Skye Reinforcement Project

Consultation Document: Alignment Selection

September 2021

Scottish & Southern Electricity Networks

TRANSMISSION

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GLOSSARY

Term	Definition
Alignment	A centre line of an overhead line, along with location of key angle structures.
Alignment (preferred)	An alignment for the overhead line taken forward to stakeholder consultation following a comparative appraisal of alignment options.
Alignment (proposed)	An alignment taken forward to consent application. It comprises a defined centre line for the overhead line and includes an indicative support structure (tower or pole) schedule, also specifying access arrangements and any associated construction facilities.
Amenity	The natural environment, cultural heritage, landscape and visual quality. Also includes the impact of SSEN Transmission's works on communities, such as the effects of noise and disturbance from construction activities.
AOD	Above Ordnance Datum
Baseline Alignment	The Baseline Alignment is the alignment identified by the OHL Contractor on the basis of it being the most technically feasible and economically viable alignment and design solution, giving due consideration to a range of technical and cost criteria over the construction and operation phases of a new OHL.
Biodiversity Net Gain (BNG)	A process intended to leave nature in a better state than it started using good practice principles established by the Business and Biodiversity Offset Programme (BBOP) and organisations including CIRIA, CIEEM and IEMA.
Conductor	A metallic wire strung from structure to structure, to carry electric current.
Consultation	The dynamic process of dialogue between individuals or groups, based on a genuine exchange of views, normally, with the objective of influencing decisions, policies or programmes of action.
Corridor	A linear area which allows a continuous connection between defined connection points. The corridor may vary in width along its length; in unconstrained areas it may be many kilometres wide.
Design Solution	The design of the transmission infrastructure (location, structure type) between Fort Augustus and Ardmore
Development Solution	Describes the technical parameter that the project is seeking to meet as part of the project need, accounting for OHL capacity and security of supply requirements.
Environmental Impact Assessment (EIA)	A formal process set down in The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 used to systematically identify, predict and assess the likely significant environmental impacts of a proposed project or development.
Fort Augustus to Skye Project	SSEN Transmission has previously promoted the Fort Augustus to Skye Project, which was based upon a design that proposed a new 132 kV wood pole OHL between Fort Augustus and Broadford with the existing steel lattice OHL remaining in place, and a replacement 132 kV wood pole OHL between Broadford and Dunvegan. This is now replaced by this Skye Reinforcement Project, in respect of which further consultation is being carried out.

Term	Definition
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.
GWDTE	Ground Water Dependent Terrestrial Ecosystem
Habitat	Term most accurately meaning the place in which a species lives, but also used to describe plant communities or agglomerations of plant communities.
Kilovolt (kV)	One thousand volts.
Landscape Character Type	A defined area of consistent landscape character identified in the NatureScot National Landscape Character Assessment of Scotland.
Listed Building	Building included on the list of buildings of special architectural or historic interest and afforded statutory protection under the 'Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997' and other planning legislation. Classified categories A – C(s).
Limit of Deviation (LOD)	The area either side of the proposed alignment within which micrositing of structures may take place in accordance with the conditions of the Section 37 consent.
Micrositing	The process of positioning individual structures to avoid localised environmental or technical constraints.
Mitigation	Term used to indicate avoidance, remediation or reduction of adverse impacts.
Marine Protected Areas (MPA)	Marine Protected Areas are used to ensure protection of some of the most vulnerable species and habitats within marine ecosystems.
National Scenic Area (NSA)	A national level designation applied to those landscapes considered to be of exceptional scenic value.
New Suite of Transmission Structures (NeSTS)	A project to create and implement a new design of overhead transmission line structures.
Overhead line (OHL)	An electric line installed above ground, usually supported by lattice steel towers or poles.
Plantation Woodland	Woodland of any age that obviously originated from planting.
Reactive Compensation	Reactive compensation is the process of adding or injecting positive and/or negative power to a power system to essentially attain voltage control.
Route	A linear area of approximately 1 km width (although this may be narrower/wider in specific locations in response to identified pinch points / constraints), which provides a continuous connection between defined connection points.
Route (preferred)	A route for the overhead line taken forward to stakeholder consultation following a comparative appraisal of route options.
Route (proposed)	A route taken forward following stakeholder consultation to the alignment selection stage of the overhead line routeing process.
Routeing	The work undertaken which leads to the selection of a proposed alignment, capable of being taken forward into the consenting process under Section 37 of the Electricity Act 1989.

Term	Definition
Scheduled Monument	A monument which has been scheduled by the Scottish Ministers as being of national importance under the terms of the 'Ancient Monuments and Archaeological Areas Act 1979'.
Section	Due to the length of the project, it has been necessary to split the broad corridor into 'sections' to more easily describe, identify and assess route and alignment options. There are seven sections from Section 0 to Section 6.
Semi-natural Woodland	Woodland that does not obviously originate from planting. The distribution of species will generally reflect the variations in the site and the soil. Planted trees must account for less than 30% of the canopy composition.
Sites of Special Scientific Interest (SSSI)	Areas of national importance. The aim of the SSSI network is to maintain an adequate representation of all natural and semi-natural habitats and native species across Britain.
Skye Reinforcement Project	The current project being consulted upon.
Span	The section of overhead line between two supporting structures.
Special Area of Conservation (SAC)	An area designated under the EC Habitats Directive to ensure that rare, endangered or vulnerable habitats or species of community interest are either maintained at or restored to a favourable conservation status.
Special Landscape Area (SLA)	Landscapes designated by The Highland Council which are considered to be of regional/local importance for their scenic qualities.
Special Protection Area (SPA)	An area designated under the Wild Birds Directive (Directive74/409/EEC) to protect important bird habitats.
Stakeholders	Organisations and individuals who can affect or are affected by SSEN Transmission works.
Study Area	The area within which the corridor, route and alignment study takes place.
System Planning Pathway	A system planning pathway looks at medium to long term network needs to determine electrical transmission infrastructure requirements (Development Pathway).
The National Grid	The electricity transmission network in Great Britain.
Underground Cable	An electric cable installed below ground, protected by insulating layers and marked closer to the surface to prevent accidental damage through later earthworks.
Variant	An alternative alignment or design solution proposed to avoid localised constraints.
Volts	The international unit of electric potential and electromotive force.
Wayleave	A voluntary agreement entered into between SSEN Transmission and a landowner upon whose land an overhead line is to be constructed for the installation and retention of the transmission equipment.
Wild Land Area (WLA)	A series of 42 mapped areas which have been identified by NatureScot as comprising the most extensive areas of high wildness within Scotland, following a process of interpretive mapping and site survey. WLA is not a statutory designation but these areas are considered to be nationally important.

PREFACE

This Consultation Document has been prepared by Scottish and Southern Electricity Networks Transmission (SSEN Transmission) with input by ASH Design and Assessment Ltd. to seek comments from all interested parties on the preferred alignment[1] and design solution identified for the proposed Skye Reinforcement Project between Fort Augustus Substation and Ardmore Substation on the Isle of Skye.

The Consultation Document is available online via the project web page at https://www.ssen-transmission.co.uk/projects/skye-reinforcement/

Public consultation events detailing the proposals described in this document will be held at the following times and locations:

Dunvegan Community Hall, Dunvegan	28th September 2021	15.00 – 19.00
Broadford Village Hall, Broadford	29th September 2021	15.00 – 19.00
Glenelg Village Hall, Glenelg	30th September 2021	1**5.00** – 19.**00**
Kyleakin Village Hall, Kyleakin	04th October 2021	15.00 – 19.00
Glengarry Community Hall, Invergarry	05th October 2021	1**5.00** – 19.**00**
Fort Augustus Village Hall, Fort Augustus	06th October 2021	15.00 – 19.00

Virtual consultation events will also be held via the project web page on 13th October 2021 between 13.00 – 15.00 and 17.00 to 19.00.

Comments on this document should be sent to:

Lisa Marchi
Community Liaison Manager
Scottish Hydro Electric Transmission PLC
10 Henderson Road
Inverness IV1 1SN
Email: lisa.marchi@sse.com
Mobile: 07825 015507

All comments are requested by 19th November 2021.

[1] An update on the proposed / preferred route is also provided for Sections 2 and 3.

EXECUTIVE SUMMARY

This Consultation Document invites comments from all interested parties on the proposals by Scottish and Southern Electricity Networks Transmission (herein referred to as 'SSEN Transmission'), operating under licence as Scottish Hydro Electric Transmission plc (herein referred to as 'SHE Transmission') to construct a new 132 kV overhead transmission line (OHL) between Fort Augustus Substation and Ardmore Substation on the Isle of Skye, Scotland. The project being promoted is known as the Skye Reinforcement Project.

The existing 132 kV OHL from Fort Augustus to Ardmore on the Isle of Skye ("the existing OHL") is the sole connection from the mainland electricity transmission system to Skye and the Western Isles. Recent studies into the condition of the existing OHL have confirmed that the section between Quoich Substation and Ardmore Substation is required to be rebuilt and, upon completion of construction of the new OHL, the existing OHL would be removed. Furthermore, as a result of an increase in the renewable energy projects for which access to the electricity transmission network is being formally requested, there is a requirement to increase the capacity of the existing OHL for the entirety of its length between Ardmore and Fort Augustus. This includes replacing the recently constructed Skye Tee and Quoich to Aberchalder OHLs between Fort Augustus and Quoich. These OHLs would be decommissioned and dismantled on completion of the new higher capacity OHL.

To facilitate this asset replacement and meet this increased capacity requirement, a new double circuit steel structure 132 kV transmission connection is required between Fort Augustus Substation and Edinbane Substation. A new single circuit trident H wood pole (H pole) OHL, is also required between Edinbane Substation and Ardmore Substation. The existing OHL between Fort Augustus Substation and Broadford Substation would be removed, as well as the existing 132 kV wood pole line between Broadford Substation and Ardmore Substation. Both sections of the new OHL are collectively referred to in this Consultation Document as "the new OHL".

In March 2020, a Consultation Document[2] was prepared to set out the project need and describe the Skye Reinforcement Project, seeking comments from stakeholders and members of the public on the route option studies undertaken, and the rationale for, and approach to, the selection of the preferred route. Comments received were documented in a Report on Consultation which set out the consultation process for the project between mid-November 2019 and end of June 2020, during the route option stage of the project. The Report on Consultation[3] confirmed that the preferred route in Sections[4] 0, 1, 4, 5 and 6 is being taken forward as the proposed route for the consideration of alignment[5] options. In Section 2 (Sligachan to Broadford) and Section 3 (Broadford to Kyle Rhea), given the consultation responses received and the sensitivities and challenges present within these sections, further engineering and environmental review of the options available was deemed to be required prior to identifying a proposed route and design solution.

Work has since been carried out to seek to determine a proposed route and design solution for Sections 2 and 3 and a preferred alignment and design solution for all sections of the OHL, whilst also considering alternative OHL alignment options and design solutions in challenging or sensitive areas. The results of this work are summarised in this Consultation Document.

The preferred alignment and design solution has been selected to provide an optimum balance of environmental, technical and economic factors, and has been informed through a collaborative working approach between environmental and engineering teams, as well as preliminary input from statutory consultees. The preferred alignment is generally routed adjacent to, or within the vicinity of, the existing OHL. The preferred design solution typically comprises single circuit wood pole OHL between Ardmore and Edinbane

[2] Skye Reinforcement Project: Consultation Document: Route Options (March 2020), produced by SSEN Transmission

[3] Skye Reinforcement Project: Report on Consultation (November 2020), produced by SSEN Transmission

[4] For the purposes of reporting during this consultation phase, given the length of the OHL the project has been split into seven defined 'Sections' to more easily describe route and alignment options. These 'Sections' are described in paragraph 1.1.4 and shown on accompanying figures.

[5] A centre line of an overhead line, along with the location of key angle structures.

(Section 0), and steel lattice OHL between Edinbane and Fort Augustus Substation. In two areas; approximately 14 km between Glen Varragill Forest (north of Sligachan) and Luib (Section 2); and the final 6 km on approach to Fort Augustus Substation (Section 6), the preferred design solution is underground cable to mitigate likely significant environmental effects, or to facilitate rationalisation of the electricity network.

When providing comments and feedback on this Consultation Document, SSEN Transmission would be grateful for your consideration of the questions below:

- Have we adequately explained the need for this Project?
- Are you satisfied that our approach taken to selecting the preferred alignment and design solution has been adequately explained?
- Are there any factors, or environmental features, that you consider may have been overlooked during the route and alignment selection process?
- Do you have any other comments in relation to the drivers for the project, related to the transmission infrastructure requirements, or about the preferred alignment and design solution?

1. INTRODUCTION

1.1 Overview and Purpose of Document

1.1.1 This Consultation Document invites comments from all interested parties on the electricity transmission project being brought forward by Scottish and Southern Electricity Networks Transmission (herein referred to as 'SSEN Transmission'), operating under licence as Scottish Hydro Electric Transmission plc (herein referred to as 'SHE Transmission') to construct a new double circuit steel structure 132 kV overhead transmissions line (OHL) between Fort Augustus Substation and Edinbane Substation and a new single circuit trident H wood pole (H pole) OHL between Edinbane Substation and Ardmore Substation. Both sections of new OHL are referred to collectively in this Consultation Document as "the new OHL".

1.1.2 The existing 132 kV electricity transmission OHL from Fort Augustus to Ardmore on the Isle of Skye ("the existing OHL") is the sole connection from the mainland electricity transmission system to Skye and the Western Isles. Recent studies into the condition of the existing OHL have confirmed that the section between Quoich Substation and Ardmore Substation is required to be rebuilt and, upon completion of construction of the new OHL, the existing OHL would be removed. Furthermore, as a result of an increase in the renewable energy projects for which access to the electricity transmission network is being formally requested, there is a requirement to increase the capacity of the existing OHL for the entirety of its length between Ardmore and Fort Augustus. This includes replacing the recently constructed Skye Tee and Quoich to Aberchalder OHLs between Fort Augustus and Quoich. These OHLs would be decommissioned and dismantled on completion of the new higher capacity OHL.

1.1.3 To facilitate this asset replacement and also meet increased capacity requirements, the new OHL represents a long-term approach in relation to planning for future transmission infrastructure requirements to Skye, particularly having regard to targets fixed by the Scottish and UK Governments to achieve net zero by 2045 and 2050 respectively. The policy objection of "net zero" is the reduction of carbon emissions by 100% from 1990 levels by 2050 in order to avoid the worst impacts of climate change and seeks to limit global warming to 1.5 degrees centigrade. This target also applies to all sectors of the economy, including energy.

1.1.4 Given the length of the OHL, this document splits the project into seven defined 'Sections'[6] to more easily describe route and alignment options. These 'Sections' are broadly defined as follows:

- Section 0 – Ardmore to Edinbane;
- Section 1 – Edinbane to North of Sligachan;
- Section 2 – North of Sligachan to Broadford[7];
- Section 3 – Broadford to Kyle Rhea;
- Section 4 – Kyle Rhea to Loch Cuaich;
- Section 5 – Loch Cuaich to Invergarry; and
- Section 6 – Invergarry to Fort Augustus.

1.1.5 This consultation exercise provides stakeholders and members of the public with the opportunity to provide feedback on the preferred alignment and design solution.

1.2 Project Background

1.2.1 In March 2020, a Consultation Document[2] (was prepared to set out the project need and describe the Skye Reinforcement Project, seeking comments from stakeholders and members of the public on the route option

[6] Section lines should be considered as 'soft' rather than definitive lines, generally following topography and / or natural features.

[7] Section 2 was referred to in the Consultation Document at route options stage (March, 2020) as 'Sligachan to Broadford'. This has since been amended to more accurately reflect the transition between the preferred alignment and design solution from Section 1 to Section 2 of the project.

studies undertaken, and the rationale for, and approach to, the selection of the preferred route. Comments received were documented in a Report on Consultation (November 2020)[3] which set out the consultation process for the project between mid-November 2019 and end of June 2020, during the route option stage of the project.

1.2.2 The Report on Consultation (November 2020)[3] also confirmed that the preferred route in Sections 0, 1, 4, 5 and 6 would be taken forward as the proposed route for the consideration of alignment[8] options. In Sections 2 and 3, given the consultation responses received and the sensitivities and challenges present within these sections, further engineering and environmental review of the options available was required prior to identifying a proposed route, preferred alignment and design solution.

1.2.3 Work has since been carried out to seek to determine a proposed route for Sections 2 and 3 and an environmentally preferred alignment and design solution for all sections of the OHL, whilst also considering alternative OHL alignment options and design solutions. The results of this work are summarised in this Consultation Document.

1.3 Document Structure

This Consultation Document is structured as follows:

Chapter 1: Introduction - setting out the purpose of the Consultation Document as well as the project background, document structure and the next steps;

Chapter 2: Project Need and Overview - describes the need for the proposed transmission project, the proposed development solution, access requirements and the typical construction methods;

Chapter 3: Route and Alignment Selection Process - describes the SSEN Transmission Route Selection Guidance and the methodology used for the route and alignment selection process;

Chapters 4 - 11: Comparative Appraisal of Alignment Options and Design Solution - describes the preferred alignment and design solution on a Section by Section basis and identifies and summarises the reasons for the decisions. Alternative alignments for each section are also described. Decisions taken with regard to the proposed route in Sections 2 and 3 are also set out; and

Chapter 12: Consultation on the Proposals - invites comments on the alignment selection process and identification of a preferred alignment and design solution.

1.3.1 The main body of this Consultation Document is supported by a series of figures, visualisations and appendices.

1.4 Next Steps

1.4.1 As part of this consultation exercise, comments are sought from members of the public, statutory consultees and other stakeholders on the preferred alignment and design solution put forward in this report.

1.4.2 A Report on Consultation will be produced which will document the consultation responses received during this stage of the project, and the decisions made having regard to these responses.

1.4.3 Following the identification of a proposed alignment and design solution for the new OHL, further technical and environmental surveys will be undertaken as appropriate to support an Environmental Impact Assessment Report and Section 37 application, anticipated to be made in 2022.

[8] A centre line of an overhead line, along with the location of key angle structures.

2. PROJECT NEED AND OVERVIEW

2.1 Introduction

2.1.1 An overview of the existing infrastructure, the need for the project and the work undertaken by SSEN Transmission to assess the electricity transmission infrastructure requirements (system planning pathway) has been set out in the Consultation Document at route options stage (March 2020)[2]. Subsequently, SSEN Transmission has submitted its initial needs case to Ofgem, setting out an evidence based and economically justified case for replacement of the existing OHL between Fort Augustus and Ardmore on the Isle of Skye. An overview of the project need is provided in this Chapter. Further details on project need and consideration of other strategic reinforcement options to deliver the connection requirements are included in the initial needs case[9], available at https://www.ssen-transmission.co.uk/projects/skye-reinforcement.

2.2 Existing Transmission Infrastructure

2.2.1 SSEN Transmission owns and maintains the electricity network across the north of Scotland and holds a licence under the Electricity Act 1989 to develop and maintain an efficient, co-ordinated and economical system of electrical transmission that will facilitate competition between current and new generators.

2.2.2 The existing single circuit 132 kV OHL from Fort Augustus to Ardmore on the Isle of Skye extends over 160 km in length and is the sole connection from the mainland national grid to Skye and onwards, via subsea cable to the Western Isles. The security of supply on Skye and the Western Isles is dependent on this circuit. The existing OHL to Skye is made up of distinct sections, which were constructed at different times over the last 65 years in response to changing needs. This comprises of the following (see also Plate 2.1):

1. Fort Augustus Substation to Skye Tee (near Invergarry) – a 9 km section of OHL from Fort Augustus to the Skye Tee point, of trident wood pole construction and completed in June 2017;
2. Aberchalder (Skye Tee) to Quoich – Recently constructed OHL of trident wood pole construction. This OHL has been constructed as an asset replacement to the existing single circuit 132 kV steel lattice OHL through this area which was constructed in the mid 1950's to connect the Quoich hydroelectric power station to the grid;
3. Quoich to Broadford – double circuit of steel lattice towers, strung with a single circuit 132 kV OHL constructed between 1979 and 1980; and
4. Broadford to Ardmore – single circuit of trident wood pole, strung with a single circuit 132 kV OHL constructed in 1989.

2.2.3 From Ardmore, there are two Scottish Hydro Electric Power Distribution (SHEPD) owned 33 kV subsea cables; one to Loch Carnan on South Uist and the other to the Isle of Harris. The line continues from the Isle of Harris as a 132 kV transmission circuit to Stornoway on the Isle of Lewis.

2.2.4 The security of supply on Skye and the Western Isles is dependent on the Skye circuit as the only connection to the main Great Britain electricity grid. To enhance supply security on the Western Isles, there are SHEPD owned backup diesel generators at Battery Point and Arnish (both connected at Stornoway) to support Lewis and Harris, and diesel generators at Loch Carnan and Barra to support the Uists. Additionally, SHEPD use mobile backup diesel generation to secure supplies on the Isle of Skye. Therefore, in the event of a fault on the main line, customer supplies are solely reliant on ageing backup generators, with associated impacts on greenhouse gas emissions.

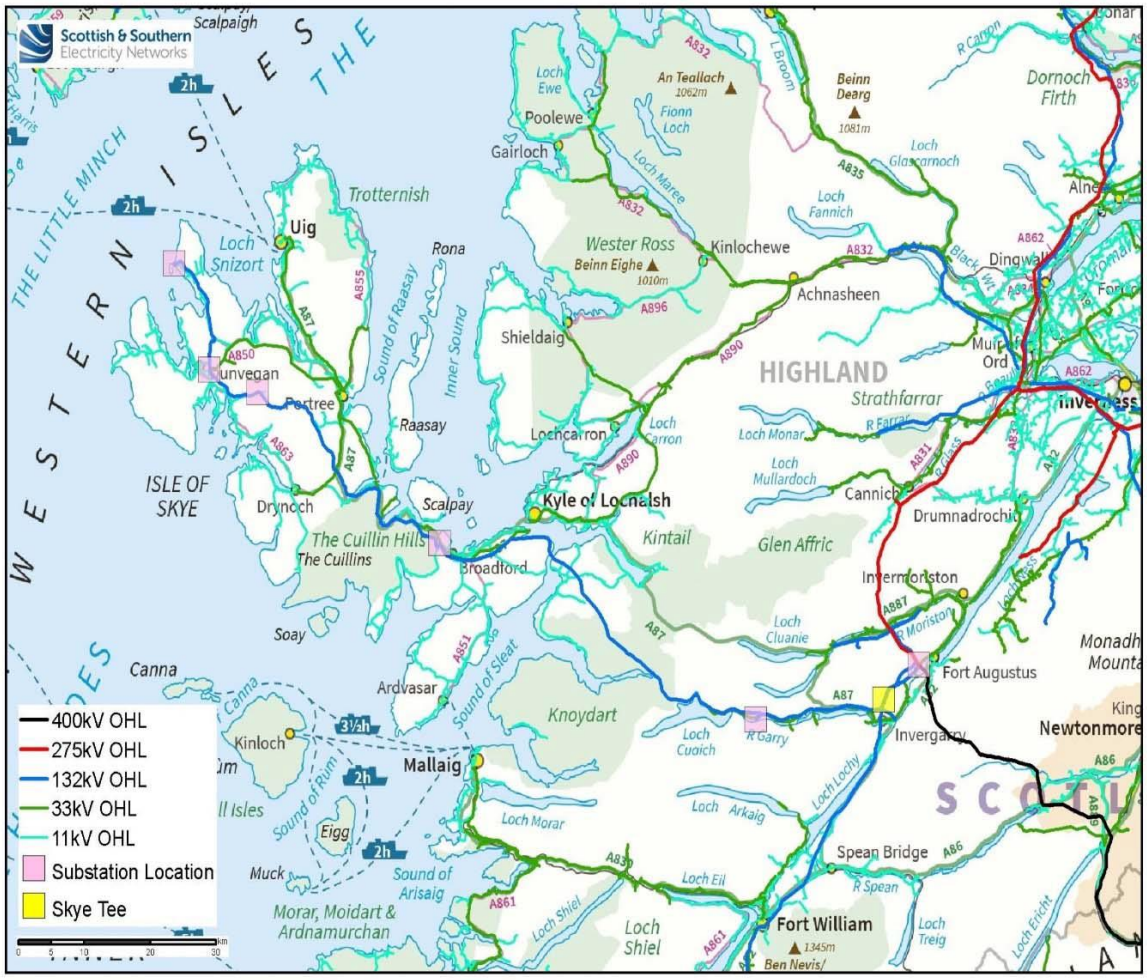
[9] Skye 132 kV Reinforcement Initial Needs Case Submission (July 2021), produced by SSEN Transmission

2.3 The Need for the Project

2.3.1 Over the past few years, several assessments have been carried out to determine the condition of the existing OHL and associated electricity infrastructure, including existing substation equipment. In addition, more applications for the generation and demand connections on Skye have been received over that period. This has caused SSEN Transmission to review the needs case for the project and the approach for upgrading the Skye transmission network to ensure that the best sustainable long-term solutions are identified. The need for the Skye Reinforcement Project can be summarised as follows:

- The existing OHL is reaching the end of its operational life and requires replacement in order to maintain security of supply for homes and businesses on Skye, and on the Western Isles that are currently supplied via a subsea cable from the north of Skye;
- There is a requirement to connect new renewable electricity generators on Skye which results in a requirement for an increase in capacity of the existing OHL; and
- Following commitment from both the UK and Scottish Governments to achieve net zero emissions by 2050 and 2045 respectively, SSEN Transmission plans to 'future proof' the new OHL to facilitate this objective. This will allow incremental increases in capacity to support the connection of additional renewables generation when such need has been clearly demonstrated.

Plate 2.1: Existing Line



2.4 Proposed Development Solution

2.4.1 To facilitate the known connection requirements, the main elements of the proposed development solution are summarised below:

- From Fort Augustus Substation to Broadford Substation, the proposed development solution is to construct a new double circuit 132 kV OHL supported by steel structures. The existing Fort Augustus to Skye Tee 132 kV trident pole wood pole OHL, the newly constructed Quoich to Aberchalder trident wood pole OHL and the existing steel lattice tower OHL between Skye Tee and Broadford would be dismantled and removed once the new OHL is operational;
- Between Broadford Substation and Edinbane Substation, the existing single circuit wood pole trident 132 kV OHL would be replaced with a new double circuit[10] 132 kV OHL supported by steel structures. The existing OHL would be dismantled and removed once the new OHL is operational; and
- Between Edinbane Substation and Ardmore Substation, the existing single circuit wood pole trident 132 kV OHL would be replaced with a new higher capacity 132 kV trident wood pole OHL. During construction, the existing OHL and its replacement would run in tandem but on energisation of the new OHL, the existing OHL would be dismantled and removed.

2.4.2 As detailed design of the project has progressed, and proposed development solutions have been considered in the context of local conditions and environmental sensitivities, consideration has been given to appropriate mitigation measures to minimise predicted likely significant effects. This has included the consideration and viability of localised underground cabling and subsea cable solutions where such mitigation could address specific issues, subject to engineering, economic and environmental considerations.

2.4.3 Due to the installation requirements, electrical characteristics, environmental considerations and economics of underground cable and subsea cable options, and associated substation equipment requirements, it would not be economically or technically viable to consider such options for the entire OHL alignment.

2.4.4 The OHL solution is also preferred as it provides reliable security of supply, with a lower return of service time than underground or subsea cable options in a fault scenario. For these reasons, the focus of the early detailed design stage of the project has been identifying optimal locations for the new OHL support structures and construction methodologies. In tandem, assessment of likely significant environmental effects has been undertaken, and this will continue through the environmental impact assessment stage of the project whereby further mitigation measures may be required in the context of predicted likely significant effects, subject to engineering and environmental considerations.

2.5 Other Related Works

2.5.1 The Skye Reinforcement Project will give rise to a need to upgrade the substations along the route of the OHL to facilitate the new OHL. Further modifications are also required to existing substations due to asset condition and the need to provide capacity to connect generation proposed on the Isle of Skye. The proposed substation works are summarised below:

- Broadford Substation: Installation of a new 132 kV indoor switching station, a new 132/33 kV transformer, outdoor circuit breakers and indoor reactive compensation measures at the existing Broadford Substation site.
- Edinbane Substation: Installation of a new 132 kV indoor switching station and establishment of a new indoor substation at the existing Edinbane Substation site.

[10] The Skye Reinforcement Project: Consultation Document: Route Options (March 2020), produced by SSEN Transmission, noted that the proposed development solution between Broadford Substation and Edinbane Substation would be a replacement single or double circuit 132 kV OHL. Further generation connection requests made to SSEN Transmission have since confirmed the requirement for a double circuit between Broadford Substation and Edinbane Substation.

2.5.2 These works will require an application for planning permission under the Town and County Planning (Scotland) Act 1997 (as amended). The works are likely to be deemed as National Development within NPF3 and as such are categorised as Major Development within the Development Hierarchy and require to be subject to a formal Proposal of Application Notice (PAN) and associated pre-application consultation exercises. Appropriate environmental assessment work will be undertaken in support of these applications.

2.5.3 In addition, there would be a requirement for a new switching station at Quoich Tee, near to the existing tee off at Kingie. This project would be developed separately by SHEPD.

2.5.4 Modification of the existing 11 and 33 kV distribution network in some areas is also likely to be required to accommodate the new OHL.

2.5.5 The existing 132 kV OHL would be dismantled upon completion of the Skye Reinforcement Project, as referred to in paragraph 2.4.1.

2.5.6 Other related works to facilitate the construction of the project include the installation of appropriate access for construction traffic (see 2.8 below), public road improvements and restoration works following the construction phase.

2.6 Overhead Line Design Solutions

2.6.1 It is proposed that the supporting steel structures required as part of the development solution between Edinbane Substation and Fort Augutus Substation (i.e. Section 1 to 6) are of lattice design. Towers would be approximately 28 m in height, although tower heights may be increased where local topography dictates in order to achieve sufficient clearance distances. The span lengths between towers would vary depending on topography and altitude but would be approximately 250 m apart. Exact heights of and the distances between towers would be determined after a detailed line survey and confirmed prior to submission of an application for consent.

2.6.2 The proposed new H wood pole OHL between Ardmore Substation and Edinbane Substation would have a nominal height of approximately 13 m (including insulators and support), depending on ground conditions. The spacing between poles would be approximately 80 m, subject to topography, altitude and further survey. This will also be confirmed prior to submission of an application for consent.

2.7 Alternative Design Solutions

2.7.1 Feasibility studies for other design solutions (i.e. underground cable, subsea and NeSTS) have been undertaken where relevant in Sections 2, 3 and 6 to inform route, alignment and design solution options. These studies have enabled a fuller understanding of the technical viability, environmental impact and cost of such options, in comparison with a steel lattice OHL. This is discussed further within Chapters 7, 8 and 11 of this Consultation Document, in relation to Sections 2, 3 and 6 respectively.

2.8 Access during Construction

2.8.1 The construction of a new OHL approximately 160 km in length is a major undertaking, presenting significant construction challenges not just in terms of scale but also remoteness, terrain and seasonal weather conditions.

2.8.2 The commissioning by SSEN Transmission of an experienced OHL contractor (see 2.10 below) has enabled construction access considerations to be at the forefront of this stage in the design process. Whilst construction access details are yet to be finalised, an access track matrix has been developed by the project team considering both construction and operational access requirements, and with reference to NatureScot's good

practice guide on constructing tracks in Scottish uplands[11]. Typical access solutions are set out below with respect to the different technology types under consideration, and will be subject to on-going review through the design process and EIA stages of the project. Further detail on construction access methods are provided in each of the relevant sections of the project (see Chapter 5 to 11).

2.8.3 In general, proposed construction site access would be taken via the existing public road network and would make use of existing forest and estate tracks as far as practicable, upgraded as required. Existing bellmouths would be utilised where possible, subject to improvements. New bell mouths would be required at a number of locations.

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

Wood Pole Construction Access

2.8.5 For wood pole construction (i.e. in Section 0), vehicle access is required to each pole location during construction, moving along the line, to allow excavation and creation of foundations and pole installation. Preference will be given to lower impact access solutions including the use of low pressure tracked personnel vehicles and trackway in boggy / soft ground areas to reduce any damage to, and compaction of, the ground. These journeys would be kept to a minimum to minimise disruption to habitats along the route.

2.8.6 It is anticipated that helicopters would be used for the delivery of materials to each pole locations for wood pole construction in Section 0. The key benefit of helicopter use for wood pole construction is that vehicular access to each pole location (as well as inline access) can be significantly reduced, with delivery of components and erection being facilitated by helicopter.

Steel Lattice OHL Construction Access

2.8.7 Typically, new temporary stone tracks are likely to be required to access each steel tower location in Sections 1 to 6, as well as the requirement for inline access between towers. Stone tracks are designed to suit the heavy plant loads required for construction works for steel towers, and to suit the varied ground conditions along the route. On completion of construction, unless required for operational access, the stone tracks would be removed and the original material reinstated. Where access to tower positions is difficult due to steep terrain, alternative methods would be proposed such as using smaller items of plant, specialist tracked plant, and in some cases using helicopters for moving materials.

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

2.8.9 The use of helicopters for construction of steel lattice towers is feasible, however, the operational restrictions (e.g. weather, proximity to public roads and environmental factors), and the significant cost implications, for a

[11] Constructed tracks in the Scottish Uplands (Updated September 2015), Scottish Natural Heritage.

project of this scale are key considerations. The use of helicopters is likely to be required in more remote sections of the project, and where particular environmental or geographical constraints necessitate their use. Where helicopters are used, construction plant would still require access to each tower location to facilitate construction and erection of towers. Helicopter landing zones would also require to be identified.

Underground Cable Construction Access

2.8.10 Installation of an underground cable would typically require a wide construction corridor (approximately 30 m) to accommodate excavation and cable installation equipment. A construction haul road would be required for much of the cable installation route. After construction, disturbed ground can be reinstated and restored.

2.9 Access during Operation

2.9.1 Permanent access tracks would only be required in more remote areas where access during construction requires a higher specification track, and where long term maintenance needs require permanent access. Generally, this requirement is most relevant to Sections 3 and 4 of the project given their more remote nature (refer to Chapter 8 and 9 of this Consultation Document). It is intended however to keep requirements for permanent access tracks to a minimum. Where required, permanent tracks would be reinstated to a width suitable for 4x4 vehicles.

2.10 OHL Contractor

2.10.1 To inform the alignment selection stage of this project, SSEN Transmission has engaged an experienced OHL construction contractor to carry out a detailed desk-based and site walkover survey to explore the advantages, disadvantages and constructability of OHL alignment options. This has proven valuable at this early stage of the project in terms of providing confidence in the buildability of alignment options, and construction access opportunities. Whilst the full access strategy is still being developed, construction and operational access requirements have been a key consideration in informing the preferred alignment, utilising existing access where possible and identifying access routes to facilitate the OHL.

2.10.2 Other technical considerations such as avoiding cross overs of existing electrical infrastructure (in particular the existing 132 kV OHL) to minimise potential outages of the electricity network (resulting in cost implications and disruption to the consumer) have been a factor in the evaluation of alignment options.

2.10.3 Targeted ground investigation works are also being undertaken along the route of the line, which will further inform tower positions, foundation requirements and construction access requirements. This information should be available to inform the EIA stage of the project.

2.11 Biodiversity Net Gain

2.11.1 Biodiversity Net Gain (BNG) is a process which leaves nature in a better state than it started. Although it is an internationally recognised process and tool within the development industry, it is not a term that is widely used or implemented in Scotland[12]. A small handful of businesses are making voluntary commitments to incorporating BNG into their projects, including SSEN Transmission.

2.11.2 SSEN Transmission has developed a BNG toolkit based upon the Natural England metric[13], which aims to quantify biodiversity based upon the value of habitats for nature. It is an efficient and effective method for

[12] CIEEM. 2019. Biodiversity Net Gain in Scotland. CIEEM Scotland Policy Group. https://cieem.net/wp-content/uploads/2019/06/Biodiversity-Net-Gain-in-Scotland-CIEEM-Scotland-Policy-Group.pdf

[13] Natural England Biodiversity Metric 2.0 http://publications.naturalengland.org.uk/publication/5850908674228224

demonstrating whether development projects have been able to maintain or increase the biodiversity value of a development site after construction works.

2.11.3 For BNG to be used appropriately and to generate long-term gains for nature, the good practice principles established by the Business and Biodiversity Offset Programme (BBOP)[14] should be followed. These principles have been established in the context of UK development by the Construction Industry Research and Information Association (CIRIA), the Chartered Institute for Ecology and Environmental Management (CIEEM) and the Institute of Environmental Management and Assessment (IEMA)[6].

2.11.4 BNG does not apply to statutory designated sites or irreplaceable habitats (e.g. ancient woodland[15], blanket bog)[16].

SSEN Transmission's Biodiversity Ambition

2.11.5 SSEN Transmission is committed to protecting and enhancing the environment by minimising the potential impacts from their construction and operational activities. As part of this approach, SSEN Transmission has made commitments within its Sustainability Strategy (2018)[17] , Sustainability Plan (2019)[18] and RIIO-T2 Business Plan, for new infrastructure projects to:

- Ensure natural environment considerations are included in decision making at each stage of a project's development;
- Utilise the mitigation hierarchy to avoid impacts by consideration of biodiversity in project design;
- Positively contribute to the UN and Scottish Government Biodiversity strategies by achieving an overall 'No Net Loss' on new infrastructure projects gaining consent in 2020 onwards and achieving Net Gain on projects gaining consent in 2025 onwards; and
- Work with their supply chain to gain the maximum benefit during asset replacement and upgrades.

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

[14] Guidance Notes to the Standard on Biodiversity Offsets (2012). Business and Biodiversity Offsets Programme (BBOP). https://www.forest-trends.org/wp-content/uploads/imported/BBOP_Standard_Guidance_Notes_20_Mar_2012_Final_WEB.pdf
[15] Categories 1a and 2a.
[16] CIRIA, CIEEM, IEMA (2019). Biodiversity Net Gain: Good practice principles for development, A Practical Guide. https://cieem.net/wp-content/uploads/2019/02/C776a-Biodiversity-net-gain.-Good-practice-principles-for-development.-A-practical-guide-web.pdf
[17] Delivering a smart, sustainable energy future: The Scottish Hydro Electric Transmission Sustainability Strategy (2018) https://www.ssen-transmission.co.uk/media/2701/sustainability-strategy.pdf
[18] Our Sustainability Plan: Turning Ambition into Action. (2019) SHE Transmission. https://www.ssen-transmission.co.uk/media/3215/our-sustainability-plan-consultation-report.pdf

3. ROUTE AND ALIGNMENT SELECTION PROCESS

3.1 Introduction and Approach

3.1.1 The approach to route and alignment selection has been informed by SSEN Transmission's guidance[19] which provides a framework to ensure environmental, technical and economic considerations are identified and appraised at each stage of the routeing process.

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

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

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

3.1.4 As confirmed in the Report on Consultation (November 2020)[3], the preferred route in Sections 0, 1, 4, 5 and 6 has been taken forward as the proposed route to the alignment selection stage (Stage 3). Within Sections 2 and 3, further engineering and environmental studies have been undertaken to review route, alignment and design solutions within these sections.

3.1.5 The approach to the route and alignment selection process is set out in Appendix 1 of this Consultation Document.

3.1.6 A summary of the route options stage, as described within the Consultation Document at route options stage (March 2020)[2] and Report on Consultation (November 2020)[3], is set out in Appendix 2 of this Consultation Document. This appendix provides a brief summary of the route option stage of the project on a section by section basis, including the responses received from stakeholders and the decisions made with respect to the identification of a proposed route in each section (apart from in Sections 2 and 3).

3.2 Engineering and Environmental Input

3.2.1 As set out in Chapter 2 of this Consultation Document, SSEN Transmission has engaged an experienced OHL construction contractor to carry out a detailed desk-based and site walkover survey to explore the advantages, disadvantages and constructability of OHL alignment options. Subsequently, an OHL alignment has been identified by the OHL contractor on the basis of it being the most technically feasible and economically viable alignment, giving due consideration to a range of technical and cost criteria over the construction and operation phases of a new OHL. This is referred to in this report as the 'Baseline Alignment'.

3.2.2 Alternative OHL alignment options and design solutions (referred to as 'variants') have also been considered by the OHL contractor and project environment and engineering teams as part of the iterative alignment selection process.

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

3.2.3 In considering the potential environmental constraints of the Baseline Alignment identified by the OHL contractor, as well as alternative variants and design solutions, the following tasks have been undertaken:

- Desk-based review and targeted site survey by project landscape architects, ecologists, ornithologists, archaeologists, geologists and hydrologists to review alignment options and provide advice on variants or micrositing opportunities for positioning of towers and indicative construction access;
- Targeted Phase 1 / National Vegetation Classification (NVC) habitat surveys and protected species surveys to supplement existing data;
- Review of ornithological survey data and records for the area, including requests for data held by RSPB, and targeted bird surveys to supplement existing survey data;
- Review of comments received from stakeholders during the route options stage following publication of the Skye Reinforcement Project Consultation Document (March 2020)[2] as detailed within the Report on Consultation (November 2020)[3];
- Workshops with SSEN Transmission, the OHL contractor and environmental consultants to discuss alignment options and variants, prior to the identification of a preferred alignment and design solution;
- Site reconnaissance visits by the SSEN Transmission engineering team and environmental consultants to review alignment options; and
- Workshops with statutory consultees to present the preferred alignment and design solution, and seek preliminary feedback.

4. COMPARATIVE APPRAISAL OF ALIGNMENT OPTIONS AND DESIGN SOLUTIONS

4.1 Overview

4.1.1 Chapters 5 to 11 of this Consultation Document provide a summary of the alignment options and design solutions that have been considered within Sections 0-6, together with the primary reasons for the selection of a preferred alignment and design solution within each section, giving due consideration to environmental, technical and economic considerations. For Sections 2 and 3, an update on work to identify a proposed route is also provided (see Chapters 7 and 8).

4.1.2 The Baseline Alignment and variants, together with environmental designations and constraints within each section, are shown in Figures 2.0.1a to 2.6.3a. The preferred alignment and design solution is shown on Figures 3.0a to 3.6. Figure 1 confirms the proposed and preferred routes for each section.

4.1.3 For the purposes of this consultation, it should be assumed that an indicative 200 m Limit of Deviation (LOD) (i.e.100 m either side of the line except where constraints exist e.g. the existing overhead line) would be applied to the preferred alignment to allow for further iterations during the EIA process and subsequent to the consenting process, as more detailed survey information is gathered and analysed.

4.1.4 As noted previously, the ‘Baseline Alignment’ is the alignment identified by the OHL Contractor on the basis of it being the most technically feasible and economically viable alignment and design solution, giving due consideration to a range of technical and cost criteria over the construction and operation phases of a new OHL. The term ‘Variants’ is used to describe alternative alignment or design solution options to the Baseline Alignment to avoid localised constraints. The preferred alignment is the alignment and design solution taken forward to stakeholder consultation, and could be a combination of the Baseline Alignment and variants.

5. SECTION 0 – ARDMORE TO EDINBANE

5.1 Introduction

5.1.1 This section of the project originates at Ardmore Substation, following a southerly direction through Waternish Peninsula before reaching Dunvegan Substation. From here, the new OHL would head in a south easterly direction, terminating at Edinbane Substation.

5.1.2 Figures and visualisations prepared as part of this Consultation Document of relevance to this section include:

Figures

- Figure 2.0.1a to 2.0.3c: Section 0: Baseline Alignment, Variants, Environmental Designations and Constraints
- Figure 3.0a to 3.0c: Section 0: Preferred Alignment and Design Solution

Visualisations

- Figure 4.0.1 (a-d) VP1 – Trumpan Church Burial Ground
- Figure 4.0.2 (a-d) VP2 – Trumpan
- Figure 4.0.3 (a-c) VP3 – Dun Hallin Broch from Knockbreck School
- Figure 4.0.4 (a-c) VP4 – Upper Feorlig

5.2 Proposed Development Solution

5.2.1 Within this section, it is proposed that the existing 132 kV wood pole OHL would be replaced with a new 132 kV wood pole (H pole) OHL. The new OHL would have a nominal height of approximately 13 m (this could range between 10 m and 16 m in height above ground level (including insulators and support), depending on local terrain and ground conditions). The spacing between poles would vary depending on topography and altitude but would be approximately 80 m apart (likely to range between 70 m and 105 m). A fibre optic cable would be strung under the conductors along the entire route for operational telecommunication purposes.

5.2.2 The wood pole (H pole) OHL solution meets the predicted capacity and load requirements between Ardmore and Edinbane and provides reliable security of supply.

5.3 Technical Considerations and Construction Access

5.3.1 The terrain throughout this section largely comprises gently undulating open moorland, at an altitude of between sea level and approximately 160 m AOD. Construction of a new OHL within this section would likely be undertaken utilising tracked excavators and rock breaking equipment. Each pole hole would be excavated to approximately 4.5 m long and 2 m wide, at a depth typically around 2.5 m. Excavated turf and sub soils would be locally stored, and replaced upon completion.

5.3.2 The H poles would be erected utilising one or two excavators, dependant on assembled weight. Stays would be installed as required to secure the pole. The use of helicopters for the delivery of materials is likely to be utilised throughout this section to minimise vehicular access to each pole location, and therefore reducing the requirement for new tracks. As a result, construction access to each pole location is likely to be achieved by all terrain vehicles and tracked excavators, maximising the use of existing tracks to facilitate access.

5.4 Baseline Alignment

5.4.1 The Baseline Alignment for Section 0 was developed by an OHL contractor on the basis of it being the most technically feasible and economically viable alignment and design solution. The Baseline Alignment for Section

0 is shown on Figures 2.0.1a to 2.0.1c. Within this Section the Baseline Alignment is typically routed adjacent to the existing OHL (which would be removed) with the exception of the following areas:

- Trumpan; here the existing OHL heads in a north easterly direction from Ardmore Substation, passing between properties as it crosses the minor road to the north east of Trumpan, and then heads in a south-easterly direction toward Upper Halistra. In contrast, the Baseline Alignment heads in a south easterly direction from Ardmore Substation and passes just to the east of Halistra Loch before heading east, crossing the minor road and meeting the existing OHL. This deviation from the existing OHL was proposed given the potential to increase the proximity of a new OHL to properties if following the existing OHL;
- Hallin; here the existing OHL is routed to the east of properties and crofts at Hallin, and to the west of Dun Hallin Broch Scheduled Monument. In contrast, the Baseline Alignment is routed to the east of Beinn na Mointich, deviating from the existing OHL for approximately 3.5 km until it meets the existing OHL within the vicinity of Waternish House, Stein. This deviation from the existing OHL was proposed as a means of moving the OHL away from properties at Hallin, given the existing OHL is situated to the rear of properties in this area; and
- Glen Heysdal; whereby the Baseline Alignment is routed approximately 450 m from the existing OHL to avoid residential properties.

5.4.2 In all other areas, the OHL contractor determined that the most technically feasible and economically viable option for the Baseline Alignment would be to generally follow adjacent to the existing OHL.

5.5 Alignment Options Appraisal

5.5.1 As part of the iterative alignment selection process, a review of the Baseline Alignment and potential variants has been carried out by the SSEN Transmission environmental and engineering teams, and environmental consultants, in close collaboration with the OHL contractor. A summary of the key elements of this review is provided below.

Baseline Alignment (Environmental Considerations)

Natural Heritage

5.5.2 Approximately 200 m of the Baseline Alignment crosses the An Cleireach Site of Special Scientific Interest (SSSI) notified for its geological features. The existing OHL also crosses the SSSI. It is considered the construction of the OHL along the Baseline Alignment could be achieved without likely significant effects on the notified features of the SSSI through the micro-siting of poles to avoid rocky outcrops. This would be undertaken in consultation with NatureScot.

5.5.3 The Baseline Alignment would generally pass through typical upland mire and heath habitats and patches of rough acid grassland pasture and marshy grassland common on Skye. Habitats along the Baseline Alignment mainly comprise areas of acid and improved grasslands, a mix of wet and dry heaths and areas of blanket bog in places. Some of these are high sensitivity habitats but opportunities exist to mitigate impacts through micro-siting of poles and minimising disturbance during construction.

5.5.4 Watercourses and water bodies within the survey area are considered suitable for supporting otters. Protected species surveys in 2020 recorded otter signs on several watercourses within the vicinity of the Baseline Alignment, mainly in the form of spraints. It is recognised that new holts or couches may appear in future which would need to be considered during pre-construction surveys.

5.5.5 Hen harriers breed within the wider area and there are also records of corncrake and white-tailed eagle. There is potential for displacement and disturbance during construction to these species, but this could be mitigated

through timing of these activities. Moorland breeding bird surveys carried out between April and July 2021 detected no notable species of conservation concern within the vicinity of the Baseline Alignment. Similarly, scarce breeding bird surveys over the same period detected no breeding sites of scarce raptors within the vicinity of the Baseline Alignment, although flights by white tailed eagle, peregrine and merlin were recorded. A single male corncrake was also recorded holding territory at Trumpan in May 2021.

5.5.6 Surface water drinking protection zones are present at Trumpan, Stein and Balmeanach, and private water supply infrastructure will be present throughout this area. Further review of water supply sources and infrastructure will be required to assess potential effects and inform appropriate mitigation measures through the EIA stage of the project.

Landscape and Visual

5.5.7 Views from Trumpan, where the Baseline Alignment crosses coastal land to the front of properties on the approach to Ardmore Substation, may give rise to some visual effects. This is to some degree offset by the removal of the existing OHL for some receptors. This is illustrated in Visualisations included with this Consultation Document from Trumpan (see VPs 1 and 2, contained in Figures 4.0.1 and 4.0.2 a-c). Further south-east, the Baseline Alignment to the east of Dun Hallin Broch and following the edge of the forest plantation to the rear of Beinn na Mointich provides an opportunity to move the new OHL further from properties at Hallin and Lower Hallistra, albeit there is the possibility of this appearing on the skyline from some (limited) places. This is illustrated in the visualisation included with this Consultation Document (see VP 3 from Knockbreck School looking towards Dun Hallin Broch, contained in Figure 4.0.3 a-c).

5.5.8 Beyond Stein, the Baseline Alignment runs generally adjacent and to the east of the existing OHL to Dunvegan Substation. Localised skylining of the Baseline Alignment may affect a small number of receptors (for example near Cnoc a' Chrochaire), although the micrositing of poles to avoid siting on localised knolls or ridgelines would help to minimise this. Similarly, between Dunvegan Substation and Edinbane Substation, some visual effects may be experienced from a small number of receptors at Balmeanach and Upper Feorlig, although generally the Baseline Alignment would appear similar to the existing OHL in these areas. Views from Upper Feorlig are illustrated in VP 4 (contained in Figure 4.0.4 a-c), included with this Consultation Document.

Cultural Heritage

5.5.9 The archaeological and cultural heritage baseline of this area is characterised by features typical of upland rural landscapes throughout the Highlands. On the more cultivable land, irregular fields defined by drystone walls and earthen banks enclose cultivation remains in the form of former spade-cut lazy beds and/or plough-cut rig and furrow. In the upland pasture, stock management features such as sheepfolds, drovers' tracks, shieling huts and livestock pens and enclosures are evident. Settlement remains include abandoned crofting townships, cleared and abandoned during the Highland Clearances of the late 18th and early 19th centuries, and there are traces of 18th century military roads, carried over the numerous burns by simple stone bridges.

5.5.10 The majority of these features most likely date to the late-medieval and post-medieval periods, although some evidence of prehistoric settlement and activity is present in the form of Iron Age brochs, hut circles and occasional chance finds of artefacts. The relative scarcity of cultivable land on suitable terrain is likely to mean that later settlement has largely continued and developed on lands exploited in prehistoric periods, and it is likely that the later activity has obscured (but not obliterated) much of the evidence of earlier settlement and occupation. The evidence suggests a long and in places continuous occupation from the Bronze Age to the

present. The landscape formed by this historic and prehistoric occupation is both extensive and well-preserved throughout much of this area.

5.5.11 The extent and sensitivity of these heritage assets in relation to the likely construction footprint of the Baseline Alignment mean that few of the cultural heritage remains present are likely to be at risk of disturbance, and would be subject to appropriate mitigation such as micro-siting and adoption of sensitive construction techniques (e.g. the use of low ground pressure vehicles) to minimise impact.

5.5.12 There are two Scheduled Monuments within the general vicinity of the Baseline Alignment; the medieval remains of Trumpan church and burial ground (SM 949), approximately 270 m north-east of the Baseline Alignment at Trumpan; and Dun Hallin (SM 916), a prehistoric broch approximately 220 m north-east of the existing OHL. Views from these two Scheduled Monuments are included in this Consultation Document (see VP 1 and 3, contained in Figures 4.0.1 and 4.0.3 a-c respectively)). No likely significant effect on the setting of these Scheduled Monuments as a result of the Baseline Alignment is anticipated.

5.5.13 There is one Category C Listed Building of Low sensitivity within the general vicinity of the Baseline Alignment, comprising the original early 19th century 'Fairy Bridge' (LB466) at Duirinish. Again, no likely significant effects on its setting are anticipated.

Other Environmental Considerations

5.5.14 Numerous properties fall within the vicinity of the Baseline Alignment at Trumpan, Halstra, Hallin, Stein, Lusta and Hornival. The Baseline Alignment also runs within the vicinity of the crofting properties at Upper Feorlig and Balmeanach. These crofting properties are linked to the use of the land in the area for agriculture. The Baseline Alignment crosses areas of agricultural land use, including land primarily suited to grassland, and land capable of use as improved grassland.

5.5.15 Forestry in the area is limited to plantations to the north east of Stein, and to the west of Edinbane Substation. A new or extended wayleave through commercial plantation to the west of Edinbane Substation would be required, through which the existing OHL is currently routed.

