Scottish & Southern Electricity Networks

TRANSMISSION

Report on Consultation - Route Selection

Project: LT337 Tangy IV Wind Farm OHL Connection

Date: April 2023

Rev								
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GLOSSARY

Term	Definition
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.
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.
Environmental Impact Assessment (EIA)	Environmental Impact Assessment. A formal process codified by EU directive 2011/92/EU, and subsequently amended by Directive 2014/52/EU. The national regulations are set out in The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017. The EIA process is set out in Regulation 4(1) of the regulations and includes the preparation of an EIA Report by the developer to systematically identify, predict, assess and report on the likely significant environmental impacts of a proposed project or development.
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.
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.
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.
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.
Plantation Woodland	Woodland of any age that obviously originated from planting.
Ramsar Sites	Wetlands of international importance that have been designated under the criteria of the Ramsar Convention on Wetlands for containing representative, rare or unique wetland types or for their importance in conserving biological diversity.
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.
Routeing	The work undertaken which leads to the selection of a proposed alignment, capable of being taken forward into the consenting process under Section 37 of the Electricity Act 1989.

Term	Definition
Scheduled Monument	A monument which has been scheduled by the Scottish Ministers as being of national importance under the terms of the 'Ancient Monuments and Archaeological Areas Act 1979'.
Semi-natural Woodland	Woodland that does not obviously originate from planting. The distribution of species will generally reflect the variations in the site and the soil. Planted trees must account for less than 30% of the canopy composition
Sites of Special Scientific Interest (SSSI)	Areas of national importance. The aim of the SSSI network is to maintain an adequate representation of all natural and semi-natural habitats and native species across Britain.
Span	The section of overhead line between two structures.
Special Area of Conservation (SAC)	An area designated under the EC Habitats Directive (Directive 92/43/EEC) 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 (Directive 79/409/EEC) to protect important bird habitats. Implemented under the Wildlife and Countryside Act 1981.
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.
Terminal Structure	A structure (tower or pole) required where the line terminates either at a substation or at the beginning and end of an underground cable section.
The National Grid	The electricity transmission network in the Great Britain.
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.

PREFACE

This Report on Consultation has been prepared by WSP UK Ltd. on behalf of Scottish and Southern Electricity Networks Transmission (SSEN Transmission) to provide a summary of the responses received from key stakeholders (including statutory and non-statutory consultees, local communities, landowners and individual residents) throughout the proposals to date. A Consultation Document[1] was published in August 2022 which sought comments on the proposals, the approach to route selection, the analysis of Route Options and the identification of a Preferred Route.

This Report on Consultation describes how the feedback from consultation has informed the identification of the Proposed Route. Once confirmed, the Proposed Route is then taken forward for the subsequent alignment and consenting stages of the project.

The consultation period was open for 10 weeks, from 19th August 2022 to 28th October 2022. A face-to-face public consultation event was held between 2pm and 7pm on 23rd August 2022 at Campbeltown Town Hall, 54 Main Street, Campbeltown, Argyll, PA28 6AB and 24th August 2022 at Whitehouse Village Hall, Tarbert, PA26 6XR.

To continue engagement on the project SSEN Transmission has developed an online consultation tool, to enable the local community to experience the full exhibition from home on a computer, tablet or mobile device. The online exhibition has been designed to look and feel like a real consultation in a community hall, with exhibition boards, maps, interactive videos and the opportunity to share views on the proposals.

Visitors were able to engage directly with the Project Team, via a live chat function, where they could ask any questions they might have about the project and share their feedback on the current proposals.

A virtual consultation event took place via the project website:

https://www.ssen-transmission.co.uk/projects/project-map/tangy-iv-wind-farm-connection-project/ at the following time:

- 25th August 2022; 5pm – 7pm

This Report on Consultation provides a summary of how SSEN Transmission has responded to comments received by key stakeholders on the Preferred Route and details the actions that will be taken as the proposals progress through to the alignment stage.

[1] SSEN Transmission plc (August 2022) Tangy IV Wind Farm 132 kV OHL Connection Route Selection Consultation Document.

EXECUTIVE SUMMARY

The developer of Tangy IV Wind Farm has submitted an application to the Scottish Government under Section 36 of the Electricity Act 1989 for a 100 megawatt Wind Farm and has a contracted connection date of November 2028. Under the terms of their license, SSEN Transmission is therefore obliged to connect the developer to the transmission network by the contracted connection date.

SSEN Transmission is proposing to construct a new 132 kilovolt (kV) overhead line (OHL) between Tangy IV Wind Farm Substation and a connection point near the existing Crossaig to Carradale 132 kV OHL. As part of this, a new switching station or extension of the Carradale Grid Supply Point is also required to create a transmission connection between the Tangy IV Wind Farm Connection and the existing Crossaig to Carradale 132 kV OHL. The switching station or extension of Carradale Grid Supply Point (GSP) will be used to connect the new Tangy IV Wind Farm to the grid whilst ensuring all relevant protection equipment is installed in the event of a fault.

Route Options were identified in sections, with two transition points identified as 'nodes' within the north of the study area, enabling the routes to be switched between different zones. Route Options identified provided feasible areas for the OHL to be developed, and from which a Preferred Route has been selected that provides an optimum balance of environmental, engineering and economic factors. Site Options were also identified for the proposed switching station from which a Preferred Site has been selected giving the same consideration for environmental, engineering and economic factors. The Consultation Document[2] invited comments from all interested parties on the Preferred Route and Preferred Site.

This Report on Consultation documents the consultation process which has been undertaken for the project between August and October 2022. The programme of consultation was designed to engage with stakeholders including statutory and non-statutory consultees, local communities, landowners and individual residents in order to invite feedback on the rationale for and approach to, the selection of the Preferred Route and Preferred Site.

This report describes the key responses received and provides detail on the actions proposed in response to the issues raised. The consultation process sought to confirm that a Preferred Route comprising of a combination of Route Options A1, B1 and C1 was to be progressed as the Proposed Route. However, following initial consultation responses and feedback received during the consultation period (19th August – 30th September), and noting the differences between Route Options A1 and A2, and B1 and B2 were marginal, a revised Preferred Route comprising of Route Options A2, B2 and C1 was identified. Subsequently, the consultation period was extended by a further 4 weeks to end on the 28th October to allow for consultation on the revised preference to be undertaken. Feedback received from consultees including RSPB Scotland, Historic Environment Scotland, Scottish Forestry and Argyll Fisheries Trust reflected that a change to Route Options A2 and B2 would avoid potential disturbance of habitats that are important for Atlantic Salmon and sea trout populations; preferrable options to reduce collision risk for birds including Greenland white-fronted goose and black grouse; likely to require less transiting of areas of ancient woodland; and likely to have a much lesser impact on historic environment interests than Route Options A1 and B1.

The consultation process has confirmed the preferred combination of Route Options A2, B2 and C1 is proposed to be progressed as the Proposed Route, within which further study will seek to identify alignment options. It is recognised that the revised Preferred Route runs through sensitive environments, however the revised Preferred Route has been selected on the basis that it is considered to provide an optimum balance of environmental, engineering and economic factors, and will become the Proposed Route taken forward to the alignment stage.

[2] SSEN Transmission plc (August 2022) Tangy IV Wind Farm 132 kV OHL Connection Route Selection Consultation Document.

1. INTRODUCTION

1.1 Purpose of Document

SSEN Transmission is proposing to construct a new 132 kilovolt (kV) overhead line (OHL), which will be supported on either wooden pole tridents or L4 steel structures, between the Tangy IV Wind Farm Substation and a connection point near the existing Crossaig to Carradale 132 kV OHL as shown in **Plate 1.1**.

This Report on Consultation documents the consultation process for the project between August and October 2022, during the route option stage of the project. The programme of consultation was designed to engage with key stakeholders including statutory and non-statutory consultees, local communities, landowners and individual residents in order to invite feedback on the rationale for and approach to, the selection of the Preferred Route for the proposed 132 kV OHL and Preferred Site for the proposed switching station/ extension to Carradale GSP[3].

This report describes the key responses received and details the actions taken in response to the issues raised.

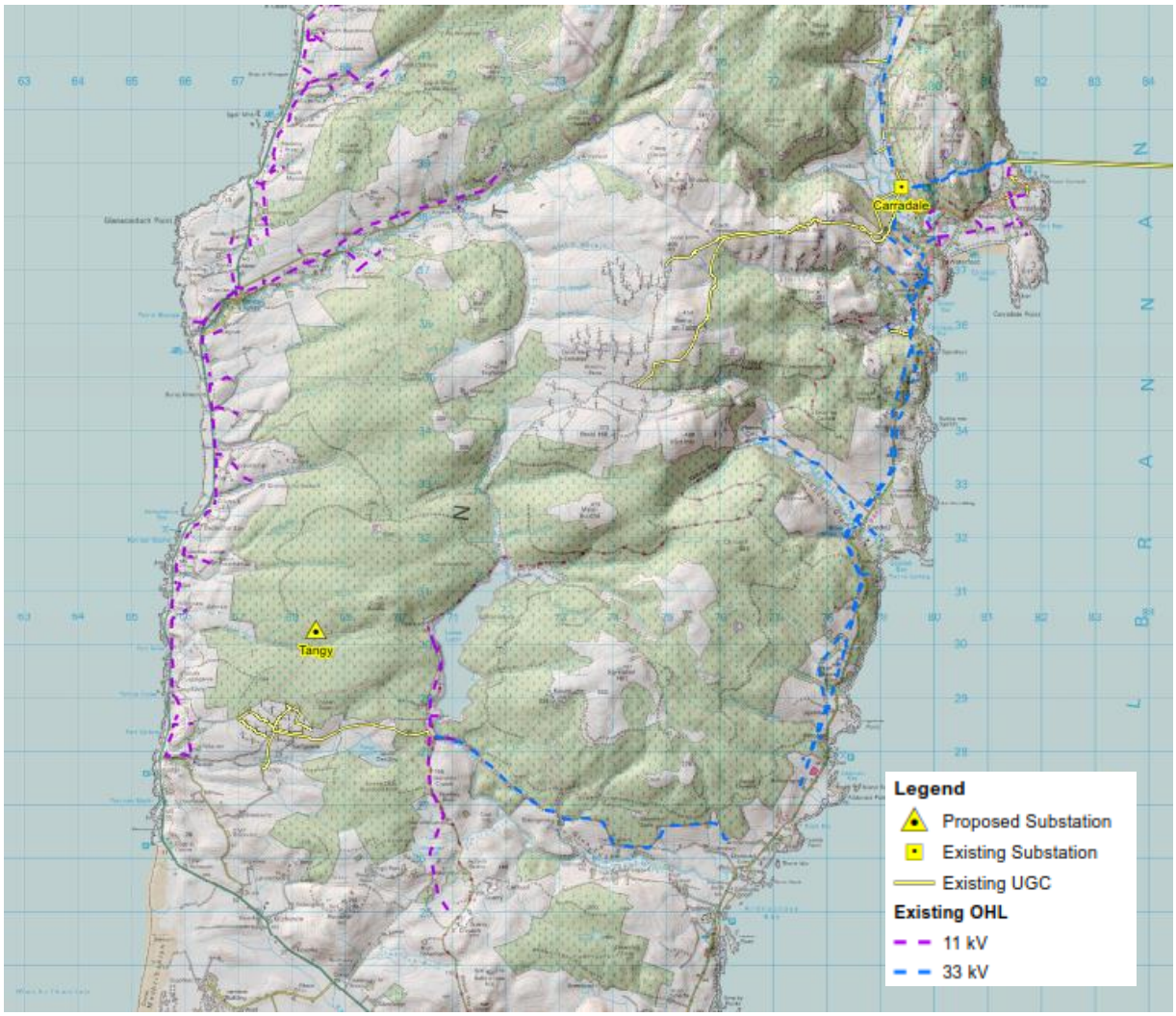


Plate 1.1 – Site Location

1.2 Document Structure

This Report on Consultation is structured as follows:

- Part 1: Introduction – setting out the purpose of the Report on Consultation;

[3] Identified within the LT337 Tangy IV Wind Farm OHL Connection (August 2022), produced by SSEN Transmission.

- Part 2: Project Overview – outlines the background to the project and provides a description of the key elements;
- Part 3: Consideration of Route and Site Options – describes how the Preferred Route and Preferred Site were identified;
- Part 4: The Consultation Process – describes the framework for consultation and methods which have been employed;
- Part 5: Initial Engagement Response – describes the initial feedback and consultation and feedback received, and changes adopted;
- Part 6: Stakeholder Consultation Responses and key issues – summarises the range of responses and key comments arising from the public consultation and documents the Statutory and Non-Statutory Consultees who responded through the consultation process;
- Part 7: SSEN Transmission Responses to Consultation – describes how the comments and issues raised by Statutory and Non-Statutory stakeholders during consultation will be addressed; and
- Part 8: Conclusions and Next Steps – provides a summary of the conclusions reached and actions going forward.

2. PROJECT OVERVIEW

2.1 The Need for the Project

SSEN Transmission is a wholly owned subsidiary of the SSE plc Group of companies. SSEN Transmission holds a license under the Electricity Act 1989 for the transmission of electricity in the north of Scotland and has a statutory duty under Schedule 9 of the Electricity Act 1989 to 'develop and maintain an efficient, co-ordinated and economical electricity transmission system in its licensed areas'.

The developer of Tangy IV Wind Farm has submitted an application to the Scottish Government under Section 36 of the Electricity Act 1989 for a 100 megawatt (MW) Wind Farm and has a contracted connection date of November 2028. Under the terms of their license, SSEN Transmission is therefore obliged to connect the developer to the transmission network by the contracted connection date.

The requirement for the switching station or extension to Carradale GSP is to create a central node on the network where multiple lines of the same voltage can connect. Switches at this location allow each line in and out to be controlled without affecting the other lines. In this instance, the switching station or extension to Carradale GSP is required to connect the proposed OHL from the Tangy IV Substation to the existing Crossaig to Carradale 132 kV OHL and subsequently to the UK electricity network.

2.2 Alternative Options Considered

For a connection of this length and scale an underground cable is not a feasible option due to costs involved during construction as well as ongoing maintenance problems associated with underground cables in remote areas including terrain, access and the presence of watercourses and associated flood zones, potential undesignated assets and peat. As such, all options explored were OHL routes and the options considered were the connection point of the OHL into three existing assets.

The first option for the OHL connection, was the T in option into the existing Crossaig to Carradale 132 kV OHL. The second option was to install a new 132 kV busbar at Carradale GSP and the third option was to have a direct connection into the Crossaig 132/275 kV substation. This third option was discounted due to the length of the required OHL route being in excess of 30 km which would significantly increase the costs involved and have a greater visual impact for the local residents and users of the local area. As such, both options 1 and 2 for the OHL connection points were taken forward for further development as part of the site selection process and three potential locations were selected (see **Section 2.3** below).

2.3 Proposals Overview

Route Options

SSEN Transmission is proposing to construct a new 21.5 km 132 kV OHL, which will be supported on wooden pole tridents, between the Tangy IV Wind Farm Substation and a connection point near the existing Crossaig to Carradale 132 kV OHL. Steel lattice towers may also be required; however, this will be confirmed at the alignment stage. For the purposes of this report, it is assumed that the Proposed Development would comprise both wooden trident poles and steel lattice towers.

Generally, the height, including extensions, for the wooden poles is 11-17 m and for L4 steel lattice towers between 26-44 m. The selection of the supports suitable for the OHL are being considered separately to the OHL routeing and alignment process.

The final designation of support type is generally dependent on three main factors: altitude, weather and the topography of the route. The size of supports and span lengths will also vary depending on these factors, with supports being closer together at high altitudes to withstand the effects of greater exposure to high winds, ice and other weather events. The support configuration, height and the distance between supports will therefore only be fully determined after a detailed alignment survey.

The proposed wooden trident poles will support three conductors (wires) on three insulators positioned at the top of the pole. The L4 steel lattice towers will support six conductors (wires) on six cross-arms (three on each side) and an earth wire between the peaks. Typical designs for both structures can be seen in **Plate 2.1** and **Plate 2.2**.

Plate 2.1 – Typical wooden trident pole design

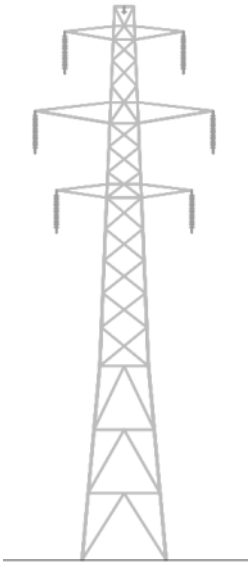


Plate 2.2 – Typical L4 steel lattice tower design

Site Options

SSEN Transmission is also proposing to construct a new switching station or extension of the Carradale GSP to create a transmission connection between the Tangy IV Wind Farm 132 kV OHL and the existing Crossaig to Carradale 132 kV OHL. The switching station or extension to Carradale GSP will be used to connect the new Tangy IV windfarm to the grid whilst ensuring all relevant protection equipment is installed in the event of a fault.

The following elements are included as a part of the proposed switching station:

- A new switching station site operational footprint approximately 68 x 58 m in size; switchgear building of approximately 21 x 49 m; with a maximum height of 10 m. Smaller buildings would also feature within the site. It will be surrounded by a 2.4 m high metal palisade security fence;
- A new combined control and switchgear building;
- Landscaping and biodiversity requirements;
- Connection from the proposed Tangy IV Wind Farm OHL Connection to the existing Crossaig to Carradale 132 kV OHL; and
- Permanent access to the Preferred Site.

Three potential Site Options were identified by SSEN Transmission the assessment of which was included within the Consultation Report[4].

