Report on Consultation - Alignment Selection

Sheirdrim 132 kV Wind Farm Connection

Ref: LT000266



Rev					
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# CONTENTS

GLOSSARY	GLOSSARY		
EXECUTIV	E SUMMARY	1	
1.	INTRODUCTION	2	
1.1	Purpose of Document	2	
1.2	Document Structure	2	
1.3	Objectives	2	
2.	THE PROPOSALS	3	
2.1	Project Background	3	
2.2	Project Description	3	
2.3	Selection of a Preferred Alignment	4	
3.	THE CONSULTATION PROCESS	5	
3.1	Consultation History	5	
3.2	Methods of Consultation	5	
3.3	Statutory and Non-Statutory Consultees	6	
3.4	Consultation Questions	6	
4.	CONSULTATION RESPONSES AND KEY ISSUES	7	
4.1	Summary of Engagement from the Virtual Exhibition	7	
4.2	Summary of Feedback – Virtual Consultation and Feedback Forms	7	
4.3	Issues Emerging from Consultation Feedback	8	
4.4	Summary of Feedback - Statutory and Non-Statutory Stakeholders	8	
5.	PROJECT RESPONSES TO CONSULTATIONS	27	
5.1	Overview	27	
5.2	Conclusion	27	
5.3	Proposed Alignment	27	
6.	NEXT STEPS	27	
APPENDIX A – FIGURE			
APPENDIX B – CONSULTATION BROCHURE			

# GLOSSARY

Term	Definition
ABC	Argyll and Bute Council
Alignment	A centre line of an overhead line OHL, along with location of key angle structures.
Amenity	The natural environment, cultural heritage, landscape and visual quality. Also includes the impact of SHE Transmission's works on communities, such as the effects of noise and disturbance from construction activities.
Ancient Woodland	Woodland which has been in continuous existence since before 1750 in Scotland and is important for biodiversity and cultural identity. Ancient semi- natural woodland is Ancient Woodland composed of mainly locally native trees and shrubs that derive from natural seed fall or coppice rather than from planting.
Baseline Alignment	The Baseline Alignment aims to provide the optimal alignment within the Proposed Route, taking account of engineering criteria as per Table A7 of SSEN Transmission guidance.
Barrier & Collision Effects	Barrier effect is where the development creates an obstacle to regular movements of birds (e.g. to and from breeding sites or migration routes). Collision effects are where the proposed development poses a risk of harm to birds through direct contact.
СЕМР	Construction Environmental Management Plan
Centre Line	The linear connection between the central point of each support structure along the length of the overhead line.
Circuit	Overhead line or underground cable consisting of multiple conductors, to carry electric current.
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 and, normally, with the objective of influencing decisions, policies or programmes of action.
Corridor	A linear area which allows a continuous connection between the defined connection points. The corridor may vary in width along its length; in unconstrained areas it may be many kilometres wide.
Desk-based Assessment	A desktop appraisal using existing information (e.g. from online sources, mapping and through information requests to relevant organisations).
European Protected Species	<ul> <li>European protected species are those species listed on:</li> <li>Habitats Regulations 1994 Schedule 2 – European protected species of animal</li> <li>Habitats Regulations 1994 Schedule 4 – European protected species of plants</li> </ul>
	They comprise species of plants and animals protected by law throughout the European Union.
Environmental Impact Assessment (EIA)	A formal process set down in The Electricity Works (EIA) (Scotland) Regulations 2000 (as amended in 2008) used to systematically identify, predict and assess the likely significant environmental impacts of a proposed project or development.
GEMP	General Environmental Management Plan
GWDTE	Groundwater Dependent Terrestrial Ecosystem
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.

Term	Definition
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 (LCT)	Landscape character is defined as the distinct, recognisable and consistent pattern of elements in the landscape. It is these patterns that give each locality its 'sense of place', making one landscape different from another, rather than better or worse.
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).
LOD	Limits of Deviation, an area which defines the practical limits within which micrositing of the OHL infrastructure can occur within the terms of the s37 consent which is to be sought. The purpose of Limits of Deviation is to allow flexibility within a s37 consent for the final micrositing of individual towers to respond to localised ground conditions, topography, engineering, and environmental constraints
LIDAR	A detection system which works on the principle of radar but uses light from a laser.
Local Nature Conservation Site (LNCS)	LNCSs identify locally important natural heritage that could be affected by development.
Micrositing	The process of positioning individual structures to avoid localised environmental or technical constraints.
Mitigation	Term used to indicate avoidance, remediation or alleviation of adverse impacts.
National Scenic Area (NSA)	A national level designation applied to those landscapes considered to be of exceptional scenic value.
Overhead line (OHL)	An electric line installed above ground, usually supported by lattice steel towers or poles.
OPGW	Optical fibre ground wire
PAC	Pre Application Consultation
PAN	Proposal of Application Notice
Plantation Woodland	Woodland of any age that obviously originated from planting.
Proposed Development	The Proposed Development comprises the construction and potation of a 132 kV overhead line (OHL) and underground cable (UGC) to connect the proposed Sheirdrim Wind Farm to Crossaig Substation with an approximate length of 8-11km. The wind farm site and substation are located approximately 11km south-west of Tarbert.
RAG	Red/Amber/Green, rating applied for the comparative appraisal. A high impact is shown as red, a medium impact is shown as amber, and a low impact is shown as green.
Report on Consultation Document	A report that documents the result of a consultation process.
Riparian Woodland	Natural home for plants and animals occurring in a thin strip of land bordering a stream or river.
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.

Term	Definition
Routeing	The work undertaken which leads to the selection of a proposed alignment, capable of being taken forward into the consenting process under Section 37 of the Electricity Act 1989.
Scheduled Monument	A monument which has been scheduled by the Scottish Ministers as being of national importance under the terms of the 'Ancient Monuments and Archaeological Areas Act 1979'.
Semi-natural Woodland	Woodland that does not obviously originate from planting. The distribution of species will generally reflect the variations in the site and the soil. Planted trees must account for less than 30% of the canopy composition
Sites of Special Scientific Interest (SSSI)	Areas of national importance. The aim of the SSSI network is to maintain an adequate representation of all natural and semi-natural habitats and native species across Britain.
Sky-lining	The process of positioning an overhead line along the top of an elevated area.
Span	The section of overhead line between two 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. Implemented under the Wildlife and Countryside Act 1981.
SSEN Transmission	Scottish and Southern Energy Networks Transmission
Stakeholders	Organisations and individuals who can affect or are affected by SHE Transmission works.
Study Area	The area within which the corridor, route and alignment study takes place.
Substation	Part of the electrical transmission and distribution system that transforms voltage from high to low, or the reverse, before switching to another electricity network.
Switching Station	A central node on the network where multiple lines of the same voltage can connect. Switches allow each line in and out to be controlled without affecting the other lines.
Underground Cable (UGC)	An electric line installed below ground.
UXO	Unexploded ordnance
Volts	The international unit of electric potential and electromotive force.
Wayleave	A voluntary agreement entered into between a landowner upon whose land an overhead line is to be constructed and SHE Transmission
Wild Land Area (WLA)	Those areas comprising the greatest and most extensive areas of wild characteristics within Scotland.

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# **EXECUTIVE SUMMARY**

Scottish and Southern Electricity Networks (SSEN) Transmission undertook alignment consultation during September and October 2022 to request comments on the proposal to construct and operate a 132 kV overhead line connection for an approximate length of 8-11 km from the proposed Sheirdrim Wind Farm Substation compound to the existing Crossaig 132 kV Substation (the 'Proposed Development'). Three proposed overhead line (OHL) alignment and three proposed underground cable (UGC) alignment options were presented and have been appraised against a range of selection criteria. This Report on Consultation (RoC) presents a summary of the consultation undertaken; summarises the comments provided by all interested parties, including statutory consultees and member of the public on the three OHL alignment options and three UGC alignment options under consideration, and details SSEN Transmission's responses to the feedback received.

The consultation process included the publication of a Consultation Document (September 2022) that describes the alignment selection and appraisal process. Interested parties were invited to provide their views. In addition, SSEN Transmission published a Consultation Brochure and Poster, and held a virtual consultation webinar event along with live chat sessions. Through the consultation, comments were sought from members of the public, statutory consultees, and other key stakeholders on the preferred alignment option.

A total of seven responses were received along with multiple questions from the local community. In summary key themes of the feedback were:

- The locally sensitive environmental areas that have been correctly identified must be assessed to ensure disturbances are minimised and alternative options are considered;
- Within the area, there are black grouse, golden eagle and Greenland white-fronted geese which require further assessment before the project progresses;
- Once the preferred alignment has been selected, fully detailed survey works should take place to confirm the findings of the desk-based appraisals; and
- Most of the consultees agreed with the Preferred Alignment Option 1.

# 1. INTRODUCTION

# 1.1 Purpose of Document

Scottish Hydro Electric Transmission plc (SHET) who, are operating and known as Scottish and Southern Electricity Networks (SSEN) Transmission, hold a licence under the Electricity Act 989 to develop and maintain an efficient, coordinated, and economical system of electricity transmission in the north of Scotland and remote islands. The developer of Sheirdrim Wind Farm is seeking consent under Section 36 of the Electricity Act 1989 for an 84 MW wind farm, which has a contracted connection date of October 2027. SSEN Transmission has a statutory duty under Schedule 9 of the Electricity Act 1989 to connect the new development to the transmission network by the contracted connection date ("Proposed Development").

The Proposed Development is in line with SSEN Transmission's commitment and licence obligation to facilitate the connection of renewables generators to the grid through an economical, efficient and coordinated approach to transmission reinforcement.

A programme of consultation was designed to engage with key stakeholders including statutory and non-statutory consultees, local communities, landowners, and individual residents to invite feedback on the rationale for and approach to, the selection of the preferred alignment.

This Report on Consultation documents the consultation on the Proposed Development under consideration by SSEN Transmission. The report describes the key feedback received and details the actions taken by SSEN Transmission in response to the comments provided.

# 1.2 Document Structure

The Report on Consultation is structured as follows:

- 1. Introduction sets out the purpose of the Report on Consultation;
- 2. The Proposals within the Consultation outlines the background / context to the project and provides a description of the key elements;
- 3. The Consultation Process describes the framework for consultation and methods which have been employed;
- 4. Stakeholder Consultation Responses summarises the range of responses, key comments and issues arising through the consultation process;
- 5. SSEN Transmission's Responses to Consultation describes how the comments and issues raised during consultation will be addressed; and
- 6. Next Steps provides a summary of the conclusions reached and actions going forward.

## 1.3 Objectives

The objectives of this report are:

- To document the consultation process between September and October 2022;
- To summarise feedback received from stakeholders following the consultation events;
- To document actions undertaken in response to feedback where relevant; and
- To clearly set out how the Proposed Alignment has been informed by the consultation process.

# 2. THE PROPOSALS

# 2.1 Project Background

SSEN Transmission is proposing to construct and operate a 132 kV OHL and UGC to connect the proposed Sheirdrim Wind Farm to the existing Crossaig Substation.

The developer of Sheirdrim Wind Farm (reference 19/02424/S36) is seeking consent to the Scottish Government's Energy Consents Unit (ECU) under Section 36 of the Electricity Act 1989 for a 134 MW wind farm, which has a contracted connection date of October 2027.

SSEN Transmission has a statutory duty under Schedule 9 of the Electricity Act 1989 to connect the new development to the transmission network by the contracted connection date.

The approach to the alignment selection was as documented in the SSEN Transmission new guidelines. A range of alignment options were assessed for a range of environmental, engineering and economic topics. The result of the alignment study was the identification of a preferred alignment, which sought to balance the environmental, economic and engineering constraints. The preferred alignment formed the basis of this consultation.

# 2.2 Project Description

The technology solution proposed and appraised considers:

- Three OHL alignment options comprising trident wood pole (Photo 1);
- Three UGC alignment options extending from the proposed Sheirdrim Wind Farm Substation; and
- One UGC connection to the existing Crossaig Substation.

Figure 1.1 (Appendix A) shows the alignments appraised.