5.5.16 The Baseline Alignment would run within the vicinity of, or cross the Stein to Gillen, and Loch Caroy to Glen Vic Askill Core Paths, as well as two other Rights of Way and Wider Path Network paths. Public access to these paths during construction, and in the longer term, would be considered further during the EIA stage of the project, and appropriate mitigation measures developed. There are also tourist attractions and accommodation within this section, particularly on the Waternish Peninsula.

5.5.17 There are no current planning applications or areas allocated for future development in direct conflict with the Baseline Alignment within this section.

Variants (Environmental Considerations)

5.5.18 A number of variants to the Baseline Alignment have been considered to either mitigate a potential effect, or to provide an alternative for consideration by the project team during the selection of a preferred alignment and design solution. These variants are set out in Table 5.1 and shown on Figures 2.0.1a to 2.0.1c. The potential environmental constraints and opportunities of these variants in comparison to the Baseline Alignment, and with regard to the environmental topic areas set out in SSEN Transmission's routeing guidance[19], is discussed in more detail in Appendix 3 (see also Figures 2.0.2a to 2.0.3c).

Table 5.1: Variants: Section 0

Variant	Description	Variant Taken forward? (Y/N)
Variant 0-A (Trumpan)	This variant was considered as it provides a viable alternative to the Baseline Alignment, running adjacent to the existing OHL, heading northeast at Trumpan from Ardmore Substation and crossing between properties, before heading in a south easterly direction behind properties towards Halistra, where it would re-join the Baseline Alignment. It was considered that this could result in an increased effect on the setting of Trumpan Church SM in comparison to the Baseline Alignment, and could also bring the line closer to properties. As such, the Baseline Alignment is preferred.	N
Variant 0-B (Trumpan)	This short variant was considered as it could reduce the potential effect of poles skylining as the OHL crosses the minor (north) road to Trumpan. This variant is however located close to an area previously allocated for housing, and where planning permission in principle was approved for a property in 2013. The Baseline Alignment was therefore deemed preferable.	N
Variant 0-C (Hallin)	This variant was considered as it provides a viable alternative to the Baseline Alignment at Upper Halistra, running parallel to the existing OHL on its eastern side for approximately 3.5 km, where it would re-join the Baseline Alignment at Stein. This variant would result in the potential for visual effects on properties at Hallin, and interaction with croft land. There is also potential for increased effect on the setting of Dun Hallin Broch SM in comparison with Baseline Alignment. The Baseline Alignment was therefore deemed preferable.	N
Variant 0-D (Hallin)	This variant is routed further to the east of Beinn na Mointich in comparison with the Baseline Alignment, closer to Gillen. It would re-join the Baseline Alignment near the Waternish Forest plantation to the east of Beinn na Mointich. This variant would increase the length of the OHL, and result in the potential for increased visual effects on properties at Gillen. No discernible benefits in comparison to Baseline Alignment, which is preferred.	N
Variant 0-E (Fairy Bridge)	This variant at Fairy Bridge was proposed to consider the different landscape and visual effects of an alignment on the western side of the existing OHL. The variant would run generally parallel on the western side of the existing OHL for approximately 4 km. It is considered that there is the potential for increased landscape and visual effect of this variant in comparison with the Baseline Alignment,	N

Variant	Description	Variant Taken forward? (Y/N)
	due in part to proximity to the road and road users. The Baseline Alignment was therefore deemed preferable.	
Variant 0-F (Fairy Bridge)	A short variant at Fairy Bridge that takes a more direct route across an area of peat to the west of the existing OHL, involving two crossovers of the OHL. Potential effects on peat at this location are likely to be mitigated through micrositing of poles. There is a preference in landscape and visual terms for the Baseline Alignment in comparison to this variant.	N
Variant 0-G (Glen Heysdal)	This short variant to the east of Upper Feorlig was proposed to minimise effects on sensitive habitats, and potentially limit skylining of poles from properties at Upper Feorlig. This variant would require crossing the existing OHL twice within a short distance, and could interact with land being used for crofting. As such, the Baseline Alignment is preferred.	N
Variant 0-H (Balmeanach)	This variant, running parallel to the existing OHL on its southern side for a short distance, was proposed to reduce potential effect on sensitive habitats, and also to reduce the length of OHL crossing the SSSI (Geological). The variant would however result in increased proximity and visual effect from properties at Balmeanach, and interaction with croft land. It would also require two crossovers of the existing OHL. It is considered that potential effects on sensitive habitats and the SSSI (Geological) can be minimised through micrositing. Therefore the Baseline Alignment is preferred.	N
Variant 0-I (Balmeanach)	This variant would be routed to the south of Balmeanach, crossing both the existing OHL and the minor road. On the south side of the valley, the variant would be routed across open moorland before passing through a commercial forestry plantation prior to reaching Edinbane Substation. This variant has been considered to avoid the SSSI (Geological) but would result in increased length of OHL, creation of a new wayleave through plantation forestry, and potential for increased landscape and visual effects. As such, the Baseline Alignment is preferred.	N

5.6 Preliminary Consultation Feedback

5.6.1 During the alignment selection process, workshops have been held with statutory consultees to seek feedback on alignment options and design solutions for the project. A summary of the feedback provided in relation to Section 0 is provided below:

- The Highland Council highlighted that the Baseline Alignment runs alongside Stein to Gillen, and Loch Caroy to Glen Vic Askill Core Paths, and that it crosses two other Rights of Way and Wider Path

Network paths. Public access will therefore need to be considered and accommodated during construction works, and where longer-term access is required;

- NatureScot highlighted that the Baseline Alignment crosses the An Cleirach SSSI. NatureScot offered to provide the Earth Science Site Documentation for the site to help guide the siting of infrastructure within the SSSI;
- Historic Environment Scotland (HES) raised some concerns with potential setting effects in relation to Trumpan Church and Dun Hallin Broch Scheduled Monuments. HES requested additional wirelines from and to these sites of the Baseline Alignment and alternative OHL variants. On receipt of this information, HES concluded that the Baseline Alignment was preferred to alternative OHL variants with respect to potential setting effects on SMs in Section 0; and
- Forestry Land Scotland and SEPA made no specific comment on Section 0 during preliminary discussions.

5.6.2 Appendix 4 provides further detail on the responses received from statutory consultees during preliminary engagement, and how these have been addressed and considered during the alignment selection process.

5.7 Preferred Alignment and Design Solution

5.7.1 In selecting the preferred alignment and design solution for this section, consideration has been given to a variety of environmental, technical and cost considerations, as detailed above, as well as the preliminary consultation responses received from statutory consultees. On balance, it was determined that the Baseline Alignment should be taken forward as the preferred alignment and design solution within this section. This would require the installation of approximately 23 km of wood pole (H pole) OHL. The existing wood pole OHL would be removed upon completion. The preferred alignment and design solution is shown on Figure 3.0a to 3.0c.

6. SECTION 1 – EDINBANE TO NORTH OF SLIGACHAN

6.1 Introduction

6.1.1 This section of the project originates at Edinbane Substation, heading generally south east towards Glenmore and Mugeary, and continuing towards Glen Varragill to the north of Sligachan.

6.1.2 Figures and visualisations prepared as part of this Consultation Document of relevance to this section include:

Figures

- Figure 2.1.1a to 2.1.3b: Section 1: Baseline Alignment, Variants, Environmental Designations and Constraints
- Figure 3.1a to 3.1b: Section 1: Preferred Alignment and Design Solution

Visualisations

- Figure 4.1.1 (a-c) VP5 – Glen Vik Askill from Dun Arkaig Broch
- Figure 4.1.2 (a-c) VP6 – Mugeary

6.2 Proposed Development Solution

6.2.1 Within this section, it is proposed that the existing 132 kV wood pole OHL would be replaced with a new double circuit steel lattice 132 kV OHL. The change from wood pole to steel lattice structure is required within this section to meet the predicted capacity and load requirements from Edinbane Substation. The steel lattice solution provides reliable security of supply, and is a cost-effective solution. A short section of underground cable to connect the OHL to Edinbane Substation is likely to be required.

6.2.2 Within this section, the existing 132 kV wood pole OHL would be removed upon completion of the new OHL.

6.3 Technical Considerations and Construction Access

6.3.1 This section generally comprises low lying topography, with soft / peaty soils and several watercourses. Generally, construction of stone access tracks is likely to be the preferred method of accessing each tower location within this section as stone tracks offer the most robust means of providing access for the heavy construction plant required. Temporary trackway is not likely to be feasible for use across large areas in this section due to ground conditions, weight of construction vehicles and length of time trackway would need to be in place, all of which could result in an adverse effect on local habitats if trackway was used extensively. Temporary trackway may be used however in localised areas. Existing forestry tracks such as those in Tungadal and Glen Varragill forests would be used where practicable. Further peat probing and habitat surveys would be undertaken during the EIA stage of the project to inform the most appropriate method and route for construction access.

6.3.2 The use of helicopters is not currently being considered for this section of the project given the good access opportunities that exist from the local road network and existing forestry tracks for the delivery of materials to site.

6.4 Baseline Alignment

6.4.1 The Baseline Alignment for Section 1 was developed by an OHL contractor on the basis of it being the most technically feasible and economically viable alignment and design solution. The Baseline Alignment for Section

1 is shown on Figures 2.1.1a to 2.1.1b. Within this section the Baseline Alignment is typically routed adjacent to the existing OHL (which would be removed) with the exception of the following areas:

- Loch Connan: due to local landform and topography, the Baseline Alignment deviates by approximately 250 m from the existing OHL; and
- Glenmore / Mugeary; here the alignment deviates from the existing 132 kV OHL and passes across open moorland at Achaleathan before following the eastern edge of Tungadal Forest. The primary driver for this has been to reduce landscape and visual effects, particularly from properties at Glenmore and Mugeary. On approach to Mugeary, the Baseline Alignment follows the contour around the lower slopes and crosses through the forest block to the west of Mugeary. South of Mugeary, the Baseline Alignment crosses back to the east of the existing OHL.

6.5 Alignment Options Appraisal

6.5.1 As part of the iterative alignment selection process, a review of the Baseline Alignment and potential variants has been carried out by the SSEN Transmission environmental and engineering teams, and environmental consultants, in close collaboration with the OHL Contractor. A summary of the key elements of this review is provided below.

Baseline Alignment (Environmental Considerations)

Natural Heritage

6.5.2 Within this section, the Baseline Alignment would pass through approximately 1 km of the Cuillins Special Protection Area (SPA), for which golden eagle is a qualifying feature, as it runs to the east of Glen Varragill Forest. As the Baseline Alignment would generally follow the existing OHL through this part of the SPA, through a lower lying area and adjacent to plantation forestry, it is considered that the Baseline Alignment should present a low risk to golden eagles. Further discussion on the Cuillins SPA with respect to Section 2 and 3 of this project is included in Chapters 7 and 8 of this Consultation Document.

6.5.3 The Sligachan Peatlands Special Area of Conservation (SAC) / Site of Special Scientific Interest (SSSI) is located to the west of the A87 on approach to Sligachan, but as the Baseline Alignment is located to the east of the A87 in this area direct impacts on this designation would be avoided. The Baseline Alignment would cross watercourses that are upstream of the SAC/SSSI, and appropriate mitigation to avoid silt and pollution entering these watercourses during construction would be required to avoid indirect effects on the SAC/SSSI.

6.5.4 The Baseline Alignment would traverse areas of blanket bog, wet heath, wet modified bog, dry modified bog and small patches of acid grassland habitats. There is the potential for areas of deeper peat and priority peatland habitats, particularly across the moorland at Achaleathan and to the west of Glenmore. The Carbon and Peatland Map 2016 identifies areas of Class 1 peatlands in this section. Peat probing along the route of the Baseline Alignment within Section 1 has confirmed that peat depths are often below 1 m, albeit there are some areas where deeper peat exists. One of these areas is where the OHL would cross the moorland at Achaleathan. Here, peat depths generally exceed 2 m, and in some places are greater than 4 m. Much of this is also intact and active blanket bog habitat.

6.5.5 Known ornithological sensitivities include white-tailed eagle, golden eagle, hen harriers, red-throated diver and greenshank, all of which frequent the area. Nest sites for some of these species are known to exist within the wider area and bird survey work has been continuing through 2021 to inform alignment selection, and to further inform appropriate mitigation measures. Moorland breeding bird surveys within this section between May and July 2021 detected greenshank, golden plover and curlew within the area, and flights of white-tailed eagle and red throated diver. Flight activity surveys for golden eagle and white-tailed eagle have been carried out in 2021, supplementing existing survey data. Flights of both species were recorded throughout this area. A focus on

identifying known nest sites for birds of conservation concern during 2021 surveys has helped inform the alignment selection process.

6.5.6 The Baseline Alignment passes the north eastern tip of a surface water drinking protection zone supplying Bracadale, and private water supply infrastructure could be present in limited areas throughout the section. Further review of water supply sources and infrastructure will be required to assess potential effects and inform appropriate mitigation measures through the EIA stage of the project.

Landscape and Visual

6.5.7 Whilst the Cuillin Hills NSA designation does not extend into this section, the Cuillin mountains form a notable focus of views from areas within Section 1 and the appreciation of the NSA in views from this area is a recognised Special Quality of the NSA.

6.5.8 More generally across this section, the patchwork landscape of moorland and forest is considered to provide reasonable opportunity to accommodate this type of development if well aligned.

6.5.9 Visual receptors comprise residents of crofting properties at Glenmore and Mugeary where properties are mostly orientated to take advantage of elevated westerly views across the valley. The Baseline Alignment, situated along the edge of the forest would help to mitigate potential significant visual effects from visual receptors at Glenmore, given the distance and the backcloth effect of the forest, despite being in the main view. At Mugeary, the landform results in the Baseline Alignment being closer to properties. Although closer, this Baseline Alignment reduces the potential for skylining in views from these properties. This is illustrated in the visualisation included with this Consultation Document (see VP 6, contained in Figure 4.1.2 a-c). A further visualisation of relevance to this section is included with this Consultation Document in VP 5 (contained in Figure 4.1.1 a-c), near Glen Vic Askill.

6.5.10 Residents, visitors and tourists utilising the local road network would gain views of the Baseline Alignment, particularly the A87 between Portree and Sligachan, and the B885, crossing between Bracadale and Portree.

Cultural Heritage

6.5.11 In this section, Dun Arkaig Broch Scheduled Monument is located approximately 1.3 km from the Baseline Alignment at its closest point, as illustrated in VP 5 (contained in Figure 4.1.1 a-c), included with this Consultation Document. No likely significant effect on the setting of these assets as a result of the Baseline Alignment is anticipated.

6.5.12 Few non-designated heritage assets have been recorded within the vicinity of the Baseline Alignment, partly reflecting the upland nature of the landscape and partly a lack of archaeological investigation. Recorded features are mostly post-medieval, such as buildings, field boundaries, and cultivation remains. Direct impacts on these should be avoided through micro-siting.

Other Environmental Considerations

6.5.13 Agriculture in this section, and intersected by the Baseline Alignment, predominantly consists of rough grazing, dominated by plant communities of low grazing value.

6.5.14 Forestry includes plantations at Glen Vic Askill, Glen Tungadal and Glen Varragill. The Baseline Alignment would avoid felling any plantation forestry at Glen Vic Askill, but would require a new wayleave through approximately 1 km of the eastern block of Glen Tungadal forest at Mugeary. Similarly, the Baseline Alignment

would require some limited felling and the creation of a short new wayleave through Glen Varragill as the Baseline Alignment crosses the A87.

6.5.15 Core paths include the Loch Caroy to Glen Vic Askill Core Path. Public access to paths during construction, and in the longer term, would be considered further during the EIA stage of the project, and appropriate mitigation measures developed.

6.5.16 The northern part of the Baseline Alignment is within the vicinity of the consented Glen Ullinish Wind Farm. There are no current planning applications or areas allocated for future development in direct conflict with the Baseline Alignment within this section.

Variants (Environmental Considerations)

6.5.17 A number of variants to the Baseline Alignment have been considered to either mitigate a potential effect, or to provide an alternative for consideration by the project team during the selection of a preferred alignment and design solution. These variants are set out in Table 6.1 and shown on Figures 2.1.1a to 2.1.1b. The potential environmental constraints and opportunities of these variants in comparison to the Baseline Alignment, and with regard to the environmental topic areas set out in SSEN Transmission's routeing guidance[19], is discussed in more detail in Appendix 3 (see also Figures 2.1.2a to 2.1.3b).

Table 6.1: Variants: Section 1

Variant	Description	Variant Taken forward? (Y/N)
Variant 1-A (Edinbane to Glen Vik Askill Forest)	This variant has been proposed to maintain sufficient clearance distances from the consented Glen Ullinish Wind Farm which are not achieved with the Baseline Alignment. This would require a new wayleave to be created through forestry at Glen Vic Askill. Given the technical requirement to maintain sufficient clearance distances from the consented Glen Ullinish Wind Farm, this variant is preferred.	Y
Variant 1-B (Achaleathan)	This variant has been proposed following additional NVC surveys and a peat probing exercise throughout Section 1, which identified areas of blanket bog and deep peat along the Baseline Alignment across moorland at Achaleathan. This necessitated a change to the Baseline Alignment to minimise effects on peatland habitats and avoidance of areas of deeper peat where practicable. Whilst further review of this variant will be required during the EIA process to minimise effects on deeper areas of peat and peatland habitats, this variant is preferred over the Baseline Alignment.	Y
Variant 1-C (Glenmore / Mugeary)	This variant would run adjacent, and to the west of the existing OHL, passing in front of properties at Glenmore and Mugeary. It presents a viable alternative to the Baseline Alignment and would reduce effects on sensitive habitats and areas of deeper peat at Achaleathan. It would however result in likely significant landscape and visual effects at Glenmore and Mugeary, and as such the Baseline Alignment is preferred.	N

Variant	Description	Variant Taken forward? (Y/N)
Variant 1-D (Glenmore / Mugeary)	This variant, to the east and to the rear of properties at Glenmore and Mugeary, was primarily considered in relation to the potential landscape and visual effects of an OHL alignment in this area. It was deemed that such an alignment would result in likely significant landscape and visual effects at Glenmore and Mugeary. As such, the Baseline Alignment is preferred.	N
Variant 1-E (Glen Varragill Forest)	This variant was considered as it takes a shorter and more direct route through the Glen Varragill Forest plantation, either side of the A87. This variant would require the creation of a new wayleave. The Baseline Alignment was preferred as it would minimise felling.	N

6.6 Preliminary Consultation Feedback

6.6.1 During the alignment selection process, workshops have been held with statutory consultees to seek feedback on alignment options and design solutions for the project. A summary of the feedback provided in relation to Section 1 is provided below:

- The Highland Council highlighted that the Baseline Alignment crosses the Loch Caroy to Glen Vic Askill Core Path (also part of Wider Path Network path). Public access will therefore need to be considered and accommodated during construction works, and where longer term access is required;
- NatureScot highlighted that the Baseline Alignment crosses watercourses that are upstream of the Sligachan Peatlands SAC and SSSI, avoiding silt and pollutants entering these watercourses will be key. Also highlighted by NatureScot was Class 1 peatland habitat within much of Section 1. NatureScot recommended peat and vegetation surveys to guide the siting of infrastructure and construction tracks;
- HES confirmed they were content that significant impacts on the setting of Dun Arkaig Broch Scheduled Monument are not likely as a result of the Baseline Alignment; and
- Forestry Land Scotland and SEPA made no specific comment on Section 1.

6.6.2 Appendix 4 provides further detail on the responses received, and how these have been addressed and considered during the alignment selection process.

6.7 Preferred Alignment and Design Solution

6.7.1 In selecting the preferred alignment and design solution for this section, consideration has been given to a variety of environmental, technical and cost considerations, as detailed above, as well as the preliminary consultation responses received from statutory consultees. On balance, it was determined that Variant's 1-A and 1-B would be taken forward given the requirement to ensure sufficient clearance distances to the consented Glen Ullinish Wind Farm (Variant 1-A) and minimising effects on deeper areas of peat where practicable (Variant 1-B), in combination with the Baseline Alignment in all other areas. The existing wood pole OHL would be removed upon completion. The preferred alignment and design solution is shown on Figure 3.1a to 3.1b.

7. SECTION 2 – NORTH OF SLIGACHAN TO BROADFORD SUBSTATION

7.1 Introduction

7.1.1 As has been noted previously, whilst a preferred route for Section 2 was identified within the Consultation Document at route options stage (March 2020)[2], given the consultation responses received and the environmental sensitivities and technical challenges present within this section, further engineering and environmental review of available options has been required prior to identifying a proposed route and design solution.

7.1.2 This Chapter will set out the key environmental considerations, alternative technology and route options considered for this section of the project, prior to exploring alignment options and confirming the proposed route, preferred alignment and design solution within Section 2.

7.1.3 Figures and visualisations prepared as part of this Consultation Document of relevance to this section include:

Figures

- Figure 2.2.1a to 2.2.3b: Section 2: Baseline Alignment, Variants, Environmental Designations and Constraints
- Figure 3.2a to 3.2b: Section 2: Preferred Alignment and Design Solution

Visualisations

- Figure 4.2.1 (a-d) VP7 – A87 at Sligachan Camp Site
- Figure 4.2.2 (a-d) VP8 – A87 in Gleann Torra-mhichaig
- Figure 4.2.3 (a-d) VP9 – Moll Minor Road near Kinloch Ainort
- Figure 4.2.4 (a-d) VP10 – A87 overlooking Loch Ainort

7.1.4 Appendix 5 (LVA of OHL Baseline Alignment within Section 2) is also of direct relevance to this section.

7.2 Summary of Key Environmental Considerations

7.2.1 Section 2 is characterised by the mountains of the Black and Red Cuillin ranges which rise steeply from the shore providing a prominent landscape and visual focus, and the long fjord-like sea-lochs of Loch Sligachan and Loch Ainort which cut deeply inshore to the feet of the mountains. This is a sensitive and dramatic landscape and the accessibility provided by the A87 trunk road, which winds around the bases of the mountains and around the heads of the lochs, results in this area being highly popular with tourists and visitors.

7.2.2 The majority of the preferred route follows the A87 and skirts the edge of the Cuillin Hills National Scenic Area (NSA) and Cuillins Wild Land Area (WLA). In terms of an overhead solution, although the steel lattice towers would replace existing wood poles, the greater prominence of these structures in relation to the sensitivity of the landscape is considered likely to result in significant landscape effects. It is considered that structures may be distracting in valued mountain views and may lead to a barrier effect across the base of the mountains, particularly when seen from the A87.

7.2.3 New OHL structures would be potentially visible to the rear of properties at Sconser, Luib and Strollamus and would be potentially prominent and distracting in views from parking laybys and tourist sites along the A87 at

Loch Sligachan and Loch Ainort, from Peinachorrain and from the Raasay Ferry on the approach to Sconser. There is the potential for some of these visual effects to be significant (see Appendix 5).

7.2.4 The preferred route would also pass through the Cuillins SPA for much of its length, for which golden eagle is a qualifying feature (supporting 8 pairs). However, as the route would generally follow the existing line it is considered that a new OHL replacing the existing OHL should present fewer potential risks to golden eagles.

Preliminary Consultation Feedback

7.2.5 During the alignment selection process, workshops have been held with statutory consultees to seek feedback on alignment options and design solutions for the project. A summary of the feedback provided in relation to Section 2 is provided below:

- The Highland Council and NatureScot both suggested it was important to consider subsea and underground cable options, and the potential use of NeSTS, and for information on these options to be provided in order for consultees to understand how these have been fully explored;
- The Highland Council also highlighted that the preferred route crosses a number of core paths, rights of way and wider path network paths;
- NatureScot suggested that an assessment of the Special Qualities of the NSA should be carried out on alignment options to tease out the differences; and
- NatureScot highlighted the crossing of Loch Sligachan, around Glamig and the head of Loch Ainort as key areas where alternatives should be explored.

7.2.6 Appendix 4 provides further detail on the responses received, and how these have been addressed and considered during the alignment selection process.

7.3 Alternative Technology Options

7.3.1 Given the sensitive nature of this section, and to mitigate likely significant landscape and visual effects, further review into alternative design solutions has been undertaken in order to find an acceptable route, alignment and design solution through this section. This has included investigating the feasibility of cabling options within this section (both subsea and land), as well as the potential to use alternative steel structures (NeSTS) in targeted areas (e.g. at the heads of lochs). This review is summarised below and has enabled a fuller understanding of the technical viability, environmental impact and cost of such options, in comparison with a steel lattice OHL.

NeSTS

7.3.2 New Suite of Transmission Structures (NeSTS) are a series of steel pole structures that have been developed as part of a Network Innovation Competition (NIC) innovation project to design an OHL structure that aims to lower the environmental impact of OHLs. The design of these structures has been developed in close consultation with key statutory bodies, utilising visualisations and 3d modelling to seek comment on their appearance and potential utilisation on the transmission network.

7.3.3 The use of NeSTS has been considered in Section 2 between Sligachan and Broadford as an alternative design solution to the steel lattice OHL.

7.3.4 The technology comprises of a series of pole sections making up the main body of the structure, with the cross arms that hold the conductor and associated fittings/components, attached to the top section. The pole is made up from sheet steel folded on a press plate with 12 sides to a pole, each section is lifted into position with a crane and positioned over the one below with an overlap on the taper to create a slip joint. The joint is pulled

together with hydraulic pulling rams to a predetermined stress, using gravity and friction to keep each joint in place. Typically, a pole suitable for the Skye circuit would have 3 sections. **Plate 7.1** provides an example of a NeSTS pole.

Plate 7.1: Example of NeSTS pole with larger 400m+ spans

7.3.5 The construction toolset for NeSTS is similar to that of lattice towers, and requirements for access tracks, foundation types and environmental constraints are weighed up to develop the optimum alignment through the design phase.

7.3.6 The NeSTS structures have been designed to enable larger spans, and therefore to enable OHLs to comprise fewer structures in response to stakeholder request.

7.3.7 The installation of NeSTS poles within this area would be a viable alternative in technical terms to a steel lattice OHL, and the longer span lengths that are possible with the NeSTS poles would enable more direct alignment options around the heads of Lochs Ainort and Sligachan to be explored.

7.3.8 Whilst the NeSTS option could offer some advantages to the steel lattice OHL solution in terms of increased span lengths to navigate challenging terrain through this section, and result in fewer structures in an OHL design, it is considered that both NeSTS and steel lattice OHL structures would likely result in significant landscape and visual effects on the Cuillins National Scenic Area, and that these effects could justify the increased cost to customers and increased substation footprints required for an underground cable solution.

7.3.9 Whilst the use of taller towers with a wider span would theoretically lead to fewer towers within the NSA and surrounding areas, the more solid appearance of the NeSTS towers would have similar, if not more prominence than the steel lattice towers in the landscape. Taller towers of either structure type would continue to form a barrier effect around the edge of the NSA and in views from the A87 and settlement areas featuring the mountains and coast. In addition, the taller towers would have greater potential to skyline in views and to reduce the apparent scale and grandeur of the landscape.

7.3.10 The NeSTS option is therefore not being progressed as an alternative design solution within Section 2 as it would not mitigate likely significant landscape and visual effects on the NSA and other receptors.

7.3.11 Further consultation with stakeholders on the NeSTS poles has commenced separately following the completion of the NeSTS trial OHL at Loch Cuaich in 2021.

Wood Pole OHL

7.3.12 To replace the existing 132 kV wood pole with another wood pole solution that met the capacity requirements of the Skye Reinforcement Project would require the construction of four double trident wood poles. This was not deemed a practicable alternative on technical or environmental grounds due to topography, the constrained nature of this section and likely significant environmental effects (in particular landscape and visual effects). This alternative design solution was therefore not considered further.

Underground Cables

7.3.13 Underground cable technology has been used within SSEN Transmission and the wider UK transmission industry for many years. Key considerations in relation to its installation relate to topography, ground conditions, access and other environmental considerations (e.g. watercourse crossings, sensitive habitats etc.), as well as the requirement for reactive compensation at connected substations.

7.3.14 The viability of an underground cable as an alternative design solution within part of Section 2 of the Skye Reinforcement Project has been informed by feasibility studies and walkover surveys by specialist cable engineers to evaluate its constructability.

7.3.15 An underground cable solution for this project would comprise of a double circuit, with a cable rating required to match the corresponding OHL at 348 Mega Volt Amps (MVA). The cables would be terminated at a Cable Sealing End (CSE) compound, which would allow for transition between underground cable to OHL (an example is shown in Plate 7.2 below). A permanent access track would be required at each CSE compound.

Plate 7.2: Example of a Cable Sealing End Compound

7.3.16 The overall cable construction corridor would need to be approximately 30 m wide to accommodate excavation and cable installation equipment and store excavated materials during construction for reinstatement once the installation process is complete. A haul road would be constructed along the length of the cable section during the construction phase, with the circuits installed on either side. Similarly, access points and tracks from existing public roads to the proposed haul road would likely be required.

7.3.17 To facilitate a more efficient installation cables would be installed via ducts. These plastic ducts would be installed prior to the cable pull job to minimise open ground works / excavations. The high voltage cable would then be pulled into place at each joint bay location, required at intervals of approximately 800-900 m along each cable circuit route.

7.3.18 The installation of an underground cable within Section 2 would present a number of technical and environmental challenges, a summary of which are noted below:

- Potential effects on the surface water and hydrogeological regime, and subsequent effects on Groundwater Dependent Terrestrial Ecosystems (GWDTE);
- Effects on soils and peat. Ground conditions are likely to be variable throughout Section 2, with rock close to the surface in some areas, and deeper areas of peat in others. Such conditions would need to be established prior to finalising a cable route, and areas of deeper peat avoided as far as practicable;
- A number of watercourse crossings would be required, including at the heads of Loch Sligachan and Loch Ainort. It is likely these would be achieved by Horizontal Directional Drill (HDD);
- During construction the establishment of a 30 m wide cable corridor would result in disruption to predominantly wet heath and some bog habitats, which are found throughout Section 2;
- Potential for landscape and visual effects during the construction phase, albeit these should be short term, subject to appropriate and carefully planned reinstatement; and
- In areas where the cable route would be within the vicinity of the A87, or require crossing the road (or other minor roads), there would likely be a requirement for road closures and traffic management systems to be put in place.

7.3.19 The mitigation of these effects during construction would be key to the success of an underground cable route within part of Section 2 of the Skye Reinforcement Project. It is anticipated that standard and best practice mitigation measures in relation to the construction effects of an underground cable would be covered in a project specific Construction Environment Management Plan (CEMP) and Construction Method Statements, that would be developed in accordance with industry best practice guidance, including Pollution Prevention Guidance (PPGs). A Peat Management Plan and Site Restoration Plan would also be required to set out procedures for stripping, handling, storage and re-use of soil and peat. Drainage design of the temporary haul road would also require careful consideration to preserve the natural hydrological regime as much as possible. This would be set out in the Construction Method Statements. Where interaction with the local road network occurs, a Traffic Management Plan would be required.

7.3.20 Other technical and economic factors to consider include:

- Fault finding, which is typically more complex, time consuming and costly on underground cable systems in comparison to OHLs. General visual inspection and maintenance is more challenging as accessibility is naturally restricted;
- Power losses, which can be a key consideration and limiting factor in terms of the maximum length of an underground cable solution that could be installed. Initial studies have suggested that reactive compensation measures (comprising additional works at linked substation sites (i.e. Edinbane and

Broadford), consisting of a similar installation to a new grid transformer and associated bay) would be required to facilitate an underground cable route of greater than 7 km in this section; and

- Due to higher installation costs compared to an OHL, and the requirement for reactive compensation measures at substation sites on the transmission network, an underground cable solution would result in a considerable increase in the cost of the project as a whole.

7.3.21 Despite the number of constraints and challenges associated with the installation of an underground cable, as well as additional cost, an underground cable solution would provide the opportunity to mitigate the long term likely significant landscape and visual effects of an OHL solution through parts of Section 2, in particular the likely significant effects on the Cuillins National Scenic Area and on other landscape and visual receptors within the vicinity (see Appendix 5).

7.3.22 Further consideration of an underground cable solution has therefore been undertaken during the detailed alignment selection process, and is discussed further in this Chapter.

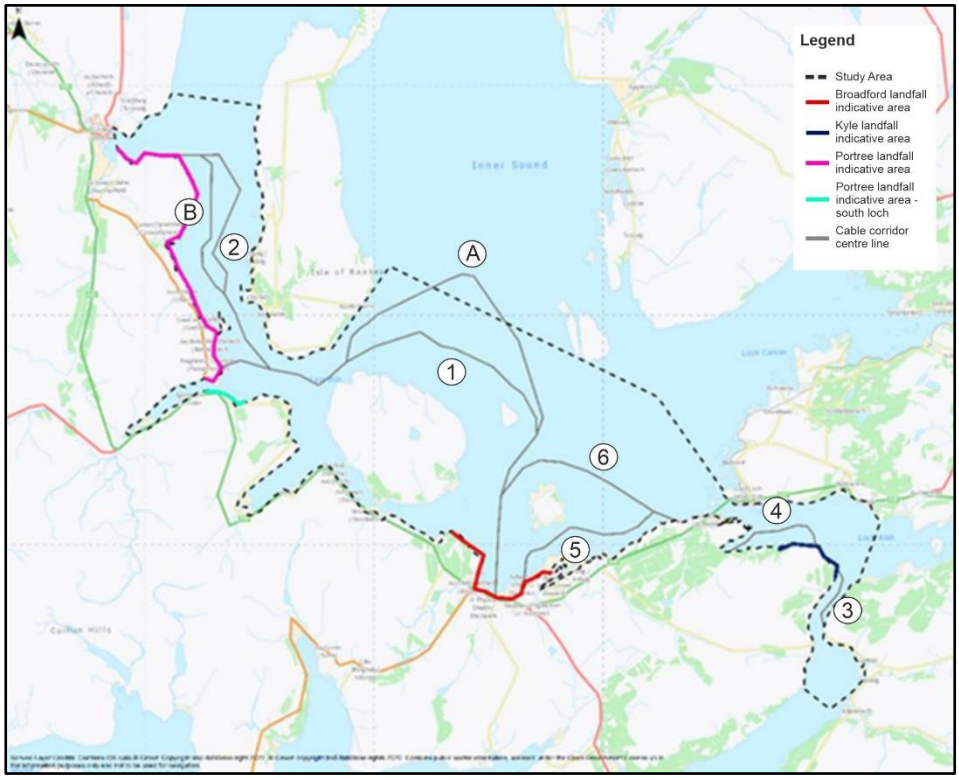
Subsea Cables

7.3.23 A desktop study of potential subsea cable options and indicative landfall locations has been undertaken between Portree and Broadford on the Isle of Skye, covering much of Section 2 of the Skye Reinforcement Project. Consideration was also given to potential subsea cable options between Broadford and Kyle Rhea (i.e. Section 3 of the Skye Reinforcement Project), and this is summarised in Chapter 8 of this Consultation Document.

7.3.24 The desktop study included a review of a wide variety of data, covering the physical environment, environmental and ecological factors, and other sea users. Following this, identification and charting of potential subsea cable routes and constraints were mapped and assessed, with potential for mitigation or avoidance of particular constraints considered.

7.3.25 Plate 7.3 shows indicative landfall locations and cable routes covering both Section 2 and 3.

Plate 7.3 – Indicative Landfall Locations / Subsea Cable Routes

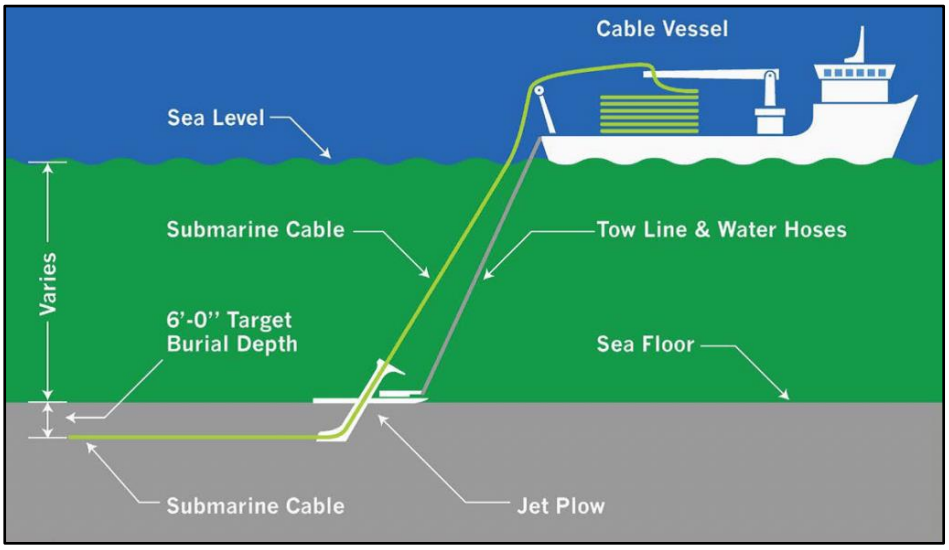


7.3.26 A subsea cable solution for this project would comprise of a double circuit, with a cable rating required to match the corresponding OHL at 348MVA. This would either involve four 132 kV cables, requiring CSE compounds (see **Plate 7.2**) at either landing point location, or two 220 kV cables which, due to the rating change required, would mean the electrical equipment required to step the voltage up and down at the transition point between OHL and subsea cables would be similar in scale to a 132 kV transmission substation site.

7.3.27 There are a few key technical parameters to consider when assessing the suitability of subsea cable routes. The first of these is water depth. Due to the repair criteria a separation distance must be a minimum of 1.5 x water depth, so the deeper the cable is installed the greater the separation requirements between different circuits. Second is the thermal rating of cable circuits in shallow water, which could affect the cable cross section required. Third is the interface with other sea uses, particularly fishermen, as installing subsea cable in areas of higher activity increases the risk of anchor strike in shipping lanes. Lastly are the seabed conditions, which will determine the required burial depth on the sea floor and method of cable protection if required burial depths cannot be met via typical methods.

7.3.28 Submarine cables are generally installed by a cable laying ship with the aid of robots used to control cable laying on the sea bed. Due to their cost to install and strategic value, high voltage electrical cables are generally buried on the sea floor to protect them from general wear and risk of damage. There are various techniques used to undertake this, with popular methods being hydro jet burial or ploughing. **Plate 7.4** shows a diagram of the process using a cable plough.

Plate 7.4 – Subsea Cable Installation Method



7.3.29 Table 7.1 provides a description of the subsea cable routes considered, the key constraints and overall suitability. The subsea cable routes within Section 2 comprise two main routes (referred to as Option 1 and Option 2 below), and two alternative sub-options (referred to as Sub-option A and B below). Sub-options do not form options in their own right, but form alternative options within each of the two main routes.

Table 7.1: Subsea Cable Options between Portree and Broadford

Subsea Cable Option	Description of Route	Constraints	Overall Suitability
Option 1 Broadford – north of Scalpay –	Water depths vary between 25 m and 104 m though data coverage is incomplete. Bathymetry indicates large areas of exposed bedrock, with	Major constraints concern the MPA, both in terms of its qualifying features (flapper skate) and the potential to result in a barrier effect	Low

Subsea Cable Option	Description of Route	Constraints	Overall Suitability
Peinchorran (24 km in length)	some accumulation of sediments in depressions. North of Pabay the seabed becomes irregular with high gradients associated with marine escarpments. Mapped tidal velocities peak at 3 knots. This route passes through the Red Rocks and Longay Urgent Marine Protected Area (MPA), and the Inner Hebrides and the Minches SAC. It also crosses areas of identified biogenic reef. A historic munition's disposal site is located approximately 800 m to the northeast of the cable corridor centre line in an area of deep water.	for elasmobranch species as a result of Electromagnetic Field (EMF) avoidance behaviour. In addition, there is the potential for adverse effects on embryonic flapper skate, alongside a number of other likely pressure pathways. Other constraints concern topography and geology, particularly from Broadford to north of Pabay where the presence of Jurassic sandstone at seabed will likely preclude subsea cable burial for parts of this route. The munitions disposal site also presents a major potential risk to cable installation works.	
Option 2 Broadford – north of Scalpay – Portree (34.5 km in length)	As per Option 1, until deviation north towards Portree through Sound of Raasay. Through the Sound of Raasay, water depths vary between 19 m and 80 m though data coverage is incomplete. Bathymetry indicates large relatively smooth seabed and sandy mud within the Sound of Raasay. Mapped tidal velocities peak at 3 knots. The route crosses the Skye - Raasay SSEN Distribution subsea power cable. Low density of commercial fisheries, but shipping activity around Peinchorran and Portree is higher than elsewhere in the study area.	Major constraints similar to those identified for option above and concern the MPA, topography and geology north of Pabay. Within the Sound of Raasay, the seabed is generally smooth and more gently angled, with depressions in the centre of the channel indicating gas or fluid release.	Low
Sub-Option A North of Scalpay northern extension (15 km in length)	Water depths range between 28 m and 180 m. Between Longay and Pabay, water depths increase with areas of seabed of moderate to steep gradients. Further north the areas of deeper water are characterised by smooth seabed (indicating a sandy or muddy bottom) between steep-sided	Major constraints concern the MPA, both in terms of its qualifying features (flapper skate) and the potential to result in a barrier effect for elasmobranch species as a result of EMF avoidance behaviour. In addition, there is the potential for adverse effects on embryonic	Low

Subsea Cable Option	Description of Route	Constraints	Overall Suitability
	escarpments. Mapped tidal velocities peak at 3 knots. An historic munition's disposal site is located approximately 500 m to the east of the cable route. The route passes through the Red Rocks and Longay Urgent MPA and is entirely within the Inner Hebrides and the Minches SAC This route option also encroaches into the Sound of Raasay Ministry of Defence (MoD) Exercise and Danger Area, and a moderate density of commercial fisheries is present in the area with high value potting activity. Fishing activity is likely to be more prevalent within the deeper water channels.	flapper skate, alongside a number of other likely pressure pathways. The proximity of the munitions disposal site also presents a major potential risk to seabed works. Constraints associated with the Sound of Raasay MoD Exercise and Danger Area would require further investigation.	
Sub-Option B Sound of Raasay deep water channel (6.8 km in length)	An alternative deep-water route within the Sound of Raasay, with water depths ranging from 47 m to 123 m. Whilst BGS data coverage is incomplete, seabed substrate is interpreted as sandy mud across much of the route within the deep-water channel., with gentle to moderate gradients. Mapped tidal velocities peak at 3 knots. This route option is entirely within the Inner Hebrides and the Minches SAC. The route also crosses the Skye - Raasay SSEN Distribution subsea power cable. A low density of commercial fisheries is present in the area. Shipping activity around Peinchorran and Portree is higher than in much of the study area.	Given the less challenging topography and the absence of designated areas, from a cable installation perspective this route potentially poses fewer constraints than other route options and, thus, is considered as having Medium suitability.	Medium

7.3.30 The results of the study indicated that subsea cable installation in Section 2 is likely to be very challenging, with a variety of adverse factors that include strong tidal currents, designated marine habitats, areas of rugged/complex bedrock at seabed, a historic munitions disposal site and a MoD Exercise and Danger Area. Commercial fisheries in the area will also need to be taken into consideration. Recent identification of the

flapper skate nursery and designation of the Red Rocks and Longay Urgent MPA provide further constraints to a number of potential subsea cable routes.

7.3.31 It was concluded that none of the subsea cable options discussed above would be considered suitable for subsea cable installation when considered in combination. Whilst Sub-Option B is considered as having medium suitability, it requires to be combined with a main route to form a complete subsea route option. As such, it is not proposed to give further consideration to subsea cable as an alternative design solution within Section 2.

7.4 Consideration of Alternative Route Option

7.4.1 As noted in the Consultation Document at route options stage (March 2020)[2,] and in parallel with the review of alternative design solutions noted above, consideration has also been given to how such solutions could be applied to an alternative route option; Route Option 2B. This route option departs from Route Option 1A to the south of Glen Varragill Forest, crossing moorland to the north of Ben Lee before heading south to Peinchorran, crossing Loch Sligachan before re-joining Route Option 2A. The potential for an alternative crossing point at Loch Ainort has also been given consideration.

7.4.2 The focus of considering Route Option 2B and the alternative crossing point at Loch Ainort has been the crossing of Loch Sligachan and Loch Ainort, given that these would be the most technically and environmentally challenging aspects of this alternative route option.

7.4.3 Two types of technology were considered to cross the lochs. Firstly, using large steel crossing towers in order to span the entire distance with OHL, and secondly, with use of Hydraulic Directional Drill (HDD) in order to install cables under the sea loch bed and connect to OHL towers at each side. Direct burial via laying of subsea cables into the sea floor was not considered as feasible due to the shallow water depth (<20m) presented at the loch crossings, with large areas of the seabed graded as unsuitable in these areas.

Loch Crossing Using Towers

7.4.4 The crossing of Loch Sligachan for the alternative route option (Route Option 2B) would be close to the mouth of the loch making use of two prominent elevated positions on either side at Peinachorrain and Sconser to allow for clearances to be maintained that allow vessels to pass safely under the conductors. The towers would have to be of a specialist design in order to meet the crossing requirements of the loch, with the span being around 1200 m. The towers would need to be circa 90 m in height at either side of the loch, with a smaller reinforced anchor tower situated behind the crossing towers to provide the required support. The indicative location for crossing Loch Sligachan as part of Route Option 2B is shown in Plate 7.5.

7.4.5 An alternative crossing of Loch Ainort has been considered near to the mouth of the loch. This is the narrowest point of the loch but would require a crossing of approximately 1500 m in length. This would require larger crossing towers of around 106 m in height. The indicative location for crossing Loch Ainort as part of an alternative crossing of the loch is shown in Plate 7.6.

7.4.6 Due to the size of crossing towers, large foundations would be needed in the form of concrete pours for each leg. In order to erect the towers a crane pad would also need to be constructed, meaning a flat area on either side of the lochs would need to be constructed to allow for a crane to lift the tower parts into place from a stable platform. Finally, the conductors would likely be installed with the help of cable drums, towing vessels and helicopters.

Plate 7.5 – Potential Overhead Crossing of Loch Sligachan

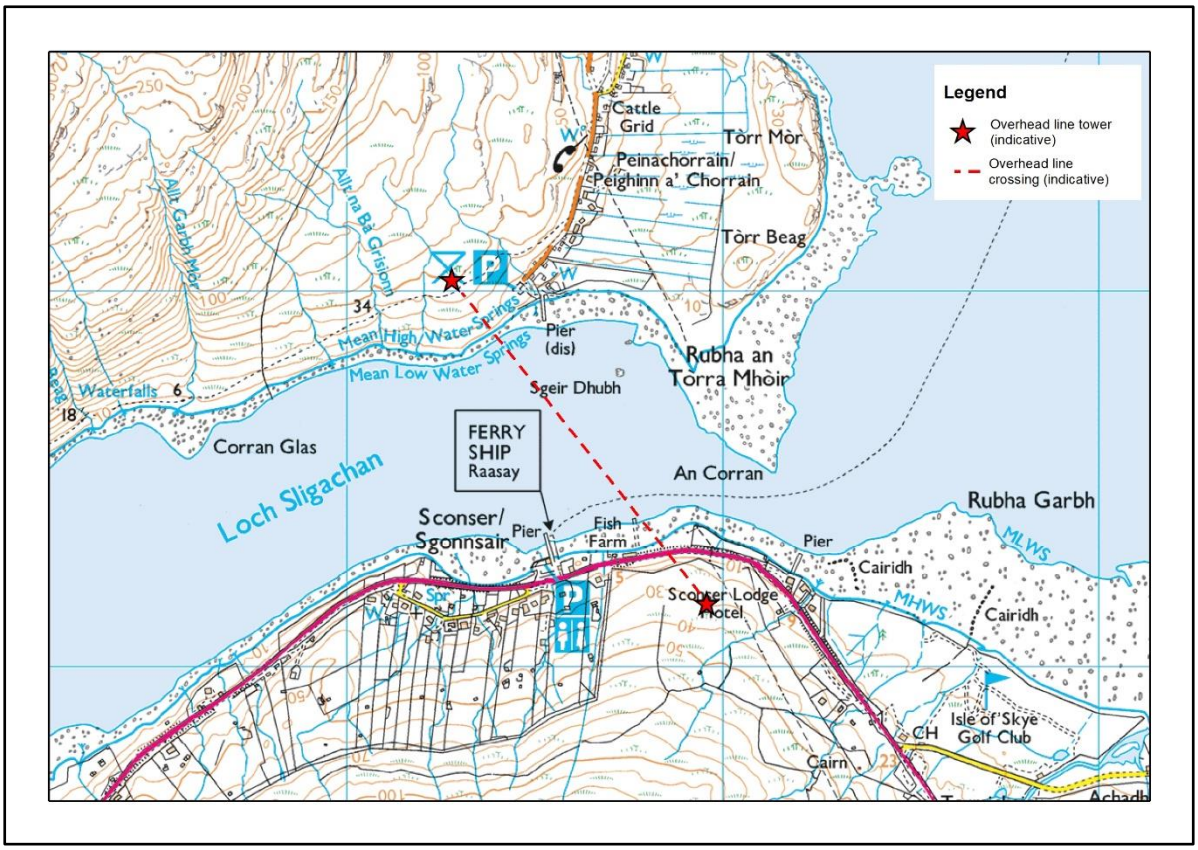
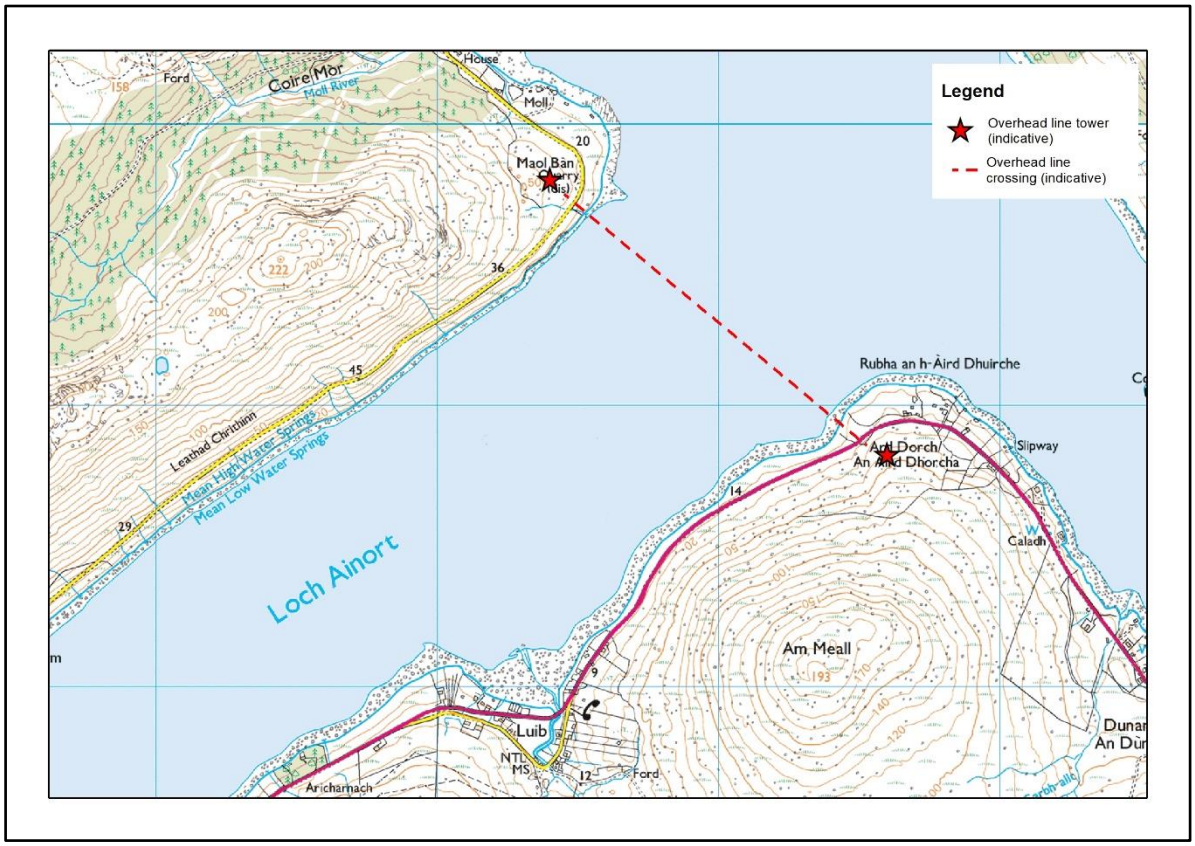


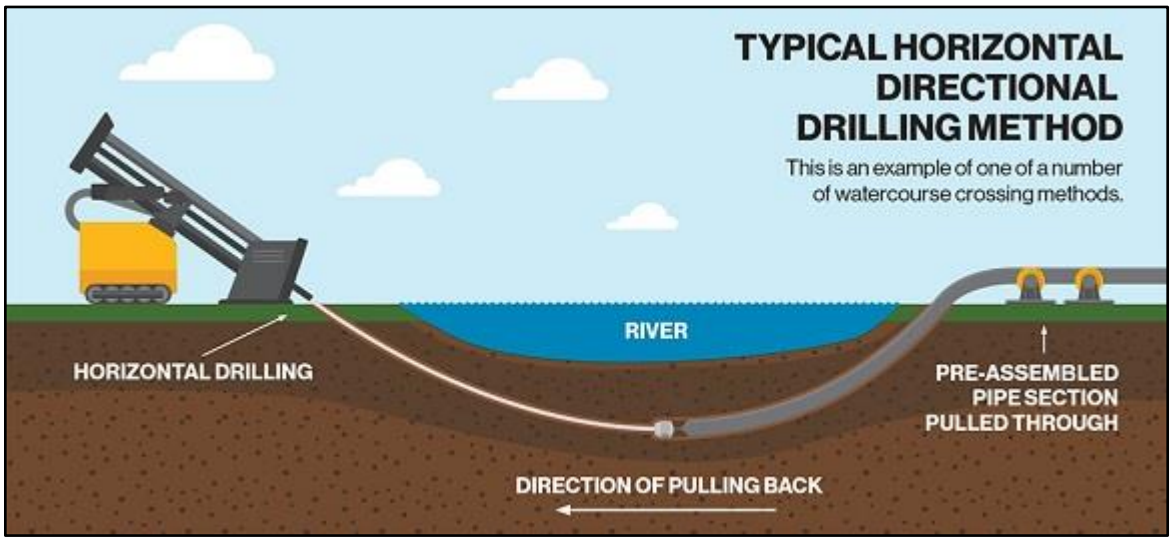
Plate 7.6 – Potential Overhead Crossing of Loch Ainort



Loch Crossing Using HDD

7.4.7 Horizontal Directional Drilling (HDD) is a method of installing underground pipelines, cables and service conduit through trenchless methods. It involves the use of a directional drilling machine, and associated attachments, to accurately drill along the chosen bore path and back ream the required pipe. See **Plate 7.7** below.