2.4 Access During Construction

2.4.1 Construction Activities

Construction activities are anticipated to consist of six phases, as follows:

- alterations to the existing transmission and distribution networks;

[4] Identified within the LT337 Tangy IV Wind Farm OHL Connection (August 2022), produced by SSEN Transmission.

- enabling work (forestry clearance and establishment of temporary construction compound(s);
- erection of towers;
- conductor stringing (including construction of temporary scaffolding);
- inspections and OHL commissioning; and
- removal of temporary works and site reinstatement.

All construction activities will be undertaken in accordance with a Construction Environmental Management Plan (CEMP) which will define specific methods for environmental survey, monitoring and management throughout construction. A CEMP will be produced by the Principal Contractor and agreed with statutory consultees prior to the commencement of construction.

2.4.2 Access During Construction

Vehicle access is required to each support structure location during construction to allow excavation and creation of foundations and erection of the support structure. Existing tracks would be used where possible and upgraded as required. Preference will be given to lower impact access solutions including the use of low pressure tracked personnel vehicles and temporary track solutions in boggy / soft ground areas to reduce any damage to, and compaction of, the ground. These journeys would be kept to a minimum to minimise disruption to habitats along the route. Temporary access panel solutions may also be used to protect the ground, however, temporary stone tracks are likely to be necessary in some areas depending on existing access conditions, terrain and altitude. Helicopters may also be used to reduce access track requirements.

Access requirements for the Proposed Development will be dependent upon the type of OHL supports chosen. Consideration of impacts will be undertaken at the alignment stage once the support type has been confirmed. A more detailed plan for access during construction will be prepared once a Proposed Alignment has been identified and the type of support structure has been selected.

2.4.3 Indicative Programme

It is anticipated that construction of the Proposed Development would take place over an 18 – 22 month period, following the granting of consents, although a detailed programming of works would be the responsibility of the Principal Contractor in agreement with SSEN Transmission.

Construction is estimated to start in Summer 2026 with completion in Summer 2028.

3. CONSIDERATION OF ROUTE OPTIONS

3.1 Introduction

The Consultation Document[5] sets out the approach to the consideration and appraisal of route options, in line with SSEN Transmission's routeing guidance[6]. The guidance sets out SSEN Transmission's approach to selecting a route for an OHL.

In line with the principles outlined in the guidance document, the method of identifying a Preferred Route has involved the following four key tasks:

- identification of the baseline situation;
- identification of alternative Route Options;
- environmental, engineering and economic analysis of Route Options; and
- identification of a Preferred Route.

3.2 Route Options

The Route Options were initially identified at 1 km widths along areas where it was considered feasible to accommodate the Proposed Development. Two transition points identified as 'nodes' were illustrated within the north of the study area to reflect the potential for crossing between route options within this area, and two end to end routes were also identified. The Route Options are presented in **Plate 3.1**.

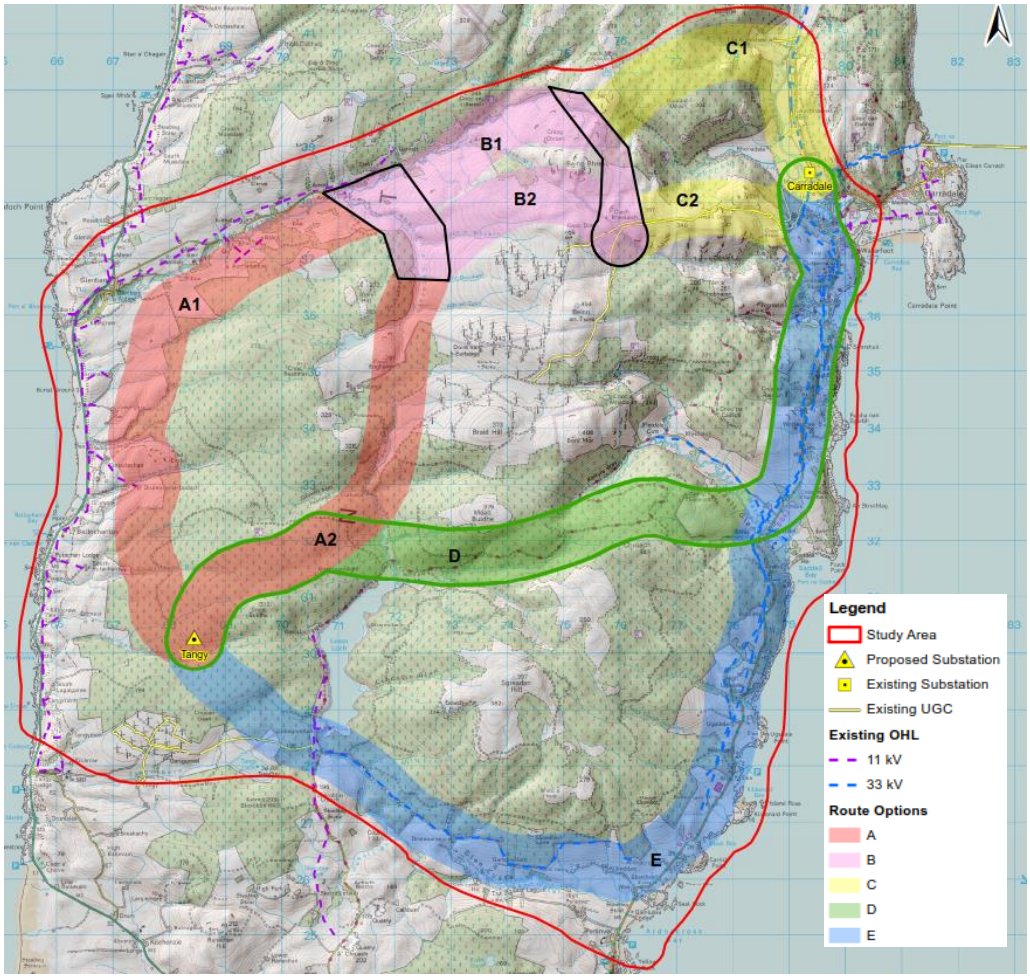


Plate 3.1 – Route Options

[5] SSEN Transmission plc (August 2022) Tangy 132 kV OHL Connection Route Selection Consultation Document.

[6] SSEN Transmission (September 2020), Procedures for Routeing Overhead Lines and Underground Cables of 132 kV and above.

3.3 Identification of Preferred Route

The Preferred Route presented within the Consultation Document was selected on the basis that it was considered to provide an optimum balance of environmental, engineering and economic factors. This included reduced elevation constraints, avoidance of existing and proposed developments, less presence of woodland and moorland habitat and reduced potential for tree felling. The Preferred Route is shown in **Plate 3.2** and comprised a combination of Route Options A1, B1 and C1.

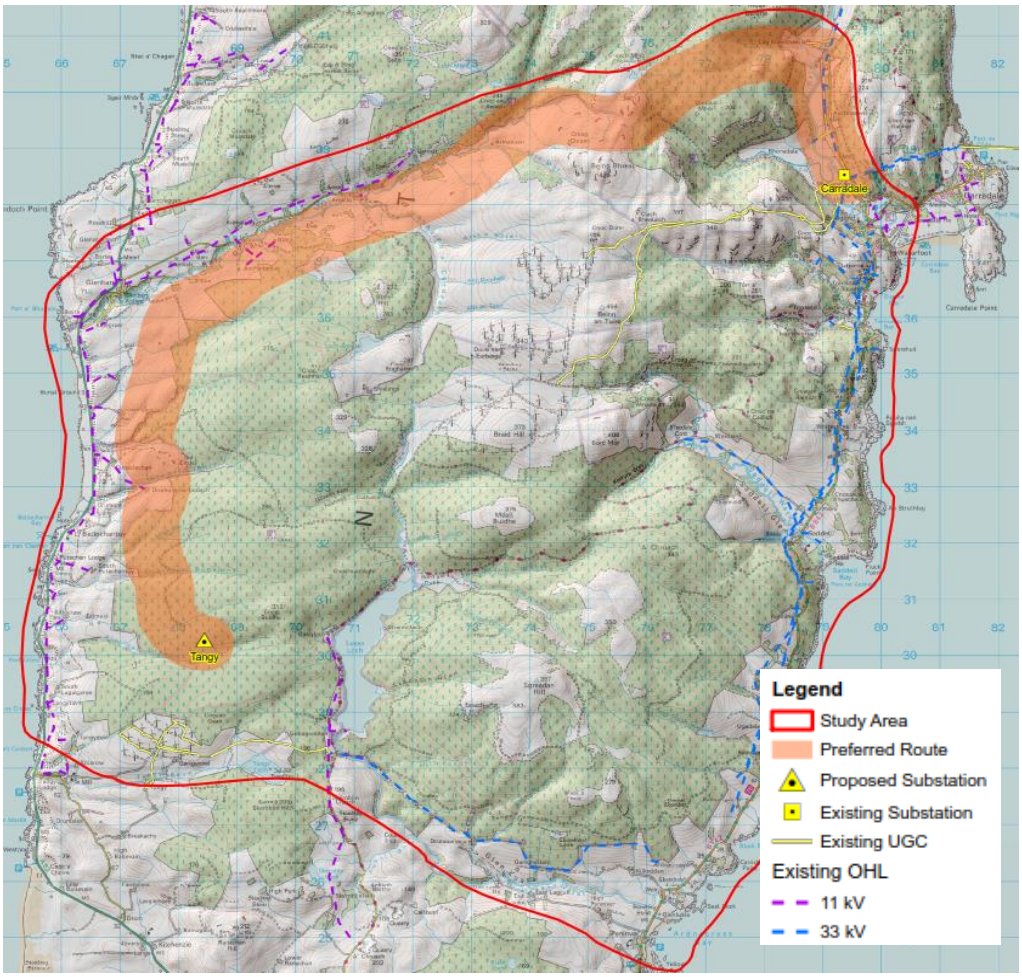


Plate 3.2 – Preferred Route

The consultation process (refer to **Section 4**) sought to confirm that a Preferred Route as shown in **Plate 3.2** was to be progressed as the Proposed Route. However, following initial consultation responses and feedback received during the consultation period (19th August – 30th September), and noting the differences between Route Options A1 and A2, and B1 and B2 were marginal, a revised Preferred Route comprising of Route Options A2, B2 and C1 was identified and presented as the Revised Preferred Route for consultation (see **Plate 5.1**). Subsequently, the consultation period was extended by a further 4 weeks to end on the 28th October to allow for consultation on the revised preference to be undertaken (refer to **Section 5** for further details).

During the alignment selection stage of the project, alignment options within the Proposed Route will be carefully considered to achieve an acceptable alignment which seeks to minimise environmental effects. Confirmation of the preferred alignment will be informed by further consultation exercises, and through detailed surveys which may identify any additional and/or currently unknown engineering, environmental or land use constraints. Should further site and desk-based analysis at the alignment selection stage identify a particular constraint, a further review of route or alignment options may be required prior to the identification of a Preferred Alignment.

3.4 Identification of a Preferred Site Option

The Preferred Site Option presented within the Consultation Document[7] was Site Option 3 as shown on **Plate 3.3**. This was considered the Preferred Site Option on the basis that it was also considered to provide an optimum balance of environmental, engineering and economic factors. This is primarily due to the site option being an extension to the existing Carradale GSP rather than a new large indoor switching station requiring new transmission infrastructure, thereby reducing the potential landscape and visual impacts of the development and reducing the cost and associated carbon footprint of new infrastructure.

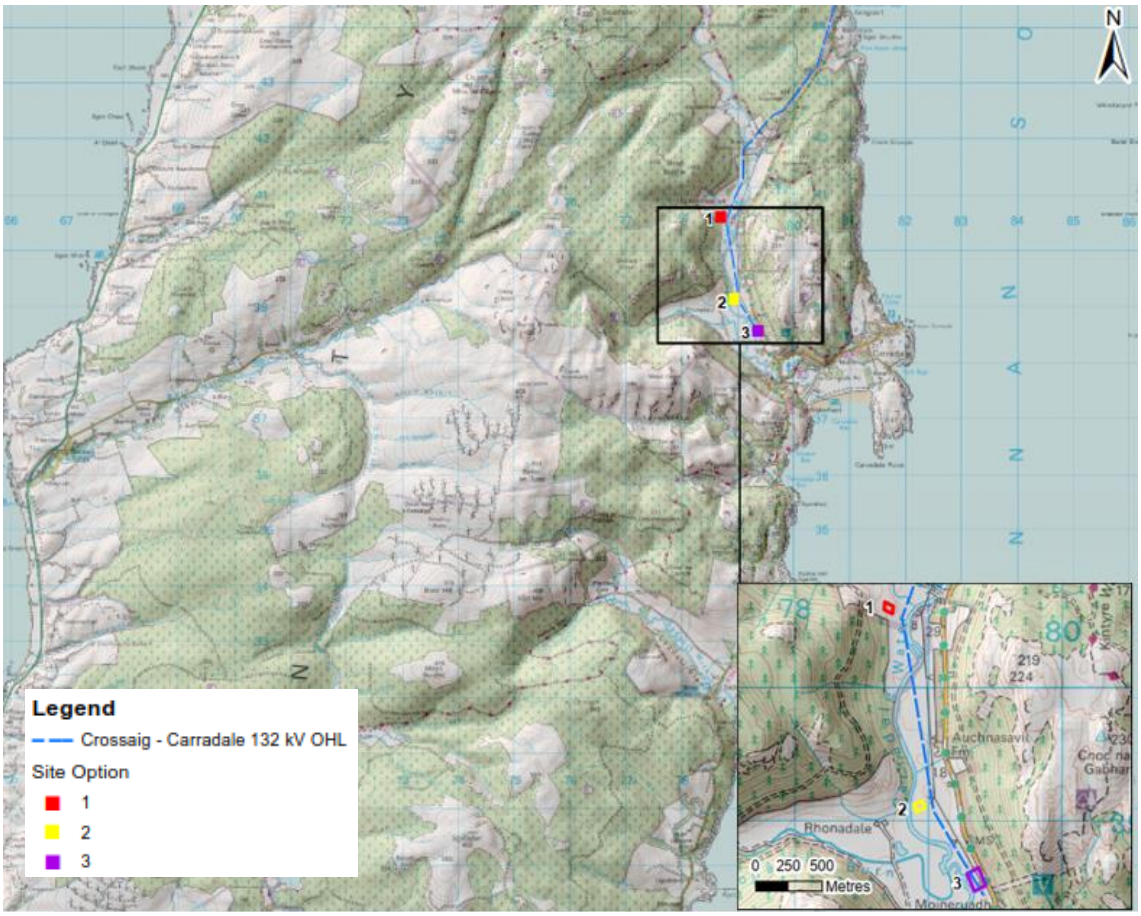


Plate 3.3 – Site Options

[7] SSEN Transmission plc (August 2022) Tangy IV Wind Farm 132 kV OHL Connection Route Selection Consultation Document.

4. THE CONSULTATION PROCESS

4.1 Introduction

In accordance with the SSEN Transmission guidance a process of consultation on the Preferred Route option, including the Preferred Site option was implemented. This was done in conjunction with the route consultation for the Earraghail Wind Farm Connection project for which a separate Report on Consultation has been prepared. This section identifies the methods of consultation and the key dates when consultation took place.

4.2 Methods of Consultation

The following methods were used to consult on the Preferred Route, as set out below.

4.2.1 Consultation Document

The Tangy 132 kV OHL Connection Consultation Document (August 2022[8]) was produced detailing the selection process for the Preferred Route and Preferred Site, taking account of environmental, engineering and economic factors. The Consultation Document was made available for download in August 2022 from: https://www.ssen-transmission.co.uk/projects/project-map/tangy-iv-wind-farm-connection-project/.

Table 4.1 details the statutory and non-statutory stakeholders in receipt of the Consultation Document or otherwise informed of the website details:

Table 4.1 – List of Statutory and Non-Statutory Consultees

Statutory Consultees	
Argyll and Bute Council	Argyll District Salmon Fisheries Board
Energy Consents Unit	Historic Environment Scotland (HES)
NatureScot	Scottish Environment Protection Agency (SEPA)
Scottish Forestry	Transport Scotland
Non-Statutory Consultees	
Argyll Fisheries Trust	BT Group
Royal Society for the Protection of Birds (RSPB) Scotland	Scottish Water
West of Scotland Archaeology Service	
Community Councils, Politicians and others	
West Kintyre Community Council	South Kintyre Community Council
East Kintyre Community Council	Tarbert and Skipness Community Council
Councillor for Mid Argyll Ward	Councillors for South Kintyre Ward

Consultees / landowners were made aware through various consultation promotion materials (see **Table 4.2**), of the Consultation Document which was made available via the dedicated project website. Feedback on the Consultation Document was requested by Friday 30th September 2022. However, following engagement with statutory and non-statutory consultees, the consultation period was extended by four weeks in order to provide sufficient time for responses to be received (see **Section 5**). The consultation therefore requested all responses by 28th October 2022.

Stakeholders were invited to provide feedback through the following methods:

- A series of questions were asked within the Consultation Document requesting comments on specific aspects of the project as follows:

[8] SSEN Transmission plc (August 2022) Tangy IV Wind Farm 132 kV OHL Connection Route Selection Consultation Document.

- Has the need for the Project been adequately explained?
- Has the approach taken to select the Preferred Route been adequately explained?
- Are there any factors, or environmental features, that you consider may have been overlooked during the Preferred Route selection process?
- Do you feel, on balance, that the Preferred Route selected is the most appropriate for further consideration at the alignment selection stage? Please provide an explanation of your answer.
- If you don't agree to our Preferred Route which of the options would you consider the best option for SSEN Transmission to develop? Please provide an explanation of your answer.

- A feedback form was also provided on the project website allowing users to submit comments.

