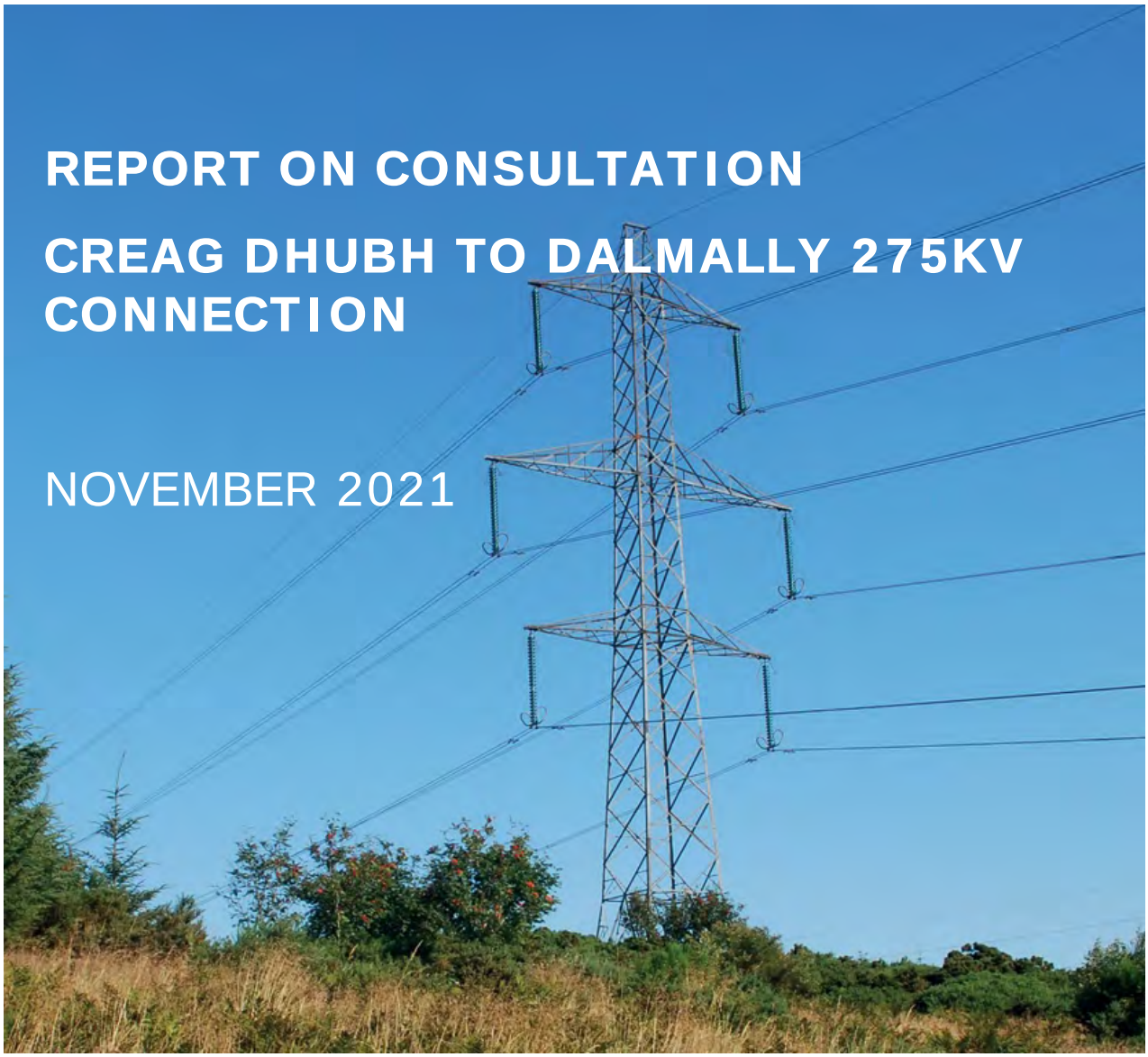
Scottish & Southern Electricity Networks

TRANSMISSION

REPORT ON CONSULTATION

CREAG DHUBH TO DALMALLY 275KV CONNECTION

NOVEMBER 2021



Scottish & Southern Electricity Networks

TRANSMISSION

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GLOSSARY

Term	Definition
ABC	Argyll and Bute Council
Alignment	A centre line of an overhead line route, along with location of key angle structures.
Amenity	The natural environment, cultural heritage, landscape, and visual quality. Also includes the impact of SSEN Transmission's works on communities, such as the effects of noise and disturbance from construction activities.
Ancient Woodland	Woodland which has been in continuous existence since before 1750 in Scotland and is important for biodiversity and cultural identity. Ancient semi-natural woodland is Ancient Woodland composed of mainly locally native trees and shrubs that derive from natural seed fall or coppice rather than from planting.
Baseline Alignment	The Baseline Alignment aims to provide the optimal alignment within the Proposed Route, taking account of engineering criteria as per Table A7 of SSEN Transmission guidance.
BB	Balfour Beatty
CEMP	Construction Environmental Management Plan
Centre Line	The linear connection between the central point of each support structure along the length of the overhead line.
Circuit	Overhead line or underground cable consisting of multiple conductors, to carry electric current.
Conductor	A metallic wire strung from structure to structure, to carry electric current.
Consultation	The dynamic process of dialogue between individuals or groups, based on a genuine exchange of views and, normally, with the objective of influencing decisions, policies, or programmes of action.
Corridor	A linear area which allows a continuous connection between the defined connection points. The corridor may vary in width along its length; in unconstrained areas it may be many kilometres wide.
Environmental Impact Assessment (EIA)	A formal process set down in The Electricity Works (EIA) (Scotland) Regulations 2000 (as amended in 2008) used to systematically identify, predict, and assess the likely significant environmental impacts of a proposed project or development.
GEMP	General Environmental Management Plan
GWDTE	Groundwater Dependent Terrestrial Ecosystem
Habitat	Term most accurately meaning the place in which a species lives, but also used to describe plant communities or agglomerations of plant communities.
Indicative Proposed Alignment	An alignment for the overhead line identified following public consultation that is taken forward to EIA and detailed design.
Kilovolt (kV)	One thousand volts.
LOD	Limits of Deviation, an area which defines the practical limits within which micrositing of the OHL infrastructure can occur within the terms of the s37 consent which is to be sought. The purpose of Limits of Deviation is to allow flexibility within a s37 consent for the final micrositing of individual towers to respond to localised ground conditions, topography, engineering, and environmental constraints

Listed Building	Building included on the list of buildings of special architectural or historic interest and afforded statutory protection under the 'Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997' and other planning legislation. Classified categories A – C(s).
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.
Overhead line (OHL)	An electric line installed above ground, usually supported by lattice steel towers or poles.
OPGW	Optical fibre ground wire
PAC	Pre Application Consultation
PAN	Proposal of Application Notice
Plantation Woodland	Woodland of any age that obviously originated from planting.
Preferred Alignment	An alignment for the overhead line taken forward to stakeholder consultation following a comparative appraisal of route options.
Proposed Alignment	An alignment taken forward to consent application. It comprises a defined centre line for the overhead line and includes an indicative support structure (tower or pole) schedule, also specifying access arrangements and any associated construction facilities
Proposed Development	The construction and operation of a new 275 kV double circuit connection between Creag Dhubh and Dalmally (the Proposed Development) comprising: • a 13.4 kilometre (km) double circuit 275 kV overhead line (OHL), supported by lattice steel towers between a proposed substation at Creag Dhubh to a new switching station in Glen Lochy adjacent to the existing SPEN 275 kV OHL from Dalmally to Inverarnan; • a new switching station in Glen Lochy on the existing SPEN 275 kV OHL from Dalmally to Inverarnan; and • a new substation at Creag Dhubh.
Proposed OHL	The proposed new 275 kV overhead transmission line between the proposed Creag Dhubh substation and the proposed Glen Lochy switching station.
RAG	Red/Amber/Green, rating applied for the comparative appraisal
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.
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 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 Protection Area (SPA)	An area designated under the Wild Birds Directive (Directive74/409/EEC) to protect important bird habitats. Implemented under the Wildlife and Countryside Act 1981.
SPEN	Scottish Power Energy Networks
SSEN Transmission	Scottish and Southern Energy Networks Transmission
Stakeholders	Organisations and individuals who can affect or are affected by SSEN Transmission works.
Study Area	The area within which the corridor, route and alignment study takes place.
Substation	Part of the electrical transmission and distribution system that transforms voltage from high to low, or the reverse, before switching to another electricity network.
Switching Station	A central node on the network where multiple lines of the same voltage can connect. Switches allow each line in and out to be controlled without affecting the other lines.
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 SSEN Transmission.

EXECUTIVE SUMMARY

Scottish and Southern Electricity Networks (SSEN) Transmission completed a consultation in July and August 2021 to request comments on its proposal to construct and operate a 275 kV connection between Creag Dhubh substation and Dalmally (the Proposed Development) comprising:

1. a 13.4 kilometre (km) double circuit 275 kV overhead line (OHL), supported by steel lattice towers between a proposed substation at Creag Dhubh to a new switching station in Glen Lochy (Succoth Glen) adjacent to the existing Scottish Power Energy Networks (SPEN) 275 kV OHL that runs from Dalmally to Inverarnan;
2. a new 275 kV switching station in Glen Lochy (Succoth Glen); and
3. a new 132/275 kV substation at Creag Dhubh.

This Report on Consultation presents a summary of the consultation undertaken by SSEN Transmission during July and August 2021 with regard to the Preferred Alignment selection for the OHL. In addition, this report also summarises feedback received on the proposals for the Creag Dhubh Substation and Glen Lochy (Succoth Glen) Switching Station.

The consultation process included the publication of the Consultation Document[1] (June 2021) to describe the evaluation of the different alignment options and invite interested parties to provide their views. In addition, SSEN published a Consultation Brochure and Poster, and held a Virtual Consultation[2] Event along with live chat sessions. Through the consultation, comments were sought from members of the public, statutory consultees, and other key stakeholders on the preferred alignment option. The Creag Dhubh Substation Proposal of Application Notice (PAN) event was co-joined with the wider consultation to set the proposals within the wider context and to maximise engagement.

A full description of the Overhead Line Alignment Selection process is provided in the Creag Dhubh to Dalmally Consultation Document, June 2021, found on the project website at:

https://www.ssen-transmission.co.uk/media/5542/lt29-creag-dhubh-to-dalmally_consultation-document_june-2021_issue.pdf

Following a comparative analysis of environmental, engineering and cost criteria of the five alignment options and the baseline alignment. A combination of the Baseline Alignment plus GL5 was considered to be the Preferred Alignment. The consultation feedback and SSEN's responses are summarised in Section 5 of this report.

The Creag Dhubh Substation Proposal of Application Notice (PAN) Pre-Application Consultation process as prescribed by regulations under the Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2013 (SSI 2013/155).the consultation feedback and SSEN's responses are summarised in Section 5 of this report.

An information event is being held on 23rd November between 1pm and 7pm at Dalmally Community Hall, further information is given in Section 7.

This Report on Consultation documents the consultation on the three project elements summarised above, under consideration by SSEN Transmission. The report describes the key feedback received and details the actions taken by SSEN Transmission in response to the comments provided.

[1] https://www.ssen-transmission.co.uk/projects/creag-dhubh-dalmally-275kv-connection/

[2] https://3dwtech.co.uk/dashboard/ssen/argyll-kintyre-strategy/exhibition/

1. INTRODUCTION

1.1 Purpose of Document

Scottish and Southern Electricity Networks (SSEN) Transmission is proposing to construct and operate a 275 kV connection between Creag Dhubh substation and Dalmally (the Proposed Development) comprising:

1. a 13.4 kilometre (km) double circuit 275 kV overhead line (OHL), supported by lattice steel towers between a proposed substation at Creag Dhubh to a new switching station in Glen Lochy (Succoth Glen) adjacent to the existing Scottish Power Energy Networks (SPEN) 275 kV OHL that runs from Dalmally to Inverarnan;
2. a new 275 kV switching station in Glen Lochy (Succoth Glen); and
3. a new 132/275 kV substation at Creag Dhubh.

A programme of consultation was designed to engage with key stakeholders including statutory and non-statutory consultees, local communities, landowners, and individual residents to invite feedback on the rationale for and approach to, the selection of the preferred alignment. Stakeholders were also invited to provide feedback on latest proposals for Creag Dhubh substation and Glen Lochy (Succoth Glen) switching station.

A Proposal of Application Notice (PAN) for Creag Dhubh was submitted to Argyll and Bute (ABC) Council on 16th June 2021. The public consultation events for the wider project were co-joined with the PAN main event. The PAN is a statutory process and as such the Creag Dhubh Substation consultation was identified within the consultation event as a separate element with separate feedback in the context of the Pre-Application Consultation (PAC) requirements for applications under the Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2013 (SSI 2013/155).

This Report on Consultation documents the consultation on the three project elements summarised above, under consideration by SSEN Transmission. The report describes the key feedback received and details the actions taken by SSEN Transmission in response to the comments provided.

1.2 Document Structure

This report is comprised of six sections as follows:

1. Introduction – sets out the purpose of the Report on Consultation;
2. The Proposals within the Consultation – outlines the background/context to the project and provides a description of the key elements;
3. The Consultation Process – describes the framework for consultation and methods which have been employed;
4. Stakeholder Consultation Responses– summarises the range of responses, key comments and issues arising through the consultation process;
5. SSEN Transmission's Responses to Consultation – describes how the comments and issues raised during consultation will be addressed;
6. Overhead Line Tie-in at Succoth Glen – describes the options considered for an overhead line tie-in to replace the proposal for a switching station at Glen Lochy (Succoth Glen) and,
7. Next Steps – provides a summary of the conclusions reached and actions going forward.

The main body of this document is supported by a series of figures and appendices.

2. THE PROPOSALS WITHIN THE CONSULTATION

2.1 Project Context

There is a requirement for SSEN Transmission to increase its network capability in Argyll and Kintyre, beyond that already under current construction and public development, to enable the connection of further renewable generation and to export to the wider national electricity transmission network. This group of works, designed to deliver the required increase in network capacity, has been named the 'Argyll and Kintyre 275kV Strategy'[3].

The Proposed Development forms part of the Argyll and Kintyre 275kV Strategy and aims to reinforce the existing transmission network connections in the Argyll region.

2.2 Proposals Description

The Proposed Development described in the Consultation Document, June 2021, included a 13.4 km double circuit 275 kV OHL and supporting structures connecting a proposed substation at Creag Dhubh to a new switching station in Glen Lochy (Succoth Glen). The proposed OHL, substation and switching station will be the subject of separate applications for consent.

The Proposed Development and associated elements are illustrated in **Appendix A, Figure 2.1**.

The alignment options would accommodate self-supporting fabricated galvanised steel lattice towers, L8(c) series (**Plate 2.1**), that are on average 50 metres (m) high and separated by an average distance of 280 m. The spacing (span length) between towers and the tower height would vary depending on environment and engineering constraints with maximum height of approximately 60 m and maximum span length of 350 m. Each tower would carry two circuits, with three horizontal cross arms on each side of the tower, each carrying an insulator string and two conductors. An earth wire, containing an optical fibre ground wire (OPGW), would be strung between the tower peaks.

Ancillary works will be required for the construction and maintenance of the OHL. This will include tree and vegetation clearance; upgrades of existing or new junction bell-mouths and access tracks; and road and other infrastructure (bridges, culverts etc.) alterations.

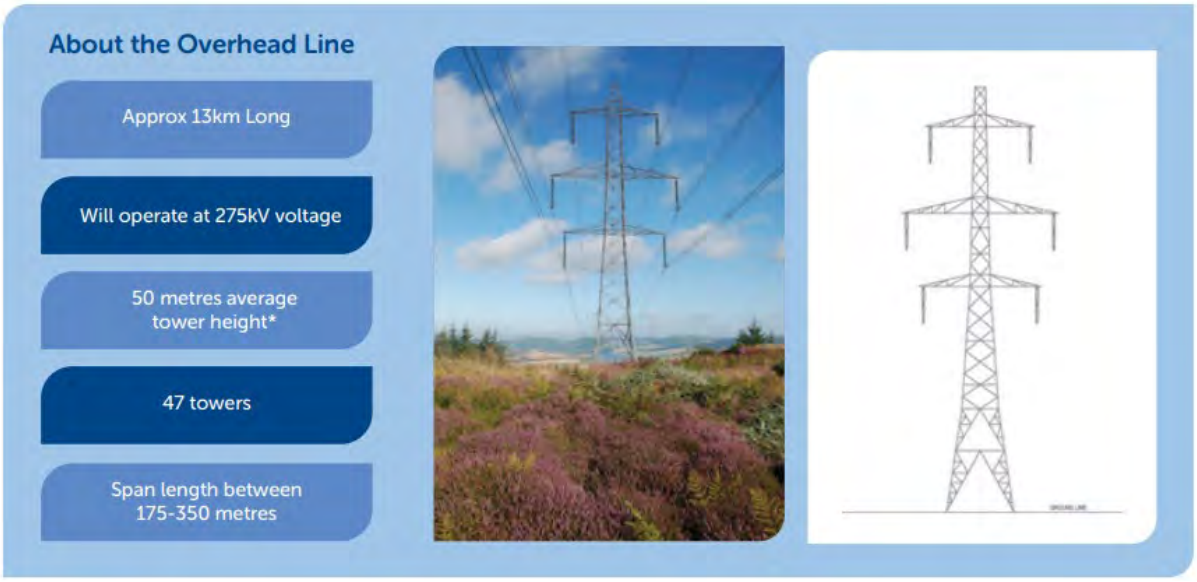


Plate 2.1: Overhead Line Details

[3] https://www.ssen-transmission.co.uk/projects/argyll-and-kintyre-275kv-strategy/

2.2.1 Overhead Line Alignment Selection Process

A full description of the Overhead Line Alignment Selection process is provided in the Creag Dhubh to Dalmally Consultation Document, June 2021, found on the project website at:

https://www.ssen-transmission.co.uk/media/5542/lt29-creag-dhubh-to-dalmally_consultation-document_june-2021_issue.pdf

Five deviations (GL1-GL5) were identified and reviewed in terms of cost, engineering, and environment. The reasoning for these deviations is summarised below.

Deviation GL1, Figure 3.2

This deviation option was proposed to reduce the impact on Class 2 peatland habitat, including areas of blanket bog (Annex 1 habitat), as well as reducing potential setting impacts on Scheduled Monument SM5149 (Dychlie, deserted crofts). Between Tower 34 and Tower 40, GL1 moves north from the Baseline Alignment into the plantation woodland, which also offers some screening.

Deviation GL2, Figure 3.3

This deviation option was proposed to reduce potential setting impacts on Scheduled Monument SM5149 as well as reducing any visual impacts from Blarchaorain property. GL2 is also set further back than the Baseline Alignment between Tower 28 (this option would make Tower 28 an angle tower instead of Tower 29) and Tower 33, which provides further woodland screening.

Deviation GL3, Figure 3.4

This deviation option was proposed to reduce potential visual and setting impacts, as above. As GL3 cuts straight across between Tower 31 to Tower 36, it would also result in a smaller area of woodland fragmentation. GL3 would be a lower cost option compared to the Baseline Alignment.

Deviation GL4, Figure 3.5

This deviation option was proposed to straighten up the Baseline Alignment and bring it closer to the edge of the woodland, reducing the loss of commercial woodland and fragmentation. GL4 would also be a lower cost option compared to the Baseline Alignment.

Deviation GL5, Figure 3.6

This deviation option was proposed to reduce the loss of Ancient Woodland between Tower 45 to Tower 46. GL5 reduces the loss of blanket bog and slightly reduce impacts on archaeologically sensitive areas (Rig and Furrow found scattered throughout between towers Tower 40 and Tower 45). GL5 also provides a slight improvement in visual amenity for local properties.

Preferred Alignment

2.2.2 Following a comparative analysis of environmental, engineering and cost criteria of the five alignment options and the baseline alignment. A combined alignment of the Baseline Alignment plus GL5 was considered to be SSEN Transmission's Preferred Alignment. The GL5 deviation option greatly reduces the loss of Ancient Woodland in comparison to the Baseline Alignment, has the lowest impact on blanket bog habitat, as well as providing a slight improvement to the visual amenity of local properties.

2.2.3 Glen Lochy (Succoth Glen) Switching Station

This switching station (**Plate 2.2**) was described in the Consultation Document, June 2021. The switching station was proposed to connect the proposed OHL with the existing SPEN 275 kV overhead line between Dalmally and Inverarnan Substation. The switching station will create a central node on the network where multiple lines of the

same voltage can connect. Switches at this location will allow each line in and out to be controlled without affecting the other lines.

Following the consultation process in 2020, where Site 6 remained the Preferred Site, the location of Site 6 was relocated by approximately 30 m to the north and rotated by approximately 10 degrees. This is to accommodate the electrical equipment and provide the optimal orientation to align the towers with the existing SPEN overhead line. The change in orientation also reduces the risk of disturbance to local wildlife, by moving it further from habitats.