Plate 7.7 – Typical HDD method



7.4.8 The scale and complexity of undertaking this work at these loch crossings is a significant challenge. The crossing of Loch Sligachan at its narrowest point would mean that the HDD would surface on the north side of the loch in front of the settlement of Peinchorrain. From here there was little by way of a feasible method for routeing an OHL or cable out of this location without having a direct impact on the settlement itself. The crossing of Loch Ainort is even more complex, requiring an HDD of approximately 1500 m, far beyond the scale of previous HDD works SSEN Transmission has undertaken on previous projects. Other key considerations to make in reference to an HDD option for crossing the lochs is the competency of bedrock presented for drilling and the risk of frack out of drilling fluids into the marine ecosystem, which would be very difficult to seal quickly with such long drilling lengths.

Summary

7.4.9 With respect to the crossing of both of these locations by tall overhead line towers, while technically feasible, it is considered that the scale of these structures would have a dominating effect in the local area and would undoubtedly result in likely significant effects on the NSA and other landscape and visual receptors throughout Section 2, and particularly for receptors at Peinchorrain, Sconser and Loch Ainort.

7.4.10 In terms of HDD use, given the distance of the loch crossings that have been considered, there are technical complexities, high risk and high cost involved in utilising this solution in these locations. The transition to OHL also presents technical challenges at these locations, and does not offer the opportunity to mitigate likely significant landscape and visual effects on the NSA and other landscape and visual receptors within Section 2.

7.4.11 Given these constraints, it is not proposed to consider this alternative route option further. As such, Route Option 2A is confirmed as the proposed route option (see sub-section 7.8).

7.5 Baseline Alignment

7.5.1 In parallel to the consideration of alternative design solutions within Section 2, the appointed OHL contractor developed a Baseline Alignment within the proposed route (Route Option 2A) on the basis of it being the most technically feasible and economically viable alignment and design solution.

7.5.2 The Baseline Alignment through Section 2 is typically routed adjacent to the existing OHL (which would be removed), reflecting the topography and constrained nature of this section. The OHL crossing at the head of Loch Sligachan, the descent towards Loch Ainort and a short section to the south of Luib all necessitated a slight departure from the existing OHL to facilitate the most technically viable option.

7.6 Technical Considerations and Construction Access

7.6.1 Section 2 comprises hilly terrain, with steep hillsides and rock encountered at shallow depths. Construction of stone access tracks would likely be the preferred method of accessing each tower location within this section as they offer the most robust means of providing access for the heavy construction plant required. Temporary trackway is not likely to be feasible for use across large areas in this section due to ground conditions, weight of construction vehicles and length of time trackway would need to be in place, all of which could result in an adverse effect on local habitats if trackway was used extensively. Temporary trackway may however be utilised in localised areas. Proximity to the A87 provides opportunities to minimise the length of new tracks from the local road network. Existing accesses would be utilised where possible.

7.6.2 The use of helicopters is not currently being considered for installation of OHL towers within this section of the project due predominantly to the proximity to the A87.

7.7 Alignment Options Appraisal

7.7.1 As part of the iterative alignment selection process, a review of the Baseline Alignment and potential variants has been carried out by the SSEN Transmission environmental and engineering teams, and environmental consultants, in close collaboration with the OHL contractor. A summary of the key elements of this review is provided below.

Baseline Alignment (Environmental Considerations)

Natural Heritage

7.7.2 The Baseline Alignment would pass through the Cuillins SPA for much of its length, for which golden eagle is a qualifying feature (supporting 8 pairs). As the Baseline Alignment would generally follow the existing OHL, it is considered that this would present limited risks to golden eagles.

7.7.3 High sensitivity habitats are extensive throughout this route, with large expanses of wet heath and smaller pockets of blanket bog in places, and potential for areas of deeper peat.

7.7.4 Otter, a European Protected Species, are likely to be present and using the coast, watercourses and waterbodies within the vicinity of the route.

7.7.5 As the area is underlain by an impermeable bedrock the majority of the water will be shed as surface water flow, hence a large number of fast flowing streams prevail along the entire route, all orientated perpendicular to slope and generally flowing into Loch Ainort or Loch Sligachan. It is anticipated there will be private water supplies and sources along the route.

Landscape and Visual

7.7.6 This section is a sensitive and dramatic landscape and the accessibility provided by the A87 trunk road, which winds around the bases of the mountains and around the heads of the lochs, results in this area being highly popular with tourists and visitors.

7.7.7 The majority of the Baseline Alignment follows the A87 and skirts the edge of the Cuillin Hills NSA and Cuillins WLA. Visual receptors in this section comprise residents located in settlement areas around Loch Sligachan at Sconser and Peinachorrain, around Loch Ainort at Luib, and south along the coast including Dunan and Strollamus. Tourism development at Sligachan is also highly sensitive including a hotel and campsite and there are numerous recreational routes leading into the mountains and around the coast which are used by walkers and cyclists. Transport receptors include those using the A87 and other rural roads, and the ferry between Sconser and Raasay. There are numerous stopping points and viewpoints set along these routes including parking bays around Loch Ainort and Loch Sligachan and a picnic area and viewpoint at Peinachorrain.

7.7.8 To inform the alignment selection process, a landscape and visual appraisal of the Baseline Alignment has been carried out to determine the likely significant effects on landscape and visual receptors within this section. The results of this appraisal is provided within Appendix 5, and summarised below.

7.7.9 The landscape and visual appraisal undertaken for the Baseline Alignment concluded that significant effects to the landscape and visual resource would be likely, including likely significant effects to the Cuillin Hills NSA, visual receptors at settlement and tourist areas throughout Section 2 and a number of road and recreational routes, including the popular A87 trunk road. Further significant effects to Wild Land Area 23. Cuillin, as well as other residential and recreational visual receptors within the study area are also considered possible.

7.7.10 Visualisations to illustrate the Baseline Alignment throughout this section are appended to this Consultation Document (see VPs 7, 8, 9 and 10, contained in Figures 4.2.1 to 4.2.4 a-d respectively).

Cultural Heritage

7.7.11 The archaeological and cultural heritage baseline of this area is characterised by features typical of upland rural landscapes throughout the Highlands. Designated cultural heritage sites within this section are limited to Listed Buildings at Luib, and the B listed Sligachan Old Bridge.

7.7.12 Cultivable land is relatively scarce in this area, and settlement is mostly concentrated in the crofting townships of ‘Sconser’, ‘Luib’ and 'Strollamus’. In and around these townships, and on low-lying, flatter land along the coast, irregular fields defined by drystone walls and earthen banks enclose cultivation remains in the form of former spade-cut lazy beds and/or plough-cut rig and furrow. In the steeper uplands, the land is largely used as rough pasture and/or wild grazing. Stock management features such as sheepfolds, drovers’ tracks, shieling huts and livestock pens and enclosures are evident. Settlement remains include abandoned crofting townships, cleared and abandoned during the Highland Clearances of the late 18th and early 19th centuries.

7.7.13 The majority of these features most likely date to the late-medieval and post-medieval periods, although some evidence of prehistoric settlement and activity is present in the form of Iron Age hut circles. The landscape formed by this historic and prehistoric occupation is both extensive and well-preserved along much of the route. Of the heritage assets recorded in this section, it is anticipated that direct impacts could generally be avoided through micro-siting and appropriate mitigation.

Other Environmental Considerations

7.7.14 There are properties that fall within the vicinity of the Baseline Alignment at Sconser, Luib, Dunan and Strollamus. Agriculture is predominantly rough grazing, with some areas of improved grassland at Sconser.

7.7.15 Forestry is present to the east of Gleann Torra-mhichaig, and again at Broadford as the Baseline Alignment connects into Broadford Substation.

7.7.16 In terms of recreation, Sligachan is an important tourist hub with a hotel, a campsite and the start of a large number of hill walking routes. The Baseline Alignment in this section would also run parallel to a core path between Luib and Dunan.

7.7.17 Planning permission in this section has been granted for the partial change of use of an agricultural shed to the creation of four holiday letting units at the head of Loch Ainort off the Moll Road (19/02676/Ful). Other planning applications, typically housing related are not anticipated to be in direct conflict with the Baseline Alignment.

Variants (Environmental Considerations)

7.7.18 A number of variants to the Baseline Alignment have been considered to either mitigate a potential effect, or to provide an alternative for consideration by the project team during the selection of a preferred alignment and design solution. These variants are set out in Table 7.2 and shown on Figures 2.2.1a to 2.2.1b. The potential environmental constraints and opportunities of these variants in comparison to the Baseline Alignment, and with regard to the environmental topic areas set out in SSEN Transmission's routeing guidance[19], is discussed in more detail in Appendix 3 (see also Figures 2.2.2a to 2.2.3b).

Table 7.2: Variants: Section 2

Variant	Description	Variant Taken forward? (Y/N)
Variant 2-A (Underground Cable; North of Sligachan to Luib)	This variant comprises approximately 14.5 km of underground cable from the north of Sligachan to Luib. The underground cable would follow a similar alignment to that of the Baseline Alignment, with a CSE required at either end of the underground cable. Reactive compensation would be required at Broadford Substation. This variant and alternative design solution has been proposed to mitigate the likely significant effects on landscape and visual receptors within this section, including the Cuillin Hills NSA and Cuillins WLA. As a result, this variant is deemed to be preferred in comparison with the Baseline Alignment (OHL).	Y
Variant 2-B (Sligachan Hotel)	This variant diverges from the Baseline Alignment to the south of Glen Varragill Forest, and heads in a southerly direction toward Sligachan Hotel, crossing the A87 before reaching the hotel. The variant is routed to the rear of the hotel, crosses the A863 before heading northeast on the south side of the A87 where it would re-join the Baseline Alignment. The variant has been considered to minimise landscape and visual effects in easterly views of the Baseline Alignment from Sligachan. However, the variant is anticipated to result in likely significant environmental effects, particularly landscape and visual effects on receptors at Sligachan, and on the NSA. As such, this variant is not preferred.	N

Variant	Description	Variant Taken forward? (Y/N)
Variant 2-C (Sligachan)	This variant crosses the tidal area closer to the existing OHL and has been proposed to increase the distance between a new OHL and receptors at Sligachan. It is considered that this would result in some improvement from a landscape and visual perspective, but unlikely to mitigate the likelihood for significant effect. There are also technical challenges with routeing a new OHL through the tidal area. This variant is therefore not preferred.	N
Variant 2-D (Sconser)	This variant has been considered to minimise potential landscape and visual effects of a new OHL, particularly from receptors at Peinnachorran. Whilst this would result in an improvement in appearance of a new OHL for receptors at Peinnachorran in landscape and visual terms, it would increase proximity and likelihood for significant effect for receptors at Sconser. This variant is therefore not preferred.	N
Variant 2-E (Gleann Torra-mhichaig - West)	This variant, to the west of the existing OHL through Gleann Torra-mhichaig for approximately 2 km, has been considered as it would result in a slight improvement from a landscape and visual perspective through Gleann Torra-mhichaig. However, significant landscape and visual effects are still likely and therefore this variant is not preferred.	N
Variant 2-F (Gleann Torra-mhichaig - East)	This variant crosses the A87 at Sconser and passes to the east of the A87 and Gleann Torra-mhichaig, past Druim Nan Cleochd, before re-joining the Baseline Alignment around the head of Loch Ainort. It has been considered as it would remove the OHL from much of Gleann Torra-mhichaig. There is however potential for skylining of some towers, and likely significant landscape and visual effects around Sconser and Loch Ainort would remain. This variant is therefore not preferred.	N

7.8 Identification of Proposed Route and Design Solution

7.8.1 The review and study of alternative design solutions within Section 2 to mitigate likely significant effects on the NSA and other landscape and visual receptors has helped inform a decision by SSEN Transmission to proceed with Route 2A as the proposed route within this section. This decision has been taken due to a lack of other viable 'route' options through this section.

7.8.2 With respect to the Proposed Route (Route Option 2A), it is proposed that the design solution would comprise the installation of an underground cable from the north of Sligachan for approximately 14.5 km to Luib. From Luib to Broadford, the design solution would revert to steel lattice OHL.

7.8.3 The proposed design solution to underground the OHL through part of this section is being promoted to mitigate likely significant effects on the NSA, particularly those effects that would have been experienced between Sligachan and Loch Ainort with a steel lattice OHL solution.

7.8.4 The identification of an underground cable alignment is at an early stage, and it is recognised that the potential for likely significant effects during the construction phase could occur. Further engineering studies are on-going

to determine the underground cable alignment, and these studies will be supported by environmental survey data and assessment during the EIA stage of the project to seek to mitigate likely significant effects and to set out robust mitigation (see para. 7.3.19) and habitat restoration measures to ensure effects are minimised and the successful long term restoration of the cable route can be achieved.

7.9 Preferred Alignment and Design Solution

7.9.1 In selecting the preferred alignment and design solution, consideration has been given to a variety of environmental, technical and cost considerations relevant to this section, as detailed above, as well as the preliminary consultation responses received from statutory consultees.

7.9.2 The preferred alignment and design solution comprises an underground cable solution (Variant 2-A) from Sligachan to Luib. At Luib, the design solution reverts to OHL and continues along the Baseline Alignment to Broadford Substation. The preferred alignment and design solution is shown on Figure 3.2a to 3.2b. The Visualisations included of relevance to this section (VPs 7, 8, 9 and 10, contained in Figures 4.2.1 to 4.2.4 a-d respectively), comprise both the Baseline OHL Alignment (as page 'c' of each figure) and the preferred alignment and design solution (as page 'd' of each figure).

8. SECTION 3 – BROADFORD SUBSTATION TO KYLE RHEA

8.1 Introduction

8.1.1 The preferred route put forward for Section 3 within the Consultation Document at route options stage (March 2020)[2] was Route Option 3A (Western Extent) and Route Option 3B (Glen Arroch). The primary reasons for selection of the preferred route at this stage was based on the anticipated increased technical challenges of other route options within Section 3, and the likely effects on the qualifying features of the Kinloch and Kyleakin Hills SAC, in particular the western acidic oak woodland qualifying feature (which is also classified as ancient woodland), which were considered to be less for the preferred route. However, the preferred route would still need to cross various other qualifying habitats of the SAC and could result in an adverse effect on site integrity, whilst also expected to result in likely significant landscape and visual effects to and from Glen Arroch. It was also considered at this stage that the minor road through Glen Arroch provided good access opportunities for Route Option 3B.

8.1.2 The Consultation Document at route options stage (March 2020)[2] stated that further engineering and environmental survey work would be carried out to find an acceptable alignment and design solution through this sensitive landscape and environment, which could result in a review of the preferred route.

8.1.3 Consultation responses received from statutory and non statutory consultees[20] highlighted contrasting views and opinions on the preferred route put forward in this section. There was strong opposition to the preferred route from the local community and community representatives, as well as RSPB. Concerns were focussed on the sensitivities of the landscape and environment of Glen Arroch and Kylerhea, with many expressing the view that Route Option 3A should be reconsidered. Given the potential for adverse effects on site integrity of the SAC, NatureScot however were of the view that, based on the information available at the time, the preferred route (Route Option 3B) was considered the least worst option, albeit this may also lead to an adverse effect on site integrity and an objection from NatureScot.

8.1.4 Further review of Route Option 3A and 3B has therefore been carried out by SSEN Transmission since the previous consultation exercise, supported by an OHL contractor and environmental teams, to explore alignment options and design solutions within both routes.

8.1.5 This Chapter sets out the key environmental and technical considerations for this section of the new OHL, and describes the alternative technologies that have been considered. It then looks at the potential implementation of these within both route options, and the key sensitivities to be considered when developing an OHL alignment in this section. The Chapter then provides an update on the preferred route, and the preferred alignment and design solution therein.

8.1.6 Figures and visualisations prepared as part of this Consultation Document of relevance to this section include:

Figures

- Figure 2.3.1a to 2.3.2b: Section 3: Baseline Alignment, Variants, Environmental Designations and Constraints
- Figure 3.3a to 3.3b: Section 3: Preferred Alignment and Design Solution

Visualisations

- Figure 4.3.1 (a-c) VP11 – From A851 looking towards Broadford
- Figure 4.3.2 (a-c) VP12 – Donald Murchison's Monument

[20] Reported in the Report on Consultation (November 2020)

8.2 Summary of Key Issues

8.2.1 From the existing Broadford Substation this section initially traverses a relatively flat area of open moorland and commercial forestry plantation to the south of the populated A87 corridor, comprising the towns of Broadford, Harrapool, Skulamus and Breakish. Where the section enters Glen Arroch and the Kinloch and Kyleakin Hills SAC / SSSI the terrain turns mountainous with areas of steep gradient before reaching the existing OHL steel lattice towers supporting the OHL crossing at Kyle Rhea.

8.2.2 All route options considered through this section have to cross the Kinloch and Kyleakin Hills SAC / SSSI, and minimising potential effects on the qualifying features of the SAC (which include alpine and sub alpine heaths, blanket bog, dry and wet heaths, mixed woodland on base rich soils associated with rocky slopes, western acidic oak woodland and otter) has been central to the consideration of route, alignment and design solutions through this section.

8.2.3 The preferred route identified in the Consultation Document at route options stage[2] (Route Option 3B) also passes through a sensitive landscape, albeit not one that is covered by a landscape designation. Minimising potential landscape and visual effects through Glen Arroch, for communities at Kylerhea and Glenelg (on the mainland) and on other recreational receptors is a key consideration. Potential effects on landscape character and visual amenity for other routes within this section could also occur. Effects on ornithology and felling of commercial plantation and woodland are also important factors.

8.2.4 It should also be noted that the terrain through this section, particularly for the alternative route option (Route Option 3A) is particularly challenging for the construction of an OHL. This has been closely scrutinised by the OHL contractor to develop practicable construction access solutions that give due consideration to the environmental sensitivities through this section, particularly within the SAC. This has included review of the suitability of the minor road through Glen Arroch for construction access purposes.

Preliminary Statutory Consultee Feedback during the Alignment Selection Stage

8.2.5 The evaluation and analysis of practicable options through this section has taken considerable time, and as such there has been little opportunity for preliminary discussions with statutory consultees during the alignment selection stage of the project in the same way as there has been with other sections. A workshop was held with NatureScot and The Highland Council in September 2021 to provide an update on route and alignment selection. SSEN Transmission will use this alignment consultation exercise as a means to gather views and discuss the preferred alignment and design solution with statutory and non-statutory consultees, prior to confirming the proposed alignment.

8.3 Alternative Technology Options

8.3.1 The consideration of alternative technology options within Section 3 of the Skye Reinforcement Project has focussed on viable and practicable alternative solutions to a steel lattice OHL that could mitigate likely significant effects on the SAC, as well as landscape and visual effects. This has primarily focussed on investigating the feasibility of cabling options within this section (both subsea and land).

8.3.2 The use of alternative steel structures (NeSTS) has not been considered within this section as it is considered that this alternative technology would not mitigate the site specific likely significant effects noted within this section; i.e. the likely significant effects on qualifying features of the SAC, and landscape and visual effects.

8.3.3 The review of alternative technology options is summarised below and has enabled a fuller understanding of the technical viability, environmental impact and cost of such options, in comparison with a steel lattice OHL.

Underground Cables

8.3.4 Chapter 7 (paragraphs 7.3.13 to 7.3.17) of this Consultation Document describes the use of underground cable generally within the UK transmission industry, and the key considerations and requirements for its installation.

8.3.5 The viability of an underground cable as an alternative design solution within part of Section 3 of the Skye Reinforcement Project has been informed by feasibility studies and walkover surveys by specialist cable engineers to evaluate its constructability. Consideration for its use has been focussed on the Glen Arroch and Kylerhea settlement part of Route Option 3B only, as an opportunity to mitigate against likely significant landscape and visual effects through this area. The use of underground cable is not deemed to be a practicable or appropriate technology choice for Route Option 3A (eastern extent) within the SAC given the steep terrain (in places) and sensitive habitats present within that part of the route option. The installation of an underground cable here would almost certainly result in likely significant effects on the SAC and its qualifying features due to the extent of the construction corridor required.

8.3.6 The installation of an underground cable through Glen Arroch and Kylerhea (Route Option 3B) would present a number of technical and environmental challenges, a summary of which are noted below:

- Likely significant effects on the Kinloch and Kyleakin Hills SAC due to disruption to peatland habitats and qualifying features of the SAC given a working corridor of approximately 30 m (including haul road). Such effects are likely to be much greater for an underground cable in comparison to a steel lattice OHL given a much larger working corridor and habitat loss, increasing the potential for pollution events and watercourse crossings within the SAC, as well as potential hydrological and hydrogeological effects;
- A number of watercourse crossings would likely be required given proximity to the Abhaimm Lusa, Allt Mor and Kylerhea River watercourses;
- Effects on soils and peat. Ground conditions are likely to be variable throughout Section 3, with rock close to the surface in some areas, and deeper areas of peat in others. Such conditions would need to be established prior to finalising a cable route, and areas of deeper peat avoided as far as practicable;
- Potential for landscape and visual effects during the construction phase, albeit these should be short term, subject to appropriate and carefully planned reinstatement;
- Requirement for reactive compensation at Broadford and Fort Augustus Substations, resulting in additional works being required at these substations to account for power losses inherent in underground cables; and
- Due to higher installation costs compared to an OHL, and the requirement for reactive compensation measures at substation sites on the transmission network, an underground cable solution would result in a considerable increase in the cost of the project as a whole.

8.3.7 Mitigation measures for environmental effects of underground cabling in Section 2 (see Chapter 7, paragraph 7.3.17) would also be relevant here, and key to the success of an underground cable route within part of Section 3 of the Skye Reinforcement Project.

8.3.8 Despite these challenges, the installation of an underground cable as part of the design solution within Route Option 3B could provide the opportunity to mitigate long term likely significant landscape and visual effects of an OHL solution through Glen Arroch and Kylerhea. As such, further consideration of an underground cable solution was undertaken during the alignment selection stage of the project to inform both route and alignment selection decisions in Section 3. This is discussed further in sub-section 8.4 of this Consultation Document.

Subsea Cables

8.3.9 A desktop study of potential subsea cable options and indicative landfall locations has been undertaken between Broadford and Kyle Rhea, covering Section 3 of the Skye Reinforcement Project. Those potential subsea cable options of relevance to Section 2 of the Skye Reinforcement Project are discussed in Chapter 7 of this report.

8.3.10 The desktop study included a review of a wide variety of data, covering the physical environment, environmental and ecological factors, and other sea users. Following this, identification and charting of potential subsea cable routes and constraints were mapped and assessed, with potential for mitigation or avoidance of particular constraints considered.

8.3.11 Chapter 7 (paragraphs 7.3.23 to 7.3.28) of this Consultation Document describe the subsea cable requirements on this project, and the key considerations and requirements for its installation.

8.3.12 Table 8.1 provides a description of the subsea cable routes considered, the key constraints and overall suitability in relation to Section 3 of the Skye Reinforcement Project. The subsea cable routes within Section 3 comprise four main routes (referred to as Options 3 to 6 below, see also Plate 7.3).

Table 8.1: Subsea Cable Options within Section 3

Subsea Cable Option	Description of Route	Constraints	Overall Suitability
Option 3 Existing OHL on the Scottish mainland – Kyle Landfall Indicative Area (3 km in length)	Water depths vary between 12 m and 36 m. The 15 m bathymetric contour is very close to shoreline, and the area is characterised by steep-sided rocky slopes. Away from steep flanks, seabed gradients are generally low and the morphology suggests a hard substrate with current scour. Tidal velocities are high with peaks of 8 knots. Located entirely within two SACs.[21] It is also within very close proximity of a NCMPA.[22] No significant interaction with existing seabed infrastructure and a low density of commercial fisheries in the area.	Main constraint is the extremely high tidal current velocity present (peak flows of 8 knots), likely to preclude cable lay vessels that operate using dynamic positioning, meaning that anchor positioning would be required with associated additional anchor handling vessels and anchor impacts on the seabed. Route is also entirely within two SACs and near one NCMPA. There will likely be direct impacts through habitat loss and/or disturbance to sensitive benthic habitats and species.	Low
Option 4 Kyle Landfall Indicative Area	Water depths vary between 39 m and 115 m. The 15 m bathymetric contour is very close to shoreline. On the slopes descending to the middle of the Loch, gradients are generally	The main constraint to laying subsea cable(s) in this location is the high tidal current velocity present (peak flows of 3 knots), likely to preclude cable lay vessels	Low

21 the Inner Hebrides and Minches SAC (designated for harbour porpoise Phocoena phocoena), and the Lochs Duich, Long and Alsh Reefs SAC (designated for Annex I reef habitat).
22 the Lochs Duich, Long and Alsh Nature Conservation Marine Protected Area (NCMPA) (designated for burrowed mud and flame shell beds).

Subsea Cable Option	Description of Route	Constraints	Overall Suitability
– Loch na Beiste (4.7 km in length)	>20°. Tidal velocities are high with peaks of 3 knots. Located entirely within the two SACs and is also located within the NCMPA as mentioned for Option 3. Due to this, the route is near burrowed mud and recorded flame shell (*Limaria hians*) beds. Extensive Flame shell beds are rare and of conservational importance. No significant interaction with existing seabed infrastructure, but a moderate density of commercial fisheries in the area with high levels of shipping activity in the vicinity of Skye bridge. A number of wrecks have also been recorded in the area surrounding the western landfall within Loch na Beiste. A SSEN Distribution subsea power cable also runs adjacent to this route to the northwest.	that operate using dynamic positioning, meaning that anchor positioning would be required with associated additional anchor handling vessels and anchor impacts on the seabed. The NCMPA and SAC designated areas are major constraints. There will be likely direct impact through habitat loss and/or disturbance to sensitive benthic habitats and species. Wrecks and a nearby SSEN Distribution cable may also be constraints.	
Option 5 West of Skye bridge – Harrapool (8.7 km in length)	Water depths vary between 11 m and 23 m though data coverage is incomplete. Where data is available, bathymetry indicates exposed bedrock escarpments. Mapped tidal velocities have peaks of 2 knots. The route option is entirely within the Inner Hebrides and the Minches SAC and it also passes through a designated seal haul-out site at Pabay and Ardnish Peninsula. There is no significant interaction with existing seabed infrastructure and a low density of commercial fisheries in the area, though potting activity is likely to be present in the vicinity.	The major constraints for this route option concerns the shallow water, designated areas and rock escarpments, together with incomplete data, all of which increases the installation risk of subsea cables. Bathymetric data identifies regions of infralittoral rock and biogenic reef.	Low
Option 6 West of Skye bridge – north of Pabay – Broadford	The water depths in the east of this route range between 11 m and 91 m. North and northwest of Pabay the seabed is irregular with locally high gradients associated with escarpments (generally <12° though data coverage incomplete). The	Water depths may cause difficulties in the cable laying operation due to the draft of the cable lay vessel limiting access. Extensive areas of exposed bedrock will likely preclude cable burial and increases the need for rock protection. Similarly,	Low / Medium

Subsea Cable Option	Description of Route	Constraints	Overall Suitability
(13.5 km in length)	approach to Broadford is more gently sloped. Bathymetric data indicates extensive areas of exposed bedrock. Mapped tidal velocities peak at 2 knots. The route option is entirely within the Inner Hebrides and the Minches SAC and a moderate density of commercial fisheries is present in the area.	localised high seabed gradients associated with escarpments also increases the risk of cable burial and/or installation.	

8.3.8 The results of the study indicated that subsea cable installation in the area is likely to be very challenging, with a variety of adverse factors that include strong tidal currents, designated marine habitats and areas of rugged/complex bedrock at seabed.

8.3.9 It was concluded that none of the subsea cable options discussed above would be considered suitable for subsea cable installation within Section 3 of the Skye Reinforcement Project. As such, it is not proposed to give further consideration to subsea cable as an alternative design solution within Section 3.

8.4 Consideration of Alignment Options and Design Solutions within the Preferred Route (Route Option 3B) Identified within the Consultation Document (March 2020)

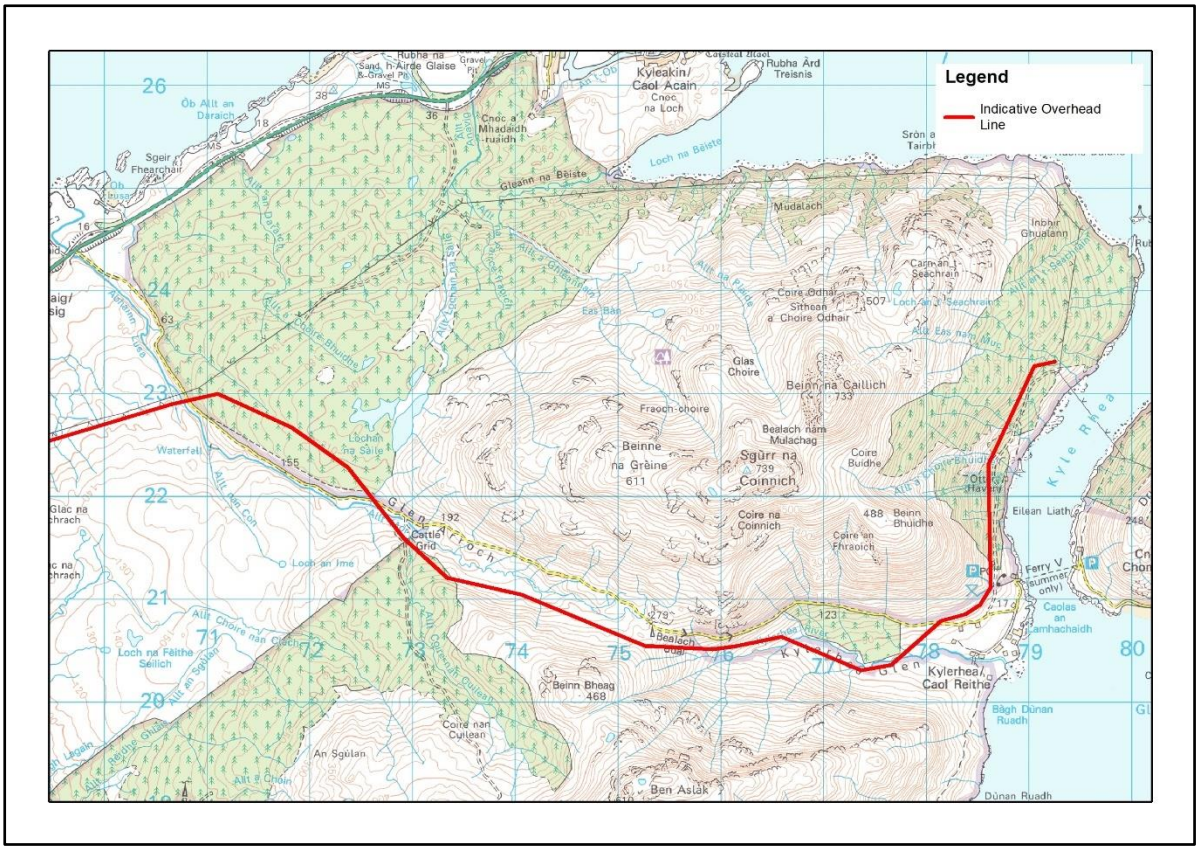
8.4.1 As noted above, Route Option 3B was put forward as the preferred route in the Consultation Document at route options stage (March 2020)[2], albeit the environmental sensitivities of this route were acknowledged and subject to more detailed review during the alignment selection stage. Contrasting views from statutory and non statutory consultees, as well as the local community, emphasised the sensitivities of this section of the project.

8.4.2 Whilst both route options (3A and 3B) cross the Kinloch and Kyleakin Hills SAC, one of the key differences between the two route options is that Route Option 3B would largely avoid areas of woodland and larger areas of blanket bog (Annex 1 priority habitats and qualifying features of the SAC), and primarily traverses wet heath habitats and smaller pockets of dry heath (Annex 1 habitats and also qualifying features of the SAC).

8.4.3 Distinct OHL alignment options within Route Option 3B are very limited due to topography. The presence of the minor road through Glen Arroch and the community at Kylerhea are also factors. An initial OHL alignment was developed by the OHL contractor, and whilst changes to the alignment were put forward and for the most part adopted, these were generally of a minor nature. Plate 8.1 provides an indicative illustration of an OHL alignment within Route Option 3B.

8.4.4 Given the restrictions to viable OHL alignment options within Route Option 3B, there is a limit to what can be achieved to minimise, or mitigate, likely significant landscape and visual effects of a new steel lattice OHL within this landscape. Suggestions were made to aid in this objective where possible, although it was clear that to successfully mitigate such effects could only be achieved through the consideration of undergrounding parts of the route.

Plate 8.1: Indicative Overhead Line within Route Option 3B

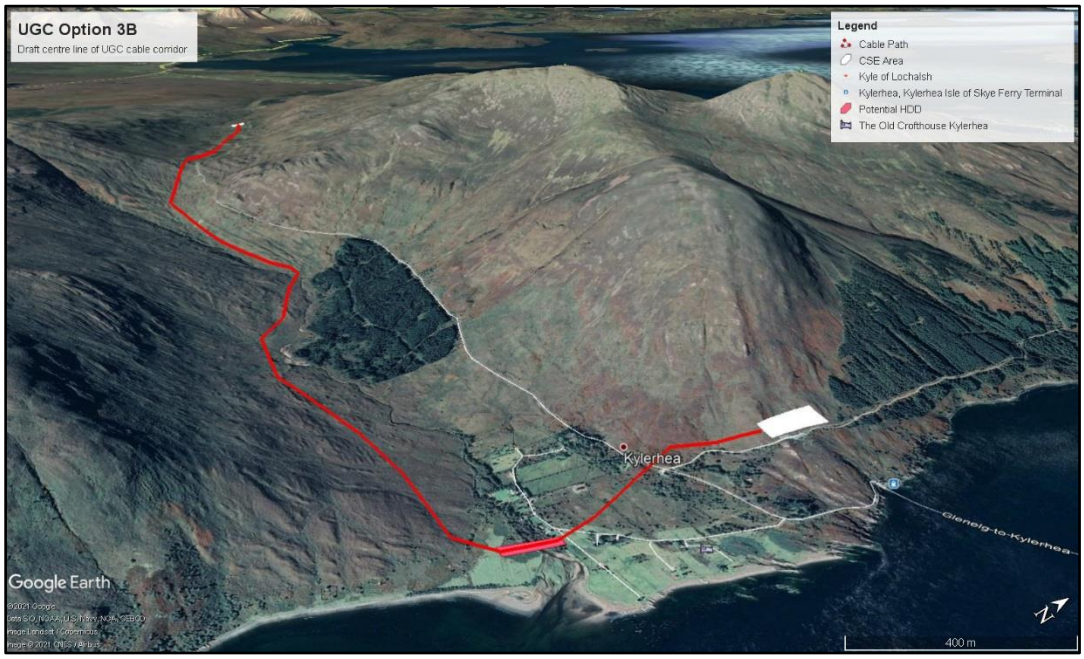


8.4.5 Review of construction access requirements for an OHL alignment within Route Option 3B determined that the current minor road is not suitable for construction access traffic. Therefore, a new construction haul road would be required along an OHL alignment to facilitate construction for much of Route Option 3B. The new haul route would typically run parallel to the OHL alignment, be of stone construction, and would require to be used throughout the construction phase through this part of the route. It is likely that this track would require to be made permanent to facilitate operational access, albeit reinstated to a track suitable for ATVs.

8.4.6 Engineering studies were undertaken into the technical viability and extent of underground cable options within Route Option 3B. These studies concluded that the viability of an underground cable through part of Route Option 3B would be limited to an area from approximately Bealach Udal to Kylerhea (RSPB hide) (approximately 5 km in length), as indicatively illustrated on Plate 8.2. Opportunities for undergrounding beyond these areas were restricted by topography and ground conditions, together with technical limitations on the viable length of cable route possible.

8.4.7 Whilst offering the potential to mitigate likely long term significant landscape and visual effects, an underground cable solution as part of the design solution within Route Option 3B would be a considerable challenge given the steepness of slope and ground conditions. Likely significant landscape and visual effects in the short term could occur given the width of the construction corridor and requirements for a haul road. There would also be the requirement for CSE compounds at either end of the cable route, prior to transitioning back to OHL, which would result in likely significant landscape and visual effects. The underground cable would also pass through part of the SAC, with the potential to adversely affect site integrity.

Plate 8.2: Indicative Underground Cable Route within Route Option 3B



8.4.8 Due to the technical limitations and challenges of installing an underground cable route within this part of Route Option 3B, coupled with the likely significant effects on the SAC, and landscape and visual receptors both in the short term (construction) and long term (likely significant effects of the sealing end compound and OHL infrastructure beyond the underground cable), it was concluded that underground cabling should not form part of a viable design solution within Route Option 3B. Therefore, steel lattice OHL is the only viable design solution within Route Option 3B.

8.5 Consideration of Alignment Options and Design Solutions within Route Option 3A (Alternative Route Option)

8.5.1 Route Option 3A (eastern extent) was not put forward as the preferred route option within the Consultation Document at route options stage (March 2020)[2] due to the technical challenges in building a new OHL within this location and the potential to adversely affect the primary qualifying features of the SAC. However, given the sensitive nature of this section, and similar challenges with Route Option 3B, consideration of both route options has continued through the alignment selection stage of the project. As noted in paragraph 8.3.5, the use of underground cable is not deemed to be a practicable or appropriate technology choice for Route Option 3A (eastern extent) within the SAC given the steep terrain (in places) and sensitive habitats present within that part of the route option. As such, only a new OHL has been considered.

8.5.2 The existing OHL is routed within the vicinity of this route option, following a route which is in part very close to the coastline of Loch na Beiste. Built before the SAC was designated, the existing OHL requires the management of a wayleave corridor through dense ancient woodland prevalent along part of its route. Route Option 3A is located further to the south, and typically at a higher elevation to the existing OHL due primarily to technical constraints of building a new OHL immediately adjacent to the existing OHL, as well as the impact this would have on ancient woodland. The existing OHL would be dismantled upon completion of the Skye Reinforcement Project, with the managed wayleave allowed to regenerate.

8.5.3 Put simply, there are two questions that need to be addressed with respect to developing a new OHL within Route Option 3A:

- is there a viable and constructable OHL alignment; and
- If so, what are the likely effects on the Kinloch and Kyleakin Hills SAC / SSSI.

8.5.4 To help address the first of these points, SSEN Transmission commissioned an OHL contractor to investigate OHL alignment options. Following multiple site visits, helicopter fly through and detailed desk-based review, the OHL contractor was able to establish that there is a viable OHL alignment within Route Option 3A.

8.5.5 This resulted in SSEN Transmission's environmental and engineering teams working with the OHL contractor to iteratively review alignment options and tower positions to minimise adverse effects on the qualifying features of the SAC as far as practicable. A key objective to this has been identifying an OHL alignment that keeps felling of ancient woodland within the SAC, noted as a primary qualifying feature of the SAC and an Annex 1 Priority Habitat, to an absolute minimum, both during the construction phase and as part of any operational wayleave requirement. SSEN Transmission believe this objective can be met.

8.5.6 Another key objective has been to develop a construction and operational access strategy that also seeks to minimise effects on all qualifying features of the SAC, but particularly Annex 1 Priority Habitat (i.e. the woodland and blanket bog qualifying features of the SAC). The access strategy is still evolving and requires engineering, ecological and geo-technical expertise to ensure the construction access approach is developed in accordance with the habitat types, peat depth, slope and ground conditions present at the site in order to achieve the best practicable environmental option with appropriate controls, mitigation and monitoring.

8.5.7 To minimise construction traffic within the SAC, it is proposed that a number of towers would be constructed by helicopter. Whilst this construction technique does not avoid the requirement for temporary track infrastructure, it does considerably reduce the frequency of track use by construction vehicles, thus minimising potential damage to habitats. To further minimise adverse effects on habitats within the SAC, it is proposed to reduce the construction time within the SAC to as short as practicable. As such, it is estimated this could be completed in 6 to 9 months.

8.5.8 For operational access, SSEN Transmission would seek to minimise new permanent tracks within the SAC. Where existing tracks or paths are present, these would be utilised where possible, and upgraded as required to allow maintenance access by ATV.

8.5.9 The construction and operational access strategy will be developed and assessed through the EIA and Habitats Regulation Appraisal (HRA) process, and will be discussed in consultation with NatureScot and Forestry Land Scotland (as landowner). To that end, a preliminary shadow HRA is being produced which considers the likely significant effects on SAC qualifying features in more detail, and which will be used to inform whether there will likely be adverse effects on site integrity. The results of this will be discussed with NatureScot.

8.6 Identification of Preferred Route

8.6.1 Having considered the potential constraints and opportunities of both route options, SSEN Transmission have concluded that Route Option 3A should be progressed as the preferred route. This decision to change from the previously preferred route (Route Option 3B) has been made following a review of both route options from an engineering and environmental perspective, and consideration of the consultation responses received during the previous consultation exercise at route options stage.

8.6.2 A detailed alignment selection process established that a technically viable OHL alignment could be constructed within Route Option 3A, that would keep felling of ancient woodland within the SAC, noted as a

primary qualifying feature of the SAC and an Annex 1 Priority Habitat, to an absolute minimum, both during the construction phase and as part of any operational wayleave requirement.

8.6.3 Further work is however required to establish a construction and operational access strategy that seeks to minimise adverse effects on the site and the respective qualifying features as far as practicable.

8.6.4 In terms of the previously preferred route (Route Option 3B), it has been determined that the minor road through Glen Arroch is not suitable for construction traffic, and therefore a new haul road would be required to be constructed adjacent to the OHL. It is likely that this track would require to be made permanent to facilitate operational access, albeit reinstated to a track with a narrower running width and suitable for ATVs. As a result, adverse effects on the SAC are likely to occur. Furthermore, the likely significant landscape and visual effects within this sensitive landscape could not be mitigated. The sensitivity of the visual receptors using the remote road through Glen Arroch and Kylerhea Glen which is popular with visitors taking the small ferry crossing from Glenelg, the community at Kylerhea, and visitors to the nearby Otter Haven RSPB reserve were key reasons in the selection of Route Option 3A as the preferred route in this section.

8.6.5 Notwithstanding these conclusions, it is acknowledged that the sensitivities of Section 3 of the project through the Kinloch and Kyleakin Hills SAC are such that both route options must remain under consideration whilst the adverse effects on the SAC, and other factors, are fully determined. As such, Figure 1 confirms the preferred route to be taken forward is Route Option 3A, whilst Route Option 3B is illustrated as an alternative route option under consideration.

8.7 Baseline Alignment

8.7.1 The remaining parts of this Chapter discuss the Baseline Alignment developed within the revised preferred route (i.e. Route Option 3A).

8.7.2 Within this Section, the Baseline Alignment is initially routed adjacent to the existing 132 kV OHL (which would be removed) past Broadford, Harrapool, Sculamus and Breakish. As the Baseline Alignment continues east, it travels up to approximately 0.8 km to the south of the existing OHL through Kinloch and Kyleakin Hills SAC / SSSI. The existing OHL is also routed through this part of the SAC / SSSI, often very close to the coastline and requiring a managed wayleave through ancient woodland. By remaining to the south of the existing OHL, the Baseline Alignment remains generally to the south of the ancient woodland at Mudalach. Where woodland is within the vicinity of the Baseline Alignment, it is anticipated that the OHL could span across it, with felling kept to an absolute minimum. After Mudalach, the Baseline Alignment runs parallel once again to the existing OHL to the existing towers crossing Kyle Rhea.

8.8 Alignment Options Appraisal

8.8.1 As part of the iterative alignment selection process, a review of the Baseline Alignment and potential variants has been carried out by the SSEN Transmission environmental and engineering teams, and environmental consultants, in close collaboration with the OHL contractor. A summary of the key elements of this review is provided below.

Baseline Alignment (Environmental Considerations)

Natural Heritage

8.8.2 To the south of Broadford, the Baseline Alignment would skirt the very edge of the Cullins SPA, adjacent to the existing OHL. Further to the east, the Baseline Alignment would span the northern tip of the Mointeach nan Lochain Dubha SAC / SSSI, whereby it is anticipated that new towers would be located outwith the SAC

boundary. For both of these European designated sites, a HRA is likely to be required upon submission of a consent application, albeit no adverse effect on site integrity for either site is anticipated.

8.8.3 The eastern extent of the Baseline Alignment would also pass through the Kinloch and Kyleakin Hills SAC and SSSI. The qualifying features of the SAC are noted in Table 8.2 below.

Table 8.2: Qualifying Features of the Kinloch and Kyleakin Hills SAC

Feature	Identified Pressures	Condition & Date Last Assessed	Description
Alpine and subalpine heaths	Overgrazing (deer)	Unfavourable Recovering 17 Feb 2015	Annex I habitat
Blanket bog	No negative pressures	Favourable Maintained 13 Nov 2014	Annex I priority habitat
Dry heaths	Invasive species (bracken)	Favourable Maintained 17 Feb 2015	Annex I habitat
Mixed woodland on base-rich soils associated with rocky slopes	Invasive species Overgrazing	Unfavourable Recovering 9 Oct 2013	Annex I priority habitat
Western acidic oak woodland	Invasive species Overgrazing	Unfavourable Declining 9 Oct 2013	Annex I habitat
Wet heathland with cross-leaved heath	Overgrazing	Unfavourable Declining 11 Sept 2009	Annex I habitat
Otter	Dumping/storage of materials Forestry operations Other	Favourable Maintained 21 Aug 2011	Annex II species

8.8.4 The habitats along, or within the vicinity of the Baseline Alignment within the SAC are dominated by broadleaved woodlands, dry heaths, wet heaths, blanket bogs, and bracken (or various mosaics thereof, particularly mosaics of blanket bog and wet heath). The majority of habitats along and surrounding this alignment are qualifying features of the SAC. Habitat components of note include the stands of broadleaved woodland which contain mature trees along the watercourses west of Mudalach, and the expanse of woodland along the unnamed watercourse west of the Allt Mor Ghuaidhre, which lies to the east of Mudalach. These larger woodland stands all lie in deeply incised gorges. The Baseline Alignment also traverses several small areas of blanket bog and wet heath/blanket bog mosaics. Dry heaths are generally avoided along the majority of the Baseline Alignment, with the remainder generally crossing wet heath areas.

8.8.5 The SAC also supports an otter population, although the citation notes otter was not a primary reason for SAC site selection. The population within the SAC is representative of the Scottish west coast and encompasses a large number of holts used for shelter and breeding, intertidal and inland feeding areas, and freshwater pools. Recent surveys have confirmed that evidence of otter was predominantly recorded along the coast, with little evidence found inland in suitable habitat, e.g. along watercourses and in boulder piles, beyond 50 m from the shore.

8.8.6 A HRA will be required to be carried out by the Competent Authority upon submission of a consent application for the Kinloch and Kyleakin Hills SAC. As noted in paragraph 8.5.10, a preliminary shadow HRA is being developed to inform likely significant effects and adverse effects on site integrity. The results of this will be discussed with NatureScot.

8.8.7 Other constraints include protected species, with otter, a European Protected Species, likely to be present and using the coast, watercourses and waterbodies within the vicinity of the Baseline Alignment.

8.8.8 The Baseline Alignment crosses over a surface water drinking protection zone near Harrapool. Properties within the vicinity of the Baseline Alignment could be served by private water supplies from watercourses crossed by or within the vicinity. Neither are expected to pose a development constraint.

8.8.9 Priority peatland mapping suggests that this route would pass through or skirt the edges of some areas of Class 1 (strong likelihood of deep peat and priority peatland habitats). Areas of open moorland and coniferous plantation with a number of watercourse crossings to consider, some of which comprise steep ravines.

Landscape and Visual

8.8.10 The initial part of Section 3, commencing at Broadford Substation is on the boundary of The Cuillin Hills NSA. However, the existing forestry plantations around the substation create a clear transition between the designated and non-designated landscape. Moving away from the NSA, the Baseline Alignment would be adjacent to and replace an existing steel lattice OHL to the south of Broadford and surrounding communities, resulting in an effective like-for-like replacement with likely minimal landscape effects and little to distinguish it from the existing OHL in views from residential properties and routes in this area.

8.8.11 To the east of the Baseline Alignment within Section 3, the landscape is characterised by rough, rocky hills with limited access and a steep and complex rocky shoreline to Loch Alsh and Kyle Rhea. Forestry plantation occupies areas of more accessible lower slopes whilst the remote, rugged coastal slopes along the south of Loch Alsh are colonised by native woodlands. Settlement in this area is limited, with Kyleakin and Kyle of Lochalsh situated to the north on either side of the Skye Bridge, and the community at Kylerhea over 2 km to the south of the existing OHL crossing towers at Kyle Rhea.

8.8.12 The existing steel lattice alignment following the remote coastal edge of Loch Alsh into the crossing location at Kyle Rhea can be seen from the northern shore of Loch Alsh from the A87, including various stopping and viewing locations, and from residential areas such as Balmacara and some outlying parts of Kyleakin and Kyle of Lochalsh. However, these comprise relatively distant views and towers are not prominent, with their perceptibility depending on lighting conditions. The Baseline Alignment would be set higher on the hill, above the existing woodland and would therefore be likely to appear more visible, although seen by a similar range of receptors. However, the towers would be similarly distant in views and likely to have a comparable range of perceptibility depending on lighting. As the alignment would be sited entirely above the existing native woodland, there would be no visible wayleave.

8.8.13 Access and construction works though this area would be likely to appear more visible than towers and have a greater landscape impact, but it is anticipated that these features would be temporary and subject to restoration.

8.8.14 Visualisations to illustrate the Baseline Alignment throughout this section are appended to this Consultation Document (see VPs 11 and 12, contained in Figures 4.3.1 and 4.3.2 a-c).

Cultural Heritage

8.8.15 The archaeological and cultural heritage baseline of this area is characterised by features typical of upland rural landscapes throughout the Highlands. Designated cultural heritage sites within this section include the Scheduled Monument of Chambered Cairns (Old Corry cairns, SM 13673), located close to the Baseline Alignment near Broadford / Ath Leathann. Other Scheduled Monuments include Broadford Bay, chambered

cairn (SM 13724), Ashaig church (remains) and burial ground (SM 13720) and Ashaig burnt mound (SM 13721).

8.8.16 There are a small number of non-designated heritage assets recorded in the Historic Environment Record within the vicinity of the Baseline Alignment, although it is anticipated that direct impacts could generally be avoided through micro-siting and appropriate mitigation.

Other Environmental Considerations

8.8.17 There are properties that fall within the vicinity of the Baseline Alignment at Sconser, Luib, Dunan and Strollamus. Agriculture is predominantly rough grazing, dominated by plant communities of low grazing value. Minor interaction with sections of improved grassland (5.1 and 5.3) may occur around Broadford.

8.8.18 There will be some removal of forestry likely to be required to accommodate a new wayleave at Broadford and through plantation to the south of Kyleakin before the Baseline Alignment enters the Kinloch and Kyleakin Hills SAC / SSSI.

Variants (Environmental Considerations)

8.8.19 The eastern extent of Route Option 3A was subject to a number of iterations during the alignment selection process. Given the technical challenges of constructing an OHL through this route, alignment variants were extremely limited. Instead, the iterations focussed on potential tower locations, micro-siting these to minimise effects on the higher sensitivity habitats within the SAC where practicable (i.e. the woodland and blanket bog habitats, qualifying features of the SAC and Annex 1 Priority Habitats). As these were inherently minor changes, they are not shown as variants in the table below as they did not constitute a notable change to the Baseline Alignment. Any notable changes to the Baseline Alignment within the eastern extent of Route Option 3A were either not possible due to technical restrictions, or would have resulted in woodland removal.

8.8.20 Only one variant to the Baseline Alignment within this section has therefore been considered to either mitigate a potential effect, or to provide an alternative for consideration by the project team during the selection of a preferred alignment and design solution. This variant is set out in Table 8.3 and shown on Figures 2.3.1a to 2.3.1b. The potential environmental constraints and opportunities of these variants in comparison to the Baseline Alignment, and with regard to the environmental topic areas set out in SSEN Transmission's routeing guidance (SSEN Transmission, September 2020 update), is discussed in more detail in Appendix 3.

Table 8.3: Variants: Section 3

Variant	Description	Variant Taken forward? (Y/N)
Variant 3-A (Broadford)	This variant is routed to the north side of the existing OHL on departure from Broadford Substation, and has been proposed to facilitate the connection of the OHL infrastructure with Broadford Substation. It also has the benefit in comparison to the Baseline Alignment and the existing OHL of being further from the Old Corry Cairns Scheduled Monument.	Y

8.9 Preferred Alignment and Design Solution

8.9.1 The preferred alignment and design solution comprises an OHL connection, utilising a combination of Variant 3A and the Baseline Alignment.