## 2.2.1 Trident Wood Pole

The trident wood poles would vary between 12 – 15 m depending on the span length required. However, the average height of the structures across the line will be 14 m (including insulators and support). The proposed trident wood pole would support three conductors (wires) in a horizontal flat formation. The spacing between poles would vary depending on topography and altitude. The specific distances would be determined after a detailed line survey but would be approximately 90 m apart. A photograph showing a typical wood pole trident line is shown in **Photo 1** below.



#### 2.2.2 Underground Cables

Two sections of UGC are anticipated to be required. The first UGC is anticipated at the northern end of the connection running for approximately 3.25 km from where the alignment leaves Sheirdrim Wind Farm Substation to where it converts to OHL by way of a wood pole terminal structure (**Diagram 2**) at Loch Cruinn.

A second section of UGC is anticipated to be on final approach to the connection point at Crossaig Substation in the south (approximately 1 km in length) converting from OHL to UGC by way of a second wood pole terminal structure (**Diagram** 2) near Crossaig.

# 2.3 Selection of a Preferred Alignment

OHL

OHL alignment Option 1 is the environmentally preferred option on account of the lower potential for impact on blanket bog (in good or moderate condition, 0.6 ha) and AWI woodland (utilisation of existing operational corridor). This alignment is also likely to result in reduced loss of commercial forestry on account of the use of the proposed Inveraray to Crossaig 275 kV OHL operational corridor, which is currently under construction, and use of the associated permanent access tracks.

OHL alignment Option 1 is the preferred option from a technical perspective on account of no major infrastructure crossings, the ability to utilise the new permanent accesses and accommodation works associated with the in construction Inveraray to Crossaig 275 kV OHL, remaining outside any existing or proposed turbine wake zones and it involves the least woodland removal of all alignments.

There is no preferred OHL alignment option from a cost perspective as all costs are comparable, with no alignment cost varying significantly to indicate an overall preference.

Balancing the environmental, technical and cost considerations of the three OHL alignments, alignment Option 1 has been selected as the Preferred Alignment.

# UGC

UGC alignment Option 3 is the preferred option environmentally as it does not pass through any statutory protected habitats or designated sites and has lower potential for impact on Class 1 Peatland.

UGC Options 1 and 2 score similarly in the technical assessment. Option 2 is considered marginally preferable to Option 1, as it adheres more closely to the proposed access tracks associated with the proposed Sheirdrim Wind Farm allowing better and marginally less constrained access during construction and operational maintenance.

The preferred UGC alignment from a cost perspective is Option 3 because it is the lowest cost option.

On balance, whilst UGC Option 2 transects the greatest area of Class 1 Peatland, impacts may be limited due to the use of existing access tracks associated with the proposed Sheirdrim Wind Farm. Technically, due to UGC Option 2's alignment more closely following the proposed Sheirdrim Wind Farm access tracks, there are fewer associated constraints to the construction and future maintenance of the UGC and fewer additional access tracks will be required to be constructed. As such UGC alignment Option 2 has been selected as the Preferred Alignment on balance of the environmental, technical and cost considerations.

Crossaig Substation UGC connection has only one option and the alignment is dictated by technical constraints around the Crossaig Substation.

# 3. THE CONSULTATION PROCESS

# 3.1 Consultation History

In accordance with the SSEN Transmission guidelines<sup>1</sup>, a process of consultation on the preferred alignment option was undertaken. This is described in the sections below.

## 3.2 Methods of Consultation

#### 3.2.1 Sheirdrim Wind Farm Connection Consultations

SSEN Transmission organised an in-person event and a virtual event for Sheirdrim Wind Farm connection project in conjunction with four Argyll substations. A bespoke virtual consultation platform was developed which allowed stakeholders to visit a virtual consultation room and view the project information at their leisure. The virtual platform was designed to enable stakeholders to experience the full exhibition from home on a computer, tablet or mobile device. It was designed to look and feel like a face-to-face consultation in a community hall, with exhibition boards, maps, and the opportunity to share views on the proposals. As an alternative to face-to-face events which SSEN Transmission would normally hold, a live online chat function was available at advertised times to allow attendees to ask questions and get responses from the project team.

The virtual platforms could be accessed from the project website where there was also the consultation brochure available to view for those who preferred this format or struggled with bandwidths for accessing the virtual room.

The face to face consultation events were held at the following locations:

- Tuesday 27th September 2022 Skipness Village Hall; and
- Wednesday 28<sup>th</sup> September 2022 Whitehouse Village Hall.

#### 3.2.2 How was the Consultation Promoted?

#### Snapshot of the Virtual engagement

The consultation period opened on Monday 22<sup>nd</sup> September 2022 and continued until the 18<sup>th</sup> October 2022. The responses received during this time were considered by the project team and are included within this report.

Feedback received outside of this timeframe has been considered by the team to assist in determining the Preferred Alignment and included within the report. Stakeholders were able to view information about the project in the consultation booklet, on the SSEN Transmission website and within the virtual consultation room. A live chat session was held on the following date:

#### Thursday 1st October 2022

#### Promotion of the Virtual Consultation

The virtual consultation was advertised using several methods. We contacted community stakeholders initially to advise them of the upcoming consultation. This communication went to the MSP and MP for the area, Councillors (Mid Argyll and Kintyre and the Islands) and Community Councils (Inveraray, Lochgilphead, West Lochfyne, Furnace, Strachur, East Kintyre and Tarbert and Skipness).

A Mail drop was sent out to the local community advising them of the in-person events. An advert promoting the consultation was placed in the Oban Times. Emails were sent to those signed up for updates for the Project. Brochures were also posted to local areas to be accessible for local communities.

Updates and information on this consultation could also be found on our project specific website<sup>2</sup>.

The virtual consultation promotion is summarised in Table 3.1.

Table 3.1: Promotion of Consultation		
Method	Details	

<sup>&</sup>lt;sup>1</sup> SSEN Transmission Guidelines, 'PR-NET-ENV-501 Procedures for HV OHL and UGC Routing.pdf'

<sup>&</sup>lt;sup>2</sup> SSEN Transmission, (2022), 'Sheirdrim Wind Farm Connection' available online at: https://www.ssen-transmission.co.uk/projects/sheirdrim-wind-farm-connection/

Table 3.1: Promotion of Consultation		
Mail drop – Consultation Brochure (also uploaded to the Project Website (see below)	Sent out to 650 local properties in proximity of the proposals.	
Email to stakeholders to advise of consultation	MSP, MP, Councillors, Community Councils, and all those who had signed up for project updates.	
Press release	Advertised in the Oban Times, Lochaber Times, Campbelltown Courier and Argyllshire Advertiser	
	Published on the SSEN Transmission website (https://www.ssen- transmission.co.uk/projects/sheirdrim-wind-farm- connection/) and SSEN Transmission LinkedIn page.	

## Promotion of Hard Copy Information

Hard copies of the consultation brochure and feedback form were sent out to community councillors for them to distribute on SSEN Transmission's behalf to community members who might have trouble accessing online information. Stakeholders who had questions or comments about the project were able to contact the Community Liaison Manager to request additional information about the project, these queries were responded to by the relevant members of the project team.

# 3.3 Statutory and Non-Statutory Consultees

Comments were sought from a range of stakeholders both with statutory and non-statutory interest in the consenting process. The list of consultees, both statutory and non-statutory, invited to comment as part of the consultation on the Preferred Alignment is provided in **Table 3.2**.

Table 3.2: List of Statutory and Non-Statutory Consultees		
Statutory Consultee		
Argyll and Bute Council (ABC)	Scottish Forestry (SF)	
Historic Environment Scotland (HES)	Scottish Government (Energy Consents Unit)	
NatureScot	Scottish Water	
Scottish Environment Protection Agency (SEPA)	Transport Scotland	
Non-Statutory Consultee		
Argyll District Salmon Fishery Board (ADSFB) / Argyll Fishery Trust (AFT)	Sustrans	
Royal Society for the Protection of Birds (RSPB)	West of Scotland Archaeology Service (WoSAS)	
Scotways	Kintyre Way	

# 3.4 Consultation Questions

SSEN Transmission asked participants in the consultation to consider the following five questions:

- 1. Do you feel sufficient information has been provided to enable you to understand what is being proposed and why?
- 2. Which of the three Options would you consider the best option for SSEN Transmission to develop? Please provide an explanation of your answer.
- 3. Which of the three Options would you consider the least preferable option for SSEN Transmission to develop? Please provide an explanation of your answer.
- 4. Are there any potential risks or benefits associated with this project, that you believe have not been included in the Consultation Document?
- 5. Do you have any other comments on the Proposed Development?

# 4. CONSULTATION RESPONSES AND KEY ISSUES

In developing the Project, we consider environment, engineering, and cost constraints on the design and safe operation of the electricity infrastructure along with views expressed by stakeholders. Gathering views from a variety of stakeholders is vital to developing and shaping a balanced solution. To ensure that we are transparent throughout our consultation process it is vital that we provide the opportunity to share the feedback we have received from stakeholders on the proposals we have presented.

# 4.1 Summary of Engagement from the Virtual Exhibition

A total of 43 people attended over the two days at the in-person events. A total of six emails of feedback relating to Sheirdrim Wind Farm connection and one feedback form received via email. Various conversations relating to the project were held at our in-person events.

On this occasion there was no attendance at our instant chat event, however, a total of three visited our portal a total of seven times throughout the consultation period. A total of 17 users visited our project webpage throughout the consultation period.

## 4.2 Summary of Feedback – Virtual Consultation and Feedback Forms

A summary of comments and questions received during the virtual consultation is provided in Table 4.1.

Table 4.1: Summary of Comments and Questions			
Comment received	SSEN Transmission's Response		
A number of responses were received relating to tourism including; The economic decline the tourism industry would face in relation to the Kintyre Way walk and the Kintyre 66 routes. This would be severely impacted with the preferred option as it comes close to the B842. As a lot of income is generated from tourism, there should be more emphasis on land preservation along tourist routes.	The issues relating to tourism in the local area have been noted and will be addressed in the land use and recreation chapter of the EIA report / Environmental Appraisal. As this project is currently in the development phase, if consented it will be Autumn 2024 before construction starts and we would try to appoint a principal contractor who we would encourage to appoint local subcontractors and create local jobs where possible. We would be happy to collaborate with Argyll and Bute council in the future to attend meet the buyer events and support local employment fairs.		
The consultation process is not good as the wind farm development and then the connectivity factors are considered in isolation and some timely distance between them. Wind farm operators should be required to consult with SSE first so a full plan of the development is considered in one go and mindful of environmental factors for the public to view. This process seems farcical when the windfarm is currently objected to and SSE are still consulting on how to transmit the energy.	In response to comments regarding the wind farms it was stressed that SSEN Transmission are separate from the developers of the wind farm. SSEN Transmission has an obligation to facilitate the connection of renewable generators to the grid through an economical, efficient and coordinated approach to transmission reinforcement. SSEN Transmission application therefore is looking to gain consent to connect these wind farms to the grid, if they gain consent. However, people's frustration at the volume of projects and the fact that the connections require to be progressed separately to the wind farm application was noted. SSEN Transmission have made a commitment to continue to be transparent in sharing our proposals. SSEN Transmission and the developers are in close communication which will continue throughout the Project.		

Table 4.1: Summary of Comments and Questions			
Comment received	SSEN Transmission's Response		
The majority of the line should be placed underground as possible and more than what is suggested and then the yellow line option 3 would be the preferred route. Option 1 is the least damaging although it would be better if the underground section could be extended to the point where it aligns with the new 275 kV overhead line.	Overhead Line is considered to be the most cost effective and reliable form of electricity transmission. Where the OHL introduces potentially unacceptable impacts, such as impacts on birds, landscape and visual amenity or noise, local undergrounding via cables can be considered. However, due to the issues encountered with locating and resolving faults with underground cables on what are critical Transmission circuits, factored in with the significant additional cost and increased environmental disruption generally associated with cables, these are not the initial solution proposed on the majority of our schemes.		

# 4.3 Issues Emerging from Consultation Feedback

Responses covered a range of topics with a number raising specific issues in relation to the preferred connection option.

The majority of the feedback SSEN Transmission received was objecting to the wind farm connections generally rather than specifically relating to the preferred alignment for the Sheirdrim Wind Farm Connection. The negative impact on tourism was a reoccurring issue for most community members and many conversations had suggested an underground cable would be preferred.