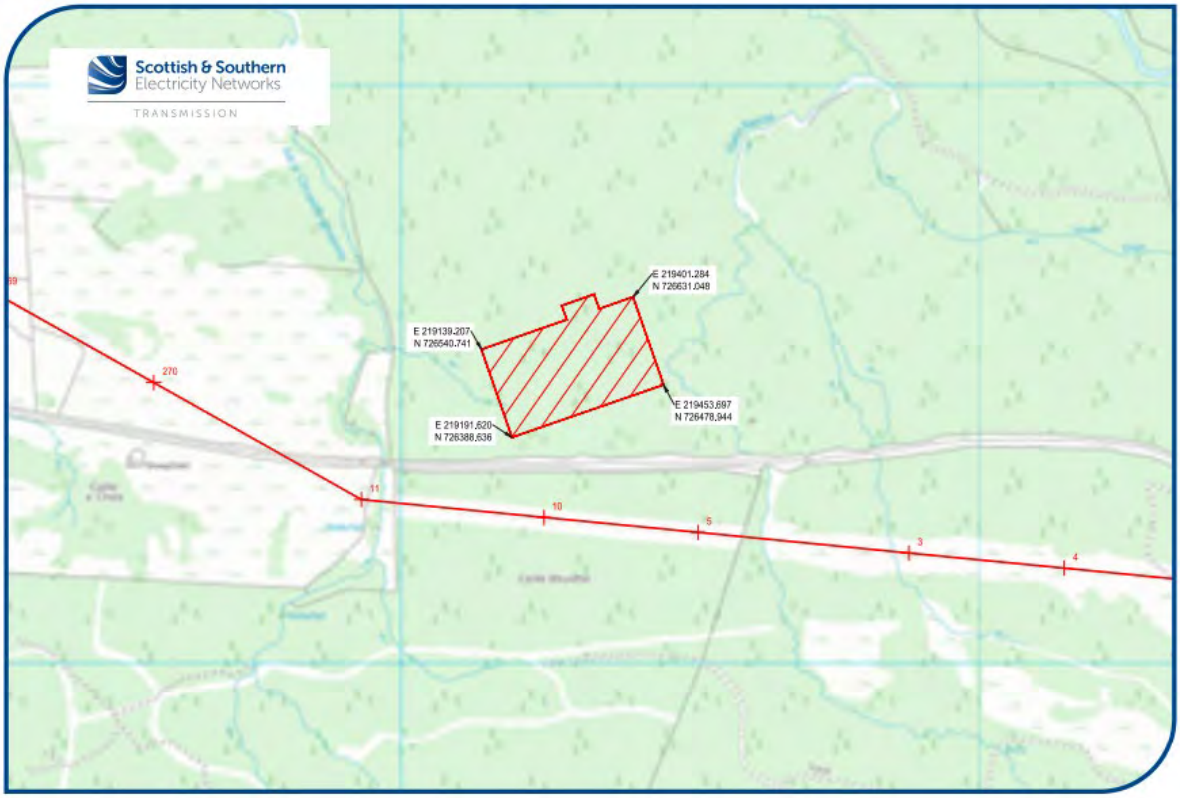


Plate 2.2: Glen Lochy (Succoth Glen) Switching Station proposed in Consultation Document June 2021

2.2.4 Creag Dhubh Substation

The proposed substation will connect the existing 132 kV overhead line between Inveraray to Taynuilt. It will also connect to the existing Dalmally to Inveraran 275 kV overhead line via the proposed Creag Dhubh to Dalmally 275 kV OHL, to allow connection to the wider electricity network. To link the existing 132 kV overhead line to the existing 275 kV overhead line, the Creag Dhubh substation includes both 132 kV and 275 kV switchgear and 132/275 kV transformers to enable the two existing overhead lines to be linked. The substation is proposed to be a Gas Insulated Switchgear (GIS) substation, which means the majority of the switchgear is contained within buildings, which reduces the total area of land required for the substation.

Since the consultation events in 2018, the preferred site location included in the Consultation Document June 2021 was altered to take into consideration site constraints. As such, the site has moved approximately 30 m to the north (**Plate 2.3**).

Plate 2.3: Creag Dhubh substation proposed in Consultation Document June 2021

2.2.5 Creag Dhubh Substation Proposal of Application Notice

As part of the consultation event SSEN Transmission formally consulted on Creag Dhubh Substation. This comprises the Proposal of Application Notice (PAN) Pre-Application Consultation process as prescribed by Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2013 (SSI 2013/155). This PAN event has been co-joined with the wider consultation to set the proposals within the wider project context and to manage consultation fatigue due to multiple events in quick succession. The PAN is a statutory process and as such the Creag Dhubh Substation consultation has been clearly identified within the consultation event as a separate element with separate feedback in the context of the Pre-Application Consultation requirements for Town Planning applications.

3. THE CONSULTATION PROCESS

3.1 Consultation History

In accordance with the SSEN Transmission guidelines, a process of consultation on the preferred route option was implemented. A brief overview of the project progress and consultation undertaken since March 2016 is illustrated in **Plate 3.1.**

Plate 3.1: Overview of Project History and Consultation (2016-2021)

3.2 Additional Consultation for Overhead Line Tie-in at Succoth Glen

In preparation for and during the latest consultation period, throughout summer 2021, Scottish Power Energy Networks (SPEN) and SSEN Transmission conducted more detailed discussions regarding the Glen Lochy (Succoth Glen) Switching Station. The Switching Station is designed to allow electricity on the SSEN Transmission proposed new OHL from Creag Dhubh to Dalmally to transfer onto the existing SPEN OHL and subsequently be distributed to the wider electricity network.

SPEN and SSEN Transmission have identified the feasibility of utilising an overhead Tie-in connection. This connection removes the need for Glen Lochy (Succoth Glen) Switching Station, instead towers and wires only will provide the connection between the proposed new OHL Preferred Alignment and the existing OHL.

Three proposed Tie-in Options between Tower 40 and Tower 47 of the Preferred Alignment and the existing SPEN OHL have been considered. Further details on these options are provided in Section 6 of this report.

3.3 Statutory and Non-Statutory Consultees

Comments were sought from a range of stakeholders both with statutory and non-statutory interest in the consenting process. The list of consultees invited to comment as part of the consultation on the Preferred Alignment is provided in **Table 3.1.**

Table 3.1 lists the statutory and non-statutory organisations invited to consider the Consultation Document.

Table 3.1: List of Statutory and Non-Statutory Consultees	
Statutory Consultee	
Argyll and Bute Council	Scottish Forestry (SF)
Historic Environment Scotland (HES)	Scottish Government (Energy Consents Unit)
NatureScot	Scottish Water
Scottish Environment Protection Agency (SEPA)	Transport Scotland
Non-Statutory Consultee	
Argyll District Salmon Fishery Board (ADSFB) / Argyll Fishery Trust (AFT)	Sustrans
Royal Society for the Protection of Birds (RSPB)	West of Scotland Archaeology Service (WoSAS)

This consultation ran for a five-week period, starting Monday 12th July 2021 and closed on Friday 13th August 2021. Comments were requested by 13th August 2021.

3.4 Methods of Consultation

3.4.1 Consultation Document

SSEN Transmission published a Consultation Document (June 2021) to describe the different alignment options evaluated in more detail and invite interested parties to provide their views. The Consultation Document was sent to statutory and non-statutory stakeholders (as detailed in **Table 3.1**). It can be found on the project website at the following link:

https://www.ssen-transmission.co.uk/media/5542/lt29-creag-dhubh-to-dalmally_consultation-document_june-2021_issue.pdf

3.4.2 Brochure and Posters

In addition, SSEN Transmission published a Consultation Brochure and Posters (July 2021), both of which provided an overview of the project and consultation process, along with providing details of the virtual public consultation[4] and live web-based chat sessions (see below).

3.4.3 Virtual Consultation

Due to the restrictions in place around social gatherings because of Covid-19, the public consultation was held virtually. We developed a bespoke platform which allowed stakeholders to visit a virtual consultation room and view the project information at their leisure. The virtual platform (**Plate 3.1**) enabled stakeholders to experience the full exhibition from home on a computer, tablet, or mobile device. It was designed to look and feel like a face-to-face consultation in a community hall, with exhibition boards, maps, interactive videos, and the opportunity to share views on the proposals. As an alternative to face-to-face events which SSEN Transmission would normally hold, a live chat function was available at advertised times to allow attendees to ask questions and get responses from the project team.

The virtual platforms could be accessed from the project website:

https://www.ssen-transmission.co.uk/projects/argyll-and-kintyre-275kv-strategy/.

The consultation document and brochure were also available to view for those who preferred this format or struggled with bandwidths to access the virtual room. Paper copies were also available on request.

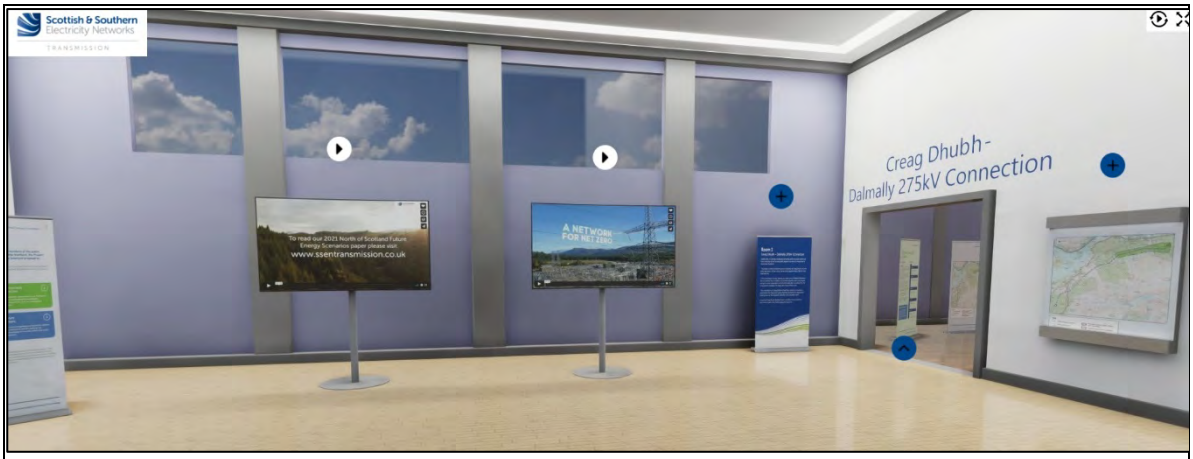


Plate 3.2: Image from Virtual Consultation Platform

The Virtual Consultation Exhibition launched on 14 July 2021 and closed on 29 July 2021. Live chat sessions were held at the following times:

- Wednesday 14 July 2021, 10 am to 1 pm and 5 pm to 7 pm;
- Thursday 15 July 2021, 10 am to 1 pm and 5 pm to 7 pm; and
- Thursday 29 July 2021, 10 am to 1 pm and 5 pm to 7 pm.

Participants were encouraged to complete a feedback form (via the project website). Phone and emails contact details were provided for the Community Liaison Manager for any additional questions or feedback.

[4] https://3dwtech.co.uk/dashboard/ssen/argyll-kintyre-strategy/exhibition/

3.4.4 Promotion of the Virtual Consultation

The virtual consultation was advertised using several methods, as summarised in **Table 3.2.**

Table 3.2: Promotion of Consultation	
Method	**Details**
Mail drop - Consultation Brochure	Sent out to over 5,000 properties in proximity of the proposals.
Email to stakeholders to advise of consultation	MSP, MP, Councillors, Community Councils, and all those who had signed up for project updates for each element within the Argyll and Kintyre 275kV Strategy.
Press release	Advertised in the Argyllshire Advertiser and The Oban Times and published to the SSEN Transmission website and LinkedIn page.

3.5 Consultation Questions

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

1. Do the alignment options presented at this consultation respond to any concerns you had over the project? Please provide an explanation of your answer
2. Do you agree with the preferred overhead line route alignment? (GL5)
3. If no to Q2, please indicate your preferred overhead line route alignment:
4. Which of the route alignment options presented would you consider the least preferable option for SSEN Transmission to develop? Please provide an explanation of your answer.
5. Do you have any comments regarding the design update to the Glen Lochy Switching Station?

4. STAKEHOLDER CONSULTATION RESPONSES

In developing the Creag Dhubh to Dalmally 275kV Connection Project, we consider environment, engineering, and cost constraints on the design and safe operation of the assets along with views expressed by stakeholders. Gathering views from a variety of stakeholders is vital to developing and shaping a solution that balances different views of stakeholders. To ensure that we are transparent throughout our consultation process it is vital that we provide the opportunity to share the feedback we have received from stakeholders on the proposals we have presented.

In response to this consultation, 201 individual articles of feedback via feedback forms were received, as well as letters and emails. Further details are provided below.

4.1 Summary of Engagement from the Virtual Exhibition

All responses received between 12th July and 13th August 2021 were considered by the project team and included within this report. Any responses received outside of this time frame will be considered by the team; however, they may not be included within the report.

Table 4.1 provides a summary of the engagement with the Virtual Exhibition over the five-week consultation period.

Table 4.1:Summary of Engagement – Virtual Consultation	
Category	**Number**
Unique page views of the Argyll and Kintyre 275kv Strategy page	591
Unique page views of the Creag Dhubh – Dalmally 275Kv Connection page	410
Unique page views of the interactive consultation portal	343
Number of visitors asking questions during the live chat events	17

4.2 Summary of Public Feedback Forms

We received 104 completed feedback forms and 97 emails/postal letters from stakeholders who did not also complete a feedback form. Where a preference for one of the alignment options was clearly stated within an email/letter, this has been included in the feedback analysis. Where emails were received which raised questions, these were responded to directly and any topics raised are included in the FAQ section of this report.

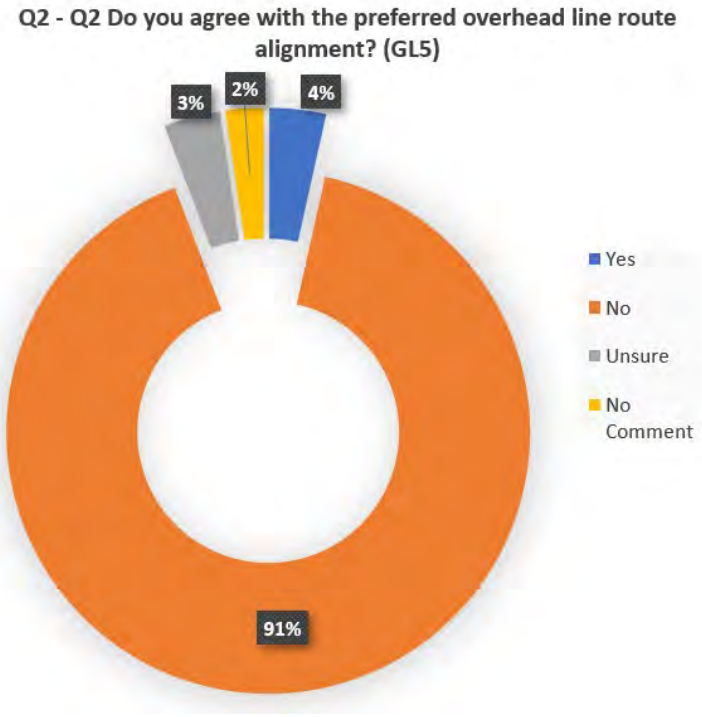
The following section collates the written feedback received in response to this consultation.

4.2.1 Responses to alignment Preference Questions

Question 1 - Do the alignment options presented at this consultation respond to any concerns you had over the project? Please provide an explanation of your answer.

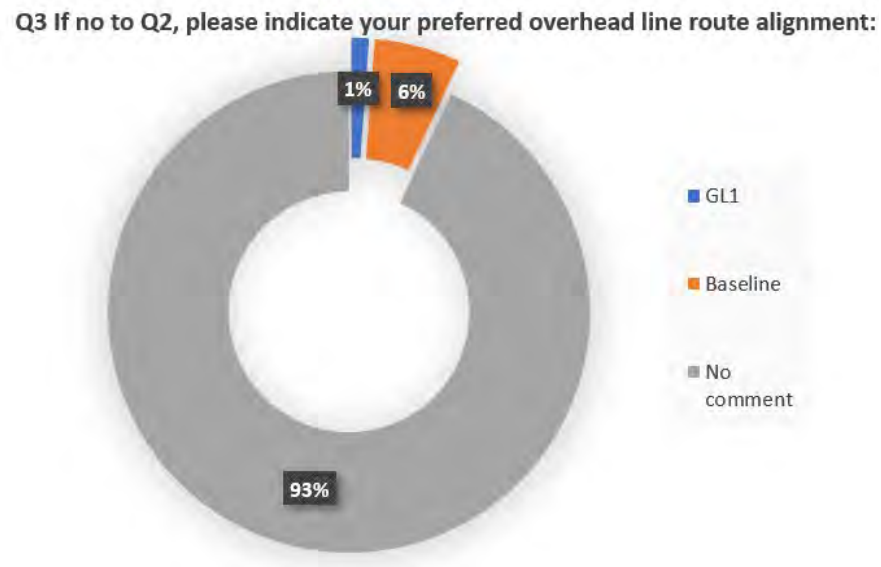
Most of the responses we received were from those who were concerned and objected to the project for a variety of reasons. Most of the fears were regarding the perceived negative impact that this project may have on the landscape, the potential impact on the wildlife and the possibility it would contribute to a decline in tourism. Out of the 103 feedback forms, 11 people chose to leave this section blank, the other 92 signalled their opposition to the project. Some members of the public noted that, although they had concerns, they understood the need for the project and the reasoning behind it.

Question 2 - Do you agree with the preferred overhead line route alignment? (GL5).



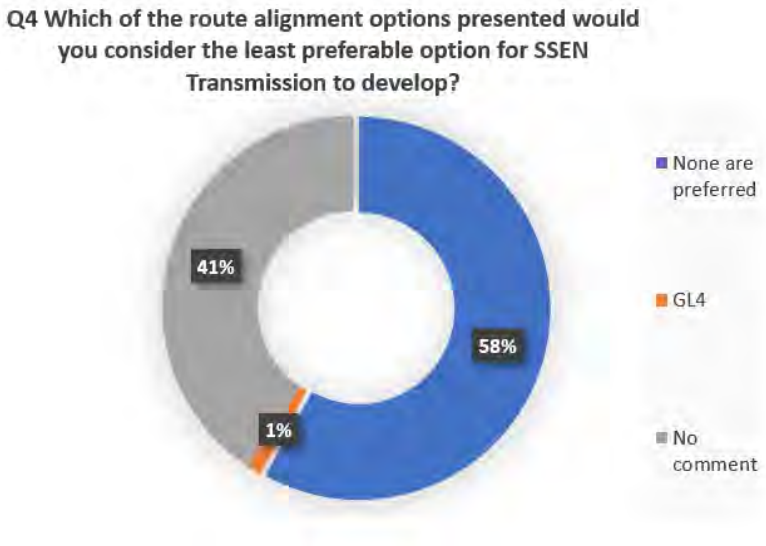
We asked the local community if they agreed with the preferred overhead line route agreement. Out of the 97 feedback forms we received, 91% (78) chose “no”, 4% (3) chose “yes”, 3% (3) were unsure and 2% (2) chose to make no comment.

Question 3 - If no to Q2, please indicate your preferred overhead line route alignment.



In Q3, we gave the opportunity for the local community to state which was their preferred route alignment if they had disagreed with the proposed one in Q2, we gave a choice of GL1, GL2, GL3, GL4 and Baseline Of this, 93% (80) of respondents did not select a preferred, with 1% (1) suggesting GL1 as a possible alternative and 6% (5) choosing Baseline as their preferred option.

Question 4 - Which of the route alignment options presented would you consider the least preferable option for SSEN Transmission to develop? Please provide an explanation of your answer.



We asked respondents which, out of all the route alignment options presented, would the local community consider the least preferable option for SSEN Transmission to develop and to explain their answer. 58% (50) of local people decided none were preferred with 41% (35) deciding not to comment and 1% (1) suggesting GL4. There were a number of common themes across respondents' concerns around these options.

Question 5 - Do you have any comments regarding the design update to the Glen Lochy Switching Station?

This gave the local community the opportunity to express any concerns that they have regarding the project. Most of the responses stated that they rejected the plans and do not support the project.

4.3 Statutory and Non-Statutory Stakeholder Feedback

Table 4.2 confirms the responses received from stakeholders in response to the Consultation Document. **Table 5.1** (in Section 5 of this report) provides a summary of stakeholder feedback and SSEN Transmission's response.

Table 4.2: Statutory and Non-Statutory Consultee Respondents	
Consultee	**Response Received**
Argyll and Bute Council	Creag Dhubh Substation PAN Response – 27.08.2021 Creag Dhubh to Dalmally Overhead Line Scoping Response – 11.08.2021
Argyll District Salmon Fishery Board (ADSFB) / Argyll Fishery Trust (AFT)	No response received.
Energy Consents Unit (ECU)	21.06.2021 and 02.08.2021
Historic Environment Scotland (HES)	13.08.2021
Nature Scot	24.08.2021
Network Rail	No response received
Royal Society for the Protection of Birds (RSPB)	No response received
Scottish Environment Protection Agency (SEPA)	No response received.
Scottish Forestry (SF)	12.08.2021
Scottish Water	No response received
Sustrans	No response received
Transport Scotland	03.08.2021
West of Scotland Archaeology Services	22.07.2021

5. SSEN TRANSMISSION'S RESPONSES TO CONSULTATION

5.1 Overview

This section of the report provides a response from SSEN Transmission on some of the questions and themes emerging from the public consultation, and the comments provided by statutory and non-statutory stakeholders invited to review the Consultation Document.

5.2 Questions and Theme Emerging from Public Consultation

In addition to answering questions regarding their preference for alignment options, participants were also asked to provide other feedback. Topics raised included:

97 written responses were received; these were a mixture of emails and letters.

The common themes picked out from these responses were as follows:

- Landscape.
- Health implications – mental and physical.
- Adverse effects on housing, tourism industry and businesses in general.
- Frustration at the local area already housing pylons and the project being commercially driven, with a lack of clarity regarding the need for them.
- No advantages for the residents, i.e. nothing done for the community.
- The local economy being negatively affected.

Suggestions from the community were as follows.

- To make the project go underground.
- Upgrade and use the pylons that are already there.

The Report on Consultation Creag Dhubh to Dalmally 275kV Connection, published in November 2020, included a Frequently Asked Questions (FAQs) section in Appendix 3, this document can be accessed on the project website at the following link: https://www.ssen-transmission.co.uk/media/4939/report-on-consultation-creag-dhubh-to-dalmally-275kv-connection-november-2020-web-version.pdf

Following a public meeting held on 4th October 2021, a further Frequently Asked Questions (FAQs) was published in October 2021 in to provide further information on the questions and themes raised by the community. This document can be accessed on the project website at the following link: https://www.ssen-transmission.co.uk/media/5936/dalmally-community-qa-21-oct-2021.pdf

5.3 Statutory and Non-Statutory Stakeholder Responses

Table 5 provides a summary of the responses to the Consultation Document provided by statutory and non-statutory consultees, along with a reply from SSEN Transmission regarding how the project will be developed to take account of the comments provided as it moves forward into the next phase of development.