4.2.2 Public Consultations

A face-to-face public consultation event was held between 2pm and 7pm on:

- 23rd August 2022 at Campbelltown Town Hall, 54 Main Street, Campbelltown, Argyll, PA28 6AB.
- 24th August 2022 at Whitehouse Village Hall, Tarbert, PA29 6XR.

The exhibition was advertised using several methods as shown in Error! Reference source not found.**.** A copy o f the public notice is provided in **Appendix A.** The notice was also circulated to local community councils and displayed in Campbell Town Hall. Copies of the brochure were also left within the local area of Campbelltown and Tarbert.

Table 4.2 – Summary of Consultation Promotion

Method	Recipients
Mail drop – Postcard	4,634 local properties.
Emails to Stakeholder to advise of consultation	Councillors (Mid Argyll Ward and South Kintyre Ward), Community Councils (West Kintyre, East Kintyre, South Kintyre, and Tarbert and Skipness), as well as those who signed up to updates for the Project.
Press Advert	Oban Times and Campbelltown Courier.
Posters	A poster was put outside Campbelltown Town Hall.
Social Media	Details and information regarding the event was posted on the SSEN Transmission project webpage.

The public exhibitions provided a forum to share information about the project and the Preferred Route including the Preferred Site. Attendees were invited to take a summary information leaflet (see **Appendix B**) and to consider information presented on a series of exhibition boards. The exhibition boards detailed key information on the project and what SSEN Transmission were consulting on, these included maps, environmental and engineering information.

All members of the public were invited to complete a feedback form (see **Appendix C**).

63 members of the public attended the public consultation exhibition over the two days. A total of six completed feedback forms were received following the exhibition.

4.2.3 Summary of the Virtual Engagement Event

SSEN Transmission developed an online consultation tool 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 at home from the 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, interactive videos as illustrated in **Plate 4.1** and the opportunity to share views on the proposals.

Furthermore, as an alternative to face-to-face events, if people were not available for the in-person events, a live chat function was available at advertised times to allow attendees to ask questions and get responses from the Project Team.

The virtual platform could be accessed from the project website where there was also the consultation brochure (see **Appendix B**) available to view for those who preferred this format or struggled with internet bandwidth when accessing the virtual room.

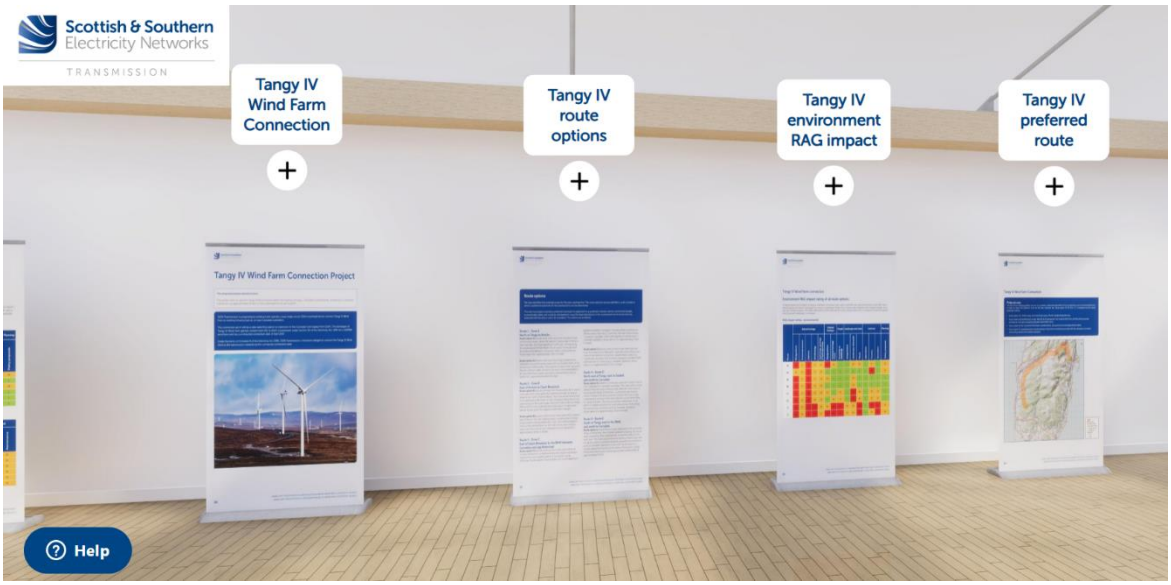


Plate 4.1 – Public Engagement Website Landing Page

The consultation period opened on 19th August 2022 and was open for ten weeks. All responses received during the consultation period were considered by the Project Team and are included within this report. Stakeholders were able to view information about the project on the SSEN Transmission website, access the virtual consultation room and complete the feedback form. A snapshot of the virtual engagement is presented in **Table 4.3** below.

Table 4.3 – Virtual Engagement Snapshot

Category	Number
Unique page views of the virtual portal over the consultation period (19th August – 28th October) (Unique / Total)	49 / 76
Visitors to SSEN project website throughout the consultation period	29
Number of visitors asking questions during the live chat event	0
Completed feedback forms	6

Where requested, hard copies of the consultation brochure and feedback form were sent out if stakeholders were unable to view the information online. A number of stakeholders emailed the SSEN Transmission Community Liaison manager to request additional information about the project. These queries were responded to by the relevant members of the Project Team.

5. INITIAL ENGAGEMENT RESPONSE

5.1 Revised Preferred Route

Feedback from consultees on the Preferred Route as presented within the Consultation Document[9] (A1, B1 and C1) was initially requested by Friday 30th September 2022. However, following initial consultation and feedback received, the consultation responses were reviewed and it was evident that through consultation there was greater support for an alternative route within Zones A and B.

Following this initial consultation the Project Team reviewed the differences between the route options in Zones A and B to consider whether a revised Preferred Route would be a preferable option for seeking consultee feedback on. This was primarily due to the relatively marginal differences between route options A1/A2 and B1/B2 presented within the Consultation Document. For example, in Zone A, Route Option A2 was preferred from an environmental and economic perspective, however due to the presence of proposals within the area and elevation constraints Route Option A1 was considered marginally preferred. For Zone B, Route Option B2 was preferred overall from an environmental perspective due to the proximity to cultural heritage designations and Barr Water valley, but on balance with cost and elevation constraints Route Option B1 was considered marginally preferred.

Feedback received from consultees including RSPB Scotland, Historic Environment Scotland, Scottish Forestry and Argyll Fisheries Trust reflected that a change to Route Options A2 and B2 would avoid potential disturbance of habitats that are important for Atlantic Salmon and sea trout populations; preferrable options to reduce collision risk for birds including Greenland white-fronted goose and black grouse; likely to require less transiting of areas of ancient woodland; and likely to have a much lesser impact on historic environment interests than Route Options A1 and B1. As such, SSEN Transmission presented a revised Preferred Route comprising of Route Options A2, B2 and C1 as a preferable option for seeking consultee feedback on. The revised Preferred Route is shown in **Plate 5.1**.

To allow all parties the opportunity to provide further comment on the revised Preferred Route the consultation period was extended by four weeks, with all additional feedback requested by 28th October 2022. Responses to consultee feedback on both the pre-consultation Preferred Route (**Plate 3.1**) and revised Preferred Route (**Plate 5.1**) are provided in **Table 7.1** (see **Section 7** below). This includes a response by SSEN Transmission on how these comments will be addressed in subsequent stages of the project. Any responses received after this date have been considered and responded to where available.

[9] SSEN Transmission plc (August 2022) Tangy IV Wind Farm 132 kV OHL Connection Route Selection Consultation Document.

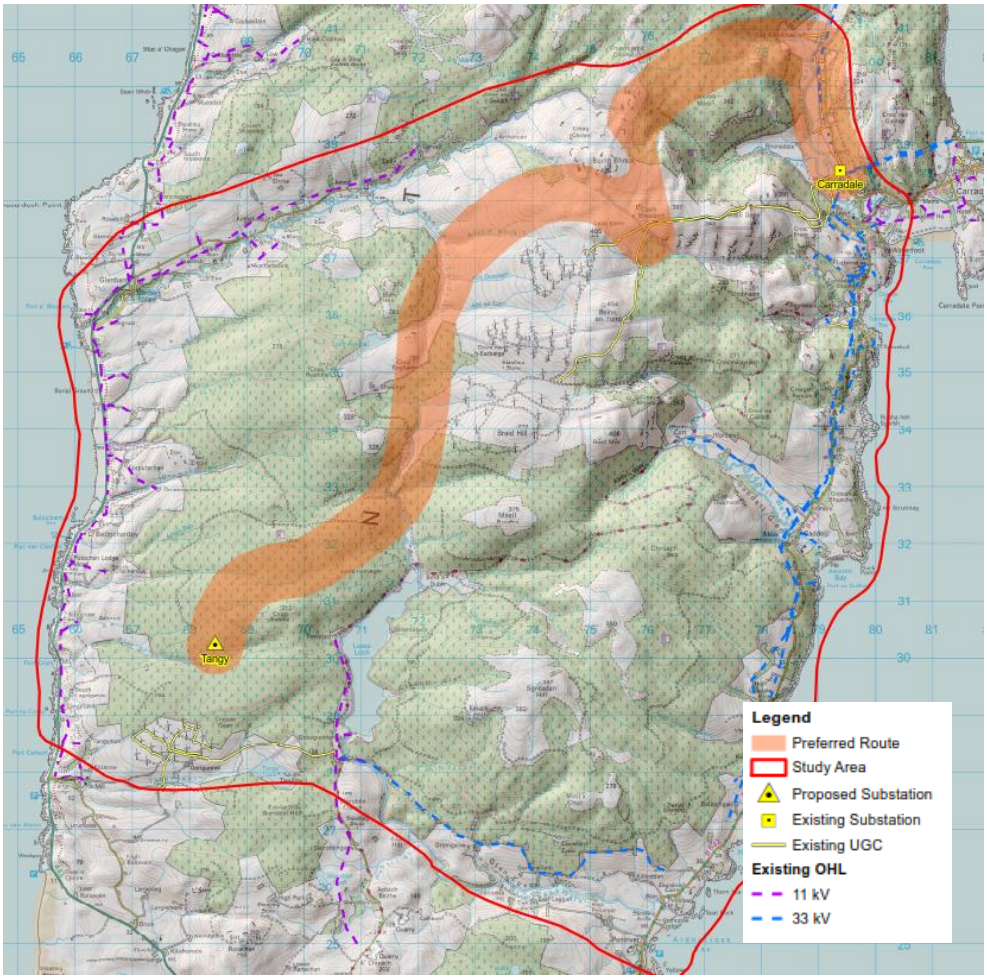


Plate 5.1 – Revised Preferred Route

6. STAKEHOLDER CONSULTATION RESPONSES

In developing the Tangy 132 kV OHL Connection project, the environmental, engineering, economic and geographic constraints on the design and safe operation of the assets along with views expressed by stakeholders are considered. Gathering views from a variety of stakeholders is vital to developing and shaping a solution that balances different views of stakeholders. To ensure transparency throughout the consultation process it is vital that the opportunity is provided to share feedback received from stakeholders on the Proposed Development.

6.1 Feedback forms

In response to this consultation, feedback from consultees has primarily been received via completed feedback forms. Feedback from landowners has been received via email and from onsite meetings. Some respondents also chose to voice queries and views via email, post or phone call. At the respondent's request, and with agreement from the Project Team, their comments are included within this report. Six completed feedback forms were received. Where emails were received which raised questions, these were responded to directly and any topics raised.

All feedback was received prior to publication of the Report on Consultation and within a timeframe where inclusion was feasible.

6.2 Statutory and Non-Statutory Stakeholder Feedback

In total, 25 consultation responses were received during the consultation process, 14 from statutory and non-statutory consultees and 11 from members of the public. **Table 6.1** details the respondents and the dates on which responses were received from stakeholders in response to the Consultation Document, **Table 7.1** (Section 7) provides a summary of statutory and non-statutory stakeholder feedback, landowners feedback and SSEN Transmission's response.

Table 6.1: Statutory and Non-Statutory Consultee Respondents

Consultee	Date Response Received
BT	22nd August 2022, 30th September 2022
NatureScot	5th September 2022, 3rd October 2022
Scottish Water	14th September 2022, 30th September 2022
SEPA	14th September 2022, 13th October 2022
Energy Consents Unit	17th September 2022
Scottish Forestry	20th September 2022, 10th October 2023
RSPB Scotland	23rd September 2022, 28th October 2022
Historic Environment Scotland	26th October 2022
Argyll Fisheries Trust	2nd November 2022

All consultation responses received during the consultation period have been collated and summarised into a consultation register. This register remains an active document and will be updated on receipt of further consultation comment.

Whilst recognising that this consultation was not part of a formal EIA screening or scoping procedure, the statutory and non-statutory consultees gave informative responses and identified where an option may necessitate specialist survey or would require careful design or mitigation to avoid sensitive features. Not every Route Option was given a response with consultees focussing on the Preferred Route and Route Options where they anticipated a potential issue. These responses will be considered further by the Project Team at the alignment selection and EIA stages of the project as required.

7. PROJECT RESPONSES TO CONSULTATIONS

7.1 Overview

This section of the report provides the responses from SSEN Transmission to the questions and themes emerging from the public consultation and the responses provided by statutory and non-statutory stakeholders and landowners.

7.2 Consultation Responses

Table 7.1 provides a summary of the responses to the Consultation Document provided by statutory and non-statutory consultees, as well as landowners. **Table 7.2** provides a summary of the Feedback Forms response themes. These are presented along with a reply from SSEN Transmission, including how the project will be developed to take account of the comments provided, as it moves forward into the next phase of development.

Through the consultation process a number of comments have been raised which require clarification or further assessment. These points include additional detail on the potential alignment, recommendations for continued consultation with stakeholders, and the importance of various surveys and assessments for protection of environmental aspects as the project evolves. This process will remain inclusive, seeking further consultation where appropriate.

Table 7.1 – Statutory and Non-Statutory Consultee Respondents

Stakeholder	Summary of Feedback	Response by SSEN Transmission
BT	**22nd August 2022 (Pre-Consultation Preferred Route)** Our initial review indicates that route options A1, B1 and C1 should not cause interference to BT's current and presently planned Radio Network. However, in order to give a more accurate response co-ordinates for the proposed Wind Turbine locations are required as we do have existing radio links which may need to be considered but I can only check this using exact co-ordinates. **30th September 2022 (Revised Preferred Route)** We have studied this Windfarm connection proposal, using routes A2, B2 and C1 only, with respect to EMC and related problems to BT point-to-point microwave radio links. The conclusion is that the Preferred Route A2, B2 and C1 as indicated on the attached consultation document should not cause interference to BT's current and presently planned radio network. BT requires 100m minimum clearance from any structure to the radio link path. If the proposed locations change please let us know and we can reassess this for you.	As no turbines are proposed as part of this development no further response is required to BT's initial feedback. SSEN Transmission acknowledge BT's comments in relation to the revised Preferred Route, and are satisfied that alignment options within the Preferred Route present minimal risk to interference with BT's current and presently planned radio network. Consultation with BT will be undertaken early within the alignment stage to gather comments on potential alignment options.
NatureScot	**5th September 2022 (Pre-Consultation Preferred Route)** *Designated sites* We note Option A1-B1-C1 is the Preferred Route which is approximately 21km in length. We are pleased to see that this route seeks to minimise potential disturbance and collision with Greenland White Fronted Geese which are a designated feature of the Kintyre Goose Routes SPA and Kintyre Goose Lochs SSSI. The preferred option is not close to any known roosting lochs, however roost usage is highly variable between years and could possibly use Loch nan Ciob, located close to C1. Therefore we would expect you to consider potential impacts on the SPA/RAMSAR/SSSI as part of any application. We wish to highlight that we have recently updated our guidance relating to disturbance distances for protected bird species – https://www.nature.scot/doc/disturbance-distances-selected-scottish-bird-species-naturescot-guidance. Option A1 also intersects to component gorges of the Bellochantuy and Tangy Gorges SSSI, designated for quaternary of Scotland geological features. The key geological interest of this SSSI are contained with the stream interior valleys and potential impacts on the SSSI could arise from the construction of the overhead power lines as well as the construction of any additional infrastructure required. As such, efforts should be made to avoid impacting the valley interiors by careful siting of overhead towers and tracks.	The potential for impacts upon natural heritage assets, landscape designations and disturbance and collision risk to both the Greenland white-fronted goose and golden eagles was considered within the Consultation Document and will continue to be considered through future design stages and assessment work. Effects would be minimised through construction design and the implementation mitigation to protect the environment through a suitable Construction Environmental Management Plan (CEMP). It is acknowledged that the Preferred Route could potentially impact Kintyre Goose Roosts SPA and Kintyre Goose Lochs SSSI. Further design work will seek to identify an alignment which avoids or minimises potential impacts to designated sites. If appropriate, mitigation will be considered and further consultation on this matter will be undertaken with NatureScot. NatureScot's comments on landscape designations and the sensitivity of LCTs and their associated features are noted. Any route between the two connection points will cross areas of different LCTs