Comments were made from community members about the consultation process with people finding it difficult to understand especially as SSEN Transmission and the wind farm developers work separately when consulting with the community. There were also comments made regarding the volume of infrastructure that the local area is hosting.

## 4.4 Summary of Feedback - Statutory and Non-Statutory Stakeholders

Table 4.2 describes the responses received from stakeholders in response to the Consultation Document.

In total seven consultation responses were received during the consultation process, five from statutory and non-statutory consultees and two from members of the public. **Table 4.4** provides the detail of stakeholder feedback along with a reply from SSEN Transmission regarding how comments will be considered as the Proposed Development moves forward into the next phase of development.

Table 4.2: Statutory and Non-Statutory Consultee Respondents		
Consultee	Response Received	
Argyll and Bute Council	No response received	
Argyll District Salmon Fishery Board (ADSFB)	No response received	
Argyll Fisheries Trust (AFT)	No response received	
Energy Consents Unit (ECU)	No response received	
Historic Environment Scotland (HES)	20.10.2022	
The Kintyre Way	21.11.2022	
Nature Scot	20.10.2022	
Royal Society for the Protection of Birds (RSPB)	20.10.2022	
Scottish Environment Protection Agency (SEPA)	20.10.2022	
Scottish Forestry (SF)	25.10.2022	
Scottish Water	20.10.2022	
Sustrans	No response received	

Table 4.2: Statutory and Non-Statutory Consultee Respondents		
Scotways	20.10.2022	
Transport Scotland	No response received	
West of Scotland Archaeology Services	No response received	

Table 4.1: Statutory and Non-Statutory Consultee Summary of Responses		
Organisation	Comment	SSEN Transmission Response
Historic Environment Scotland (HES)	We understand that the Alignment Selection Consultation Document (September 2022) appraises three options for the alignment of the 132 kV OHL and UGC needed to connect the Proposed Development. These different alignment options have been developed following the selection of a preferred route (Route Option C) for the grid connection and a desk-based site appraisal. Here, we welcome where the alignment options have been designed to avoid areas of high amenity value (including historic environment designations) and, also, to consider their overall appearance in the landscape. We have reviewed the comparative appraisal of the three different alignment options presented at Chapter 6 of the Alignment Selection Consultation Document (September 2022). Here, we are content to agree that the different OHL and UGC alignments under consideration share many of the same environmental sensitivities. We note that there is some limited potential for the alignments under consideration to impact on heritage assets and their settings. We do not, however, consider that there are pronounced differences for our interests between the alignment Option 1 for the OHL component of the proposals. We are also content with the selection of Alignment Option 1 for the OHL component of the	SSEN Transmission welcome Historic Environment Scotland's response and shared understanding that the alignments under consideration share many of the same sensitivities in the context of cultural heritage. SSEN Transmission are committed to making further refinements to the Proposed Alignment, through the EIA / EA process such that, where possible, any remaining impacts on heritage assets or setting may be minimised and appropriate mitigation measures identified if required.
NatureScot	We note that Route C will be taken forward as the Proposed Route to Alignment	SSEN Transmission welcome NatureScot's response and welcome your comments in respect to the
	Stage. This route does not pass through any nationally or internationally	alignment's avoidance of nationally designated sites, internationally designated sites and High
	designated sites and we are pleased to see that it avoids the habitat management	Constellation Wind Farm's habitat management area.
	area associated with High Constellation Wind Farm.	SSEN Transmission take seriously the potential impacts of our projects on biodiversity. A year's worth
	We welcome the undergrounding of the cable where it passes Loch Lurach and	of bird surveys were undertaken between August 2021 and August 2022 (inclusive) including vantage
	Loch Cruinn as this will minimise collision risk for birds and note that Option 2 is	point surveys, breeding bird surveys and winter goose roost surveys. These surveys mean we have a

	the preferred UGC Alignment. This option also looks to reduce disturbance to breeding and overwintering bords during the installation of the cable as it appears to be mostly located outside of potential disturbance buffers for breeding birds and overwintering geese that may use the lochs. There may, however, be potential disturbance issues on Loch Cruinn where the UGC meets the OHL section and so the EIA will need to address this and outline any potential mitigation in order to avoid disturbance to breeding or overwintering birds. Please note that we have recently updated our guidance on disturbance buffers for sensitive bird species, you can find this on our website: https://www.nature.scot/doc/disturbance-distances-selected-scottish-bird- species-naturescot-guidance . We agree that utilising Alignment Option 2 for the OHL section would help to minimise landscape and visual impacts and use of the existing 132 kV Crossaig – Inveraray OHL corridor would also seek to reduce loss of ancient semi-natural woodland. This option (along with the other two options for Route C) would, however, cross the existing site boundary for the consented, but not yet built, Eascairt Wind Farm which would have an impact on operation of the wind farm and the implementation of their habitat management plan (HMP). The HMP, has not yet agreed with Argyll and Bute Council as part of their planning conditions however, I am aware that this is something that the developers have been working on fairly recently so I recommend you consult with Darin Rooney (darrinr@pi-uk.com) over this route if you have not already done so. Additionally, the preferred OHL option passes close (approximately 700 m) to a known golden eagle nest site at Crossaig so you will need to consider possible disturbance here.	better understanding of the usage of the area by local avifauna, especially those with associations to designated sites. This information has fed into the routing phases of the project and will be rigorously assessed within the EIA / EA. Through the EIA / EA assessment, should any specific impacts be identified, for example, disturbance to breeding or overwintering birds around Loch Cruinn, then appropriate mitigation measures will be developed and proposed alongside SSEN Transmission's standard measures outlined in our Species Protection Plans (SPPs). SSEN Transmission welcome your advice re updated guidance in respect to disturbance buffers for sensitive species and will ensure this is applied to the EIA / EA. SSEN Transmission welcome your recognition of our efforts to minimise impacts on landscape and visual receptors as well as the potential impacts on woodland listed on the Ancient Woodland Inventory. SSEN Transmission are in discussions with the Eascairt Wind Farm developer (through Darin Rooney) in respect to our Proposed Alignment and potential impacts on the proposed HMP. SSEN Transmission are aware of the golden eagle nest site near Crossaig in your response and this will be considered alongside our existing data through the EIA / EA process.
Royal Society for the	Summary RSPB Scotland note the Applicant's preference for Option 1. However, we would preferentially support selection of option 2 on the basis that this would utilise 2	We welcome RSPB's response and acknowledges your preference for Option 2 on account of the reduced forestry removal and replacement of the existing Inverary to Crossaig (I-C) line (due for removal) with our current proposal, in keeping with the NatureScot Guidance. This particular issue was

1

Table 4.1: Stat	utory and Non-Statutory Consultee Summary of Responses	
Protection of	km of the existing cleared corridor for the 132 kV Inveraray to Crossaig OHL which	rigorously assessed during the alignment appraisal and a balance had to be sought between the
Birds (RSPB)	is scheduled for removal. The NatureScot (2016) Guidance Document	environmental factors and technical factors. In this respect, the health and safety constraints
	'Assessment and mitigation of impacts of power lines and guyed meteorological	associated with multiple crossings of the new I-C line with the Proposed Alignment for the Sheirdrim
	masts on birds' notes that replacing an existing power line is usually preferable to	connection were considered a priority. Further to this, the positive attributes of more closely following
	building on a new site, because the general area is already disturbed.	the new I-C alignment mean there is a much reduced need for new access tracks and those
	RAG Assessment of OHL Alignment options	constructed for the new I-C line may be reused for this project, resulting in a lower overall loss of habitat in the area.
	<ul> <li>With reference to their preferred Option 1, the Applicant notes that: ' placing two OHLs on [parallel alignments may result in lower net impacts on landscape and visual receptors, on account of the potential; increased visibility of both OHLs' (see also NatureScot, 2016). These positive assumptions are not cited for Option 2, which is also on close parallel alignment with the Inveraray to Crossaig 275 kV OHL (in construction phase).</li> <li>Option 1 would create wider corridors/pockets of open ground between the Proposed Development and the Inveraray to Crossaig 275 kV OHL (in construction phase) west of Ravensbay and Oragaig; which may not then be available to open ground foragers/breeders. The benefit of utilising the existing cleared corridor to minimise Ancient Woodland impacts is also highlighted for OHL Option 1 – but is not included in the summary RAG assessment for option 2 (RSPB Scotland's</li> </ul>	We recognise that elements of Option 2 would also be subject to increased visibility associated with being close to the new I-C line. Whilst this is preferable the health and safety constraints and requirement for additional access tracks are considered more important. We acknowledge your comment on the creation of wider corridors / pockets of open ground enclosed by the OHL infrastructure in the area west of Oragaig. The driver here was a technical one, in order to navigate the associated landform at this location. SSEN Transmission will look at further refinements that can be made in this area and assess the final alignment within the EIA / EA in order to determine associated ornithological impacts and any requirement for mitigation and / or compensation required. We appreciate that the AWI loss is not specifically stated in the summary statement relating to Option 2, however, it is considered in Section 6 where impacts on the AWI are evenly weighted between Options 1 and 2. Again this metric would not alter the overall option selected due to the mentioned
	preferred option).	above.
	Survey Requirements	We welcome RSPB's recommended approach to impact assessment and associated survey effort for
	RSPB Scotland advise than an Environmental Impact Assessment (EIA) and associated Environmental Impact Assessment Report (EIAR) for this proposal should establish the potential impacts of the proposed Development on protected bird populations within the area, with emphasis given in assessing	this project. SSEN Transmission currently has a screening request with the Energy Consent Unit, the response to which will ultimately determine whether the project requires EIA or EA. Should EIA be screened out SSEN Transmission will undertake a voluntary EA which will assess impacts on ornithology to a similar level of detail that would be found within an EIAR.
	potential impacts on raptors, black grouse Lyrurus tetrix and migrant Greenland	We have been working to NatureScot Guidance and have been in consultation with NatureScot on the
	white-fronted geese Anser albifrons flavirostris. This EIAR should; include a	approach to bird surveys. Baseline bird surveys including vantage point surveys, breeding bird surveys
	comprehensive study of bird use throughout the year, in the area of and	and winter goose roost surveys (where required) were undertaken between August 2021 and August
	surrounding the site; to obtain an understanding pf the potential impacts of the	2022 (inclusive). The focal species of these surveys included (but were not limited to) raptors, black

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Table 4.1: Statutory and Non-Statutory Consultee Summary of Responses		
Proposed Development on bird populations. All surveys should follow standard	grouse and migrant geese. NatureScot were consulted in respect to the scope and duration of these	
ornithological methodologies, as set out by NatureScot (2016, 2017).	surveys. The data from these surveys is currently being analysed and written up for assessment in the	
The Applicant notes that option 2 may result in negligible change to the impacts	EA / EIA.	
on ornithological receptors on account of their habituation to the existing 132 kV	SSEN Transmission agrees that the survey effort undertaken to date will allow for:	
Inveraray to Crossaig OHL. While that positive assumption may hold, RSPB Scotland advise that in accordance with guidance from NatureScot (2016) new	Local differences in routing, and any requirement for new wayleaves;	
baseline survey work spanning a minimum of 1-year will nevertheless be required	Any difference in the size and configuration of new infrastructure	
to reflect:	(e.g., an alternative wiring configuration, which may alter the risk of electrocution for birds via	
Local differences in routing, and any requirement for new wayleaves;	phase-to-phase/phase-to-ground contact);	
Any difference in the size and configuration of new infrastructure	Changes in local ecological conditions since installation of the original infrastructure.	
(e.g., an alternative wiring configuration, which may alter the risk of electrocution for birds via phase-to-phase/phase-to-ground contact);	• Capture and mitigate any negative impacts of the operational development on ornithological receptors.	
Changes in local ecological conditions since installation of the original infrastructure.	We agree with the assertion that increased visibility (e.g. in respect of Schedule 1 species such as the Greenland white fronted goose) is applicable to OHL alignment Option 2 as well as Option 1, however	
The collection of fresh baseline data also offers the opportunity to capture and mitigate any negative impacts of the operational development on ornithological	as described above the primary driver for the selection of Option 1 over Option 2 was based on H&S and other environmental considerations.	
receptors.	SSEN Transmission welcomes RSPB's detailed description of the conservation status, species threats,	
(e.g., in respect of Schedule 1 species such as the Greenland white fronted goose)	breeding behaviour and site specific details on regional priority areas for this species. Black grouse	
is applicable to OHL alignment Option 2 as well as Option 1; as this option also	were included in surveys undertaken by professional ornithologists between August 2021 and August	
closely follows the Inveraray to Crossaig 275 kV OHL (in construction phase).	surveys. Published data from Sheirdrim Wind Farm, High Constellation Wind Farm and Freesdale Wind	
SPECIES	Farm were used to inform the presence of traditional black grouse leks in the vicinity of the Proposed	
Black Grouse	Development.	
In the UK, the black grouse is a Red Listed species and the subject of a Biodiversity	It is prudent to highlight that the need to underground the alignment in the north west of the	
Action Plan (UKBAP). This bird has undergone significant declines in south-west	alignment is driven by proximity to the proposed Sheirdrim Wind Farm.	
Scotland, with Argyll remaining a key area for them. Being direct and powerful	SSEN Transmission is committed to assessing impacts on black grouse through desk based and field	
birds in flight, black grouse are vulnerable to collision with unmarked barriers	survey data within the EIA / EA and where impacts arise the mitigation hierarchy will be applied to	