Table 5: Statutory and Non-Statutory Consultee Responses		
Organisation	**Comment**	**SSEN Transmission Response**
Argyll and Bute Council	<u>Creag Dhubh Substation PAN</u> The Committee noted the content of the report and agreed that the following should be taken into consideration by the Applicant in finalising any future planning application submission: To consider holding face to face public consultation meetings if regulations allow and to consider extending the period of consultation to enable these meetings to take place. Please see full response here: Agenda for Planning, Protective Services and Licensing Committee on Wednesday, 18 August 2021, 11:00 am - Argyll and Bute Council (argyll-bute.gov.uk) <u>Creag Dhubh to Dalmally Overhead Line Scoping Response</u> A summary of A&BC's Scoping Response (Ref: 21/00286/SCOPE) is provided below covering key topics. The full Scoping Response is available on A&BC Planning website at the following link: https://portal360.argyll-bute.gov.uk/my-requests/document-viewer?DocNo=22523956 The full scoping submission (Ref: ECU00002199) is available on the Energy Consent Unit's website at the following link:https://www.energyconsents.scot/ApplicationDetails.aspx?cr=ECU00002199&T=0 1. Consideration of Alternatives: The EIA should include a description of the reasonable alternatives (in terms of project design, technology, location, size and scale) studied by the developer, which are relevant to the proposal and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects.	<u>Creah Dhubh Substation PAN</u> Noted. Additional stakeholder face to face opportunities to engage with SSEN prior to planning submission were undertaken. These events (listed below) were in response to a general request for face-to-face engagement regarding the project and not specifically related to the proposed substation. 1. 4th October 2021 – Round Table meeting with representatives from the Glenorchy & Innishail Community Council, Jenny Minto MSP, Drax. 2. 4th October 2021 – Public Meeting – Dalmally Community Hall SSEN and local stakeholders. Resulted in the publication of a FAQ's document, refer to Section 5.2. 3. Information event being held on 23rd November 2021, Dalmally Community Centre. Provision of printed visualisations, access to the 3D visualisation model, further information on the removal of the Glen Lochy (Succoth Glen) switching station from our proposals and the SPEN Tie-In. Opportunity to speak with members of the team about the current proposals. <u>Creag Dhubh to Dalmally Overhead Line Scoping Response</u> 1. Consideration of Alternatives – Noted. Chapter 3, of the EIA, will contain this information. 2. Built Elements – Noted. This information will be provided in the EIA.

	This should include the results of the community consultation exercises which have been undertaken at time of submission of the S37 application. This should include information on the alignment choice from tower 33 to the proposed GLSS (which at time of writing is understood to still be subject to community consultation) prior to a final alignment being chosen within the preferred route corridor. 2. Built Elements The EIA should identify the location of all built elements, including access tracks and any related and required borrow pits to facilitate access track provision, both temporary and permanent, which should be sited to avoid habitats of importance, wetlands, areas of deep peat and blanket bog, watercourses and abstractions, in order that areas of particular vulnerability to damage from development, or which have higher pollution sensitivity, may be protected from unnecessary impacts associated with the development. The assessment should address the construction, operational and decommissioning phases of the development. It should also be noted that the Council would expect the access to/from the site to the junction with the public road to be included within the site edged red. Sufficient details should be provided within the EIA to clarify where any engineering operations, including formation of access tracks and roads junctions are required with final details being subject to CEMP and a traffic management plan (TMP). 3. Planning Policy Context Although at a relatively early stage in its development and currently therefore being afforded limited weight, your attention is drawn to the emerging LDP 2. Depending upon the date of any future application this may have reached a stage in the adoption process where the weight to be afforded to this will be increased. Therefore, the applicants should ensure that the status and weight to be afforded to the policies and land use allocations/designations in this emerging LDP 2 document are both considered, and given appropriate weight, in any policy evaluation.	3. Planning Policy Context – Noted. As part of the planning submission, we will provide a Planning Policy Statement that will give due consideration to LDP 2. 4. Landscape & Visual Amenity – Viewpoints have been agreed with A&BC. Future felling and potential increased landscape impacts will be considered in the EA Landscape & Visual Impact Assessment Chapter. 5. Ornithology, Biodiversity, Ecology – Noted. Guidance that has been followed will be included in the EIA. 6. Cultural Heritage – Potential impacts to the Duncan Ban Monument will be scoped into the EIA. Additional visualisation viewpoints have also been included, refer to HES consultation response. 7. Traffic, Transport & Access – Potential borrow pits will be identified within the EIA and further exploration of Borrow Pits will be undertaken following planning submission. 8. Summary – Noted. Scope will include any additions raised in the HES and NatureScot responses. The following outstanding A&BC consultation responses remain: Local Biodiversity Officer, Environmental Health Officer, Area Roads Engineer.

	4. Landscape & Visual Amenity The Planning Authority recommends that the following additional viewpoints are provided: • From the Oban railway line in vicinity of "Brackley" and also towards the proposed Glen Lochy switching station (as part of cumulative impact assessment) • From the curtilage of Brackley towards the towers • Viewpoints to south and west from Duncan Ban Monument • From the old military road • Viewpoint 18 should look to north east and north west. • Viewpoint 19 should look to north east and north west The principal consideration should be to ensure that the proposed Creag Dhubh Substation and Glen Lochy Switching Station locations assimilate into the landscape to the greatest degree possible. It is noted that there are elements of commercial forestry of various ages around the proposed locations, and therefore the future felling and potential increased landscape impacts associated with this expected, and predictable, felling regime should be factored into landscaping proposals for both developments. 5. Ornithology, Biodiversity, Ecology All surveys should be carried out at the optimum time of year by a suitably qualified person and include mitigation. Links to: A Biodiversity Technical Note for Planners and Developers, Argyll & Bute Council, February 2017 and Pollinators in Planning and Construction, A brief guide for the development sector, Scottish Natural Heritage, August 2019 are provided below: https://www.argyll-bute.gov.uk/sites/default/files/biodiversity_technical_note_feb_2017_4.pdf	

	https://www.nature.scot/sites/default/files/2019-09/Pollinators%20in%20Planning%20and%20Construction%20Guide.pdf The applicant is advised to follow the good practice set out in these documents. Please note that the views of the Councils biodiversity officer are awaited and will be forwarded in due course. 6. Cultural Heritage Given that a final alignment has not been provided for the route from tower 33 to the proposed Glen Lochy switching station the potential route would take the line within close proximity to the Duncan Ban Monument. Although the line would be at a lower level than the monument it is considered that the scale and proximity of the line could be harmful to the setting of this Category B Listed Building. As a local high point the setting and character of the monument is sensitive to what could be large industrial scale infrastructure in close proximity to it. The Council will have regard to the views of HES on this matter once the final alignment and design details have been finalised. It is considered that the potential impact on the Duncan Ban Monument should be specifically scoped into the EIA and addressed in some detail. 7. Traffic, Transport & Access The EIA should both clarify and commit SSEN to the exploration of the use of borrow pits in advance of the submission of any TMP, and a condition requiring a phased approach to this exercise to seek to reduce traffic movements and movement of construction materials long distances by road is considered appropriate. 8. Summary Table 13.1 provides a summary of the EIA scoping report and clarifies what issues are proposed to be scoped in and out of the EIA. The Planning Authority is in general agreement with the conclusions of this. However, the Planning Authority defers to the views of other consultees in respect to their relevant field of expertise, and in particular	

	Scottish Nature and Historic Environment Scotland. It should also be noted that outstanding internal consultation responses will require to be considered when available. Consultations undertaken. Responses awaited. • Argyll & Bute Council Local Biodiversity Officer • Argyll & Bute Council Environmental Health Officer • Argyll & Bute Council Area Roads Engineer • Argyll & Bute Council Archaeological Advisors the West of Scotland Archaeology Service (received 22.07.2021)	
ECU	<u>Consultation Response 21.06.2021:</u> Thanks for your email. As far as I can see your email is not part of a current application under the Electricity Act 1989 or other process under the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017. The ECU will respond to your request for a scoping opinion (reference ECU00002199) in due course. The planning authority currently has an extension until tomorrow. However, the documents you have submitted on 18 June will not be considered by ECU and we will not be providing comments. This is because they do not appear to engage any of our statutory functions directly. Happy to discuss if you think I have misunderstood the purpose of your email. <u>Consultation Response 02.08.2021:</u> Thanks for letting the ECU know about the progress with your forthcoming application. Unfortunately, I will not be able to take part. ECU case officers like myself and Lesley now only deal with submitted applications under the Electricity Act 1989 or other process under the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017. We also can provide a half hour EIA pre-application meeting and a gate-check when you	Noted.

	are ready to submit however we no longer have the capacity to be involved outside these processes. I look forward to hearing from you in due course when you're ready for EIA application / gatecheck.	
Historic Environment Scotland (HES)	Our remit is World Heritage Sites, scheduled monuments and their setting, category A-listed buildings and their setting, and gardens and designed landscapes (GDLs) and battlefields in their respective inventories. Please also seek information and advice from Argyll & Bute Council's archaeology and conservation services for matters including unscheduled archaeology and category B and C-listed buildings We have provided specific comments on potential impacts of the section of the scheme between Tower 28 and the Glen Lochy substation on historic environment assets within our remit in the attached annex. Further information is required to fully understand the potential effects on the setting of some of the assets within our remit. We recommend that our Managing Change in the Historic Environment guidance note on setting should be used when considering setting impacts as the project progresses. Further good practice advice on the assessment of impacts on cultural heritage can also be found in Appendix 1 of the EIA Handbook. https://www.historicenvironment.scot/archives-and research/publications/publication/?publicationId=80b7c0a0-584b-4625-b1fd-a60b009c2549 HES have no concerns over the minor changes to the proposed substations. Summary of Annex Our preferred option is the baseline option as it presents the least impact on the setting of Auchtermally or Uachdar Mhaluidh, Deserted Township (SM 4019), Tom a'Chaisteal, dun, Teatle Water (SM 4209) and Dychlie, deserted crofts (SM 5149). Whilst alignments GL1 to GL4 all lessen the impact on the setting of Dychlie, deserted crofts (SM 5149) compared to the baseline, by locating the route further from the monument and by utilising topography to set the line marginally lower in the landscape,	Follow-up consultation was undertaken with HES by exchange of letters. A letter was sent 23/07/2021 responding to points raised in HES's consultation response and providing details of additional visualisation viewpoints requested by HES and the format of visualisations. A response was issued on 06/08/2021 in which no further issues were raised and the visualisation viewpoints and formats were agreed. The consultation letter noted the following: - In regards the potential direct impact on Auchtermally or Uachdar Mhaluidh, Deserted Township (SM 4019), it was confirmed that, in line with national policy, the proposed OHL will be designed to avoid the Scheduled Monument and avoid any direct impact on the monument. - Following site visits to assess the potential impacts of the Proposed Development on the setting of heritage assets within a 5 km study area, it was confirmed that Tom a'Chaisteal Dun, Teatle Water (SM 4209) is currently surrounded by commercial forestry plantation which largely limits views out from the monument in all directions. Given the current forestry cover, it was advised that a photomontage from this viewpoint will not adequately show the potential impact of the Proposed Development on the setting of the monument. Instead, it was suggested that a photo-wire visualisation (where the towers are overlaid on top of the baseline photography) would be the most effective means of portraying the potential visual impact in the event that the forestry is removed.

	these alignments would be closer to and uphill of, and therefore have an adverse increased impact on the more sensitive setting of Tom a'Chaisteal, dun, Teatle Water (SM 4209). Alignment GL5 would increase the impact on the setting of Auchtermally or Uachdar Mhaluidh, Deserted Township (SM 4019) as it brings the line closer to the monument and locates it at a greater altitude, thus increasing its prominence in outward views. We are concerned that these impacts do not appear to have been thoroughly considered in the assessment process so far and sufficient information has not been supplied regarding the closest new element of the proposals, T29, which is likely to be a significant cause of any impacts. This information is required in order to better understand the potential impacts and inform any resulting mitigation, such as line avoidance and relocation of towers. We would be happy to provide more detailed comments if further information can be supplied to assist with the assessment of impacts. We recommend that visualisations showing the impacts of the Preferred Alignment and alternative options from the 3 scheduled monuments would be helpful. If it would be helpful for us to engage with your cultural heritage advisors regarding these impacts and the assessments, we would be happy to do so.	
West of Scotland Archaeological Service (WoSAS)	I refer to the above planning application sent to me for archaeological consultation. I advise that I agree with the proposed methodology outlined in the scoping report chapter concerning cultural heritage and look forward to the further consultation proposed during the project.	Noted.
Nature Scot	During our initial site visit with key stakeholders for this proposal we discussed the need for the transmission line not to be on the skyline along the SE side of Loch Awe at its northern end and for the inevitable skyline of the line crossing SE to Creag Dhubh substation to be minimalised. This was to be achieved by utilising landscape features for shielding and low routes to accommodate the line running parallel to Loch Awe (NE to SW). NatureScot also advised that the line should be kept out of the Golden Eagle SPA.	The alignment of the OHL has been sited across the lower lying moorland hills of the Craggy Upland LCT, away from the more elevated and open hilltops to the east. Existing forestry plantations and areas of woodland would provide varying degrees of screening of the proposed development as it crosses this hillside. Additionally, woodland associated with the edges of Loch Awe would also provide more localised screening in views from the water body and its

	From the maps provided it is not possible to determine whether these design principles, and hence minimising these landscape impacts, have been maintained. As such, if they have increased impacts on the setting of the northern part of Loch Awe, I request these specific elements be identified and differences shown in wireline diagrams for further discussion.	shorelines. Where visible, the alignment would be back clothed by topography. The Proposed Development does not intersect with Glen Etive and Glen Fyne SPA, classified for breeding golden eagle. It does run approximately 40 m from the SPA at its closest point, which is within potential connectivity distance. A full assessment of the potential impacts of the Proposed Development on the SPA shall be undertaken in the EIA, which shall review field survey data and desk study data, including PAT modelling, to determine if Significant Effects are possible. In the area where the OHL crosses the A819 to extend into the Creag Dhubh substation, it routes along the toe of Craig nan Sassanach, which would backcloth the OHL. Towers 1 – 4 climb onto slightly higher topography to enter the substation which may incur some marginal sky lining in views from the west of Loch Awe. Landscaping proposals for the substation will seek to reduce / filter these views. The realignment of the OHL to extend into Glen Lochy, rather than pass through the Strath of Orchy, has reduced its impact on the setting of the northern part of the loch by moving it away from the loch and following the contours of the hillside
Scottish Forestry (SF)	Scottish Forestry advised that both the UK Forestry Standard -4th Edition – 2017 (UKFS) and Scottish Governments Control of Woodland Policy 2009 (CoWRP) are relevant to all three projects. As with previous projects, forest design and wider felling need to be taken into account, with similar landscape work being completed as per Inveraray Crossaig. In addition, the hydrology of development felling in context with the normal forest activity needs to be considered in relation to any sensitive waters, including Loch Awe. Specific Comments:	Comments from Scottish Forestry are noted. Guidance provided in the UK Forestry Standard -4th Edition – 2017 (UKFS) and Scottish Governments Control of Woodland Policy 2009 (CoWRP) has been and will be adhered to in the development of the proposed design. It is also confirmed that the hydrology of development felling will be considered in the environmental assessments in relation to any sensitive areas.

	1. LT29 alignment options. I am content with the description of GL5 diversion decision, which, despite a slightly increased impact on coniferous woodland, does minimise the effect on the Ancient Woodland. 2. Glen Lochy Switching Station 3. Creag Dhubh Substation The minor alterations proposed at Glen Lochy and Creag Dhubh, do not appear to have any additional impacts on woodlands than the previous proposals, and so I have no further comments to make.	
Transport Scotland	It should be noted that Transport Scotland will only provide formal comment on Environmental Impact Assessment consultations if formally consulted by the Energy Consents Unit (ECU) as, from 1st October 2015, local planning authorities were no longer required to consult with Scottish Ministers on EIA development. Should the application be submitted under the Electricity Act 1989 or other process under the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017, then ECU will formally consult Transport Scotland and comments will be sought on the EIA.	This is noted.

6. OVERHEAD LINE TIE-IN AT SUCCOTH GLEN

6.1 Introduction

During the consultation period in July and August 2021, Scottish Power Energy Networks (SPEN) and SSEN Transmission conducted more detailed discussions regarding the OHL Tie-in of the existing SPEN OHL to the Glen Lochy (Succoth Glen) Switching Station. The OHL Tie-In to the Switching Station is designed to allow electricity on the SSEN Transmission proposed new OHL from Creag Dhubh to Dalmally to transfer onto the existing SPEN OHL and subsequently be distributed to the wider electricity network.

The OHL Tie-In connection removes the need for Glen Lochy (Succoth Glen) Switching Station, instead towers and wires are used to configure the connection between the proposed new OHL Preferred Alignment and the existing OHL.

In response to the consultation with SPEN, SSEN Transmission have agreed that Glen Lochy (Succoth Glen) Switching Station will not be built at this time and that an alternative connection arrangement shall be progressed to connect the proposed OHL from Creag Dhubh to Dalmally to the existing SPEN OHL in Succoth Glen.

6.2 Baseline Conditions

6.2.1 Environmental Baseline Summary

The three Tie-in Options are located between Tower 41 and Tower 47 of the Preferred Alignment. This section of the OHL follows a straight easterly trajectory until T47, intersecting small areas of Ancient Woodland (1.4 ha) between T46 and T47, crossing a small area of blanket bog (approx. 280 m) around T41 and crossing three small tributaries. The results of the Stage 1 and 2 peat probe surveys show negligible levels of peat across this section of the Preferred Alignment.

All Tie-In Options cross areas of Ancient Woodland (AW), with Option 1 (including a temporary OHL diversion) crossing the largest area of AW (4.6 ha). Option 2 crosses approximately 0.3 ha of blanket bog habitat (Annex 1). A Whisky Still (remains of) (Cultural Heritage asset: 19315) is recorded at 218188, 726292 and lies in proximity to the proposed T44C new position of Tie-In Option 2 (Figure 3.2, Appendix 2). Further baseline information is located in Section 5 of the Alignment Selection Study Report.

Figure 6.1 illustrates the key environmental constraints within the Study Area.

6.2.2 Engineering Baseline Summary

The Baseline Alignment for the OHL Tie-In connection is the Preferred Alignment from OHL towers T40 to T47. The Baseline Alignment and the Tie-In Options have been technically assessed following the SSEN Guidance and using the information provided by the Principal Contractor, Balfour Beatty. The shortest connection which avoids or minimises engineering constraints and interaction with the environmental constraints will be the Preferred Option.

6.3 Cost Baseline Summary

The baseline total cost of the project includes the new OHL towers from T40 to T47. The cost comparison of the Baseline with the assessed Options is calculated on a percentage basis against the Baseline, following SSEN Guidance. The lowest cost Option is described as the Baseline cost.

6.4 Tie-In Options and Comparative Assessment Summary

As part of the discussions with SPEN a total of three possible Tie-In Options have been identified (**Figure 6.1 to 6.4, Appendix 2**) with reference to the engineering criteria as per Table A7 of SSEN Transmission guidance[5]. An Addendum to the Alignment Selection Study Report has been drafted that documents the appraisal of three proposed Tie-In Options between Tower 41 and Tower 47 of the Preferred Alignment (**Figure 2.1, Appendix 2**), and the existing SPEN OHL.

The suggested Tie-in Options (including temporary diversions) were assessed in line with environmental, engineering and cost criteria (SSEN Transmission OHL Routing Guidance as well as the Holford Rules[6]). The Option which, on balance, would represent the optimum balance of environmental, engineering, and cost considerations was then selected. The description of each Option is supported by a figure (see **Figures 6.1** to **6. 4, Appendix 2**), with an overview of all Tie-In Options shown in **Figure 6.1 (Appendix 2**).

6.4.1 Tie-In Options

Option 1

Option 1 would involve the OHL being connected to the existing 275 kV Overhead Line (operated by SPEN) between existing SPEN Towers 17 and 18, at the proposed Tower 47. This Option is demonstrated in **Figure 6.2 (Appendix 2**).

Option 1 would require felling of AW (0.4 ha) to allow space for the 0.6 km long, temporary diversion south of the existing SPEN line, between Towers 17 and 19, required as part of the construction works. The railway line will not be affected by the works. However, the access, terrain, ground conditions for this part of the line are challenging.

Option 2

Option 2 would involve the OHL being connected to the existing 275 kV Overhead Line (operated by SPEN) between existing SPEN Towers 15 and 16, at the proposed Tower 43. Tower 44 would be moved further north and Towers 45, 46 and 47 would not be built. SPEN Tower 16R will replace Tower 16 on the existing line. Option 2 would result in the greatest loss of AW (0.9 ha). This Option is demonstrated in **Figure 6.3 (Appendix 2).**

A temporary 1.3 km diversion between existing SPEN Towers 14 and 17 would be required as part of the construction works. This temporary diversion crosses approximately 0.3 ha of blanket bog habitat (Annex 1).

This Option is considered the most technically straightforward in terms of temporary diversion and connection to the existing line.

Option 3

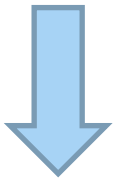
Option 3 would involve the OHL being connected to the existing 275 kV Overhead Line (operated by SPEN), between existing Towers 13 and 14, at the proposed Tower 41. Towers 42-47 would not be built. This Option is demonstrated in **Figure 6.4 (Appendix 2).**

This Option would require felling of AW (0.4 ha) to allow space for the temporary 1 km diversion between existing SPEN Towers 12 and 15, required as part of the construction works. It is a challenging Option due to properties and watercourses nearby.

[5] SSEN, 2020. Procedures for Routeing Overhead Lines and Underground Cables of 132kV and above. Document reference: PR-NET-ENV-501. September 2020

[6] The Holford Rules were first developed in 1959 by Sir William Holford and continue to inform transmission line routeing in the UK. These rules advocate the application of a hierarchical approach to routeing which first avoids major areas of highest amenity, then smaller areas of high amenity, and finally considers factors such as backdrop, woodland, and orientation.

The guidance states that each environmental topic (as well as topics within the engineering and cost categories) should be considered in terms of the potential for the development to be constrained with a Red/Amber/Green (RAG) rating applied as appropriate.

Performance	Comparative Appraisal
Most Preferred  **Least Preferred**	Low potential for the development to be constrained G = Green
	Intermediate potential for the development to be constrained A = Amber
	High potential for the development to be constrained R = Red

The OHL Alignment RAG Comparative Analysis for the OHL tie-in options is presented in Annex 4.

6.5 SSEN Transmission Preferred Tie-In Option at Succoth Glen

To select SSEN's Preferred OHL Tie-in Option a comparative appraisal of the environmental, engineering, and cost sensitivities and risks was undertaken for each Option within the Study Area (Section 1.3), in accordance with the methodology set out in SSEN Transmission guidance. The guidance states that each environmental topic (as well as topics within the engineering and cost categories) should be considered in terms of the potential for the development to be constrained with a Red/Amber/Green (RAG) rating applied as appropriate.