Stakeholder	Summary of Feedback	Response by SSEN Transmission
	Landscape and Visual There are no national landscape designations within the Preferred Route corridor, however we consider that there is potential for significant landscape and visual impacts, in particular impacts on highly sensitive Landscape Character Types (LCTs) i.e. Rocky Coastland LCT adjacent to A1 and the Coastal Glens LCT for C1. Therefore you should consider undergrounding the cable in particularly sensitive locations for visual receptors and LCTs. *Other Issues* B1 may fall within the Central Kintyre Habitat Management Plan which was set up via Section 75 agreement to mitigate against possible impacts on breeding golden eagle from the construction and operation of Beinn an Tuirc and Deucheran Hill Windfarms. You should consult with SPR to ascertain if the construction of B1 will fall within this habitat management area. *Switching Station* We note Option 3 is the preferred location for Tangy Switching Station. Locating it close to the Carradale GSP will seek to reduce partial landscape and visual impacts, however we consider this location could have impacts on a known bat roost as well as otters. As such, this area will need to be surveyed appropriately and licenses sought if necessary. **3rd October 2022 (Revised Preferred Route)** We note the preferred alignment for the Tangy IV OHL Connection is now A2-B2-C1. The A2 section passes much closer to Lussa Loch, a component of the Kintyre Goose Roosts SPA and Kintyre Goose Lochs SSSI designated for non-breeding Greenland white-fronted geese. These SPA geese are also known to roost in Loch Arnicle. In our view, the A2 OHL section could pose a significant disturbance risk to geese as well as potential collision risk and you will need to consider these as part of the EIA and HRA. In our view, you should consider undergrounding the OHL where it passes close to GWGF roosting lochs. B2 is also likely within the Beinn an Tuirc HMP which provides suitable foraging habitat for golden eagles. The construction of OHL within this area may make it less attractive as well as causing a potential collision risk which could lead to the pair of resident eagles becoming less productive / the range unviable. This golden eagle range is already highly constrained by existing wind farms and commercial forestry. The HMP was implemented as a condition of the consent for Beinn an Tuirc Windfarms and construction of an OHL could affect their ability to comply with his condition. It would appear that undergrounding the OHL within option B1 would	with subtly different characteristics, however these are all variations of a broader regional rugged hill and glen landscape character. The use of alternative technological solutions has been considered by SSEN Transmission, including the possibility of an underground cable. As documented in Section 2 of the Consultation Document, an OHL was considered the most appropriate solution due to the associated challenges with underground cables in remote areas. This includes terrain, access and the presence of watercourses and associated flood zones, potential undesignated assets and peat. SSEN Transmission acknowledge the extent of Habitat Management Plans within Kintyre and are consulting further with NatureScot and SPR to consider potential impacts and mitigation requirements. This will inform subsequent design stages and assessment work through the alignment and EIA stages. It is currently proposed that the following ecological and ornithological surveys will inform the alignment stage: UK Habitat Classification (proposed to be up to 325 m from alignment options), a full suite of ornithology surveys, protected species habitat suitability surveys and protected species surveys where required. The results of these surveys will be provided within the Alignment reports and subsequent EIA. Protected species licences will be sought if necessary. In response to NatureScot's comments on the revised Preferred Route, SSEN Transmission acknowledge the A2 section will pass much closer to Lussa Loch and will present a potential risk to Greenland white-fronted geese. The current ornithological survey program includes flight activity surveys, goose field use and roost surveys that will inform alignment design and any mitigation if required. It is likely that this section will require undergrounding due to the proposed Cnoc Buidhe Wind Farm within this area and the need to avoid being in proximity to proposed turbines. Any further undergrounding would be considered where necessary. SSEN Transmission also note B2 route likely passes through the Beinn an Tuirc HMP. A draft EIA report specific to golden eagle has been

Stakeholder	Summary of Feedback	Response by SSEN Transmission
	alleviate any potential landscape and visual concerns as well as reducing impacts on golden eagles.	produced to assess potential impacts and to inform development of the alignment design, mitigation, and monitoring in consultation with relevant stakeholders.
Scottish Water	**14th September 2022 (Pre-Consultation Preferred Route)** *Drinking Water Protected Areas* Both routes do encroach within the Carradale Borehole catchment which supplies Carradale Water Treatment Works. Our preference would be for Route [A1, B1 and C1] to be the route you pursue as it appears to present the lowest risk to water quality in the catchment. The line for Carradale well field is approx. 2.5 km upstream in the valley of the Carradale Water, but the boreholes both here and at Saddell would be very unlikely to be affected by this project if Route [A1, B1 and C1] was chosen. Scottish Water have produced a list of precautions for a range of activities. This details protection measures to be taken within a DWPA, the wider drinking water catchment and if there are assets in the area. Please note that site specific risks and mitigation measures will require to be assessed and implemented. These documents and other supporting information can be found at www.scottishwater.co.uk/slm. We welcome receipt of this notification about the proposed activity within a drinking water catchment where a Scottish Water abstraction is located. The fact that this area is located within a drinking water catchment should be noted in future documentation. We would request further involvement at the more detailed design stages, to determine the most appropriate proposals and mitigation within the catchment to protect water quality and quantity. *Scottish Water Assets* All Scottish Water assets potentially affected should be identified, with particular consideration being given to access roads and pipe crossings. If necessary, local Scottish Water personnel may be able to visit the site to offer advice. All of Scottish Water's processes, standards and policies in relation to dealing with asset conflicts should be complied with. **30th September 2022 (Revised Preferred Route)** As per our previous response, the route options do encroach within the Carradale Borehole catchment which supplies Carradale Water Treatment Works.	It is noted that both the pre-consultation and revised Preferred Route encroach within the Carradale Borehole catchment which supplies Carradale Water Treatment Works. Further surveys will be undertaken to identify a preferred alignment(s) that avoid and/or minimise potential impacts, where practicable. A scoping report will be prepared to confirm the matters to be assessed in the EIA. SSEN Transmission also acknowledge Scottish Water's policies and standards in relation to dealing with asset conflicts. These comments will be considered at the alignment stage.

Stakeholder	Summary of Feedback	Response by SSEN Transmission
	Scottish Water have produced a list of precautions for a range of activities. This details protection measures to be taken within a DWPA. These documents and other supporting information can be found at.	
SEPA	**14th September 2022 (Pre-Consultation Preferred Route)** We do not consider that there are any factors or environmental features in relation to our interests that have been overlooked during the Preferred Route selection process. We agree that in relation to our interests, with the information currently available, the Preferred Route selected is the most appropriate for further consideration at the alignment selection stage. We note that it is recognised that numerous burns and rivers flow through valleys within the Study Area. However, it is noted that all Route Options with peat risk are potentially high risk to the OHL until depths are fully understood. OHL alignment stage and probing would be required on all Preferred Routes prior to alignment studies. GWDTE have not been considered as part of this report. Potential GWDTE are anticipated to be in the vicinity of each of the Route Options and will be assessed when data becomes available. It is noted that the Route Options have the potential to compromise quality or quantity of surface waters or groundwaters, in relation to public or private water supplies. *Switching Station* We note that although Site Option 3 has some technical difficulties (position in the 1 in 200-year flood zone), it is still considered that Site Option 3 is the overall Preferred Site. We consider that a new switching station is essential infrastructure in relation to our flood risk advice. Therefore please see our guidance at sepa-flood-risk-standing-advice-for-planning-authorities-and-developers.pdf. Please note that any development involving landraising in the functional floodplain is not covered in this standing advice, and SEPA should therefore still be consulted on such proposals. **13th October 2022 (Revised Preferred Route)** *Peat* The majority of the Route Options have an element of peat ranging from low percentage to high within each Route Option. Route Options A1 and C1 have been allocated an amber RAG rating as	SEPA's comments on both the pre-consultation and revised Preferred Route on burns and rivers, peat, GWDTEs and public/private water supplies are noted and will be considered further throughout the alignment and EIA stages. SSEN Transmission will undertake further consultation with SEPA as part of the alignment stage. A UK Habitat Classification survey has been undertaken in order to inform the alignment stage. The alignment stage will seek to avoid sensitive habitats, wherever practicable. In addition, peat probing will be carried out to inform any future application for consent through the EIA. In line with SSEN Transmission's Routeing Guidance, the presence and potential impact upon peat will continue to be considered as part of the alignment stage. Where avoidance is not possible, mitigation measures will be identified and discussed with SEPA. In relation to the switching station, SEPA's standing advice is noted and will be considered at detailed site selection to minimise potential environmental effects where possible.

Stakeholder	Summary of Feedback	Response by SSEN Transmission
	Class 3 peat covers between 5-20% of Route Option A1 and Class 2 peat covers 5-20% of Route Option C1. It is considered that these areas could be avoided during alignment stage. The remaining Route Options have been allocated a Red RAG rating as Class 2 and C2 peat covers more than 20% of Route Option A2 and Class C2 peat covers more than 20% of Route Options B1, B2 and C2. Some areas of peat span the entire width of the route options and would likely be unavoidable during the OHL alignment stage. All Route Options with peat risk are potentially high risk to the OHL until depths are fully understood. OHL Alignment stage and probing would be required on all Preferred Routes prior to alignment studies. Scottish Planning Policy states that 'where peat and other carbon rich soils are present, applicant should assess the likely effects of development on carbon dioxide (CO_2) emissions. Where peatland is drained or otherwise disturbed, there is liable to be a release of CO2 to the atmosphere. Developments should aim to minimise this release.' The developer will therefore need to demonstrate in relation to the proposed route options and the above assessment how peat excavations have been minimised.	
Energy Consents Unit	**17th September 2022** Email acknowledgement of the consultation document and information pertaining to pre-application engagement and consultation events. No further responses received.	None required.
Scottish Forestry	**20th September 2022 (Pre-Consultation Preferred Route)** SF consider that both the UK Forestry Standard – 4th edition – 2017 (UKFS) and Scottish Governments Control of Woodland Policy 2009 (CoWRP) apply to this proposal. In relation to the Preferred Route option A1, B1 and C1: 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). All areas of woodland that need to be removed to directly accommodate the overhead line and associated infrastructures will always be counted towards the net area of CP required. When a proposed development or infrastructure requires to go through forestry, consideration should be given to forest design guidelines. A1	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 within the Consultation Report alongside other environmental, engineering and economic considerations in the appraisal and selection of the Preferred Route. 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 EIA as the project progresses. Further environmental and engineering studies and consultation with Scottish Forestry will be undertaken at the alignment stage and

Stakeholder	Summary of Feedback	Response by SSEN Transmission
	The majority of the proposal falls within the Lussa Land Management Plan approved in 2018 for 10 years. This is an important document to consider as you move forward as there may be opportunities to improve the woodland diversity. Careful consideration was given to the felling around Bellochantuy Village. Public water catchment and any potential increase in felling or changes in timing would need to be considered. The UKFS Water Guidance 34 (p179) Avoid clearfelling more than 20% of the catchment of a public water supply within any three-year period applies. The West Lussa area also lacks riparian native broadleaf habitats within the woodland and so native broadleaf CP proposals would be a positive move. C1 The majority of the proposal falls within the Carradale Land Management Plan (LMP). An important document to consider as there may be opportunities to improve woodland diversity. There are strong native woodland areas within the C1 West of Lag Kilmichael and the LMP proposed to expand these. There is a strong presumption against the removal of native woodland within Scottish Governments Control of Woodland Policy. **10th October 2022 (Revised Preferred Route)** In relation to route option A2, B2, C1: A2 – compared to A1 this route will go through more woodland interior and therefore is likely to be more woodland removal. B2 – would appear to have little in the way of woodland impact.	continue throughout the project to avoid or minimise potential impacts on forestry and forest habitat where possible.
RSPB Scotland	**23rd September 2022 (Pre-Consultation Preferred Route)** *Baseline Conditions* The consultation document notes a review of planning application documents for wind farm developments within 2 km of the study area was undertaken to inform the ornithology baseline, with the most recent surveys undertaken in 2017. While RSPB Scotland welcome consideration of this information, we advise that local environmental conditions are likely to have changed during the 5-year period since data collection; not least because, disappointingly, some sections of Preferred Route Option cross active wind farm HMP areas.	SSEN Transmission note RSPB Scotland's comments on the Preferred Route. It is currently proposed that the following ecological and ornithological surveys will inform the alignment stage: UK Habitat Classification (proposed to be up to 325 m from alignment options), a full suite of ornithology surveys, protected species habitat suitability surveys and protected species surveys where required. The results of these surveys will be provided within the Alignment reports and subsequent EIA. Protected species licences will be sought if necessary. The presence of active Habitat Management Plans are being reviewed by SSEN Transmission in consultation with

Stakeholder	Summary of Feedback	Response by SSEN Transmission
	RSPB Scotland reiterate that at least 1-full year of field surveys of the Preferred Route Option will be required before this can be finalised. All survey work should apply the latest guidance from NatureScot (SNH, 2017). *Designated Sites* RSPB Scotland advise that a HRA will be required to assess the potential for impact on Annex 1 Greenland white-fronted goose, which are the qualifying interest of the Kintyre Goose Lochs/Roosts SPA/Ramsar. *Species* <u>Greenland white-fronted goose</u> The Applicant notes that Greenland white-fronted geese have feeding sites to the north of A1. Birds commuting along flightpaths between traditional feeding and roosting sites are vulnerable to collision (SNH, 2016). A HRA and Collision Risk Modelling exercise are therefore required. Suggested mitigation measures include line height restriction, line sheathing and line marking. Any mitigation measures must be in place and maintained in full functional order for the lifetime of the proposed development. <u>Black grouse</u> Data indicate 3 leks of Highest Regional Priority, 3 leks of High Regional Priority and 3 leks of Regional Priority are located c. 1.5 km from the A1-B1-C1 option, with the majority concentrated around Ancient Woodland fragments surrounding the A1-B1 node. The Preferred Route therefore sits well within the 5 km adult dispersal zone. Any degradation/loss of Ancient Woodland fragments or ground vegetation could result in significant negative impacts for this species at Regional scale. Black grouse are vulnerable to collision with unmarked barriers such as OHLs and fence lines. RSPB Scotland would expect to see robust survey methodology If potential negative impacts are identified, appropriate mitigation and enhancement activities should follow to support this threatened bird and secure positive effects for biodiversity. The Applicant should note that in addition to the avoidance of work < 750 m from active black grouse leks during lekking period (1st March – 31st May), ground vegetation within 1.5 km of an active lek comprises core feeding and brood rearing territory for females and chicks. The disturbance to good quality brood-rearing habitat should be minimised during the breeding season (1st April – 15th August).	NatureScot and other relevant stakeholders. These will be considered through the development of the alignment design and subsequent assessment work where mitigation will be identified if required. The potential for impacts upon Greenland white-fronted goose, Black Grouse and Raptors were considered within the Consultation Document and will continue to be considered through future design stages and assessment work as we seek to find an acceptable alignment that minimises potential effects on these sensitive species. Consultation with Argyll Raptor study group will be undertaken at the alignment stage with regards to the scope of ornithological surveys and any relevant data they may hold. Opportunities for habitat enhancement, i.e. blanket bog restoration and connectivity will be considered in line with SSEN Transmission's Routeing Guidance. SSEN Transmission recognise the importance of establishing a holistic approach to assessment. The potential cumulative impact is considered in the development and appraisal during routeing as well as part of the EIA. Cumulative impacts will be taken into consideration with other environmental, engineering and economic factors to select a proposed alignment which is economically viable, technically feasible, minimises impacts on important resources or features of the environment and reduces disturbance to those living in it, working in it, visiting it or using it for recreational purposes. SSEN Transmission also acknowledge RSPB Scotland's comments on the revised Preferred Route. It is noted that section A2 will bring the line closer the designated Tangy Loch and Lussa Loch roost sites. Further design work will seek to identify an alignment which avoids or minimises potential impacts to these designated sites informed by ongoing survey work pertaining to flight activity surveys, goose field use and roost surveys.

Stakeholder	Summary of Feedback	Response by SSEN Transmission
	Native woodland comprise important black grouse habitat at a low density of ≤ 200 stems/ha. RSPB Scotland recommend the following: • If sections of commercial plantation forest are removed and/or new hard edges are created, these should be replanted/softened with native shrub and woodland species of appropriate local provenance at low density • Clearing brash after clear-felling sections of commercial plantation forest, and allowing a fallow period before restocking, will expedite recovery and regeneration of black grouse food plants in the field layer. <u>Raptors</u> Historical data indicate that golden eagle and white-tailed eagle activity favours the north-east of the study area, likely using open ground habitat now occupied by/surrounding the Beinn an Tuirc wind farm. A historical golden eagle breeding record was returned south of C2, < 5 km from the B1-C1 node on the Preferred Route Option. The placement of OHLs within eagle territories – and particularly when close to eyrie sites – presents risks in respect of disturbance during construction phase/operational maintenance, displacement and line collision. Even on lower ground, eagles have been found to collide with low-flying structures such as deer fences during periods of reduced visibility. 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 must be given fulsome consideration to safeguard these iconic Annex 1 and Schedule A1/1A species. Historical data also indicate that breeding hen harrier have been recorded throughout the Study Area north of Tangy. RSPB Scotland strongly recommend the Applicant liaises with the Argyll Raptor Study Group to ensure full capture of site occupancy/breeding data for these sensitive species. *Habitats* The Preferred Route Option (A1-B1-C1) is located further from Statutory Designated Areas and crosses less Ancient Woodland, open ground habitat and Class 1/Class 2 peat than other routeing options. It is disappointing the Applicant is unable to present a routeing option without scope for significant environmental harm in respect of the biodiversity crisis. This demonstrated in the Applicant's own RAG analyses.	In line with SSEN Transmission's Routeing Guidance, the presence and potential impact upon peat will continue to be considered as part of the alignment stage. SSEN Transmission acknowledge the need to carry out peat probing surveys to inform the alignment stage. A peat probing survey will be carried out to inform design and layout. Where avoidance is not possible, restoration measures will be identified and discussed with RSPB Scotland.