leks (Bevanger, 1995).
Leks are frequently traditional site, used year-on-year by male black grouse to
display and call competitively. Females attend leks during the core mating season
$(1^{st} March - 31^{st} May)$ to select and copulate with the best males (White et al.,
2013). Open ground and ow-density native woodland edge habitats suitable for
lekking are under considerable and rising pressure from activities such as
renewable energy developments/peripheral infrastructure and commercial
forestry in Kintyre. This loss of lek sites and habitats is contributing to the
continued fragmentation of ArgyII's declining black grouse population.
The north-western section of all OHL Alignment Options, and all UGC Options,
pass through 1 black grouse area of Highest Regional Priority and lie c. 2 km south
of a second area of Highest Regional Priority. Priority levels were identified using
survey work conducted from 2009 – 2015. Full coverage of Argyll was not
possible; instead, precedence was given to areas known to host the largest
residual black grouse populations to ensure that core sites for this threatened
bird could be conserved. Areas of Highest Regional Priority occur where multiple
leks of 3 or more males (recorded from 2009 – 2015) have overlapping home
ranges, providing a population of multiple lekking groups (a home range being 1.5
km radius from a lek). These areas are considered to be very high priority.
The north-western section of all OHL Alignment Options, and all UGC Options, sit
well within the 5 km (conservative) adult dispersal zone for both leks of Highest
Regional Priority, and any degradation / loss of low-density native/Ancient
Woodland or ground vegetation could result in significant negative impacts for
this species at Regional Scale. Robust fieldwork will therefore be required to
ascertain current levels of black grouse activity; and whether, if good numbers of
birds are still present, any potential negative impacts of the Proposed
Development on this species can be mitigated.

such as OHLs and fence lines; particularly when such barriers are situated close to

Table 4.1: Statutory and Non-Statutory Consultee Summary of Responses

determine the most appropriate measures to be applied including (but not limited to) habitat enhancements. Further to this, works undertaken during the construction phase of the project will be compliant with SSEN Transmission's bird Species Protection Plan (SPP) which has been developed in consultation with NatureScot.

SSEN Transmission will consider and include (where appropriate) the stand off distances, sensitive breeding periods for black grouse and habitats that support the different life stages of black grouse as outlined.

We appreciate the sensitivity of eagles in the context of electricity generation and transmission infrastructure, and the cluster of such projects that are occurring in the local area. As such a cumulative assessment will be undertaken as part of the EA / EIA for this project.

SSEN Transmission are aware of eagles breeding in the vicinity of the project and the potential risks to them associated with electrical infrastructure. SSEN Transmission will consider all proposed mitigation measure put forward as part of the EA / EIA including

- Avoidance of breeding and egg laying periods
- Line of sight and no line of site exclusion zones
- ECoW management of exclusions zones on site

SSEN Transmission acknowledge RSPB's preferred alignment and the associated impacts on AWI and open ground habitats. Due to the number of projects occurring in this area a degree of coordination is essential and discussions are already underway as to how best to coordinate works to lower the impacts on local nature conservation and local residents an example being the reuse of access tracks to minimise habitat loss.

SSEN Transmission acknowledges RSPB's suggested measures to increase visibility of the line. All measures suggested will be appraised in the EA / EIA to determine likely benefit, balanced against any additional impacts e.g. landscape and visual impacts that may arise from such measures. SSEN Transmission acknowledge the recommended lifespan of mitigation measures developed.

In accordance with the mitigation hierarchy, the Applicant should take steps to avoid impacts, such as by adjusting alignment /re-routing the line in this location; or, should that not be possible, mitigating the impact to black grouse leks and habitats. Furthermore, in accordance with the principle for biodiversity enhancement as set out in the draft NPF4, and in recognition that we are in joint nature and climate crisis, black grouse enhancement works should be identified. Looking ahead to construction phase for both the OHL and UGC, the Applicant should note that in addition to the avoidance of work <750 m from active black grouse leks during the lekking period ( $1^{st}$  March –  $31^{st}$  May) (NatureScot, 2022), ground vegetation within 1.5 km of an active lek comprises core feeding and brood rearing territory for females and chicks. Thus, disturbance to good quality brood-rearing habitat (insect rich vegetation such as Bog myrtle *Myrica gale*, bogs, mires, wet flushes, and blaeberry *Vaccinium myrtillus* in woodland) should be minimised during the breeding season ( $1^{st}$  April –  $15^{th}$  August) and reinstated outwith the breeding season to support this feature of Regional Importance.

#### Golden eagle Aquila chrysaetos

Open ground and low-density native woodland edge habitats, suitable for use by hunting eagles, are under considerable and rising pressure from activities such as renewable energy developments/peripheral infrastructure and commercial forestry in Kintyre. The cumulative impact of these activities on Kintyre's territorial pairs <u>must</u> be given fulsome consideration to safeguard these iconic birds, which are protected under Schedule 1, Schedule 1A and Schedule 1A of the wildlife and Countryside Act 1981.

Golden eagles breed to the north-west of the Crossaig substation. The placement of OHLs within eagle territories – especially when close to eyrie sites (i.e., as birds access the eyrie and surrounding area during seasonal nest building, incubation, rearing and fledging) – presents risks in respect of disturbance during construction phase / operational maintenance, displacement, and line collision/electrocution. Even on lower ground, eagles have been found to collide We agree with RSPB's assertion that likely significant effects on Kintyre Goose roosts Special Protection Area (SPA) and Sound of Gigha SPA cannot be excluded without first being appraised as part of the HRA process, this is detailed in the HRA screening. Collision risk modelling is also being considered as part of the EA / EIA.

SSEN Transmission acknowledges RSPB's suggested measures to increase visibility of the line for geese and minimise collision risk. All measures suggested will be appraised in the EA / EIA to determine likely benefit, balanced against any additional impacts e.g. landscape and visual impacts that may arise from such measures. SSEN Transmission acknowledge the recommended lifespan of mitigation measures developed.

SSEN Transmission agrees that loss of valuable habitats such as AWI should be avoided wherever possible, as such the proposed alignment has been selected as the impacts on woodland listed on the AWI have been minimised, utilising existing gaps in the woodland or crossing points that minimise the number of trees that would need to be removed.

To inform the impact assessment on this project a range of habitat surveys have been undertaken in 2022 to better understand the local context. UKHab surveys have been undertaken across the Preferred Route (encompassing all alignments) with NVC surveys targeting specific habitats of interest, including but not limited to AWI and blanket bog. Further to this habitat condition scores have been applied so that the condition of habitats such as blanket bog can be determined.

As noted SSEN Transmission have considered the impacts of the Proposed Development on areas of peatland and a response on the fragmentation of open ground and reuse of the existing I-C corridor is provided above.

SSEN Transmission acknowledge RSPB's preference in terms of alignment selection and the associated impacts on the different habitats as a result of this. SSEN Transmission undertake Biodiversity Net Gain (BNG) assessments on all projects with the aim of achieving No Net Loss for all projects consented post 2020 and a Net Gain on all projects consented post 2025.

SSEN Transmission are ambitious when it comes to the impacts and potential benefits of our projects as illustrated by our commitments on BNG. All opportunities for habitat enhancements will be

Table 4.1: Statutory	y and Non-Statutory	y Consultee Summary	of Responses

with low-lying structures such as deer fences during periods of reduced visibility (e.g., fog and low cloud). For golden eagles, the breeding season is identified as 1<sup>st</sup> February to 31<sup>st</sup> August with birds being most sensitive to disturbance during the egg laying period of March – early April. To mitigate the risk of disturbance, RSPB Scotland advise an initial works exclusion zone of 1500 m (direct line of sight) or 1000 m (no line of sight) around active eyries during the breeding season. Tolerance of human activity during nesting varies between pairs. It may therefore be possible to revise this distance down following further observation/survey by the Ecological Clark of Works.

RSPB Scotland favours OHL 2 on the basis that this would utilise 2 km of the existing 132 kV Inveraray to Crossaig OHL cleared corridor; minimising loss of Ancient Woodland and development on previously undisturbed open ground habitats. While NatureScot (2016) guidance notes that the requirement for downtaking of redundant infrastructure could result in disturbance during construction lasting longer than would be the case for installation of a new line, this risk is likely applicable to all OHL alignment options due to their close proximity to the existing 132 kV Inveraray to Crossaig line. We therefore urge the Applicant to coordinate construction activity in parallel with downtaking activity for the redundant OHL wherever possible.

During the operational phase, suggested mitigation measures to reduce any identified collision risk include line sheathing, line marking and post-construction monitoring (NatureScot, 2016). Line marking measures should comprise hanging bird deflectors which are checked and replaced as part of routine line maintenance schedule, ideally on an annual cycle. <u>Any mitigation measures must</u> <u>be in place and maintained in full functional order for the lifetime of the</u> <u>Proposed Development.</u>

#### Greenland white-fronted goose

The Applicant notes the proximity of the Proposed Development to the Kintyre Goose roosts Special Protection Area (SPA) and Sound of Gigha SPA, with the considered through the EA / EIA process and the associated BNG assessment, balanced with delivering value for the consumer.

SSEN Transmission will look to assess the cumulative impact of this project in the context of surrounding consented projects within the EA / EIA, in order to determine the cumulative impacts on local bird species.

SSEN Transmission is committed to working with a range of stakeholders including landowners, renewables developers and statutory consultees to derive the best outcomes for the environment. SSEN Transmission is currently in consultation with local wind farm developers on habitat management plans in the context of protected bird species.

potential for barrier and collision impacts to this Schedule 1 species. Birds commuting along flightpaths between traditional feeding and roosting sites (e.g., Lochan Fraoich to the west of the proposed Development) are vulnerable to collision (NatureScot, 2016), and may cross the alignments to access these designated sites to be deterred from accessing these areas through disturbance and physical effects associated with the construction and /or operation of the proposed Development. A Habitats Regulations Appraisal and Collision Risk Modelling exercise are therefore required.

Suggested mitigation measures to reduce any identified collision risk include line height restriction, routing lines along existing linear elements of equal or greater height, line sheathing, line marking and post-construction monitoring (NatureScot, 2016). Line marking measures should comprise hanging bird deflectors which are checked and replaced as part of routine line maintenance schedule, ideally on an annual cycle. <u>Any mitigation measures must be in place</u> <u>and maintained in full functional order for the lifetime of the Proposed</u> <u>Development.</u> RSPB Scotland consider that the assumed benefit of increased visibility is applicable to OHL Alignment Option 2 as well as Option 1; as this option follows the Inveraray to Crossaig 274 kV OHL (in construction phase).

## HABITATS

#### **Ancient Woodland**

Ancient Woodland is an extremely rare, irreplaceable habitat in Scotland which suffers continued loss and fragmentation. Therefore, any direct impact via loss of veteran trees and the lichen/lower plant communities supported by them is significant; undermining the objectives of the Argyll and Bute Woodland and Forest Strategy.