A comparative environmental appraisal between each of the three Tie-in Options[7] is presented in **Table 1**, with cost and engineering appraisal presented in **Tables 6.1** and **6.2**. **Figure 6.1 (Appendix 2)** illustrates the key environmental constraints, upon which the decision regarding an overall preference was made.

6.6 OHL Tie-in Options Environmental Assessment

Table 6.1 below summarises the environmental appraisal RAG ratings for the Preferred Alignment and the three Tie-in Alignment Options.

[7] The temporary diversions required for each Tie-in Option have also been considered as part of the assessment.

Table 6.1: OHL Tie-in Options Environmental Comparison Table

OHL Tie-in Option	RAG Impact Rating - Environmental															
	Natural Heritage					Cultural Heritage		People	Landscape and Visual				Land Use			Planning
	Designations	Habitats	Protected Species	Ornithology	Hydrology / Geology	Designated Assets	Non-designated Assets	Proximity to Dwellings	Designations	Character	Visual	RVA	Agriculture	Forestry	Recreation	Policy & Proposals
Preferred Alignment	A	A	A	A	G	A	G	G	G	G	G	G	G	A	G	A
Option 1	A	G	A	G	A	A	G	G	G	A	A	A	G	A	G	A
Option 2	R	A	A	G	A	A	A	G	G	A	A	R	G	G	G	A
Option 3	A	G	A	G	A	A	G	G	G	A	A	G	G	G	G	A

The RAG ratings (as per SSEN Guidance) show Tie-in Option 3 would be the preference as it would result in the smallest loss of Ancient Woodland in comparison to the other two Options, as well as reducing the number of towers required (three less) and impact to the surrounding habitat. Option 3 is also predicted to have a negligible impact on visual amenity due to the intervening topography that would screen / filter any intervisibility from Cnoc an t-Sadhail and Brackley Farmhouse. Selection of Tie-in Option 3 would avoid the potential for encirclement of the properties by transmission infrastructure and would reduce the prominence of the OHL in views from each property. The temporary diversion for Option 1 would result in the loss of 2.8 ha (4.6 ha overall) of AW. However the majority of the current habitat consists of scattered scrub and coniferous plantation, rather than closed canopy mature broadleaf woodland. This allows the option of micrositing the temporary poles and avoiding tree loss. Option 1 would impact a small section of mature broadleaf woodland near existing SPEN tower 17. Considering this and the temporary nature of the diversion, Option 1 has been rated as AMBER. However if the temporary diversion was moved north of the SPEN line, Option 1 would be rated as RED. Option 1 would form a notable or even prominent element in views to the southeast of Brackley compared with Option 3, however it would not compromise the views from Brackley. Tie-in Option 2 would create encirclement by transmission infrastructure in views from the property at Brackley Farm, which is likely to compromise the quality and character of views, and result in a loss of visual amenity (rated RED). It would also result in the fragmentation and loss of 1.8 ha of AW (rated RED).

6.7 **OHL Tie-in Options Engineering Assessment**

Table 6.2 below summarises the engineering appraisal RAG ratings for the Preferred Alignment and the three Tie-in Alignment Options.

Table 6.2: OHL Tie-in Options Engineering Comparison Table

Alignment Options	RAG Impact Rating - Engineering					
	Infrastructure Crossing		Ground Condition		Construction and Maintenance	Proximity
	Major Crossings	Road Crossings	Terrain	Peat	Angle Towers	Clearance Distance
Preferred Alignment	G	G	A	R	G	G
Option 1	G	G	R	R	R	G
Option 2	A	G	A	R	R	G
Option 3	A	G	A	R	R	A

RAG ratings for the 3 Tie-in Options are compared to the same section (T40 -47) from the original GL5 preferred alignment. It is to be noted that GL5 did not include for the tie-in-in to existing SPEN circuit, however the new tie-in-in connections (Option 1, 2 and 3) now require additional angle towers resulting in red rating as per PR-NET-ENV-501 guidance.

The RAG ratings for the 3 Options show that the major crossings, terrain, and clearance distance are the main categories that differentiates each route. Option 1 does not cross the railway. The terrain for Option 1 is particularly challenging for construction of a tie-in-in location, temporary diversion and therefore given a red rating in line with PR-NET-ENV-501 guidance. This Option also requires the most towers overall to facilitate the connection.

In terms of ground conditions, Option 3 goes through the largest area of peat, however all Options score red rating as per PR-NET-ENV-501 guidance, due to significant areas of peat. In terms of the clearance distance to properties, Option 3 falls within 250m of an existing property (approximately 220m) whereas there are no properties within 250m for Options 1 and 2. The temporary diversion on Option 3 to build online junction tower could be difficult on the northern SPEN circuit due to a property in very close proximity (approximately 35m) to the existing SPEN circuit, however could be achieved by instead diverting the southern circuit should this become technically favoured. This gives Option 2 an overall advantage against the other Options and therefore is deemed the most technically favourable in terms of its assessment against the criteria in PR-NET-ENV-501.

An additional factor to consider is the feasibility of connecting the new SSEN and existing SPEN circuits to the proposed Glen Lochy switching station in the future if required. Options 1 and 2 have a greater feasibility as they are closer to the proposed switching station location compared to Option 3.

Therefore, from the engineering assessment Option 2 is preferred. Option 1 presents challenging terrain and difficulty of constructing a tie-in-in location and a temporary diversion. Option 3 has disadvantages in terms of large amounts of peaty ground, located approximately 220m from a house and is least desirable for a future connection into Glen Lochy (Succoth Glen) switching station, leaving the possible connection point further away.

6.8 OHL Tie-in Options Engineering Assessment

The GL5– Preferred Alignment is not the lowest cost assessed. It has the second highest cost in the criteria for capital, tree Felling, land assembly, consents mitigations, inspections, and maintenance; the highest being Option 1.

6.8.1 Option 1

Option 1 has a 15 % greater cost than the lowest cost Options in Tree Felling and Consents Mitigations; due to the greater area of tree felling that would be required and the subsequent compensatory planting to replace the felled trees. Assessed against the other criteria, Option 1 has a 9% greater cost than the lowest cost Option in

the criteria for Capital; an 8% greater cost in Land Assembly and Inspections & Maintenance, than the lowest cost Option.

6.8.2 Option 2

Option 2 has lowest costs for Tree Felling and Consents Mitigations. It has a 4% greater Capital cost than the lowest cost Option and a 3% greater Land Assembly and Inspections & Maintenance cost than the lowest cost Option; it also has a 15 % greater cost than the lowest cost Options in the criteria for Diversions.

6.8.3 Option 3

Option 3 is the lowest cost of the four Options considered in the criteria for Capital, Land Assembly, Inspections & Maintenance. It has a 2% greater Tree Felling and Consents Mitigations cost than the lowest cost Option; it also has a 15 % greater cost than the lowest cost Options in the criteria for Diversions.

Table 6.3 below summarises the cost appraisal RAG ratings for the Preferred Alignment and the three Tie-in Alignment Options.

Table 6.3: OHL Tie-in Options Cost Comparison Table

Route	RAG Impact Rating – Cost						
	Capital	Diversions	Public Road Improvement	Tree Felling	Land Assembly	Consent Mitigations	Inspections
Preferred Alignment	107	100	100	112	106	112	106
Option 1	109	100	100	115	108	115	108
Option 2	104	115	100	100	103	100	103
Option 3	100	115	100	102	100	102	100

Following the RAG assessment methodology to determine the assessment of costs**, there is no preference for any Option** when compared to the lowest cost Option, considering only Cost.

6.9 Summary and Conclusion

From an environmental perspective, the appraisal identifies Tie-in Option 3 as the preference, as it results in the smallest loss of Ancient Woodland in comparison to the other two Options, as well as reducing the number of towers required (three less) and subsequent impact to the surrounding habitat. Option 3 is also predicted to have a negligible impact on visual amenity due to the intervening topography that would screen / filter any intervisibility from Cnoc an t-Sadhail and Brackley Farmhouse. Selection of Tie-in Option 3 would avoid the potential for encirclement of the properties by transmission infrastructure and would reduce the prominence of the OHL in views from each property.

The temporary diversion for Option 1 would result in the loss of 2.8 ha (4.6 ha overall) of AW. However, most of the current habitat consists of scattered scrub and coniferous plantation, rather than closed canopy mature broadleaf woodland. This allows the option of micrositing the temporary poles and avoiding tree loss. Option 1 would impact a small section of mature broadleaf woodland near existing SPEN Tower 17. Option 1 would form a notable or even prominent element in views to the southeast of Brackley compared with Option 3, however it would not compromise the views from Brackley.

Tie-in Option 2 would create encirclement by transmission infrastructure in views from the property at Brackley Farm, which is likely to compromise the quality and character of views, and result in a loss of visual amenity. It would also result in the fragmentation and loss of 1.8 ha of Ancient Woodland.

In respect of engineering assessment, Option 2 is the preferred option. Option 2 is preferred over Option 3 because of the proximity to the residential property Cnoc an t-Sadhail. Option 2 is preferred over Option 1 due to the challenging terrain along Option 1 and the potential difficulties this creates for construction and operation.

Option 1 and Option 2 are preferred over Option 3, because Option 3 would be more difficult to facilitate any connection into a Glen Lochy (Succoth Glen) switching station.

From a cost perspective, there is no preference between the three Tie-in Options.

The Brackley Farm in-bye land is more intensively grazed pasture close to the farm buildings. The hill farming system at Brackley is disproportionately reliant on this small acreage of in-bye land, which is immediately south of the railway and also between the railway and A85. Development of this area would cause considerable disturbance during construction and thereafter whilst the land recovers following reinstatement. Therefore, Option 1 would be preferable to reduce the disturbance to the affected landowner.

The key difference in assessment between Option 2 and Option 1 is the presence of challenging terrain, based on an assessment of the Lidar data. A site visit was conducted to the Option 1 location on 28th October 2021. The purpose of the site visit was to review the initial tower profiles, temporary diversion and access track alignments. A survey of the ancient woodland area was also completed. There will be a further revision of the temporary diversion and access track alignments based on the site visit results.

Based on the initial contractors' designs, it is considered that Option 1 tower positions and clearances can be achieved and that a temporary mast diversion can be installed to permit the construction of the permanent tower, within the existing OHL alignment. It is likely that a permanent access for construction and operations can be designed; this work is yet to be finalised week commencing 1st November 2021, using the results of the site visit to inform the more detailed access track layout. Therefore, SSEN is confident that the contractor led design will provide an engineering design solution to mitigate the challenging terrain associated with Option 1 and will avoid significant impacts to Ancient Woodland.

Therefore, in consideration of all remaining issues, SSEN Transmission's preferred option is OHL Tie-in Option 1.

7. NEXT STEPS

7.1 Planning

Creag Dhubh to Dalmally 275 kV Overhead Line Connection

An application for consent will be submitted for the OHL under Section 37 (s.37) of the Electricity Act 1989, with application for deemed consent requested under the Town and Country Planning (Scotland) Act 1997 (as amended). An EIA Report will be submitted with the application for s.37 consent which will consider the key issues identified within the Scoping Request submitted to the Scottish Government Energy Consents Unit in December 2020. The s.37 application will be submitted in December 2021. Following submission of the s.37 application to the Scottish Government there will be a period of administration while the Scottish Government makes the application available for comments to be submitted on its website https://www.energyconsents.scot/; SSEN Transmission will provide a notification when comments can be submitted to the Scottish Government on the SSEN Transmission proposal.

Creag Dhubh Substation

A proposal of application notice (PAN) was submitted to Argyll and Bute Council in June 2021, as the Proposed Development qualifies as a major application through the Town and Country Planning (Hierarchy of Development) (Scotland) Regulations 2009. The consultation in July and August 2021 formed the pre-application Creag Dhubh Substation PAN event. Feedback received from this event has been collated in the Pre-Application Consultation (PAC) Report.

Creag Dhubh Substation is currently undergoing an EIA Screening exercise, parallel to this consultation process, with Argyll and Bute Council. Upon, receipt of the Screening Opinion from Argyll and Bute Council, SSEN will review and respond accordingly.

A planning application under the Town and Country Planning (Scotland) Act 1997 (as amended) will be submitted to Argyll and Bute Council to seek planning consent for the proposed substation. The planning application for the substation will be accompanied by an environmental appraisal report. The planning application will be submitted in December 2021.

7.2 Public Information Event

An information event is being held on 23rd November between 1pm and 7pm at Dalmally Community Hall. This event will display printed visualisations, provide access to the 3D visualisation model, give further information on the removal of the Glen Lochy (Succoth Glen) switching station from our proposals for the overhead line Tie-in that is proposed in its place. Members of the SSEN team will be available in person to speak with members of the public about the proposals.

Planning Comment

Members of the public will have the opportunity to comment on both applications for consent either directly to the Scottish Government or to Argyll and Bute Council. Full instructions on how to comment and the timescales for doing do will be advertised in the local press when the applications are submitted. Information will be posted on the project website at:https://www.ssen-transmission.co.uk/projects/creag-dhubh-dalmally-275kv-connection/

7.3 Other Activities

Further Survey

During November 2021 further peat surveys are being completed for the SSEN Transmission Preferred overhead line tie in Option 1, access track alignments, tower positions and potential peat restoration areas. The data collected will inform the Peat Management Plan (PMP) and Peat Landslide Hazard Risk Assessment (PLHRA) being submitted as part of the EIA.

Scottish & Southern Electricity Networks

TRANSMISSION

APPENDIX 1: CONSULTATION BROCHURE

Argyll and Kintyre 275kV Strategy Consultation Booklet

July 2021

Share your views with us:

We are launching a virtual consultation exhibition to gain views and feedback on our proposals for our **Argyll and Kintyre 275kV Strategy**. This strategy includes our plans for the previously consulted upon **Creag Dhubh - Dalmally 275kV Connection project**, alongside two new projects; **Creag Dhubh – Inveraray 275kV Overhead Line** and **Argyll and Kintyre 275kV Substations**.

Information on our proposals is available within this consultation booklet, and we also invite you to view our virtual consultation portal where we will hold live IM chat sessions at the following dates and times:

- **Wednesday 14th July - 10am-1pm & 5-7pm**
- **Thursday 15th July - 10am-1pm & 5-7pm**
- **Thursday 29th July - 10am-1pm & 5-7pm**

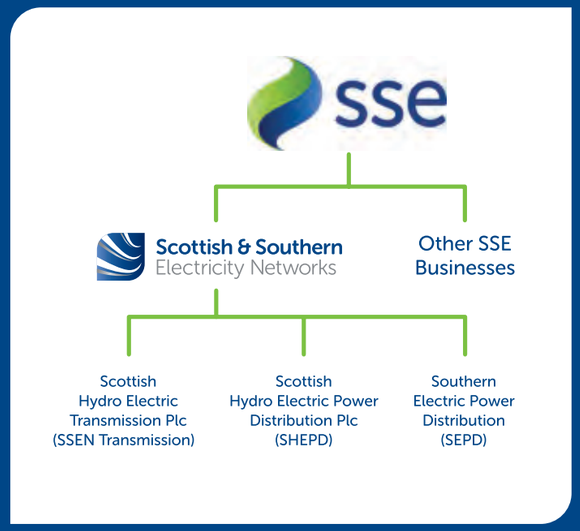
For more information, please visit:
www.ssen-transmission.co.uk/projects/argyll-and-kintyre-275kv-strategy/

Scottish & Southern Electricity Networks

TRANSMISSION

Who We Are

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



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 (OHL), underground cables (UCG) 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

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 the Office of Gas and Electricity Markets (Ofgem).

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

The Argyll and Kintyre 275kV Strategy

The original transmission network in Argyll and Bute was constructed over 60 years ago and designed to transmit electricity to consumers in rural areas of low-density population.

As the UK strives for Net Zero (achieving a balance between the greenhouse gases put into the atmosphere and those taken out), SSEN Transmission has seen a significant increase in generator connection applications in Argyll and Kintyre in the last 18 months, predominantly in renewable generation.

In terms of this renewable generation (i.e. windfarms), there are infrastructure requirements needed to connect generators to our Transmission network. More information on the windfarms requiring connection and upcoming consultation is listed on Page 34.

There is therefore a requirement for us to increase our network capability in Argyll and Kintyre, beyond that already under current construction and public development, to enable the connection of further renewable generation and to export to the wider GB network. We have called this group of works designed to deliver the required increase in network capacity our 'Argyll and Kintyre 275kV Strategy'.

Our Argyll and Kintyre 275kV Strategy consists of 3 projects, one of which has previously been consulted on publicly since 2016, and another two which are in early development and the initial consultation stage. They are as follows:

Creag Dhubh - Dalmally 275kV Connection (pages 06 - 16) 1

Stakeholders in Dalmally will already be familiar with this project which we have consulted on and subsequently adapted our plans in response to stakeholder feedback.

The project involves establishing a new substation at Creag Dhubh and new switching station at Glen Lochy, connected by approximately 13km of new overhead line.

In this consultation, we are seeking your views on our Preferred Alignment for the overhead line.

In addition, to minimise separate events, we are also using this virtual consultation as the first formal public consultation for the Creag Dhubh substation Pre-Application Notice (PAN) event. The consultation on Creag Dhubh is therefore a statutory consultation event (within the Town and Country Planning (Scotland) Act regulations) seeking views on the proposed substation and associated works.

A separate Creag Dhubh feedback form is available on Page 37 and we welcome comments as part of this formal engagement process.

Creag Dhubh - Inveraray 275kV Overhead Line (pages 17-23) 2

This is a new project which would involve between 8-12 km of new 275kV overhead line constructed between the proposed new substation at Creag Dhubh, and a connection point on the Inveraray to Crossaig overhead line.

It will initially be operated at 132kV, but will be capable of 275kV operation, once associated transmission network connected substations to the south have been upgraded to 275kV capability.

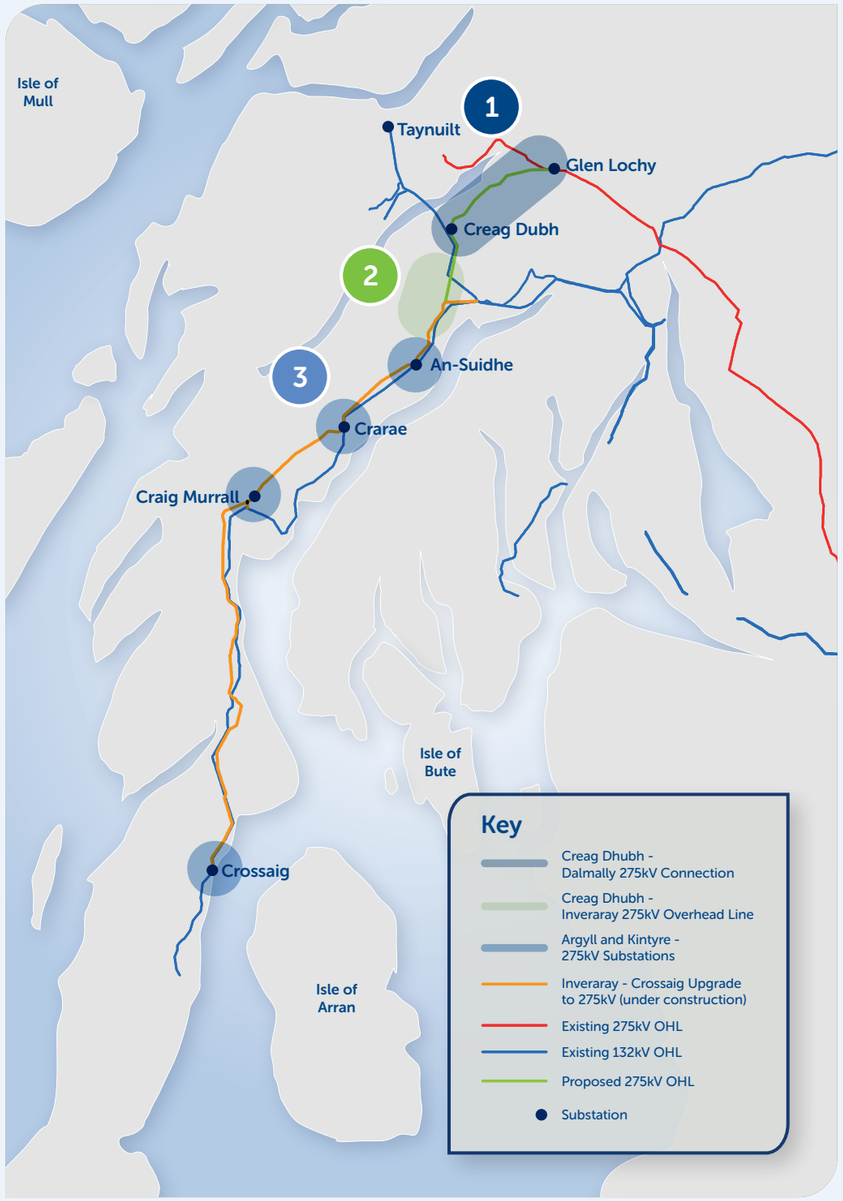
The existing 132kV overhead line between Inveraray and the proposed new Creag Dhubh substation will be removed. We are inviting views as to our Preferred Route Option, within which the replacement overhead line will be located.

Argyll and Kintyre 275kV Substations (pages 24-33) 3

To complete the Argyll and Kintyre 275kV Strategy, all of the connected substations require upgrade to 275kV capability. As a result we are progressing with a new project which would involve construction and operation of four new 275kV electricity substations, south of Inveraray.

We are inviting views regarding preferred Site Options identified for each of these substations.

To find out more about the Strategy as a whole, and sign up for updates, please visit:
www.ssen-transmission.co.uk/projects/argyll-and-kintyre-275kv-strategy/



In the interest of transparency, we're presenting this package of works as a whole to our stakeholders across the region, to ensure all local community members are aware of the full extent of our proposals and invited to comment on the development of each.

We recognise that as the proposed works span across the region, not all of the three projects will be of direct interest to all stakeholders and members of the public.

During this consultation we therefore invite stakeholders to comment on as many or as little of the projects listed as desired and have provided separate feedback forms for ease.

Creag Dhubh – Dalmally 275kV Connection

1. About the project

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 to ensure security of supply.

Previous consultation

We have been consulting on this project since March 2016. In recognition of feedback regarding the previous preferred alignment to Dalmally substation, we committed to explore alternative options to avoid crossing the Strath of Orchy. These were presented in September 2020, and following consideration of feedback received, we confirmed our Preferred Option in the Report on Consultation, published in November 2020. The Preferred Option is an alternative overhead line connection location east of Dalmally and new switching station, avoiding the need to connect to the existing Dalmally substation.