Stakeholder	Summary of Feedback	Response by SSEN Transmission
	RSPB Scotland are also disappointed to note sections of B1 and C1 cross ground presently comprising the Beinn an Tuirc wind farm HMP area. This further supports our strong concern that renewable energy developments and their peripheral infrastructure are poorly coordinated in Kintyre, risking unacceptable negative environmental impacts and inefficient resource use. *Ancient Woodland* Ancient woodland is 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* The northern section of the Preferred Route is located on Class 2 peatland. A detailed peat mapping exercise is required. Siting infrastructure on open habitats particularly Class 1 and 2 peatland should be avoided wherever possible. Regardless of final route selection, RSPB Scotland urge the Applicant to be ambitious in any mitigation and enhancement proposals for blanket bog restoration, positive moorland management and the connecting of Ancient Woodland fragments both on and off site. *Cumulative Impact* 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 bird impacts in relation to other operational, consented and proposed developments in the planning system within this Natural Heritage Zone is essential. RSPB Scotland strongly advise that a holistic landscape management plan is established between energy developers and landowners. **28th October 2022 (Revised Preferred Route)** RSPB Scotland note Route Option A2,B2,C1 is now preferred by the Applicant. *Species* <u>Greenland white-fronted goose</u> While section option A2 does bring the line closer to the designated Tangy Loch and Lussa Loch roost sites, the position of section A2 within commercial non-native forestry may help to reduce collision risk as birds navigate over the existing obstacle of forest blocks. The revised route option (A2, B2, C1) is therefore preferable in respect of anticipated Greenland white-fronted goose impacts.	

Stakeholder	Summary of Feedback	Response by SSEN Transmission
	Black grouse A revised route (A2, B2, C1) is preferable in respect of anticipated black grouse impacts; however it still sits well within the 5 km (conservative) adult dispersal zone for these 4 regionally important black grouse leks. Any degradation/loss of low-density native/Ancient Woodland or ground vegetation could therefore result in significant negative impacts for this species at Regional Scale. *Habitat* The revised Route Option (A2, B2, C1) is preferable in respect of its lower impact on the qualifying features of Statutory Designated Areas, proportion of infrastructure sited within commercial non-native forest blocks and the transiting of less Ancient Woodland than other routeing options. However, B2 does cross a significant section of predicted Class 1 peatland. *Peatland* C. 50% of section B2 is located on predicted Class 1 peatland, comprising nationally important carbon-rich soils, deep peat and priority peatland habitat likely to be of high conservation value.	
Historic Environment Scotland	**26th October 2022** We have reviewed the Consultation Document (August 2022) prepared as part of the consultation for our historic environment interests. Our historic environment interests covers world heritage sites, scheduled monument and their setting, category A-listed buildings and their setting and gardens and designed landscapes (GDLs) and battlefields in their respective inventories. You should also seek advice from the West of Scotland Archaeology Service (WoSAS) for matters including unscheduled archaeology and category B and C-listed buildings. We note that there is some potential for impacts on heritage assets and their settings caused by the development of a grid connection in this area. These include, amongst others, the Crois Mhic Aoidh, standing stone (SM251), the Garvalt, dun 500m SW of SM23740, the Blary, dun ENE of SM3077 and the Carragh an Talaidh, chambered cairn, Brackley (SM189) scheduled monuments. We recommend that mitigation by design is undertaken to minimise impacts on heritage assets and their settings where possible. We understand that route option A2-B2-C1 replaces a previous Preferred Route option selected (A1-B1-C1) for the development within the Routeing Consultation Document (August 2022). Here, it should be noted that the new Preferred Route (A2-B2-C1) is likely to have a much lesser impact on our historic environment interests than the previous one (A1-B1-C1). We therefore	SSEN Transmission acknowledge the potential for impacts on heritage assets. The assets have been considered in the route options appraisal. Further environmental studies will be undertaken at the alignment stage which will consider the potential for impacts on cultural heritage sites and assets. It is considered an acceptable alignment that minimises potential effects on cultural heritage sites and assets within the combination route A1-B1-C1 and A2-B2-C1 can be found. SSEN Transmission have consulted with both WoSAS and Historic Environment Scotland in the route options appraisal and will continue to engage with these stakeholders through subsequent project stage, including discussion on potential mitigation. The use of visualisations to demonstrate the impact of a replacement OHL will be considered as part of the Environmental Impact Assessment forming part of the Section 37 Application. SSEN Transmission notes HES' comments on the switching station locations. Their recommendations will be considered at detailed site selection to minimise potential environmental effects where possible.

Stakeholder	Summary of Feedback	Response by SSEN Transmission
	welcome this change and, as a consequence of this, consider that the environmental performance of the scheme has been improved. *Route Option Alternatives* • Route A1: Development is likely to give rise to significant impacts on several scheduled monuments, including SM3740, SM3077, SM3111, SM178, SM3280, SM3315, SM3178 and SM7434. Impacts on the setting of these SMs are likely to be caused by the grid connection passing in close proximity. Importantly the line would pass to the west of Cleongart, Dun (SM3178) and Corputechan, Hut Circles (SM7434). This would surround the monuments in modern infrastructure and forestry and divorce them from currently uninterrupted views to and from the sea. • Route A2: This option passes with 1.1km of the Crois Mhic Aoidh, standing stone. This monument is already situated between two extant windfarms to the north and south. This route would pass to the west, further surrounding it with modern development. It is not clear how much a line would sever the monuments relationship with western views but steps should be taken to reduce this. • Route B1: This option is likely to give rise to impacts on the setting of the Garvalt, dun 500m SW of (SM3740) and the Blary, dun ENE of (SM3077). B1 would pass within 20m of the Garvalt, overshadowing the dun by any lattice towers on the north side of the Barr water. • Route B2: Option B2 is likely to give rise to impacts on the setting of the Garvalt, dun 500m SW of (SM3740) and the Blary, dun ENE of (SM3077), although to a lesser extent than B1. The intervening distance and topography and the location of the proposed line far away on the south side of the Barr Water from Garvalt suggests that any impacts would be unlikely to be significant, however. • Route C1: Option C1 would pass within 1.2km of the Carragh an Talaidh, chambered cairn, Brackley (SM189). This route would be visible in views from the monument to the south along the line of the Carradale Water. However, because of intervening topography and distance it seems likely that any impact would be minimal and could be further mitigated by design. • Route C2: Unlikely to impact on any heritage assets in our remit. • Route D: The development of a grid connection along route D is likely to impact on several heritage assets and their settings. Option D overlaps with Saddell Abbey (SM3645). Any proposed direct impacts upon the scheduled area would require SMC	

Stakeholder	Summary of Feedback	Response by SSEN Transmission
	from Historic Environment Scotland. It is very unlikely that consent would be granted for any works associated with this development. • Route E: The development of a grid connection along route E is likely to impact on several heritage assets and their settings. Option E also overlaps with Saddell Abbey (SM3645), as well as Kildonan, Glenluss Lodge, Ardnacross and Tangy Loch. Any works within the scheduled areas would require SMC from Historic Environment Scotland, which is unlikely to be granted. *Switching Station Locations* We note that three options are proposed for the siting of a switching station on the Carradale Water. Of these options, it appears that option 1 would be visible from Carrach an Talaidh, standing stone (SM189) which may increase the overall scheme's impact upon the setting of the monument. We would thus prefer either options 2 or 3 for the siting of the switching station, which would not be visible from the monument. We note that option 3 for the switching station is the current preferred option. We would recommend that the impact of these options is assessed and considered if any change in the preferred option is required.	
Argyll Fisheries Trust	**2nd November 2022 (Revised Preferred Route)** I can confirm that the Argyll District Salmon Fishery Board welcome the proposed change to A2 and B2 routes, which avoids potential disturbance of habitats that are important for Atlantic Salmon and sea trout populations.	None required.
Landowners – this is a summary that relates to the feedback from the landowners that have responded to this consultation	Concerns about the impact and disturbance to agriculture business. Comments on this topic included: • Damage to agricultural land and productivity during the construction, which would impact on the future viability of a farming business and the ability to produce food. • Past installation of towers has created long term drainage problems and impacted productivity of some land areas. • Potential damage to water infrastructure that is used for supply animals and disturbance and distress caused to animals during the construction phases. • The proposed route should not be put through productive agricultural land but instead it should be over low grade and forestry ground.	SSEN Transmission acknowledge that during construction there may be instances that land and business operations may be impacted as such during landowner consultation a landowner commitments register was created to record and monitor commitments made to landowners during the construction phase of the project to assist in avoidance and mitigation of undue disturbance. Once the principal contractor has been appointed for the construction phase steps will be taken and agreements put in to place to mitigate undue disturbance. Reports of Condition will be generated before works commencing and remediation works will be undertaken to restore ground to its previous condition.

Stakeholder	Summary of Feedback	Response by SSEN Transmission
	• Route options A1 and B1, would sever and damage ploughable and productive land. This is used for animal feed production and damage to it would have a significant financial impact on the running of the farm. • Route option A2 would have less on impact on farming operations as the land is mostly used for grazing livestock.	
	Concerns about the disturbance caused to daily life during the construction phase. Comments on this topic included: • Experience of having towers installed nearby was costly, disruptive and distressing. • Another route should be considered away from dwelling houses. • Negative impact on property value.	SSEN Transmission will look to minimise impacts on residential properties during the route selection phase. Where there is unavoidable disruption SSEN Transmission and their contractors will look to minimise this within the scope of the commitments register, which is created as part of the landowner consultation.
	Concerns about the impact development on future and existing energy infrastructure and carbon off setting projects in the area: • The Proposed Route is not acceptable as it would impact on other windfarm developments. • The Proposed Route may impact on the on the extension of an existing windfarm. • A2 & B2 route options are very close to an operation boundary of an existing windfarm a buffer would be required to maintain a safe distance from the existing windfarm. • Concern there may be impact on future windfarm development and areas that have been identified as being suitable for habitat management.	SSEN Transmission have taken cognizance of existing developments, and developments logged with the ECU, as such further refinement will be undertaken during the alignment selection stage to keep the proposed line within industry standards regarding turbine and OHL proximity.
	Concerns about the potential Environmental Impacts: • The proposed B1, B2, C1 and C2 would run through an existing Habitant Management Area and could impact bird life in these areas. • A2 would Impact on existing HMA, and this could lead to disruption to wildlife and a peatland restoration area.	SSEN Transmission acknowledge the extent of Habitat Management Plans within Kintyre and are consulting further with NatureScot and SPR to consider potential impacts and mitigation requirements. This will inform subsequent design stages and assessment work through the alignment and EIA stages.

Stakeholder	Summary of Feedback	Response by SSEN Transmission
	• The preferred route crosses through the area covered by the Central Kintyre Habitat Management Plan (HMP) and there is legal agreement for this in place. • Concern the construction of the OHL would put the HMP at risk and lead to a breach of planning conditions. • Concern there may be impact on future windfarm development and areas that have been identified as being suitable for HMA.	
	Concerns about the routeing method and approach used: • Undergrounding of the cable is not considered by SSEN Transmission as viable option, due to distance from the Tangy IV to the substation and subsequent cost. SSEN Transmission have not provided any information demonstrating this. • The consultation does not consider partial undergrounding of the part of the route as a viable option. SSEN Transmission have looked at undergrounding sections of OHL routes in other schemes to help minimise disturbance to landowners. • The consultation does not consider partial undergrounding of the part of the route as a viable option. SSEN Transmission have looked at undergrounding sections of OHL routes in other schemes to help minimise disturbance to landowners. • The Holford Rules and SSEN Transmission Routeing Guidance and states that the routeing be environmentally design-led and technical constraints taken into consideration. However, the comparative analysis chapter seems to have not been taken into consideration when identifying a preferred route.	At this stage in the process SSEN Transmission are looking at the preferred route for the power transmission line. Undergrounding the cable for the full route is not a feasible option due to costs involved during construction as well as ongoing maintenance problems associated with underground cables in remote areas; such as terrain, access and the presence of watercourses and associated flood zones, potential undesignated assets and peat However, as the design is refined the suitability for undergrounding of the cable in some locations may be considered where appropriate.

Table 7.2 – Feedback Form Responses

Summary of Feedback	Response by SSEN Transmission
The majority of feedback was objecting to wind farm connections generally rather than specifically relating to the Preferred Route for Tangy. The negative impact on tourism was a recurring issue for most community members and undergrounding was suggested as an alternative. The community members also voiced concerns of the difficulty in understanding the consultation process, especially as SSEN Transmission and the wind farm developers work separately in consulting with the community.	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 Transmissions 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 duly noted. SSEN Transmission have made a commitment to continue to be transparent in sharing our proposals.
Comments raised concerns about the economic impact. Comments on this topic included: • Negative impact on Tourism and local businesses resulting in lack of visitors to the area. • What are the economic benefits to the area in terms of jobs and local supply chain?	As this project is currently in the development phase, if consented it will be 2025 before construction starts and we would be looking 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 fair.
Concerns about the effect on landscape character and visual amenity of the area. Comments on this topic included: • Objections to more large pylons in the local area. • Concerned about the small area of Argyll already hosting large amounts of Electrical infrastructure. • Visual impact severely compromised and how the pylons will dominate the landscape.	Landscape and visual effects have been considered during the routeing stage, and informed the identification and selection of the Preferred Route. Landscape and visual effects are considered in more detail at the next stage, the alignment selection with the project landscape team involved in the identification of alignments within the Proposed Route. The route will be supported on wood poles with the potential for some underground cable to be required. The assessment will include the consideration of where to locate individual poles by making use of topography, minimising direction changes and addressing the visual interaction with existing infrastructure. These will be balanced alongside other cost, technical and other environmental considerations, which will inform angle support structure locations and in turn the length, extent, cost and economic viability of the new infrastructure. It is important that integrated decision making and engagement from all SSEN Transmission participants takes place throughout the appraisal process to ensure that appropriate weight is given to all factors informing the alignment.

Summary of Feedback	Response by SSEN Transmission
Concerns about the health and environmental impact. Comments on this topic included: • Health implications. • Negative impact on the local communities Health and well-being.	In response to your question regarding health and electrical pylons, EMFs are considered as part of the Environmental Impact Assessment (EIA) process. SSEN Transmission are obliged as part of our transmission licence obligations, to ensure that our assets operate within the limits specified in guidance from the UK Government. These limits are based on the advice of the Government's independent scientific advisers - Health Protection Scotland and Public Health England (formerly Health Protection Agency, Formally NRPD) - who ensure the appropriate level of protection for the public from these fields. Health Protection Scotland and Public Health England are appointed by the Secretary of State to protect the public from dangers to health. These organisations conduct and review relevant research and ensure that the guidelines for limiting exposure are based on the most appropriate available scientific information. Further information on the guidance can be accessed on the UK Government website: https://www.gov.uk/government/collections/electromagnetic-fields. Information on the research into a possible link between EMFs generated from electricity transmission infrastructure and human health is documented in the Energy Networks Association (2017) publication "Electric and Magnetic Fields: The Facts". SSEN Transmission are carefully considering alignment in order to mitigate any aviation strikes. There are ongoing ornithology surveys being undertaken which will be available within the Environmental impact assessment (EIA). This will be to confirm risk and required mitigation.
Comments were raised as to why Route E was not the Preferred Route as it already exists, and how switching stations will be camouflaged from the road	From an environmental view, route E has the most red within the RAG table (as per the Consultation Document). It is located adjacent to the East Kintyre Area of Panoramic Quality (APQ) and is the longest route proposed. Whilst Route E has an existing 33kV connection for Tangy 1 & 2 it scored poorly in comparison with the Preferred Route and revised Preferred Route selected. The modifications to Carradale to facilitate a connection from the south would be extensive. The 33kV connection could not be reused for this project due to capacity requirements. The switching station options were discounted for a variety of reasons, their visual impact being one of them. Route E crosses many Ancient Woodlands and passes through protected and designated sites for birds which have internationally important roosts present like the Kintyre Goose Roosts which is SSSI (Site of Special Scientific Interest), Ramsar which is wetland of international importance, and SPA (Special Protection Areas) and close proximity to the Tangy Loch SSSI and SPA. There are also many dwellings along the route and as it would run along Kintyre Way it would create a significant cumulative visual effect. It also passes many core paths and it would affect all

Summary of Feedback	Response by SSEN Transmission
	the users (walkers, hikers, anglers) and two thirds of the route falls within the East Kintyre Areas of Panoramic Quality. There are also a few scheduled monuments and listed buildings.
Comment received noting that the plans presented were quite vague.	The plans presented at the consultation indicate several route corridors, each of 1 km width and approximately 21.5km long over a large area, as such the level of detail presented may be limited. Once the refinement of the Proposed Route is undertaken the level of detail that can be shown will be far greater.
There was also a comment that stated the public consultation event was very informative. This person was complementary of the knowledgeable answers they received to their questions.	None required.

8. CONCLUSIONS AND NEXT STEPS

8.1 Summary

This Report on Consultation documents the consultation process which has been undertaken for the project between August and October 2022. The programme of consultation was designed to engage with stakeholders including statutory and non-statutory consultees, local communities, landowners and individual residents in order to invite feedback on the rationale for, and approach to, the selection of the Preferred Route.

This report describes the key responses received and provides detail on the actions proposed in response to the issues raised. The consultation on the route selection process has been successful in obtaining a large amount of feedback from both statutory and non-statutory consultees.

A number of stakeholder responses provided information on further material to be considered for the alignment appraisals. The specific comments raised will be incorporated in the further assessment work to be undertaken. The points raised include the need for additional consideration of the potential impacts upon specific receptors or areas, the need for further environmental information, recommendations for continued consultation with stakeholders and the importance of various assessments for the protection of environmental aspects as the project evolves.

To address these points, the following actions are being undertaken:

- Alignment options will be developed and will consider appropriate technological options along the Preferred Route. The results of these studies will be reported at Alignment Selection (Stage 3);
- Further environmental survey and assessment work will be undertaken in parallel with the engineering studies to enable a collaborative approach in seeking to identify preferred alignments through this sensitive landscape and environment. In particular, this will involve further survey effort and advice relating to landscape and visual, ornithology, hydrology, peat, soils and cultural heritage matters. The results of these studies will be reported at Alignment Selection; and
- Further consultation will be organised with key statutory and non-statutory consultees, local councillors and local communities to provide updates on the project during the alignment stage. This will include addressing comments relating to the provision of information during the consultation process. Formal consultation will be organised to enable comments from stakeholders to be sought on the preferred alignments identified.