8.9.2 It is acknowledged that careful consideration will need to be given to this section of the OHL, particularly through the SAC to ensure potential effects are minimised as far as practicable. This will occur through the EIA and HRA process, and will involve consultation with NatureScot and Forestry Land Scotland (as landowner).

8.9.3 Whilst the preferred alignment and design solution has been identified (see Figures 2.3.1a to 2.3.1b), it is acknowledged that the sensitivities of Section 3 of the project through the Kinloch and Kyleakin Hills SAC are such that both route options must remain under consideration whilst the adverse effects on the SAC, and other factors, are fully determined. As such, Figure 1 confirms the preferred route to be taken forward as Route Option 3A, whilst Route Option 3B is illustrated as an alternative route option under consideration.

9. SECTION 4 – KYLE RHEA TO LOCH CUAICH

9.1 Introduction

9.1.1 This section of the project is approximately 40 km in length, running north west to south east between the east landing point of the Kyle Rhea crossing on the mainland to Loch Quoich dam.

9.1.2 Figures and visualisations prepared as part of this Consultation Document of relevance to this section include:

Figures

- Figure 2.4.1a to 2.4.2c: Section 4: Baseline Alignment, Variants, Environmental Designations and Constraints
- Figure 3.4a to 3.4c: Section 4: Preferred Alignment and Design Solution

Visualisations

- Figure 4.4.1 (a-c) VP13 – Glenmore
- Figure 4.4.2 (a-c) VP14 – Gleandubhlochain (looking north west)
- Figure 4.4.3 (a-c) VP15 – Road Above Kinloch Hourn
- Figure 4.4.4 (a-c) VP16 – Loch Coire Shubh

9.2 Proposed Development Solution

9.2.1 Within this section, the existing 132 kV steel lattice OHL would be replaced with a new double circuit 132 kV OHL supported by steel lattice structures approximately 28 m in height, depending on topography. A double circuit steel lattice OHL solution is the preferred technology choice for this section as it meets the predicted capacity and load requirements, provides reliable security of supply, and provides a cost effective solution through technically challenging terrain.

9.2.2 The span lengths between towers would vary depending on topography and altitude but would be approximately 250 m apart. Exact heights of and distances between towers would be determined after a detailed line survey and confirmed following micrositing prior to construction.

9.3 Technical Considerations and Construction Access

9.3.1 The terrain throughout this section is technically challenging for construction of an OHL, dominated by extensive areas of mountainous topography, with exposed steep to very steep rock. Access is restricted to a small number of existing single track minor roads at Glenelg and Kinloch Hourn. The area between Balvraid and Kinloch Hourn has no public road access at all, although there are some forestry and estate tracks, as well as walkers paths through this remote part of the route.

9.3.2 In general, new temporary stone tracks are likely to be required to access many of the towers within this section. However, there are a number of forestry and estate tracks, as well as walkers paths through the more remote section between Balvraid and Kinloch Hourn, and the construction access strategy has focussed on utilising existing tracks and paths where possible. Some of these would require upgrading, but would be reinstated (either fully or partially) upon completion. Where access to tower positions is difficult due to steep terrain, of particular consideration in this section, alternative methods would be proposed such as using smaller items of plant, specialist tracked plant and in some cases using helicopters for moving materials.

9.3.3 The area around Druim Iosal is a particular pinch point given the presence of the existing OHL and local topography. As such, it was considered the best option at Druim Iosal is to build on the route of the existing

OHL for a short section up and over the hill. This would require outages. Construction access to this part of the new OHL is anticipated to be made from Glen More, utilising existing forestry tracks through Moyle Wood (to be upgraded) prior to a new track being required, and Balvraid, whereby the existing track (also a core path) would be upgraded. New bridges may be required in this area to facilitate construction access, and this access point would form the primary access for the remote section of the new OHL from here towards Kinloch Hourn.

9.3.4 Between Balvraid and Kinloch Hourn, given the complex topography and terrain, some cross overs of the existing OHL are inevitable, which would require outages. Construction access into this area would be from the north west, as described in the paragraph above. Consideration of developing access from Arnisdale / Corran has been discounted following site walkovers due to the difficulties in upgrading existing accesses.

9.3.5 On approach to Kinloch Hourn, the steepness of the topography and terrain is such that the most viable option is to utilise the existing alignment. This would require new towers to be built approximately 15 – 20 m from the existing towers (or where terrain is favourable) and would again require outages. The descent into Kinloch Hourn is considered too steep for standard construction vehicles, meaning alternative methods of construction would be required such as the use of helicopters for the delivery of materials and the use of wide-tracked excavators.

9.3.6 Between Balvraid and Kinloch Hourn, operational access will be required due to the remoteness and length of this part of the route. It would be intended to reinstate the construction access to a width suitable for 4x4 vehicles.

9.3.7 At Quoich bridge, significant engineering and ground clearance works would be required to locate an OHL adjacent (and to the south) of the existing OHL. As such, opportunities to route a new OHL were limited to immediately north of the bridge, or on its southern side.

9.4 Baseline Alignment

9.4.1 The Baseline Alignment for Section 4 is shown on Figures 2.4.1a to 2.4.1c. The Baseline Alignment was developed by the OHL contractor to be the most technically feasible and economically viable option. Within this section the Baseline Alignment is typically routed adjacent, or close to, the existing OHL (which would be removed) with the exception of the following areas:

- Scallisaig (Glen More); the Baseline Alignment passes further to the north of the existing OHL and at a higher elevation in parts to facilitate a crossing at Glen More that maintains sufficient distance from properties;
- Kinloch Hourn and Loch Coire Shubh; due to extremely steep gradient and very limited opportunities for construction access, there is a technical necessity for the Baseline Alignment to diverge from the existing OHL for approximately 4 km between Kinloch Hourn, Loch Coire Shubh and Loch an Doire Dubh. In this area, the existing OHL has been constructed on rock outcrops and it is not technically feasible, given current Health and Safety legislation, to construct a new OHL over a similar alignment. Therefore, after crossing the Allt Coire Sgoireadal, the Baseline Alignment would head in a southerly direction toward Loch Coire Shubh. Here, the Baseline Alignment is routed to the west of Loch Coire Shubh, and to the east of the minor road. Options to the east of Loch Coire Shubh were ruled out on technical grounds due to steep, and / or wet ground, rocky outcrops and extremely challenging construction access. The Baseline Alignment remains on the eastern side of the minor road before re-joining the alignment of the existing OHL within the vicinity of Loch a' Choire Bheithe; and
- Loch Cuaich; to the north of Loch Cuaich, at Glen Quoich, the Baseline Alignment passes to the south of the bridge rather than the north as the existing OHL does. Passing to the south of the bridge is deemed preferable in terms of constructability. The Baseline Alignment would then remain on the south and lower side of the existing OHL to Quoich dam.

9.5 Alignment Options Appraisal

9.5.1 A review of the Baseline Alignment and all potential variants has been carried out against a variety of environmental, technical and economic considerations. A summary of the key elements of this review is provided below.

Baseline Alignment (Environmental Considerations)

Natural Heritage

9.5.2 The Baseline Alignment would cross the Druim Iosal Geological Site of Special Scientific Interest (SSSI) and Geological Conservation Review (GCR) Site. The route through Druim Iosal is a particular pinch point with the best constructable option being to utilise the path of the existing OHL alignment, requiring a small number of towers to be built adjacent to existing tower positions, requiring outages. Two of these towers are located within the eastern extent of the SSSI and GCR boundary.

9.5.3 Notwithstanding the Lochs Duich, Long and Alsh Reefs SAC crossed by the existing OHL at Kyle Rhea, there are no other nationally or internationally designated sites for nature conservation within the vicinity of the Baseline Alignment. Given the nature of the works, effects on the qualifying features of the SAC are not likely.

9.5.4 Habitats along the route are predominantly wet heath with patches of dry heath and blanket bog. Grassland and stands of bracken can be found in some areas, and there are isolated areas of mixed and broadleaved woodland. These woodlands comprise native woodland, predominantly classified as upland birchwood, and ancient woodland. Some of this woodland may require removal to accommodate the new OHL.

9.5.5 There are no ornithological designations covering the Baseline Alignment, but potential sensitivities exist such as golden eagle, white tailed eagle, black throated diver, red throated diver and greenshank. European Protected Species include potential for otter, bat, red squirrel and pine marten.

Landscape and Visual

9.5.6 The Baseline Alignment would pass through a very remote, rugged landscape with steep complex topography and high scenic qualities. This is reflected in large parts of this area being designated for landscape, namely Knoydart NSA, Kinloch Hourn, Knoydart and Morar WLA, and Moidart, Morar and Glen Shiel Special Landscape Area (SLA). Whilst the existing OHL runs through this area and has an influence in reducing landscape sensitivity of this route, the narrow valleys, steep slopes and complex topography, particularly around Kinloch Hourn and Loch Coire Shubh, present difficulties and challenges in achieving a new alignment for a replacement OHL (including earthworks and construction access) which would not have greater impacts. There is also the potential for loss of native woodland through these areas which contributes to the appreciation and value of these landscapes.

9.5.7 Sensitive visual receptors include those residents within properties and travelling on the public road through Glen More between Glenelg and Shiel Bridge, although there is also potential benefit in this area for some receptors as a result of the Baseline Alignment where the existing OHL would be removed. There is also potential for modified views from areas around Glenelg and Glen Bernera.

9.5.8 Passing through the mountain interior the Baseline Alignment would be regularly visible from recreational and walking routes up through Gleann Beag, and from Kinloch Hourn and Arnisdale. These comprise Core Paths, Scottish Hill Tracks and longer distance hill tracks. Further views would be obtained by travellers and recreational users on the minor road to Kinloch Hourn which is a popular route for tourists seeking a remote experience. Additional route and landform complexity between Kinloch Hourn and Loch Cuaich has the

potential to increase the level of visual impact from this new OHL. There could also be potential for increased visual impact in views from properties, a car park and popular viewpoints at Kinloch Hourn.

9.5.9 Existing paths through this area and the minor road to Kinloch Hourn are very much part of the experience and values obtained within this part of the landscape. The road to Kinloch Hourn is highlighted in the Special Qualities of the NSA for its sense of remoteness, and is recognised as an important access point for further access into, and appreciation of, the WLA. As such, construction and operational access through this area will require careful consideration (see sub-section 9.3).

Cultural Heritage

9.5.10 There are two Scheduled Monuments near Balvraid in Gleann Beag; Dun Grugaig (SM 914), a stone-walled dun or fort, approximately 840 m south-west of the Baseline Alignment on a steep knoll alongside the Abhainn a'Ghlinne Bhig; and approximately 2 km north-west along Gleann Beag, two neighbouring brochs together comprise SM 90152. Dun Telve stands near the river, around 1.7 km south-west of the Baseline Alignment, and Dun Troddan is set on a terrace in the hillside, a little further east and 1.3 km south-west of the Baseline Alignment. A full setting assessment from these Scheduled Monuments will be required. However, initial appraisal suggests that no significant effects upon their setting as a result of the Baseline Alignment is anticipated.

9.5.11 One other designated heritage asset is located within the vicinity of the Baseline Alignment: Quoich Dam and Intake Gatehouse Towers (LB51704), a Category B Listed Building of Medium sensitivity.

9.5.12 The majority of the cultural heritage features along Section 4 most likely date to the late-medieval and post-medieval periods, although some evidence of prehistoric settlement and activity may be present, in the form of possible settlement platforms on the slopes above Inner Loch Hourn. The damming of Loch Cuaich in the late 1950s resulted in the rise of the water level, flooding the original shoreline. A number of settlements and features recorded on historic Ordnance Survey mapping have been submerged, and it could also be the case that any surviving prehistoric evidence along the lochside was similarly flooded.

Other Environmental Considerations

9.5.13 There are few properties within the vicinity of the Baseline Alignment in this section, restricted to properties at Glen More and Kinloch Hourn.

9.5.14 In terms of agriculture, this section comprises predominantly rough grazing, dominated by plant communities of low grazing value. The Baseline Alignment would have minor interaction with small areas of land capable of supporting mixed agriculture at Glen More.

9.5.15 Generally limited removal of commercial forestry would be required for the Baseline Alignment in this Section. An extension to the existing wayleave would be required at Druim na Leitre, east of Kyle Rhea. The Baseline Alignment also passes through an area identified for pinewood regeneration by Scottish Forestry.

9.5.16 The Baseline Alignment crosses several core paths and Scottish Hill Tracks, and runs parallel to a longer distance hill track between Kinloch Hourn and Glen Elg. Passing through the mountain interior the Baseline Alignment would be regularly visible from parts of these routes.

9.5.17 There are no current planning applications or areas allocated for future development in direct conflict with the Baseline Alignment within this section.

Variants (Environmental Considerations)

Variants Overview

9.5.18 A number of variants to the Baseline Alignment have been considered to either mitigate a potential effect, or to provide an alternative for consideration by the project team. These variants are set out in Table 9.1 and shown on Figures 2.4.1a to 2.4.1c. The potential environmental constraints and opportunities of these variants in comparison to the Baseline Alignment, and with regard to the environmental topic areas set out in SSEN Transmission's routeing guidance[19], is discussed in more detail in Appendix 3 (see also Figures 2.4.1a to 2.4.1c).

Table 9.1: Variants: Section 4

Variant	Description	Variant Taken forward? (Y/N)
Variant 4-A (Druim na Leitire)	This short deviation to the Baseline Alignment at Druim na Leitire was proposed to minimise potential landscape and visual effects of one prominent tower. This variant offered advantages over the Baseline Alignment, but was superseded by Variant 4C.	N
Variant 4-B (Bernera forestry track)	Diverges from the Baseline Alignment, in the forestry to the north of Galtair and would keep to the south side of the Bernera forestry track (which is a core path) before re-joining the Baseline Alignment upon leaving the eastern edge of the forest. This variant would bring the OHL lower down the hill and minimise landscape and visual effects from Glen Bernera in comparison with the Baseline Alignment. This variant offered advantages over the Baseline Alignment, but was superseded by Variant 4C.	N
Variant 4-C (Glenmore)	This variant has been proposed to more closely follow the existing OHL from the Kyle Rhea crossing point to Glen More and avoid potential land use constraints associated with the Baseline Alignment at Scallisaig. This variant offers some advantages over the Baseline Alignment in that the landscape and visual effects will be similar to that of the existing OHL. There is potential for some removal of native woodland, albeit the existing OHL wayleave corridor through the same woodland would be reinstated. On balance, given the land use constraints associated with the Baseline Alignment, this variant is preferred.	Y
Variant 4-D (Glenmore)	A short deviation from the Baseline Alignment to follow flatter ground through Coire a' Bheoil-airigh before re-joining the Baseline Alignment near Loch a' Mhuilinn. This was proposed to minimise landscape effects, but was superseded by Variant 4C.	N
Variant 4-E (Druim losal)	This variant at to the south of Druim losal was proposed to minimise the likely prominence of one tower.	N

Variant	Description	Variant Taken forward? (Y/N)
	However, as noted in paragraph 9.3.3, this is a particular pinch point and it was considered by the OHL contractor that the only viable solution is to build on the current alignment of the existing OHL, with new towers built adjacent to existing towers. This would require an outage of the transmission network. Given technical constraints, this variant is not preferred.	
Variant 4-F (Druim Eileasaig)	This variant was proposed on landscape and visual grounds between Bealach Aoidhdailean and Gleandubhlochain as it was felt that an alignment to the north of the existing OHL would be better back clothed and close to ground already disturbed by the existing rough argo track, in comparison with the Baseline Alignment. As a result, this variant is preferred.	Y
Variant 4-G (Kinlochhourn Forest)	This variant stemmed from the consideration of towers skylining above Kinlochhourn as the Baseline Alignment rose up and over the hillside. The variant reduces the effects of skylining in this location by keeping to the south side of the existing line. By remaining on the south side of the existing OHL, this variant is also at a lower elevation in parts and follows the existing argo track more closely. It is therefore considered preferable to the Baseline Alignment.	Y
Variant 4-H (Loch Coire Shubh)	This variant has been put forward to minimise landscape and visual effects within this area as far as practicable. It aims to do this by taking an alignment that crosses, and is then routed to the west of the minor road for approximately 2 km, prior to crossing the road again to re-join the Baseline Alignment. In comparison to the Baseline Alignment this variant was considered preferable on landscape and visual grounds.	Y
Variant 4-I (Loch Cuaich)	This variant was considered to minimise landscape and visual effects from the minor road and Glen Quoich bridge. Whilst the Baseline Alignment is technically easier to build in this location, it was considered the adverse effects on views of Loch Cuaich from the minor road and bridge warranted a change to the Baseline Alignment in this location. This variant is therefore preferred.	Y

9.6 Preliminary Consultation Feedback

9.6.1 During the alignment selection process, workshops have been held with statutory consultees to seek feedback on alignment options and design solutions for the project. A summary of the feedback provided in relation to Section 4 is provided below:

- The Highland Council queried whether NeSTS and steel lattice are being considered for Section 4;
- NatureScot suggest that it is likely that the Baseline Alignment will result in significant adverse impacts on the special qualities of the Knoydart NSA and the Kinlochhourn – Knoydart – Morar WLA. Suggested close scrutiny of alignment and tower positions at the Bealach at Cadha Mor (Kinlochhourn), Loch Coire Shubh and Glen Quoich bridge;

- NatureScot highlighted potential interaction with Druim Iosal SSSI and Quoich Spillway SSSI which are both sites of interest for their Moine geology;
- NatureScot also referenced peatland, woodland, ornithology and other protected species that may be present within this section;
- HES highlighted the Scheduled Monument of Bernera Barracks, which views from and to Glen More are important to the monument's cultural significance, as well as Dun Telve and Dun Troddan, brochs, Glenelg (SM 90152) & Dun Grugaig, dun Gleann Beag (SM 914); and
- Forestry Land Scotland highlighted that the Baseline Alignment cuts through some smaller forestry blocks that the existing line avoids and asked whether these could be avoided. Forestry Land Scotland also queried if existing wayleave would be used.

9.6.2 Appendix 4 provides further detail on the responses received, and how these have been addressed and considered during the alignment selection process.

9.7 Preferred Alignment and Design Solution

9.7.1 In selecting the preferred alignment, consideration has been given to a variety of environmental, technical and cost considerations relevant to this section, as detailed above. As a result of the technical challenges and environmental sensitivities of this section, alignment selection has been through numerous iterations to achieve the right balance between technical viability and due consideration to the sensitive environment. A focus during the alignment selection process has been to minimise potential landscape and visual effects through the Knoydart NSA, Kinloch Hourn, Knoydart and Morar WLA, and Moidart, Morar and Glen SLA. As such, the preferred alignment comprises the Baseline Alignment, with Variants 4-C, 4-F, 4-G, 4-H and 4-I. The preferred alignment is shown on Figures 3.4a to 3.4c.

10. SECTION 5 – LOCH CUAICH TO INVERGARRY

10.1 Introduction

10.1.1 This section is routed west to east, from Quoich dam, and following to the north of Loch Poulary and Loch Garry prior to crossing the A87 and heading towards Loch Lundie, to the north of Invergarry.

10.1.2 Figures and visualisations prepared as part of this Consultation Document of relevance to this section include:

Figures

- Figure 2.5.1a to 2.5.2c: Section 5: Baseline Alignment, Variants, Environmental Designations and Constraints
- Figure 3.5a to 3.5c: Section 5: Preferred Alignment and Design Solution

Visualisations

- Figure 4.5.1 (a-c) VP17 – Loch Quoich Dam

10.2 Proposed Development Solution

10.2.1 Within this section, the existing 132 kV wood pole OHL would be replaced by a new double circuit 132 kV OHL supported by steel lattice structures approximately 28 m in height. A double circuit steel lattice OHL solution is the preferred technology choice for this section as it meets the predicted capacity and load requirements, provides reliable security of supply, and provides a cost effective solution.

10.2.2 The span lengths between towers would vary depending on topography and altitude but would be approximately 250 m apart. Exact heights of and distances between towers would be determined after a detailed line survey and confirmed following micrositing prior to construction.

10.2.3 The existing 132 kV steel lattice OHL through this section would be dismantled. This is in part being undertaken through 2021 as the existing OHL is deemed to have come to the end of its operational life. A short term replacement in the form of a new wood pole OHL has recently been constructed to maintain supply through this area. The remaining parts of the existing steel lattice OHL, and the recently constructed wood pole OHL would both be removed upon completion of the new OHL.

10.2.4 Also, three new NeSTS poles are currently being constructed near Quoich dam as a permanent replacement to the existing towers following a landslip in 2018. The new OHL would connect with these poles and continue eastwards, to the north of the minor road toward Inchlaggan and Loch Garry.

10.3 Technical Considerations and Construction Access

10.3.1 Given the presence of the existing OHL, the newly constructed Quoich to Aberchalder 132 kV wood pole OHL, and commercial forestry, there are many existing access tracks through this area. These existing tracks would be utilised where possible to minimise the requirement for new stone tracks. Should new stone tracks be required, this section of the project comprises largely favourable ground conditions for their construction.

10.3.2 The use of helicopters is not currently being considered for this section of the project due to the proximity to public roads in this area and presence of existing tracks.

10.4 Baseline Alignment

10.4.1 The Baseline Alignment for Section 5 is shown on Figures 2.5.1a to 2.5.1c. The Baseline Alignment was developed by the OHL contractor to be the most technically feasible and economically viable option. Within this

section the Baseline Alignment generally follows close to the routes of the existing wood pole OHL and / or the existing 132 kV steel lattice OHL (which would both be removed). Exceptions to this include at Inchlaggan, whereby the Baseline Alignment is routed to the rear of properties, as opposed to in front of properties as per the existing OHL, and at Achadh-luachrach, north of Loch Garry, where land use constraints require a deviation to the south of the existing OHL.

10.5 Alignment Options Appraisal

10.5.1 A review of the Baseline Alignment and all potential variants has been carried out against a variety of environmental, technical and economic considerations. A summary of the key elements of this review is provided below.

Baseline Alignment (Environmental Considerations)

Natural Heritage

10.5.2 The Baseline Alignment runs within close proximity of the West Inverness-shire lochs Special Protection Area (SPA), which is classified for 6.6 pairs (on average) of black-throated divers and 7.8 pairs (on average) of common scoter. Black-throated divers and common scoters may fly between the composite lochs of the SPA and could be vulnerable to collision from overhead lines between the lochs. There is some potential collision risk for birds flying between these lochs, although as the new OHL would be predominantly through forestry and follows the existing OHL, the risk will be lower.

10.5.3 Other ornithological sensitivities include black grouse and an active golden eagle territory within the vicinity of the route, and black grouse, greenshank and osprey also nest along the route and potential disturbance due to construction activities may occur and will require mitigation if nests are located within possible disturbance distances.

10.5.4 Habitats along the Baseline Alignment are predominantly wet heath, with patches of dry heath and blanket bog (with potential for deep peat in some areas). Forestry plantation is common to the east of this section, and there are areas of native woodland, particularly to the north of Loch Garry.

10.5.5 The Quoich Spillway Geological SSSI and GCR is located to the south of the minor road at Quoich dam, but is not anticipated to be impacted by the new OHL.

Landscape and Visual

10.5.6 The landscape of Section 5 is characterised by areas of open moorland and forestry within Glen Garry, which contains Loch Garry, Loch Poulary, River Garry, Gearr Garry and Kingie Pool. The landscape is relatively enclosed, contained by landform and / or vegetation with some longer-range scenic views channelled along Glen Garry. There is a perception of separation and relative remoteness in comparison with the busier Great Glen but the presence of various man-made features (settlement, roads, commercial forestry, wind turbines, electricity infrastructure) contributes to a rural settled sense of place.

10.5.7 Quoich Dam is situated at the western end of Section 5, while other man-made features are situated along the valley including Quoich Power Station and steel lattice and wood pole electrical infrastructure. Residential settlement consists of properties around Invergarry and dispersed dwellings along the lower slopes of Glen Garry. This is a sparsely settled rural area connected by the minor public road to Kinlochhourn and the A87 road that leads northward to Loch Loyne. Recreational routes are largely situated in the vicinity of Invergarry as well as connecting Loch Garry with other nearby villages.

10.5.8 To the west falls the Moidart, Morar and Glen Shiel SLA. It is not anticipated that the Baseline Alignment would lead to an increased level of impact of the Special Qualities of the SLA, particularly considering the presence of other OHLs in the landscape. Other protected / designated landscapes in the area include the Kinlochourn-Moidart-Morar WLA to the west and south of the Baseline Alignment, and the Loch Lochy and Loch Oich SLA to the south and south-east. Adverse effects to these areas are not expected as a result of the Baseline Alignment.

10.5.9 Visual receptors within Section 5 include residents of Invergarry and dispersed dwellings along the lower slopes of Glen Garry, including at Tomdoun, Poulary, Inchlaggan and Garrygualach. Many views from properties in Glen Garry are oriented to look across or along the valley, over the loch or river. Receptors would also include those on Core Paths and popular walking routes, the minor road in Glen Garry, and the A87. There is also a natural stopping point at Loch Quoich Dam, where visual receptors have views along Glen Garry.

Cultural Heritage

10.5.10 There is one designated heritage asset within the vicinity of the Baseline Alignment within Section 5; Quoich Dam and Intake Gatehouse Towers (LB51704), a Category B Listed Building of Medium sensitivity.

10.5.11 There are also 26 non-designated cultural heritage assets recorded on The Highland Council HER within 500 m either side of the Baseline Alignment, and a further eight features were identified during a desktop study of historic mapping and aerial photography.

10.5.12 The majority of the cultural heritage features along Section 5 most likely date to the late-medieval and post-medieval periods, although some evidence of prehistoric settlement and activity may be present (the HER records the chance find of a Bronze Age pot near Ardochy in the 1900s. The evidence suggests activity, if not occupation, from the prehistoric period to the present-day. The landscape formed by this activity is moderately well-preserved along parts of Section 5, although commercial forestry has been established (mostly in the latter part of the 20th century) in the eastern part of the section.

Other Environmental Considerations

10.5.13 Properties along Glen Garry, at Tomdoun and Poulary and at Munerigie and Achadh Luachrach are within the vicinity of the Baseline Alignment in this section.

10.5.14 Agriculture within this section is predominantly rough grazing, dominated by plant communities of low grazing value. There could be some minor interaction with sections of improved grassland (5.3) to the north of Loch Garry.

10.5.15 A new or extended wayleave would be required through commercial forestry to the north of Loch Garry.

10.5.16 There are no current planning applications or areas allocated for future development in direct conflict with the Baseline Alignment within this section.

Variants (Environmental Considerations)

Variants Overview

10.5.17 Given that the Baseline Alignment closely follows the route of the existing steel lattice OHL, this is generally deemed to be the most appropriate alignment. As such there are no variants to the Baseline Alignment currently being considered to either mitigate a potential effect, or to provide an alternative for consideration by the project team.

10.6 Preliminary Consultation Feedback

10.6.1 During the alignment selection process, workshops have been held with statutory consultees to seek feedback on alignment options and design solutions for the project. A summary of the feedback provided in relation to Section 5 is provided below:

- NatureScot highlight that Section 5 passes close to Loch Poulary, Loch Garry and Loch Lundie, which are all part of the SPA which is protected for breeding black-throated divers and common scoter. They advise that following a route closest to the existing overhead line is likely to present the lowest risk of increased impacts to scoters and divers;
- NatureScot also referenced peatland, woodland, ornithology and other protected species that may be present within the Section;
- HES suggested that in Section 5, there is no potential to affect assets within their remit;
- Forestry Land Scotland queried if existing wayleave would be used; and
- The Highland Council and SEPA made no specific comments relating to Section 5.

10.6.2 Appendix 4 provides further detail on the responses received, and how these have been addressed and considered during the alignment selection process.

10.7 Preferred Alignment and Design Solution

10.7.1 In selecting the preferred alignment, consideration has been given to a variety of environmental, technical and cost considerations relevant to this section, as detailed above. Given that the Baseline Alignment closely follows the route of the existing OHL, this is generally deemed to be the most appropriate alignment and is therefore put forward as the preferred alignment and design solution in this section.

11. SECTION 6 – INVERGARRY TO FORT AUGUSTUS

11.1 Introduction

11.1.1 This section heads north east from north of Invergarry towards Auchterawe and Fort Augustus Substation.

11.1.2 Figures prepared as part of this Consultation Document of relevance to this section include:

Figures

- Figure 2.6.1a to 2.6.3a: Section 6: Baseline Alignment, Variants, Environmental Designations and Constraints
- Figure 3.6: Section 6: Preferred Alignment and Design Solution

11.2 Proposed Development Solution

11.2.1 It is proposed that this section would comprise the installation of a new double circuit 132 kV OHL supported by steel lattice structures approximately 28 m in height. A double circuit steel lattice OHL solution is the preferred technology choice for this section as it meets the predicted capacity and load requirements, provides reliable security of supply, and provides a cost-effective solution.

11.2.2 Within this section, the existing 132 kV wood pole OHL would be removed upon completion of the new OHL.

11.3 Technical Considerations and Construction Access

11.3.1 Existing access tracks are present within this section, typically to provide access to existing power lines, are well maintained and likely to be able to provide suitable construction access for this project with minimal upgrade requirements. Should new stone tracks be required, this section of the project comprises largely favourable ground conditions for their construction.

11.3.2 The use of helicopters is not currently being considered for this section of the project due to the presence of existing tracks.

11.3.3 Given the presence of the existing OHL and other OHL infrastructure, minimising cross overs of the new OHL with the existing OHL is a key technical consideration during the alignment stage. Cross overs can lead to the requirement for outages on the network which has cost implications and disruption for the consumer.

11.4 Baseline Alignment

11.4.1 The Baseline Alignment for Section 6 is shown on Figure 2.6.1a. The Baseline Alignment was developed by the OHL contractor to be the most technically feasible and economically viable option. Within this section the Baseline Alignment generally follows that of the existing Fort Augustus to Skye Tee 132 kV wood pole OHL (which would be removed), past Loch Lundie before entering Inchnacardoch Forest. The alignment rises through forested ground to the west of Auchterawe before meeting the Beauly to Denny 400 kV wayleave routed adjacent to the existing OHL. From this point, an underground cable connection into Fort Augustus Substation would be required.

11.4.2 The Baseline Alignment deviates slightly from the existing OHL at Loch Lundhie, Lòn Mòr and Auchterawe Wood.

11.5 Alignment Options Appraisal

11.5.1 A review of the Baseline Alignment and all potential variants has been carried out against a variety of environmental, technical and economic considerations. A summary of the key elements of this review is provided below.

Baseline Alignment (Environmental Considerations)

Natural Heritage

11.5.2 The Baseline Alignment would border the West Inverness-shire lochs SPA at Loch Lundie. Black-throated divers and common scoters may fly between the composite lochs of the SPA (SSSIs) and so may be vulnerable to collision from OHLs between the lochs. The new OHL is not between the main SPA lochs, and survey work associated with the Fort Augustus to Skye T OHL did not identify a potentially significant risk with diver species flying to the east from Loch Lundie, although potential disturbance issues would remain.

11.5.3 Habitats along the Baseline Alignment are predominantly heather moorland, peatlands and areas of native woodland / commercial forestry.

Landscape and Visual

11.5.4 The landscape of Section 6 is characterised by areas of open moorland near Loch Lundie, contrasting with dense coniferous forestry of Inchnacardoch Forest. Settlement is sparse in the vicinity of the alignment, with the exception of a bothy at Achadh-nan-Darach and the settlement of Auchterawe. Existing electrical infrastructure is present in the area, including the woodpole 'Skye-T' OHL and a steel lattice OHL between Loch Lundie and Fort Augustus Substation, via Auchterawe. The Baseline Alignment would not affect any designated or protected landscapes.

11.5.5 The landscape of moorland and forest is considered to have reasonable opportunity to accommodate the Baseline Alignment.

11.5.6 Visual receptors within Section 6 include those on core paths near Loch Lundie and within Inchnacardoch Foresty, as well as those in the bothy at Achadh-nan-darach and settlement of Auchterawe.

Cultural Heritage

11.5.7 Torr Dhuin Scheduled Monument (SM 794), a stone-walled dun, or fort is located approximately 1.3 km south-east of the Baseline Alignment near Auchterawe. The monument is located on a steep, forested knoll overlooking the River Oich and is visible from the valley floor to the east over which it looks. A full settings assessment will be required to determine potential effects. However, initial appraisal suggests that any potential effects on its setting are not likely to be significant.

11.5.8 There are five non-designated cultural heritage assets recorded on The Highland Council HER within 500 m either side of the Baseline Alignment, and another two features were identified during the desktop study of historic mapping and aerial photography.

11.5.9 There is almost no cultivable land in this section, and land use is dominated by commercial forestry plantations at Auchterawe and east of Loch Lundie. Settlement is very sparse, confined to the small township around Auchterawe House. The cultural heritage features along Section 6 most likely date to the late-medieval and post-medieval periods, although some evidence of prehistoric settlement and activity may be present. The scarcity of cultivable land on suitable terrain is likely to mean that settlement has largely continued and developed on lands previously exploited in prehistoric periods, and it is likely that the later activity has obscured

much of the evidence of earlier settlement and occupation. A collection of heritage assets remain in a group around the Invervigar Burn and are evidently perhaps all associated remains of the small, Dail a' Chuirn / Achadh-nan-darach township settlement (MHG32910).

11.5.10 In general, it should be relatively straightforward to mitigate any potential direct impacts to heritage assets in this section, through design modifications and the use of micrositing to avoid structural remains of former buildings and other standing structures. Where it is not possible to avoid direct impacts upon heritage assets through micrositing, impacts can be reduced through adoption of sensitive construction techniques within the vicinity of these assets.

Other Environmental Considerations

11.5.11 There are a number of properties at Auchterawe which fall within the vicinity of the Baseline Alignment in the section, and the potential for constraint is increased by the presence of existing electricity infrastructure.

11.5.12 Agriculture consists predominantly of rough grazing, dominated by plant communities of low grazing value.

11.5.13 An extension to the existing wayleave would be required through Inchnacardoch Forest.

11.5.14 There are core paths around Loch Lundie (three routes).

Variants (Environmental Considerations)

Variants Overview

11.5.15 A number of variants to the Baseline Alignment have been considered to either mitigate a potential effect, or to provide an alternative for consideration by the project team. These variants are set out in Table 11.1 and shown on Figure 2.6.1a. The potential environmental constraints and opportunities of these variants in comparison to the Baseline Alignment, and with regard to the environmental topic areas set out in SSEN Transmission's routeing guidance[19], is discussed in more detail in Appendix 3 (see also Figures 2.6.1 to 2.6.3).

Table 11.1: Variants: Section 6

Variant	Description	Variant Taken forward? (Y/N)
Variant 6-A (Loch Lundie)	This variant has been suggested to minimise potential effects on the qualifying species of the West Inverness-shire Lochs SPA present at Loch Lundie. This variant follows more closely the alignment of the existing OHL, in comparison to the Baseline Alignment. As such, this variant is preferred.	Y
Variant 6-B (Auchterawe)	Approximately 6 km of underground cable to connect into Fort Augustus Substation. This variant has been put forward to facilitate rationalisation of existing OHL infrastructure within the area, and in light of likely future connection requirements. This variant is preferred.	Y

11.6 Preliminary Consultation Feedback

11.6.1 During the alignment selection process, workshops have been held with statutory consultees to seek feedback on alignment options and design solutions for the project. A summary of the feedback provided in relation to Section 6 is provided below:

- NatureScot highlight that Section 6 passes close to Loch Lundie, which is part of the West Inverness-shire Lochs SPA, protected for breeding black-throated divers and common scoter. NatureScot advise that following a route closest to the existing overhead line is likely to present the lowest risk of increased impacts to scoters and divers;
- HES highlight the Baseline Alignment's proximity to the Scheduled Monument of Torr Dhuin, fort, Fort Augustus (SM 794). HES suggest a key consideration for this is whether the new towers associated with the Baseline Alignment would adversely impact important views to the fort from the Great Glen and from the fort along the Great Glen. HES have offered advice on viewpoint locations and continue to recommend that visualisations should be produced illustrating impacts on both outward and inward views from and to the fort;
- Forestry Land Scotland have expressed some concern regarding the Baseline Alignment through Inchnacardoch Forest; and
- The Highland Council and SEPA made no specific comments relating to Section 6.

11.6.2 Appendix 4 provides further detail on the responses received, and how these have been addressed and considered during the alignment selection process.

11.7 Preferred Alignment and Design Solution

11.7.1 In selecting the preferred alignment, consideration has been given to a variety of environmental, technical and cost considerations relevant to this section, as detailed above. It is proposed that the Baseline Alignment with Variant 6-A and 6-B (underground cable) is taken forward as the preferred alignment and design solution in Section 6.

12. CONSULTATION ON THE PROPOSALS

12.1.1 SSEN Transmission places great importance on, and is committed to, consultation and engagement with all parties or stakeholders who are likely to have an interest in proposals for new projects. Stakeholder consultation and engagement is an essential part of an effective development process.

12.1.2 Preliminary consultation with statutory consultees has been undertaken throughout the alignment selection and design stage to seek feedback on alignment options and design solutions as they have evolved. This feedback has been given consideration in selection of a preferred alignment and design solution (see Appendix 4).

12.1.3 Feedback received by stakeholders during the route options stage, as detailed within the Report on Consultation (published in November 2020), has also helped inform the alignment selection stage and identification of a preferred alignment and design solution.

12.1.4 A series of public exhibition events will be held to provide local communities the opportunity to provide feedback on the alignment selection stage of the project.

12.2 Questions for Consideration by Consultees

12.2.1 When providing your comments and feedback, SSEN Transmission would be grateful for your consideration of the questions below:

- Have we adequately explained the need for this Project?
- Are you satisfied that our approach taken to selecting the preferred alignment and design solution has been adequately explained?
- Are there any factors, or environmental features, that you consider may have been overlooked during the route and alignment selection process?
- Do you have any other comments in relation to the drivers for the project, related to the transmission infrastructure requirements, or about the preferred alignment and design solution?

12.3 Next Steps

12.3.1 All comments are requested by 19th November 2021. A Report on Consultation will be produced which will document the consultations received, and the decisions made in light of these responses, and the identification of a proposed alignment.

12.3.2 Following the identification of a proposed alignment, further technical and environmental surveys will be undertaken as appropriate to support an Environmental Impact Assessment (EIA) Report and Section 37 application for the proposed alignment, anticipated to be made in summer 2022. A Scoping Report for the project is planned to be published in November 2021 to outline the proposed scope of the EIA Report.

1. APPENDIX 1: APPROACH TO ROUTE AND ALIGNMENT SELECTION

1.1 Methodology

1.1.1 The approach to route and alignment selection was informed by SSEN Transmission's guidance 'Procedures for Routeing Overhead Lines and Underground Cables of 132 kV and above'[1]. The guidance sets out SSEN Transmission's approach to selecting a route and alignment for an OHL. This document helps SSEN Transmission to meet its obligations under Schedule 9 of the Electricity Act 1989, which requires transmission license holders:

- to have a regard to the desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest and of protecting sites, buildings and objects of architectural, historic or archaeological interests; and
- to do what they reasonably can to mitigate any effect that the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites, buildings or objects.

1.1.2 The guidance develops a process which aims to balance these environmental considerations with technical and economic considerations throughout the process.

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

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

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

1.2 Selection of a Proposed Route

1.2.1 The route selection stage of the project involves the identification of route options, and the environmental, technical and economic analysis of these route options to arrive at a preferred route. The route option stage is documented within the Consultation Document (March 2020)[2] and Report on Consultation (November 2020)[3].

1.2.2 The Report on Consultation (SSEN Transmission, November 2020) confirmed that the preferred route in Sections 0, 1, 4, 5 and 6 is being taken forward as the proposed route for the consideration of alignment[4] options. In Sections 2 and 3, given the consultation responses received and the sensitivities and challenges present within these sections, further engineering and environmental review of the options available was deemed to be required prior to identifying a proposed route, preferred alignment and design solution.

1.2.3 This work has been undertaken and is reported within this Consultation Document.

[1] SSEN Transmission (March 2018), Procedures for Routeing Overhead Lines of 132kV and above (updated in September 2020)
[2] Skye Reinforcement Project: Consultation Document: Route Options (March 2020), produced by SSEN Transmission
[3] Skye Reinforcement Project: Report on Consultation (November 2020), produced by SSEN Transmission
[4] A centre line of an overhead line, along with the location of key angle structures.

1.3 Alignment Identification and Selection Methods

1.3.1 SSEN Transmission has engaged an experienced OHL construction contractor to carry out a detailed desk-based and site walkover survey to explore the advantages, disadvantages and constructability of OHL alignment options within the proposed route (and preferred and alternative routes (where relevant) within Sections 2 and 3). Subsequently, an alignment has been identified by the OHL contractor on the basis of it being the most technically feasible and economically viable alignment, giving due consideration to a range of technical and cost criteria over the construction and operation phases of a new OHL. This is referred to in this report as the Baseline Alignment. Alternative OHL alignment options and design solutions (referred to as 'variants') have also been considered by the OHL contractor and project environment and engineering teams as part of the iterative alignment selection process.

1.3.2 In considering the potential environmental constraints of the Baseline Alignment identified by the contractor, as well as alternative alignment options, the following tasks have been undertaken:

- Desk-based review and targeted site survey by project landscape architects, ecologists, ornithologists, archaeologists, geologists and hydrologists to review alignment options and provide advice on variants or micro-siting opportunities for positioning of towers and indicative construction access;
- Targeted phase 1 / NVC habitat and protected species surveys to supplement existing data;
- Review of ornithological survey data and records for the area, including requests for data held by RSPB, and targeted bird surveys to supplement existing survey data;
- Review of comments received from stakeholders following publication of the Skye Reinforcement Project Consultation Document[2], as detailed within the Report on Consultation[3];
- Workshops with SSEN Transmission, the OHL contractor and environmental consultants to discuss alignment options and variants, prior to the identification of a preferred alignment and design solution;
- Site reconnaissance visits by the SSEN Transmission engineering team and environmental consultants to review alignment options; and
- Workshops with statutory consultees to present the preferred alignment and design solution, and seek preliminary feedback.

1.3.3 The steps outlined in the Holford Rules[5] and SSEN Transmission's guidance 'Procedures for Routeing Overhead Lines and Underground Cables of 132 kV and above'[1], have been taken into account as far as is practicable in establishing the alignment options:

- Avoid if possible major areas of highest amenity value (including those covered by national and international designations and other sensitive landscapes).
- Avoid by deviation, smaller areas of high amenity value.
- Try to avoid sharp changes of direction and reduce the number of larger angle towers required.
- Avoid skylining in key views and where necessary, cross ridges obliquely where a dip in the ridge provides an opportunity.
- Target the alignment towards open valleys and woods where the scale of poles will be reduced and views broken by trees (avoid slicing through landscape types and try to keep to edges and landscape transitions).
- Consider the appearance of other lines in the landscape to avoid a dominating or confusing wirescape effect.
- Approach urban areas through industrial zones and consider the use of undergrounding in residential and valued recreational areas.

[5] Scottish Hydro Electric Transmission Limited (SHETL). (October 2004). *The Holford Rules: Guidelines for the Routeing of New High Voltage Overhead Transmission Lines with NGC 1992 and SHETL 2003 Notes; Revision 1.01*

1.4 Appraisal Method

1.4.1 Appraisal of alignment options has involved systematic consideration against the environmental topic areas included in **Table 1.1**:

Table 1.1: Environmental Topic Areas Considered

Category	Sub-Topic
Natural Heritage	Designations
	Protected Species
	Habitats
	Ornithology
	Hydrology Hydrogeology and Geology
Cultural Heritage	Designations
	Cultural Heritage Assets
People	Proximity to Dwellings
Landscape and Visual	Designations
	Character
	Visual
Land Use	Agriculture
	Forestry
	Recreation
Planning	Policy
	Proposals

1.5 Rating of Alignment Options

1.5.1 At Stage 2, a RAG rating was applied to each topic area within each section, indicating potential constraint to development. The RAG rating approach is considered too broad at Stage 3 as it could generally result in similar ratings for all options. Instead, a more descriptive appraisal is adopted, allowing for more detailed considerations of the differences in constraint to development between each option.

1.6 Identification of a Preferred Alignment

1.6.1 The overall objective throughout the appraisal of alignment options has been to take full consideration of all factors to minimise any potential adverse impacts on the environment whilst taking into account technical and cost considerations. Following review and consideration of the potential alignment options, a preferred alignment was arrived at.

Energy and Climate Change Directorate
Energy Consents Division

Scottish Government
Riaghaltas na h-Alba
gov.scot

T: 0131 244 1241
E: alan.brogan@gov.scot

By email only

8 October 2020

Dear Stakeholder,

COVID-19 – SCOTTISH GOVERNMENT ENERGY CONSENTS UNIT

The Electricity Works (Miscellaneous Temporary Modifications) (Coronavirus) (Scotland) Regulations 2020

On 24th April 2020 I wrote to you to inform you that The Electricity Works (Miscellaneous Temporary Modifications) (Coronavirus) (Scotland) Regulations 2020 came into effect on 24 April 2020. The regulations make temporary modifications to the usual requirements placed on developer companies to make physically available application and EIA documentation for public inspection in named places within the locality of proposed developments, with respect to applications made under section 36 or section 37 of the Electricity Act 1989 until 30 September 2020.

I can inform you that The Coronavirus (Scotland) Acts (Amendment of Expiry Dates) Regulations 2020 has come into force and amends the expiry date from 30 September 2020 to 31 March 2021. Subsequently The Electricity Works (Miscellaneous Temporary Modifications) (Coronavirus) (Scotland) Regulations 2020 are in force until 31 March 2021.

On this basis applicants will not require to ensure the Scottish Ministers have hard copies of the application documents at the point of an application under The Electricity Act 1989. Hard copies will be required on the expiry of the Coronavirus (Scotland) Act 2020. The requirement for applicants to make physical copies of documentation available in public places on making relevant applications remains suspended until 31st March 2021, and instead applicants must make such documentation electronically available during this time.

The usual requirements for publication of notices in newspapers will still be in place.

We continue to ask that during this time and where some members of the public may have difficulty in accessing documentation, that developers assist in any way it is possible for them to do so to facilitate public participation in the decision making process. Developers should consider making CD or USB copies of EIA reports easily available, particularly to members of the public having limited access to the internet. Physical copies of non-technical summaries of EIA information should be sent free of charge to those who request them.

We expect that, in relation to pre application engagement, which is always promoted and encouraged by the Scottish Ministers in respect of Electricity Act applications, developers should follow the Scottish Government guidance on pre-application consultation which was published on 23rd April - https://www.gov.scot/publications/coronavirus-covid-19-planning-guidance-on-preapplication-consultations-for-public-events/

While public events and pre application consultation are not a statutory requirement in terms of Electricity Act applications, we consider such engagement to be important where large scale projects are proposed, and we would ask that the reasonable alternatives and suggestions for additional consultation set out in the document be adopted for projects requiring Electricity Act consent, such as would be required for major planning developments.

If you have any queries regarding the above please do not hesitate to contact Energy Consents Unit at Econsents_Admin@gov.scot

Yours faithfully,

[REDACTED]

Alan Brogan
A member of staff of Scottish Government

1. APPENDIX 2 - SUMMARY OF ROUTE OPTIONS STAGE

1.1 Introduction

1.1.1 This Appendix provides a brief summary of the route option stage of the project on a section by section basis, including the responses received from stakeholders and the decisions made with respect to the identification of a proposed route in each section[1].

1.2 Section 0: Ardmore to Edinbane

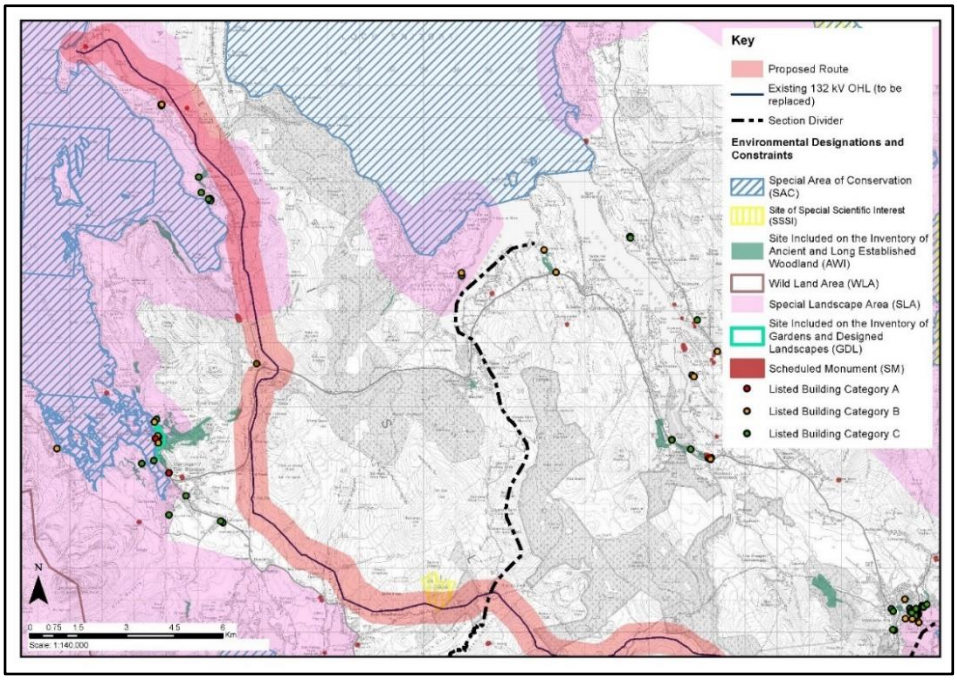
Preferred Route

1.2.1 As identified in the Consultation Document[2] at route options stage, the preferred route identified within this section is a combination of Route 0A (Ardmore to Dunvegan) and Route 0D (Dunvegan to Edinbane).

- Route 0A (Existing Route) - Broadly following the route of the existing trident wood pole OHL, from Ardmore Substation to Dunvegan Substation. The route crosses to the north / eastern side of the B886 road and passes to the rear of crofts and properties on the Waternish peninsula. The route then follows the A850 and a minor road to reach Dunvegan Substation.
- Route 0D (Existing Route) – Following the route of the existing wood pole OHL from Dunvegan Substation in a south easterly direction over open moorland toward St John's Chapel before heading east across moorland and through woodland towards Edinbane Substation.

1.2.2 Plate A2.1 illustrates the preferred route in relation to environmental designations and areas of protection. The preferred route passes through the North West Skye Special Landscape Area (SLA) and the An Cleireach Site of Special Scientific Interest (SSSI), a geological SSSI featuring Tertiary igneous intrusions. The route is located within the vicinity of properties, routes and tourist developments, including those on the Waternish peninsula. Designated cultural heritage sites include Trumpan Church, Dun Hallin Broch and Annait Scheduled Monuments.

Plate A2.1: Section 0 – Preferred Route and Environmental Designations



[1] As noted within the Report on Consultation (November 2020), produced by SSEN Transmission

[2] Skye Reinforcement Project: Consultation Document: Route Options (March 2020), produced by SSEN Transmission

Consultation Responses

1.2.3 During consultations at route option stage, responses received from statutory and non-statutory consultees provided general support for the preferred route identified. Environmental sensitivities were highlighted in consultation responses, particularly in relation to designated cultural heritage sites and assets, and ornithological constraints. Comments from the local community ranged from queries on capacity and future generation, the alignment of the OHL and design solution, and community consultation.

Proposed Route

1.2.4 The Report on Consultation[3] concluded that, subject to further consideration of environmental constraints and sensitivities, the preferred route in this Section (Route Option 0A / 0D) is taken forward as the proposed route.

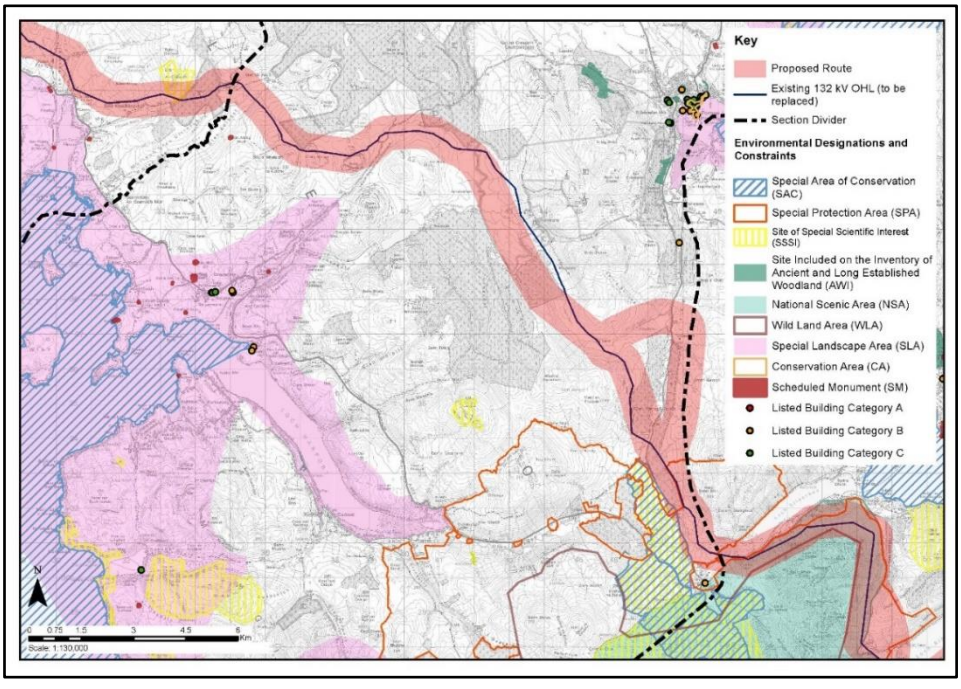
1.3 Section 1: Edinbane to Sligachan

Preferred Route

1.3.1 As identified in the Consultation Document[2] at route options stage, the preferred route for Section 1 is Route Option 1A. This route option broadly follows the route of the existing wood pole OHL from Edinbane Substation to the south-west end of Loch Sligachan, passing Glenmore and then through and to the east of Glen Varragill Forest. The route generally follows lower ground, skirting hills such as Beinn na Cloiche, Stròc-b'heinn and Meall an Fhuarain.