The Preferred Option addresses concerns about the visual and cumulative impacts of connecting to the existing network infrastructure in the Strath of Orchy and avoids environmental challenges concerning flooding and pollution risk, associated with the undergrounding option.

This consultation

We are seeking your views on:

- The proposed Creag Dhubh substation (note this element is subject to the formal PAN process as prescribed for major planning applications). This event forms the main pre-application consultation event for this site and is subject to statutory procedures.*
- The minor location changes to the Proposed Glen Lochy Switching Station site.
- Our proposed overhead line route alignment between Tower 28 (on the preferred 2018 alignment) and the Proposed Glen Lochy switching station.

Project elements

A new 275/132kV substation adjacent to the existing Inveraray to Taynuilt 132kV overhead line (Creag Dhubh Substation)

A new 275kV overhead line between the proposed Creag Dhubh substation and a switching station in Glen Lochy

A new Glen Lochy switching station, to connect the new 275kV overhead line with the existing Scottish Power 275kV overhead line between Dalmally and Inverarnan Substation

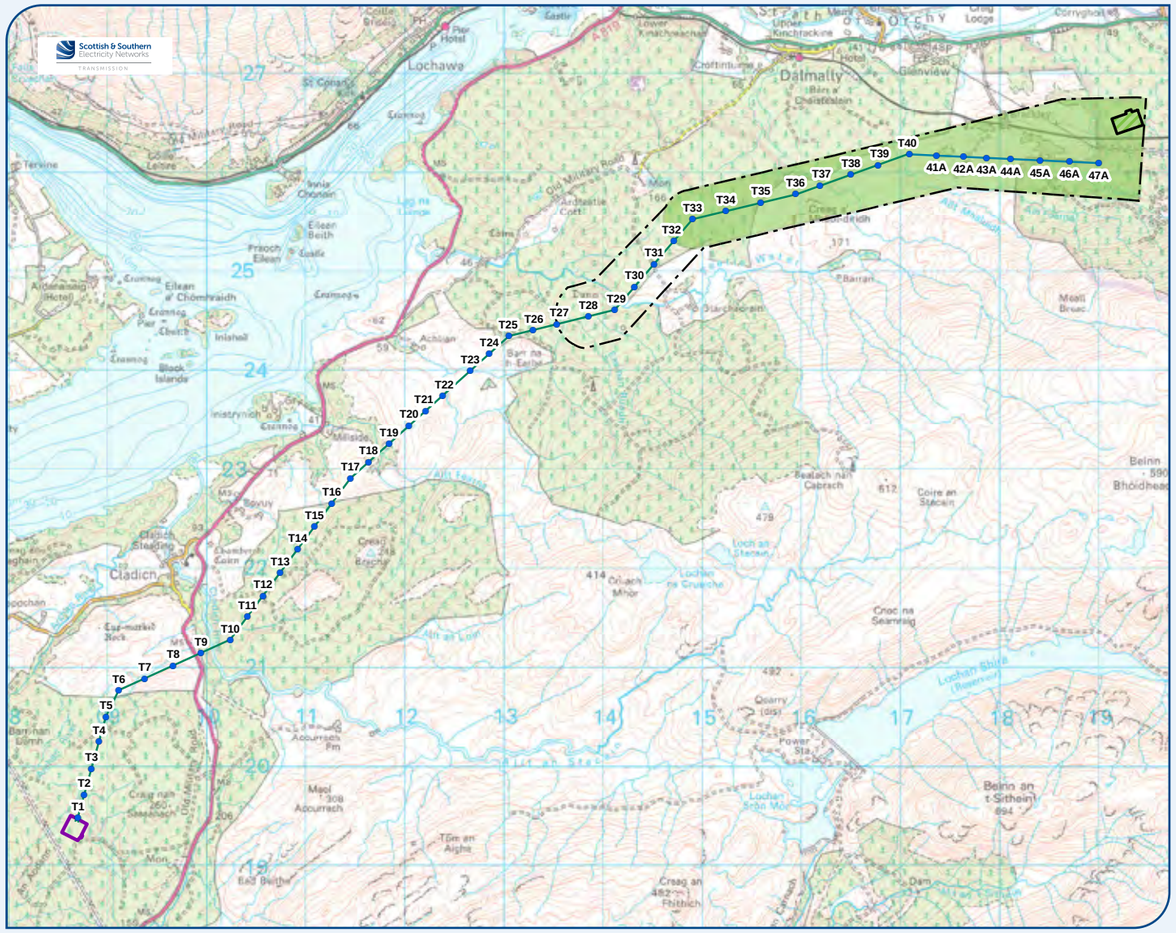
Key dates

- Planning application submissions **Autumn 2021**
- Anticipated Construction Start Date **Spring 2023**
- Project Completion **Spring 2025**

***Creag Dhubh Substation Proposal of Application Notice (PAN)**

As part of the consultation event we are formally consulting on Creag Dhubh Substation. This element of the consultation is a statutory requirement of the pre-application consultations process for this future planning application.

This PAN event has been co-joined with the wider consultation to set the proposals within the wider project context and to minimise the number of separate consultation events we are hosting. Separate information boards (Pages 15-16), and a separate feedback form (Page 37) for the Creag Dhubh Substation are provided and we encourage feedback and comments to inform the design and final proposals. A formal planning application is due to be submitted to Argyll & Bute Council in Autumn 2021 for Creag Dhubh substation.



Key

- Preferred Tower Locations
- Preferred Alignment
- Study Area
- Preferred Switching Station, Site 6, 2020 Consultation
- Proposed Creag Dhubh Substation
- Preferred Route, Option 3, 2020 Consultation

Creag Dhubh – Dalmally 275kV Connection

2. Project history

March 2016

Project Introduction Consultation

The 'North Argyll' project is introduced to local stakeholders.

October 2016

Route Options Consultation

A preferred route for the new overhead line is shared. Community members cited concerns regarding proximity to residential properties, visual impact and proximity to the existing Scottish Power transmission line. There were requests that the line be undergrounded in Dalmally due to these concerns.

Throughout 2017

Initial Cable Investigations

During review of all consultation feedback received to date, a decision was made to carry out investigation into potential underground cabling routes in Dalmally.

January 2018

Cabling Update Meeting Glenorchy and Innishail CC

Project team attend a local community council meeting to present the results of the Cable Feasibility Study. Three potential options were identified, each constrained by the location, with no clear option preference.

March 2018

Preferred Alignment Consultation

Preferred alignment for the overhead line between proposed Creag Dhubh Substation site and existing Dalmally Switching Station. Majority of feedback received is in objection to the preferred route and alignment, citing landscape and visual concerns.

Throughout 2019

Cable Investigations and Results

In recognition of feedback, we announce plans to further explore undergrounding across the Strath of Orchy.
Two potentially feasible options are identified, however, due to high risk of environmental pollution and engineering challenges, a decision is made to investigate alternative connection options which would aim to respond to landscape and visual concerns.

Early 2020

Glen Lochy Switching Station

An alternative connection location, avoiding the Strath of Orchy is identified to the east of Dalmally; which would link to the existing overhead line between Dalmally and Inverarnan substation.

September 2020

Virtual Consultation

Three options presented for consultation:

1. an overhead line from Creag Dhubh to the existing Dalmally substation (preferred solution from 2018),
2. an underground cable connection to the existing Dalmally substation; and
3. an alternative overhead line connection location east of Dalmally and new switching station (Glen Lochy).

November 2020

Report on Consultation

Following public consultation, we publish our Report on Consultation, confirming the preferred option as Option 3: Glen Lochy Overhead Line and Switching Station. Since then, site work has been ongoing to determine alignments for the overhead line, and locations for the substation and switching station.

Summer 2021

Virtual Consultation

Updates provided on Creag Dhubh Substation and Glen Lochy Switching Station. Views sought on overhead line alignment from Tower 28 (on the preferred 2018 alignment) to Glen Lochy Switching Station and Proposal of Application Notice (PAN) process commences for Creag Dhubh Substation.

3. Route Alignment Selection Process

Following consultation in September 2020 and consideration of feedback received, we confirmed our preferred option as an alternative overhead line connection location between Tower 28 (on the preferred 2018 alignment) and new Glen Lochy Switching Station, avoiding the need to connect to the existing Dalmally substation.

Presented in the consultation materials, a 1km wide Preferred Route (Option B1) was highlighted to accommodate this alternative connection. Considering consultation responses, this assessment remains unchanged and Option B1 has been considered in further detail. Since then, we have been working to identify an optimal alignment within this route which is technically feasible, economically viable and causes the least disturbance to the environment; and to those who live, work, visit or use the area for recreation.

Baseline Alignment
The next step in the process was to identify a Baseline Alignment within the Preferred Route, which was produced by our engineering design contractors through desktop surveys, Digital Terrain Model (DTM) data and on-site walkover surveys to investigate key features such as buildings, public footpaths, water bodies and existing infrastructure.

Baseline Alignment Deviations
Once the engineering Baseline Alignment was identified, a workshop took place between SSEN Transmission and our environmental consultant. The workshop considered deviations to the Baseline Alignment that would offer localised improvements to sensitive receptors. This included cultural heritage receptors (e.g. Duncan Ban Monument), landscape and visual receptors, ornithological receptors (e.g. black grouse) and designated habitats, such as Ancient Woodland and blanket bog. The deviations are assessed alongside the Baseline Alignment to arrive at a Preferred Alignment.

Five deviations (GL1-GL5) were identified for further assessment, and reviewed in terms of cost, engineering and environment. These deviations can be viewed in the figure below.

1. **Deviation GL1** was proposed to reduce the impact on Class 2 peatland habitat, including areas of blanket bog as well as reducing potential setting impacts on the Scheduled Monument. It also moves north from the Baseline Alignment into the plantation woodland, which offers some screening.

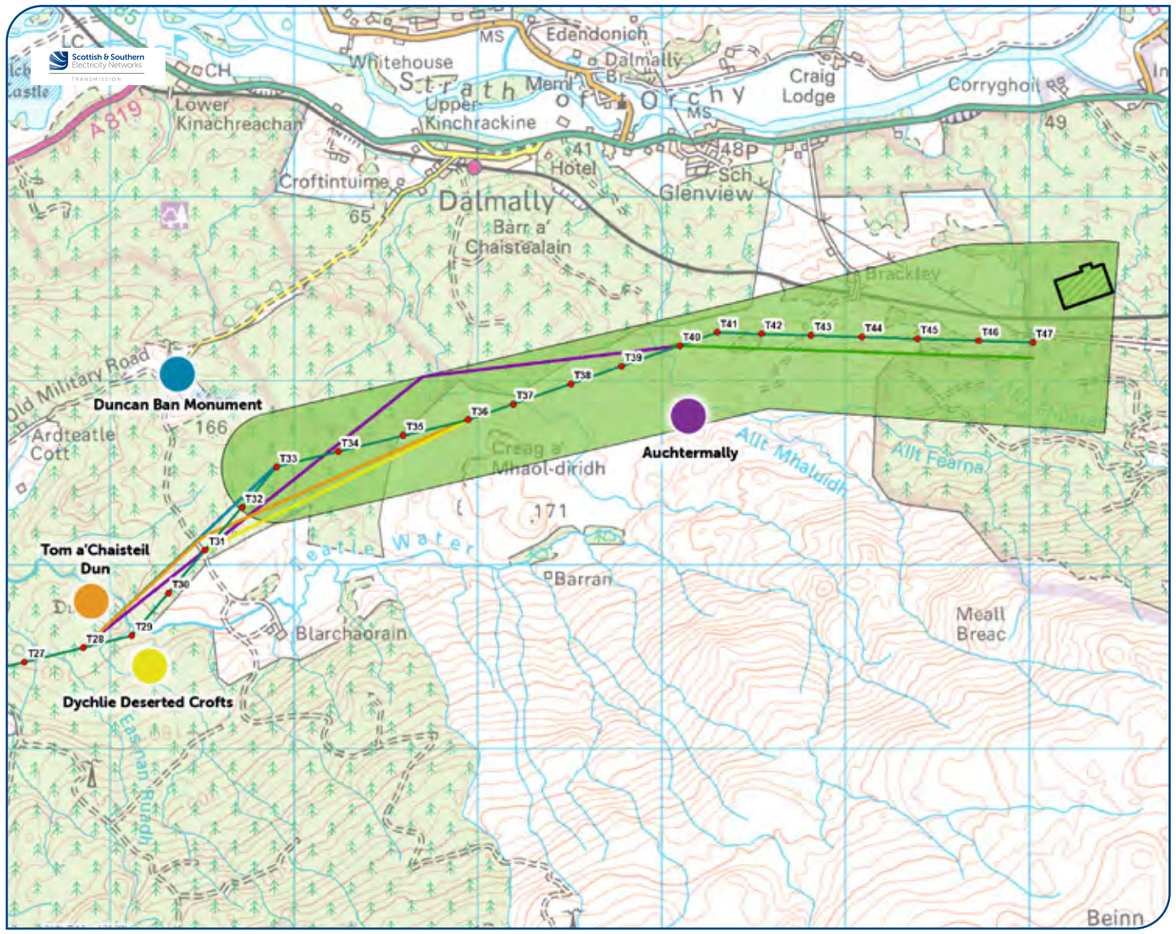
2. **Deviation GL2** was proposed to reduce potential setting impacts on the Scheduled Monument as well as reducing any visual impacts from residential property. GL2 is also set further back than the Baseline Alignment, which provides further woodland screening.

3. **Deviation GL3** was proposed to reduce potential visual and setting impacts, would also result in a smaller area of woodland fragmentation and would be a lower cost option compared to the Baseline Alignment.

4. **Deviation GL4** was proposed to straighten up the Baseline Alignment and bring it closer to the edge of the woodland, reducing the loss of commercial woodland and fragmentation. It would also be a lower cost option compared to the Baseline Alignment.

5. **Deviation GL5** was proposed to reduce the loss of Ancient Woodland, reduce the loss of blanket bog and slightly reduce impacts on heritage features. GL5 also provides a slight improvement to visual receptors to local properties.

Creag Dhubh – Dalmally 275kV Connection



Key

- Baseline Tower Locations
- Baseline Alignment

Deviation Option

- GL1
- GL2
- GL3
- GL4
- GL4 (preferred)
- Preferred Switching Station, Site 6, 2020 Consultation
- Preferred Route, Option 3, 2020 Consultation
- Duncan Ban Monument
- Tom a'Chaisteil
- Dychlie Deserted Croft
- Auchtermally

Red Amber Green (RAG) Charts

To demonstrate the full extent of analysis undertaken on alignment 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 alignment options analysis, please refer to the Consultation Document available from the project webpage or on request.

Alignment options - Environmental

Environmental	Alignment options					
Natural Heritage	**Baseline**	**GL1**	**GL2**	**GL3**	**GL4**	**GL5**
Designations						
Ornithology						
Protected Species						
Habitats						
Hydrology / Geology						
Cultural Heritage						
Designations						
Non-designated Assets						
People						
Proximity to Dwellings						
Landscape and Visual						
Designations						
Character						
Visual						
Land Use						
Agriculture						
Forestry						
Recreation						
Planning						
Policy						
Proposals						

Alignment options - Engineering

Engineering	Alignment options					
Infrastructure crossings	**Baseline**	**GL1**	**GL2**	**GL3**	**GL4**	**GL5**
Major Crossings						
Road Crossings						
Ground Condition						
Terrain						
Peat						
Construction and Maintenance						
Angle Towers						
Proximity						
Clearance Distance						

Alignment options - Cost

From a cost perspective the differences were marginal resulting in all options receiving a green rating.

Creag Dhubh – Dalmally 275kV Connection

4. Preferred Route Alignment

To select a Preferred Alignment, a comparative appraisal of the environmental, engineering, and cost sensitivities and risks was undertaken for each option in accordance with the methodology set out in SSEN Transmission guidance. Details of the appraisal can be viewed in full detail within the Consultation Report.

Through consideration of all sensitivities and risks identified, the preferred route alignment selected is deviation alignment GL5.

Environment: On balance, GL5 would be the preference as it would greatly reduce the loss of Ancient Woodland in comparison to the Baseline Alignment, has the lowest impact on blanket bog habitat, as well as providing a slight improvement to visual receptors.

The preferred alignment is closer to the black grouse lek compared with GL1; however mitigation could be put in place to reduce disturbance to the black grouse lek during construction.

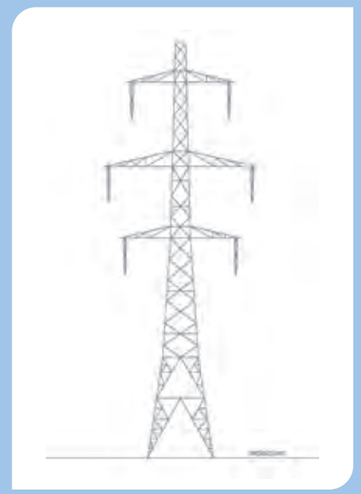
Engineering: In terms of engineering, the number of angle towers and location of peat are the main criteria that differentiate each alignment.

However, the RAG assessment included in the Consultation Document concludes that the lower number of angle towers for the Baseline Alignment and GL5 is not of any significance. Regarding avoiding peated areas, GL1 could have the same risk as the other alignment options, as it runs through existing forestry with unknown ground conditions, but anticipated to be planted over some areas of peat. Accordingly, there is no clear preference between all options.

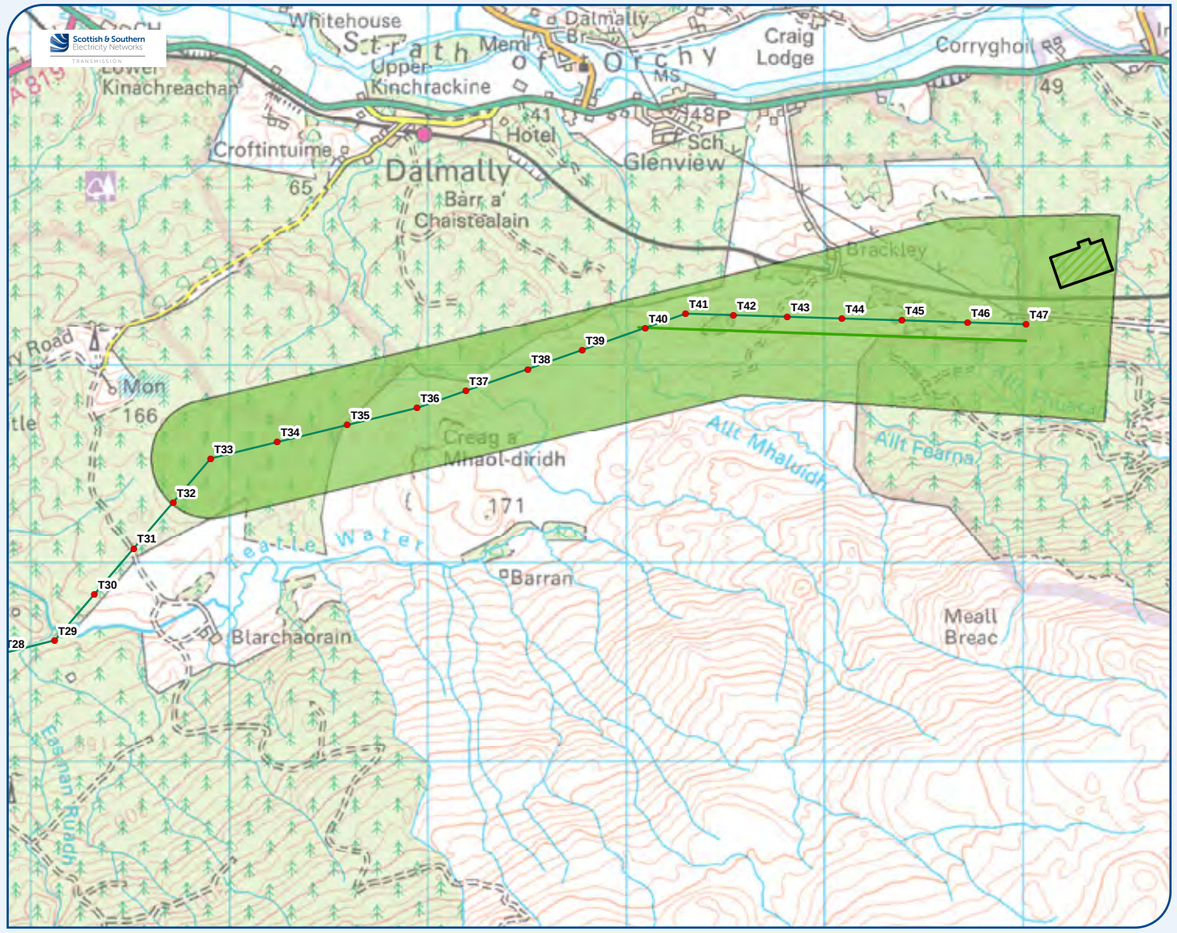
Cost: GL3 and GL4 have the lowest cost for all criteria, albeit marginal.

About the Overhead Line

- Approx 13km Long
- Will operate at 275kV voltage
- 50 metres average tower height*
- 47 towers
- Span length between 175-350 metres



*Height likely to vary between 40 and 55 metres



Key

- Baseline Tower Locations
- Baseline Alignment

Deviation Option

- GL5 (preferred)
- Preferred Switching Station, 2020 Consultation
- Preferred Route, Option 3, Consultation

Creag Dhubh – Dalmally 275kV Connection

5. Glen Lochy Switching Station

What is a switching station?

A switching station essentially creates 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 Glen Lochy switching station is required to connect the proposed overhead line from Creag Dhubh Substation to Scottish Power Energy Networks (SPEN's) existing 275kV overhead line and subsequently to the UK electricity network. Consultation with SPEN has been continuing since the initial Consultation in September 2020, to determine the most appropriate design for the connection to the existing overhead line from Dalmally to Inverarnan, owned by SPEN.

Design updates

Following the consultation process in 2020, where Site 6 remained the Preferred Site, the location of Site 6 has been shifted by approximately 30m to the north and rotated by approximately 10 degrees. This is to accommodate the electrical equipment and provide the optimal orientation to align the towers with the existing SPEN overhead line. The change in orientation also reduces the risk of disturbance to local wildlife, by moving it further from habitats.