All comments and considerations to date will be taken forward into the alignment stage, through which assessments will be carried out for all relevant environmental aspects. This process will remain inclusive, seeking further consultation where appropriate.

The Consultation Document concluded that the Preferred Route options A1 and B1 within Zones A and B were marginally preferred over Route Options A2 and B2. The consultation process has further highlighted that Route Options A2 and B2 would likely have a lower impact on interested assets from consultees including RSPB Scotland, Historic Environment Scotland, Scottish Forestry and Argyll Fisheries Trust. Notably this includes:

- A combination of A2 and B2 is preferred in respect of its lower impact on the qualifying features of Statutory Designated Areas, proportion of infrastructure sited within commercial non-native forest blocks and the transiting of less Ancient Woodland than other routeing options;
- A combination of A2 and B2 is likely to have a much lesser impact on historic environment interests compared to A1 and B1; and
- A combination of A2 and B2 avoids potential disturbance to habitats that are important for Atlantic Salmon and sea trout populations.

Taking into account the marginal differences from an environmental, engineering and economic perspective within Zones A and B identified within the Consultation Report, and the feedback provided from consultees, the consultation process has therefore concluded that a combination of Route Options A2, B2 and C1 should

be taken forward as the Proposed Route. Further study will seek to identify alignment options within the Proposed Route.

It is recognised that the Proposed Route runs through a sensitive environment, with golden eagle area and habitat management plans presenting key risks. However, the route has been selected on the basis that it is considered to provide an optimum balance of environmental, engineering and economic factors, and will become the Proposed Route taken forward to the alignment stage of this project.

Detailed analysis of potential alignment options within the Proposed Route and consultation feedback will focus on finding an alignment that avoids or minimises potential environmental impacts including those referred to in **Table 7.1** above.

8.2 Next Steps

The project will now be taken into Stage 3 (Alignment Selection), commencing with identification of alignment option within the Proposed Route. These will be informed by this and further consultation exercises, and through detailed surveys, which may identify any additional and / or currently unknown engineering, environmental or land use constraints.

Members of the public and other interested stakeholders will be invited to participate in another consultation on the Preferred Alignment in Spring 2023, before the alignment is finalised for the purpose of seeking the necessary consents and permissions under the Electricity Act 1989. The anticipated programme is as follows:

Summer 2023 Alignment selection between Tangy IV Wind Farm and Carradale Substation to select a preferred alignment and tower positions.

Summer 2023 Consultation on the Preferred Alignment.

Winter 2024 Request for an EIA Scoping Opinion.

Spring 2024 Finalise design to make applications for necessary consents and permissions.

Summer 2024 Prepare EIA Report and make Section 37 application.

SSEN Transmission will continue to engage with the local community, Community Councils, elected representatives, statutory and non-statutory consultees throughout the project.

APPENDIX A – PUBLIC NOTICE

Scottish & Southern Electricity Networks

TRANSMISSION

Earraghail Wind Farm Connection Project and Tangy IV Wind Farm Connection Project Route Options Consultation

SSEN Transmission invites you to come and share your views with us at our upcoming public consultation events.

What is happening?
SSEN Transmission is holding a series of public consultation events to gain views and feedback on our route options for both Earraghail Wind Farm Connection Project and Tangy IV Wind Farm Connection Project.

Why is this project required?
Due to the increase in renewable energy generation in Argyll, some of the existing network needs to be upgraded and reinforced to ensure supply and support the transition to net zero emissions.

For further information about the projects and their planning applications, access to the virtual consultation room and the feedback form can be found on the project webpages.

Earraghail Wind Farm Connection Project - https://bit.ly/3J87GeP
Tangy IV Wind Farm Connection Project - https://bit.ly/3PYIMjN

We kindly request that feedback forms are submitted by 5pm on Friday 23rd of September 2022.

Come and meet us here:

Tuesday 23rd August 2022
2pm-7pm at Campbelltown Town Hall, PA28 6AB

Wednesday 24th August 2022
2pm-7pm at Whitehouse Village Hall, Tarbert PA29 6XR

Or join us online, via the project webpage, to chat with the project team using live Instant Message chat at the following times:

Thursday 25th August 2022
5pm – 7pm

If you have any questions, please do not hesitate to contact our Community Liaison Manager:

Caitlin Quinn
Community Liaison Manager

1 Waterloo St, Glasgow, G2 6AY
Mobile: +44(0) 7901 135 758
Email: caitlin.quinn@sse.com

Earraghail **Tangy IV**

@SSETransmission @SSEN Community

APPENDIX B – CONSULTATION BROCHURE

Earraghail Wind Farm Connection

Route options consultation

Tangy IV Wind Farm Connection

Route options consultation

August - September 2022

Share your views with us:

We are launching public consultations to seek feedback on the route options on two projects in Argyll and Bute:

Earraghail Wind Farm Connection Project and Tangy IV Wind Farm Connection Project.

Information on our proposals is available within this consultation booklet and on the project webpages. We intend to hold both face to face and virtual consultations.

Please note, a face to face event will be subject to covid restrictions and updates on whether these will go ahead will be available on our webpages.

Scottish & Southern Electricity Networks

TRANSMISSION

Scottish & Southern Electricity Networks
TRANSMISSION

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.

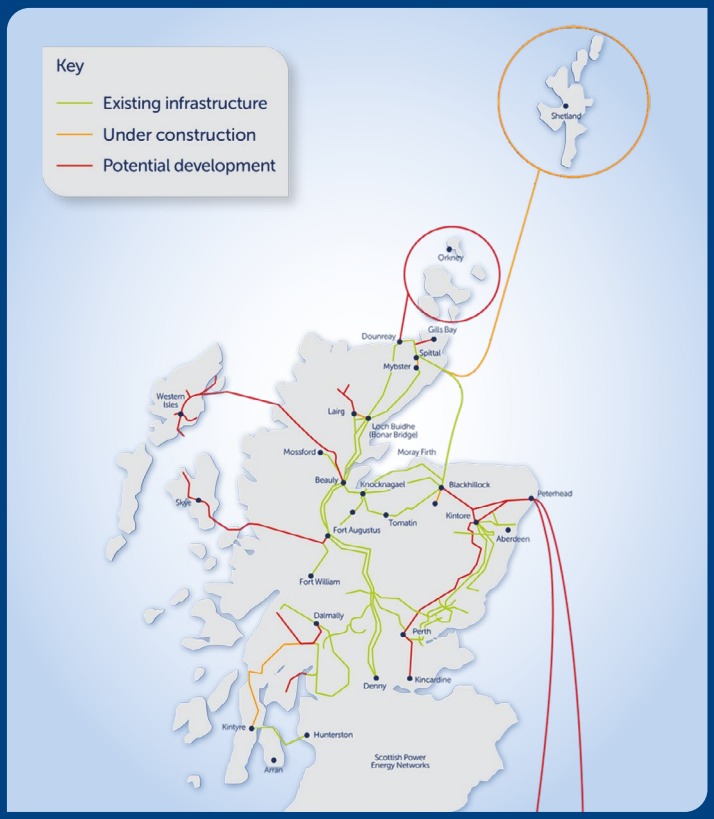
What is the difference between transmission and distribution?

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



www.ssen-transmission.co.uk/projects/earraghail-wind-farm-connection-project
www.ssen-transmission.co.uk/projects/tangy-iv-wind-farm-connection-project

Earraghail Wind Farm connection

The proposed project would involve:

The overall aim of the project is to reinforce the existing transmission network connections in the Argyll region to enable renewable energy projects to connect to the GB transmission network and ensure security of supply.

SSEN Transmission are proposing to construct and operate a new double circuit 275kV overhead line (OHL) to connect Earraghail Wind Farm to a T-point into one side of the consented Craig Murrail to Crossaig 275kV overhead line.

The developer of Earraghail Wind Farm has submitted an application to the Scottish Government under Section 36 of the Electricity Act 1989 for a 114MW wind farm and has a contracted connection date of April 2027.

Under the terms of Schedule 9 of the Electricity Act 1989, SSEN Transmission is therefore obliged to connect the Earraghail Wind Farm to the transmission network by the contracted connection date.

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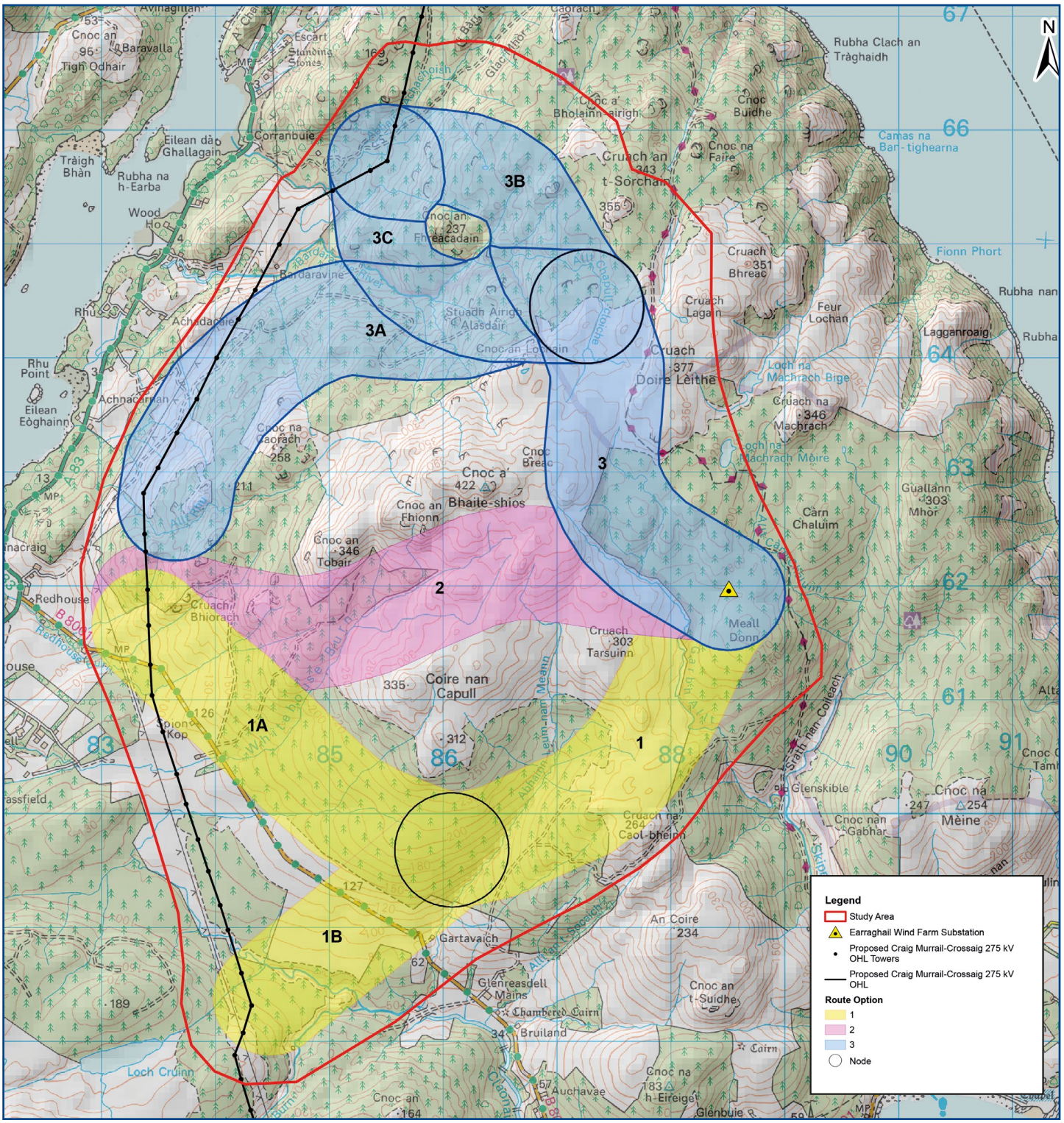
Earraghail Wind Farm Connection



www.ssen-transmission.co.uk/projects/earraghail-wind-farm-connection-project
www.ssen-transmission.co.uk/projects/tangy-iv-wind-farm-connection-project

Route options

We have identified three potential route options for the new overhead line. The route selection process identifies a wide corridor in which a preferred alignment for the overhead line can be determined.

This aims to progress towards a preferred overhead line alignment in a systematic manner, which is technically feasible, economically viable, and could be anticipated to cause the least disturbance to the environment and to those who live, work and visit the area. These options are presented on the following pages.

Route 1

Route option 1 has been divided into two sub-options, route option 1A and 1B.

Route option 1A

Route option 1A is approximately 6.8km in length. It would leave the Earraghail Wind Farm Substation in a south west direction through a small valley between Cruach Tarsumn and Cruach na Caol-bheinn.

The route would then head in a north west direction against the slope, in parallel to the east of the B8001 before joining into the consented Craig Murrail to Crossaig 275kV overhead line.

Route option 1B

Route option 1B is approximately 5.9km in length. It would leave the Earraghail Wind Farm Substation in a south west direction through a small valley between Cruach Tarsumn and Cruach na Caol-bheinn.

The route would then continue south west before crossing the B8001 and joining into the consented Craig Murrail to Crossaig 275kV overhead line.

Route 2

Route option 2 is approximately 5.2km in length. It would run east to west between Earraghail Wind Farm Substation and the consented Craig Murrail to Crossaig 275kV overhead line. The route would utilise a valley between high points at Cnoc a'Bhaite-shios, Cnoc an Fhionn and Cnoc an Tobair to the north and Crunach Tarsuinn and Coire nan Capull to the south. The western section of route would have to traverse a steep slope.

Route 3

Route option 3 has been divided into three sub-options, route option 3A, 3B and 3C, in order to assess the three potential route options that could be preferred within the north west of the corridor.

Route option 3 is approximately 3km in length and would leave Earraghail Wind Farm Substation to the north west, traveling north and roughly following the route of the Kintryre Way. The route avoids areas of higher ground to the east, Cruach Doire Leithe, and west, Cnoco Breac. Approximately 1.8km north west of Earraghail Wind Farm Substation, the route would then split into three sub-options.

Route option 3A

Route option 3A is approximately 4.5km in length and would bare west from route option 3, traversing the steep slopes.

The route then travels south west along the route of the consented Craig Murrail to Crossaig 275kV overhead line.

Route option 3B

Route option 3B is approximately 2.3km in length and follows a more direct route, continuing from route option 3 in a north west direction and would connect into the consented Craig Murrail to Crossaig 275kV overhead line north before bearing west around the Cnoc an Freacadain high point.

Route option 3C

Route option 3C is approximately 2.5km in length and is proposed between route options 3A and 3B to avoid the Cnoc an Freacadain high point by heading west from route option 3 before connecting into the consented Craig Murrail to Crossaig 275kV overhead line within the north west of the Corridor.

What are the potential risks associated with these options?

We have completed a desk based assessment of the routes and have identified that the six options present the following environmental and engineering risks:

1. Environmental

a) Route options 3A, 3B and 3C encounter areas of steep slopes and several areas of Ancient Woodland.
b) All route options pass-through areas of heath and blanket bog. However, route option 2 has the largest stretch of isolated moorland to cross.
c) All options pass-through upland moorland and woodland edge habitats with the potential to support Schedule 1 and red listed species including hen harrier, black grouse and golden eagle. Route options 2 and 3 passes through the biggest areas of upland moorland habitat. These route options are also the smallest distance from the high peaks and crags of the corridor that could support nesting golden eagle.
d) Route option 1A has a single category C listed building within it. There are no World Heritage Sites, Inventory Battlefields or Inventory Gardens and Designated Landscapes within the route options.
e) Potential to impact a wider woodland area through increased windthrow risk from woodland removal of an overhead line operational corridor.

2. Engineering

a) All routes are impacted by the wind farm and the wake effect.
b) Peatland present design challenges on all routes, however on routes 1A and 1B this could be mitigated during the alignment stage.
c) Routes 1A, 1B, 3A and 3C all pass through 1 in 200 year flood zone areas which will require to be mitigated during the alignment stage.

Scottish & Southern Electricity Networks
TRANSMISSION

Enviromental infomation & RAG

Earraghail Wind Farm Connection

Environment RAG impact rating of all route options

To demonstrate the full extent of analysis undertaken on the three route options identified, we created Red Amber Green (RAG) table's which illustrate the level of associated risk to each consideration. A high risk is shown as red, a medium risk is shown as amber, and a low risk is shown as green. For further information on the route options analysis, please refer to the consultation document available from the project webpage or on request.