1.3.2 Plate A2.2 illustrates the preferred route in relation to environmental designations and areas of protection. The preferred route passes through the Cullins Special Protection Area (SPA), and runs adjacent to the Sligachan Peatlands Special Area of Conservation (SAC) and SSSI. The Cuillin Hills National Scenic Area (NSA) and Wild Land Area (WLA) are visible on approach to Sligachan. The route is located within the vicinity of properties at Glenmore and Mugeary.

Plate A2.2: Section 1 – Preferred Route and Environmental Designations



[3] Report on Consultation (November 2020), produced by SSEN Transmission

Consultation Responses

1.3.3 During consultations at route option stage, support for the preferred route was provided by NatureScot and Scottish Forestry. Potential constraints and environmental sensitivities were highlighted by statutory and non-statutory consultees, particularly in relation to designated cultural heritage sites and assets, ornithological constraints, Class 1 peatlands and the potential for landscape and visual effects. Comments received from the local community in relation to this Section focused on capacity and the transition from wood pole to steel structure. No specific comments on route options were received.

Proposed Route

1.3.4 The Report on Consultation[3] concluded that, subject to further consideration of environmental constraints and sensitivities, the preferred route in this Section (Route Option 1A) is taken forward as the proposed route.

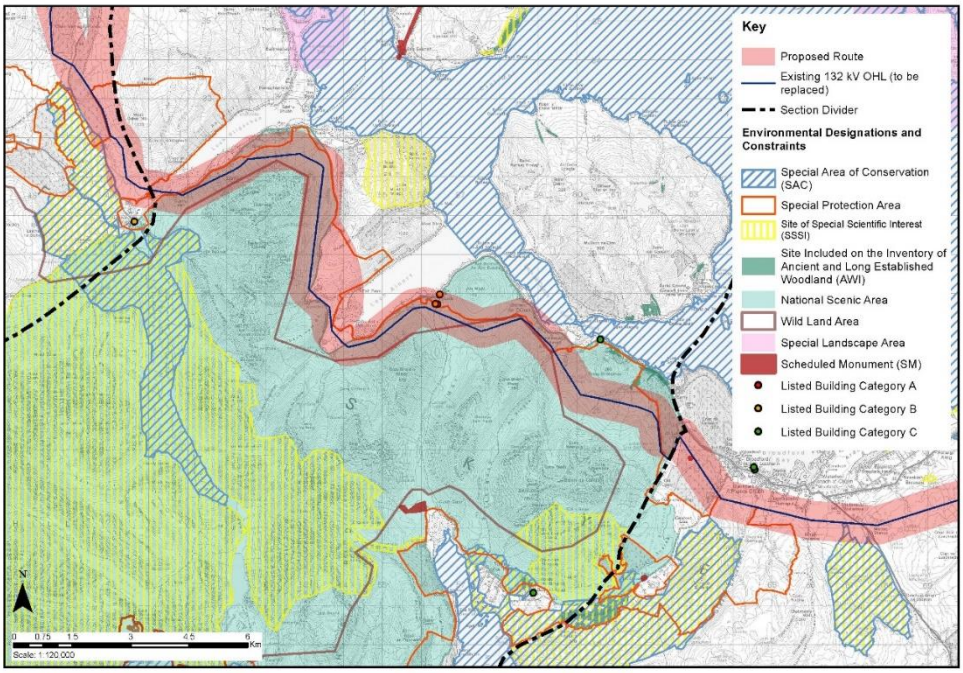
1.4 Section 2: Sligachan to Broadford Substation

Preferred Route

1.4.1 As identified in the Consultation Document[2] at route options stage, the preferred OHL route for Section 2 is Route Option 2A. This route option broadly follows the route of the existing wood pole OHL, skirting the edge of the Cuillins. Crossing the head of Loch Sligachan, to the east of Sligachan, the route generally follows the A87 towards Sconser. Here, the route heads in a southerly direction following the A87 through Gleann Torra-mhichaig toward Loch Ainort. From Loch Ainort, the route follows the A87 toward Luib, before heading to the south of Am Muall and Creag Strollemus before following a south easterly direction toward Broadford.

1.4.2 Plate A2.3 illustrates the preferred route in relation to environmental designations and areas of protection. The preferred route passes through the Cullins SPA. The Cuillin Hills NSA and WLA are present, as well as other sensitive visual receptors e.g. at Sligachan, Peinachorrain, Sconser and users of the A87.

Plate A2.3: Section 2 – Preferred Route and Environmental Designations



Consultation Responses

1.4.3 Comments received from statutory and non-statutory consultees during route option consultations highlighted some of the sensitivities of this section. Qualified support for the preferred route was provided by Scottish Forestry, John Muir Trust and RSPB, albeit the landscape, visual and ornithological sensitivities and potential for significant effects is noted in this support. In contrast, NatureScot cautioned that they may object to Route Option 2A and that further consideration to Route Option 2B should be given.

1.4.4 The comments received from local residents and a community trust in this section focussed on the landscape and visual sensitivities of this section, and capacity for local generation.

Proposed Route

1.4.5 It is as a result of the sensitive nature of this section that the Consultation Document[2] at route options stage noted that further environmental and engineering survey work will be undertaken in order to find an acceptable alignment and/or design solution through this section, which may result in a review of the preferred route. This work has been undertaken and is reported in Chapter 7 of this Consultation Document, together with confirmation of the proposed route and design solution.

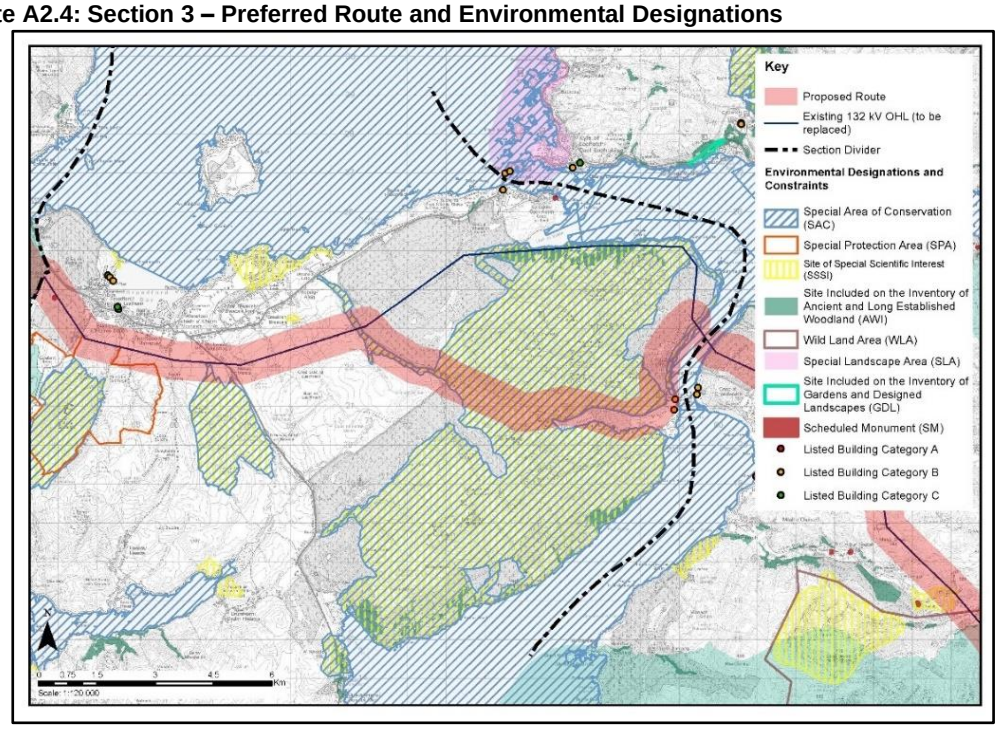
1.5 Section 3

Preferred Route

1.5.1 As identified in the Consultation Document[2] at route options stage, the preferred OHL route for Section 3 is Route Option 3B. This route initially follows the existing steel lattice overhead line before then following the minor road through Glen Arroch to Kyle Rhea, where it would meet the existing OHL crossing of the narrows.

1.5.2 Plate A2.4 illustrates the preferred route in relation to environmental designations and areas of protection. The preferred route passes through the Kinloch and Kyleakin Hills SAC / SSSI, and is routed within the vicinity of the Mointeach nan Lochain Dubha SAC / SSSI and Lochs Duich, Long and Alsh reefs SAC. The route would pass through Glen Arroch and near the village of Kylerhea, an area popular with tourists and wildlife enthusiasts.

Plate A2.4: Section 3 – Preferred Route and Environmental Designations



Consultation Responses

1.5.3 During consultations at route option stage, there were contrasting views expressed by statutory and non-statutory consultees in this section. NatureScot and Scottish Forestry stated a preference for the preferred route, whilst RSPB stated a strong preference for Route Option 3A following the existing OHL. This section generated a considerable number of responses from the local community and community representatives. The vast majority of views expressed were of concern for the preferred route put forward in the Consultation Document (Route Option 3A / 3B through Glen Arroch and Kylerhea), with many requesting this is reviewed and the existing OHL route (Route Option 3A) considered again.

Proposed Route

1.5.4 It is as a result of the sensitive nature of this section that the Consultation Document[2] at route options stage noted that further environmental and engineering survey work would be undertaken in order to find an acceptable alignment and/or design solution through this section, which may result in a review of the preferred route. This work has been undertaken and is reported in Chapter 8 of this report, together with an update of the preferred route and design solution.

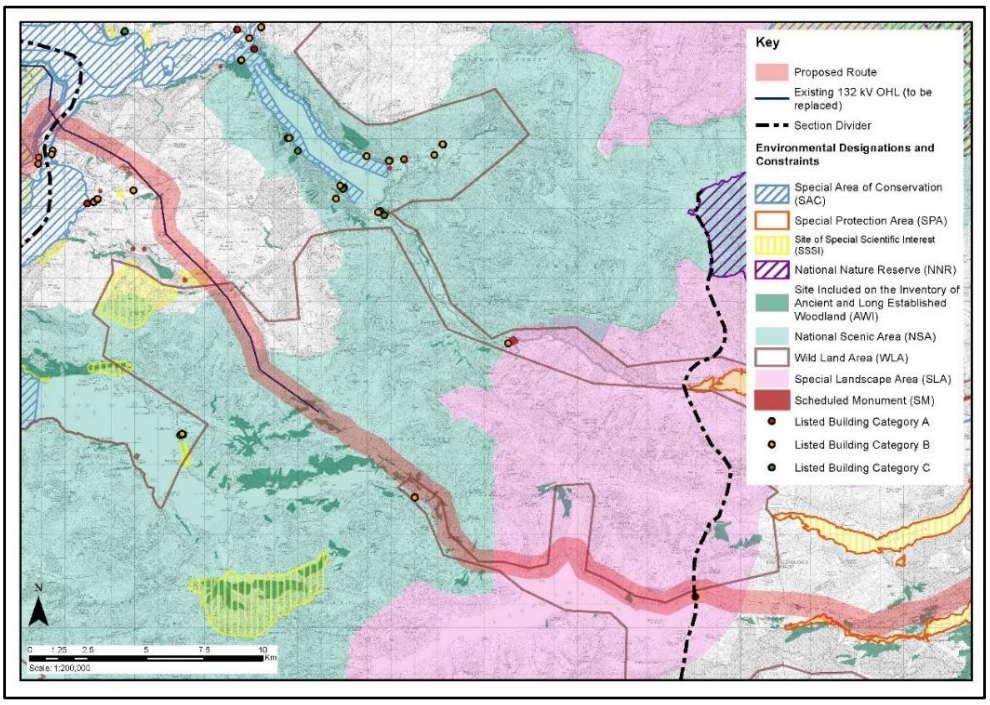
1.6 Section 4: Kyle Rhea to Loch Cuaich

Preferred Route

1.6.1 As identified in the Consultation Document[2] at route options stage, the preferred route for Section 4 is Route Option 4A. This route option follows the route of the existing steel lattice OHL (which would be removed) from Kyle Rhea to Quoich Dam, via Kinloch Hourn. The route passes through a very remote, rugged landscape with steep complex topography and high scenic qualities.

1.6.2 Plate A2.5 illustrates the preferred route in relation to environmental designations and areas of protection. The preferred route passes through the Knoydart NSA, Kinlochhourn, Knoydart and Morar WLA, Central Highlands WLA and Moidart, Morar and Glen Shiel SLA. It also passes with the vicinity of the Druim loasal SSSI (geological) and GCR, Kinloch Hourn GCR and Quoich spillway SSSI (geological).

Plate A2.5: Section 4 – Preferred Route and Environmental Designations



Consultation Responses

1.6.3 During consultations at route option stage there was general support for the preferred route put forward by statutory and non-statutory consultees, albeit consultees advise caution given the sensitive landscape the OHL would be routed through, and NatureScot advised they may object once a fuller understanding of impacts is known. Comments received from the local community in relation to this section focused on consultation, landslip risk, alignment and design solutions, and construction related queries.

Proposed Route

1.6.4 The Report on Consultation[3] concluded that, subject to further consideration of environmental constraints and sensitivities, the preferred route in this Section (Route Option 4A) is taken forward as the proposed route.

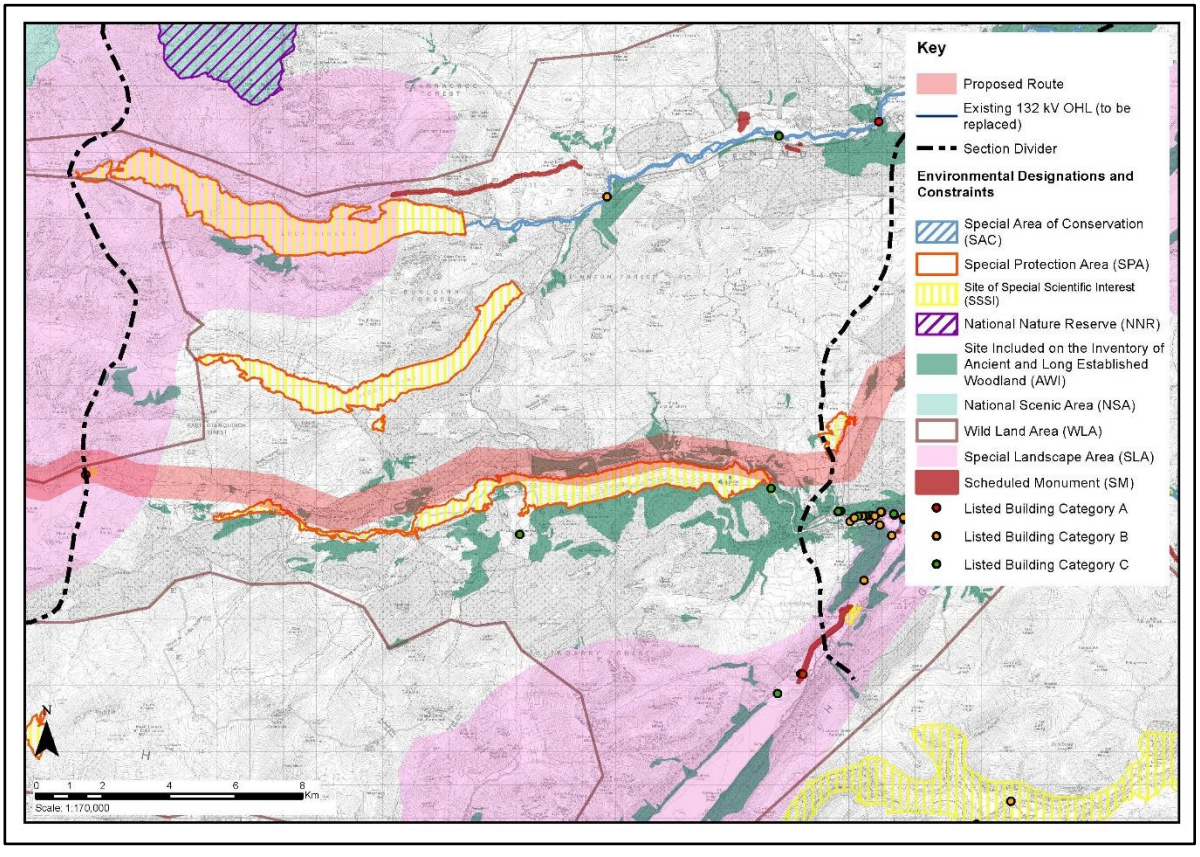
1.7 Section 5: Loch Cuaich to Invergarry

Preferred Route

1.7.1 As identified in the Consultation Document[2] at route options stage, the preferred OHL route for Section 5 is Route Option 5A. This route option follows the route of the existing OHL from Quoich dam to Invergarry.

1.7.2 Plate A2.6 illustrates the preferred route in relation to environmental designations and areas of protection. The preferred route is located within the vicinity of the West Inverness-shire Lochs SPA / SSSI and the Quoich Spillway SSSI (Geological).

Plate A2.6: Section 5 – Preferred Route and Environmental Designations



Consultation Responses

1.7.3 Responses received from statutory and non-statutory consultees during the routeing stage of the project in relation to this section provided general support for the preferred route identified, albeit environmental sensitivities are highlighted, particularly in relation to ornithological designations and constraints. Comments received from the local community focused on consultation, landslip risk, alignment and design solutions (in particular proximity to dwellings), and construction related queries. No specific comments on route options were received.

Proposed Route

1.7.4 The Report on Consultation[3] concluded that, subject to further consideration of environmental constraints and sensitivities, the preferred route in this section (Route Option 5A) is taken forward as the proposed route.

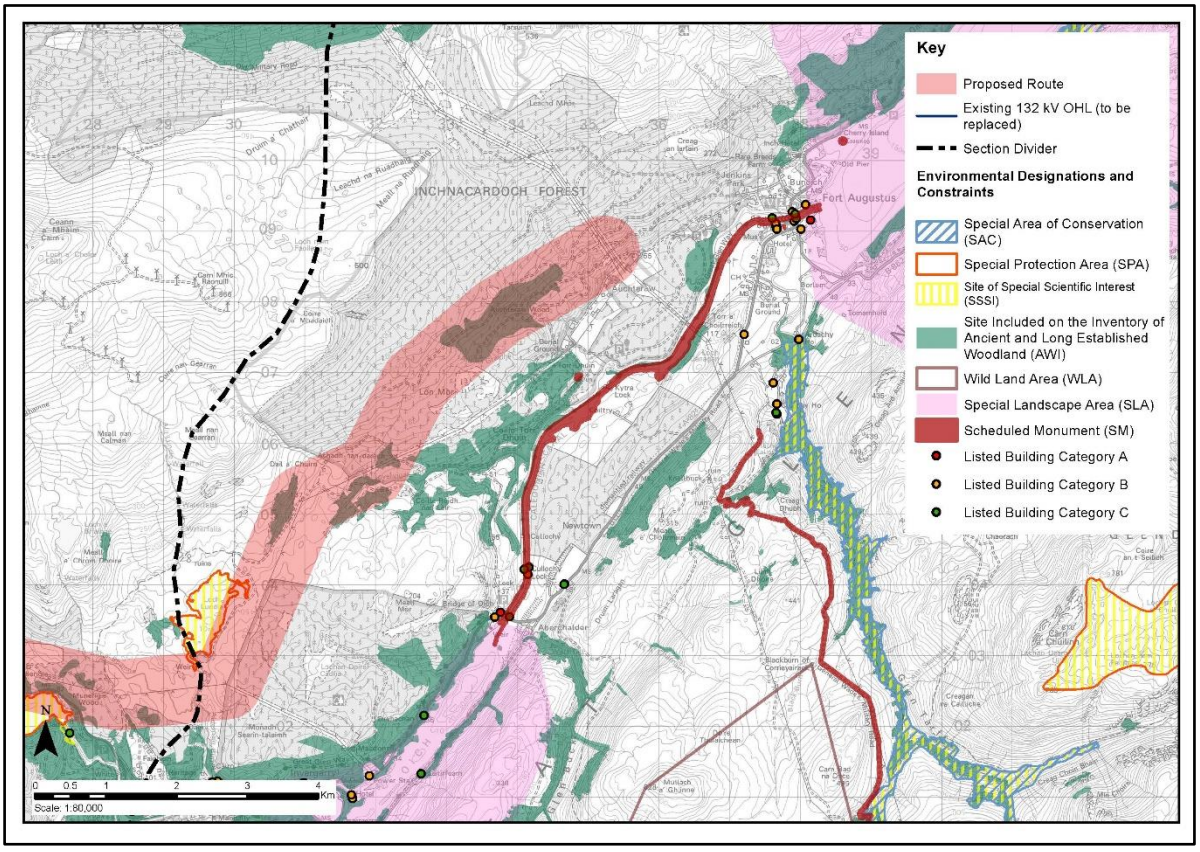
1.8 Section 6: Invergarry to Fort Augustus

Preferred Route

1.8.1 As identified in the Consultation Document[2] at route options stage, the preferred OHL route for Section 6 is Route Option 6A, following existing electrical infrastructure from the tee point north of Invergarry, in a north easterly direction towards Fort Augustus Substation.

1.8.2 Plate A2.7 illustrates the preferred route in relation to environmental designations and areas of protection. The preferred route runs within the vicinity of the West Inverness-shire Lochs SPA. It is also routed within the vicinity of the Caledonian Canal and Torr Dhuinn Fort Scheduled Monuments, and properties at Auchterawe.

Plate A2.7: Section 6 – Preferred Route and Environmental Designations



Consultation Responses

1.8.3 During consultations at route option stage, responses received from statutory and non-statutory consultees in relation to this section provided general support for the preferred route identified, albeit environmental sensitivities are highlighted, particularly in relation to wirescape impacts at Auchterawe, ornithological designations and constraints, cultural heritage sites and forestry. The preferred route was also supported in this section by the local community, albeit comments received from local residents focussed on the connection into Fort Augustus Substation, with a preference for this to be undergrounded.

Proposed Route

1.8.4 The Report on Consultation[3] concluded that, subject to further consideration of environmental constraints and sensitivities, the preferred route in this section (Route Option 6A / 6C) is taken forward as the proposed route.

APPENDIX 3 – COMPARATIVE ALIGNMENT TABLES

SECTION 0 – ARDMORE TO EDINBANE

Category	Sub-Topic	Summary of Constraints for Baseline Alignment	Opportunities and Constraints for Variants	Alignment Preference
Natural Heritage	Designations	The Baseline Alignment would pass through the An Cleireach SSSI for approximately 200 m. This SSSI is a nationally important geological designation, featuring Tertiary igneous intrusions, located to the north-east of Balmeanach. The existing OHL also passes through this SSSI. The micro-siting of poles to avoid rocky outcrops within the SSSI would be required to avoid adversely affecting the notified features of the SSSI.	Variant 0-H would pass through a shorter stretch of the SSSI. However, this would bring the OHL closer to properties at Balmeanach and into croft land which could present land use constraints. It would also require to cross over the existing OHL, potentially requiring outages.	Given opportunities to mitigate effects on the SSSI, the Baseline Alignment is preferred as this would lead to reduced effects on properties and croft land, compared to Variant 0-H and 0-I.
			Variant 0-I would avoid the SSSI. Would lead to potential skylining and increased visibility from properties in Balmeanach. It would also require to cross over the existing OHL, potentially requiring outages.	
	Protected Species	Watercourses and water bodies throughout are considered suitable for supporting otters. Protected species surveys in 2020 recorded otter signs on several watercourses around the Baseline Alignment, mainly in the form of spraints; however, only one potential protected feature was recorded (an otter resting up area, known as a couch). Very few Potential Roost Features (PRFs) for bats were recorded during	Constraints considered to be broadly equivalent for all options, subject to careful micro-siting of poles and appropriate mitigation.	Given comparable constraints across all options, the Baseline Alignment is preferred, subject to appropriate mitigation.

Category	Sub-Topic	Summary of Constraints for Baseline Alignment	Opportunities and Constraints for Variants	Alignment Preference
		surveys in 2020, and those that were, are of low to low-moderate suitability.		
	Habitats	The Baseline Alignment generally passes through typical upland mire and heath habitats and patches of rough acid grassland pasture and marshy grassland common on Skye. Habitats mainly comprise areas of acid and improved grasslands, a mix of wet and dry heaths and areas of blanket bog in places. Some of these are high sensitivity habitats (i.e. Annex 1) but opportunities exist to mitigate impacts through micro-siting. Areas where higher sensitive habitats have been recorded include: • To the east of Beinn na Mointich, comprising an area of blanket bog and wet heath; • To the east of Bay and south towards Fairy Briidge, comprising patches of blanket bog wet heath, and localised peat around Fairy Bridge; • South of Fairy Bride to Lian Airigh nan Geadh comprising an area of blanket bog, and from Lian Airigh nan Geadh to Dunvegan Substation comprising primarily wet heath, with many smaller patches of	Variant 0-C (Hallin) would provide the opportunity to avoid areas of blanket bog and wet heath to the east of Beinn na Mointich. This would bring the OHL closer to properties at Hallin, bisect croft land and potentially impact on the setting of Dun Hallin Broch SM. Variant 0-G (Glen Heysdal) would provide an opportunity to avoid dry modified bog by re-routing through low conservation value improved and acid grasslands to the west instead. This variant would also reduce potential for skylining in views from properties in Feorlig / Upper Feorlig but would route the OHL through croft land which may result in land use constraints for local crofts. It would also require to cross over the existing OHL, potentially requiring outages. Variant 0-H (Balmeanach) would provide an opportunity to microsite around blanket bog habitat and onto acid grassland. This would bring the OHL closer to properties and onto croft land which may lead to land use constraints. Would also require to cross over the existing OHL, requiring outages.	Given other constraints and opportunities for micrositing of poles to minimise effects on sensitive habitats, the Baseline Alignment is preferred.

Category	Sub-Topic	Summary of Constraints for Baseline Alignment	Opportunities and Constraints for Variants	Alignment Preference
		blanket bog, wet modified bog, and dry heath; and • To the south east of Dunvegan Substation towards Balmeanach, comprising areas of blanket bog, wet heath and dry heath. In all of these areas it is anticipated that micrositing of poles could minimise potential effects.		
	Ornithology	Hen harriers breed within the wider area and corncrake are visitors to the Waternish peninsula between late April and early August. There are also records of white-tailed eagle within the wider area. Moorland breeding bird surveys carried out between April and July 2021 detected no notable species within the vicinity of the Baseline Alignment. Similarly, scarce breeding bird surveys over the same period detected no breeding sites of scarce raptors within the vicinity of the Baseline Alignment, although flights by white tailed eagle, peregrine and merlin were recorded. A single male corncrake was also recorded holding territory at Trumpan in May 2021.	Constraints considered to be broadly equivalent for all options, subject to appropriate mitigation.	Given comparable constraints across all options, the Baseline Alignment is preferred, subject to appropriate mitigation.
	Hydrology Hydrogeology and Geology	The Carbon and Peatland Map 2016 identifies areas of Class 1 peatlands from the southern extents of the Waternish peninsula extending	In general, constraints considered to be broadly equivalent for all options, although variants noted for habitats also of relevance to priority peatland.	Given opportunities for micrositing of poles to minimise effects on sensitive habitats,

Category	Sub-Topic	Summary of Constraints for Baseline Alignment	Opportunities and Constraints for Variants	Alignment Preference
		south and covering much of the land between Dunvegan and Edinbane substations. The area is underlain by an impermeable bedrock. Most of the water will be shed as surface water flow, hence a large number of fast flowing streams prevail, particularly on Waternish Peninsula. It is anticipated there will be private water supplies throughout this area, and there are surface water drinking protection zones at Trumpan and Stein, but these are not considered to pose a risk to the development..		the Baseline Alignment is preferred.
Cultural Heritage	Designations	This is an area rich in designated cultural heritage assets, particularly Trumpan Church, Dun Hallin Broch and Annait Scheduled Monuments. A small number of Scheduled Monuments (e.g. Barpannan Chambered Cairns (SM 893), and Dun Feorlig Broch (SM 3494)) and Listed Buildings are located outside the Baseline Alignment. A review of the Baseline Alignment in comparison with Variants 0-A (Trumpan), 0-C and 0-D (Hallin) was carried out to determine potential changes to the settings of these Scheduled Monuments. This review, carried out in consultation with HES, concluded that the Baseline Alignment was the preferable	As noted, a review of the Baseline Alignment in comparison with other OHL Variants concluded that the Baseline Alignment was the preferable OHL alignment with respect to setting effects on designated cultural heritage assets.	Following review of potential setting effects on designated assets, the Baseline Alignment is preferred.

Category	Sub-Topic	Summary of Constraints for Baseline Alignment	Opportunities and Constraints for Variants	Alignment Preference
		alignment with respect to setting effects on SMs.		
	Cultural Heritage Assets	This is an area rich in cultural heritage and there are numerous non-designated cultural heritage assets that are recorded on The Highland Historic Environment Record (HER) in the Waternish Peninsula. The Baseline Alignment passes through Trumpan Township (MHG 4739) and Lusta Township (MHG 6139) and through a well-preserved field system at Hallistra (MHG5965). Other non-designated assets present within the vicinity include brochs, sheiling huts, field systems, field and township boundaries, and areas of former lazy bed cultivation. These features are a mixture of previously recorded HER entries and sites newly identified during a desktop study of aerial photography and historic mapping Mitigation in the form of micro-siting of poles and adoption of sensitive construction techniques would minimise any likely effects.	Given the extents of the non-designated cultural heritage assets through this area, all options are likely to be similarly constrained and subject to the same approach to mitigation.	Given comparable constraints across all options, the Baseline Alignment is preferred, subject to appropriate mitigation.
People	Proximity to Dwellings	Settlement and properties are located within the general vicinity of the Baseline Alignment at Trumpan, Halstra, Hallin, Stein, Lusta and Hornival on the Waternish Peninsula, and also	All OHL Variants avoid close proximity to properties. However, all OHL Variants would converge at a similar point on exit / approach to Ardmore Substation and would share similar constraints	Given comparable constraints across all options, the Baseline Alignment is preferred.

Category	Sub-Topic	Summary of Constraints for Baseline Alignment	Opportunities and Constraints for Variants	Alignment Preference
		at Upper Feorlig and Balmeanach. The Baseline Alignment has been routed to avoid close proximity to these properties (i.e. beyond 4 times the nominal height of the structure). One exception to this is at Ardmore where at its closest point the Baseline Alignment passes circa 30 m to the rear of a property, set down into the hill side with only its roof visible when viewed from the north east. Another property is circa 50 m distance from the Baseline Alignment in this area. The presence of the existing 132 kV OHL, the 11 kV line and topography on approach to Ardmore Substation all limit viable options for an OHL in this location.	noted for Baseline Alignment in terms of proximity to properties at this location.	
Landscape and Visual	Designations	The Baseline Alignment runs through the North West Skye Special Landscape Area (SLA) through much of the Waternish Peninsula. Special Qualities of the SLA of potential sensitivity to the OHL involve the relationship between land and sea, the traditional patterns of the crofting landscapes and their association with historic land use, and distinctive features of the terrain, including views towards MacLeod's Tables from within and around the SLA.	No OHL Variant offers a particular advantage over the Baseline Alignment in terms of minimising effects on the SLA.	Given comparable constraints across all options, the Baseline Alignment is preferred.

Category	Sub-Topic	Summary of Constraints for Baseline Alignment	Opportunities and Constraints for Variants	Alignment Preference
	Landscape Character	The landscape is heavily influenced by the coast with an intricate coastline of bays and rocky promontories backed by croft lands and strung out settlements. Inland areas are characterised by stepped moorland with occasional patches of forest plantation. The southern part of the Baseline Alignment crosses two coastal valleys (Glen Heysdal and Balmeanach glen) where improved croft lands and scattered settlement extend inland slightly. In general, whilst the coastal landscapes have higher sensitivity though this Section, inland landscapes are broadly accommodating of the type of development proposed (wood pole OHL), particularly given that this would be replacing an existing wood pole OHL.	Variant 0-B offers a localised benefit to landscape character in relation to the Baseline Alignment as it would take a more sensitive alignment across the Cnoc a' Catha roadside ridge, where the Baseline Alignment would appear more prominent. Variant 0-G (Glen Heysdal) provides an opportunity to minimise some of the effects of localised skylining in comparison to the Baseline Alignment.	Variants 0-B and 0-G both offer some improved landscape effects to the Baseline Alignment but have not been taken forward as part of the preferred alignment due to other land use constraints.
	Visual	Visual receptors within the vicinity of the Baseline Alignment include residential settlements along the Waternish coast including Trumpan, Halistra, Hallin and Stein where there are open, coastal views, and scattered crofting properties at Upper Feorlig in Glen Heysdal and Balmeanach. A viewpoint at Trumpan, Core Paths near Stein, Dunvegan and Ullinish, and the rural roads which serve these properties,	There is some advantage for a small number of receptors at Trumpan with Variant 0-A in comparison to the Baseline Alignment, given it follows the existing 132 kV OHL and would avoid crossing to the front of coastal views from some properties. Variant 0-A would feature within westerly views in the same manner of the existing OHL and would pass closer to a couple of individual properties.	There is little to choose between the Baseline Alignment and Variant 0-A in terms of visual effects. Variants 0-B and 0-H both offer some likely improved visual effects but have not been taken forward as part of the preferred

Category	Sub-Topic	Summary of Constraints for Baseline Alignment	Opportunities and Constraints for Variants	Alignment Preference
		including the A850 and B886, are also visually sensitive, being used by residents and popular with visitors and tourists. Views from Trumpan, where the Baseline Alignment crosses coastal land to the front of properties on the approach to Ardmore Substation, may give rise to some visual effects and the potential for skylining to poles as they cross over the minor road to the north of Trumpan. Effects are to some degree offset by the removal of the existing OHL for some receptors. Further south-east, the Baseline Alignment to the east of Dun Hallin Broch and Beinn na Mointich moves the new OHL further from properties at Hallin and Lower Hallistra albeit there is the possibility of this appearing on the skyline from some (limited) places. There would also be some visual effects on users of a Core Path in this area. At Glen Heysdal, potential for skylining of some poles in views from properties at Feorlig and Upper Feorlig.	There would therefore be only limited benefit in terms of visual effects from some receptors. Variant 0-B is similar in nature to the Baseline Alignment, but provides an opportunity to reduce the effects of skylining of poles on views obtained by visual receptors to the west, including from residential properties and the minor road in comparison to the Baseline Alignment. . Variant 0-C (Hallin) offers an alternative to the Baseline Alignment with potential to reduce skylining and visual effects on the Stein to Gillen Core Path, instead being routed to the east of the existing OHL. This would however be close to the rear of properties at Hallin and Lower Hallistra (as per the existing OHL). Would also bring the OHL closer to Dun Hallin Broch SM, which is considered less preferable to the Baseline Alignment. Variant 0-D (Hallin), located further to the east of Beinn na Mointich than the Baseline Alignment would increase the risk of skylining in views from Gillen. Considered less preferable in comparison to the Baseline Alignment on landscape and visual grounds given potential for increased sky lining from Gillen. Also less preferable in terms of setting effects on Dun Hallin Broch SM.	alignment due to other land use constraints.

Category	Sub-Topic	Summary of Constraints for Baseline Alignment	Opportunities and Constraints for Variants	Alignment Preference
			Varients 0-E and 0-F provide alternative options at Fairy Bridge but would be closer to the public road leading to likely greater visual effects. Likely greater visual effects than the Baseline Alignment due to proximity to the public road. Also would be required to cross over the existing OHL one or more times, potentially requiring outages.	
			Variant 0-G (Glen Heysdal) provides an opportunity to minimise some of the effects of skylining in comparison to the Baseline Alignment. This would appear slightly closer in views from Feorlig / Upper Feorlig but less likely to skyline and therefore preferred, but would route the OHL through croft land which may result in land use constraints for local crofts. It would also require to cross over the existing OHL, potentially requiring outages.	
			Variant 0-H (Balmeanach) would bring the OHL closer to properties and onto croft land which may lead to land use constraints. Would also require to cross over the existing OHL, requiring outages.	
			Variant 0-I would lead to potential skylining and increased visibility from properties in Balmeanach. It would also require to cross over the existing OHL, potentially requiring outages.	

Category	Sub-Topic	Summary of Constraints for Baseline Alignment	Opportunities and Constraints for Variants	Alignment Preference
Land Use	Agriculture	Crofting settlements are present within Section 0 and the Baseline Alignment crosses areas of agricultural land use, including land primarily suited to grassland (4.2), and land capable of use as improved grassland (5.1 and 5.2). No grade 1, 2 or 3 agricultural land is present in the vicinity of the Baseline Alignment. At Hallin, the Baseline Alignment offers an opportunity to move the OHL further away from properties and croft land in comparison to the existing OHL.	Whilst constraints are considered to be broadly equivalent for all options, subject to careful micro-siting of poles and appropriate mitigation, the following variants are anticipated to increase effect on agriculture and croft land in comparison to Baseline Alignment: • Variant 0-C (Hallin) • Variant 0-G (Glen Heysdal) • Variant 0-H (Balmeanach)	The Baseline Alignment is preferred given reduced effects on agriculture in comparison with other Variants.
	Forestry	The Baseline Alignment would require a new or extended wayleave through commercial plantation to the west of Edinbane Substation. To the east of Stein, the Baseline Alignment crosses a corner of plantation forest, part of Waternish Forest. This area is currently clear felled and adjacent to an old borrow pit.	At Hallin, Variant 0-C would avoid any interaction with Waternish Forest. Variant 0-C would be close to the rear of properties at Hallin and Lower Hallistra (as per the existing OHL). Would also bring the OHL closer to Dun Hallin Broch SM, which is considered less preferable to the Baseline Alignment. On approach to Edinbane Substation, Variant 0-I would require a similar extent of felling to the Baseline Alignment, and in part where no wayleave is currently present. Variant 0-I would bring the OHL closer to properties and onto croft land which may lead to land use	Given minor effect on forestry, and considering other constraints, the Baseline Alignment is preferred.

Category	Sub-Topic	Summary of Constraints for Baseline Alignment	Opportunities and Constraints for Variants	Alignment Preference
			constraints. Would also require to cross over the existing OHL, requiring outages.	
	Recreation	The Baseline Alignment would run within the vicinity of, or cross the Stein to Gillen, and Loch Caroy to Glen Vic Askill Core Paths, as well as two other Rights of Way and Wider Path Network paths.	Constraints considered to be broadly equivalent for all options, subject to careful micro-siting of poles and appropriate mitigation.	Given comparable constraints across all options, the Baseline Alignment is preferred.
Planning	Policy	As a 'National Development' (NPF 3), and considering the alignment selection process undertaken to minimise potential environmental effects, it is considered the Baseline Alignment would be in broad conformity with local and national planning policy.	Constraints considered to be broadly equivalent for all options.	Given comparable constraints across all options, the Baseline Alignment is preferred.
	Proposals	No notable proposals within the planning system identified within the vicinity of the Baseline Alignment.	Constraints considered to be broadly equivalent for all options. Within the vicinity of Variant-1B, an application for planning permission in principle for the development of a house was lodged in 2013. This was approved but has since lapsed.	Given comparable constraints across all options, with the exception of Variant-1B, the Baseline Alignment is preferred.

Summary of Alignment Selection and Design Solution within Section 0

On balance, it was determined that the Baseline Alignment should be taken forward as the preferred alignment and design solution within this section. This would require the installation of approximately 23 km of wood pole (H pole) OHL. The existing wood pole OHL would be removed upon completion.

SECTION 1 - EDINBANE TO NORTH OF SLIGACHAN

Category	Sub-Topic	Summary of Constraints	Opportunities and Constraints for Variants	Alignment Preference
Natural Heritage	Designations	The Baseline Alignment would pass through the Cuillin Hills SPA, classified for 8 pairs of resident breeding golden eagles, for approximately 1 km. A HRA is likely to be required upon submission of a consent application, albeit no adverse effect on site integrity for the SPA is anticipated, assuming appropriate mitigation. Also, the Sligachan Peatlands SAC/SSSI, the qualifying features of which include blanket bog, dystrophic and oligotrophic lochs, vascular plants, transition mires and quaking bogs, is located approximately 500 m to the west of the Baseline Alignment for approximately 4 km. The Baseline Alignment would cross watercourses that are upstream of the SAC/SSSI, and appropriate mitigation to avoid silt and pollution entering these watercourses during construction would be required to avoid indirect effects on the SAC/SSSI.	There are no variants that would avoid passing through the Cuillin Hills SPA between Glen Varragill Forest and Sligachan. All variants would share the same constraints and requirement for mitigation with respect to the Sligachan Peatlands SAC/SSSI.	Given comparable constraints across all options, there is no particular preference of alignment, subject to appropriate mitigation.
	Protected Species	European Protected Species such as otter and bats could be present along the Baseline Alignment, as well as other protected species, including reptiles.	Constraints considered to be broadly equivalent for all options, subject to careful micro-siting of towers and appropriate mitigation during construction.	Given comparable constraints across all options, there is no particular preference of alignment, subject to appropriate mitigation.

Category	Sub-Topic	Summary of Constraints	Opportunities and Constraints for Variants	Alignment Preference
	Habitats	The Baseline Alignment generally passes through open moorland and heathland comprising areas of blanket bog, wet heath, wet modified bog, dry modified bog and small patches of scattered acid grassland habitats. Areas where higher sensitive habitats have been recorded include: • From Edinbane Substation to the B885 where there are areas of blanket bog and deep peat; and • As the Baseline Alignment crosses the moorland at Achaleathan and towards Glenmore, this is an area of blanket bog. Peat probing undertaken by the OHL contractor has identified areas of deep peat.	Variant 1-A provides an opportunity to minimise effects on blanket bog by routeing through plantation forestry, albeit potential for deeper areas of peat remain. This variant would bring the OHL closer to a known white tailed eagle nest, although it is anticipated that suitable buffer distances can be maintained to minimise effects during construction and operation. Peat probing has identified that Variant 1-B crosses shallower peat in comparison to the Baseline Alignment across the moorland at Achaleathan. Habitat walkovers suggest this area to be more of a habitat mosaic with smaller patches of blanket bog intertwined with wet heath, purple moor-grass (*Molinia caerulea*) wet modified bog, and small patches of acid grassland on shallow mineral soils and exposed knolls.	Given sensitive habitats and deeper areas of peat, Variant 1-A and 1-B are preferred, in combination with the Baseline Alignment in other areas. Further habitat and peat depth surveys required to ensure the preferred alignment, tower locations and construction access are microsited to minimise effects on sensitive habitats.
			Variant 1-C and 1-D provide an alternative alignment to minimise potential effects on blanket bog and deeper areas of peat, being routed across less sensitive habitats. These variants though would result in likely significant landscape and visual effects from receptors at Glenmore and Mugeary.	Whilst Variants 1-C and 1-D offer further opportunities to minimise effects on habitats and peatlands, these have not been taken forward as preferred due to likely significant landscape and visual effects. Further habitat and peat depth surveys required to ensure the preferred alignment, tower

Category	Sub-Topic	Summary of Constraints	Opportunities and Constraints for Variants	Alignment Preference
				locations and construction access are microsited to minimise effects on habitats.
	Ornithology	Moorland breeding bird surveys, flight activity surveys for white-tailed eagle and golden eagle, and searches for nest sites have been undertaken throughout 2021, to supplement existing data and inform alignment selection within Section 1. Known ornithological sensitivities throughout Section 1 include white-tailed eagle, golden eagle, hen harriers, red-throated diver and greenshank, all of which frequent the area. There are no known nest sites for birds of conservation concern within the vicinity of the Baseline Alignment, taking into account suitable buffer zones for different species. Historic nest sites close to the Baseline Alignment have been checked and confirmed as no longer viable / in use.	Variant 1-A brings the OHL closer to a known white tailed eagle nest. However, it is anticipated that suitable buffer distances can be maintained to minimise effects during construction and operation. By following the existing OHL, Variant 1-C would avoid felling a new wayleave through a part of Glen Tungadal Forest, near Mugeary (used historically by white tailed eagle), and would keep the OHL at a lower elevation through this part of the route. Similarly, Variant 1-D would also avoid the requirement for felling, although would be located at a higher elevation. Both of these variants would result in likely significant landscape and visual effects from receptors at Glenmore and Mugeary.	Baseline Alignment given reduced requirement for fellings, although with suitable mitigation (i.e. sensitive timing of construction activities) other variants are not anticipated to result in additional constraint.

Category	Sub-Topic	Summary of Constraints	Opportunities and Constraints for Variants	Alignment Preference
	Hydrology Hydrogeology and Geology	The Carbon and Peatland Map 2016 identifies areas of Class 1 peatland along the majority of the Baseline Alignment. Peat probing has been carried out along the Baseline Alignment throughout Section 1, confirming that generally peat depths are shallow. However, pockets of deeper peat do exist. In particular, where the Baseline Alignment crosses the moorland at Achaleathan and towards Glenmore, this is an area comprising blanket bog and deep peat. A number of watercourse crossings, particularly at Glenmore and Glen Varragill, would need to be considered, predominantly in relation to construction access. Private water supplies anticipated in this area also, although not anticipated to be a development constraint.	Peat probing has identified that Variant 1-B crosses much shallower peat in comparison to the Baseline Alignment across the moorland at Achaleathan. Habitat walkovers suggest this area to be more of a habitat mosaic with smaller patches of blanket bog intertwined with wet heath, purple moor-grass (*Molinia caerulea*) wet modified bog, and small patches of acid grassland on shallow mineral soils and exposed knolls.	Given sensitive habitats and deeper areas of peat, Variant 1-A and 1-B are preferred, in combination with the Baseline Alignment in other areas. Further habitat and peat depth surveys required to ensure the preferred alignment, tower locations and construction access are microsited to minimise effects on peatlands.
			Variant 1-C and 1-D provide an alternative alignment to minimise potential effects on blanket bog and deeper areas of peat, being routed across less sensitive habitats. These variants would result in likely significant landscape and visual effects from receptors at Glenmore and Mugeary.	Whilst Variants 1-C and 1-D offer further opportunities to minimise effects on habitats and peatlands, these have not been taken forward as preferred due to likely significant landscape and visual effects. Further habitat and peat depth surveys required to ensure the preferred alignment, tower locations and construction access are microsited to minimise effects on peatlands.

Category	Sub-Topic	Summary of Constraints	Opportunities and Constraints for Variants	Alignment Preference
Cultural Heritage	Designations	No cultural heritage designated assets are within the immediate vicinity of the Baseline Alignment. Dun Arkaig broch (SM 13662) lies approximately 1.5 km from the Baseline Alignment.	Constraints considered to be broadly equivalent for all options.	Given comparable constraints across all options, there is no particular preference of alignment.
	Cultural Heritage Assets	There are two non-designated cultural heritage assets recorded in The Highland Council HER within the vicinity of the Baseline Alignment within Section 1. These comprise sheiling huts (MHG 5156) and a dyke (MHG 55833). Other heritage assets were identified from the desktop study. These mainly comprise post-medieval features such as buildings, field boundaries, and cultivation remains. Mitigation through micro-siting of towers and access routes where necessary should avoid direct effects on these assets.	Constraints considered to be broadly equivalent for all options.	Given comparable constraints across all options, there is no particular preference of alignment.
People	Proximity to Dwellings	Settlement and properties are located over 1 km to the east of the Baseline Alignment at Glenmore and Mugeary. There is a property approximately 500 m from the Baseline Alignment at Glen Vic Askill.	Variant 1-A would be located approximately 325 m from the property at Glen Vic Askill, closer than the Baseline Alignment.	The Baseline Alignment is preferable over Variant 1-A given increased distance, albeit Variant 1-A is not considered to be in close proximity to the property at Glen Vic Askill.
			Variant 1-C and 1-D would run closer to the properties at Glenmore and Mugeary than the	The Baseline Alignment is preferable of Variants 1-C and

Category	Sub-Topic	Summary of Constraints	Opportunities and Constraints for Variants	Alignment Preference
			Baseline Alignment. Could result in likely significant landscape and visual effects, and proximity may appear somewhat overbearing in some areas.	1-D given increased distance between it and Glenmore / Mugeary.
Landscape and Visual	Designations	On approach to Sligachan, the Baseline Alignment has potential for indirect effects to the Cuillin Hills NSA due to the appearance of steel structures in the foreground of views towards the mountains.	Variants in Section 1 are broadly similar with respect to indirect effects on the NSA. Reference should be made to Section 2 (Variant 2-A).	Given comparable constraints across all options, there is no particular preference of alignment.
	Character	The Baseline Alignment is mostly within the Upland Sloping Moorland and Stepped Moorland Landscape Character Types and is composed of sweeping open moorland with a broadscale pattern of forestry plantation. These landscapes are considered broadly accommodating of this type of development if well aligned. To the west of the B885, small flat-topped rocky knolls are a unique feature of the landscape and more locally sensitive to change.	Variant 1-A would provide an opportunity to minimise impacts on the small flat-topped rocky knolls present at Creag Bhreac as it is routed through the forest plantation at Glen Vic Askill, but may be more prominent crossing open slopes near to Glen Vic Askill. It would also require a new wayleave to be created through the plantation. Variant 1-A also brings the OHL closer to a known white tailed eagle nest, although it is anticipated that suitable buffer distances can be maintained to minimise effects during construction and operation. Potential for increased visual effect from property at Glen Vic Askill with Variant 1-A.	The Baseline Alignment is considered to have comparable constraints with Variants 1-A and 1-B with no particular preference between these alignments.

Category	Sub-Topic	Summary of Constraints	Opportunities and Constraints for Variants	Alignment Preference
		An area of settlement and crofting land at Glenmore has a smaller scale character and greater sensitivity.	Both the Baseline Alignment and Variant 1-B cross the flat open moorland near Achaleathan, with potential for greater landscape effects, but Variants 1-C and 1-B would have greater landscape effects on small scale landcapes around Glenmore.	
	Visual	The Baseline Alignment has been routed through and along the edge of forestry keeping to a distance of at least 840 m from properties at Glenmore and Mugeary and minimising skylining to reduce potential visual effects for receptors in these areas. Other visual receptors are limited to a property at Glen Vic Askill (circa 500 m from the Baseline Alignment) users of a core path and road users.	Variant 1-A would be located approximately 325 m from the property at Glen Vic Askill, leading to potentially increased visual effects.	The Baseline Alignment is preferred for visual effects.
			Variant 1-C and 1-D would run closer to properties and visual receptors at Glenmore and Mugeary in comparison with the Baseline Alignment. This could result in significant landscape and visual effects, with proximity of Variant 0-D resulting in towers appearing somewhat imposing in some areas.	
			Variant 1-E at Glen Varragill Forest would take a more direct route through the forest. This is deemed less preferable in landscape and visual terms in comparison to the Baseline Alignment, primarily due to the point of crossing of the A87 and the potential impact in key views, as well as increased felling requirements.	

Category	Sub-Topic	Summary of Constraints	Opportunities and Constraints for Variants	Alignment Preference
Land Use	Agriculture	The Section is predominantly rough grazing, dominated by plant communities of low grazing value. The Baseline Alignment does not interact with any grade 1, 2 or 3 agricultural land.	Constraints considered to be broadly equivalent for all options, although potential for interaction with land use for crofting for Variants 1-B and 1-C.	Given comparable constraints across all options, the Baseline Alignment, in combination with Variant 1-A and / or 1-B as required, is preferred.
	Forestry	Baseline Alignment would require a new wayleave for a short section through forestry at Glen Tungadal and Glen Varagill.	Variant 1-A would require a new wayleave through forestry at Glen Vic Askill. There is also potential for increased visual effect from property at Glen Vic Askill with this variant, and it brings the OHL closer to a known white tailed eagle nest, although it is anticipated that suitable buffer distances can be maintained to minimise effects during construction and operation.	Given relatively minor effect on forestry, and considering other constraints, there is no particular preference of alignment.
	Recreation	The Baseline Alignment crosses the Loch Caroy to Glen Vic Askill Core Path.	There are no variants that would avoid this constraint.	Given comparable constraints across all options, there is no particular preference of alignment.

Category	Sub-Topic	Summary of Constraints	Opportunities and Constraints for Variants	Alignment Preference
Planning	Policy	As a 'National Development' (NPF 3), and considering the alignment selection process undertaken to minimise potential environmental effects, it is considered the Baseline Alignment would be in broad conformity with local and national planning policy. Minimising effects on Class 1 peatland habitats and deeper areas of peat will require careful consideration to maintain this position.	Variant 1-A provides an opportunity to minimise effects on blanket bog by routeing through plantation, albeit potential for deeper areas of peat remain. Peat probing has identified that Variant 1-B crosses much shallower peat in comparison to the Baseline Alignment across the moorland at Achaleathan. Habitat walkovers suggest this area to be wet heath and mire (M25).	Given sensitive habitats and deeper areas of peat, Variant 1-A and 1-B are preferred, in combination with the Baseline Alignment in other areas. Further habitat and peat depth surveys required to ensure the preferred alignment, tower locations and construction access are microsited to minimise effects on peatlands.
	Proposals	The Baseline Alignment is within recommended clearance distance for electrical infrastructure from the consented Glen Ullinish wind farm.	Variant 1-A remains outwith the recommended clearance distance from the consented Glen Ullinish wind farm. Potential for increased visual effect from property at Glen Vic Askill with Variant 1-A. Variant 1-A brings the OHL closer to a known white tailed eagle nest, although it is anticipated that suitable buffer distances can be maintained to minimise effects during construction and operation. Variant 1-A would require a new wayleave through forestry at Glen Vic Askill, although opportunity to minimise effects on sensitive habitats.	Whilst Variant 1-A could result in additional effects in comparison to the Baseline Alignment, the requirement to maintain recommended clearance distance from consented wind farms results in Variant 1-A being preferred in this location.