Technology options are being developed that will refine the area and size of the switching station with key considerations including environmental impact during both construction and operation. However at present, the current footprint stands at roughly 280m by 165m plus an extra area of roughly 60m by 30m for the control building. This gives a switching station size of 4.8 hectares. Additional land take will be required for cut and fill to tie the platform into the existing ground levels, the overhead line towers, an access track to enter the site and any landscaping. Some land take will also be required during construction for laydown, welfare and processing of material during earthworks.

Preferred location

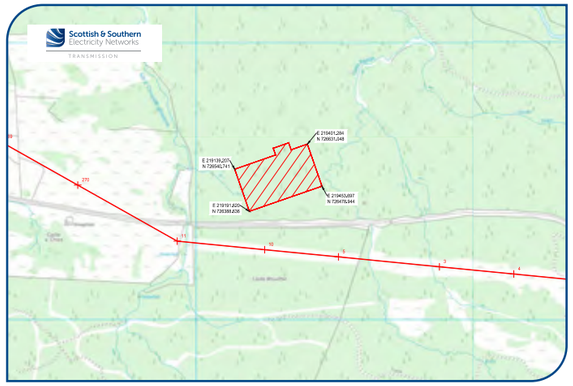
In September 2020, we shared potential locations for the Glen Lochy Switching Station site, from around 2km east of Dalmally.

Six different sites were initially identified, (although Site 5 was discounted due to technical and environmental constraints). Through analysis of the environmental and engineering constraints Site 6 was identified as the preferred option.

Next Steps

The new Site 6 location will be taken forward to Environmental Impact Assessment (EIA) screening in Summer 2021, parallel to this consultation process. We will then commence formal consultation and submit an application for consent under the Town and Country Planning (Scotland) Act 1997.

The preferred location for the Glen Lochy Switching Station will be reviewed considering comments received during this consultation process, as well as further surveys and site configuration design work.



6. Creag Dhubh Substation

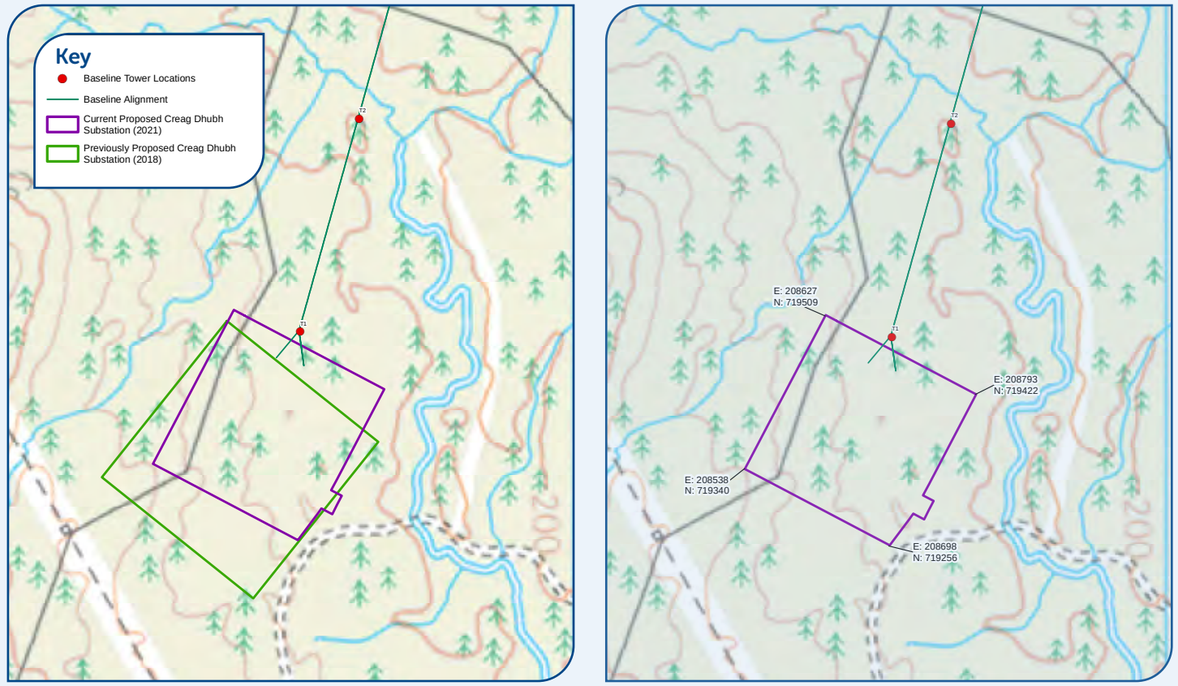
The Creag Dhubh substation is required for the connection of the proposed overhead line to the existing network. The substation will connect onto the existing 132kV network between Inveraray and Taynuilt and will also connect to the proposed Glen Lochy Switching Station via a new overhead line, to allow connection to the wider electricity network.

We've been consulting on the Creag Dhubh substation location since 2016, where the preferred substation search area was provided during Consultation Events held in March of that year.

Following the site selection process two sites were initially identified for further survey and presented during consultation events in October 2016. However site investigations identified significant volumes of environmentally sensitive and technically challenging peatland, meaning further site selection within the search area would be required to arrive at the preferred site. The selection of the preferred site was undertaken as a combination of the environment, engineering and cost assessment scoring and the preferred option selected was taken forward for consultation and detailed design in March 2018.

Design Updates

Since the consultation events in 2018, the preferred site location has undergone further assessment resulting in minor changes taking into consideration key constraints. As such, the site has moved approximately 30m to the north:

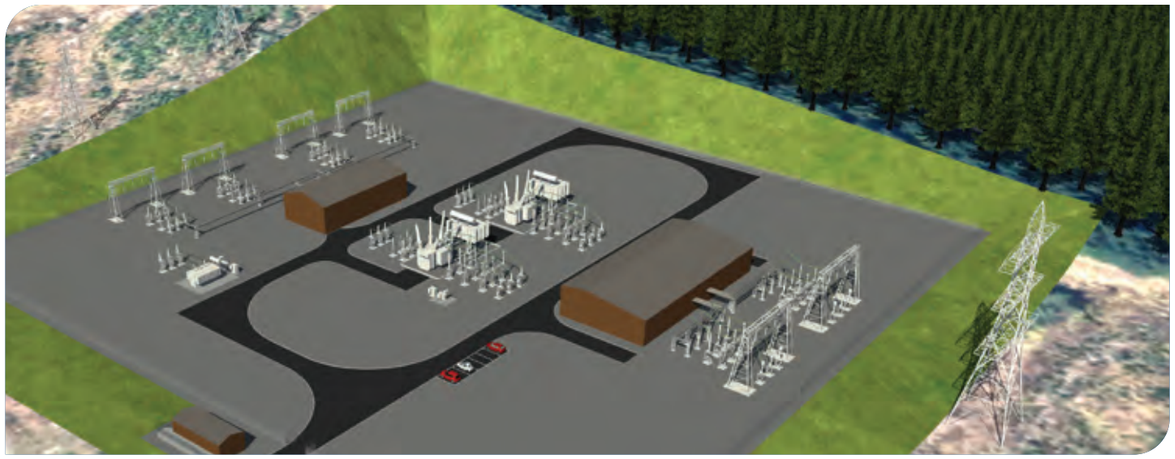


Creag Dhubh – Dalmally 275kV Connection

Substation Details

- To allow for a reduced substation surface area, gas insulated switchgear (GIS) has been chosen rather than air insulated switchgear (AIS).
- One side of the substation will consist of a 275kV double busbar GIS, housed in the larger of the two main buildings and will include connection of two 275kV overhead line bays. The other side will consist of 132kV double busbar GIS, housed in the smaller of the two main buildings and will include four 132kV overhead line bays and a possible grid transformer bay.
- Sufficient space has been allowed within the current design to allow the phased connection of the new 275kV overhead line between Creag Dhubh and Inveraray with the aim of minimising impact to customers.
- Both sets of GIS will have two bays to connect to the centrally located supergrid transformers which sit between the two buildings. The 275/132kV supergrid transformers (SGT) will be rated at 480 MVA.

At present, the current footprint stands at roughly 190m by 200m. This gives a substation size of 3.8 hectares. Additional land take will be required for cut and fill to tie the platform into the existing ground levels, the adjacent overhead line towers, an access track to enter the site and any landscaping. Some land take will also be required during construction for laydown, welfare and processing of material during earthworks.



Visualisation of the proposed Creag Dhubh substation

Planning Application

This site is now subject to formal pre-application consultation as part of the PAN process. The PAN was submitted to Argyll and Bute Council on 10th June. As part of the pre-application process we are required to hold a main public consultation event. Due to the ongoing COVID 19 pandemic, the Government have directed that all such events must be held virtually until further notice. We have co-joined this PAN event with the stakeholder engagement for the wider project. It should be noted that the Creag Dubh PAN consultation is a statutory event and feedback on the proposals for this element should be provided on the appropriate form (see Page 37).

Next Steps

We encourage you to make comment and provide feedback on the proposals for the new Creag Dhubh substation by Friday 13th August via the feedback form, which can be found on Page 37, via the project webpage, or via email to the Community Liaison Manager. The comments received will be reviewed and responded to and where appropriate changes to the proposed development will be made prior to submission of the formal planning application to Argyll & Bute Council in Autumn 2021. At that time, comments of support or objection can be made directly to the council as part of the statutory application process. At this time all comments should be directed to SSEN Transmission and not to the Council.

Creag Dhubh - Inveraray 275kV Overhead Line

1. About the project

Project Need

SSEN Transmission has seen a significant increase in generator connection applications in Argyll and Kintyre, with over 600MW total generation having applied for a connection to the network in the region in the last 18 months.

This increase in new renewable generation, led predominantly by onshore wind, has triggered the requirement for further reinforcement of the transmission network in the region beyond that already under construction which collectively make up our Argyll and Kintyre 275kV Strategy.

Part of this strategy involves the newly proposed Creag Dhubh - Inveraray 275kV Overhead Line project, which would see between 8-12 km of new 275kV overhead line constructed between the proposed new substation at Creag Dhubh, and a connection point on to the Inveraray to Crossaig overhead line. It will initially be operated at 132kV, but will be capable of 275kV operation, once the associated transmission network connected substations to the south have been upgraded to 275kV capability.

The existing 132kV overhead line between Inveraray and the proposed new Creag Dhubh substation will be removed following installation of the replacement line.

During the construction of the replacement overhead line, we will need to maintain the local electricity supply, and therefore are required to build new towers at alternative locations to the existing towers.

Consultation on the Preferred Route

To facilitate the overhead line connection between Creag Dhubh substation and Inveraray we have identified six potential Route Options for the overhead line. As part of this consultation exercise, we are seeking stakeholder comments on our Preferred Route Option prior to carrying out further project design.

Project Timeline

July 2021

- Preferred Route Public Consultation

Autumn 2021

- Preferred Alignment Public Consultation

Summer 2022

- Development Consents Applications

Winter 2023

- Anticipated Construction Start

Spring 2025

- Anticipated Construction Completion

*Please note that dates are indicative and subject to change dependent on outcomes of consultation

Creag Dhubh - Inveraray 275kV Overhead Line

2. Preferred Technology

Overhead Line

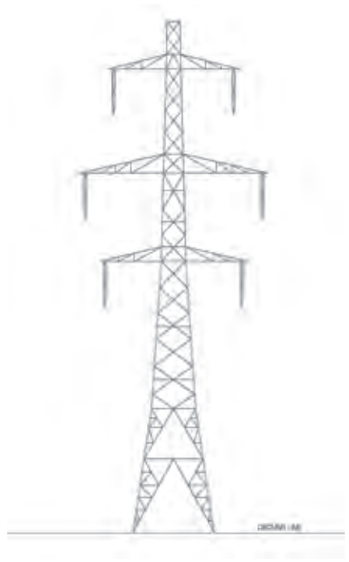
The proposed new 275kV overhead line will replace the existing 132kV overhead line between Inveraray switching station and the proposed Creag Dhubh substation, connecting at Creag Dhubh. The existing line will be decommissioned and removed upon completion of the new line. The remaining 132kV overhead line from Creag Dhubh substation to Taynuilt will not be altered during this project.

The proposed overhead line will consist of towers which are typical for the UK; lattice steel structures with six arms. Each of these arms will carry two electrical wires using an insulated unit. To provide protection from lightning, a single earthwire is attached to the top of the tower. This traditional arrangement is often described as a double circuit arrangement, because each side of the tower carries a single electrical circuit.

In order to accommodate future increases of renewable generation, it is necessary to increase the operating voltage from 132kV to 275kV. As a result of this, the new towers need to be taller which means an increase in span (the distance between each tower). This also means that alternative technologies such as wooden pole or composite pole structures, that are sometimes considered at 132kV, would not be feasible at 275kV.

The spacing between towers would vary depending on topography, altitude, and land use but would likely be between 300m to 350m. Permanent access tracks are required to any angle and terminal tower locations, with temporary access tracks required to access all other towers. At this stage, it has been assumed that towers would be a maximum of 60 m above ground level, with a typical average tower height of 50m above ground level.

The project is still however at the early design stage and any approximations regarding heights, span and tower numbers will be clarified during the next stage of design.



Existing tower height: **Approx. 27m**
New tower height: **Approx. 50m**

Existing tower span: **Approx. 255m**
New tower span: **Approx. 300-350m**

Existing number of towers to be removed: **35**
Number of replacement towers: **Approx. 30**

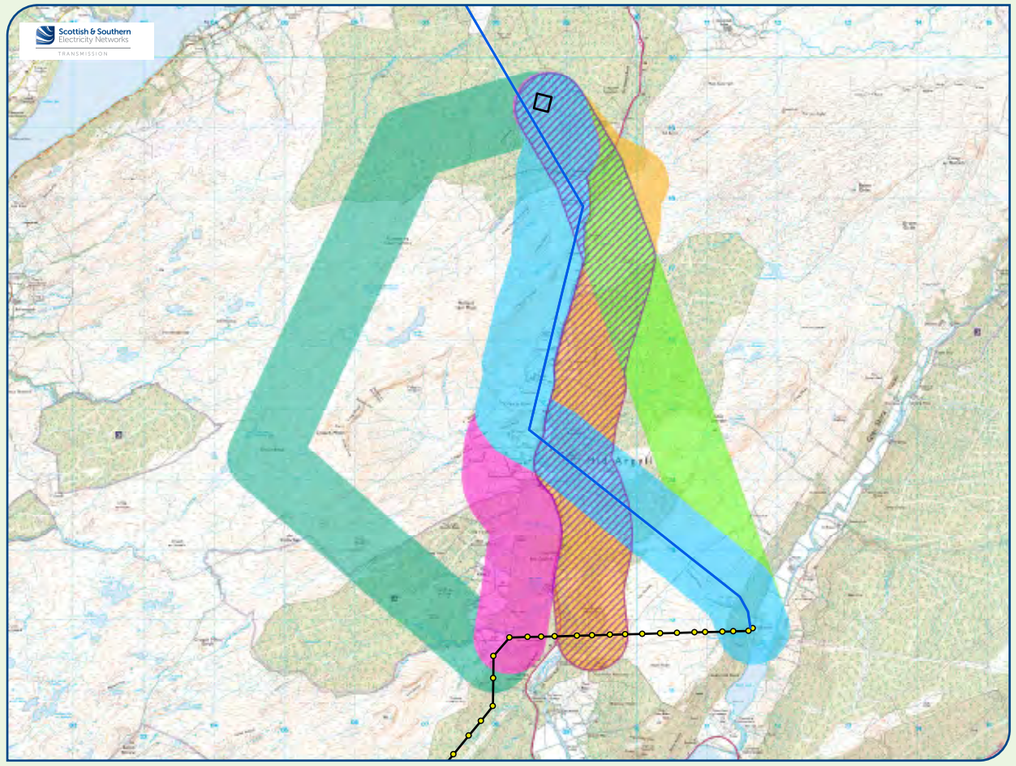
3. Routing Options Map

Study Area

A Study Area was defined by the existing 132kV overhead line between the proposed Creag Dhubh substation and a connection point on the recently constructed Inveraray to Crossaig overhead line to the north of Inveraray.

The north western boundary of the Study Area follows the southern shore of Loch Awe to the north of Cladich while the south eastern boundary roughly runs along the southern edge of Glen Shira to Inveraray. This allowed a range of Route Options and tie-in locations to be analysed.

Following on from this, six potential Route Options to connect the Inveraray to Crossaig overhead line with the proposed Creag Dhubh substation were developed, taking into account the physical, environmental and amenity constraints.
These are shown on the map below.



Key

- Proposed Creag Dhubh Substation
- 132kV OHL from Inveraray to Taynuilt
- Inveraray – Crossaig OHL
- Inveraray – Crossaig Towers

Route Option Buffer (500 m)

- A
- B
- C
- D
- E
- Preferred Route Option DE Buffer (500 m)

Creag Dhubh - Inveraray 275kV Overhead Line

4. Routing Options Analysis

Route Option A:

Overhead Line from Balantyre Wood to the Proposed Creag Dhubh Substation

- Requires crossing the existing 132kV overhead line and proposed Blarghour Wind Farm site, but does not cross the A819.
- Properties/buildings within Route are sparsely laid out.
- Avoids intersecting with the Glen Etive and Glen Fyne Special Protection Area (SPA).
- Likely to be highly constrained by extensive priority peatland habitat and high potential to impact on Schedule 1 birds.
- Impacts on visual amenity likely to be more extensive, and potentially impact on some higher sensitivity areas such as the western shore of Loch Awe.
- Longest Route Option at approximately 12km.
- Has the highest elevations with a maximum elevation of 538m.
- Highest cost Route Option.

Route Option B:

Overhead Line from Balantyre Wood to the Proposed Creag Dhubh Substation

- Would cross existing overhead line once and proposed Blarghour Wind Farm access track, doesn't cross A819 and has the least minor crossings.
- Between 2-5% of the Route Option within the 1 in 200-year flood zone.
- Substantially more properties within Route Option than other options.
- Space for tower Alignments limited due to very steep, rocky terrain, proximity of residences and the proximity of the existing line, therefore, mitigating other effects could be difficult.
- Lowest number of recorded golden eagle flights.
- Would avoid likely significant effects during construction through avoiding interactions with the water environment and majority of peatland.
- High potential to interact with Private Water Supplies which could require micrositing or further mitigation.
- Potential to result in the loss of 21.6 ha of Ancient Woodland (larger than any other option).
- Passes through well-preserved pre-Improvement townships at 'Drimfern' and 'South Tullich', that would be difficult to avoid.
- Second lowest cost of the five Route Options.

4. Routing Options Analysis

Route Option C:

Overhead Line from Inveraray Substation to the Proposed Creag Dhubh Substation

- Crosses existing overhead line, the A819 and Ladyfield plantation woodland, an area with potential to contain unexploded ordnance (UXO) associated with historic use as a firing range.
- Has between 2-5% of the Route Option within the 1 in 200-year flood zone.
- Second highest number of properties within Route Option.
- Space for tower Alignments limited due to very steep, rocky terrain, proximity of residences and the proximity of the existing line. Therefore, mitigating other effects could be difficult.
- Smallest loss of Ancient Woodland and long-established woodland (depending on Alignment) as well as second lowest area of commercial forestry lost.
- Second lowest number of recorded golden eagle flights.
- High potential for Route to interact with Private Water Supplies.
- Would require crossing the River Aray and passes through well-preserved pre-Improvement townships at 'Drimfern' and 'South Tullich', that would be difficult to avoid.
- Second highest total cost of the five Route Options.

Route Option D:

Overhead Line from Carloonan to the Proposed Creag Dhubh Substation

- Crosses the existing 132kV overhead line once and the A819, passes through Ladyfield plantation woodland.
- Between 2-5% within the 1 in 200-year flood zone and runs through the second lowest area of peatland.
- Properties/buildings are sparsely laid out.
- High potential to be constrained as it intersects the Glen Etive and Glen Fyne SPA.
- Potential to compromise conservation status of Schedule 1 birds, however, area of the Glen Etive and Glen Fyne SPA intersected by this option has comparatively low levels of golden eagle activity.
- Least impact on visual receptors as could be accommodated within the enclosed glen landscape.
- Passes through fewer areas of open habitat so may have fewer interactions with watercourses.
- Second greatest loss of Ancient Woodland and commercial plantation, potential implications to downstream hydrology.

Route Option E:

Overhead Line from Inveraray Substation to the Proposed Creag Dhubh Substation

- Wouldn't cross existing overhead line but would cross A819 and Ladyfield plantation woodland.
- No properties within this Route Option.
- Runs through second largest area of peatland.
- Second highest elevation, after Route Option A.
- Has high potential to be constrained as intersects the Glen Etive and Glen Fyne Special Protection Area.
- Considered likely to compromise the conservation status of Schedule 1 birds, however, passes through fewer areas of open habitat so may have fewer interactions with watercourses.
- Has the lowest total cost of the five Route Options.