RAG impact rating - environmental

Route	Natural heritage					Cultural heritage		People	Landscape and visual			Land use			Planning
	Designations	Protected species	Habitats	Ornithology	Hydrology, geology & hydrogeology	Designations	Cultural heritage assets	Proximity to dwellings	Designations	Landscape character	Visual	Agriculture	Forestry	Recreation	Policy proposals
1A	L	M	H	M	M	M	M	L	L	L	L	L	H	M	M
1B	L	M	H	M	M	M	L	L	L	M	M	L	M	H	L
2	L	M	H	M	M	L	L	L	L	M	M	L	M	M	M
3A	M	M	H	M	M	L	L	L	L	M	M	L	H	M	L
3B	M	M	H	M	M	M	L	L	L	M	M	L	H	M	L
3C	M	M	H	M	M	M	L	L	L	M	M	L	H	M	L

RAG impact rating - cost parameters

Site option	Capital						Operational	
	Construction	Diversions	Public road improvements	Tree felling	Land assembly	Consent mitigations	Inspections	Maintenance
1A	M (123%)	L	L	M	M	M	M	M
1B	L	L	L	L	L	L	M	M
2	L (101%)	L	L	L	L	M	H	M
3A	M (130%)	L	L	M	L	L	M	M
3B	L (104%)	L	L	L	M	L	M	M
3C	L (109%)	L	L	L	M	L	M	M

www.ssen-transmission.co.uk/projects/earraghail-wind-farm-connection-project
www.ssen-transmission.co.uk/projects/tangy-iv-wind-farm-connection-project

Engineering RAG rating of the six route options

Route	Infrastructure crossing		Environmental design				Ground condition		Construction and maintenance		Proximity				Additional considerations
	Major crossings	Minor crossings	Elevation	Atmospheric pollution	Contaminated land	Flooding	Terrain	Peatland	Access	Angle supports	Clearance distance	Wind farms	Communication masts	Urban development	Route length
1A	L	H	H	L	L	M	L	H	M	M	L	M	L	L	M
1B	L	M	H	L	L	M	L	H	M	L	L	M	L	L	L
2	L	L	H	L	L	L	L	H	H	L	L	M	L	L	L
3A	L	M	H	L	L	M	L	H	M	L	L	M	L	L	H
3B	L	L	H	L	L	L	L	H	M	M	L	M	L	L	L
3C	L	M	H	L	L	M	L	H	M	M	L	M	L	L	L

Preferred route

The aim of our routing guideline process is to provide a balanced assessment of cost engineering and environmental factors in order to select the preferred route for the new overhead line. Route option 1B is considered to be the preferred route compared to the other route options as:

- There are no statutory or non-statutory designated sites (including Ancient Woodland) present;
- It passes through the least amount of upland moorland habitat;
- It is the greatest distance from the high peaks and crags in the centre of the study area that could support nesting golden eagle;
- It has the highest potential of developing an alignment that passes through a limited area of exposed landscape;
- Has the lowest peatland percentage and average elevation, suggesting it has the lowest associated risk;
- It provides the additional advantage of allowing an angle point tee in, which will produce a less complex design and reduce safety concerns.

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Tangy IV Wind Farm Connection Project

The proposed project would involve:

This project aims to connect Tangy IV Wind Farm to either the existing Crossaig – Carradale overhead line, or directly to Carradale Substation, via approximately 21.5km of new overhead line by spring 2027.

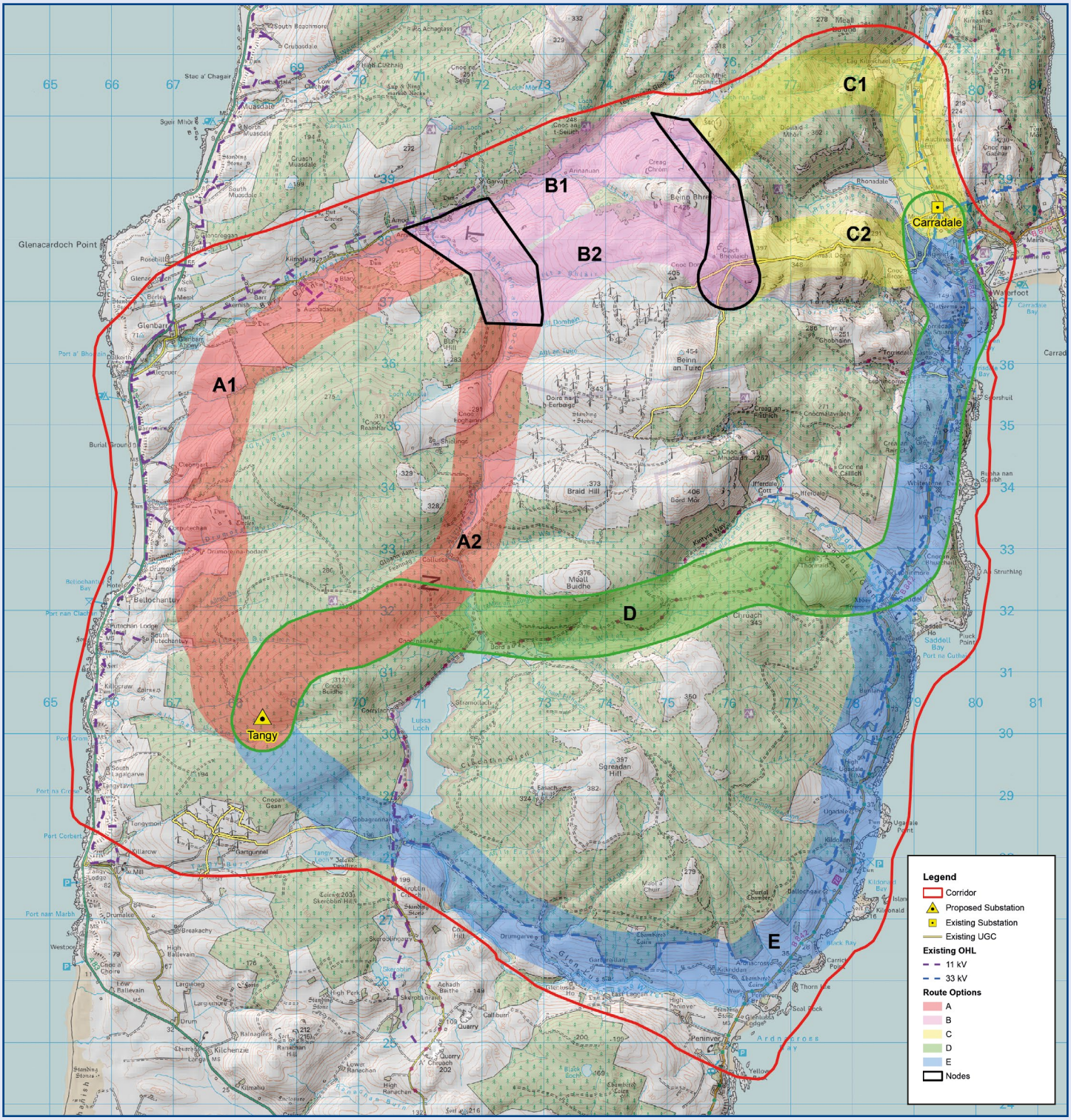
SSEN Transmission is proposing to construct and operate a new single circuit 132kV overhead line to connect Tangy IV Wind Farm to existing infrastructure at, or near Carradale substation.

The connection point will be a new switching station or extension of the Carradale Grid Supply Point (GSP). The developer of Tangy IV Wind Farm gained consent from the Scottish Government under Section 36 of the Electricity Act 1989 for a 100MW wind farm and has a contracted connection date of April 2027.

Under the terms of Schedule 9 of the Electricity Act 1989, SSEN Transmission is therefore obliged to connect the Tangy IV Wind Farm to the transmission network by the contracted connection date.

www.ssen-transmission.co.uk/projects/earraghail-wind-farm-connection-project
www.ssen-transmission.co.uk/projects/tangy-iv-wind-farm-connection-project

Tangy IV Wind Farm Connection



Route options

We have identified five potential routes for the new overhead line. The route selection process identifies a wide corridor in which a preferred alignment for the overhead line can be determined.

This aims to progress towards a preferred overhead line alignment in a systematic manner, which is technically feasible, economically viable, and could be anticipated to cause the least disturbance to the environment and to those who live, work and visit the area or use it for recreation. The options are as follows.

Route 1 - Zone A
North of Tangy to Arnicle

Route option A1 would travel north along the woodland edge on the lower slopes, above the western coastal edge of Kintyre. Near Glenbarr, the route would turn north east, running along the slopes above the Barr Water. Route option A1 would meet the node at the Abhainn a Chnoicain water course at Arnicle. Route option A1 is approximately 11km in length.

Route option A2 travels north east from Tangy IV Wind Farm Substation around the lower slopes of Cnoc Buidhe (312m AOD), and along a shallow valley. The route then heads north, along the Allt nan Calltuinn water course to the west of the existing Beinn an Tuirc Wind Farm, before joining the node at Arnicle. Route option A2 is approximately 8km in length.

Route 2 - Zone B
East of Arnicle to Clach Bhealaich

Route option B1 would continue from Route option A1 to stretch north east from route option A1, traversing through an area of steep terrain north of Beinn Bhreac. The route would extend east to an additional node north of Clach Bhealaich where there is an opportunity for the route to pass around the Beinn Bhreac hilltop (425m AOD) to the south and join route option C2 (described below). Route option B1 is approximately 4km in length.

Route option B2 would continue from route option A2 to stretch east of Arnicle, through shallow valleys, avoiding areas of steep slopes at Beinn Bhreac within the north. The route would pass north of the existing Beinn au Tuirn Wind Farm and continue east to join the node at Clach Bhealaich. Route option B2 is approximately 4.4km in length.

Route 3 - Zone C
East of Clach Bhealaich to the B842 between Carradale and Lag Kilmichael

Route option C1 would continue from route option B1 north of Clach Bhealaich in a north east direction, traversing steeper slopes in the north eastern extent of the corridor at Lag Kilmichael. Route option C1 would then turn south travelling in parallel to existing Crossaig to Carradale 132kV overhead line before connecting into a T-point into one side of the existing Crossaig to Carradale 132kV overhead line or connecting to Carradale substation. Route option C1 is approximately 5.9km in length.

Route option C2 would continue from route option B2 east from the node at Clach Bhealaich, along the rocky hilltops and steep terrain before crossing the Carradale Water valley to a T-point into one side of the existing Crossaig to Carradale 132kV overhead line or connecting to Carradale Substation. Route option C2 is approximately 3.7km in length.

Route 4 - Route D
North east of Tangy, east to Saddell and north to Carradale

Route option D presents a continuous route from Tangy IV Wind Farm Substation to Carradale Substation. This route option would initially follow the same route as route option A2, north east of the proposed Tangy IV Wind Farm, running through shallow valleys. Instead of heading north at Collusca, the route would continue east, running in the same direction as the Kintyre Way to Creag Thormaic. The route would then extend east to the B842 at Suddell and follow the road infrastructure north along the coast to the connection point at Carradale substation. Route option D is approximately 17.2km in length.

Route 5 - Route E
South of Tangy, east to the B842 and north to Carradale

Route option E would follow a route south east of the proposed Tangy IV Wind Farm, then following along the existing woodland edge and existing 33kV overhead line to meet the B842 on the east coast. The route would follow the existing infrastructure line along the coast in a northern direction and meet the connection point at Carradale Substation in the north. Route option E is located adjacent to the East Kintyre Area of Panoramic Quality (APQ) and is the longest route proposed with a total length of approximately 22.5km.

www.ssen-transmission.co.uk/projects/earraghail-wind-farm-connection-project
www.ssen-transmission.co.uk/projects/tangy-iv-wind-farm-connection-project

What are the potential risks associated with these options?

We have completed a desk based assessment of the routes and have identified that the five options present the following environmental and engineering risks:

3. Environmental

a) Route option A2 is less than 500m from the Kintyre Goose Roosts Special Protection Area (SPA), Ramsar and Kintyre Goose Lochs Sites of Special Scientific Interest (SSSI) that is designated for Greenland white-fronted geese. However, they are known to forage in areas immediately north of route option A1. Route options D and E both pass through the Kintyre Goose Roosts SSSI, Ramsar, and SPA and the Torrisdale Cliff SSSI, with route option E near the Tangy Loch SSSI and SPA.
b) Route options A1, B1, C1, C2, D and E cross over several areas of Ancient Woodland.
c) All route options pass through potential Annex 1 habitats (namely heath and blanket bog) where route B, C, D and E contain continuous sections of blanket bog and wet heath.
d) Route option A1 has four Scheduled Monuments within it (Corputechan, Cleongart, An Dunan, Blary). Route option D has a single Scheduled Monument within it, Saddell Abbey. Route option E has four Scheduled Monuments within it (Saddell Abbey, Ardnacross, Kilkeddan, Kildonan).

4. Engineering

a) All routes pose technical challenges due to high elevations with almost all routes having over 50% of the route exceeding elevations of 200m.
b) Almost all routes pass through areas of peat which presents design challenges at alignment stage.
c) All routes pass close to wind farms which present design challenges to avoid wake effect produced by the wind turbines.
d) Route 2a and 2b pass through a 1 in 200-year flood zone towards the end which will need to be accounted for at alignment stage.

Tangy IV Wind Farm connection

Environment RAG impact rating of all route options

To demonstrate the full extent of analysis undertaken on the five route options identified, we created Red Amber Green (RAG) table's which illustrate the level of associated risk to each consideration. A high risk is shown as red, a medium risk is shown as amber, and a low risk is shown as green. For further information on the route options analysis, please refer to the Consultation Document available from the project webpage or on request.

RAG impact rating - environmental

Route	Natural heritage					Cultural heritage		People	Landscape and visual			Land use			Planning
	Designations	Protected species	Habitats	Ornithology	Hydrology, geology & hydrogeology	Designations	Cultural heritage assets	Proximity to dwellings	Designations	Landscape character	Visual	Agriculture	Forestry	Recreation	Policy proposals
A1	H	M	H	M	M	H	M	L	L	M	M	L	M	L	M
A2	M	M	H	M	M	L	L	L	L	L	L	L	H	L	M
B1	H	M	H	M	M	M	L	L	L	M	L	L	L	L	L
B2	H	M	H	M	M	L	L	L	L	M	L	L	L	L	L
C1	H	M	H	M	M	M	L	M	L	H	M	L	M	M	L
C2	H	M	H	M	M	L	M	M	L	H	M	L	M	M	L
D	H	M	H	H	M	M	H	H	M	M	H	L	H	H	M
E	H	M	H	H	M	H	H	H	M	M	H	L	M	H	M

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Engineering RAG rating of the five route options

Route	Infrastructure crossing		Environmental design				Ground condition		Construction and maintenance				
	Major crossings and metallic pipelines	Road crossings	Elevation	Atmospheric Pollution	Contaminated land	Flooding	Terrain	Peatland	Access	Wind farms	Communication masts	Urban environments	Metallic pipelines
A1	L	H	L	L	L	L	L	M	L	H	M	L	L
A2	L	H	H	L	M	L	L	H	L	H	M	L	L
B1	L	M	H	L	L	L	M	H	H	H	L	L	L
B2	L	L	H	L	L	L	L	H	H	H	L	L	L
C1	M	H	H	L	L	H	M	M	M	L	H	L	M
C2	L	H	H	L	L	H	H	H	M	L	H	L	L
D	L	H	H	L	M	M	M	M	L	H	H	L	L
E	M	H	L	L	M	M	M	L	L	H	H	L	M

RAG impact rating - cost parameters

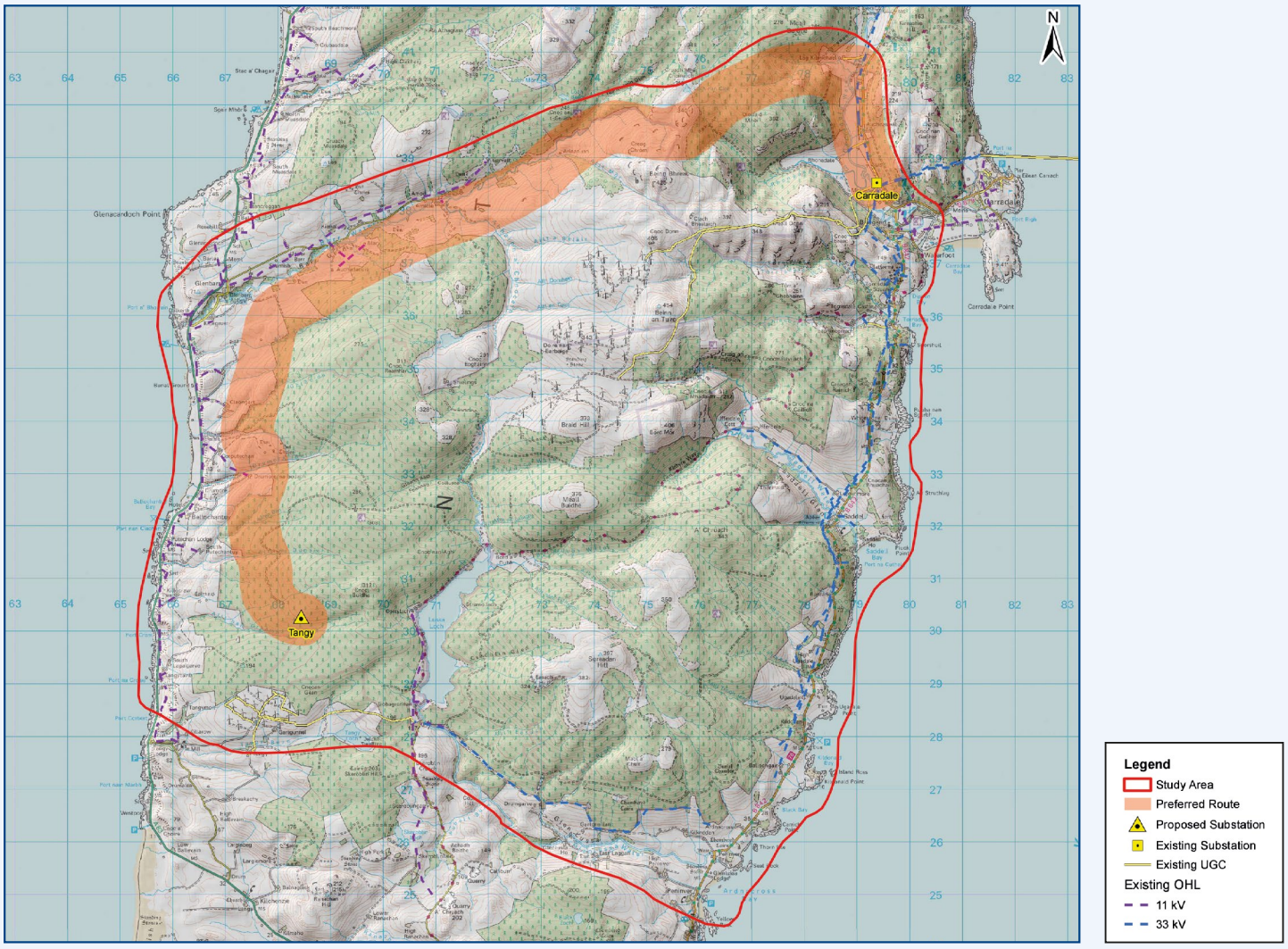
Site option	Capital						Operational	
	Cost	Diversions	Public road improvements	Felling	Land assembly	Consent mitigations	Inspections	Maintenance
A1	M (139%)	M	L	L	L	H	L	L
A2	L	L	L	H	L	L	L	L
B1	L	L	L	H	L	M	L	L
B2	H (187%)	L	L	L	L	L	M	M
C1	L	M	L	H	L	L	L	L
C2	M (138%)	H	L	L	L	M	M	M
D	L	L	L	H	L	L	L	L
E	M (130%)	H	L	M	L	M	L	L

Tangy IV Wind Farm Connection

Preferred route

The aim of our routing guideline process is to provide a balanced assessment of cost, engineering and environmental factors in order to select the preferred route for the new overhead line. Route option A1, B1 and C1 is considered as the overall preferred route as:

- Route option A1 is further away from the Kintyre Goose Roosts multiple designated site;
- Route options A1 and B1 would be less affected by the proposed Cnoc Buidhe Wind Farm and few other proposed wind farms in this area (including proposed Arnicle Wind Farm);
- Route option A1-B1-C1 consist of the lower woodland level, along with less moorland/peatland habitat;
- Route option C1 is preferred due to terrain and lack of technical constraints associated with the substation orientation and existing network at Carradale Substation.