#### Peatland

Siting infrastructure on open habitats – particularly Class 1 and 2 peatland – should be avoided wherever possible. RSPB Scotland note that Option 1 is considered to have lower peatland impacts that Option 2; nevertheless, Option 1

would create wider corridor/pockets of ground between the Proposed Development and the Inveraray to Crossaig 275 kV OHL (in construction phase) west of Ravensbay and Oragaig; which may not then be available to open ground foragers/breeders. The NatureScot (2016) Guidance Document 'Assessment and mitigation of impacts of power lines and guyed meteorological masts on birds' notes that replacing an existing power line is usually preferable to building on a new site, because the general area is already disturbed.

Siting infrastructure within existing plantation forest (which is generally of low biodiversity value) minimises loss of important native woodland, peatland and open ground habitats. RSPB Scotland favours OHL Option 2 on the basis that this would utilise 2 km of the existing the Inveraray to Crossaig OHL cleared corridor; minimising the loss of Ancient Woodland and development on previously undisturbed open ground habitats.

Regardless of final alignment selection, RSPB Scotland urge the Applicant to be ambitious in any mitigation and enhancement proposals for blanket bog restoration, positive moorland management and actions to restore / enhance Ancient Woodland, fragments both on and off site. In addition to expediting carbon offsetting for any peatland impacts resulting from the Proposed Development, and the recovery / replacement of any lost Ancient Woodland, this approach would provide valuable habitat in Kintyre for raptor prey species and Regionally Important black grouse populations by creating biodiverse transitional zones.

#### Cumulative Impact

Land use on the Kintyre Peninsula is increasingly undergoing impacts from windfarm developments and commercial forestry, so the need to consider cumulative impacts in respect of open ground habitat loss is paramount. Loss of this habitat in respect of the Proposed Development will be consequential to open ground foragers and breeding assemblages. An assessment of cumulative bird impacts in relation to other operational, consented and proposed

Table 4.1: Stat	tutory and Non-Statutory Consultee Summary of Responses	
	developments in the planning system within this Natural Heritage Zone is therefore essential.	
	Given the clear upsurge in renewable energy developments and associated OHL upgrades/substation infrastructure across ArgyII, RSPB Scotland strongly advise that a holistic landscape scale management plan is established between energy developers and landowners. A coordinated approach would:	
	1. Better evaluate and mitigate the cumulative impact of energy developments;	
	<ol> <li>Make the most efficient and impactful use of available land/resources to support coordinated (and ideally, networked) Habitat Management Plans – increasing habitat availability and landscape permeability for protected species; and</li> </ol>	
	<ol> <li>Show willingness between developers in the onshore renewables and wider energy sector to fully commit to meeting requirements for securing positive effects for biodiversity as set out in MPF4.</li> </ol>	
Scottish Environment Protection Agency (SEPA)	We note that the previous preferred more direct route cannot be delivered, and that new Alignment Option 1 is preferred for the OHL and Option 2 for the UGC. All options considered will have impacts on peat and peatland/wetland habitats, and to a lesser extent watercourses and we note that the proposed option is preferred for reasons including less impact on blanket big and ability to use existing infrastructure. We have no specific concerns regarding the preferred option but will want the subsequently submitted application to clearly demonstrate how the proposed location of the individual elements of the development have been placed to minimise impacts on the aspects of the environment in which we have an interest – which, as you know for this type of development, are generally peat, wetlands and watercourses. We would also encourage you to explore whether there may be opportunities for peatland restoration as part of the works.	The EA / EIA to be submitted in support of a s37 application will assess and look to minimise impacts on peat, wetland and watercourses. The project will be subject to a rigorous assessment from a hydrological and ecological perspective, including impacts on habitats, which will be informed by the UKHab and NVC surveys of the preferred route, undertaken in summer 2022. The impacts assessed within the ecology and hydrology assessments will be accompanied by appropriate mitigation and compensation measures, where opportunities for enhancement will be considered. Further to this SSEN Transmission undertake Biodiversity Net Gain (BNG) assessments on all projects with the aim of achieving No Net Loss for all projects consented post 2020 and a Net Gain on all projects consented post 2025. Measures taken to enhance BNG scores for the project may also include peatland restoration.

Table 4.1: State	utory and Non-Statutory Consultee Summary of Responses	
Scottish Forestry (SF)	<ul> <li>We advise that both the UK Forestry Standard -4th Edition – 2017 (UKFS) and Scottish Governments Control of Woodland Policy 2009 (CoWRP) apply.</li> <li>Having reviewed the information provided, it appears that the impact on woodland is likely to be small in scale. I am assuming that there would be no need to fell along the woodland edge between NR 827 519 and NR 837 531, and it would be useful to have confirmation of this.</li> <li>There is a strong presumption against the removal of native woodland within Scottish Governments Control of Woodland Policy. It would appear that very minimal work would be required within the native woodland areas at NR 830515 and NR 837 532 and that these could be subject to specific Native Woodland Management Plans as plans proceed.</li> <li>Woodland removal should be kept to a minimum and where woodland is felled it should be replanted and we would be happy to discuss any proposals for mitigation measures and compensatory planting (CP).</li> <li>All areas of woodland that need to be removed to directly accommodate the overhead line and associated infrastructures (pylons, access tracks, roads and ancillary structures) will always be counted toward the net area of CP required.</li> <li>When a proposed development or infrastructure requires to go through forestry, consideration should be given to forest design guidelines and Forest Plans for adjacent woodland out with the operational corridor may need to be amended or Felling Permission sought under the Forestry and Land Management (Scotland) Act 2018.</li> </ul>	Scottish Forestry comments and information on UK forestry guidance and policy, and their requirements are noted. Areas of native woodland have been identified and considered alongside other environmental, engineering and economic considerations in the appraisal and selection of the Preferred Alignment. SSEN Transmission welcome the opportunities for compensatory planting. In line with SSEN Transmission's routeing guidance, forestry will be considered as in the development and appraisal of alignment options and will be further considered as part of the EA / EIA as the project progresses. Further environmental and engineering studies and consultation with Scottish Forestry will continue throughout the project to avoid or minimise potential effects on forestry and forest habitat where possible.

Table 4.1: Sta	tutory and Non-Statutory Consultee Summary of Responses	
Scottish Water	Annex 1: Precautions to protect drinking water and Scottish Water assets during hydro development construction and operational activities General requirements 1. If you are aware the activity is taking place within a drinking water catchment the proposed timing of the works, including planned start and completion dates, should be submitted to Scottish Water 3 months in advance of any activities taking place on-site. This information should be submitted to protectdwsources@scottishwater.co.uk.	We welcome Scottish Water's response and guidance on General Requirements in respect to precautions to protect drinking water and Scottish Water assets during hydro development, construction and operational activities. We acknowledge our requirement to notify Scottish Water three months in advance of any activities taking place on-site that may take place within a drinking water catchment the proposed timing of the works, including planned start and completion dates. This requirement will be detailed in the project Construction Environmental Management Plan (CEMP).
	2. If a connection to the water or waste water network is required, a separate application must be made via the Scottish Water Development Operations Team Portal for permission to connect, this can be found at Scottishwater/portal. It is important to note that the granting of planning consent does not guarantee a connection to Scottish Water assets. The Development Operations Team can be contacted by telephone on 0800 389 0379 or via email at developmentoperations@scottishwater.co.uk	We acknowledge our requirement for a separate application should a connection to the water or waste water network be required. Details of this requirement and the associated contact details shall be included within the project CEMP. In the event of an incident occurring that could affect Scottish Water, SSEN Transmission or our appointed contractor will notify Scottish Water, without delay, using the Customer Helpline number 0800 0778 778 and the local contact if known. Details of this requirement and the associated contact details shall be included within the project CEMP.
	<ul> <li>3. In the event of an incident occurring that could affect Scottish Water we should be notified without delay using the Customer Helpline number 0800 0778 778 and the local contact if known.</li> <li>4. If an activity associated with any third party works is located within the vicinity of an existing Scottish Water asset, it is essential that these assets are protected from damage. To this end, the developer will be required to comply with Scottish Water's current process, guidance, standards and policies in relation to such matters.</li> <li>5. Copies of Scottish Water's relevant record drawings can be obtained from the undernoted Asset Plan Providers. This is distinct from the right to seek access to and inspect apparatus plans at Scottish Waters area offices, for which no charge is applied.</li> </ul>	We acknowledge that if an activity associated with any third party works is located within the vicinity of an existing Scottish Water asset, it is essential that these assets are protected from damage. SSEN Transmission will as such comply with Scottish Water's current process, guidance, standards and policies in relation to such matters. Details of this requirements will be captured in the project CEMP. We acknowledge that copies of Scottish Water's relevant record drawings can be obtained from the undernoted Asset Plan Providers and that this is distinct from the right to seek access to and inspect apparatus plans at Scottish Waters area offices, for which no charge is applied. We acknowledge that site plans obtained via the asset plan providers are indicative and their accuracy cannot be relied upon. SSEN Transmission acknowledges that for EIA's, housing and mixed developments that the developer contacts the Scottish Water Development Enablement Team via the Development Services portal at https://swastroprodweb.azurewebsites.net/home/default for further advice if assets are shown to be located in the vicinity of the proposed development, and where the exact location and the nature of

6. It should be noted that the site plans obtained via the asset plan providers are indicative and their accuracy cannot be relied upon.

7. It is recommended for EIA's, housing and mixed developments that the developer contacts the Scottish Water Development Enablement Team via the Development Services portal at

https://swastroprodweb.azurewebsites.net/home/default for further advice if assets are shown to be located in the vicinity of the proposed development, and where the exact location and the nature of the infrastructure shown could be a key consideration for the proposed development. An appropriate site investigation may be required to confirm the actual position of assets in the ground. Scottish Water will not be liable for any loss, damage or costs caused by relying upon plans or from carrying out any such site investigation.

8. Proposals for Forestry, Hydro Projects, Mining/Quarries, Peatland Restoration and Utility Projects should be sent to the HAUC Diversions Team via the Development Services portal at

https://swastroprodweb.azurewebsites.net/home/default for further advice if assets are shown to be located in the vicinity of the proposed development, and where the exact location and the nature of the infrastructure shown could be a key consideration for the proposed development. An appropriate site investigation may be required to confirm the actual position of assets in the ground. Prior to any activity commencing, all known Scottish Water assets should be identified, located and marked out. Please note that Scottish Water records are indicative only and it is your responsibility to accurately locate the position and depth of these pipes on site before preparing and submitting your plans. No intrusive site investigation works (e.g. trial holes) should be undertaken without written permission from Scottish Water.

9. Scottish Water requires Risk Assessment Method Statements (RAMS) and Safe Systems of Work (SSoW) to be prepared and submitted in advance to Scottish Water for formal review and acceptance. These documents shall consider and the infrastructure shown could be a key consideration for the proposed development. It is also acknowledged that an appropriate site investigation may be required to confirm the actual position of assets in the ground, and that Scottish Water will not be liable for any loss, damage or costs caused by relying upon plans or from carrying out any such site investigation. Pertinent details relating to this shall be captured within the project CEMP.

SSEN Transmission acknowledges that proposals for Forestry, Hydro Projects, Mining / Quarries, Peatland Restoration and Utility Projects should be sent to the HAUC Diversions Team via the Development Services portal at https://swastroprodweb.azurewebsites.net/home/default for further advice if assets are shown to be located in the vicinity of the proposed development, and where the exact location and the nature of the infrastructure shown could be a key consideration for the proposed development. It is also acknowledged that an appropriate site investigation may be required to confirm the actual position of assets in the ground and that prior to any activity commencing, all known Scottish Water assets should be identified, located and marked out. SSEN Transmission notes that Scottish Water records are indicative only and it is your responsibility to accurately locate the position and depth of these pipes on site before preparing and submitting your plans and that no intrusive site investigation works (e.g. trial holes) should be undertaken without written permission from Scottish Water. Pertinent details relating to this shall be captured within the project CEMP.

SSEN Transmission understand that Scottish Water requires Risk Assessment Method Statements (RAMS) and Safe Systems of Work (SSoW) to be prepared and submitted in advance to Scottish Water for formal review and prior written acceptance, and that these documents shall consider and outline in detail how existing Scottish Water assets are to be protected and / or managed for the duration of any construction works and during operation of the development if relevant. Details of this requirement will be captured in the project CEMP.