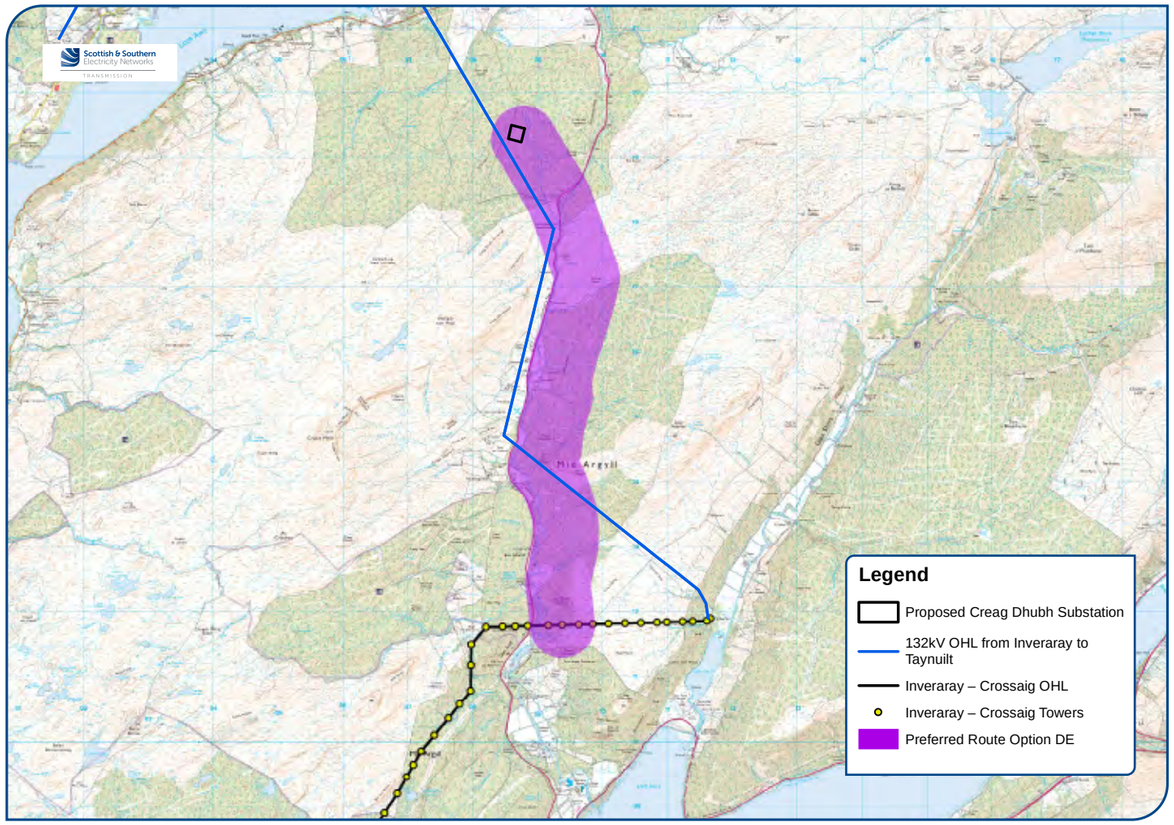
Creag Dhubh - Inveraray 275kV Overhead Line

5. Our Preferred Route Option

Route Option DE (Preferred):

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. Through analysis of the five Route Options, taking account of the factors listed above, a combination of Route Options D and E was considered the optimum solution. This Route Option DE follows Route Option D in the south from Inveraray to where it intersects Route Option E, then follows Route E to the Creag Dhubh substation. Therefore, Route Option DE has been identified as our Preferred Route.

This option intersects the Glen Etive and Glen Fyne Special Protection Area in the north but avoids the areas within the Study Area with the highest density of protected bird flight activity. It also appears to pass through fewer areas of open habitat so may have fewer interactions with wetlands. This does however mean a greater area of forestry felling may be required, which has potential implications to downstream hydrology. It will have the second greatest loss of Ancient Woodland and commercial plantation, however, would have the least impact on visual receptors as the Route could be within the enclosed glen landscape, therefore, forestry and woodland would provide a high degree of screening of the central and southern sections.



6. Red Amber Green (RAG) Charts

To demonstrate the full extent of analysis undertaken on the six 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

Environmental	Route Option					
Natural Heritage	**A**	**B**	**C**	**D**	**E**	**DE**
European Designated Sites-Ornithology						
Designated Sites-Ancient Woodland						
Regional Designations						
Protected Species						
Habitats						
Schedule 1 Birds						
Birds of Conservation Concern						
Hydrology / Geology						
Cultural Heritage	**A**	**B**	**C**	**D**	**E**	**DE**
Designations						
Cultural Heritage Assets						
People	**A**	**B**	**C**	**D**	**E**	**DE**
Proximity to Dwellings						
Landscape and Visual	**A**	**B**	**C**	**D**	**E**	**DE**
Designations						
Character						
Visual						
Land Use	**A**	**B**	**C**	**D**	**E**	**DE**
Agriculture						
Forestry						
Recreation						
Planning	**A**	**B**	**C**	**D**	**E**	**DE**
Policy						
Proposals						

RAG Impact Rating- Engineering

Engineering	Route Option					
Infrastructure crossings	**A**	**B**	**C**	**D**	**E**	**DE**
Major Crossings						
Minor Roads						
Environmental Design	**A**	**B**	**C**	**D**	**E**	**DE**
Elevation						
Contaminated Land						
Flooding						
Ground Condition	**A**	**B**	**C**	**D**	**E**	**DE**
Terrain						
Carbon & Peatland						
Proximity	**A**	**B**	**C**	**D**	**E**	**DE**
Clearance						
Windfarms						
Communication Masts						
Additional Consideration	**A**	**B**	**C**	**D**	**E**	**DE**
Route length						
Unexploded rounds						

RAG Impact Rating- Cost

Cost	Route Option					
	A	**B**	**C**	**D**	**E**	**DE**
Capital						
Diversions						
Public Road Improvement						
Tree Felling						
Land Assembly						
Consent Mitigations						
Inspections						
Maintenance						
Total Cost						

Argyll and Kintyre 275kV Substations

1. About the project

Project Need

Due to the projected increase in renewable energy generation in Argyll, a need has been identified for the upgrade and reinforcement of the electricity transmission network on the Argyll peninsula to ensure supply and support the transition to net zero emissions.

As described during the development process for the Inveraray – Crossaig overhead line rebuild, the replacement overhead line is being built at a higher 275kV voltage, initially operating at 132kV between Inveraray and Crossaig. As future renewable generation requirements connect to the electricity network and the operating voltage is required to increase to 275kV, substations along the route will also require to be replaced in order to accommodate this increase.

Project overview:

We are therefore proposing to construct and operate four (4) new 275kV electricity substations at the following locations:

- in the vicinity of the existing An Suidhe substation;
- in the vicinity of the existing Crarae substation;
- in the vicinity of Craig Murrail, north of Lochgilphead; and
- in the vicinity of the existing Crossaig substation.

Once the 275kV substations are constructed, the existing 132kV An Suidhe, Crarae and Crossaig substations will be decommissioned.

A maximum area of 8 hectares (ha) has been identified for each site option, to allow for the installation of either an air-insulated substation (AIS) or a gas-insulated substation (GIS) structure, as well as allowing space for ancillary works, construction laydown areas, access requirements and potential landscaping; and an estimated maximum gantry height of 15m.

The substations would resemble the existing substations as shown in the image to the right.

What we are consulting on:
For each substation, we have identified different Site Options alongside a Preferred Site Option, for where we believe each new substation is best situated. We are seeking comments on the Preferred Site Options and any additional local knowledge of the area which may assist with further refinement.

Previous Consultation:
As part of the development of the Inveraray – Crossaig Project, in March 2016, we consulted on the design and construction of Craig Murrail substation and comments were invited from stakeholders on the proposals. The substation was not progressed due to generation requirements at the time, however increases in generation requests across the region have triggered the requirement for the substation.

This will be the first consultations undertaken for the other three substation sites.

2. Site Option Selection Process

To begin to identify potential site options for the proposed new substations, a Study Area was defined with the following parameters:

- a distance of up to 1km on either side of the Inveraray -Crossaig 275kV overhead line; and
- a distance of up to 3km from the existing substations for An Suidhe and Crarae and 20km to the north of the existing Crossaig substation.

The smaller Study Area for An Suidhe and Crarae is to reduce the extent of movement of the existing wind farm connection. For Crossaig North, a Study Area extending to south of Tarbert was considered, due to the locations of existing and potential future wind farms north of Crossaig but south of Tarbert.

Following the identification of Study Areas, a Multi-Criteria Analysis (MCA) process was undertaken which used Geographical Information Systems (GIS) to analyse available digital datasets on environmental and technical constraints.

Performance	Comparative Appraisal
Most Preferred ↓ Least Preferred	Low potential for the development to be constrained = Green
	Intermediate potential for the development to be constrained = Amber
	High potential for the development to be constrained = Red

You can read the full Site Option analysis within our Consultation Document, but for ease, we've included maps indicating the locations of each Substation Site Option (highlighting our Preferred Site Option) along with subsequent RAG tables in the following pages.

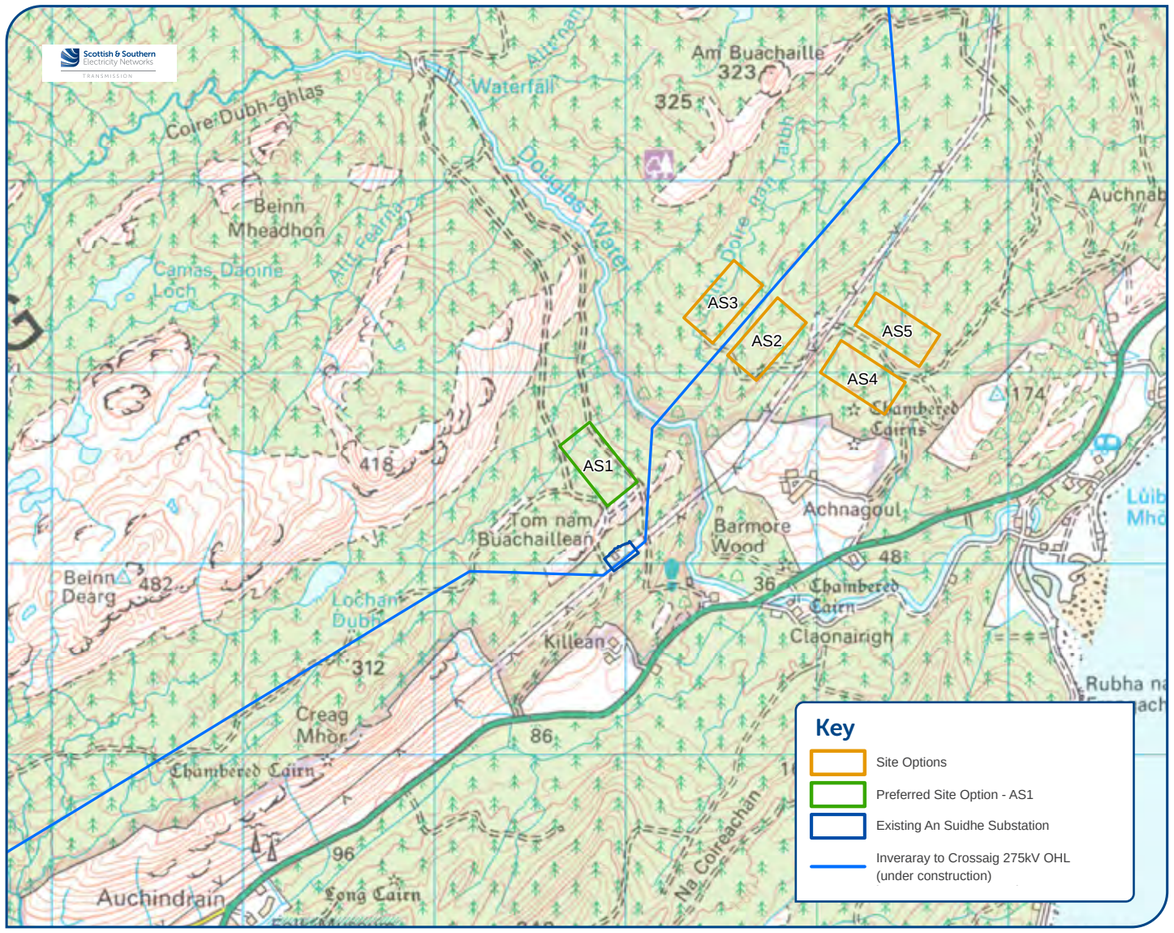
The outputs of the MCA are heat maps which indicate the least constrained locations for the Site Options.

The aim was to include sites adjacent to the existing substations to allow for extension; where this has not occurred, it is because there is insufficient unconstrained area for an extension. Within the Study Area, five Site Options for An Suidhe, six Site Options for Crarae and seven Site Options for Crossaig North have been identified.

A Red/Amber/Green (RAG) rating was then applied to each, with RED indicating a high potential for constraint, amber indicating intermediate potential for constraint and GREEN indicating low potential for constraint. Please note that a RED or AMBER rating does not necessarily mean that the Site Option would be unacceptable in planning terms but indicates the need for further consideration of the potential to mitigate potentially adverse effects.

Argyll and Kintyre 275kV Substations

3. An Suidhe Map



4. An Suidhe Assessment

RAG Impact Rating - Environmental

Environmental	Site options				
Natural Heritage	**AS1**	**AS2**	**AS3**	**AS4**	**AS5**
Designations					
Protected Species					
Habitats					
Ornithology					
Hydrology					
Geology					
Cultural Heritage					
Designated Heritage Assets					
Non-designated Heritage Assets					
People					
Proximity to Dwellings					
Landscape and Visual					
Designations					
Character					
Visual					
Land Use					
Agriculture					
Forestry					
Recreation					
Planning					
Policy					
Proposals					

RAG Impact Rating - Engineering

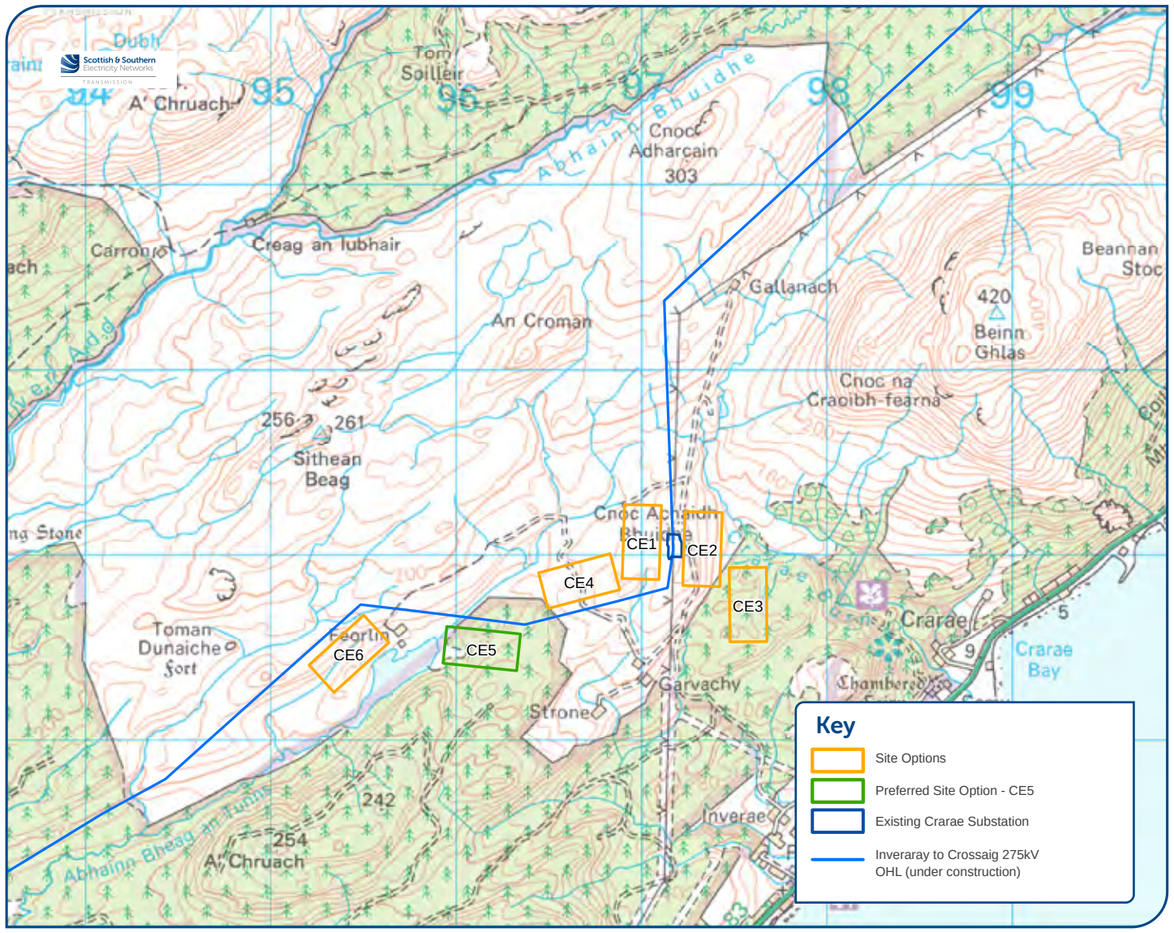
Engineering	Site options				
Access & Connectivity	**AS1**	**AS2**	**AS3**	**AS4**	**AS5**
Construction Access					
Operation & Maintenance					
Existing Circuits/Networks					
Future Development Possibilities					
Interface with SSEN Distribution					
DNO Connection					
Footprint Requirements					
Technology					
Adjacent Land Use					
Space Availability					
Hazards					
Unique Hazards					
Existing Utilities					
Ground Condtions					
Topography					
Geology					
Environmental Conditions					
Elevation					
Salt Pollution					
Flooding					
Carbon Footprint					
SF6					
Contaminated Land					
Noise (proximity to properties					

Preferred Option:

Overall, Site Option AS1 is considered to be the preferred site on the basis of least potential for environmental, technical and cost constraints.

Argyll and Kintyre 275kV Substations

5. Crarae Map



6. Crarae Assessment

RAG Impact Rating - Environmental

Environmental	Site options					
Natural Heritage	**CE1**	**CE2**	**CE3**	**CE4**	**CE5**	**CE6**
Designations						
Protected Species						
Habitats						
Ornithology						
Hydrology						
Geology						
Cultural Heritage						
Designated Heritage Assets						
Non-designated Heritage Assets						
People						
Proximity to Dwellings						
Landscape and Visual						
Designations						
Character						
Visual						
Land Use						
Agriculture						
Forestry						
Recreation						
Planning						
Policy						
Proposals						

RAG Impact Rating - Engineering

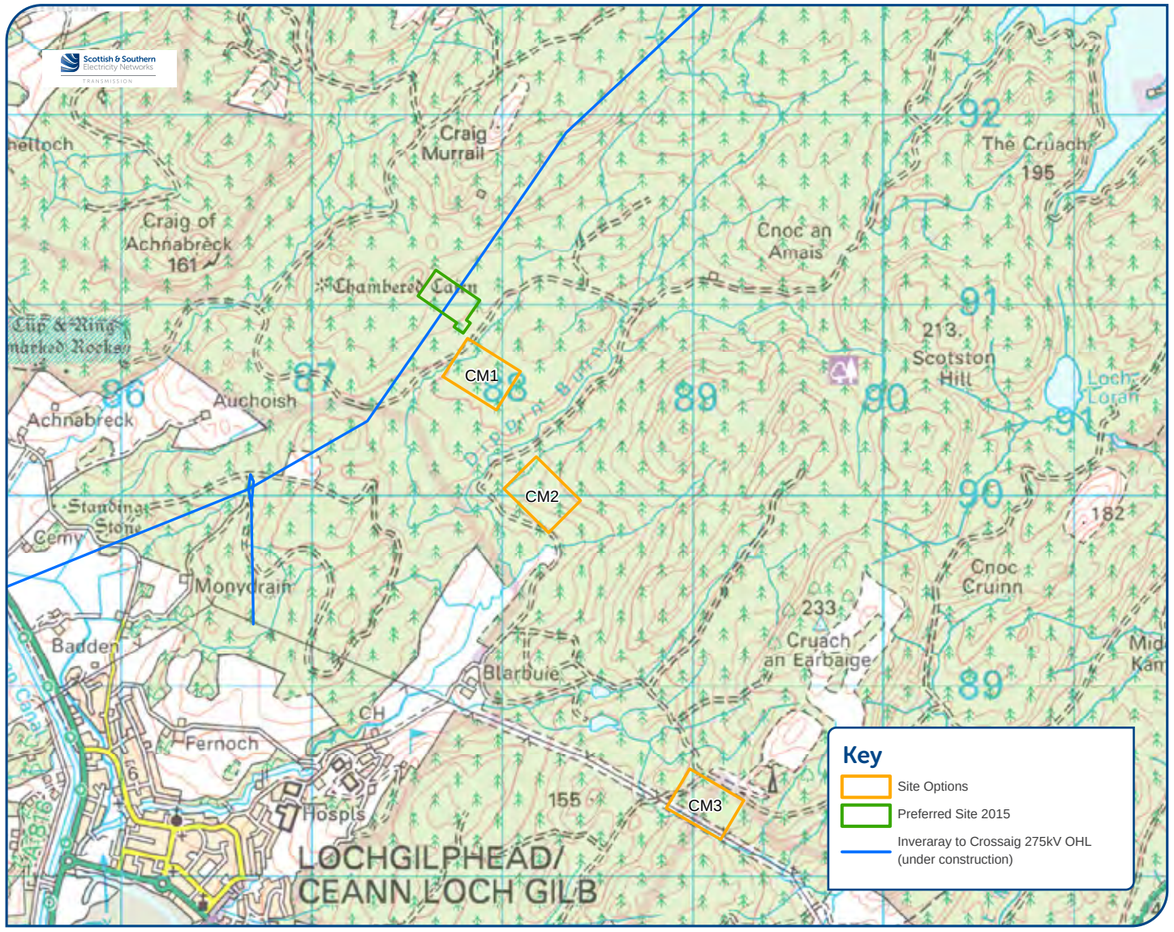
Engineering	Site options					
Access & Connectivity	**CE1**	**CE2**	**CE3**	**CE4**	**CE5**	**CE6**
Construction Access						
Operation & Maintenance						
Existing Circuits/Networks						
Future Development Possibilities						
Interface with SSEN Distribution						
DNO Connection						
Footprint Requirements						
Technology						
Adjacent Land Use						
Space Availability						
Hazards						
Unique Hazards						
Existing Utilities						
Ground Condtions						
Topography						
Geology						
Environmental Conditions						
Elevation						
Salt Pollution						
Flooding						
Carbon Footprint						
SF6						
Contaminated Land						
Noise (proximity to properties						

Preferred Option:

Overall, Site Option CE5 is considered to be the preferred site on the basis of least potential for environmental and technical constraints.

Argyll and Kintyre 275kV Substations

7. Craig Murrail Map



8. Craig Murrail Assessment

RAG Impact Rating - Environmental

Environmental	Site options				
Natural Heritage	**preferred Site 2015**	**CM1**	**CM2**	**CM3**	**CM4**
Designations					
Protected Species					
Habitats					
Ornithology					
Hydrology					
Geology					
Cultural Heritage					
Designated Heritage Assets					
Non-designated Heritage Assets					
People					
Proximity to Dwellings					
Landscape and Visual					
Designations					
Character					
Visual					
Land Use					
Agriculture					
Forestry					
Recreation					
Planning					
Policy					
Proposals					

RAG Impact Rating - Engineering

Engineering	Site options				
	PS 2015	**CM1**	**CM2**	**CM3**	**CM4**
Health and Safety					
Construction timescales					
Access and connectivity					
Availability					
Maintenance Requirements					
Flexibility					

Preferred Option:

Overall, the Preferred Site identified in 2015 remains the preferred site on the basis of least potential for environmental, technical and cost constraints.