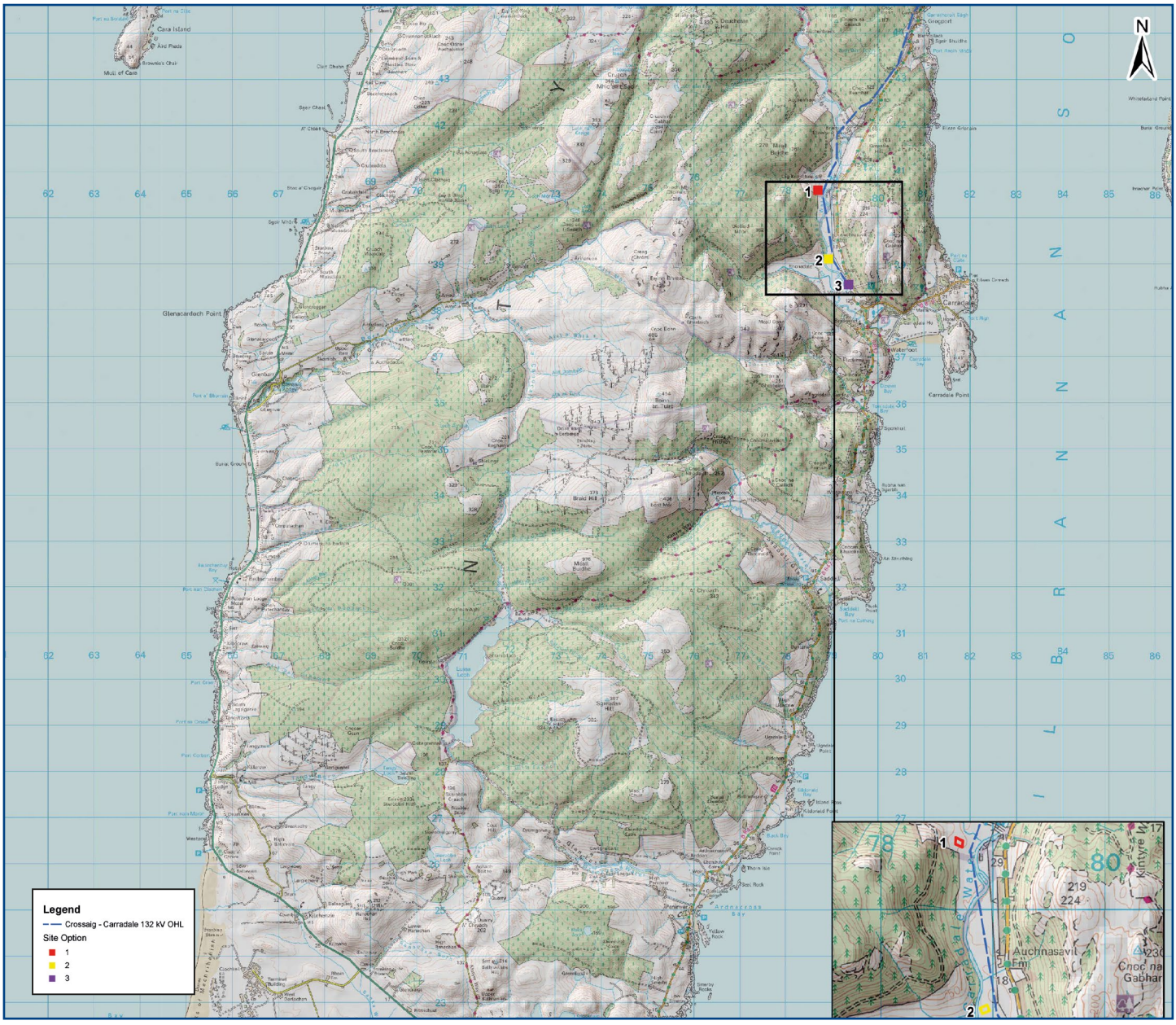
www.ssen-transmission.co.uk/projects/earraghail-wind-farm-connection-project
www.ssen-transmission.co.uk/projects/tangy-iv-wind-farm-connection-project

Tangy Switching Station/Carradale Direct Connection

SSEN Transmission is proposing to construct a new switching station or an extension to the existing Carradale Grid Supply Point (GSP) between the proposed Tangy 132kV overhead line and the existing Crossaig to Carradale 132kV overhead line.

The switching station and GSP will be used to connect the new Tangy IV Wind Farm to the grid whilst ensuring all relevant protection equipment is installed in the event of a fault.

The requirement for the switching station is to create a central node on the network where multiple lines of the same voltage can connect. Switches at this location allow each line in and out to be controlled without affecting the other lines. In this instance, the switching station is required to connect the proposed overhead line from Tangy IV substation to the existing Crossaig Carradale 132kV overhead line and subsequently to the UK electricity network.



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Tangy Switching Station/Carradale Direct Connection

Three potential site options were identified by SSEN Transmission within the area of search.

Site option 1

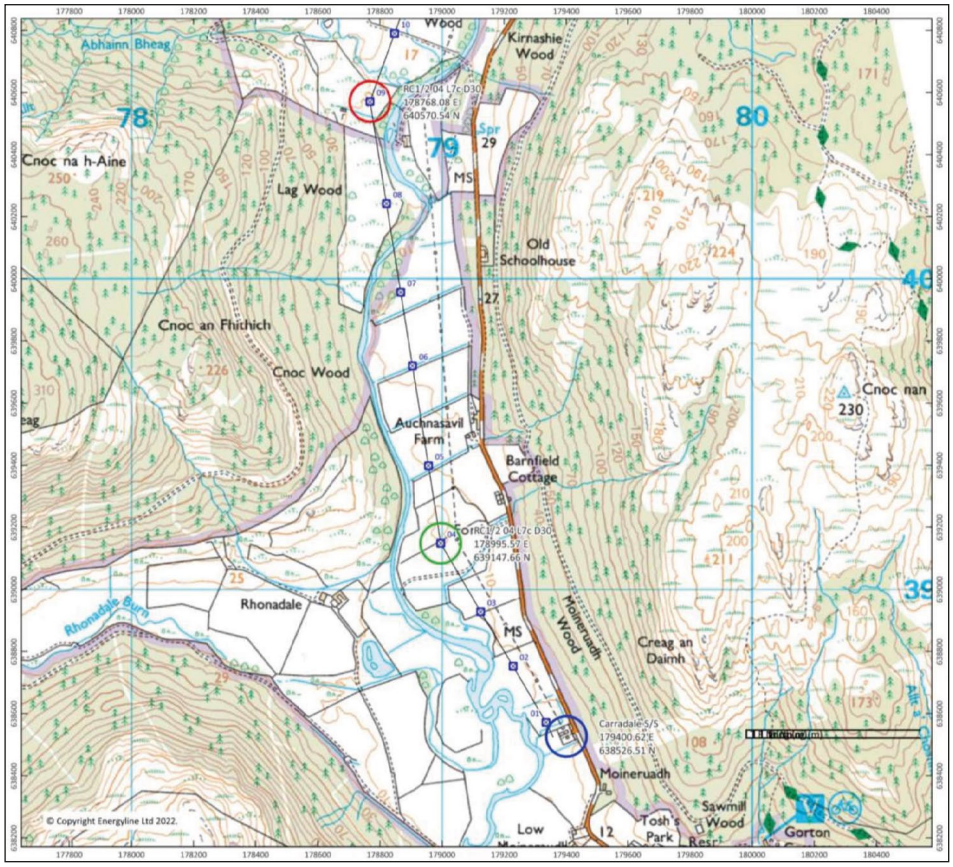
This site option will consist of a switching station and is located west of Tower 9 of the Crossaig to Carradale 132kV overhead line, approximately 2.1km north west of the existing Carradale GSP. Site Option 1 is located on agricultural land and is bound by Carradale Water to the east and open fields with blocks of woodland to the north, west and south.

Site option 2

This site option will consist of a switching station which is located west of Tower 4 of the Crossaig to Carradale 132kV overhead line, approximately 700m north west of the existing Carradale GSP. Site Option 2 is located on agricultural land and bound by the Carradale Water to the west and open fields with scattered woodland areas to the north, east and south.

Site option 3

This site option will consist of the installation of a new busbar immediately north of the existing Carradale GSP and will form an extension to this substation. Site Option 3 is located on agricultural land and bound by the Carradale Water to the west and the B842 to the east.



Lattice Steel Towers
Lattice Steel OHL
Tower Options
Option 1
Option 2
Option 3

What are the potential risks associated with these options?

We have completed a desk based assessment of the sites and have identified that these three options present the following environmental and engineering risks:

5. Environmental

- All three locations are in proximity to a major watercourse, the Carradale Water;
- All sites are close to associated riparian habitat including Native and Ancient Woodland;
- Multiple archaeological investigations have been conducted in the area of site option 3, concluding a concentrated presence of prehistoric activity. Site option 3 also has an increased likelihood of subsurface archaeology given the presence of nearby designations;
- Site option 3 is in proximity to a known bat roost.

6. Engineering

- Lack of future opportunities to expand the switching station or Carradale GSP extension due to the surrounding topography and capacity issues on the Carradale to Crossaig OHL;
- Site options 2 and 3 both fall within a 1 in 200 year flood zone.

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www.ssen-transmission.co.uk/projects/tangy-iv-wind-farm-connection-project

RAG ratings for the site options

To demonstrate the full extent of analysis undertaken on the three route options identified, we created Red Amber Green (RAG) table's which illustrate the level of associated risk to each consideration. A high risk is shown as red, a medium risk is shown as amber, and a low risk is shown as green.

RAG impact rating - environmental parameters

Site option	Natural heritage					Cultural heritage		Landscape and visual			Land use			Planning	
	Designations	Protected species	Habitats	Ornithology	Hydrology, geology & hydrogeology	Designations	Cultural heritage assets	Designations	Landscape character	Visual	Agriculture	Forestry	Recreation	Policy	Proposals
1	L	M	L	L	M	L	L	L	M	M	L	L	M	M	L
2	L	M	L	L	M	L	L	L	M	M	L	L	M	M	L
3	L	H	L	L	M	M	L	L	L	L	L	L	M	M	M

RAG impact rating - engineering parameters

Site option	Connectivity				Footprint requirements			Hazards		Ground conditions		Environmental conditions							Construction access	Operation and maintenance
	Existing circuits/network	Future development possibilities	Interface with sse distribution and generation	Dno connection	Technology	Adjacent land use	Space availability	Unique hazards	Existing hazards	Topography	Geology	Elevation	Salt pollution	Flooding	Carbon footprint	Sf6	Contaminated land	Noise (proximity to dwellings/ residential properties)	Substation Access road	Access
1	L	H	L	L	L	L	L	L	M	L	L	L	H	M	H	L	L	L	M	L
2	M	H	L	L	L	M	H	H	M	L	M	L	H	H	H	L	L	L	M	L
3	M	M	L	L	L	L	L	L	M	L	M	L	H	H	L	L	L	L	L	L

Site option selection

Tangy Switching Station

RAG impact rating - cost parameters

Site option	Capital						Operational	
	Construction	Diversions	Public road improvements	Felling	Land assembly	Consent mitigations	Inspections	Maintenance
1	H	L	L	L	H	H	L	L
2	H	L	L	L	H	H	L	L
3	L	L	L	L	L	L	L	L

Preferred site
From an environmental perspective, site options 1 or 2 are preferred due to less environmental constraints.

However, site option 3 is preferred from a landscape perspective as the landscape character and visual impacts are lower due to the presence of existing infrastructure.

Site option 3 is preferred from an engineering perspective due to the requirement of a large indoor switching station proving to be expensive and also having a larger carbon footprint.

Although site option 3 has some technical difficulties, such as its position in the 1 in 200-year flood zone, it is still considered that this site option has an overall lower risk.

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. 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 summer 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 late September 2022.

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 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.

Sheirdrim Wind Farm

This project aims to connect Sheirdrim Wind Farm to the wider electricity network. It also aims to obtain planning permission for the Sheirdrim Wind Farm substation compound.

The substation platform would be the responsibility of Scottish Power (UK) Ltd as the wind farm developer. Consultation on the preferred alignment will be undertaken in late summer 2022.

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.

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

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

www.ssen-transmission.co.uk/projects/earraghail-wind-farm-connection-project
www.ssen-transmission.co.uk/projects/tangy-iv-wind-farm-connection-project

Scottish & Southern Electricity Networks
TRANSMISSION

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

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

Tuesday 23rd August 2022
Campbelltown Town Hall, PA28 6AB

Wednesday 24th August 2022
Whitehouse Village Hall, Tarbert PA29 6XR

Our live chat sessions will be held at the following times:
Thursday 25th August 2022, 5pm – 7pm

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

We are planning on holding both face to face and virtual events. The face to face events will be subject to the Covid restrictions at the time and will go ahead if appropriate taking into consideration the safety and wellbeing of the communities we are consulting and the project team.

The feedback forms in this booklet can be detached and sent back, or you can fill them in online using the forms on the project webpages. 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 webpages.

Keep in touch

In you have any questions of require further information regarding either 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

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

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 out copies of this brochure, please contact the Community Liaison Manager to arrange this.

Feedback

As part of the consultation exercise, we are seeking comments back from members of the public, statutory consultees and other key stakeholders.

We kindly request that all comments and feedback forms are received by **Friday 23rd September**.

Further information, should you require it, is available on the project webpage or can be made available in printed format by contacting the Community Liaison Manager.

Your feedback - Earraghail Wind Farm connection project

If you prefer, the same feedback form is available to complete online and can be found on the project webpage:
www.ssen-transmission.co.uk/projects/earraghail-wind-farm-connection-project/
Please complete in **BLOCK CAPITALS**.

Q1 **Has the need for the project been adequately explained?**

Yes ☐ No ☐ If no, please tell us how we could provide further explanation

Q2 **Has the approach taken to select the preferred route been adequately explained?**

Yes ☐ No ☐ If 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 route selection process?**

Q4 **Do you feel, on balance, that the preferred route selected is the most appropriate for further consideration at the alignment selection stage? Please provide an explanation of your answer.**

Q5 **If you don't agree to our preferred route which of the options would you consider the best option for SSEN Transmission to develop? Please provide an explanation of your answer.**

Scottish & Southern Electricity Networks
TRANSMISSION

Your Feedback – Tangy IV Wind Farm connection project

If you prefer, the same feedback form is available to complete online and can be found on the project webpage:
www.ssen-transmission.co.uk/projects/tangy-iv-wind-farm-connection-project
Please complete in **BLOCK CAPITALS**.

Q1 **Has the need for the project been adequately explained?**

Yes ☐ No ☐ If no, please tell us how we could provide further explanation

Q2 **Has the approach taken to select the preferred route been adequately explained?**

Yes ☐ No ☐ If 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 route selection process?**

Q4 **Do you feel, on balance, that the preferred route selected is the most appropriate for further consideration at the alignment selection stage? Please provide an explanation of your answer.**

Q5 **If you don't agree to our preferred route which of the options would you consider the best option for SSEN Transmission to develop? Please provide an explanation of your answer.**

Your feedback

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 Transmission, 1 Waterloo St, Glasgow, G2 6AY

Email: caitlin.quinn@sse.com

The feedback forms and all information provided in this booklet can also be downloaded from the dedicated website:

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

www.ssen-transmission.co.uk/projects/tangy-iv-wind-farm-connection-project

Any information given on the feedback form can be used and published anonymously as part of Scottish and Southern Electricity Networks Transmission consultation report. By completing this feedback form you consent to Scottish and Southern Electricity Networks Transmission using feedback for this purpose.

Scottish & Southern Electricity Networks

TRANSMISSION

SSEN Community

@SSETransmission

ssen-transmission.co.uk

APPENDIX C – PUBLIC CONSULTATION FEEDBACK FORM

Scottish & Southern Electricity Networks
TRANSMISSION

Your Feedback – Tangy IV Wind Farm connection project

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www.ssen-transmission.co.uk/projects/tangy-iv-wind-farm-connection-project
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Q1 **Has the need for the project been adequately explained?**

Yes ☐ No ☐ If no, please tell us how we could provide further explanation

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