Summary of Alignment Selection and Design Solution within Section 1

On balance, it was determined that Variant's 1-A and 1-B would be taken forward given the requirement to ensure sufficient clearance distances to the consented Glen Ullinish Wind Farm (Variant 1-A) and minimising effects on deeper areas of peat where practicable (Variant 1-B), in combination with the Baseline Alignment in all other areas. The existing wood pole OHL would be removed upon completion.

SECTION 2 – NORTH OF SLIGACHAN TO BROADFORD

Category	Sub-Topic	Summary of Constraints	Opportunities and Constraints for Variants	Alignment Preference
Natural Heritage	Designations	The Baseline Alignment would pass through the Cuillins SPA for much of its length, for which golden eagle is a qualifying feature (supporting 8 pairs). As the Baseline Alignment would generally follow the existing OHL, it is considered that this would present limited risks to golden eagles. A HRA is likely to be required upon submission of a consent application, albeit no adverse effect on site integrity for the SPA is anticipated, assuming appropriate mitigation.	Variant 2-A offers the greatest opportunity to minimise effects to the Cuillins SPA as it would be undergrounded, subject to appropriate mitigation to minimise potential effects on qualifying species. Potential effects of Variant 2-A on habitats, hydrology / hydrogeology would also need to be carefully considered, with appropriate mitigation and restoration measures put in place to minimise effects.	Given opportunity to minimise effects on the Cuillins SPA with Variant 2-A, this is preferred in combination with the Baseline Alignment from Luib to Broadford.
	Protected Species	European Protected Species such as otter could be present along the Baseline Alignment, as well as other protected species, including reptiles. There is very little woodland present along the Baseline Alignment, as such there is expected to be minimal roosting potential for bats.	Constraints considered to be broadly equivalent for all OHL options, subject to careful micro-siting of towers, construction access and appropriate mitigation. The increased construction corridor and closer interaction with watercourses for Variant 2-A (underground cable) does increase potential direct and indirect effects on protected species during construction, and would require appropriate mitigation to minimise effects.	In terms of potential effects on protected species, the Baseline Alignment would be preferred. However, subject to appropriate mitigation, it is anticipated that other variants (overhead and underground) could be achieved without significant effects on protected species.

Category	Sub-Topic	Summary of Constraints	Opportunities and Constraints for Variants	Alignment Preference
	Habitats	The predominant habitat recorded along the Baseline Alignment is wet heath, which forms a large expanse of near continuous habitat which at times is only occasionally interspersed with small patches of other upland habitat types. Deeper areas of peat and blanket bog habitats likely to be present south of Am Meall (e.g. large flat peaty area located at the headwaters of the Garbh-allt and close to Loch nam Madach Uisge), and close to Loch Cuil na Creige and at Allt Mhic Leanain associated with flat lying areas.	Constraints considered to be broadly equivalent for all OHL options, subject to careful micro-siting of towers and appropriate mitigation. The increased construction corridor and closer interaction with watercourses for Variant 2-A (underground cable) does increase potential effects on habitats during construction, and would require appropriate mitigation to minimise effects on habitats, hydrology / hydrogeology, and ensure effective restoration.	In terms of potential effects on habitats, the Baseline Alignment would be preferred, subject to micro-siting. Other variants (overhead and underground) would require to be subject to micro-siting, appropriate mitigation and restoration measures to minimise effects on habitats.
	Ornithology	The Baseline Alignment travels through the Cuillins SPA, classified for 8 pairs of resident breeding golden eagles. Active white-tailed eagle territories within 6 km, plus information from surveys, sightings and satellite tags suggest use of the surrounding area. Other sensitivities include breeding greenshank, and possible merlin breeding habitat, plus waders, waterfowl and gulls.	Variant 2-A offers the greatest opportunity to minimise effects to the Cuillins SPA as it would be undergrounded. The increased construction corridor and closer interaction with watercourses for Variant 2-A (underground cable) does increase potential effects on habitats during construction, and would require appropriate mitigation to minimise effects on habitats, hydrology / hydrogeology, and ensure effective restoration. Variant 2-F would result in a new OHL crossing higher ground at Druim na Cleochd. Whilst outwith the SPA, this area could be used by SPA qualifying species, albeit flight activity surveys during 2021 did	Given opportunity to minimise effects on the Cuillins SPA with Variant 2-A, this is preferred in combination with the Baseline Alignment from Luib to Broadford, subject to appropriate mitigation.

Category	Sub-Topic	Summary of Constraints	Opportunities and Constraints for Variants	Alignment Preference
			not record any frequent use of this area by eagles or other birds of conservation concern.	
	Hydrology Hydrogeology and Geology	Priority peatland mapping suggests that in the areas surrounding the Baseline Alignment, to the south of Am Meall and near Strollamus Class 1 and 2 (strong likelihood of deep peat and priority peatland habitats) is present. Also crossed over by the Baseline Alignment is a surface water drinking protection zone near Dunan / An Dùnan. Catchments to any groundwater wells, springs and GWDTE are likely to be similar to surface catchments. The Baseline Alignment would cross a number of watercourses, particularly around Loch Sligachan where the steep slopes of the Cuillins generates some fast-flowing watercourses of various sizes, and waterfalls. Pollution risks present.	Constraints considered to be broadly equivalent for all OHL options, subject to careful micro-siting of towers, construction access and appropriate mitigation. The increased construction corridor and closer interaction with watercourses for Variant 2-A (underground cable) does increase potential effects on habitats during construction, and would require appropriate mitigation to minimise effects on habitats, hydrology / hydrogeology, and ensure effective restoration.	In terms of potential effects on habitats, the Baseline Alignment would be preferred, subject to micro-siting. Other variants (overhead and underground) would require to be subject to micro-siting, appropriate mitigation and restoration measures to minimise effects on peat and peatland habitats.
Cultural Heritage	Designations	The Baseline Alignment would pass near the listed Sligachan Old Bridge (LB 1783), a cluster of listed buildings at Luib and a Scheduled Monument (Old Corry cairns (SM 13673)) near Broadford (also discussed in relation to Section 3). No adverse effects on setting are anticipated.	Constraints considered to be broadly equivalent for all OHL options. The installation of an underground cable (Variant 2-A) present an opportunity to minimise effects on setting.	Variant 2-A in combination with the Baseline Alignment would be preferred given opportunity to minimise effects on setting.

Category	Sub-Topic	Summary of Constraints	Opportunities and Constraints for Variants	Alignment Preference
	Cultural Heritage Assets	The Baseline Alignment would pass near a cluster of non-designated cultural heritage assets around Strollamus, mostly representing post-mediaeval settlement and land use. It is anticipated that direct effects on non - designated cultural heritage assets could largely be avoided.	Constraints considered to be broadly equivalent for all OHL options. The installation of an underground cable (Variant 2-A) would increase potential to disturb known heritage assets and any previously unknown sub-surface buried archaeology, albeit potential effects are anticipated to be limited.	Given comparable constraints across all OHL options, there is no particular preference of alignment. Variant 2-A would increase potential for disturbance to sub-surface buried archaeology.
People	Proximity to Dwellings	The Baseline Alignment is located typically to the south of properties at Sconser, Luib, Dunan and Strollamus, but no properties within close proximity (i.e. within 100 metres).	Variant's 2-B and 2-D would bring the OHL closer to properties and buildings at Sligachan and Sconser respectively.	The Baseline Alignment, or Variants 2-A and 2-C, are not located within close proximity to properties, and would therefore be preferred.
Landscape and Visual	Designations	The Baseline Alignment would result in likely significant landscape and visual effects on the Cuillin Hills NSA, given the prominence of steel structures which would be distracting in valued mountain views and would create a barrier effect around the base of the mountains. The Baseline Alignment also skirts the edge of the Cuillins WLA, although other development (e.g. roads, housing and existing wood pole OHLs) is considered likely to reduce the perceived wild land values of the WLA in this area.	Variant 2-A (underground cable) would provide an opportunity to mitigate the likely significant long term effects on landscape and visual receptors within this section, including the Cuillin Hills NSA. Whilst short term effects may still be likely, it is anticipated that with appropriate mitigation and restoration such effects would be limited to the construction phase, or shortly thereafter. Varient 2-F would remove a short section of the Baseline Alignment from the NSA through Gleann Torra-mhichaig but significant effects to the NSA and setting would still be likely.	Given opportunity to mitigate likely significant effects on the Cuillins NSA, and other landscape and visual receptors, Variant 2-A is preferred in combination with the Baseline Alignment from Luib to Broadford.

Category	Sub-Topic	Summary of Constraints	Opportunities and Constraints for Variants	Alignment Preference
	Character	Landscape character through this section is highly sensitive, characterised by steep mountain slopes, and inland loch-shore. Key areas of sensitivity are located around the shores and across the heads of Loch Sligachan and Loch Ainort, and through the remote valley of Gleann Torra -mhichaig. SNH mapping indicates a relatively low degree of wildness due to the existing road and housing. However, the presence of the Baseline Alignment could lead to increased visibility from other areas within the mountains with potential for wild land impact. The head of Loch Ainort is a particular area where the sense of being on the edge of wild land is experienced.	Variant 2-A would provide an opportunity to mitigate the likely significant long term effects on landscape and visual receptors within this section, including the Cuillin Hills NSA. Whilst short term effects may still be likely, it is anticipated that with appropriate mitigation and restoration such effects would be limited to the construction phase, or shortly thereafter.	Given opportunity to mitigate likely significant effects on the Cuillins NSA, and other landscape and visual receptors, Variant 2-A is preferred in combination with the Baseline Alignment from Luib to Broadford.
	Visual	The Baseline Alignment has the potential to be prominent and distracting in coastal and mountain views from the A87, including various stopping and viewing locations, valued by tourists and visitors, Particularly sensitive stopping points are located at the head of Loch Ainort where the sense of being on the edge of wild land is strong and views are obtained up between the mountains with limited development present. The Baseline Alignment would be visible to the rear of properties at Sconser, Luib and	The Baseline Alignment and all OHL variants are likely to result in significant landscape and visual effects through this section, including the Cuillins NSA. Variant 2-A would provide an opportunity to mitigate the likely significant long term effects on landscape and visual receptors within this section. Whilst short term effects may still be likely, it is anticipated that with appropriate mitigation and restoration such effects would be limited to the construction phase, or shortly thereafter.	Given opportunity to mitigate likely significant effects on the Cuillins NSA, and other landscape and visual receptors, Variant 2-A is preferred in combination with the Baseline Alignment from Luib to Broadford.

Category	Sub-Topic	Summary of Constraints	Opportunities and Constraints for Variants	Alignment Preference
		Strollamus and from properties and recreation areas at Peinachorrain on the opposite shore of Loch Sligachan. . There are notable visual sensitivities around Sligachan relating to hotel, campsite, walkers, sightseers and travellers on the road with potential for the Baseline Alignment to appear within valued mountain and coastal views. Other sensitive receptors include ferry passengers on the Sconser to Raasay Ferry and recreational users of Core Paths and other Routes, heading into the mountains from Sligachan, Kinloch Ainort and Luib and along the northern shore of Loch Sligachan,	Variant 2-B at Sligachan would be routed to the rear of the hotel, crossing the A863 before heading northeast on the south side of the A87 where it would re-join the Baseline Alignment. Whilst this Variant would avoid passing to the front of the hotel, it variant is anticipated to result in likely other significant environmental effects, and would increase the effect on views from Sligachan towards the mountains.	
			Variant 2-C Crosses the tidal area closer to the existing OHL, thereby increasing the distance between a new OHL and Sligachan. This would increase the distance between a new OHL and receptors at Sligachan, which would result in some improvement from a landscape and visual perspective, but unlikely to mitigate the likelihood for significant effect. Also technical challenges with routeing a new OHL through the tidal area.	
			Variant 2-D could result in an improvement in appearance of a new OHL for receptors at Peinnachorran, but would increase proximity and potential for significant effect for receptors at Sconser.	

Category	Sub-Topic	Summary of Constraints	Opportunities and Constraints for Variants	Alignment Preference
			Variant 2-E could result in a slight improvement to views from the A87 through Gleann Torra-mhichaig by moving the OHL slightly further from the road. Significant landscape and visual effects still likely and would require two crossings of the existing OHL.	
			Variant 2-F could remove the OHL from views towards the mountains within much of Gleann Torra-mhichaig though would still be prominent in views from the road. Micrositing this variant could further improve these views but significant visual effects for road users around Loch Sligachan and Loch Ainort would remain.	
Land Use	Agriculture	Baseline Alignment travels over predominantly rough grazing, dominated by plant communities of low grazing value, but minor interaction with section of improved grassland (5.3) at Sconser.	Constraints considered to be broadly equivalent for all options.	Given comparable constraints across all options, there is no particular preference of alignment.
	Forestry	A new wayleave would be required as the Baseline Alignment connects into Broadford substation.	Constraints considered to be broadly equivalent for all options.	Given comparable constraints across all options, there is no particular preference of alignment.

Category	Sub-Topic	Summary of Constraints	Opportunities and Constraints for Variants	Alignment Preference
	Recreation	The Baseline Alignment travels by Sligachan which is an important tourist hub with a hotel, campsite and the start of a large number of hill walking routes. The Baseline Alignment in this section would also run parallel to a core path between Luib and Dunan.	Variant 2-A would provide an opportunity to mitigate the likely significant long term effects on landscape and visual receptors within this section. Variant 2-C crosses the tidal area near Sligachan closer to the existing OHL, thereby increasing the distance between a new OHL and Sligachan, thus increasing its distance from these tourist spots.	Given opportunity to mitigate likely significant effects on the Cuillins NSA, and other landscape and visual receptors, Variant 2-A is preferred in combination with the Baseline Alignment from Luib to Broadford.
Planning	Policy	Given likely significant landscape and visual effects on The Cuillins NSA, the Baseline Alignment does present a potential conflict with planning policy through this section. Minimising such effects, as well as other effects on Natural Heritage Designations (i.e. the Cuillins SPA), Class 1 peatland habitats and deeper areas of peat will require careful consideration to ensure conformity with planning policy.	Variant 2-A would provide an opportunity to mitigate the likely significant long term effects on landscape and visual receptors within this section. Whilst short term effects may still be likely, it is anticipated that with appropriate mitigation and restoration such effects would be limited to the construction phase, or shortly thereafter.	Given opportunity to mitigate likely significant effects on the Cuillins NSA, and other landscape and visual receptors, Variant 2-A is preferred in combination with the Baseline Alignment from Luib to Broadford.
	Proposals	In the area around the Baseline Alignment, planning permission granted for the partial change of use of an agricultural shed to the creation of four holiday letting units at the head of Loch Ainort off the Moll Road (19/02676/Ful). Other planning applications, typically housing related, within this Section, but unlikely to be within vicinity of the Baseline Alignment.	Variant 2-F would be in closer proximity to the proposal off the Moll Road at Loch Ainort, in comparison with the Baseline Alignment.	Given comparable constraints across all options, there is no particular preference of alignment, although the proximity of Variant 2-F to the proposals off the Moll Road would require consideration of micro-siting towers.

Summary of Alignment Selection and Design Solution within Section 2

In selecting the preferred alignment and design solution, consideration has been given to a variety of environmental, technical and cost considerations relevant to this section, as detailed above, as well as the preliminary consultation responses received from statutory consultees.

The preferred alignment and design solution comprises an underground cable solution (Variant 2-A) from Sligachan to Luib. At Luib, the design solution reverts to OHL and continues along the Baseline Alignment to Broadford Substation.

SECTION 3 - BROADFORD TO KYLE RHEA

Category	Sub-Topic	Summary of Constraints	Opportunities and Constraints for Variants	Alignment Preference
Natural Heritage	Designations	The Baseline Alignment would skirt the very edge of the Cullins SPA, adjacent to the existing OHL. Further to the east, the Baseline Alignment would span the northern tip of the Mointeach nan Lochain Dubha SAC / SSSI, whereby it is anticipated that new towers would be located outwith the SAC boundary. For both of these European designated sites, a HRA is likely to be required upon submission of a consent application, albeit no adverse effect on site integrity for either site is anticipated, assuming appropriate mitigation. The eastern extent of the Baseline Alignment would also pass through the Kinloch and Kyleakin Hills SAC and SSSI. The habitats along, or within the vicinity of the Baseline Alignment within the SAC are dominated by broadleaved woodlands, dry heaths, wet heaths, blanket bogs, and bracken (or various mosaics thereof, particularly mosaics of blanket bog and wet heath). The majority of habitats along and surrounding the Baseline Alignment are qualifying features of the SAC. Otter is also a qualifying feature of the SAC. Minimising adverse effects on qualifying features of the SAC, in particular Annex 1	The eastern extent of Route Option 3-A through the Kinloch and Kyleakin Hills SAC and SSSI has been subject to a number of iterations during the alignment selection process. Given the technical challenges of constructing an OHL in this environment, these were generally minor, albeit important changes made to minimise effects on the qualifying features of the SAC where possible. As such, no other variants in relation to Designations were considered.	The Baseline Alignment is preferred given the changes that have been made to it during the alignment selection process. Further work is required to establish a construction and operational access strategy that seeks to minimise adverse effects on the site and respective qualifying features, in particular Annex 1 Priority Habitats.

Category	Sub-Topic	Summary of Constraints	Opportunities and Constraints for Variants	Alignment Preference
		Priority Habitats, will require a site specific, sensitive and robust access strategy, and associated mitigation, reinstatement and restoration plans.		
	Protected Species	The Baseline Alignment passes through the Kinloch and Kyleakin Hills SAC and SSSI, for which otter is a qualifying feature. Otter survey data collected here over several years has shown that otter is commonplace within the area with a high volume of otter field signs recorded, along with numerous protected features such as holts and resting up areas (couches). However, the majority of otter signs and all protected features for otter are generally restricted to the coastline, or within 50 m of it. However, the Baseline Alignment is generally well set-back from the coastline, and with much naturally screening woodland and vegetation in-between, and a lack of suitable foraging habitat inland at this location, interfaces with otter are expected to be minimal. Other European Protected Species such as bats could be present along the Baseline Alignment, in the areas of more mature broadleaved woodland.	Constraints considered to be broadly equivalent for all options, subject to careful micro-siting and appropriate mitigation.	Given comparable constraints across all options, there is no particular preference of alignment, subject to appropriate mitigation.

Category	Sub-Topic	Summary of Constraints	Opportunities and Constraints for Variants	Alignment Preference
		Probable evidence of pine marten has also been recorded in the conifer woodland plantation to the west of Kyle Rhea.		
	Habitats	The length of the Baseline Alignment through the Kinloch and Kyleakin Hills SAC and SSSI is characterised by wet heath, dry heath, blanket bog, broadleaved woodlands and associated sensitive bryophyte and lichen assemblages. These habitats are present as qualifying features of the SAC and SSSI. Elsewhere, and outwith the SAC/SSSI area, habitats are predominantly wet heath, with smaller areas of blanket bog. There is the potential for areas of deep peat. Coniferous forestry plantation is located to the western and eastern extents of the Baseline Alignment.	Constraints considered to be broadly equivalent for all options, subject to careful micro-siting and appropriate mitigation. The eastern extent of Route Option 3A through the Kinloch and Kyleakin Hills SAC and SSSI has been subject to a number of iterations during the alignment selection process. Given the technical challenges of constructing an OHL in this environment, these were generally minor, albeit important changes made to minimise effects on the qualifying features of the SAC where possible. As such, no other variants in relation to Habitats were considered.	The Baseline Alignment is preferred given the changes that have been made to it during the alignment selection process. Further work is required to establish a construction and operational access strategy that seeks to minimise adverse effects on the site and respective qualifying features, in particular Annex 1 Priority Habitats.
	Ornithology	As noted in Designations (above), the Baseline Alignment includes a short section through the Cuillins SPA. One active white-tailed eagle territory and an active golden eagle territory are located within 6 km of the Baseline Alignment. Also, white-tailed eagle and golden eagle, and other birds of conservation concern, use the areas around the narrows at Kyle Rhea.	Constraints considered to be broadly equivalent for all options, subject to appropriate mitigation.	Given comparable constraints across all options, there is no particular preference of alignment, subject to appropriate mitigation.

Category	Sub-Topic	Summary of Constraints	Opportunities and Constraints for Variants	Alignment Preference
	Hydrology Hydrogeology and Geology	Priority peatland mapping suggests the Baseline Alignment would pass through areas of Class 1 (strong likelihood of deep peat and priority peatland habitats) between Harapool and the minor road to Glen Arroch, as well as within parts of the Kinloch and Kyleakin Hills SAC. There are a number of water course crossings to consider, some of which comprise steep ravines (eastern extent of the Baseline Alignment). The Baseline Alignment crosses over a surface water drinking protection zone near Harrapool. For the western extent of the Baseline Alignment, properties could be served by private water supplies from watercourses crossed by or within the vicinity. Catchments to any groundwater wells, springs and GWDTE are likely to be similar to surface catchments.	Constraints considered to be broadly equivalent for all options, subject to careful micro-siting and appropriate mitigation.	Given comparable constraints across all options, there is no particular preference of alignment, subject to appropriate mitigation.
Cultural Heritage	Designations	A Scheduled Monument (Old Corry cairns, SM 13673) lies immediately adjacent to the Baseline Alignment near Broadford / Ath Leathann. Whilst the existing OHL is also located within the vicinity of this Scheduled Monument, the Baseline Alignment would bring the OHL closer to the Scheduled Monument and could have an adverse effect on its setting. Other Scheduled Monuments include Broadford Bay, chambered cairn (SM 13724), Ashaig	Variant 3-A, located on the northern side of the existing OHL, would increase the distance between the OHL and the Scheduled Monument (Old Corry cairns, SM 13673) near Broadford. As it would be further away than the existing OHL, likely effects on its setting are anticipated to be no worse than at present.	As Variant 3-A would increase the distance between the new OHL and the Scheduled Monument, in comparison to the Baseline Alignment, this variant is preferred, in combination with the Baseline Alignment for the rest of the alignment.

Category	Sub-Topic	Summary of Constraints	Opportunities and Constraints for Variants	Alignment Preference
		church (remains) and burial ground (SM 13720) and Ashaig burnt mound (SM 13721), and listed buildings in the harbour area at Broadford, but no adverse effects on these sites or their settings are anticipated.		
	Cultural Heritage Assets	There are a small number of non-designated cultural heritage assets recorded in the Highland Council HER (as well as features newly identified during the desktop study of historic mapping and aerial photography) within the vicinity of the Baseline Alignment, although it is anticipated that direct impacts could generally be avoided through appropriate mitigation.	Constraints considered to be broadly equivalent for all options, subject to careful micro-siting and appropriate mitigation.	Given comparable constraints across all options, there is no particular preference of alignment, subject to appropriate mitigation.
People	Proximity to Dwellings	The Baseline Alignment is not located within close proximity to dwellings. At its closest point, the Baseline Alignment is approximately 250 m from the edge of settlement at Harrapool, but at a greater distance than the existing OHL as it is located on its southern side.	Variant 3-A brings the OHL slightly closer to dwellings on the outskirts of Broadford, but is still approximately 400 m away.	Given comparable constraints across all options, there is no particular preference of alignment, subject to appropriate mitigation.
Landscape and Visual	Designations	The initial part of the Baseline Alignment, commencing at Broadford Substation is on the boundary of The Cuillin Hills NSA. However, the existing forestry plantations around the substation create a clear transition between the designated and non-designated landscape.	Constraints considered to be broadly equivalent for all options.	Given comparable constraints across all options, there is no particular preference of alignment, subject to appropriate mitigation.

Category	Sub-Topic	Summary of Constraints	Opportunities and Constraints for Variants	Alignment Preference
	Character	The Baseline Alignment would be adjacent to and replace an existing steel lattice OHL to the south of Broadford and surrounding communities, routed along the transition of the Low Smooth Moorland and Upland Sloping Moorland LCTs. An effective like-for-like replacement thought this section would lead to minimal landscape effects. To the east Section 3 the Baseline Alignment passes through areas characterised by rough, rocky hills with limited access and a steep and complex rocky shoreline to Loch Alsh and Kyle Rhea. Forestry plantation occupies areas of more accessible lower slopes whilst the remote, rugged coastal slopes along the south of Loch Alsh are colonised by native woodlands. This section of coastline is sensitive to development. Although the existing OHL is already present close to the coast, the Baseline Alignment would be at higher elevation, and potentially more prominent across a wider area. The use of temporary access measures would reduce potential landscape effects.	Constraints considered to be broadly equivalent for all options.	Given comparable constraints across all options, there is no particular preference of alignment, subject to appropriate mitigation.
	Visual	The Baseline Alignment would be adjacent to and replace an existing steel lattice OHL to the south of Broadford and surrounding communities, resulting in an effective like-for-like replacement with little to distinguish it from	Constraints considered to be broadly equivalent for all options.	Given comparable constraints across all options, there is no particular preference of

Category	Sub-Topic	Summary of Constraints	Opportunities and Constraints for Variants	Alignment Preference
		the existing OHL in views from residential properties and routes in this area. The existing steel lattice alignment following the remote coastal edge of Loch Alsh into the crossing location at Kyle Rhea can be seen from the northern shore of Loch Alsh from the A87. However, these comprise relatively distant views and towers are not prominent. The Baseline Alignment would be set higher on the hill, above the existing woodland and would therefore be likely to appear more visible, although seen by a similar range of receptors. However, the towers would be similarly distant in views and likely to have a comparable range of perceptibility. As the alignment would be sited entirely above the exiting native woodland, there would be no visible wayleave. Access and construction works though this area would be likely to appear more visible than towers and have a greater landscape impact, but these features would be temporary and subject to restoration.		alignment, subject to appropriate mitigation.
Land Use	Agriculture	The Baseline Alignment passes over predominantly rough grazing, dominated by plant communities of low grazing value. Minor interaction with sections of improved grassland (5.1 and 5.3) around Broadford.	Constraints considered to be broadly equivalent for all options.	Given comparable constraints across all options, there is no particular preference of alignment, subject to appropriate mitigation.

Category	Sub-Topic	Summary of Constraints	Opportunities and Constraints for Variants	Alignment Preference
	Forestry	Some removal of forestry likely to be required to accommodate a new wayleave for the Baseline Alignment through commercial plantations at Broadford, to the south of Kyleakin and approaching the crossing towers at Kyle Rhea. The existing wayleave would no longer be required once the existing OHL had been dismantled.	Constraints considered to be broadly equivalent for all options.	Given comparable constraints across all options, there is no particular preference of alignment, subject to appropriate mitigation.
	Recreation	The Baseline Alignment crosses the start of a core path at Broadford (SL03.04), in a similar manner to the existing OHL. The Baseline Alignment would avoid close interaction with tourist activity at Kyle Rhea.	Variant 3-A, located to the north of the existing OHL, would avoid crossing the core path at Broadford (SL03.04).	As Variant 3-A would avoid crossing the core path at Broadford, this is slightly preferred over the Baseline Alignment in this location.
Planning	Policy	The likely adverse effects on the Kinloch and Kyleakin Hills SAC and respective qualifying features are to be confirmed following further work in relation to the construction and operational access strategy. The Baseline Alignment has sought to minimise effects on sensitive habitats and peatlands, cultural heritage, landscape and visual receptors.	Constraints considered to be broadly equivalent for all options, subject to careful micro-siting of towers and appropriate mitigation.	Given comparable constraints across all options, there is no particular preference of alignment, subject to appropriate mitigation.

Category	Sub-Topic	Summary of Constraints	Opportunities and Constraints for Variants	Alignment Preference
	Proposals	There are no planning proposals that have direct conflict with the Baseline Alignment. At Broadford, there is a planning application for Construction of 24 affordable housing units, but this is over 450 m from the Baseline Alignment. There are also other housing related applications within the vicinity of Broadford, Harrapool and Breakish.	Constraints considered to be broadly equivalent for all options.	Given comparable constraints across all options, there is no particular preference of alignment, subject to appropriate mitigation.

Summary of Alignment Selection and Design Solution within Section 3

The preferred alignment and design solution comprises an OHL connection, utilising a combination of Variant 3A and the Baseline Alignment. It is acknowledged that careful attention will need to be given to this section of the OHL, particularly through the SAC to ensure potential effects are minimised as far as practicable.

SECTION 4 - KYLE RHEA TO LOCH CUAICH

Category	Sub-Topic	Summary of Constraints	Opportunities and Constraints for Variants	Alignment Preference
Natural Heritage	Designations	The Baseline Alignment would be routed through the Druim Iosal SSSI and GCR, noted for its geological importance. The route through Druim Iosal is a particular pinch point with the best constructable option being to utilise the path of the existing OHL alignment, requiring a small number of towers to be built adjacent to existing tower positions, requiring outages. Two of these towers are located within the eastern extent of the SSSI and GCR boundary. The Baseline Alignment also runs within the vicinity of the Quoich Spillway SSSI (Geological) and the Kinloch Hourn GCR. Direct effects on these sites are not anticipated.	Whilst options to avoid this particular pinch point were considered by the OHL contractor, none were deemed viable.	The Baseline Alignment is the only viable option with respect to the Druim Iosal SSSI and GCR.
	Protected Species	Throughout the Baseline Alignment within this section there is potential for European Protected Species including otter and bats, as well as other protected species including pine marten, red squirrel, water voles, badgers and reptiles.	Subject to appropriate mitigation, constraints are considered to be broadly equivalent for all options. Minimising felling of native woodland habitats will be important to reduce potential effects on protected species.	Given comparable constraints across all options, there is no particular preference of alignment, subject to appropriate mitigation.
	Habitats	Habitats within the vicinity of the Baseline Alignment comprise predominantly wet heath, with patches of dry heath and blanket bog, and mosaics thereof. Grassland and stands of	Subject to appropriate mitigation and micro-siting of towers to avoid areas of sensitive habitat or minimise	Given comparable constraints across all options, there is no particular preference of

Category	Sub-Topic	Summary of Constraints	Opportunities and Constraints for Variants	Alignment Preference
		bracken can be found in some areas, and there are isolated areas of mixed and broadleaved woodland. Some areas are noted on the Ancient Woodland Inventory (AWI), and the Baseline Alignment does pass close to or through some areas of native woodland, whereby felling would be kept to a minimum, as far as practicable.	felling of native woodland, constraints are considered to be broadly equivalent for all options.	alignment, subject to appropriate mitigation.
	Ornithology	There are two to three active golden eagle territories between Kinloch Hourn and Glenelg within the vicinity of the Baseline Alignment, albeit flight activity is typically focussed on the higher ground, and there are no known nest sites close by. Potential for black-throated diver, red-throated diver and common scoter flight activity, as well as greenshank.	Subject to appropriate mitigation, including the sensitive timing of works and pre-construction checks, constraints are considered to be broadly equivalent for all options.	Given comparable constraints across all options, there is no particular preference of alignment, subject to appropriate mitigation.
	Hydrology Hydrogeology and Geology	The Baseline Alignment passes over a surface water drinking protection zone associated with Loch Beinn a' Chaoinich and Loch a' Mhuilinn. Private water supply infrastructure present in surrounding area of Baseline Alignment (e.g. at Glenmore and Kinloch Hourn). Catchments to any groundwater wells, springs and GWDTE are likely to be similar to surface catchments. The Baseline Alignment would cross a number of watercourse crossings.	Subject to appropriate mitigation and micro-siting of towers to avoid areas of sensitive habitat and areas of deeper peat, as well as maintaining sufficient buffer distances to watercourses, constraints are considered to be broadly equivalent for all options.	Given comparable constraints across all options, there is no particular preference of alignment, subject to appropriate mitigation.

Category	Sub-Topic	Summary of Constraints	Opportunities and Constraints for Variants	Alignment Preference
		Potential effects in relation to geological SSSI's are noted above under Designations. Priority peatland mapping suggests that there are sections of Class 2 (strong likelihood of deep peat and priority peatland habitats) at intervals throughout the Baseline Alignment.		
Cultural Heritage	Designations	There are two Scheduled Monuments near Balvraid in Gleann Beag; Dun Grugaig (SM 914), a stone-walled dun or fort, approximately 840 m south-west of the Baseline Alignment on a steep knoll alongside the Abhainn a'Ghlinne Bhig; and approximately 2 km north-west along Gleann Beag, two neighbouring brochs together comprise SM 90152. Dun Telve stands near the river, around 1.7 km south-west of the Baseline Alignment, and Dun Troddan is set on a terrace in the hillside, a little further east and 1.3 km south-west of the Baseline Alignment. A full setting assessment for these Scheduled Monuments will be required. However, initial appraisal suggests that no significant effects upon their setting are anticipated. One other designated heritage asset is located within the vicinity of the Baseline Alignment: Quoich Dam and Intake Gatehouse Towers	Constraints considered to be broadly equivalent for all options.	Given comparable constraints across all options, there is no particular preference of alignment.

Category	Sub-Topic	Summary of Constraints	Opportunities and Constraints for Variants	Alignment Preference
		(LB51704), a Category B Listed Building of Medium sensitivity.		
	Cultural Heritage Assets	There are 49 non-designated cultural heritage assets recorded on The Highland Council HER within 500 m either side of the Baseline Alignment, and a further 19 features were identified during a desktop study of historic mapping and aerial photography. Assets are mostly of medieval-post-medieval date and include farmsteads and shielings.	Subject to appropriate mitigation and micro-siting of towers to avoid direct effects, constraints are considered to be broadly equivalent for all options.	Given comparable constraints across all options, there is no particular preference of alignment, subject to appropriate mitigation.
People	Proximity to Dwellings	There are few dwellings within the vicinity of the Baseline Alignment in this Section, restricted to properties at Glen More and Kinloch Hourn. At Glen More, the Baseline Alignment is routed to the north and east of the existing OHL, bringing the crossing at Glen More closer to properties near Scallisaig, albeit maintaining over 100 m distance from properties.	Variant 4-C more closely follows the existing OHL in comparison to the Baseline Alignment, and therefore the crossing point at Glen More is at a similar location to the existing OHL and to the west of properties at Scallisaig. An OHL in this location would be approximately 50 m from a static caravan. This variant would also require some felling of native woodland as it passes over the hill to the south of Glen More. The existing wayleave would be utilised as far as practicable.	At Glen More, Variant 4-C is preferred given it follows the existing OHL and provides opportunity to minimise effects on properties near Scallisaig. Elsewhere, given comparable constraints across all options, there is no particular preference of alignment.
Landscape and Visual	Designations	The Baseline Alignment would pass through a very remote, rugged landscape with steep complex topography and high scenic qualities. This is reflected in large parts of this area being designated for landscape, namely Knoydart NSA, Kinloch Hourn, Knoydart and Morar WLA,	The following variants were considered to minimise landscape and visual effects on landscape designations. Variant 4-F was proposed on landscape and visual grounds between Bealach Aoidhdailean and Gleandubhlochain as it was felt that an alignment to	All variants (4-F, 4-G and 4-H) considered to minimise potential landscape effects on the Knoydart NSA, Kinloch Hourn, Knoydart and Morar WLA, and Moidart, Morar and

Category	Sub-Topic	Summary of Constraints	Opportunities and Constraints for Variants	Alignment Preference
		and Moidart, Morar and Glen Shiel Special Landscape Area (SLA). Whilst the existing OHL runs through this area and has an influence in reducing landscape sensitivity of this route, the narrow valleys, steep slopes and complex topography, particularly around Kinloch Hourn and Loch Coire Shubh, present difficulties and challenges in achieving a new alignment for a replacement OHL (including earthworks and construction access) which would not have greater impacts. There is also the potential for loss of native woodland through these areas which contributes to the appreciation and value of these landscapes.	the north of the existing OHL would be better back clothed and close to ground already disturbed by the existing rough argo track, in comparison with the Baseline Alignment. Variant 4-G removes some towers from more prominent positions on higher ground on the approach to Kinloch Hourn, compared to the Baseline Alignment. The position to the south of the existing OHL would be further from the more remote and unaffected areas of wild land which would be less likely to increase the effect on the WLA although there would be increased visual effects for users of the Scottish Hill Track routes 251 and 252 between Glen Arnisdale / Glenelg and Kinloch Hourn. Variant 4-H has been put forward to minimise landscape and visual effects within this area as far as practicable. It aims to do this by taking an alignment that crosses, and is then routed to the west of the minor road for approximately 2 km, prior to crossing the road again to re-join the Baseline Alignment, removing the most prominent towers from views between the road and the loch..	Glen Shiel SLA are preferred in comparison with the Baseline Alignment.
	Character	The Baseline Alignment would pass through a very remote, rugged landscape with steep complex topography and high scenic qualities. The Baseline Alignment would pass through the Rugged Massif – Skye and Lochalsh and	In addition to the variants considered with respect to Landscape Designations noted above, which are also of relevance to landscape character, the following variants were considered to minimise effects on landscape character.	All variants considered to minimise potential effects on landscape character are preferred in comparison with the Baseline Alignment.

Category	Sub-Topic	Summary of Constraints	Opportunities and Constraints for Variants	Alignment Preference
		Interlocking Sweeping Peaks – Skye and Lochalsh LCTs with upland, and wild land characteristics which are very sensitive to development. Although the existing OHL is already present, the complex topography presents difficulties in achieving an alignment which does not lead to prominence of towers and increased landscape effects. Settled or small-scale coastal, loch-side and glen areas including Glen More, Kinloch Hourn and Loch Coire Shubh form small contrasting landscapes where the small scale composition of the landscape is highly sensitive.	Variant 4-A was proposed to minimise skylining of one prominent tower. This variant offered advantages over the Baseline Alignment, but was superseded by Variant 4-C.	
			Variant 4-B would bring the OHL lower down the hill and minimise landscape and visual effects from Glen Bernera in comparison with the Baseline Alignment. This variant offered advantages over the Baseline Alignment, but was superseded by Variant 4-C.	
			Variant 4-C has been proposed to more closely follow the existing OHL from the Kyle Rhea crossing point to Glen More and avoid potential land use constraints associated with the Baseline Alignment at Scallisaig. This variant offers some advantages over the Baseline Alignment in that the landscape and visual effects would be similar to that of the existing OHL. There is potential for some removal of native woodland, albeit the existing OHL wayleave corridor through the same woodland would be reinstated.	
			Variant 4-D is a short deviation from the Baseline Alignment to follow flatter ground through Coire a' Bheoil-airigh to reduce skylining from Glen More, before re-joining the Baseline Alignment near Loch a' Mhuilinn. This was proposed to minimise landscape effects, but was superseded by Variant 4-C.	

Category	Sub-Topic	Summary of Constraints	Opportunities and Constraints for Variants	Alignment Preference
			Variant 4-E: This variant at to the south of Druim Iosal was proposed to minimise the likely prominence of one tower. However, this is a particular pinch point and it was considered by the OHL contractor that the only viable solution is to build on the current alignment of the existing OHL, with new towers built adjacent to existing towers.	
	Visual	Sensitive visual receptors through this section including the following: Residents and visitors at properties at Glen More, Kinloch Hourn and potentially around Glen Bernera. Travellers including tourists and recreational travellers on public roads, chiefly through Glen More and Loch Cuaich and Kinloch Hourn, but	All variants considered with respect to Landscape Designations and Landscape Character noted above are also of relevance to Visual Effects and should be referred to. There may be increased visual effects for Variant 4-G for recreational users of the Scottish Hill Track routes 251 and 252 between Glen Arnisdale / Glen Beag and Kinloch Hourn but this could be improved through micro-siting of towers and could be offset by improvements to landscape effects.	All variants considered to minimise potential visual effects are preferred in comparison with the Baseline Alignment.

Category	Sub-Topic	Summary of Constraints	Opportunities and Constraints for Variants	Alignment Preference
		also potentially around Glen Elg and Glen Bernera. Recreational users of paths and other routes including Core Paths at Kyle Rhea, Glen Bernera, Druim Iosal and Arnisdale; Scottish Hill Track routes between Glenelg, Arnisdale and Kinloch Hourn; and various ascent routes up surrounding mountains . Complexity of landform curtailing alignment options and accessibility has the potential to increase visual effects.	Variant 4-I (Loch Cuaich) was considered to improve the visual effects from the minor road and Glen Quoich bridge compared the Baseline Alignment by removing towers from popular views across the open water of the loch. Whilst the Baseline Alignment is technically easier to build in this location, it was considered the adverse effects on views of Loch Cuaich from the minor road and bridge warranted a change to the Baseline Alignment in this location.	

Category	Sub-Topic	Summary of Constraints	Opportunities and Constraints for Variants	Alignment Preference
Land Use	Agriculture	The Baseline Alignment covers predominantly rough grazing, dominated by plant communities of low grazing value. The Baseline Alignment would have minor interaction with small areas of land capable of supporting mixed agriculture at Glen More.	Constraints considered to be broadly equivalent for all options.	Given comparable constraints across all options, there is no particular preference of alignment.
	Forestry	The Baseline Alignment would require a new wayleave to be felled through conifer plantation at Druim na Leitre, to the south of the existing OHL. The Baseline Alignment also passes through an area identified for pinewood regeneration by Scottish Forestry.	Constraints considered to be broadly equivalent for all options.	Given comparable constraints across all options, there is no particular preference of alignment.

Category	Sub-Topic	Summary of Constraints	Opportunities and Constraints for Variants	Alignment Preference
	Recreation	Passing through the mountain interior the Baseline Alignment would be regularly visible from recreational and walking routes up through Gleann Beag, and from Kinloch Hourn and Arnisdale. These comprise Core Paths, Scottish Hill Tracks and longer distance hill tracks. Further views would be obtained by travellers and recreational users on the minor road to Kinloch Hourn which is a popular route for tourists seeking a remote experience. Additional route and landform complexity between Kinloch Hourn and Loch Cuaich has the potential to increase the level of visual impact from this new OHL. There could also be potential for increased visual impact in views from properties, a car park and popular viewpoints at Kinloch Hourn.	All variants considered with respect to Landscape Designations, Landscape Character and Visual Effects are of relevance to recreation throughout this section, and should be referred to.	All variants considered to minimise potential landscape and visual effects (of relevance to recreation in this section) are preferred in comparison with the Baseline Alignment.
Planning	Policy	Minimise effects on national landscape designations and other protected landscapes has, and will continue to be, an important consideration in developing an OHL that conforms to planning policy. Modifications to the Baseline Alignment, as set out under landscape and visual considerations above, will be important factors to achieve this.	All variants considered with respect to Landscape Designations, Landscape Character and Visual Effects are of relevance to planning policy throughout this section, and should be referred to.	All variants considered to minimise potential landscape and visual effects (of relevance to planning policy in this section) are preferred in comparison with the Baseline Alignment.

Category	Sub-Topic	Summary of Constraints	Opportunities and Constraints for Variants	Alignment Preference
	Proposals	No notable planning proposals identified near the Baseline Alignment.	Constraints considered to be broadly equivalent for all options.	Given comparable constraints across all options, there is no particular preference of alignment.

Summary of Alignment Selection and Design Solution within Section 4

As a result of the technical challenges and environmental sensitivities of this section, alignment selection has been through numerous iterations to achieve the right balance between technical viability and due consideration to the sensitive environment. A focus during the alignment selection process has been to minimise potential landscape and visual effects through the Knoydart NSA, Kinloch Hourn, Knoydart and Morar WLA, and Moidart, Morar and Glen SLA. As such, the preferred alignment comprises the Baseline Alignment, with Variants 4-C, 4-F, 4-G, 4-H and 4-I.

SECTION 5 - LOCH CUAICH TO INVERGARRY

Category	Sub-Topic	Summary of Constraints	Opportunities and Constraints for Variants	Alignment Preference
Natural Heritage	Designations	The Baseline Alignment runs within close proximity of the West Inverness-shire lochs Special Protection Area (SPA), which is classified for 6.6 pairs (on average) of black-throated divers and 7.8 pairs (on average) of common scoter. Black-throated divers and common scoters may fly between the composite lochs of the SPA and could be vulnerable to collision from overhead lines between the lochs. There is some potential collision risk for birds flying between these lochs, although as the new OHL would be predominantly through forestry and follows the existing OHL, the risk will be lower. A HRA is likely to be required upon submission of a consent application, albeit no adverse effect on site integrity for the SPA is anticipated, assuming appropriate mitigation.	Given the new OHL closely follows the existing OHL through this section, no variants were considered.	The Baseline Alignment is preferred.
	Protected Species	Throughout the Baseline Alignment within this section there is potential for European Protected Species including otter and bats, as well as other protected species including pine marten, red squirrel, water voles, badgers and reptiles.	Given the new OHL closely follows the existing OHL through this section, no variants were considered.	The Baseline Alignment is preferred.
	Habitats	Habitats along the Baseline Alignment are predominantly wet heath, with patches of dry heath and blanket bog, and mosaics thereof	Given the new OHL closely follows the existing OHL through this section, no variants were considered.	The Baseline Alignment is preferred.

Category	Sub-Topic	Summary of Constraints	Opportunities and Constraints for Variants	Alignment Preference
		(with potential for deep peat in some areas). Isolated patches of grassland can be found on the lower areas, as well as forestry plantations. Native woodland is also present, some of which is noted on the ancient woodland inventory, particularly to the north of Loch Garry. Micro-siting of towers would be required to minimise felling of native woodland.		
	Ornithology	See Designations. Other ornithological sensitivities include black grouse and an active golden eagle territory within the vicinity of the route, greenshank and osprey also nest along the route and potential disturbance due to construction activities may occur and will require mitigation if nests are located within possible disturbance distances.	Given the new OHL closely follows the existing OHL through this section, no variants were considered.	The Baseline Alignment is preferred.
	Hydrology Hydrogeology and Geology	The Quoich Spillway Geological SSSI and GCR is located to the south of the minor road at Quoich dam, but is not anticipated to be impacted by the new OHL.	Given the new OHL closely follows the existing OHL through this section, no variants were considered.	The Baseline Alignment is preferred.
Cultural Heritage	Designations	There is one designated cultural heritage asset within the vicinity of the Baseline Alignment within Section 5; Quoich Dam and Intake Gatehouse Towers (LB51704), a Category B Listed Building of Medium sensitivity.	Given the new OHL closely follows the existing OHL through this section, no variants were considered.	The Baseline Alignment is preferred.

Category	Sub-Topic	Summary of Constraints	Opportunities and Constraints for Variants	Alignment Preference
	Cultural Heritage Assets	There are 26 non-designated cultural heritage assets recorded on The Highland Council HER within 500 m either side of the Baseline Alignment, and a further eight features were identified during the desktop study of historic mapping and aerial photography. The majority of the cultural heritage features along Section 5 most likely date to the late-medieval and post-medieval periods, although some evidence of prehistoric settlement and activity may be present (e.g. the HER records the chance find of a Bronze Age pot near Ardochy in the 1900s).	Given the new OHL closely follows the existing OHL through this section, no variants were considered.	The Baseline Alignment is preferred.
People	Proximity to Dwellings	Properties along Glen Garry, at Tomdoun and Poulary and at Munerigie and Achadh Luachrach are within the vicinity of the Baseline Alignment in this section.	Given the new OHL closely follows the existing OHL through this section, no variants were considered.	The Baseline Alignment is preferred.
Landscape and Visual	Designations	To the west falls the Moidart, Morar and Glen Shiel SLA. It is not anticipated that the Baseline Alignment would lead to an increased level of impact of the Special Qualities of the SLA, particularly considering the presence of other OHLs in the landscape. Other protected / designated landscapes in the area include the Kinlochourn-Moidart-Morar WLA to the west and south of the Baseline Alignment, and the Loch Lochy and Loch Oich SLA to the south	Given the new OHL closely follows the existing OHL through this section, no variants were considered.	The Baseline Alignment is preferred.

Category	Sub-Topic	Summary of Constraints	Opportunities and Constraints for Variants	Alignment Preference
		and south-east. Adverse effects to these areas are not expected as a result of the Baseline Alignment which would largely form a virtual like-for-like replacement to the existing OHL.		
	Character	The landscape of Section 5 is characterised by areas of open moorland and forestry within Glen Garry, which contains Loch Garry, Loch Poulary, River Garry, Gearr Garry and Kingie Pool. The landscape is relatively enclosed, contained by landform and / or vegetation with some longer-range scenic views channelled along Glen Garry.	Given the new OHL closely follows the existing OHL through this section, no variants were considered.	The Baseline Alignment is preferred.
	Visual	Visual receptors within Section 5 include residents of Invergarry and dispersed dwellings along the lower slopes of Glen Garry, including at Tomdoun, Poulary, Inchlaggan and Garrygualach. Many views from properties in Glen Garry are oriented to look across or along the valley, over the loch or river. Receptors would also include those on Core Paths and popular walking routes, the minor road in Glen Garry, and the A87. There is also a natural stopping point at Loch Quoich Dam, where visual receptors have views along Glen Garry.	Given the new OHL closely follows the existing OHL through this section, no variants were considered.	The Baseline Alignment is preferred.

Category	Sub-Topic	Summary of Constraints	Opportunities and Constraints for Variants	Alignment Preference
Land Use	Agriculture	The agriculture areas within the section are predominantly rough grazing, dominated by plant communities of low grazing value. There could be some minor interaction with sections of improved grassland (5.3) to the north of Loch Garry.	Given the new OHL closely follows the existing OHL through this section, no variants were considered.	The Baseline Alignment is preferred.
	Forestry	A new or extended wayleave would be required as the Baseline Alignment is routed through forestry to the north of Loch Garry.	Given the new OHL closely follows the existing OHL through this section, no variants were considered.	The Baseline Alignment is preferred.
	Recreation	The Baseline Alignment does not closely interact with recreational interests (e.g. core paths).	Given the new OHL closely follows the existing OHL through this section, no variants were considered.	The Baseline Alignment is preferred.
Planning	Policy	Assuming negative adverse effects on site integrity of European Designated Sites can be avoided, the Baseline Alignment has sought to minimise effects on cultural heritage, landscape and visual receptors and peatlands (through micro-siting). As such, and as a 'National Development' (NPF 3), it is anticipated that it could accord with both local and national planning policy.	Given the new OHL closely follows the existing OHL through this section, no variants were considered.	The Baseline Alignment is preferred.

Category	Sub-Topic	Summary of Constraints	Opportunities and Constraints for Variants	Alignment Preference
	Proposals	There are no current planning applications or areas allocated for future development in direct conflict with the Baseline Alignment within this section.	Given the new OHL closely follows the existing OHL through this section, no variants were considered.	The Baseline Alignment is preferred.

Summary of Alignment Selection and Design Solution within Section 5

Given that the Baseline Alignment closely follows the route of the existing OHL, this is generally deemed to be the most appropriate alignment and is therefore put forward as the preferred alignment.

SECTION 6 - INVERGARRY TO FORT AUGUSTUS

Category	Sub-Topic	Summary of Constraints	Opportunities and Constraints for Variants	Alignment Preference
Natural Heritage	Designations	The Baseline Alignment would border the West Inverness-shire lochs SPA at Loch Lundie. Black-throated divers and common scoters may fly between the composite lochs of the SPA (SSSIs) and so may be vulnerable to collision from OHLs between the lochs. The Baseline Alignment is not between the main SPA lochs, and survey work associated with the Fort Augustus to Skye T OHL did not identify a potentially significant risk with diver species flying to the east from Loch Lundie, although potential disturbance issues would remain. A HRA is likely to be required upon submission of a consent application, albeit no adverse effect on site integrity for the SPA is anticipated, assuming appropriate mitigation.	Variant 6-A would increase the distance between the new OHL and the SPA, bring the new OHL closer to the alignment of the existing OHL. This could minimise potential effects on the qualifying species of the West Inverness-shire Lochs SPA present at Loch Lundie.	Given the increase in distance between the new OHL, and the potential to minimise effects on the qualifying species of the SPA, Variant 6-A is preferred over the Baseline Alignment in this location.
	Protected Species	European Protected Species such as otter and bats could be present within the surrounding area of the Baseline Alignment, along with other protected species such as badger, pine marten, red squirrel and reptiles.	Constraints considered to be broadly equivalent for all options, subject to careful micro-siting of and appropriate mitigation.	Given comparable constraints across all options, there is no particular preference of alignment.
	Habitats	Habitats along the Baseline Alignment are predominantly heather moorland, peatlands and areas of native woodland / commercial forestry	Constraints considered to be broadly equivalent for all options, subject to careful micro-siting and appropriate mitigation.	Given comparable constraints across all options, there is no particular preference of alignment.