We acknowledge that we are required to obtain written acceptance from Scottish Water where any site activities are intended to take place in the vicinity of Scottish Water's assets and that the relevant team can advise on any potential risk mitigation measures that may be required. Details of this requirement will be captured in the project CEMP.

managed for the duration of any construction works and during operation of the	assets at all times for inspection, maintenance and repair. Details of this requirement will be captured
development if relevant. These documents must be submitted to Scottish Water	in the project CEMP.
for formal prior written acceptance.	SSEN Transmission acknowledges that;
10. The developer shall obtain written acceptance from Scottish Water where any site activities are intended to take place in the vicinity of Scottish Water's assets.	Any obstruction or hindrance of access to Scottish Water assets should be avoided.
The relevant team can advise on any potential risk mitigation measures that may be required.	• The prompt and efficient use and manipulation of valves, hydrants, meters or other apparatus is required at all times.
11. Scottish Water and its representatives shall be allowed access to Scottish Water assets at all times for inspection, maintenance and repair. This will also	• There should also be no interference with the free discharge from water main scours or sewer overflows.
ensure that the Scottish Water assets are protected and that any Scottish Water requirements are being observed.	These points shall be detailed within the project CEMP.
12. Any obstruction or hindrance of access to Scottish Water assets should be avoided. The prompt and efficient use and manipulation of valves, hydrants, meters or other apparatus is required at all times. There should also be no interference with the free discharge from water main scours or sewer overflows.	SSEN Transmission acknowledges that in the event of an incident occurring that could affect Scottish Water, including any damage to assets, Scottish Water should be notified without delay, using the Customer Helpline number 0800 0778 778, and the local contact if known, and that Scottish Water apparatus should not be interfered with or operated by anyone other than Scottish Water personnel. Details of these requirements shall be captured in the project CEMP.
13. In the event of an incident occurring that could affect Scottish Water, including any damage to assets, Scottish Water should be notified without delay, using the Customer Helpline number 0800 0778 778, and the local contact if known. Scottish Water apparatus should not be interfered with or operated by anyone other than Scottish Water personnel.	We acknowledge the minimum distances of sewers / water mains from Buildings / Structures / other Obstructions and that there are two critical issues relating to how close you can build to water mains and sewers, points A and B as noted. SSEN Transmission shall liaise with Scottish Water during the design process to ensure compliance and these points shall be detailed within the project CEMP to ensure consideration during construction.
14. Minimum Distances of Sewers/Water Mains from Buildings/Structures/other Obstructions – There are two critical issues relating to how close you can build to water mains and sewers.	We acknowledge that stationary plant, equipment, scaffolding, construction or excavated material, etc. should not be placed over, or close to, any Scottish Water assets without the prior written consent of Scottish Water which may be withheld depending on circumstances on-site. The detail of this
A. Scottish Water has a legal right of access in order to maintain and repair assets and there are minimum distances required in order to facilitate future SW access to water mains and sewers. No buildings, structures or any other obstructions	We acknowledge that special care should be taken to avoid the burying of Scottish Water assets or the obstruction of sewers or manholes with fill or other material, and that arrangements for altering the

outline in detail how existing Scottish Water assets are to be protected and/or

We acknowledge that Scottish Water and its representatives shall be allowed access to Scottish Water

that will restrict our access or put at risk the integrity of the assets is permitted within this distance.

B. For pressurised pipes there is a recommended distance to be used in order to protect adjacent buildings and structures should the asset burst. This is the recommended distance to minimise the risk of damage to adjacent properties and structures in the event of a water main failure. It is suggested that this distance may include garden areas but should not include inhabited structures.

The details of these requirements should be confirmed with Scottish Water as an early part of the design process.

15. Stationary plant, equipment, scaffolding, construction or excavated material, etc. should not be placed over, or close to, any Scottish Water assets without the prior written consent of Scottish Water which may be withheld depending on circumstances on-site.

16. Special care should be taken to avoid the burying of Scottish Water assets or the obstruction of sewers or manholes with fill or other material. Arrangements for altering the level of any chambers should be agreed in advance with Scottish Water and these should be constructed in accordance with Scottish Water requirements. The cost of any work to Scottish Water assets will be met by the project developer.

17. Excavation works (e.g. of wind turbine foundations) should not be carried out in the proximity of a water or waste water main without due notice having been given to Scottish Water and prior written acceptance obtained. The developer will comply fully with any Scottish Water specific site requirements.

18. Any tree planting associated with the development (e.g. compensatory planting or screening etc.) should be undertaken in line with Water for Scotland 4th Edition 2018 and Sewers for Scotland 4th Edition 2018 to ensure that Scottish Water's assets are not put at risk by future growth of tree roots.

level of any chambers should be agreed in advance with Scottish Water and these should be constructed in accordance with Scottish Water requirements. It is also noted that the cost of any work to Scottish Water assets (where required) will be met by SSEN Transmission. The detail of this requirement shall be captured in the project CEMP.

We acknowledge that excavation works should not be carried out in the proximity of a water or waste water main without due notice having been given to Scottish Water and prior written acceptance obtained. Further to this SSEN Transmission (or their contractors) will comply fully with any Scottish Water specific site requirements. The detail of these requirements shall be captured in the project CEMP.

We acknowledge that any tree planting associated with the development (e.g. compensatory planting or screening etc.) should be undertaken in line with Water for Scotland 4th Edition 2018 and Sewers for Scotland 4th Edition 2018 to ensure that Scottish Water's assets are not put at risk by future growth of tree roots. The detail of this requirement shall be captured in the project CEMP.

We acknowledge that vibration in close proximity to Scottish Water pipelines or ancillary apparatus should be managed in accordance with British Standard 5228-1:2009 (Code of practice for noise and vibration control on construction and open sites), and that the predicted levels of vibration should be agreed in advance with Scottish Water as part of the risk assessment and method statement and agreed vibration monitoring arrangements will be required. The detail of these requirements shall be captured in the project CEMP.

We will consider the possibility of increased loading on Scottish Water apparatus and measures will be taken to eliminate or mitigate increased loading on assets. Further to this care shall be taken to identify the exact location (line and level) of any assets, which may be crossed by vehicles on the access route to the site and crossing points will be engineered to the requirements of Scottish Water. Any pipe crossing proposals are subject to prior written acceptance by Scottish Water. The detail of these requirements shall be captured in the project CEMP.

We acknowledge that Scottish Water will not accept liability for any costs incurred in fulfilling any of the above requirements during the development planning, construction or operational phases, either

Table 4.1: Stat	utory and Non-Statutory Consultee Summary of Responses	
	19. Vibration in close proximity to Scottish Water pipelines or ancillary apparatus	by SSEN Transmission, SSEN Transmission's associates, contractors or any other person or organisation
	should be managed in accordance with British Standard 5228-1:2009 (Code of	involved in the project.
	<ul> <li>practice for noise and vibration control on construction and open sites). The predicted levels of vibration should be agreed in advance with Scottish Water as part of the risk assessment and method statement and agreed vibration monitoring arrangements will be required.</li> <li>20. The developer will consider the possibility of increased loading on Scottish Water apparatus and measures will be taken to eliminate or mitigate increased loading on assets. Care should be taken to identify the exact location (line and level) of any assets, which may be crossed by vehicles on the access route to the site and crossing points will be engineered to the requirements of Scottish Water.</li> <li>21. Scottish Water will not accept liability for any costs incurred in fulfilling any of the above requirements during the development planning, construction or operational phases, either by the developer, the developer's associates, contractors or any other person or organisation involved in the project.</li> <li>22. If the developer damages any Scottish Water asset they will be held liable for any costs resulting from this.</li> <li>23. Scottish Water may require costs associated with the development to be reimbursed by the developer or the developer's agents</li> </ul>	We acknowledge that if SSEN Transmission damages any Scottish Water asset they will be held liable for any costs resulting from this. We acknowledge that Scottish Water may require costs associated with the development to be reimbursed by SSEN Transmission or SSEN Transmission's agents.
Scotways	It is noted that all three alignment options will affect the Kintyre Way, there is a lack of information about impacts on public access.	The Kintyre Way have been consulted on the project at the routing and alignment stage. SSEN Transmission will consider, as part of the landscape and visual impact assessment, how viewpoints will be altered by the installation of the proposed development. Opportunities will be identified, where they exist, to promote new views and areas of interest for users of The Kintyre Way.

Table 4.1: Statutory and Non-Statutory Consultee Summary of Responses		
The Kintyre Way	Concerns raised regarding any closures of the Kintyre Way during construction and questioned if alternatives are in place.	SSEN Transmission do not expect any permanent closures during construction. There would be minimal disruption as there are no plans to put an access track.
	What community benefits can be provided. Would it be possible to improve the Kintyre Way footpath, putting in viewpoints/ seats and notice boards?	SSEN will discuss what possible benefits can be provided by the Sheirdrim Wind Farm Developer. Viewpoints from the Kintyre Way and the sea will be part of the EIA / EA and once selected and approved, SSEN will share this with the Kintyre Way.

# 5. PROJECT RESPONSES TO CONSULTATIONS

# 5.1 Overview

This section of the report documents how the preferred alignment set out within the Consultation Document has subsequently responded to the issues emerging from the consultation feedback. Responses to each of the points raised by stakeholders through the consultation process are included in Section 4 above.

- 5.1.1 To address the other points raised above, the following actions are being undertaken:
  - An EA / EIA will be prepared and submitted as part of the project consenting process. The EA / EIA will assess pertinent environmental topics and where appropriate propose mitigation to address impacts identified.
  - Any loss of Scotland's National Forestry and Land crop will comply with Scottish Government's 'Woodland Removal Policy' and there would need to be compensatory planting of new woodland to replace woodland lost to the installation of the power line. Once approval stage is closer, CP and restocking elements will be conditioned by the appropriate planning authority to ensure no net loss of woodland. The agreed mitigation / CP will be delivered through a forest plan approved by Scottish Forestry.
  - Scottish Water will be notified three months in advance of any works commencing on site and any proposed crossing of an existing Scottish Water assets will be agreed with Scottish Water.
  - SSEN Transmission shall develop a project Construction Environmental Management Plan (CEMP) which will detail
    processes and procedures relating to construction. The CEMP will include Scottish Water assets as discussed above
    (Section 4) and will extend to all identified environmental sensitivities including but not limited to landowner /
    stakeholder engagement, emergency response and incident reporting, management plans (e.g. Ecology,
    Archaeology, Waste). The CEMP will also tie in the project's environmental commitments; necessary permits
    secured / required (where known); construction methods, sequencing and timescales; relevant best practice
    guidance (including SSEN Transmission SPPs and GEMPs) and legislation.
- 5.1.2 All comments and considerations to date will be taken forward into the EIA / EA and consenting stage, through which assessments will be carried out for all relevant environmental aspects. This process will remain inclusive, seeking further consultation where appropriate.

# 5.2 Conclusion

This report describes responses received to consultation on an overhead alignment and provides detail on the actions proposed in response to the issues raised.

## 5.3 Proposed Alignment

The Preferred Alignment is shown in **Figure 1.1**. The alignment was selected on the basis that it is considered to provide an optimum balance of environmental, technical and economic factors. Based on the consultation responses received, no changes to the Preferred Alignment are necessary and this will now be taken forward as the Proposed Alignment for more detailed Environmental Appraisal/ Environmental Impact Assessment.

# 6. NEXT STEPS

SSEN Transmission will consider the final details of its proposals before submitting an application for consent under Section 37 of the Electricity Act 1989. There will be a further opportunity for comments to be submitted in relation to the application to the Scottish Government Energy Consents Unit. Full instructions on how to comment and the timescales for doing so will be advertised in the local and national press when the application is submitted.