Category	Sub-Topic	Summary of Constraints	Opportunities and Constraints for Variants	Alignment Preference
		with areas of bracken in woodland openings and existing wayleaves.		
	Ornithology	The Baseline Alignment runs to the east of Loch Lundie at the eastern edge of the West Inverness-shire Lochs SPA then through forestry to Fort Augustus Substation at Auchterawe. Black grouse are present with a known lek near Loch Lundie	Variant 6-A would increase the distance between the new OHL and the SPA, bring the new OHL closer to the alignment of the existing OHL. This could minimise potential effects on the qualifying species of the West Inverness-shire Lochs SPA present at Loch Lundie.	Given the increase in distance between the new OHL, and the potential to minimise effects on the qualifying species of the SPA, Variant 6-A is preferred over the Baseline Alignment in this location.
	Hydrology Hydrogeology and Geology	The Baseline Alignment in the Section crosses over a surface water drinking protection zone to the north-west of Invergarry. Properties at Auchterawe likely to be served by private water supplies. Catchment area to springs, wells and GWDTE likely to be similar to surface water catchment area. Priority peatland mapping suggests that there is Class 2 (strong likelihood of deep peat and priority peatland habitats) located on moorland near Loch Lundie.	Constraints considered to be broadly equivalent for all options, subject to careful micro-siting and appropriate mitigation.	Given comparable constraints across all options, there is no particular preference of alignment.
Cultural Heritage	Designations	Torr Dhuin Scheduled Monument (SM 794), a stone-walled dun, or fort is located approximately 1.3 km south-east of the Baseline Alignment near Auchteraw. The monument is located on a steep, forested knoll overlooking the River Oich, in its valley to the east, and is	As Variant 6-B would be an underground cable, this would remove any potential long-term effect of an OHL on the setting of this Scheduled Monument.	Variant 6-B would be preferred given it is an underground cable and would remove setting effects from the Tor Dhuin Scheduled Monument. Elsewhere,

Category	Sub-Topic	Summary of Constraints	Opportunities and Constraints for Variants	Alignment Preference
		visible from the valley floor. Initial appraisal suggests that any potential effects on its setting as a result of the Baseline Alignment are not likely to be significant.		alignment options are comparable.
	Cultural Heritage Assets	There are five non-designated cultural heritage assets recorded on The Highland Council HER within 500 m either side of the Baseline Alignment, and another two features were identified during the desktop study of historic mapping and aerial photography.	Constraints are considered to be broadly equivalent for all options, subject to careful micro-siting and appropriate mitigation. Variant 6-B does increase the potential to interact with buried archaeological remains given it is an underground cable with an approximately 30 m wide construction corridor, but opportunities to mitigate effects anticipated.	With appropriate mitigation, constraints across all options could be managed.
People	Proximity to Dwellings	The Baseline Alignment is not within the immediate vicinity of any dwellings, but does pass to the north of Auchterawe, which currently comprises other electricity infrastructure in the area.	Variant 6-B provides an opportunity to underground the line within the vicinity of Auchterawe. Whilst not in close interaction with properties, undergrounding would help to minimise effects on residents at Auchterawe by rationalising some OHL infrastructure.	Given opportunity to rationalise OHL infrastructure at Auchterawe, Variant 6-B is preferred in this area. Elsewhere, there is no preference in terms of proximity to dwellings.
Landscape and Visual	Designations	The Baseline Alignment is not anticipated to adversely affect designated or protected landscapes.	No adverse effect on designated landscapes anticipated with any option, albeit Variant 6-B offers the opportunity to underground the line and rationalise OHL infrastructure within the Auchterawe area.	Given opportunity to rationalise OHL infrastructure at Auchterawe, Variant 6-B is preferred in this area. Elsewhere, there is no preference in terms of landscape designations.

Category	Sub-Topic	Summary of Constraints	Opportunities and Constraints for Variants	Alignment Preference
	Character	The landscape of Section 6 is characterised by areas of open moorland near Loch Lundie, contrasting with dense coniferous forestry of Inchnacardoch Forest. The landscape of moorland and forest is considered to have reasonable opportunity to accommodate the Baseline Alignment.	Variant 6-B offers the opportunity to underground the line and rationalise OHL infrastructure within the Auchterawe area reducing potential cumulative landscape effects on this sensitive, small scale landscape	Given opportunity to rationalise OHL infrastructure at Auchterawe, Variant 6-B is preferred in this area. Elsewhere, there is no preference in terms of landscape character.
	Visual	Visual receptors within Section 6 include those on core paths near Loch Lundie and within Inchnacardoch Foresty, as well as those in the bothy at Achadh-nan-darach and settlement of Auchterawe. The cumulative effect of an additional steel lattice OHL within the Auchterawe area could result in likely significant cumulative landscape and visual effects.	Variant 6-B provides an opportunity to underground the line within the vicinity of Auchterawe, which would rationalise some OHL infrastructure in the area and help to reduce potential cumulative visual effects.	Given opportunity to rationalise OHL infrastructure at Auchterawe, Variant 6-B is preferred in this area. Elsewhere, there is no preference in terms of visual effects.
Land Use	Agriculture	Agriculture in the section consists predominantly of rough grazing, dominated by plant communities of low grazing value.	Constraints considered to be broadly equivalent for all options, subject to careful micro-siting and appropriate mitigation.	Given comparable constraints across all options, there is no particular preference of alignment.
	Forestry	Land use along the Baseline Alignment is dominated by commercial forestry plantations at Auchterawe and east of Loch Lundie. In terms of forestry considerations, an extension to the existing wayleave would be required through Inchnacardoch Forest.	Constraints considered to be broadly equivalent for all options.	Given comparable constraints across all options, there is no particular preference of alignment.

Category	Sub-Topic	Summary of Constraints	Opportunities and Constraints for Variants	Alignment Preference
	Recreation	There may be some impact for the Baseline Alignment on core paths round Loch Lundie (three routes) and Inchnacardoch Forest, given its close proximity.	Constraints considered to be broadly equivalent for all options.	Given comparable constraints across all options, there is no particular preference of alignment.
Planning	Policy	Assuming negative adverse effects on site integrity of European Designated Sites can be avoided, other considerations will relate to minimising effects on cultural heritage, landscape and visual receptors and peatlands (through micro-siting). As such, and as a 'National Development' (NPF 3), it is anticipated that it could accord with both local and national planning policy.	Variant 6-A would increase the distance between the new OHL and the SPA, bring the new OHL closer to the alignment of the existing OHL. This could minimise potential effects on the qualifying species of the West Inverness-shire Lochs SPA present at Loch Lundie. Variant 6-B provides an opportunity to underground the line within the vicinity of Auchterawe, which would rationalise some OHL infrastructure in the area and help to reduce potential cumulative effects.	Given opportunity to minimise effects on the SPA with Variant 6-A, and the opportunity to rationalise OHL infrastructure at Auchterawe with Variant 6-B, these variants are preferred, in combination with the Baseline Alignment elsewhere.
	Proposals	No notable developments identified near the Baseline Alignment.	Variant 6-B has been put forward to facilitate rationalisation of existing OHL infrastructure within the area, and in light of likely future connection requirements. This variant is preferred.	The Baseline Alignment in combination with Variant 6-B is preferred.

Summary of Alignment Selection and Design Solution within Section 6

It is proposed that the Baseline Alignment with Variant 6-A and 6-B is taken forward as the preferred alignment and design solution in Section 6.

APPENDIX 4: PRELIMINARY STATUTORY CONSULTATION RESPONSES TO ALIGNMENT OPTIONS FOLLOWING ALIGNMENT WORKSHOPS

Stakeholder	Summary of Feedback	Response by SSEN Transmission
Section 0 - Ardmore to Edinbane		
The Highland Council (THC)	Access officer highlighted that the OHL would run alongside Stein to Gillen, and Loch Caroy to Glen Vic Askill Core Paths, and crosses two other Rights of Way and Wider Path Network paths. Public access will need to be considered and accommodated during construction works, and where longer term access is required.	Core paths and other recognised walking routes are noted and referenced within this Consultation Document. Appropriate mitigation measures will be developed through the EIA stage of the project, in consultation with THC.
NatureScot	In light of the potential to cross the An Cleirach SSSI, NatureScot offered to provide the Earth Science Document for the site to help guide the siting of infrastructure.	The Earth Science Document has been obtained from NatureScot and will be referred to in the siting of infrastructure during the EIA stage of the project.
Historic Environment Scotland (HES)	HES raised some initial concerns with potential setting effects in relation to Trumpan Church and Dun Hallin Broch Scheduled Monuments. HES requested additional wirelines from / to these sites of all alignment options. On receipt of this information, HES provided written feedback concluding that the Baseline Alignment was preferred to alternative variants with respect to potential setting effects on Scheduled Monuments in this section.	Information was provided to HES to help inform their written feedback. A detailed settings assessment will be undertaken during the EIA stage of the project.
Forestry Land Scotland (FLS)	No specific preliminary feedback received in relation to alignment options and design solutions within Section 0.	None required.
Scottish Environmental Protection Agency (SEPA)	No specific preliminary feedback received in relation to alignment options and design solutions within Section 0.	None required.

Section 1 – Edinbane to Sligachan		
The Highland Council (THC)	Access officer highlighted OHL crosses the Loch Caroy to Glen Vic Askill Core Path (also part of Wider Path Network path). Public access will need to be considered and accommodated during construction works, and where longer term access is required.	Core paths and other recognised walking routes are noted and referenced within this Consultation Document. Appropriate mitigation measures will be developed through the EIA stage of the project, in consultation with THC.
NatureScot	Highlighted that the OHL crosses watercourses that are upstream of the Sligachan Peatlands SAC and SSSI - avoiding silt and pollutants entering these watercourses will be key. Also highlighted Class 1 peatland habitat within much of Section 1 and recommend peat and vegetation surveys to guide the siting of infrastructure, and construction tracks.	Potential indirect effects on the Sligachan Peatlands SAC and SSSI will be considered in full and appropriate mitigation measures developed during the EIA stage of the project. Habitat and peat depth surveys have been undertaken and have informed the alignment selection within this section. Further survey and assessment work will be undertaken at the EIA stage of the project to inform infrastructure and construction access.
Historic Environment Scotland (HES)	During preliminary consultations, HES confirmed they were content that significant impacts on the setting of Dun Arkaig Broch Scheduled Monument are not likely following the Baseline Alignment.	None required. A detailed settings assessment will be undertaken during the EIA stage of the project.
Forestry Land Scotland	No specific preliminary feedback received in relation to Section 1.	None required.
Scottish Environmental Protection Agency (SEPA)	No specific preliminary feedback received in relation to Section 1.	None required.

Section 2 – Sligachan to Broadford Substation		
The Highland Council (THC)	Highlighted importance of providing information regarding alternative options within Section 2 (e.g. subsea and underground cable options, and NeSTS poles) in order for consultees to understand how these have been fully explored. Stated underground cable option considered within this section would be a positive step forward, subject to fuller understanding of impacts and above ground infrastructure requirements.	The consideration of alternative design solutions within this section is discussed in this Consultation Document. An underground cable option is being put forward as part of the design solution within Section 2 to mitigate likely significant landscape and visual effects. This will be subject to further review and assessment during the EIA stage of the project.
	Access officer highlighted the alignment crosses a number of core paths, rights of way and wider path network paths. Public access will need to be considered and accommodated during construction works, and where longer term access is required.	Core paths and other recognised walking routes are noted within this Consultation Document. Appropriate mitigation measures will be developed through the EIA stage of the project, in consultation with THC.
NatureScot	NatureScot continue to advise that an OHL in Route 2A is likely to have a significant effect on the NSA and WLA. Recommend consideration of both Route Options 2A and 2B, as believe 2B would result in fewer landscape and visual effects.	Alternative design solutions have been explored within this section, including the viability of Route Option 2B. This is discussed within this Consultation Document. An underground cable option is being put forward as part of the design solution within Section 2 to mitigate likely significant landscape and visual effects. This will be subject to further review and assessment during the EIA stage of the project.
	Assessment of Special Qualities of NSA should be carried out.	The special qualities of the NSA have been a key consideration in the consideration of alignment options and design solutions through this section. This is considered in relation to the Baseline Alignment in Appendix 5 of this Consultation Document. A full assessment of the proposed alignment and design solution will be included in the EIA Report.
	Crossing of Loch Sligachan and around Glamig is a key area where alternatives should be explored. Also an alternative route at Glen Tor-a-Mhulaig / Moll, and approach to Loch Ainort.	An underground cable option is being put forward as part of the design solution within Section 2 to mitigate likely significant landscape and visual effects.
	Underground / subsea cable options need to be assessed so that the relative impacts can be considered in a transparent way.	Alternative design solutions have been explored within this section. This is discussed within this Consultation Document. An underground cable option is being put forward as part of the design solution within Section 2 to mitigate likely significant landscape and visual effects. This will be subject to further review and assessment during the EIA stage of the project.

	Keen to see bird survey data collected to inform NatureScot advice further, in respect of the SPA.	This has been provided and further discussion with NatureScot will continue through the EIA stage of the project.
Historic Environment Scotland (HES)	No specific comments relating to Section 2 made during workshop, or in written feedback.	None required.
Forestry Land Scotland	No specific comments relating to Section 0 made during workshop. No other written feedback received to date.	None required.
Scottish Environmental Protection Agency (SEPA)	No specific preliminary feedback received in relation to Section 2.	None required.

Section 3 – Broadford Substation to Kyle Rhea		
The Highland Council	The Highland Council attended a preliminary workshop whereby SSEN provided an update on Section 3.	Comments received by The Highland Council during the alignment consultation period will be considered, and further consultation undertaken during the EIA stage of the project.
NatureScot	NatureScot attended a preliminary workshop whereby SSEN provided an update on Section 3. NatureScot expressed concern about the potential adverse effects on site integrity of the Kinloch and Kyleakin Hills SAC / SSSI.	Concerns regarding potential adverse effects on site integrity of the Kinloch and Kyleakin Hills SAC / SSSI are acknowledged. The preferred alignment that has been developed seeks to minimise effects as far as practicable. Further consultation with NatureScot will continue through the EIA stage of the project.
Historic Environment Scotland (HES)	HES were not invited to provide preliminary comments on Section 3 given the evaluation and analysis of practicable options through this section has taken considerable time.	Comments received by HES during the alignment consultation period will be considered, and further consultation undertaken during the EIA stage of the project.
Forestry Land Scotland	Preliminary discussions have been held with Forestry Land Scotland in relation to impact on forestry through Section 3, and where the OHL crosses land owned by Forestry and Land Scotland.	Further discussions with Forestry and Land Scotland will continue through the EIA stage of the project.
Scottish Environmental Protection Agency (SEPA)	SEPA were not invited to provide preliminary comments on Section 3 given the evaluation and analysis of practicable options through this section has taken considerable time.	Comments received by SEPA during the alignment consultation period will be considered, and further consultation undertaken during the EIA stage of the project.

Section 4 – Kyle Rhea to Loch Cuaich;		
The Highland Council	Reiterated NatureScot's comments within this section during preliminary consultation workshop.	See NatureScot response.
NatureScot	Suggest that it is likely that the Baseline Alignment will result in significant adverse impacts on the special qualities of the Knoydart NSA and the Kinlochhourn – Knoydart – Morar WLA. Of particular importance were the bealach at Cadha Mor, where there are two towers above Kinlochhourn, also the alignment at Loch Cuiaich bridge, and the alignment at Loch Coire Shub.	A focus during the alignment selection process has been to minimise potential landscape and visual effects through the Knoydart NSA, Kinloch Hourn, Knoydart and Morar WLA, and Moidart, Morar and Glen SLA as far as practicable. This has included review of tower positions at the locations noted by NatureScot.
	Highlighted that the OHL could cross within the vicinity of Druim Iosal SSSI and Quoich Spillway SSSI which are both sites of interest for their Moine geology.	This is noted and has been considered during the alignment selection process. Due to a particular pinch point at Druim Iosal, two towers would be located within, or on the boundary of the SSSI, as per the existing OHL.
	NatureScot also highlighted peatland habitats, native woodland, ornithology and other protected species that may be present within Section 4.	These environmental constraints have been considered during the alignment selection stage of the project and will continue to be considered during the EIA stage of the project to minimise potential effects as far as practicable.
Historic Environment Scotland (HES)	HES noted the Scheduled Monuments of Bernera Barracks, Dun Telve and Dun Troddan, brochs, Glenelg (SM 90152) & Dun Grugaig, dun Gleann Beag (SM 914) which views from and to Glenmore are important to the monument's cultural significance.	Potential setting effects on these Scheduled Monuments have been considered, and a full settings assessment will be undertaken at the EIA stage.
Forestry Land Scotland	Highlighted that the OHL cuts through some smaller forestry blocks that the existing line avoids and queried whether these could be avoided.	Potential effects on woodland and forestry have been minimised as far as practicable.
Scottish Environmental Protection Agency (SEPA)	No specific preliminary feedback received in relation to Section 4.	None required.

Section 5 – Loch Cuaich to Invergarry		
The Highland Council	No specific comments relating to Section 5 made during preliminary workshop. No other written feedback received to date.	None required.
NatureScot	Highlight that Section 5 passes close to Loch Poulary, Loch Garry and Loch Lundie, which are all part of the West Inverness-shire Lochs SPA, designated for breeding black-throated divers and common scoter. Advise that following a route closest to the existing overhead line is likely to present the lowest risk of increased impacts to scoters and divers.	This is noted. The preferred alignment follows the existing OHL closely through this section.
	NatureScot also highlighted peatland habitats, native woodland, ornithology and other protected species that may be present within Section 5.	These environmental constraints have been considered during the alignment selection stage of the project and will continue to be considered during the EIA stage of the project.
Historic Environment Scotland (HES)	Limited potential to affect assets within their remit.	None required.
Forestry Land Scotland	Highlighted that the OHL cuts through some smaller forestry blocks that the existing line avoids and queried whether these could be avoided.	Potential effects on woodland and forestry have been minimised as far as practicable.
	Queried whether existing wayleave would be used.	Wayleave requirements for the preferred alignment would be clarified during the EIA stage of the project.
Scottish Environmental Protection Agency (SEPA)	No specific preliminary feedback received in relation to Section 5.	None required.

Section 6 – Invergarry to Fort Augustus		
The Highland Council	Queried extent of undergrounding at Fort Augustus during preliminary workshop. No other written feedback received to date.	The extent of undergrounding at Fort Augustus is set out in this Consultation Document.
NatureScot	Noted that the Baseline Alignment is closer to Loch Lundie (part of the West Inverness-shire Lochs SPA) than the existing line and asked whether it could be moved closer to existing OHL.	The alignment has been reviewed in this location and the preferred alignment is close to the existing OHL.
	NatureScot also highlighted peatland habitats, native woodland, ornithology and other protected species that may be present within Section 6.	These environmental constraints have been considered during the alignment selection stage of the project and will continue to be considered during the EIA stage of the project.
Historic Environment Scotland (HES)	Highlighted the Baseline Alignment's proximity to the Scheduled Monument of Torr Dhuin, fort, Fort Augustus (SM 794). HES suggest a key consideration for this is whether the new towers associated with the Baseline Alignment would adversely impact important views to the fort from the Great Glen and from the fort along the Great Glen. HES have offered advice on viewpoint locations and continue to recommend that visualisations should be produced illustrating impacts on both outward and inward views from and to the fort.	This part of Section 6 will now be an underground cable connection into Fort Augustus Substation, therefore long term effects on the setting of this Scheduled Monument would not be likely.
Forestry Land Scotland	Preliminary discussions have been held with Forestry Land Scotland in relation to impact on forestry through Section 6, and where the OHL crosses land owned by Forestry Land Scotland.	Further discussions with Forestry Land Scotland will continue through the EIA stage of the project.
Scottish Environmental Protection Agency (SEPA)	No specific preliminary feedback received in relation to Section 6.	None required.

Scottish & Southern Electricity Networks

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Skye Reinforcement Project

Appendix 5: Landscape and Visual Appraisal of Baseline OHL Alignment in Section 2 – Glen Varragill Forest (North of Sligachan) to Broadford Substation

September 2021

REF: LT91

Scottish & Southern Electricity Networks

TRANSMISSION

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CONTENTS

1. INTRODUCTION

1.1 Purpose of the Report

1.1.1 This report presents the findings of a Landscape and Visual Appraisal (LVA) of the proposed 132 kV steel lattice tower Baseline Alignment[1] between Glen Varragill Forest (North of Sligachan) and Broadford Substation on Skye (the Proposed Development). The Proposed Development would form part of the Skye Reinforcement Project comprising the upgrading of the existing grid connection between Ardmore on Waternish Peninsula, Skye to Fort Augustus. The purpose of the LVA is to identify the potential for significant effects which may occur as a result of the Proposed Development, to views obtained by those living, working and visiting in the area, and the wider landscape resource.

1.1.2 The LVA does not comprise an assessment and therefore does not identify and describe the degree of effects, but rather is limited to the identification of potential effects and the likelihood for these to be significant.

1.1.3 The LVA has been undertaken by ASH design + assessment Ltd, Chartered Landscape Architects, on behalf of Scottish and Southern Electricity Networks Transmission (SSEN Transmission).

1.2 The Proposed Development

Overview of the Skye Reinforcement Project

1.2.1 The Skye Reinforcement Project comprises a new double circuit steel structure 132 kV transmission connection between Fort Augustus Substation and Edinbane Substation, and a new 132 kV double trident H wood pole (H pole) overhead line (OHL) between Edinbane Substation and Ardmore Substation. The existing 132 kV OHL between Fort Augustus Substation and Ardmore Substation would be removed upon completion of the new connection.

1.2.2 For assessment purposes the project has been divided into seven separate sections, numbered 0 to 6, commencing at Ardmore Substation at the western end of the route. This LVA covers Section 2 which is situated between Glen Varragill Forest (North of Sligachan) and Broadford Substation.

Section 2: Glen Varragill Forest (North of Sligachan) to Broadford Substation

1.2.3 The Baseline Alignment within Section 2 would involve the construction of 87 steel lattice towers of approximately 28 m in height located at approximate 250 m intervals, strung with insulators and conductors. The existing OHL which would be removed in this section comprises a 132 kV trident wood pole line.

1.2.4 The Baseline Alignment for Section 2 would broadly follow the alignment of the A87 trunk road. From Glen Varragill Forest, it would descend to Sligachan, crossing the River Sligachan, outwith the tidal area of Loch Sligachan. It would then cross the A87 to traverse the hill slopes on the north side of the road toward Sconser and would continue to follow the western side of the A87 southwards through Gleann Torra-mhichaig towards Loch Ainort. At Loch Ainort, it would cross the A87 and drop down close around the head of the loch, before crossing back to the landward side of the A87 again along the southern side of Loch Ainort toward Luib. The alignment would briefly move away from the road and inland at Luib passing to the landward side of Am Meall to Strollamus, and would thereafter continue to Broadford Substation, passing to the landward side of Creag Strollamus.

[1] As identified within the Skye Reinforcement Project Consultation Document (Alignment Selection), September 2021, SSEN Transmission.

Anticipated Construction Activities

1.2.5 Temporary access tracks would be required for the construction of the steel lattice towers, likely to comprise a mix of cut or floating stone access tracks and temporary solutions such as trackway. Whilst the access proposals have not yet been fixed, it is envisaged that this would include a number of new or upgraded bellmouths / junctions on the A87 and potential upgrading of existing tracks.

1.2.6 Further construction activities including establishment of tower foundations, construction of towers and stringing of conductors are anticipated, requiring a range of construction plant including excavators, cranes, and pile drivers and the establishment of working areas.

1.2.7 As the exact locations and activities associated with access and construction are not confirmed these have been considered in a general sense only, with the emphasis of the LVA on the likely continued, long term effects of the permanent features of the Proposed Development (see Section 1.3, below).

1.3 Scope of Assessment

1.3.1 This LVA considers the potential for significant effects to both the landscape and visual resource as a result of the Proposed Development. The appraisal gives consideration to both temporary construction period effects and longer term operational effects. However, given the unconfirmed nature of what would be involved during the construction period and the temporary nature of such effects, the emphasis of the LVA is on the potential longer term effects.

1.3.2 The LVA does not comprise an assessment and therefore does identify and describe the degree of effects, but is limited to the identification of potential effects and the likelihood for these to be significant.

Zone of Theoretical Visibility

1.3.3 As an aid to establishing the scope for the LVA, ZTVs have been produced for the Proposed Development and are presented in Figures 1 and 2. The ZTV is a computer generated diagram which uses a terrain model to indicate areas from which the Proposed Development would be theoretically visible. The ZTV for the Proposed Development has been generated using ESRI ArcGIS software based on a terrain modelled using Ordnance Survey (OS) Terrain 5 DTM data. The ZTV has been produced using a tower height of 28 m and a viewer height of 2 m. Two ZTVs have been produced for the Proposed Development, taking account of the predicted perceptibility of the towers at different distances. Figure 1, shows the theoretical visibility of towers at a distance of 5 km and Figure 2 shows the theoretical visibility of towers at a distance of 2.5 km.

1.3.4 It should be noted that, whilst the ZTV is illustrative of potential visibility of towers, it is not indicative of a visual effect. The ZTV has been produced using a bare ground model and does not take account of the screening effects of trees, local landform, buildings or other obstructions. It also does not take into account the receding scale and perceptibility of features with distance.

Study Area

1.3.5 A study area of 2.5 km from the proposed towers has been adopted for this LVA, taking account of the prominence and perceptibility of existing similar lattice towers in similar landscapes and the containing qualities of the topography surrounding the Proposed Development, as illustrated by the 5 km ZTV (see Figure 1). This study area is considered suitable for the identification of all potentially significant landscape and visual effects.

1.4 Planning Context

1.4.1 The LVA has taken account of national, regional and local policy and guidance relating to landscape character and visual amenity relevant to the proposal. The following have been referred to in carrying out the appraisal:

National

- The Third National Planning Framework for Scotland (NPF3);
- Scottish Planning Policy (SPP);
- Planning Advice Note 60 – Planning for Natural Heritage (PAN 60), 2000;
- Wildness in Scotland's Countryside, SNH Policy Statement 02/03.

Regional

- The Highland-wide Local Development Plan (HwLDP), 2012; and
- The West Highlands and Islands Local Development Plan (WestPlan), 2019.

1.4.2 The HwLDP forms the key element of spatial planning policy for the Proposed Development. Policy 61 of the HwLDP concerns the protection of landscape qualities. This states that:

"New developments should be designed to reflect the landscape characteristics and special qualities identified in the Landscape Character Assessment of the area in which they are proposed. This will include consideration of the appropriate scale, form, pattern and construction materials, as well as the potential cumulative effect of developments where this may be an issue. The Council would wish to encourage those undertaking development to include measures to enhance the landscape characteristics of the area. This will apply particularly where the condition of the landscape characteristics has deteriorated to such an extent that there has been a loss of landscape quality or distinctive sense of place. In the assessment of new developments, the Council will take account of Landscape Character Assessments, Landscape Capacity Studies and its supplementary guidance on Siting and Design and Sustainable Design, together with any other relevant design guidance."

1.4.3 Policy 57 concerning the protection of Natural, Built and Cultural Heritage is also of relevant in relation to the protection of designated areas. With respect to areas of local/regional importance (e.g. Special Landscape Area) Part 1 of this policy states:

"'…we will allow developments if it can be satisfactorily demonstrated that they will not have an unacceptable impact on the natural environment, amenity and heritage resource."

1.4.4 With respect to areas of national importance (such as National Scenic Areas or Wild Land Areas), Part 2 of the policy states:

"…we will allow developments that can be shown not to compromise the natural environment, amenity and heritage resource. Where there may be any significant adverse effects, these must be clearly outweighed by social or economic benefits of national importance. It must also be shown that the development will support communities in fragile areas who are having difficulties in keeping their population and services".

1.5 Mitigation Measures

1.5.1 Recommendations for landscape and visual mitigation are described in Section 5 of this report.

2. METHODOLOGY

2.1 Assessment Guidance

2.1.1 The LVA has been prepared with reference to the Guidelines for Landscape and Visual Impact Assessment (Third Edition), 2013, published by the Landscape Institute and the Institute of Environmental Management and Assessment (GLVIA3).

Professional Judgement

2.1.2 GLVIA3 places a strong emphasis on the importance of professional judgement in identifying and designing the significance of landscape and visual effects. As part of this appraisal, professional judgement has been used in combination with structured methods and criteria to evaluate value, sensitivity and potential for effects to be significant.

2.2 Structure of the Appraisal

2.2.1 GLVIA3 discerns an important difference between landscape effects, and visual effects. These can be described as follows:

Landscape Effects

2.2.2 The character of the landscape relates to the natural processes and human activities that have been at work over time to shape the land to its present form. Factors contributing to landscape character include topography, vegetation cover, sense of space or enclosure and past and present land use. Landscape character and resources are considered to have an importance in their own right and are valued for their intrinsic qualities.

2.2.3 Landscape effects may occur when elements of the landscape which contribute to its key characteristics are changed.

Visual Effects

2.2.4 Visual amenity relates to the way in which people visually experience the surrounding landscape.

2.2.5 Visual effects may occur through the introduction into established views of new features which modify the existing structure, scale and composition of the view. Visual effects may also occur where existing features in the view are removed or altered.

Key Stages of the Assessment

2.2.6 The GLVIA methodology involves an appreciation of the existing landscape and visual resource and the ability of its key components to accept potential change. An understanding of the proposed changes which could occur and the degree to which they could alter these key components is required. The appraisal considers the potential for changes to result in significant effects and potential opportunities to mitigate these effects. There are six key stages to the appraisal process:

- Establishment of the baseline;
- Appreciation of the development proposed;
- Identification of key landscape and visual receptors;
- Evaluation of receptor sensitivity to change;
- Identification of potential effects and mitigation measures; and
- Consideration of potential for effects to be significant.

Establishment of the Baseline

2.2.7 Establishment of the baseline conditions has been undertaken through a combination of desk study. A specific site visit has not been undertaken for this appraisal but site visits undertaken in 2016, 2017 and 2019 are considered to provide a good understanding of the study area for this level of appraisal. The following desk based resources have been reviewed:

- The HwLDP, WestPlan and relevant Supplementary Guidance;
- Digital Datasets obtained from NatureScot Natural Spaces website (https://gateway.snh.gov.uk/natural-spaces/index.jsp);
- The Special Qualities of the National Scenic Areas, SNH (now NatureScot) (2010);
- THC Special Landscape Areas and citations included in the document 'Assessment of Highland Special Landscape Areas' (Horner+Maclennan with Mike Wood, Landscape Architect);
- Description of Wild Land Area 23. Cuillin (NatureScot, 2017);
- Landscape Character Types and descriptions from the NatureScot National Landscape Character Assessment;
- Mapping and aerial photography resources including Ordnance Survey 1:25000 Explorer series, GoogleEarth and National Library of Scotland mapping services; and
- Previously obtained photographic record of the study area.

Landscape Value

2.2.8 Establishment of the baseline includes the consideration of the baseline landscape value. Landscape value concerns the perceived importance of the landscape when considered as a whole, and within the context of the study area and is established through consideration of the following factors:

- Presence of landscape designations, other inventory or registered landscapes / landscape features or identified planning constraints;
- The scenic quality of the landscape;
- Perceptual aspects, such as wildness or tranquillity;
- Conservation interests such as cultural heritage features or associations, or if the landscape supports notable habitats or species;
- Recreational value; and
- Rarity, either in the national or local context, or if it is considered to be a particularly important example of a specific landscape type.

2.2.9 It should be noted that absence of a designation does not necessarily mean that a landscape or component is not highly valued, as factors such as accessibility and local scarcity can render areas of nationally unremarkable quality highly valuable as a local resource.

2.2.10 Criteria for the allocation of perceived landscape value are outlined in Table 2.1:

Table 2.1: Landscape Value Criteria

Landscape Value	Criteria
High	• The landscape is closely associated with features of international or national importance which are rare within the wider context; • The landscape is of high scenic quality and forms a key part of an important designated landscape or planning constraint; and/or • The landscape is an example of a scarce resource within the local context and is of considerable local importance for its, scenic quality, recreational opportunities or cultural heritage associations.

Medium	• The landscape is associated with features of national or regional importance which are relatively common within the wider context; • The landscape forms part of a designated landscape or is associated with other features of importance but is not rare or distinctive within the local context; and/or • The landscape is one of a number within the local context appreciated for its scenic quality, recreational opportunities or cultural heritage associations.
Low	• The landscape characteristics are common within the local and regional context and the landscape is not associated with any particular features or attributes considered to be important; and/or • The landscape is of poor scenic quality and is not appreciated for any recreational or cultural associations.

Appreciation of the Development Proposed

2.2.11 Appreciation of the Proposed Development involves the accumulation of a thorough knowledge of the proposal, its nature, scale and location within the baseline landscape, and any peripheral or ancillary features proposed. Analysis of the proposed activities and changes which would take place leads to an understanding of the potential effects that may occur to the landscape and visual resource.

Identification of Key Landscape and Visual Receptors

2.2.12 The identification of landscape and visual receptors is the first step in the analysis of the potential for significant effects to occur. Landscape and visual receptors can be described as follows:

- **Landscape receptors** comprise key characteristics or individual features which contribute to the value of the landscape and have the potential to be affected by the Proposed Development. Landscape receptors are identified through analysis of baseline characteristics when considered in relation to the impacts which might result from a development of the type proposed.
- **Visual receptors** comprise individuals experiencing views from locations such as buildings, recognised routes and popular viewpoints used by the public. Potential visual receptors are identified through analysis of desk resources, mapping and field survey, as described under 'Establishment of the Baseline' above.

Evaluation of Receptor Sensitivity to Change

2.2.13 Sensitivity considers the nature of the landscape or view and its ability to accommodate development of the type proposed without compromising its key characteristics and components. There are two aspects which are considered when establishing the landscape or visual sensitivity:

- **Value:** the baseline value of the landscape as detailed in Table 2.1 and the contributory value of individual landscape receptors to the landscape as a whole; or, the value of the overall view and particularly, the affected part of the view, to the visual receptor. This includes consideration of the type of activity in which the visual receptor may be engaged.
- **Susceptibility to change:** the ability of the landscape receptors or existing visual composition to accommodate development of the type proposed without changing the intrinsic qualities of the landscape or view.

2.2.14 It is important to note that the judgement of visual sensitivity is considered in relation to an understanding of both the existing view obtained by the visual receptor and the development proposed and therefore the perceived value of the potential area of change as a part of the viewing experience as a whole contributes to the sensitivity evaluation.

2.2.15 Criteria for sensitivity are presented in Table 2.2 below:

Table 2.2: Landscape and Visual Sensitivity Criteria

Sensitivity Rating	Landscape Sensitivity	Visual Sensitivity
High	A highly valued landscape of particularly distinctive character susceptible to relatively small changes of the type proposed.	Visual receptors occupying or using: • Dwellings, publicly accessible buildings and surrounds where the changed aspect is an important element in the view and there are no detracting features present; and • Recreational routes and locations where the changed aspect is an important element in the view and there are no detracting features present.
Medium	Dwellings, publicly accessible buildings and surrounds where the changed aspect is an important element in the view and there are no detracting features present; and	Visual receptors occupying or using: • Dwellings and publicly accessible buildings where the changed aspect is a less important element in the view and / or where some detracting features are present; • Recreational routes and locations where the changed aspect is a less important element in the view and / or where some detracting features are present; • Roads and transport routes where the changed aspect is an important element in the view and there are no detracting features present; and • Workplaces where the changed aspect is an important element of the view and there are no detracting features present.
Low	Recreational routes and locations where the changed aspect is an important element in the view and there are no detracting features present.	Visual receptors occupying or using: • Dwellings and publicly accessible buildings where the changed aspect is an unimportant element in the view and / or numerous detracting features are present; • Recreational routes and locations where the changed aspect is an unimportant element in the view and / or where numerous detracting features are present; • Roads and transport routes where the changed aspect is a less important element in the view and / or where some detracting features are present; and • Workplaces where the changed aspect is a less important element in the view and / or where some detracting features are present.

Identification of Potential Effects and Mitigation Measures

2.2.16 Potential effects may occur as a result of the interaction of the Proposed Development with the identified landscape and visual receptors.

2.2.17 The appraisal takes into account direct effects upon existing views, landscape elements, features and key characteristics and also indirect effects which may occur secondary to changes affecting another landscape component or area. The identification of potential effects is a two-fold process, giving consideration to how these effects may arise from aspects of the Proposed Development and how they may be accommodated by the existing baseline features. Where it is established that potential effects could be limited by mitigation measures, these are also given consideration.

Consideration of Potential for Effects to be Significant

2.2.18 Where the potential for effects to occur has been identified, a judgement has been made on the likelihood for these to be significant. Significant effects may be described as those which would be of considerable detriment to the receptor: either leading to a noticeable change to valued landscape characteristics of a particular area; or notable deterioration of the visual amenity of a particular view. The appraisal of potential for effects to be significant is made using professional judgement, taking in consideration of the identified receptor sensitivity and the degree to which the Proposed Development may potentially influence the view or landscape.

2.2.19 The potential for effects to be significant is presented as one of three options:

- **Likely** – significant effects are unlikely to be avoidable;
- **Possible** – there is the potential for significant effects to occur depending on the detailed design or mitigation; or
- **Unlikely** – the likelihood of significant effects occurring is considered low.

2.3 Assumptions and Limitations

2.3.1 The assessment of the Proposed Development is subject to the following limitations and assumptions:

- A specific site survey has not been undertaken for this appraisal but has been based on site visits undertaken by the writer in 2016, 2017 and 2019, supplemented by a photographic record from these sites visits and more recent visits undertaken by others. However, this is considered to be a sufficient basis on which to undertake this level of appraisal.

3. BASELINE

3.1 Landscape and Visual Context

3.1.1 The landscape context of Section 2 is characterised by the mountains of the Black and Red Cuillin ranges with their high summits and well-recognised silhouettes forming a prominent landscape and visual focus within the wider surrounding area. There is a contrast between the striking, rugged ridgeline of the black Cuillin which lies to the south-west of the study area, and the more simple structured steep, conical peaks of Red Cuillin, such as Glamaig and Marsco, which lie closer to or within the study area. Deep, sweeping, heather-clad valleys and corries separate the mountains, contrasting with the dramatic summits of crags and scree-slopes where the grey of stone predominates. The long, fjord-like sea-lochs of Loch Sligachan and Loch Ainort cut inshore to the feet of the mountains and, with the addition of off-shore islands, form a strong composition of land, and sea which emphasises the height and contrast of the mountains. Habitation and development is confined to the coastal edge, around the shores and at the heads of Loch Sligachan and Loch Ainort where the A87 trunk road winds around the bases of the mountains and the heads of the lochs. The proximity of the main, trunk road to the mountainous landscape results in notable popularity for tourists and visitors. Whilst the remote landscape away from the shore lacks roads or development, it is highly popular with recreational users and there are many tracks, paths and more challenging mountain walking routes present. Many of these routes commence at Sligachan, at the head of Loch Sligachan where there is a particular focus of visitor and tourist development.

3.2 Landscape Designations and Other Protected Landscapes

National Context

The Cuillin Hills National Scenic Area (NSA)

3.2.1 NSA is a national level designation applied to those landscapes considered to be of exceptional scenic value. NSAs are considered to represent Scotland's finest landscapes that must be conserved as part of the country's natural heritage. The special qualities which are considered to contribute to the value of each NSA are described in the SNH publication 'The Special Qualities of the National Scenic Areas' (SNH, 2010).

3.2.2 The Cuillin Hills NSA falls within the study area (see Figure 3) and covers all areas to the south-west of the A87 including the Black Cuillin and Red Cuillin mountains. The Special Qualities of the NSA are described as follows:

- Magnificent mountain scenery;
- The contrast and complement of the Black and Red Cuillin;
- The surrounding wild landscape, a fitting foil for the mountains;
- Iconic images of crofting townships with dramatic backdrops;
- The Cuillin Ridge, a landmark throughout the northwest;
- The ever-changing weather;
- A place of inspiration; and
- The most challenging mountains in Scotland.

Wild Land Area (WLA) 23: Cuillin

3.2.3 Although not a formal designation, WLAs have been defined by SNH as those areas comprising the greatest and most extensive areas of wild characteristics within Scotland and are given protection within the Planning System through Scottish Planning Policy (SPP). WLA 23 covers a similar area to The Cuillin Hills NSA with its boundary falling slightly further from the A87; typically 0.5 km to 1 km away (see Figure 3).

3.2.4 The presence of wildness is based on the presence and strength of four perceptual attributes identified in NatureScot Policy Statement 'Wildness in Scotland's Countryside' (SNH, 2002) as follows:

- A sense of sanctuary or solitude;

- Risk or, for some visitors, a sense of awe or anxiety, depending on the individual's emotional response to the setting;
- Perceptions that the landscape has arresting or inspiring qualities; and
- Fulfilment from the physical challenge required to penetrate into these places.

3.2.5 Because these responses are much dependant on an individual's perceptions, five physical attributes are identified as considered likely to lead to these perceptual responses being present. These are:

- A high degree of perceived naturalness in the setting, especially in its vegetation cover and wildlife, and in the natural processes affecting the land;
- The lack of any modern artefacts or structures;
- Little evidence of contemporary human uses of the land;
- Landform which is rugged, or otherwise physically challenging; and
- Remoteness and/or inaccessibility.

3.2.6 NatureScot has produced a description of each WLA identifying Key Qualities which are considered to contribute to their value. The Key Qualities of WLA 23 are identified as follows:

- Superlative high, steep, rocky mountains that are extremely rugged and contrast to the surrounding peatland and sea, emphasising a sense of awe;
- A circle of mountains that contain a remote and secluded interior and a strong sense of sanctuary, with contrasting outward-facing slopes where human elements are more influential;
- A strong contribution of the sea to remoteness and the sense of naturalness and awe, as well as influencing the perceived extent of the area; and
- A concentrated mountain area accessed by many different visitors to experience wild land qualities.

Regional / Local Context

Trotternish and Tianavaig Special Landscape Area (SLA)

3.2.7 A very small part of the Trotternish and Tianavaig SLA (see Figure 3), identified by THC falls within the northern part of the study area. This SLA covers the coastline northwards from Balmeanach Bay to the north of Peinachorrain, and extends to include the wider Trotternish ridge. As the portion of the SLA within the study area is extremely limited and over 2 km from the Proposed Development, it is considered that the potential for any of the Special Qualities or characteristics of the SLA to be significantly affected by the Proposed Development is Unlikely. The Trotternish and Tianavaig SLA has therefore not been considered further in this LVA.

3.3 Landscape Character

3.3.1 NatureScot has undertaken detailed review and classification of various landscape areas and types of Scotland dividing the country into a series of Landscape Character Types (LCTs) where there is considered to be a consistency of character. This has included identification of key characteristics which are considered important in the defining the character of each LCT. Within this context, 7 LCTs have been identified within the LVA study area (see Figure 4). These LCTs along with their identified key characteristics are detailed in Table 3.1.

Table 3.1: Key Characteristics of LCTs within the Study Area

LCT	Key Characteristics
LCT 357 – Farmed and Settled Lowlands - Skye & Lochalsh	• Sharp contrast between human activity and small-scale land use patterns, and the surrounding large scale, mainly uninhabited, landscapes. • Always found on low lying terrain - coastal shelves, narrow coastal strips, wide, level strath and glen floors and better drained estuarine flats.

	• In rocky moorland and mountainous areas, found on narrow shelves and slopes at the base of rocky or rugged coastal strips with an abrupt, steep and sometimes complex coastal edge. • On basalt bedrock on Skye, relief is level, inclined or terraced, incorporating vertical rock faces, tending to become broader and flatter at lower levels. • Dominance of improved grass land and relatively intense grazing. • Margins of broadleaf woodlands in good soils and sheltered areas mainly relating to estates or sheltered parts of coastal rocky moorland. • Mature parkland trees and small plantations provide shelter and enclosure and are associated with rural estates and better soils. • Settlements coalesce with each other and surrounding inbye to form ribbons or swathes of green pastures. • Green pasture contrasts with surrounding muted colours of rough grass land. • Land use is farming, crofting, tourism accommodation and activities, ferry terminals, and small plantations. • Larger settlements are active, bustling places, providing facilities for local services and tourism. • Variable pattern of settlement, governed largely by historical changes in tenure - the change from run-rig to crofting - landform and soils, and influenced by coastlines, water courses, roads, ferries and bridges. • Croft patterns are linear or scattered. • Crofts are usually coastal and exposed. • Modern settlement boundaries are well defined by fence and dyke lines which mark abrupt changes in grazing intensity. • Most settlements retain their historic patterns of development. • Clear evidence of historical human land-use in the abandoned field systems and archaeological sites. Many settlements on single track roads with a strong sense of isolation due to their distance from main settlements.
LCT 358 – Low, Smooth Moorland	• Moderately sized bands of peaty lowland of low relief, mainly below 50 metres elevation. • Simple composition with horizontal or gently sloping skyline. • Formed in depressions linked to the coast, in straths and glens between hills, and at the foot of landslide edges. • Mainly smooth terrain, rough grazing, usually in close proximity to settlement, with evidence of former or current drainage. • Sinuous burns, rivers, drainage channels, eroded peat banks and peat beds provide occasional detailed texture. • Evidence of intermittent prehistoric and historic settlement, with few modern built features. • Expansive and open, with views of mountains, islands and sea, channelled by adjacent hill slopes.
LCT 359 – Upland Sloping Moorland	• Expansive moorland with gentle slopes and broad undulations above 50 metres and sweeping, rounded summits up to 260 metres. • Mainly smooth, with small radiating burns cutting into lower slopes and weakly defined steps where peat is thinner overlying the stepped bedrock. • Occasional finer grain, ridge-like or hummocky undulations in surface deposits, found in places at the base of slopes. • Mainly used for grazing on rough grass land, and for forestry, which together form a large scale patchwork of contrasting colours and textures. • Little settlement – occasional isolated modern farms. • Distance and scale are difficult to judge, except where roads, power lines or occasional wind turbines introduce scale. • Simple overall composition. • Exposed and open, with extensive views to surrounding mountains, islands, coastlines and the sea.

LCT 360 – Stepped Moorland	• Distinctive stepped landform rising from the coast up to moderate elevation uplands. • Clearly defined, often sloping, terraces and steps which are sometimes inclined. • Hills tend to be asymmetrical with a horizontal emphasis and broad base. • Low stepped inclined shelves or low cliffs at the coast, often forming promontories and seen as repeated, low, horizontal headlands extending into the sea, and receding into the distance. • Stepped character varies depending on depth of deposits over terraces and height of vertical faces. • Repetitive pattern of vertical faces and gently sloping or slanting terraces. • Exposed basalt rock faces separating level or sloping terraces of grass or heather moorland. • Vertical steps may appear as low outcrops or walls of rock, and form steep cliffs along coastlines. • Isolated large to moderate scale forest blocks, usually found in more elevated areas masking and competing with the stepped profile form. • Trees and plantations largely absent on coastal lowlands. • Extensive grazed rough grassland, bog and heather, with more intensively grazed grassland at the coast, which is smoother and greener. • Mainly un-settled, with a few solitary farms, the type is interspersed with Farmed and Settled Lowlands – Skye & Lochalsh at the coast. • Main roads and single track roads traverse lower slopes and passes; occasional forest, farm and windfarm tracks extend up mid-slopes. • Mainly single track roads pass through coastal areas, connecting adjacent settlements. • Abandoned shielings and field patterns • Exposed and open, extensive visibility. • At the coast, high inter-visibility between promontories and rare views of inaccessible coastlines and mountains.
LCT 364 – Rocky Moorland - Skye & Lochalsh	• Moderate elevation, transitional moorland which descends to the coastal edge and adjoins Rugged Massif – Skye & Lochalsh. • High proportion of exposed rock arising from rock outcrops and deposited material. • Raw and rugged, showing minimal signs of post-glacial erosion. • Occurs on a wide range of bedrocks, which gives rise to variable texture and form. Exposed bedrock form is generally rounded, with a few areas of terraced and sloping landform. • Mainly occurs in large tracts. • Larger areas contain exposed, central undulating plateaux with lochans. • Deeply undulating land form often due to glacial erosion, in larger areas. • No overall hierarchy of peaks, except on outcrops and terraced variants. • Random pattern ground cover textures. • Little obvious land management. • Sparse habitation. • Roads mainly peripheral, some power lines and roads cross the larger scale types and introduce human scale. • Overall, scale and distance difficult to perceive, in larger areas. • General lack of landmarks. • Quiet atmosphere in central areas, with little evidence of peripheral settlement and roads in larger areas. • Rarely visited, giving a sense of isolation and remoteness in larger areas.
LCT 367 – Smooth Mountain Range	• Mainly conical mountains of convex to concave slopes and smooth rounded tops separated by wide glaciated straths and glens. • Contrasting form to the jagged Black Cuillin. • Peripheral, smooth rounded foothills.

	• Hills are of a similar profile, often viewed collectively with each other and their smooth foothills. • Smooth texture and mottled pattern, the surface is broken by deep crevices formed by drainage channels which create a radial arrangement of lines. • Upper areas are dominated by pink, exposed granite rock. • Lower slopes of heather, grassland and peaty bogs, with rivers and lochans in straths and glens. • Simple, repetitive, smooth profile of the main hills imparts a sense of predictability. • Roads, conifer forests, quarries and power lines are located mainly within the edges of the foothills. • Uninhabited landscape, with the interior accessed by paths and tracks through intervening straths and glens. • Wild character derived from the remoteness, natural landform and lack of human activity, except around the margins of the area.
LCT 368 – Angular Mountain Range - Skye & Lochalsh	• Mountains of high elevation and massive scale. • Sharp, angular profile, steep mountain slopes and huge rocky cliffs, set in rugged and smooth foothills. • Arc of jagged gabbro peaks derived from volcanic origin, with no dominant focal point. • Extensive areas of exposed, coarse, hard, dark rock. • U-shaped glaciated valleys and corries forming vast open areas, with rivers and lochans. • Contrast with form of adjacent smooth red hills. • Contrasting lower slopes and foothills with glacial and peat deposits, heather and rough grassland. • Service facilities and accommodation concentrated at entrance points and service centres around the edge of the Landscape Character Type. • Historic land use evidence on the fringes with occasional relics, shielings, field systems, old droving routes and enclosures. • Largely uninhabited. • Prominent landmark set within relatively low seascapes and landscapes and visible from great distances. • Complex visual composition in close proximity, with immense vertical scale viewed from valleys and peaks. • Interior views change according to orientation of slopes and the influence of weather. • Wild character imparted due to lack of man-made structures, remoteness, mountainous scale, raw geology and exposure.

3.4 Landscape Value of the Study Area

3.4.1 The presence of the National level NSA designation across much of the study area, confers a generally High value on the LCTs which fall within it. This includes LCT 367 (Smooth Mountain Range), LCT 368 (Angular Mountain Range – Skye and Lochalsh) and a part of LCT 358 (Low, Smooth Moorland). However, the notable popularity of the Cuillin mountains, enhanced by their depiction on television and film productions, and their frequent portrayal internationally as an iconic feature of the Scottish landscape is considered to lead to a very particularly high value for these landscapes.

3.4.2 Although no landscape designation is present across the LCTs which lie outwith the NSA, which includes areas of LCT 357 (Farmed and Settled Lowlands - Skye & Lochalsh), LCT 358 (Low, Smooth Moorland), LCT 359 (Upland Sloping Moorland), LCT 360 (Stepped Moorland) and LCT 364 (Rocky Moorland - Skye & Lochalsh), these landscapes are also considered to convey considerable value due to their close relationship to the NSA, having a role both as a setting and context to the NSA in terms of the relationships between the coastal landscapes and the mountains and the viewing opportunities the afford to appreciate the iconic mountain landscape, and also as a popular and scenic landscape in its own right. As such, a High landscape value is accorded to all the LCTs within the study area, with the possible exception of areas where commercial forestry plantation comprises the principle landcover. Although these areas, which are largely focussed at either end of the alignment, affecting parts of LCT 358 (Low, Smooth Moorland) and LCT 359 (Upland Sloping Moorland), retain a visual connection with the more highly valued landscapes they are considered to have a generally lower scenic quality. The value in these areas is therefore considered to be Medium.

3.5 Visual Receptors

3.5.1 Potential visual receptors considered in the assessment include those obtaining views from settlements routes and recreational areas. This includes residents, visitors and tourists, travellers and those undertaking outdoor activities such as walkers, climbers and cyclists.

3.5.2 All receptor locations within the study area are listed and detailed in Annex 1 of this LVA and locations shown on Figure 4.

Views from Settlement Areas

3.5.3 Settlement within the study area is largely located close to the A87, strung along the narrow coastal strip below the mountains. Key settlement clusters within the study area include: Sligachan, Peinachorain, Sconser, Luib, Dunan, Strollamus and Broadford. There are also a number of smaller settlement groups or individual properties outwith these areas. Properties are almost entirely orientated to take advantage of coastal views. However, secondary views, particularly from garden areas and associated croft land are obtained towards the mountainous interior.

Views from Routes

Roads

3.5.4 The A87 is the principal road route within the study area, looping around the bases of the mountains and the southern shores and heads of the sea-lochs. The views obtained from this route to the mountain landscape result in it being highly popular with tourists and visitors, as well as being a main commuting route for commercial traffic and local people.

3.5.5 Other main roads within the study area include small parts of the A863 Sligachan to Dunvegan road, and B8083 Broadford to Elgol road. These routes have some views towards the mountain landscape on their approach into the study area but are largely beyond the edge of the study area and scope of the LVA. There is also a minor road around the coast between Loch Ainort and Loch Sligachan at Sconser, which has variable coastal views towards the offshore isles of Scalpay and Raasay and views towards the mountains at either end, particularly the section rounding the head of Loch Ainort.

Recreational Routes

3.5.6 The mountain and coastal areas are popular for outdoor recreation including mountain biking, walking and climbing. Sligachan comprises the main starting point for most routes including longer routes between the mountains such as Scottish Hill Track 292 (Elgol to Sligachan Hotel), and ascent routes of surrounding peaks. A coastal path from Sligachan also follows the northern shore of Loch Sligachan to Peinachorrain.

3.5.7 Routes are also available from Loch Ainort, ascending the mountain Garbh-bheinn whilst linking tracks and paths between Luib, Strollamus and Torrin may be used individually or as a circular route published as Scottish Hill Track 290 (The Torrin Ring from Luib).

3.5.8 A mix of changing mountainous and coastal views are obtained from these recreational routes, often featuring the surrounding mountain peaks seen framed through valleys or across open water from the lower routes, and with wide ranging elevated and expansive views from higher ridges and peaks across the mountains and coastline.

4. APPRAISAL OF POTENTIAL EFFECTS

4.1 Landscape Character

4.1.1 The extent to which the Proposed Development would affect the existing landscape character varies depending on the individual components of the Proposed Development and the capacity of the existing landscape to accommodate these various components.