Further Information will also be posted on the project website, including the summary of the feedback/questions and SSEN Transmission's responses from the Consultation events at:

https://www.ssentransmission.co.uk/projects/sheirdrim-wind-farm-connection/

# **APPENDIX A – FIGURE**

i



Path: \\UKSSMBNAF-a383.ops.erm55.com\UKSGISData01\London\0612294 - SSE Argyll Windfarms\MAPS\0612294 - SSE Argyll Windfarms - Corridor Report.aprx\0612294 - Figure 1.2 - Sheirdrim Alignment Options - A01

# **APPENDIX B – CONSULTATION BROCHURE**

# Sheirdrim Wind Farm Connection -Alignment Consultation

September to October 2022



TRANSMISSION

# Share your views with us:

We are launching public consultations to seek feedback on the alignment options on Sheirdrim wind farm connection project in Argyll and Bute:

Information on our proposals is available within this consultation booklet and on the project webpage https://bit.ly/3RjH9hX



# Who we are

We are Scottish and Southern Electricity Networks Transmission (SSEN Transmission), operating under licence as Scottish Hydro Electric Transmission Plc (SHE Transmission) for the transmission of electricity in the north of Scotland.



In total we maintain about 5,000km of overhead lines and underground cables – easily enough to stretch across the Atlantic from John O'Groats all the way to Boston in the USA.

Our network crosses some of the UK's most challenging terrain – including circuits that are buried under the seabed, are located over 750m above sea level and up to 250km long.

The landscape and environment that contribute to the challenges we face also give the area a rich resource for renewable energy generation. There is a high demand to connect from new wind, hydro and marine generators which rely on Scottish and Southern Electricity Networks to provide a physical link between the new sources of power and electricity users. Scottish and Southern Electricity Networks is delivering a major programme of investment to ensure that the network is ready to meet the needs of our customers in the future.

# Our responsibilities

We have a licence for the transmission of electricity in the north of Scotland and we are closely regulated by the energy regulator Ofgem.

Our licence stipulates that we must develop and maintain an efficient, co-ordinated and economical system of electricity transmission.

# What is the difference between transmission and distribution?

Electricity transmission is the transportation of electricity from generating plants to where it is required at centres of demand. The electricity transmission network, or grid, transports electricity at very high voltages through overhead lines, underground cables and subsea cables.

Our transmission network connects large scale generation, primarily renewables, to central and southern Scotland and the rest of Great Britain. It also helps secure supply by providing reliable connection to the wider network of generation plans.

The electricity distribution network is connected into the transmission network but the voltage is lowered by transformers at electricity substations, and the power is then distributed to homes and businesses through overhead lines or underground cables.

# **Overview of transmission projects**





# About the project

Scottish Power (UK) Ltd is the developer for the proposed Sheirdrim Wind Farm located west of Claonaig, in Argyll. The 84MW wind farm requires a single circuit connection from the wind farm substation compound and terminating at the existing Crossiag 132kV substation. The connection will consist of approximately 3km of underground cable (UGC) which will transition to approximately 8.5km of overhead line (OHL) before transitioning back to UGC for approximately 1.0km.

SSEN Transmission seeks to connect Sheirdrim Wind Farm to the wider electricity network. The substation platform would be the responsibility of Scottish Power (UK) Ltd as the wind farm developer.

The proposed project would involve:

- An underground cable (UGC) from the Sheirdrim Wind Farm substation compound, extending approximately 2km to 3km before converting to OHL and converting back to UGC when approaching Crossaig substation. This would require excavation of a trench in which to lay the cable and the construction of joint bays.
- Approximately 8.5km of trident wood poles to carry a single circuit 132kV OHL. Wood poles would require excavation and backfilling. Where shallow bedrock is present, it may be necessary to break or remove rock to accommodate pole foundations.
- Install a 120MVA 132/33kV transformer; a GIS 33kV transformer circuit breaker; and a 33kV switch disconnector on suitable level platforms inside a combined control and transformer building; along with their associated cabling/metering/protection equipment.
- Felling commercial forestry to create an operational corridor to enable the safe operation and maintenance of the OHL.
- Associated works will include creation of temporary laydown areas for materials and welfare facilities, installation of permanent and temporary access tracks and drainage infrastructure.
- Remedial works to reinstate the immediate vicinity of the works and any ground disturbed, to pre-existing use.





# **Project history – previous consultation**

In December 2021 and January 2022 we consulted on the route options for the proposed development (see Figure 1). Following analysis of the consultation feedback, along with engineering, environmental and cost considerations, and further discussions with landowners and unexploded ordnance (UXO) specialists, it was identified that our preferred route, Route A, was not suitable. Route A passes through an area that poses a high risk from unexploded ordinance (UXO).

SSEN undertook a range of surveys over spring and summer of 2022 to identify UXO risk for the proposed development.

This work has now been completed and allowed the recent publication of the Report on Consultation (RoC). The RoC identified a new preferred route option, Route C. In combination with other consultation feedback, Route C is considered the least constrained from an environmental, engineering, and cost perspective and avoids the area of high UXO risk.

Route C has been taken forward as the proposed route option. The project has then moved into the alignment stage where we determine the proposed alignment of the OHL within the proposed route option.



Figure 1: Route options



# This consultation

OHL routing is a balance between environmental, engineering and cost considerations, with stakeholder and public consultation comprising a key element of this process.

This project is at the alignment optioneering stage of development, and we are consulting with local stakeholders to provide an update on our proposals and to share considered alignment options and the preferred alignment. We have identified a preferred alignment on which we are keen to hear your views.

After receiving feedback from this consultation and carrying out further survey work and analysis to help us refine our

proposals we will confirm the preferred alignment and take this forward to consenting as a Proposed Alignment, undertaking an Environmental Impact Assessment to support our eventual consent application.

Most of the alignment options fall within Route Option C. Please note that we have offered alignment options that fall, in short sections, out with the boundary of Route C.

This is due to the additional investigation work undertaken following the routeing consultation, which resulted in minor changes to where alignments could be accommodated within Route C (see Figure 2).



Figure 2: Alignment options - sections out with Route C

www.ssen-transmission.co.uk/projects/sheirdrim-wind-farm-connection



# Alignment – selection process

The OHL design contractor was instructed by SSEN Transmission to develop a baseline alignment for a 132kV OHL. The baseline alignment aims to provide the optimal alignment taking account of environment and engineering criteria. Following the identification of the baseline alignment (option 1), alternative alignments are suggested (options 2 and 3). The following options were suggested to address environment and engineering issues and previous consultation (see Figure 3 Alignment Options)

# **Option 1** (baseline – preferred alignment)

Extends from Sheirdrim wind farm substation comprising UGC for approximately 2.5km.

The OHL section is approximately 8.6km in length and heads south east passing to the south of Loch Cruinn and through a section of commercial forest.

It then runs parallel to the new Inveraray to Crossaig 275kV OHL, which is currently being constructed.

At Cnoc Dhubh, option 1 turns to the southwest to avoid steeper gradients and slopes and runs parallel with the new 275kV OHL and the B842 road. The OHL terminates approx. 1km from the existing Crossaig substation, where it will become UGC to connect into the substation.

# Option 2 (alternative alignment)

Extends from Sheirdrim wind farm substation comprising UGC for approximately 2.5km.

The OHL section is approximately 8.8km in length and heads in a more easterly direction through a commercial forestry area. Option 2 follows the existing 132kV OHL for approximately 2km.

At Cnoc Dhubh, option 2 turns to the southwest to avoid steeper gradients and slopes and runs along the corridor of the existing 132kV OHL and the B842 road. The OHL terminates approx. 1km from the existing Crossaig substation, where it will become UGC to connect into the substation.

To note: the existing 132kv OHL will be dismantled as part of the Inveraray to Crossaig OHL project currently in construction, leaving an existing cleared corridor in which the proposed development could occupy.

# Option 3 (alternative alignment)

Extends from Sheirdrim wind farm substation comprising UGC for approximately 1.5km. Alignment option 3 is approximately 8.5km of OHL and is the shortest alignment of the three options.

This option offers the potential for a shorter UGC section. The alignment heads south between Cnoc Creagach and Capull Cruidah avoiding steep slopes and high ground, then traverses across the slope towards Escart Farm. The alignment then picks up the edge of a large commercial forest boundary and then crosses Crossaig Glen.

The OHL terminates approx. 1km from the existing Crossaig substation, where it will become UGC to connect into the substation.

# **Cable options**

Three cable options are presented that extend from Sheirdrim wind farm to pass through the area of proposed turbines before converting to OHL. All the cable options could connect to each of the proposed OHL alignment options.

# What are the potential risks associated with these options?

We have completed a desk-based assessment of the alignment and have identified that they present the following environmental and engineering risks (see overleaf).



# **Alignment options map**



Figure 3: Alignment options



# **Environmental information**

Analysis of environmental constraints has identified sensitivities in relation to the environmental topics identified in the RAG table (see page 10). The three alignments are all within approximately 1km of each other and share many of the same environmental sensitivities. These include:

- Proximity to Kintyre Goose Roosts special protection area (SPA)) and Sound of Gigha SPA and potential for barrier and collision impacts to schedule 1 species, as they may cross the alignments to access these designated sites.
- Proximity to known golden eagle nest locations and potential for collision impacts.
- Direct impacts on areas of annex 1 habitat including blanket bog and peat.
- Commercial forestry that would need to be felled to create a clear space for operation of the overhead line and access tracks.
- Crossing over the Kintyre Way Long Distance Footpath, with potential for close range visual effects for a short section.
- Potential for direct impacts to semi natural ancien woodland.
- Proximity to known private water supplies.

# Differences between the environmental sensitivities of the alignment options are identified below.

- Option 3 passes through a larger extent of class 1 peatland than other options resulting an increased potential for direct impact on annex 1 habitat.
- Options 1 and 2 would pass through existing gaps in the semi natural ancient woodland at Crossaig and Allt Romain, which would minimise direct impacts on this irreplaceable habitat.
- Option 2 uses the existing alignment of the existing 132kV Crossaig to Inveraray OHL which is to be dismantled. Replacing one OHL with a new OHL on the same alignment would result in a lower potential impact on landscape and visual receptors.
- Option 2 uses the existing alignment of the Crossaig to Inveraray overhead line which is to be dismantled. Replacing one OHL with a new OHL would result in a lower potential for impact on ornithological receptors on account of habituation to the existing OHL.
- Option 2 passes within approximately 120 160m of three residential properties, this is closer than the other 2 options.
- Option 2 passes closer to known private water supplies with greater potential for impact on water flow /quality.







# **Engineering information - OHL**

Peatland is considered high in the RAG table for all alignments due to the corridor coverage and available data sets. At micrositing stage the risk be fully determined at all wood pole sites. Whilst all options would require tree removal from commercial and ancient woodland sites, Option 1 causes the least impact on both these woodland types. Option 2 would cross the new Inveraray to Crossaig 275 kV OHL four times (see Figure 3), a significant design and health and safety consideration. Option 3 passes within proposed turbine wake zones through the proposed Sheirdrim Wind Farm.

OHL alignment Option 1 is preferred from a technical perspective, on account of:

- No major infrastructure crossings, the ability to utilise the proposed new permanent accesses and accommodation works associated with the in construction Inveraray to Crossaig 275 kV OHL.
- It remains outside any existing or proposed turbine wake zones.
- It involves the least woodland removal of all alignments.

## **Engineering information - UGC**

Unknown ground conditions are currently a factor for all cable options including steep topography and water crossings. The aim of the alignment options is to mitigate the issues where possible by utilising planned access tracks which will be installed as part of the wind farm works or alternatively routeing the cable through more even terrain sections, where possible.

UGC Options 1 and 2 score similarly in the Engineering RAG assessment. Option 2 is considered marginally preferable to Option 1, as it adheres more closely to the proposed access tracks associated with the Sheirdrim Wind Farm allowing better and marginally less constrained access.

## **Crossaig Substation UGC Connection**

An indicative alignment is shown for this section of UGC (Figure 3). This alignment interfaces with the proposed Crossaig North Substation and the existing Crossaig Substation and its technical development is dependent on the design of the proposed new Crossaig North Substation, which is underway.





# Scottish & Southern Electricity Networks

# Environment RAG impact rating of all alignment options

# Comparative analysis of alignment options

To demonstrate the full extent of comparative analysis undertaken for each alignment option, we created Red/Amber/ Green (RAG) tables which illustrate the level of associated impact for each criterion under environment, engineering and cost. A high impact is shown as red, a medium impact is shown as amber, and a low impact is shown as green. For further information on the alignment options analysis, please refer to the Consultation Document available from the project https://bit.ly/3RjH9hX or on request.