4.1.2 A detailed appraisal of the potential effects of the Proposed Development on LCTs during construction and operation is provided in Annex 2 of this LVA. A summary of the potential significance of effects is provided in Table 4.1 and the paragraphs which follow:

Table 4.1: Summary of Potential for Significant Effects to LCTs

LCT	Potential for Significant Effects	
	During Construction	During Operation
LCT 357 – Farmed and Settled Lowlands - Skye & Lochalsh	Likely	Likely
LCT 358 – Low, Smooth Moorland (Sligachan unit)	Likely	Likely
LCT 358 – Low, Smooth Moorland (Broadford unit)	Unlikely	Unlikely
LCT 359 – Upland Sloping Moorland	Possible	Possible
LCT 360 – Stepped Moorland	Possible	Possible
LCT 364 – Rocky Moorland - Skye & Lochalsh	Unlikely	Unlikely
LCT 367 – Smooth Mountain Range	Likely	Likely
LCT 368 – Angular Mountain Range - Skye & Lochalsh	Possible	Possible

4.1.3 As can be discerned from the above table, **Likely** significant effects are anticipated for three of the LCTs within the study area: LCT 357 (Farmed and Settled Lowlands – Skye and Lochalsh), LCT 358 (Low Smooth Moorland (Sligachan unit only) and LCT 367 (Smooth Mountain Range).

4.1.4 Whist direct effects would be likely to occur within all of these areas either on a temporary basis as a result of construction activities, or on a permanent basis in relation to tower positions, the main contributor to significant effects is anticipated to be the introduction of the Proposed Development as a linear feature which would interrupt the relationship between the mountainous landscapes and the small scale settled coastal strip and seascape which is one of the uniquely valued elements of the landscape within the study area. Whilst existing features are already present along this coastal strip, including the A87 road and existing wood pole overhead lines (which would be replaced by the Proposed Development) the proposed steel lattice towers would be taller with a greater vertical spread of conductors and would be frequently located higher up the slope compared to existing development. This would result in towers often appearing prominent throughout the coastal landscapes, particularly around Loch Sligachan and Loch Ainort, and distracting within views towards the mountains, thereby negatively affecting the role of the mountains as a focus and backdrop.

4.1.5 Similar, related effects are anticipated to lead to **Possible** significant effects to LCT 359 (Upland Sloping Moorland), LCT 360 (Stepped Moorland) and LCT 368 (Angular Mountain Range - Skye & Lochalsh). These LCTs are typically further from the development but retain a close relationship between the mountainous and coastal landscape which is noted as one of their key characteristics. This is anticipated to lead to some negative effects on the landscape character, likely to be localised or indirect, but potentially sufficient to be significant during construction or operation. In the case of LCT 368, this is considered to be more in relation to indirect effects occurring due to the interruption to the role of the LCT as a landmark when viewed from surrounding coastal and lower lying areas.

4.1.6 The potential for significant effects to LCT 364 (Rocky Moorland - Skye & Lochalsh) and the Broadford unit of LCT 258 (Low, Smooth Moorland) is considered **Unlikely** due to their greater distance from the Proposed Development and likely more limited perceptibility.

Potential for Effects on The Cuillin Hills NSA

4.1.7 The alignment for the Proposed Development falls within the NSA boundary along the southern shore of Loch Sligachan and through Gleann Torra-mhichaig. It falls just outside the NSA boundary as it crosses the head of Loch Ainort, but then moves back within the boundary along the southern shore of Loch Ainort and for the remainder of the route to Broadford Substation. However, whilst sections crossing the heads of Loch Sligachan and Loch Ainort are outwith the NSA, these areas are considered equally sensitive with respect to the NSA, due to their proximity and context whereby views towards the inner mountains are seen through the valleys from the sea-lochs, and also due to their popularity as locations where members of the public appreciate the NSA.

4.1.8 Within the study area, the NSA covers parts of LCT 367 (Smooth Mountain Range), LCT 368 (Angular Mountain Range - Skye & Lochalsh) and partially LCT 358 (Low, Smooth Moorland) to the south of Sligachan. However, the remaining LCTs within the study area are also considered to have a close relationship with the NSA and are considered relevant in terms of its setting and the appreciation of its Special Qualities.

4.1.9 The Likely potential for significant effects to the landscape character of LCT 367 and LCT 358 and Possible significant effect to LCT 368 are also considered to be attributable to the NSA. The importance of the designated landscape as a focus of views and significance of its relationship with the seascape and settled coastal fringes also leads to the Likely significant effects of LCT 357 contributing an effect on the appreciation of the NSA and its association with the coastal landscape. Whilst these areas are all on the periphery of the NSA, with potential effects to the core areas unlikely, the importance of this edge as an area where the majority of people experience the NSA and appreciate its assets is anticipated to be adverse to the NSA designation overall.

4.1.10 A review of the Proposed Development in relation to the Special Qualities of the NSA is provided in Table 4.2 below. This concludes that the potential effects anticipated would lead to some Likely effects on the Special Quality of *"Magnificent mountain scenery"* and Possible significant effects, which would be localised or dependent on particular circumstances, to the Key Qualities: *"Iconic images of crofting townships with dramatic backdrops," "The surrounding wild landscape, a fitting foil for the mountains,"* and *"A place of inspiration"*.

4.1.11 Taking into account anticipated likelihood of significant effects to both the landscape character and the Special Qualities of the NSA, the potential for significant effects is therefore considered to be **Likely**.

Table 4.2: Analysis of Potential Effects on the Special Qualities of The Cuillin Hills NSA

Special Quality	Analysis	Potential for Significant Effect
Magnificent mountain scenery	The NSA citation notes the iconic views of Scotland which are associated with the NSA. This cites views from Loch Sligachan and Loch Ainort, on the A87, and particularly at Sconser*, "where the road sits tight between the sea loch and the mountains".* The potential for these views and landscape experiences to be significantly affected by the Proposed Development is considered likely (see Section 4.2) and this is therefore considered likely to affect this Special Quality.	Likely
The contrast and complement of the Black and Red Cuillin	The Proposed Development would affect the Red Cuillin area and indirectly affect the Black Cuillin through some views. The adverse effect on the Red Cuillin would largely influence its coastal side and the distinction of the two mountain groups would still therefore be able to be seen and	Unlikely

	appreciated and therefore the effect on this Special Quality is not anticipated to be significant.	
The surrounding wild landscape, a fitting foil for the mountains	The appraisal of WLA 23 (Cuillin) which covers a similar area to the NSA has identified that there may be Possible significant effects. Whilst other surrounding areas are not formally classified as wild land, many of the attributes of wild land are present, and would be potentially affected by the Proposed Development which would appear larger and more robust than existing wood pole lines as a feature in the landscape, and affect the continuity of views towards the wilder mountain landscapes in some areas; for example in the vicinity of Loch Ainort and Luib.	Possible
Iconic images of crofting townships with dramatic backdrops	The citation for this Special Quality refers specifically to the communities of Torrin and Elgol which lie outside of the study area. However, the similar relationship of crofting communities within the study area with the mountainous backdrop, such as Sconser and Luib are considered to be sensitive and would be affected by the Proposed Development. This may therefore be considered to comprise a significant effect to this Special Quality.	Possible
The Cuillin Ridge, a landmark throughout the northwest	The Proposed Development would potentially locally distract from the role of the Cuillin Ridge as a landmark, for example, around Sligachan, although the baseline alignment largely avoids crossing to the forefront of key views towards the Black Cuillin from popular locations.	Unlikely
The ever-changing weather	The Proposed Development would not affect the appreciation of weather conditions, although there is the potential that if cloud were low over the mountains, the towers of the Proposed Development may appear more prominent in views from the A87 and around Sligachan. This would not comprise a significant effect, however.	Unlikely
A place of inspiration	There could be potential influence on the inspirational aspects of the parts of the NSA affected for authors, artists or others, and as a distracting feature in some views the effect on the appreciation of the NSA for visitors could lead the connection to inspired works being adversely affected. This would depend on the specific elements of the NSA which have inspired the selected works and their relationship to the views and experiences affected.	Possible
The most challenging mountains in Scotland	This Special Quality relates specifically to the complexity of the Black Cuillin which would not be affected by the Proposed Development.	Unlikely

WLA 23. Cuillin

4.1.12 The WLA covers a broadly similar area to The Cuillin Hills NSA within the study area though slightly further back from the public road. Therefore, the majority of the baseline alignment would be outwith the WLA with only a small area between Luib and Strollamus just inside its edge. Therefore, the effects relating to LCT 367 (Smooth Mountain Range), LCT 368 (Angular Mountain Range - Skye & Lochalsh) and LCT 358 (Low, Smooth Moorland) to the south of Sligachan would be less directly attributable to the WLA. However, the importance of the relationship of the WLA with the surrounding seascape and the ability for members of the public to appreciate it from the A87 are both noted in the description for the WLA. As such, it is considered that whilst the core and central parts of the WLA would not be affected by the Proposed Development, some of its notable characteristics in relation to its setting, would be.

4.1.13 A review of the Proposed Development in relation to the WLA Key Qualities is provided in Table 4.3. This concludes that potential for significant effects for all the Key Qualities is Possible, within the localised area around the boundary of the WLA. This is largely based on the fact that the Proposed Development towers would be seen as larger and more robust than existing wood poles, and would usually be situated further uphill and closer to the WLA boundary. This which would contribute to an increased presence of built artefacts within this context and a more obvious boundary, leading to a greater sense of the limited extent of the WLA to the east. It would also lead to a possible diminished perceived sense of awe and naturalness and therefore perceived wildness in general on the slopes of the red Cuillin Hills, particularly Glamaig and in the vicinity of Loch Ainort. Although this part of the WLA displays lower levels of wildness, its proximity to the A87 which allows greater numbers of people, and particularly visitors, to appreciate those wild land attributes which are present is considered to add to the sensitivity of this area.

4.1.14 Taking the above aspects into account, the potential for significant effects on the WLA is considered to be **Possible**.

Table 4.3: Analysis of Potential Effects on the Key Qualities of WLA 23: Cuillin

Special Quality	Analysis	Potential for Significant Effect
Superlative high, steep, rocky mountains that are extremely rugged and contrast to the surrounding peatland and sea, emphasising a sense of awe;	The presence of the Proposed Development around the bases and lower slopes of the Red Cuillin mountains has the potential to affect the appreciation of the height and drama of these mountains when seen from outwith the WLA and within its edges. This is anticipated to be most noticeable around Sconser an in Gleann Torra-mhichaig where the baseline alignment is relatively high up the slope of Glamaig and sense of awe in relation to this steeply rising slope may be affected.	Possible
A circle of mountains that contain a remote and secluded interior and a strong sense of sanctuary, with contrasting outward-facing slopes where human elements are more influential;	The Proposed Development would not affect the inner area where the sense of seclusion is felt, although could, in places, affect transitional areas which approach the interior, such as at Luib where the Proposed Development towers would be more visible than existing wood poles. On the exterior outer slopes, whilst existing features already affect these areas the sense of proximity to the WLA is also felt. The Proposed Development would appear more robust and would typically be located higher up the mountainside than the existing wood poles which would be replaced, which are particularly referred to in the citation as drawing development up onto the mountainside. This has potential to further contribute to a sense of encroachment of development around the outer slopes of the WLA and to contribute to a more noticeably defined edge in some areas where there is lesser existing development, such as Gleann Torra-mhichaig or around Loch Ainort, which would give a greater understanding of the extent of the WLA.	Possible
A strong contribution of the sea to remoteness and the sense of naturalness and awe, as well as influencing the perceived extent of the area; and	This Key Quality more directly references areas in the south of the WLA where wild coastline is present. However, within the study area, the situation of the Proposed Development on the seaward side of the WLA gives potential to affect this relationship in the local area, particularly in areas around Loch Ainort where existing development is less influential, but also in other areas such as Loch Sligachan where proximity to the WLA is closely perceived.	Possible
A concentrated mountain area accessed by many	The Proposed Development would be located around the outside boundary of the WLA following the A87 where	Possible

different visitors to experience wild land qualities.	accessibility is most noticeably present. It is anticipated that new access routes for construction would be largely temporary, though some existing tracks may be more permanently upgraded. The Proposed Development would not affect accessibility or the busy nature of certain locations within the WLA which reduces sense of solitude locally but may affect the existing experience of less able visitors who appreciate the wild land characteristics from the A87, although the strength of attributes which can be experienced in these areas is inevitably already reduced.	

4.2 Visual Amenity

4.2.1 This section provides an appraisal of the potential for significant effects to the visual amenity of visual receptors identified within the Study Area as described in Section 3.4.

4.2.2 The detailed appraisal of visual receptors is included in Annex 1. A summary of the key issues is provided in Table 4.4 and the paragraphs which follow.

Table 4.4: Summary of Potential for Significant Effects to Visual Receptors

LCT	Potential for Significant Effects	
	During Construction	During Operation
Settlement Areas		
S1 – Crossal	Unlikely	Unlikely
S2 – Sligachan	Likely	Likely
S3 – Peinachorrain	Possible	Possible
S4 – Sconser	Likely	Possible
S5 – Kinloch Ainort	Possible	Possible
S6 – Luib	Likely	Likely
S7 – Ard Dorch and Corran a' Chinn Uachdaraich	Unlikely	Unlikely
S8 – Dunan and Strollamus	Likely	Likely
S9 – Old Corry and Coire-chat-achan	Unlikely	Unlikely
S10 – Broadford and surrounding area	Unlikely	Unlikely
Roads		
R1 – A87	Likely	Likely
R2 – A863	Possible	Possible
R3 – B8083	Unlikely	Unlikely
R4 – Minor Road between Loch Ainort and Sconser via Moll	Likely	Likely
Recreational Routes		
RR1 – Mountain paths commencing at Sligachan	Possible	Possible
RR2 – Sligachan to Peinachorrain Path	Likely	Likely
RR3 – Mountain Routes from Loch Ainort	Possible	Possible
RR4 – The Torrin Ring from Luib	Likely	Likely
RR5 – Core Paths around Broadford	Unlikely	Unlikely

4.2.3 As can be discerned from the above table, **Likely** significant effects are anticipated for four Settlement areas (including interior and exterior views from gardens and public areas) during construction: S2 (Sligachan); S4 (Sconser); S6 (Luib); and S8 (Dunan and Strolamus). **Likely** significant effects would be anticipated to continue into the operational phase for all these areas other than S4 (Sconser) where **Possible** significant effects are anticipated during operation. In addition, **Possible** significant effects have been identified for two further settlement areas during construction and operation: S2 (Pienachorrain); and S5 (Kinloch Ainort).

4.2.4 All of these predicted significant effects would relate to the potential appearance of the Proposed Development within mountain and coastal views where construction activities or permanent towers would be anticipated to form a distracting new feature. Where significant effects are considered Likely, this is due to the closer proximity and prominence of the Proposed Development (such as in in views from Luib or Strollamus) or increased value or sensitivity to the viewer (such as popular views from tourist areas at Sligachan or Peinachorrain). Where significant effects are considered Possible, this concerns areas where there are more potentially mitigating factors, such as the Proposed Development being likely to be situated outwith the main view, or likely to be slightly more distant in the view.

4.2.5 Four settlement areas were identified where significant effects are considered to be **Unlikely** due to greater distance from the Proposed Development and intervening landform and vegetation which would screen or filter the view: S1 (Crossal); S7 (Ard Dorch and Corran a' Chinn Uachdaraich); S9 (Old Corry and Coire-chat-achan); and S10 (Broadford and surrounding area).

4.2.6 **Likely** significant effects were also identified for two road routes and two recreational paths during both construction and operation. From the roads: R1 (A87) and R4 (Minor Road between Loch Ainort and Sconser via Moll) the Proposed Development would be situated closeby and would intrude into views towards the mountain landscape, and in some areas the coast, which are particularly valued by visitors and tourists and associated with the NSA designation. The Proposed Development would also cross recreational routes RR2 (Sligachan to Peinachorrain Path) and RR4 (The Torrin Ring from Luib) and would therefore appear as a close feature in the view. It would also appear in more distantly, likely to distract from views towards the mountains and coast.

4.2.7 As a potentially distracting but less immediate feature in views towards both the mountains and across the coastal seascape the Proposed Development is anticipated to result in **Possible** significant effects to users of routes: R1 (A863); RR1 (Mountain paths commencing at Sligachan); and RR3 (Mountain Routes from Loch Ainort) although these effects may be more localised.

4.2.8 Significant effects to visual receptors on Routes R3 (B8083) and RR5 (Core Paths around Broadford) would be **Unlikely**, due to the distance of this route from the Proposed Development, screening effects of existing forest, and presence of existing, similar infrastructure in the view.

5. POTENTIAL FOR MITIGATION

5.1.1 The potential to reduce significant landscape and visual effects through mitigation has been considered. Possible mitigation measures considered have included primary mitigation (mitigation through design) and secondary mitigation (additional measures to offset significant effects).

Potential Primary Mitigation Opportunities

5.1.2 Opportunities for primary mitigation have considered alignment modifications, and alternative technology solutions. Those measures considered are outlined in Table 5.1.

Table 5.1: Primary Mitigation Measures Considered

Ref.	Mitigation Option Considered	Potential Residual Effects	Potential Benefits
M1	Realignment of the Proposed Development to move it out of the NSA: For the majority of the baseline alignment it would be difficult to achieve an alignment outwith the NSA due to the constrained space between the NSA and the coast. The only possible change could be to realign through Gleann Torra-mhichaig to the eastern side of the road and Druim nan Cleochd.	There would be a reduced impact for travellers on one part of the A87 but continued effects elsewhere and the Proposed Development may be prominent in crossing the road near Sconser. Effects on users of the A87 and the NSA would continue to be **Likely**.	Potential limited, localised benefits
M2	Realignment of the Proposed Development to move it out of the WLA: Potential to move part of the baseline alignment between Luib and Strollamus out of the WLA in order to prevent direct effects.	The movement of the baseline alignment in this area would move towers closer to some parts of Strollamus. There would be little improvement to effects on the WLA which are considered more likely to occur in relation to indirect effects. Potential for significant effects to the WLA would be anticipated to continue to be Possible.	Unlikely to be beneficial
M3	Realignment of the Proposed Development to move it further from visual receptors. This has been considered in relation to visual receptors anticipated to have Likely operational significant visual effects as follows:		
M3.1	• S2 – Sligachan	Movement of the baseline alignment further from Sligachan would move it into the tidal zone of Loch Sligachan which is not preferred for technical reasons. Improvement to visual effects would be limited as the towers would still cross views down Loch Sligachan. Significant effects may still be **Possible**.	Unlikely to be beneficial
M3.2	• S6 – Luib	Movement of the baseline alignment further from properties would increase the altitude of towers. Towers would continue to be very prominent and there would be potentially increased landscape effects in relation to the NSA and	Unlikely to be beneficial

		WLA. Significant effects would continue to be **Likely**.	
M3.3	• S8 – Dunan and Strollamus	Movement of the baseline alignment further from properties would increase the altitude of towers, potentially making this more prominent and increasing the effect on the NSA and WLA. Significant effects would continue to be **Likely**.	Unlikely to be beneficial
M3.4	• R1 – A87	As discussed under M1, there are few locations where the baseline alignment could be moved to the opposite side of the road, limited to Gleann Torra-mhichaig. Movement further from the road in other areas would lead to towers appearing higher up the slope, potentially increasing landscape effects and still interrupting views towards the mountains from the road. Therefore, potential for significant effects would continue to be **Likely**.	Potential limited, localised benefits
M3.5	• R4 – Minor Road between Loch Ainort and Sconser via Moll	Movement away from this route would require the baseline alignment to move either into the tidal zone of Loch Ainort or towards or the west of the A87, thereby affecting sensitive views into the mountain interior from this area. Whilst this would improve the view from the Minor Road, leading to significant effects being **Unlikely**, it would be likely to increase effects on A87 users and a sensitive part of the NSA.	Unlikely to be beneficial
M3.6	• RR2 – Sligachan to Peinachorrain Path	It would not be possible to move the baseline alignment away from this recreational route without moving it closer or to the west of Sligachan which would increase the visual effects on this area, and the appreciation of the NSA. There would be continued effects to views towards Glamaig and the NSA and significant effects would still be **Possible**.	Unlikely to be beneficial
M3.7	• RR4 – The Torrin Ring from Luib	Movement of the baseline alignment to the north of the route between Luib and Dunan would improve the view towards the mountains and NSA as well as removing part of it from the WLA. However, towers would remain prominent from this route and would still cross parts of it. Therefore, potential for significant effects would be anticipated to remain **Likely**.	Potential limited localised benefits
M4	Temporary solutions during construction to minimise permanent effects.	Use of temporary track and ground reinforcement solutions for access	Some benefit for

		and working areas and a high standard of reinstatement for other working areas would help to limit the long term footprint of the Proposed Development but **Possible** and **Likely** significant effects would still be anticipated in relation to towers.	reducing longer term effects
M5	Alternative technology – Buried cable:	The installation of buried cable would remove many of the longer term visual and landscape effects, in addition to the removal of the existing effects occurring in relation to the removal of the existing 132 kV wood pole OHL. However, significant effects during construction would remain and could be potentially greater due to the requirement to access and excavate the full alignment rather than just tower positions. There could be longer term visible changes to vegetation cover within cable corridors which could affect some of the characteristics of wild land but this would be a lesser effect than towers and **Unlikely** to be significant. The benefits of underground cabling would depend on the length of cable which could be achieved through the study area with a focus on the sensitive areas around Loch Sligachan and Loch Ainort likely to be most beneficial.	Likely to be beneficial for some sections of the alignment

Secondary Mitigation

5.1.3 Opportunities for secondary mitigation have considered potential areas where planting or other features could be used to offset significant effects. These are detailed in Table 5.2.

Table 5.2: Primary Mitigation Measures Considered

Ref.	Mitigation Option Considered	Potential Residual Effects	Potential Benefits
M6	Opportunities for planting at Luib: Existing scattered trees and native woodland is present at Luib. There may be potential to build on these existing areas with strategic planting to help to screen specific views from properties or specific towers.	The potential to plant in this area may be dependant on other factors and may not conceal all views of towers. Mitigation could also result in other existing views being screened. It is considered that significant effects may still be **Possible**.	Possible limited benefits
M7	Opportunities for planting at Strollamus: Existing woodland areas are present along this section of coast and would already mitigate views of the Proposed Development from parts of Dunan and Strollamus. There is potential to build on these existing woodland	The potential to plant in this area may be dependant on other factors and may not conceal all views of towers. Mitigation could also result in other existing views being screened. It is considered that significant effects may still be **Possible**.	Possible limited benefits

	areas to help to mitigate views from other properties of the Proposed Development.		
M8	Promotion of alternative views: There may be some potential to compensate for the significant effects occurring at some parts of the route by the promotion of other views and viewing locations where the Proposed Development does not affect the view. For example promotion of coastal views in areas where the alignment is on the seaward side or promotion of mountain views in areas where the alignment is closer to the coast. This could involve re-use of working areas or establishment of new specifically designed viewing areas.	These measures may provide some compensation which would offset significant effects for tourists and travellers. However, they would not be expected to remove effects occurring in settlement areas or the NSA or WLA which would remain **Likely** or **Possible**.	Possible localised benefit for tourists and visitors

5.1.4 As detailed above, the benefits of primary mitigation opportunities would largely be offset by increased negative effects to other landscape or visual receptors. Potential improvements may be limited to possible minor realignments through Gleann Torra-mhichaig and between Strollamus and Luib. However, the viability of these measures would be dependent on other constraints and would lead to only limited improvement to potential for significant effects. Further opportunities for secondary mitigation would include potential for strategic woodland planting around Luib and Strollamus which may give localised benefits and offset some significant effects for individual receptors. In addition, the promotion of locations where alternative views to mountain and coastal areas could be enjoyed without visual effects from the Proposed Development may help to offset some visual effects for tourists and visitors. However, by and large all these measures would bring only small benefits and Likely visual effects would continue to be anticipated for the Cuillin Hills NSA and visual receptors at some settlement areas and using road and recreational areas.

5.1.5 The most viable mitigation for longer term significant effects is likely to comprise the use of buried cable as an alternative to an overhead line for some or all of this section. The implementation of underground cabling would still lead to significant effects during construction, but would be expected to lead to operational significant effects being Unlikely for most receptors. There would also be a net improvement by the removal of the existing 132 kV wood pole OHL, with only smaller distribution lines remaining above ground throughout Section 2. The installation of buried cable would lead to a requirement for above-ground sealing end compounds at either end of undergrounded sections which would lead to potential for significant landscape and visual effects depending on their location. It would therefore be most beneficial to implement as long a continuous section of underground cable as possible, in order to minimise the need to accommodate sealing ends.

6. SUMMARY AND CONCLUSIONS

6.1.1 The LVA undertaken for the Proposed Development has concluded that significant effects to the landscape and visual resource would be Likely, including **Likely** significant effects to the Cuillin Hills NSA, visual receptors at settlement and tourist areas throughout the study area using a number of road and recreational routes, including the popular A87 trunk road. Further significant effects to Wild Land Area 23. Cuillin, as well as other residential and recreational visual receptors within the study area are also considered **Possible**.

6.1.2 Primary and secondary mitigation has been considered to offset these anticipated effects. However, it is considered that significant effects would generally be difficult to offset and most Likely significant effects could not be easily mitigated by realignment or secondary mitigation such as planting. The most effective mitigation for the Proposed Development is anticipated to be partial or full undergrounding of the Proposed Development which, although would continue to result in **Likely** significant effects during construction and some possible changes during operation, would result in the potential for most long term significant effects being **Unlikely**.

7. REFERENCES

Publications

Horner+Maclennan and Wood, Mike (2011) Assessment of Highland Special Landscape Areas. SNH/THC

Landscape Institute and Institute of Environmental Management & Assessment (2013). Guidelines for Landscape and Visual Impact Assessment. 3rd Ed. Routledge.

NatureScot (2020). Assessing Images of Wild Land Areas: Technical Guidance (available at: https://www.nature.scot/assessing-impacts-wild-land-areas-technical-guidance).

Scottish Government (2014). National Planning Framework 3: A Plan for Scotland: Ambition, Opportunity, Place (NPF3). (available at: http://www.gov.scot/Topics/Built-Environment/planning/NPF3-SPP-Review/NPF3).

Scottish Government (2000). Planning for Natural Heritage: Planning Advice Note 60. (available at: http://www.gov.scot/Publications/2000/08/pan60-root/pan60).

Scottish Government (2014) Scottish Planning Policy (SPP). (available at: http://www.gov.scot/Publications/2014/06/5823).

Scottish Rights of Way and Access Society (2011). Scottish Hill Tracks. Scottish Mountaineering Trust.

Scottish Natural Heritage (SNH) (now NatureScot) (2002). Policy Statement 02/03: Wildness in Scotland's Countryside. (available at: http://www.snh.gov.uk/docs/A150654.pdf).

SNH (now NatureScot) (2017) Description of Wild Land Area 23: Cuillin (available at: https://www.nature.scot/sites/default/files/2021-06/Wild%20land%20Description%20Cuillin-July-2016-23.pdf).

SNH (now NatureScot) (2019) Scottish Landscape Character Types and Descriptions (available at: https://www.nature.scot/professional-advice/landscape/landscape-character-assessment/scottish-landscape-character-types-map-and-descriptions)

Scottish Natural Heritage/The Countryside Agency (2002) Landscape Character Guidance for England and Scotland (available at: http://publications.naturalengland.org.uk/publication/2671754?category=31019).

The Highland Council (2012). The Highland-wide Local Development Plan (HwLDP). (available at: http://www.highland.gov.uk/info/178/local_and_statutory_development_plans/ 199/highland-wide_local_development_plan).

The Highland Council (2016). West Highlands and Islands Local Development Plan (WestPlan). (available at: https://www.highland.gov.uk/downloads/file/21199/westplan_adopted_september_2019).

Websites

Bingmapping. [ONLINE] (available at: https://www.bing.com/maps). [last accessed 23rd July 2021].

Google Maps. [ONLINE] (available at: https://www.google.co.uk/maps). [Last accessed 23rd July 2021].

SNHi. Natural Spaces. [ONLINE] (available at: http://gateway.snh.gov.uk/natural-spaces/index.jsp) [last accessed 16th July 2021].

Walkhighlands. [ONLINE] (available at: http://www.walkhighlands.co.uk/). [last accessed 21st July 2021].

ANNEX 1: APPRAISAL OF POTENTIAL VISUAL RECEPTORS

Table 1: Settlement Areas

Receptor Description	Existing views	Sensitivity	Potential Effects	Potential for Effects to be Significant
S1 – Crossal Residents and visitors to a group of properties, in slightly elevated position to the north side of the the A836.	Main orientation of views is south or south-west across the road and down Glen Drynoch towards forested slopes and mountain peaks in distance. Some views may be obtained towards the Cuillins to the south-east,	Low	The Proposed Development is anticipated to be imperceptible in east-south-easterly views being over 2 km from the receptor location with existing commercial forest plantation also likely to conceal it in the view.	During construction: **Unlikely** During operation: **Unlikely**
S2 – Sligachan Residents, visitors and tourists in and around a hotel, campsite and lodge properties situated at the head of Loch Sligachan. This is a popular stopping point for the purpose of appreciating the view.	Views from in and around Sligachan are from low vantage or slightly elevated from campsite area, to the south and south east towards the Black and Red Cuillin and also to the east down Loch Sligachan.	High	The Proposed Development would be very visible in easterly and south-easterly views crossing the head of Loch Sligachan and following the south site of the A87 towards Sconser. Although replacing existing wood poles the towers would be higher and more prominent and may give the impression of ringing the base of Glamaig and creating a visual barrier between the receptor location and the coastal waters of Loch Sligachan, thereby interrupting the relationship of the coastal and mountain landscape in views.	During construction: **Likely** During operation: **Likely**
S3 – Peinachorrain Residents and visitors at linear crofting settlement on north side of Loch Sligachan at its seaward end. Visitors to viewpoint and picnic area overlooking Loch Sligachan.	Predominant easterly orientation or south-east for southernmost properties across crofts and open water towards the offshore islands and obliquely towards Sconser and Glamaig. Views from the picnic area are predominantly to south across Loch Sligachan to Sconser and Glamaig.	Medium to High	The Proposed Development would be evident crossing the lower mountain slopes in southerly views across Loch Sligachan from the most southerly properties at around 1.2 km and the picnic area. This typically would be outwith the main focus of the view from properties though would form more of a focus in views from the picnic area and possibly gardens. This may lead to the more developed landscape appearing to extend further up the mountainside, away from the coastal fringe.	During construction: **Possible** During operation: **Possible**

S4 – Sconser Residents and visitors of linear crofting settlement, roadside houses and hotel. Passengers waiting at ferry terminal and bus stop and recreational users of golf course.	Views from Sconser are predominantly orientated towards the coast but views towards Glamaig, to the rear of the settlement are obtained from the rear of properties and garden areas, particularly from properties on the landward side of the A87.	Medium	The Proposed Development would appear within rear views from properties and garden views crossing the mountain-side at distances of between 150 - 500 m. The Proposed Development would replace and be less frequent than existing wood poles but structures would be taller and more visible. Would interrupt views towards mountains where obtained and may lead to an increased a sense of visual disconnect between the settlement and mountains.	During construction: **Likely** During operation: **Possible**
S5 – Kinloch Ainort Residents and visitors of a cottage and workers at a fish farm base near head of Loch Ainort on the north side.	The main focus of view is to the south and south-east across Loch Ainort featuring the mountains of Glas-bheinn Mhòr and Gàrbh-bheinn. Side and oblique views towards other surrounding mountains and down loch Ainort	Residents: High \ Workers: Low	The Proposed Development would feature in main, side and oblique views between 350 m to 1.3 km distant, as a replacement to existing wood poles. Towers would be less frequent than wood poles but taller and more noticeable. Towers would appear closer in rear and side views and less prominent in main views over the loch, but may contribute to a sense of visual disconnect between the coastal seascape and mountains.	During construction: **Possible** During operation: **Possible**
S6 – Luib Residents and visitors to a small settlement of cottage and surrounding crofts.	Predominantly coastal aspect to views although the arrangement of properties around a small bay and burn outfall leads to some views being more oblique to the shoreline of Loch Ainort with a wider field of view inland. Views from external areas including gardens and crofts are both coastal and inland towards surrounding peaks.	Medium	The Proposed Development would feature in rear, oblique and side views at a minimum distance of 250 m replacing existing. Although generally outwith the main view, towers have the potential to be prominent, would potentially skyline and may create a visual barrier between the settlement and mountains.	During construction: **Likely** During operation: **Likely**

S7 – Ard Dorch and Corran a' Chinn Uachdaraich Residents and visitors to a group of properties on the south side at the mouth of Loch Ainort and on the opposite shore of Loch na Cairidh on Scalpay.	Predominantly coastal orientation, north and north-east from Ard Dorch, occasionally filtered by trees, towards the offshore islands and south-west from Corran a' Chinn Uachdaraich towards the mainland mountains.	Low	The Proposed Development would be unlikely to be perceptible from Ard Dorch due to intervening land form and vegetation. From Corran a' Chinn Uachdaraich towers would be perceptible crossing the coastal foothills of the mainland but are considered unlikely to be lead to a significant effect due to distances of over 1.8 km.	During construction: **Unlikely** During operation: **Unlikely**
S8 – Dunan and Strolamus Residents and visitors of a linear settlement along coast of Loch na Cairidh	Predominantly easterly or north-easterly orientation with views across Loch na Cairidh towards Scalpay, some slightly filtered by trees. Inland views are more limited at Dunan but the more open situation of properties at Strollamus results in wider secondary views inland featuring the surrounding hills.	Medium	Rear and side views of the Proposed Development would be less noticeable from properties at Dunan due to trees and land form but towers would be around 250 – 300 m to the rear of some properties at Strollamus which have a more open situation, particularly the more elevated ones inland of the A87. The towers would be less frequent than existing wood poles but the taller structures would be more prominent in rear views from some properties.	During construction: **Likely** During operation: **Likely**
S9 – Old Corry and Coire-chat-achan Residents and visitors of a linear group of properties on minor road to south of Braodford Substation.	Main, easterly orientation to view across moorland and fields/rough and towards nearby forestry.	Low	Potential oblique or side views may feature the Section 2 alignment on the approach to Broadford Substation but would depend on potential felling requirements of forest area. Even with felling, likely to be of minimal perceptibility.	During construction: **Unlikely** During operation: **Unlikely**
S10 – Broadford and surrounding area Residents, visitors and shoppers or travellers within settlements of Broadford, Corry, Harrapool, Waterloo, Skulamus, Breakish, Ashaig and scattered coastal properties.	Variety of mixed views featuring properties, coastal views and surrounding hills with the Cuillin hills more distantly to the west.	Low	Section 2 of the Proposed Development may be perceptible in westerly views as it descends the hill on the approach to Broadford Substation but would be likely to have limited perceptibility.	During construction: **Unlikely** During operation: **Unlikely**

Table 2: Roads

Receptor Description	Existing views	Sensitivity	Potential Effects	Potential for Effects to be Significant
R1 – A87 Commuters and recreational travellers / tourists on main route between Broadford and Portree. Tourists and visitors stopped at various parking laybys and viewpoints along the route.	A variety of passing and sequential views of surrounding mountains and coastline, with particular views into the mountains obtained at the head of Loch Sligachan and Loch Ainort where parking laybys and popular viewing areas are located.	Static Receptors: High / Travellers: Medium	The Proposed Development would frequently be seen from the A87 interrupting mountain views and in locations rounding the heads of Lochs Sligachan and Ainort would interrupt views towards the coast. This has the potential to create form a visual barrier between the road and valued views. Although replacing existing wood poles, towers would be more prominent throughout this section of road, and would distract from mountain and coastal views, affecting appreciation of the NSA.	During construction: **Likely** During operation: **Likely**
R2 – A863 Commuters and recreational travellers / tourists on route between Sligachan and Dunvegan	Within the study area, views from this route are focussed when travelling east on the Cuillins and less expansive views when travelling west. On descending towards Sligachan, elevated views down Loch Sligachan are revealed.	Medium	On descending towards Sligachan, the Proposed Development would be seen crossing the head of Loch Sligachan and along the lower part of Glamaig. This would interrupt the views down Loch Sligachan and could be potentially distracting.	During construction: **Possible** During operation: **Possible**
R3 – B8083 Commuters and recreational travellers / tourists on route between Broadford and Elgol	Within the study area, views across rural outskirts of Broadford and open moorland and forest with existing OHL. Mountains are seen to west from areas where forest does not obscure views.	Low	Section 2 of the Proposed Development would potentially be perceptible from this route within the study area on its approach to Broadford substation but would be unlikely to be distracting in the view.	During construction: **Unlikely** During operation: **Unlikely**
R4 – Minor Road between Loch Ainort and Sconser via Moll Recreational users or residential commuters on single track road around coastline	Coastal views towards the offshore isles and across Loch Ainort. On approach to Kinloch Ainort and Sconser, views along the coastline, inland feature a backdrop of mountains.	High	There would be no perceptible view of towers from a large part of this route but the Proposed Development would be close and prominent from the section at Kinloch Ainort and would interrupt views towards the surrounding mountains when travelling towards Kinloch Ainort and Sconser.	During construction: **Likely** During operation: **Likely**

Table 3: Recreational Routes

Receptor Description	Existing views	Sensitivity	Potential Effects	Potential for Effects to be Significant
RR1 – Mountain paths commencing at Sligachan Walkers and other recreational users of a number of mountain and glen routes which commence near to the Sligachan Hotel. Includes Scottish Hill Track 292: Elgol to Sligachan Hotel.	Striking and impressing views of surrounding mountains from lower areas and wide ranging views of mountains and coastline in elevated views.	Medium	Within the study area views of the Proposed Development would be largely limited to towers crossing the head of Loch Sligachan and ascending to Glen Varragill Forest on the opposite hills slopes when approaching Sligachan Hotel. This would be limited, and other developed features are already present in these views, though the towers could be more distracting. From the summit of Glamaig and ridge between Beinn Dearg Mheadhonach and Bealach na Sgàirde the alignment would be seen rounding Loch Ainort and may emphasise the divide between the mountains and developed coastal lands though it would be seen in the context of the busy road.	During construction: **Possible** During operation: **Possible**
RR2 – Sligachan to Peinachorrain Path Walkers or bikers following coastal path on north shore of Loch Sligachan	Views across the open water of the loch towards Sconser and Glamaig, up loch to east towards Sligachan and down the loch towards the offshore islands.	High	Looking across the Proposed Development would be seen cutting across the lower part of Glamaig with the potential impression of ringing the base of the mountain, creating a visual interruption between the coastal and mountain landscapes. The Proposed Development towers would cut across the top of Loch Sligachan and the path interrupting coastal views its eastern side and mountain views from its western side.	During construction: **Likely** During operation: **Likely**
RR3 – Mountain Routes from Loch Ainort Walkers ascending / descending Garbh-bheinn via either of two routes	Views inwards amongst the mountains of the Red Cuillins and towards Garbh-bheinn. Elevated views across and down Loch Ainort, becoming more extensive with increased height and leading to far ranging views across the coastline to the east and towards the Black Cuillin to the west, from the summit.	High	From lower parts of the route the Proposed Development may be very noticeable and potentially distracting in views over Loch Ainort and the coast. From higher areas, the Proposed Development would be likely to be perceptible but less obvious in the coastal views.	During construction: **Possible** During operation: **Possible**

RR4 – The Torrin Ring from Luib (Scottish Hill Track 290) Walkers or cyclists using three longer distance paths or a combinations of these – Luib to Strollamus (also a Core Path), Luib to Torrin or Strollamus to Torrin	Open expansive inland views up the straths and of surrounding hills and mountains. An existing wood pole lines interrupts the view slightly from the track between Luib and Strollamus. Coastal views from the ends of the routes near Luib and Strollamus.	High	The route between Strollamus and Luib would run alongside the Proposed Development and, whilst replacing existing wood poles, would be more prominent and distracting in the open views up the straths and towards the hills. Towers would also be seen when approaching the northern end of the other routes which would pass below them potentially interrupting and affecting coastal views.	During construction: **Likely** During operation: **Likely**
RR5 – Core Paths around Broadford Walkers or cyclists using a number of paths around the western side of Broadford	Variety of views across coastal and moorland areas and within forest. Existing steel lattice towers can be seen cutting through the forest in some views.	Low	There would be some views from parts of these routes but the context of surrounding forest areas and existing steel lattice towers would be likely to limit potential effects.	During construction: **Unlikely** During operation: **Unlikely**

ANNEX 2: APPRAISAL OF LANDSCAPE CHARACTER TYPES

Table 1: LCT 357 – Farmed and Settled Lowlands - Skye & Lochalsh

Potential Landscape Receptors	Landscape Sensitivity	Potential Effects	Potential for Effects to be Significant
• Sharp contrast between human activity and small-scale land use patterns, and the surrounding large scale, mainly uninhabited, landscapes. • Contrast of green pasture with surrounding muted colours of rough grass land. • Margins of broadleaved woodlands in sheltered areas. • Existing croft patterns	Within the study area, this LCT typically lies around the fringes of The Cuillin Hills NSA and has a close relationship with it. The small scale of the landscape in relation to surrounding mountains is typically susceptible to large scale change although the presence of existing smaller OHLs may create some precedence for a larger OHL to be present. Sensitivity is High	The Proposed Development would not pass through this LCT but would pass close to the inland side of it in areas near Sconser, Luib, Dunan and Strollamus. During construction there would be a likely level of disruption to some of parts of the LCT and potential for temporary direct effects from access and site establishment which could lead to changes in vegetation patterns. In the operational context, although the Proposed Development would replace existing wood pole OHLs in this area, the larger scale of the Proposed Towers and greater spread of conductors, and the typical alignment higher up the hillside would create a more prominent feature which would create a greater sense of disconnect between the low lying settled fringes and croft land and the mountainous landscape to the rear which could affect the visual relationship of the these areas, cited as a Special Quality of the NSA. The Proposed Development would also draw the appearance of development further up the hill potentially leading to some blurring of the contrast in land cover and land use.	During Construction: **Likely** During Operation: **Likely**

Table 2: LCT 358 – Low, Smooth Moorland

Potential Landscape Receptors	Landscape Sensitivity	Potential Effects	Potential for Effects to be Significant
• Simple composition with horizontal or gently sloping skyline; and • Expansive and open character, with views of mountains, islands and sea, channelled by adjacent hill slopes.	This LCT is found around in two areas of differing character within the study area: at Sligachan where the character is open and coastal; and near Broadford substation which is forested in character. The Sligachan sub-area is partly in The Cuillin Hills NSA and WLA 23 and the open character which forms a transitional link between the mountains and the sea is considered to be very susceptible to change. The forested character with existing substation and steel lattice OHL at Broadford is less susceptible to change. Sensitivity is High at Sligachan and Low at Broadford.	At Sligachan, the Proposed Development would cross the head of Loch Sligachan outwith the tidal area. Although a replacement to existing wood poles, the towers would be taller and likely to be more prominent, and would more directly influence this landscape than the wood pole line which is further to the east within the tidal zone. This would create a strong linear feature, emphasising the separation between the land and the sea. Towers would form new vertical foci within the low lying flat landscape and would interrupt and distract within the framed seaward views which are obtained down Loch Sligachan. This has the potential to affect the existing relationship between the inland landscape and the coast in this area.	During Construction: **Likely** During Operation: **Likely**
		At Broadford Substation, the Proposed Development would not directly affect the LCT but would be seen to the east descending to the substation. Whilst this may affect some views, the lower sensitivity of the LCT in this area and existing OHL steel lattice towers which create a precedent for such development are considered to lead to significant effects being unlikely.	During Construction: **Unlikely** During Operation: **Unlikely**

Table 3: LCT 359 – Upland Sloping Moorland

Potential Landscape Receptors	Landscape Sensitivity	Potential Effects	Potential for Effects to be Significant
• Simple composition with distance and scale difficult to judge, except where roads, powerline or wind turbines introduce scale; • Exposed and open character with extensive views to surrounding mountains, islands, coastlines and the sea.	Located to the north and west of Sligachan and a very small area in the west of the study area which is discounted in this appraisal. This LCT is largely outwith the NSA but maintains a close association due to its proximity and the mountain views which dominate the area. Sensitivity is High	One tower of the Proposed Development would be just inside this LCT near Sligachan. The Proposed Development would also be seen in the wider context and may form a new visual focus, and greater sense of visual scale, although roads and forest areas which are present already give a sense of scale to some degree. The Proposed Development would also be seen in the wider context from some areas, particularly traversing the lower slopes of Glamaig, potentially creating an interruption to relationship between mountains and coast. They would also interrupt the more elevated views down Loch Sligachan from this LCT which could create a sense of disconnect between the LCT and the sea and coastline. However, the visual relationship with the southern mountains would not be affected.	During Construction: **Possible** During Operation: **Possible**

Table 4: LCT 360 – Stepped Moorland

Potential Landscape Receptors	Landscape Sensitivity	Potential Effects	Potential for Effects to be Significant
• Distinctive stepped landform with repetitive pattern of vertical faces and gently; sloping or slanting terraces. • Terraces forming steeper cliffs or promontories along coastline. • General lack of settlement; and • Exposed and open character with, extensive visibility.	This LCT falls generally outwith designated landscapes within the study area although maintains a close visual association with The Cuillin Hills NSA and falls partially within WLA and SLA boundaries outwith the study area. Its open and exposed character and perceived remoteness are susceptible to change although its broadscale patterns of forestry occasional settlement and roads give some opportunities to accommodate OHL development if well sited. Nevertheless, within the study area, the steep coastal hill-slopes are considered highly susceptible to change. Sensitivity is Medium to High.	This LCT comprises the typical character type of northern Skye and only a small portion of the Proposed Development in Section 2 at its northern end falls within its edge, transitioning with LCT 358. This would have a limited effect on the appreciation of this LCT. However, in the context to the south of the LCT, the Proposed Development would be seen crossing the head of Loch Sligachan and traversing the lower slopes of Glamaig. Whilst this visual connection to the adjacent mountain landscape is not cited as one of the key characteristics of the LCT, at a local level the Proposed Development would create some barrier effect between the near and far sides of Loch Sligachan and the mountainous landscape of the Cuillins. Whilst there is already a contrast between the undeveloped northern side of Loch Sligachan where this LCT is located and the more developed southern side the Proposed Development may enhance this sense of separation.	During Construction: **Possible** During Operation: **Possible**

Table 5: LCT 364 – Rocky Moorland - Skye & Lochalsh

Potential Landscape Receptors	Landscape Sensitivity	Potential Effects	Potential for Effects to be Significant
• High proportion of exposed rock with raw and rugged appearance; • Sparse habitation and little obvious land management;. • General lack of landmarks; • Scale and distance difficult to perceive, in larger areas but some power lines and roads introduce human scale; • Rarely visited, giving a sense of isolation and remoteness.	Within the study area this LCT is found on Scalpay and a very small and peripheral area south of Broadford which has been discounted in this LVA. The LCT does not fall within any designated landscapes within the study area, but is valued for its remote and rugged character and as part of the coastal and island landscape and seascape which forms an important setting to the mountains of the NSA. Sensitivity is High.	This LCT would not be directly affected by the Proposed Development and it's situation offshore gives it a sense of separation and isolation from the areas affected. The lowest ground closer to the Proposed Development is mainly forested, which would limit potential intervisibility with the Proposed Development. From higher areas, the Proposed Development may be seen to cross the mountain slopes of the mainland to the west, although at a distance where perceptibility would be fairly limited.	During Construction: **Unlikely** During Operation: **Unlikely**

Table 6: LCT 367 – Smooth Mountain Range

Potential Landscape Receptors	Landscape Sensitivity	Potential Effects	Potential for Effects to be Significant
• Mainly conical mountains separated by wide glaciated straths and glens. • Smooth texture and profile • Roads, forest areas, quarries and power lines located mainly within the edges of the foothills • Uninhabited landscape, accessed by paths and tracks through straths and glens; • Wild character derived from the remoteness, natural landform and lack of human activity, except around the margins of the area.	This LCT falls almost entirely withing the Cuillin Hills NSA within the study area and mostly within WLA 23and is integral to its designation. The simple structure of the landform which rises steeply and continuously from the coastline and glens is highly susceptible to change, although the existing fringe of rural development and roads around the outer area reduces slightly within the local context. Sensitivity is High.	The Proposed Development would be routed around the edge of the LCT and through Gleann Torra-mhichaig where there is already some existing precedent for linear development due to the trunk road and existing wood pole lines. However, although it would replace existing wood pole lines, the towers would be taller and more noticeable with a greater spread of conductors and would typically be located further up the mountain side. This has the potential to create a greater linear barrier, distracting from and affecting the appreciation of the mountains from the surrounding glens and would particularly affect areas around Sligachan and Sconser, through Gleann Torra-mhichaig and around Loch Ainort. It may also affect a sense of remoteness and naturalness of the mountain landscape and the appreciation of the wild characteristics which, although not directly present, can still be sensed around the edges of the LCT. The Proposed Development would also be seen within some areas to create a greater sense of separation between the LCT and the coastal seascape with which it has a strong association.	During Construction: **Likely** During Operation: **Likely**

Table 7: LCT 368 – Angular Mountain Range - Skye & Lochalsh

Potential Landscape Receptors	Landscape Sensitivity	Potential Effects	Potential for Effects to be Significant
• Mountains of high elevation and massive scale; • Contrast with form of adjacent smooth red hills; • Largely uninhabited; • Prominent landmark set within relatively low seascapes and landscapes and visible from great distances; • Complex visual composition in close proximity, with immense vertical scale viewed from valleys and peaks; and • Wild character.	This LCT falls within and is integral to the designation of the Cuillin Hills NSA. It also forms the core of the WLA 23. The dramatic topography, valued views and lack of development are highly susceptible to change of the type proposed. Sensitivity is High.	The Proposed Development would not directly affect this LCT and would have limited intervisibility with it, limited to some views through glens. However, there would be indirect effects relating to the appreciation of the LCT from other external areas, likely to be particularly noticeable around Sligachan. This may lead to a distraction in views towards the distinctive mountains from exterior areas and their role as a landmark, as well as the visual composition of the rugged peaks in relation to the surrounding seascape.	During Construction: **Possible** During Operation: **Possible**

Scottish & Southern Electricity Networks

TRANSMISSION

N

0 0.425 0.85 1.7 2.55 3.4 Kilometers

Scale - 1:60,000

Key

- Study Area
- Tower Position
- Baseline Alignment

Zone of Theoretical Visibility (ZTV): Number of Towers Theoretically Visible within 5km

- Maximum (44)
- Minimum (1)

Project No:	LT91
Project:	Skye Reinforcement Project
Title:	Landscape and Visual Appraisal of Baseline OHL Alignment in Section 2 Figure 1 - Theoretical Visibility of Towers within 5km
Drawn by:	SK 20/09/2021
Drawing:	119026-D-S2-LVA1-1.0.0

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TRANSMISSION

Key

- Study Area
- Tower Position
- Baseline Alignment

Zone of Theoretical Visibility (ZTV): Number of Towers Theoretically Visible within 2.5km

- Maximum (27)
- Minimum (1)

N

0 0.425 0.85 1.7 2.55 3.4 Kilometers

Scale - 1:60,000

Project No:	LT91
Project:	Skye Reinforcement Project
Title:	Landscape and Visual Appraisal of Baseline OHL Alignment in Section 2 Figure 2 - Theoretical Visibility of Towers within 2.5km
Drawn by:	SK 20/09/2021
Drawing:	119026-D-S2-LVA2-1.0.0

Scottish & Southern Electricity Networks
TRANSMISSION

Raasay House GDL

Raasay and Rona SLA

Trotternish and Tianavaig SLA

WLA 23. Cuillin

The Cuillin Hills NSA

N

0 0.425 0.85 1.7 2.55 3.4 Kilometers
Scale - 1:60,000

Key

- Study Area
- Tower Position
- Baseline Alignment

Designated and Protected Landscapes

- National Scenic Area (NSA)
- Special Landscape Area (SLA)
- Wild Land Area (WLA)
- Site Included in the Inventory of Gardens and Designed Landscapes (GDL)

Project No:	LT91
Project:	Skye Reinforcement Project
Title:	Landscape and Visual Appraisal of Baseline OHL Alignment in Section 2 Figure 3 - Designated and Protected Landscapes
Drawn by:	SK 20/09/2021
Drawing:	119026-D-S2-LVA3-1.0.0

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TRANSMISSION

RR2 – Sligachan to Peinachorrain Path
R2 – A863
RR1 – Mountain paths commencing at Sligachan
R4 - Minor Road between Loch Ainort and Sconser via Moll
RR4 – The Torrin Ring from Luib
RR3 – Mountain Routes from Loch Ainort
R1 - A87
RR5 – Core Paths around Broadford
R3 - B8083

S1 S2 S3 S4 S5 S6 S7 S8 S9 S10

Glamaig
Beinn Dearg Mheadhonach
Marsco
Black Cuillin Ridge
Garbh-bheinn

N
0 0.425 0.85 1.7 2.55 3.4 Kilometers
Scale - 1:60,000

Key

- Study Area
- Tower Position
- Baseline Alignment

Potential Visual Receptors

- Settlement Area
- A Road
- B Road
- Minor Road
- Core Path
- Scottish Hill Track
- Other Recognised Recreational Route
- Munro Summit
- Corbett Summit
- Other Summit

Landscape Character Type (LCT)

- LCT 357: Farmed and Settled Lowlands - Skye & Lochalsh
- LCT 358: Low Smooth Moorland
- LCT 359: Upland Sloping Moorland
- LCT 360: Stepped Moorland
- LCT 364: Rocky Moorland - Skye & Lochalsh
- LCT 367: Smooth Mountain Range
- LCT 368: Angular Mountain Range - Skye & Lochalsh

Project No: LT91

Project: Skye Reinforcement Project

Title: Landscape and Visual Appraisal of Baseline OHL Alignment in Section 2
Figure 4 - Landscape Character and Potential Visual Receptors

Drawn by: SK 20/09/2021

Drawing: 119026-D-S2-LVA4-1.0.0