# **RAG impact rating - environment - OHL**

	Natural heritage					Cult heri	tural tage	People	eople Landscape		Land use			Planning		
OHL Alignment	Designations	Protected species	Habitats	Hydrology/ geology	Ornithology	Designations	Assets	Proximity to dwellings	Designations	Character	Visual	Agriculture	Forestry	Recreation	Proposals	Policy
1	н	L	н	L	м	м	м	L	м	м	м	L	м	м	L	м
2	н	L	н	L	м	м	м	L	м	м	м	L	м	м	L	м
3	н	L	н	L	м	м	м	L	м	м	м	L	м	м	L	м

# **RAG impact rating - environment - UGC**

	Natural heritage					Cult heri	tural tage	People Landscape		Land use			Planning			
UGC Alignment	Designations	Protected species	Habitats	Ornithology	Hydrology/ geology	Designations	Assets	Proximity to dwellings	Designations	Character	Visual	Agriculture	Forestry	Recreation	Proposals	Policy
1	L	L	м	L	L	N	L	L	L	L	L	L	N	L	L	L
2	L	L	м	L	L	N	L	L	L	L	L	L	N	L	L	L
3	L	L	м	L	L	N	L	L	L	L	L	L	N	L	L	L
Crossaig Substation Connection	L	L	L	L	L	N	L	L	L	L	L	N	м	L	L	L



# Engineering RAG impact rating of all alignment options

# **RAG impact rating - engineering - OHL**

Option	1	2	3				
Infrastructure Crossing							
Major Crossings	L	Н	L				
Minor Roads	l I	Н	L				
Environmental Design							
Elevation	L	L	L				
Atmospheric Pollution	L	L	L				
Contaminated Land	L	L	L				
Flooding	L	L	L				
Ground Condition							
Terrain	l I	l I	l I				
Peatland	Н	Н	Н				
Construction and Maintena	nce						
Access	L	L	l I				
Angle Towers	Н	L	Н				
Proximity	Proximity						
Clearance Distance	l I	Н	L				
Windfarms	Н	Н	Н				
Communication Masts	L	L	L				
Urban Developments	L	L	L				
Metallic Pipes	L	L	L				

# **RAG impact rating - engineering - UGC**

Route	А	В	С				
Infrastructure Crossing							
Major Crossings	L	L	L				
Minor Roads	L	L	L				
Environmental Design							
Elevation	Н	Н	L				
Contaminated Land	L	L	L				
Ground Condition							
Terrain	L	L	L				
Peatland	Н	Н	Н				
Construction and Maintenance							
Access	L	L	Н				
Cable Haul Road	l I	l I	Н				
Proximity							
Clearance Distance	L	L	L				
Windfarms	Н	Н	Н				
Communication Masts	L	L	L				
Design							
Joint bays & Link Boxes	L	L	L				
Additional Considerations							
Route Length	L	L	L				



# Cost RAG impact rating of all alignment options

There is no preferred OHL alignment from a cost perspective as all costs are comparable with no alignment cost varying significantly to indicate an overall preference. Overall, preferred UGC alignment from a cost perspective is alignment option 3 because it is the lowest cost option. However this will be assessed in line with Engineering and Environmental aspects.

Alignment	1	2	3
Capital	103%	105%	G
Diversions	G	G	G
Public road improvement	G	G	G
Tree falling	Н	Н	Н
Land assembly	G	G	G
Consent mitigations	А	А	А
inspections	А	G	G
Maintenance	А	G	G
Total cost	103%	105%	G

# **RAG Impact Rating - Cost - OHL**

# **RAG Impact Rating - Cost - UGC**

Alignment	1	2	3
Capital	126%	129%	G
Diversions	G	G	G
Public road improvement	G	G	G
Tree falling	G	G	G
Land assembly	G	G	G
Consent mitigations	G	G	G
inspections	А	А	А
Maintenance	А	А	А
Total cost	126%	129%	G

# **Preferred alignment**

The aim of our routing process is to provide a balanced assessment of environment, engineering and cost factors in order to select the Preferred alignment for the new OHL.

**The Preferred OHL alignment is Option 1.** This would not cross under the new Inveraray to Crossaig OHL and is outside of wind turbine wake zones. This option can use existing access tracks, for a large part of the route and runs along the edge of an existing wayleave, meaning removal of Ancient Woodland can be avoided and minimised. All options will affect Annex 1 peatland and Blanket Bog habitat.

Commitment will be made to avoid and reduce peat impacts through a detailed Peat Management Plan (PMP) with measures including micro siting and use of temporary, floating access tracks to avoid excavating peat.

The preferred UGC alignment is Option 2 as this option offers the greatest opportunity to reduce permanent impacts to peat through using wind farm access tracks and UGC installation in peat already disturbed through track creation.

For the OHL there are no significant differences in the overall costs such that it would influence the rationales provided for the preferred alignments. Option 2 UGC is the more expensive option, however, environmental and engineering benefits are considered to outweigh the cost.



# What else is happening in Argyll?

# **Development projects**

#### Creag Dhubh to Inveraray 275kV overhead line

This project involves constructing nearly 9km of new 275kV overhead line (OHL), supported by steel lattice towers, between the proposed new substation at Creag Dhubh and a connection point at tower 18 on the recently constructed Inveraray to Crossaig overhead line. The new line will be operated at 275kV once the associated transmission network in the Argyll and Kintyre region has been upgraded to 275kV capability. This will be done one circuit at a time over the summer of 2026 into spring 2027.

# Creag Dhubh to Dalmally 275kV connection

We continue to engage with the community in Dalmally regarding the alignment which has been taken forward in our Section 37 Application for the Creag Dhubh to Dalmally 275kV Connection.

We anticipate a decision on the application in summer 2023. If consented, we foresee construction commencing early 2024.

#### Argyll and Kintyre 275kV substations – An Suidhe, Crarae, Craig Murrail and Crossaig North

We sought feedback from the public in our pre-application consultation events for the Argyll and Kintyre substations in December 2021 - January 2022.

SSEN Transmission intends to submit the planning and Section 37 applications for these four substations in Autumn 2022 with construction anticipated to commence in summer 2024 if the planning applications are successful.

# Other projects in the area

## Sloy Power Station substation rebuild

Transmission assets at Sloy Power Station substation are reaching the end of their operational capabilities and need to be replaced. This project includes construction of a new substation near the existing site, tower and gantry works for connection to the existing overhead line, 11kV cables to be installed to connect back to the power station from the new substation location and removal of existing equipment at the existing substation. The project team are currently identifying potential locations and further information will be shared at future consultation events.

## Dunoon overhead line rebuild

The Dunoon overhead line rebuild project is to replace the existing transmission overhead line which connects Dunoon to the wider national grid.

The existing overhead line is supported by an old design suite of steel lattice towers (often referred to as pylons) which are coming towards the end of their operational capabilities.The project is currently in development and following consultation on the preferred route alignment in August 2021, SSEN Transmission plan to submit a Section 37 application for this project in February 2023,

#### **Glen Falloch and Sloy VISTA**

As part of the SSEN Transmission VISTA (Visual Impact of Scottish Transmission Assets) initiative, we have installed a 132kV twin cable section of the existing 132kV double overhead line circuit at Sloy and Glen Falloch. Construction commenced in 2021 and 26 steel towers have now been removed.

## Wind farm connection projects

The Argyll and Kintyre 275kV Strategy is required to facilitate renewable generation in Argyll. We also have a requirement to connect this renewable generation to our upgraded infrastructure.

#### **Blarghour wind farm**

This project aims to connect the consented Blarghour wind farm to the proposed Creag Dhubh substation via approximately 10km of overhead line by spring 2026.

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## High Constellation wind farm connection

This project aims to connect High Constellation wind farm to the existing Crossaig substation via approximately 400m of underground cable by spring 2025

#### **Earraghail Wind Farm**

The project aims to connect the Earraghail Wind Farm development via c.5.4km of 275kV double circuit overhead line onto the existing Craig Murrail – Crossaig overhead line for Spring 2027.

## Tangy IV Wind Farm

The project aims to connect the Tangy IV Wind Farm development via approximately c.19.5km of 132kV single circuit overhead line onto the existing Crossaig Carradale overhead line for Spring 2027.

# **Construction projects**

# Inveraray – Crossaig reinforcement

This project involves the rebuild of the existing overhead line between Inveraray and Crossaig and has been in construction since late 2019.

Construction of phase 1 of the project (Inveraray to Port Ann) was completed in March 2022, and construction of phase 2 commenced in autumn 2021.

## Carradale substation

The aim of this project is to reinforce Carradale substation in order to enable renewable generation connection requests.

This involves the replacement of four existing transformers with higher capacity unity to enable this upgraded connection. Work is ongoing and due to be completed by the end of 2022.

Each of our projects are ultimately given their own dedicated project website.

This is where you will find regular, more specific updates regarding the latest news and timelines relating to the individual projects works.

To view the complete list of projects with websites please use the following URL: https://bit.ly/3MShRoN



# How do I have my say?

We understand and recognise the value of the feedback provided by members of the public during all engagements, consultations and events. Without this valuable feedback, the project development team would be unable to progress projects and reach a balanced proposal to submit for planning.

# Join our face to face and virtual consultation events

Our consultation events have been organised to ensure our project teams will be available to answer questions on the following dates and times.

These will be held at location:

Tuesday 27th September 2022 Skipness Village Hall PA29 6XT – 2pm till 7pm

Wednesday 28th September 2022 Whitehouse Village Hall, Tarbert A29 6XR – 2pm till 7pm

We will also hold a virtual consultation on:

## Thursday 6th October 5pm till 7pm

During this session you will be able to send us your questions using a live instant message chat and they will be answered by the project team.

The feedback form in this booklet can be detached and sent back, or you can fill it in online using the forms on the project webpage. We do request that any feedback that you wish to be included in the Report on Consultation is received in written format (feedback received via phone calls will be circulated to the project team but would not be included in reporting).

All feedback received will be collated, reviewed and included in the Report on Consultation which will be published on the project webpage. Can you please ensure all feedback is submitted by Tuesday 18th October 2022.

# Keep in touch

In you have any questions of require further information regarding any of these projects, please do not hesitate to contact the Community Liaison Manager:

# Caitlin Quinn Community Liaison Manager



caitlin.quinn@sse.com

M: +44(0)7901 135758





If you are unable to join the face to face and virtual consultation live chat sessions, there are still plenty of ways to engage with our team:

- You can contact us by email, phone or post. Please see details for the Community Liaison Manager.
- We are happy to arrange (virtual) meetings for individuals or small groups to discuss any areas of interest and if this is something you would like us to facilitate, please contact us as soon as possible.
- We are happy to post copies of this brochure, please contact the Community Liaison Manager to arrange this.
- Copies of this brochure can be made available in larger print if required.



To support everyone online, we provide accessibility and language options on our website through 'Recite Me'. The accessibility and language support options provided by 'Recite Me' include text-to-speech functionality, fully customisable styling features, reading aids, and a translation tool with over 100 languages, including 35 text-to-speech.

Please select "Accessibility" on our website to try out our inclusive toolbar."



# Your feedback

If you prefer, the same feedback form is available to complete online and can be found on the project webpage: https://bit.ly/3RjH9hX Please complete in BLOCK CAPITALS.

Q1	Has the need for the project been adequately explained?What other information would you consider useful at this stage?YesNoIf no, please tell us how we could provide further explanation
Q2	Has the approach taken to select the preferred alignment been adequately explained?YesNoIf no, please tell us how we could provide further explanation
Q3	Are there any factors, or environmental features, that you consider may have been overlooked during the preferred alignment selection process?
Q4	Do you feel, on balance, that the preferred alignment selected is the most appropriate for further consideration? Please provide an explanation of your answer.
Q5	If you don't agree to our preferred alignment which of the options would you consider the best option for SSEN Transmission to develop? Please provide an explanation of your answer.

# Full name

Address

Telephone

Email

If you would like to be kept informed of progress on the project please tick this box.

If you would like your comments to remain anonymous please tick this box.

# Thank you for taking the time to complete this feedback form.

## Please submit your completed form by one of the methods below:

Post: Scottish and Southern Electricity Networks, 1 Waterloo St, Glasgow, G2 6AY

Email: caitlin.quinn@sse.com

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