Location:
Unlike the other substations being consulted on, there is not an existing Craig Murrail substation. Site Options considered for this substation are north of Lochgilphead, close to the new Inveraray – Crossaig overhead line.

History:
A site selection exercise was undertaken in 2015 for the proposed Craig Murrail substation. At that time, four substation Site Options were identified and compared. A preference for two of the four sites was identified, subject to further site investigation. Based on a civil engineering desk study, an amendment to one of the two preferred sites was made and this amended site was ultimately selected as the preferred site. Some limited further design work was undertaken; however, no site surveys were completed as the project was then put on hold.

Site Options:
In order to ensure the site selection process is completed in line with current SSEN Transmission site selection guidance, an additional Site Selection Study has been undertaken in respect of the five substation Site Options considered in 2015. Again, a Red/Amber/Green (RAG) rating was then applied to each criteria, as demonstrated above.

Argyll and Kintyre 275kV Substations

9. Crossaig North Map

10. Crossaig North Assessment

RAG Impact Rating - Environmental

Environmental	Site options						
Natural Heritage	**CG1**	**CG2**	**CG3**	**CG4**	**CG5**	**CG6**	**CG7**
Designations							
Protected Species							
Habitats							
Ornithology							
Hydrology							
Geology							
Cultural Heritage							
Designated Heritage Assets							
Non-designated Heritage Assets							
People							
Proximity to Dwellings							
Landscape and Visual							
Designations							
Character							
Visual							
Land Use							
Agriculture							
Forestry							
Recreation							
Planning							
Policy							
Proposals							

RAG Impact Rating - Engineering

Engineering	Site options						
Access & Connectivity	**CG1**	**CG2**	**CG3**	**CG4**	**CG5**	**CG6**	**CG7**
Construction Access							
Operation & Maintenance							
Existing Circuits/ Networks							
Future Development Possibilities							
Interface with SSEN Distribution							
DNO Connection							
Footprint Requirements							
Technology							
Adjacent Land Use							
Space Availability							
Hazards							
Unique Hazards							
Existing Utilities							
Ground Condtions							
Topography							
Geology							
Environmental Conditions							
Elevation							
Salt Pollution							
Flooding							
Carbon Footprint							
SF6							
Contaminated Land							
Noise (proximity to properties							

Preferred Option:

Overall, Site Option CG2 (immediately adjacent to the existing Crossaig Substation) is considered the be the preferred site on the basis of least potential for environmental, technical and cost constraints.

What else is happening in Argyll?

Alongside the Argyll 275kV Strategy, SSEN Transmission are currently developing and constructing additional reinforcement, generation connection and VISTA projects across Argyll.

We've provided a list of our SSEN Transmission projects in the region below, alongside a short description and links to where you can access further information.

Windfarm Connection Projects

As mentioned, the Argyll and Kintyre 275kV Strategy is required for the facilitation of renewable generation in Argyll. We also have a requirement to connect this renewable generation to our upgraded infrastructure. We plan to begin consulting on the options for the following windfarm connection projects as follows, where further information will be shared:

Sheirdrim Wind Farm Connection: This project aims to connect the proposed Sheirdrim Wind Farm to the existing Crossaig Substation via approximately 10km of overhead line by Spring 2025. Public consultation on the preferred route for the Overhead Line (OHL) is targeted for Winter 2021.

Blarghour Wind Farm Connection: This project aims to connect the proposed Blarghour Wind Farm to the new Creag Dhubh Substation via approximately 10km of overhead line by Autumn/Winter 2025. Consultation on the preferred route for the OHL is targeted for Winter 2021.

Earraghail Wind Farm: The project aims to connect the Earraghail Wind Farm development via c3km of 275kV Double Circuit Overhead Line onto the existing Craig Murrail – Crossaig Overhead Line for October 2025. Consultation on the preferred route for the Overhead Line will be undertaken in Spring 2022.

Tangy 4 Wind Farm: The project aims to connect the Tangy 4 Wind Farm development via c22km of 132kV Single Circuit Overhead Line onto the existing Crossaig – Carradale Overhead Line for October 2026. Consultation on the preferred corridor for the Overhead Line will be undertaken in Spring 2022.

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.

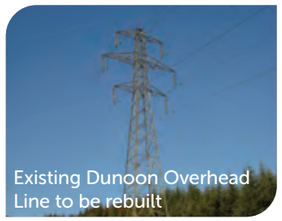
Sloy Power Station Substation Rebuild

Transmission assets at Sloy Power Station Substation are reaching the end of their working life and need to be replaced. This project includes a new substation near the existing one at the power station, 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 is expected to be shared later this year.

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 on Phase 1 of the project (Inveraray – Port Ann) is drawing to completion whilst construction on Phase 2 commenced in May 2021. Find out more: ssen-transmission.co.uk/projects/inveraray-crossaig


Carradale Substation


Existing Dunoon Overhead Line to be rebuilt

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 units to enable this upgraded connection. Work is ongoing and due to be completed by the end of 2022. Find out more: ssen-transmission.co.uk/projects/carradale-substation

Dunoon Overhead Line Rebuild

The aim of this project is to replace the existing overhead transmission network line which connects Dunoon to the wider national grid. The existing overhead line is supported by an old design suite of metal lattice towers (often referred to as pylons) which are coming toward the end of their operational life. The project is currently in development and consultation on the preferred route alignment is taking place this year. Find out more: ssen-transmission.co.uk/projects/dunoon/

Glen Falloch and Sloy VISTA

As part of the SSEN Transmission's VISTA (Visual Impact of Scottish Transmission Assets) initiative, we are installing a 132kV twin cable section of the existing 132kV double overhead line circuit at Sloy and Glen Falloch. Construction commenced earlier this year and 26 steel towers are scheduled to be removed by the end of 2021. Find out more: ssen-transmission.co.uk/projects/vista-glen-falloch-sloy

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.

We are keen to receive your views and comments with regards to the following elements of our projects and will be seeking feedback from members of the public on this exhibition until **Friday 13th August 2021**. You will find the appropriate feedback forms at the end of this booklet:

Creag Dhubh - Dalmally 275kV Connection (1)

- **We're inviting your comments regarding our proposed overhead line route alignment between Tower 28 (on the preferred 2018 alignment) and the Proposed Glen Lochy switching station.**
- **We'd also welcome your views regarding the minor location changes to the preferred Glen Lochy Switching Station site.**
- **For Creag Dhubh Substation, we shall shortly be submitting a Town and Country Planning Application and are seeking formal comments ahead of submitting an application to Argyll and Bute Council. Please find more information below.**

Creag Dhubh - Inveraray 275kV Overhead Line (2)

- **We are seeking stakeholder comments on our Preferred Route Option for the replacement Creag Dhubh – Inveraray 275kV overhead line, prior to carrying out further project design.**

Argyll and Kintyre 275kV Substations (3)

- **We're inviting your views regarding our preferred options for each of the 4 substations and are seeking any additional local knowledge of the area which may assist with further refinement.**

Creag Dhubh Substation – PAN
In regard to the Creag Dhubh Substation (Creag Dhubh – Dalmally 275kv Connection), general comments on the proposals can be made throughout the 12-week period to 02 September 2021.
To provide feedback on the proposal or to gain further information on the project, please fill in a Creag Dhubh Substation feedback form, visit our virtual consultation events or contact our Community Liaison Manager.

Once planning applications have been submitted there will be an opportunity for the public to make formal representations to Argyll and Bute Council for the proposed Creag Dhubh Substation before a decision is made on our application.

Comments
Your views and comments can be provided to the project team by completing the feedback forms within this booklet, via the project webpage, or by writing to our Community Liaison Manager. All received feedback will be assessed and the proposed options adapted where necessary.

How do I have my say?

Join our virtual consultation

Our virtual consultation room will launch on the week commencing 12th July, where information regarding our proposals will be available alongside opportunities to join the project team for interactive text chat sessions. A link to view the virtual consultation platform will be available on the Argyll and Kintyre 275kV Strategy project webpage:
www.ssen-transmission.co.uk/projects/argyll-and-kintyre-275kv-strategy/

Our live chat sessions will be held at the following times:

- **Wednesday 14th July: 10am-1pm & 5pm-7pm**
- **Thursday 15th July: 10am-1pm & 5pm-7pm**
- **Thursday 29th July: 10am-1pm & 5pm -7pm**

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

If you are unable to join the 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.

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

All feedback received will be collated, reviewed and included in the Report on Consultation, along with SSEN Transmission's responses to the topics raised. The report will be published later this year and will be available to view on the project webpage.

Keep in touch

If you have any questions or require further information regarding SSEN Transmission's Argyll and Kintyre 275kV Strategy, please do not hesitate to contact the project Community Liaison Manger:

Helen Batey

Helen.Batey@sse.com

01925 800 833 / 07778 453 993
Helen Batey, Scottish and Southern Electricity Networks, Inveralmond House, 200 Dunkeld Road, Perth, PH1 3AQ

Feedback

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

We kindly request that all comments are received by **Friday 13th August 2021.** 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. The feedback forms in this booklet can be detached and sent back, or you can fill them in online using the form 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 the Report on Consultation).

All feedback received will be collated, reviewed and included in our subsequent Report on Consultation, along with SSEN Transmission's responses to the topics raised. The report will be published later this year and will be available to view on the project webpage.

Your feedback - Creag Dhubh Substation PAN

If you prefer, the same form is available to complete online and can be found on the project webpage: **www.ssen-transmission.co.uk/projects/creag-dhubh-dalmally-275kv-connection**
Please complete in **BLOCK CAPITALS**. (Please tick one box per question only).

Q1 **Have we adequately explained the approach taken to select the preferred site for the Creag Dhubh substation?**

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

Q2 **Do you have any concerns about our preferred site for the Creag Dhubh Substation?**

Yes ☐ No ☐ If no, please provide information

Q3 **Are there any factors, or important points that should be brought to the attention of the Project Development Team regarding the Creag Dhubh substation site?**

Your Feedback - Creag Dhubh – Dalmally 275kV Connection

Overhead Line Alignment and Glen Lochy Switching Station Location

Q1 **Do the alignment options presented at this consultation respond to any concerns you had over the project? Please provide an explanation of your answer.**

Q2 **Do you agree with the preferred overhead line route alignment? (GL5)**

Yes ☐ No ☐ Unsure ☐

Q3 **If no to Q2, please indicate your preferred overhead line route alignment:**

Baseline ☐ GL1 ☐ GL2 ☐ GL3 ☐ GL4 ☐

Q4 **Which of the route alignment options presented would you consider the least preferable option for SSEN Transmission to develop? Please provide an explanation of your answer.**

Baseline ☐ GL1 ☐ GL2 ☐ GL3 ☐ GL4 ☐ GL5 ☐ None are preferred ☐

Q5 **Do you have any comments regarding the design update to the Glen Lochy Switching Station?**

Your feedback - Creag Dhubh - Inveraray 275kV Overhead Line

If you prefer, the same form is available to complete online and can be found on the project webpage: www.ssen-transmission.co.uk/projects/creag-dhubh-inveraray-275kv-overhead-line/
Please complete in **BLOCK CAPITALS**. (Please tick one box per question only).

Q1 **Has the requirement for the Creag Dhubh to Inveraray 275kV Overhead Line been clearly explained?**

Yes ☐ No ☐ If no, please provide information

Q2 **Do you agree with our Preferred Route (DE)?**

Yes ☐ No ☐ If no, please provide information

Q3 **If you do not agree with our Preferred Route, which Route do you prefer?**

ROUTE A ☐ ROUTE B ☐ ROUTE C ☐ ROUTE D ☐ ROUTE E ☐ NOT APPLICABLE ☐

Q4 **Has the rationale on the preferred technology been clearly explained (Steel Lattice Tower)?**

Yes ☐ No ☐ If no, why not?

Q5 **Do you have any comments regarding the preferred technology?**

Yes ☐ No ☐ If no, why not?

Q6 **Are there any factors, or environmental features, that you consider may have been overlooked during the Preferred Route selection process?**

Yes ☐ No ☐ If no, why not?

Your feedback - Argyll and Kintyre 275kV Substations

If you prefer, the same form is available to complete online and can be found on the project webpage: https://www.ssen-transmission.co.uk/projects/argyll-and-kintyre-275kv-substations
Please complete in **BLOCK CAPITALS.** (Please tick one box per question only)

Q1 **Has the requirement for the Argyll and Kintyre 275kV Substations been clearly explained?**

Yes ☐ No ☐ Unsure ☐

Q2 **Do you agree with our Preferred Site Option (AS1) for An Suidhe? (Please explain your answer)**

Yes ☐ No ☐ Unsure ☐

Q3 **If you do not agree with our Preferred An Suidhe Site Option, what is your preferred alternative Site Option? (Please explain your answer)**

AS2 ☐ AS3 ☐ AS4 ☐ AS5 ☐

Q4 **Do you agree with our Preferred Site Option (CE5) for Crarae?**

Yes ☐ No ☐ Unsure ☐

Q5 **If you do not agree with our Preferred Crarae Site Option, what is your preferred alternative Site Option? (Please explain your answer)**

CE1 ☐ CE2 ☐ CE3 ☐ CE4 ☐ CE6 ☐

Q6 **Do you agree with our Preferred Site Option (Preferred Site 2015) for Craig Murrail? (Please explain your answer)**

Yes ☐ No ☐ Unsure ☐

Q7 **If you do not agree with our Preferred Craig Murrail Site Option, what is your preferred alternative Site Option?**

CM1 ☐ CM2 ☐ CM3 ☐ CM4 ☐

Q8 **Do you agree with our Preferred Site Option (CG2) for Crossaig North? (Please explain your answer)**

Yes ☐ No ☐ Unsure ☐

Q9 **If you do not agree with our Preferred Crossaig North Site Option, what is your preferred alternative Site Option? (Please explain your answer)**

CG1 ☐ CG3 ☐ CG4 ☐ CG5 ☐ CG6 ☐ CG7 ☐

Q10 **Are there any factors, or environmental features, that you consider may have been overlooked during the Preferred Site Option selection process?**
Please use this space to provide any further comments regarding the project or the consultation:

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 Hydro Electric Transmission, Inveralmond House, 200 Dunkeld Road, Perth, PH1 3AQ

Email: helen.batey@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/creag-dhubh-dalmally-275kv-connection
www.ssen-transmission.co.uk/projects/creag-dhubh-inveraray-275kV-overhead-line
www.ssen-transmission.co.uk/projects/argyll-and-kintyre-275kv-strategy/

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

Scottish & Southern Electricity Networks

TRANSMISSION

SSEN Community

@ssencommunity

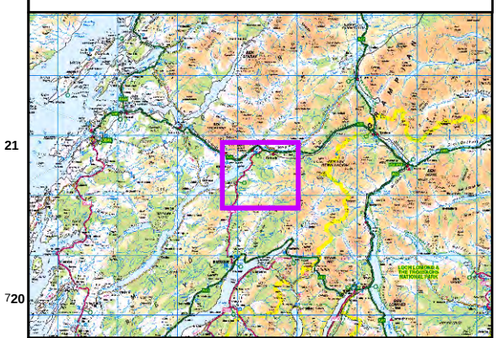
ssen-transmission.co.uk

APPENDIX 2: FIGURES

Scottish & Southern Electricity Networks
TRANSMISSION

Legend

- Preferred Tower Locations
- Preferred Alignment
- Study Area
- Preferred Switching Station, Site 6, 2020 Consultation
- Proposed Creag Dhubh Substation
- Preferred Route, Option 3, 2020 Consultation



Project No: LT000029
Project: 1700003673

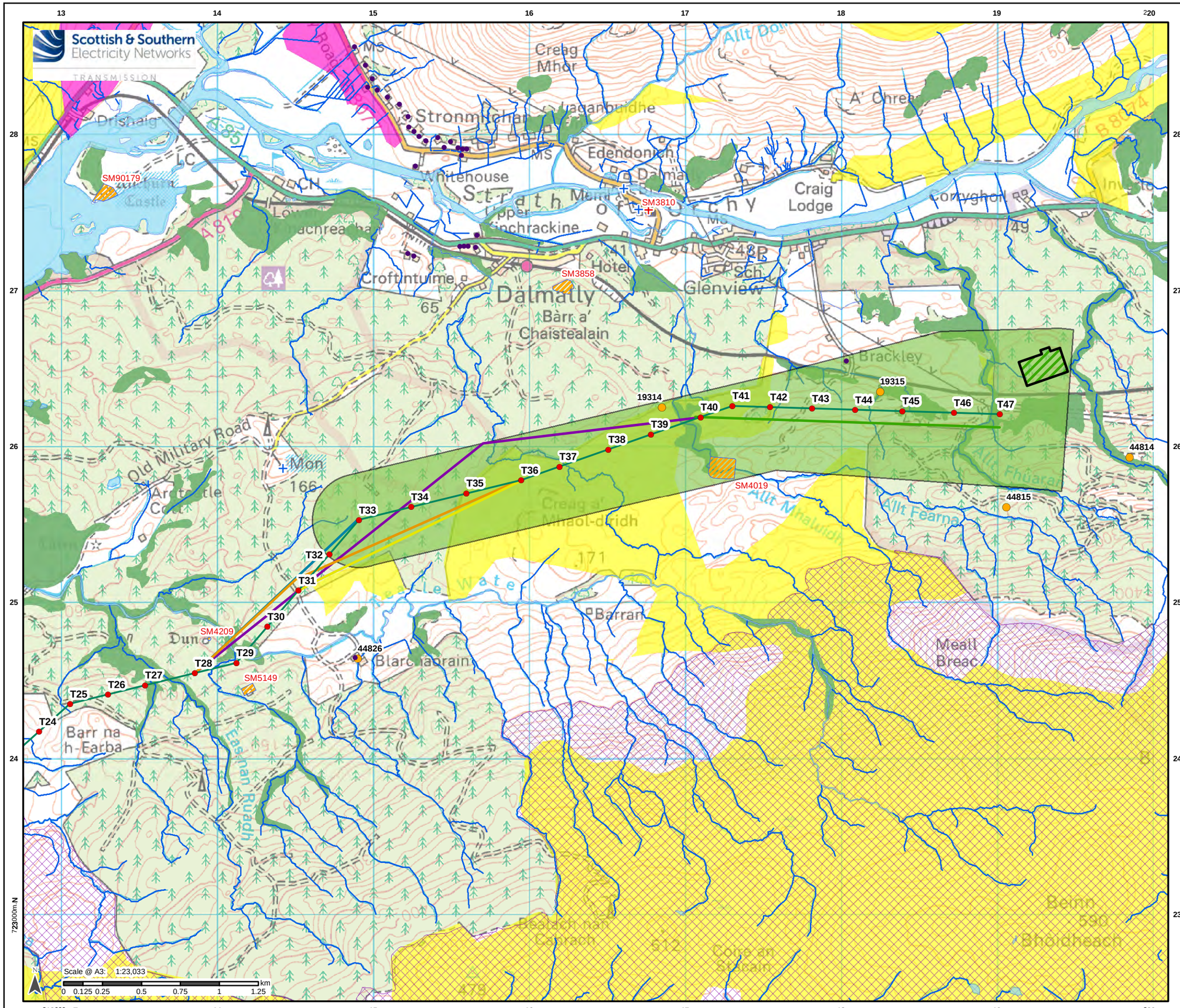
Title:
Creag Dhubh to Dalmally 275kV Connection

Figure 2.1: Preferred Alignment Location Plan

Drawn by: BM Date: 11/10/2021

Drawing: R170_3673_Fig2.1_PreferredAlignmentLocPlan_A.mxd

Scale @ A3: 1:40,000
0 0.25 0.5 1 1.5 2 2.5 km



Legend

- Baseline Tower Locations
- Baseline Alignment
- Preferred Switching Station, Site 6, 2020 Consultation
- Preferred Route, Option 3, 2020 Consultation
- Identified Properties for Assessment - Residential and Visual Amenity Assessment (RVAA)

Deviation Option

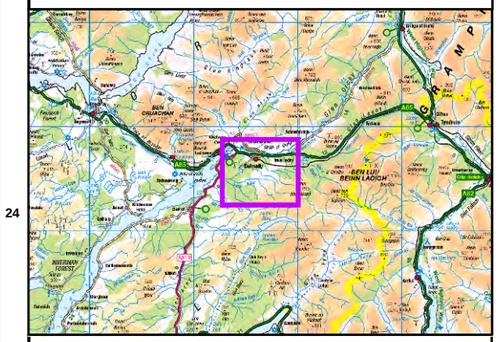
- GL1
- GL2
- GL3
- GL4
- GL5

Listed Buidling Category

- A
- B
- Cultural Heritage Site
- Scheduled Monument
- Watercourse
- Waterbody
- Ancient Woodland
- Special Protection Area

Carbon and Peatland (2016 Map v2)

- Class 1
- Class 2



Project No: LT000029

Project: 1700003673

Title:
Creag Dhubh to Dalmally 275kV Connection

Figure 3.1:
Baseline Alignment with All Deviation Options with Constraints

Drawn by: BM Date: 11/10/2021

Drawing: R170_3673_Fig3.1_Baseline_vs_AllAlignmentDeviations_Constraints_A

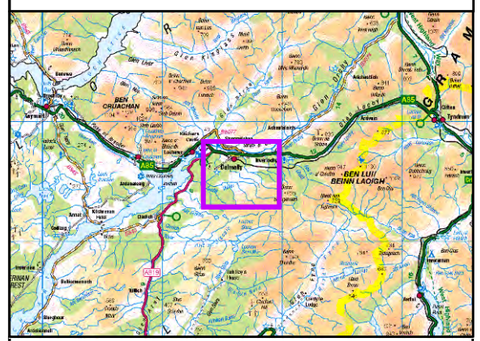
Scottish & Southern Electricity Networks
TRANSMISSION

Legend

- Baseline Tower Locations
- Baseline Alignment

Deviation Option

- GL1
- Preferred Switching Station, Site 6, 2020 Consultation
- Preferred Route, Option 3, 2020 Consultation



Project No: LT000029

Project: 1700003673

Title:
Creag Dhubh to Dalmally 275kV Connection

Figure 3.2:
LT29 Preferred Alignment with Deviation Option GL1

Drawn by: BM Date: 11/10/2021

Drawing: R170_3673_Fig3.2_DeviationGL1_A

Scale @ A3: 1:20,000

0 0.125 0.25 0.5 0.75 1 1.25 km

214000m.E 723000m.N

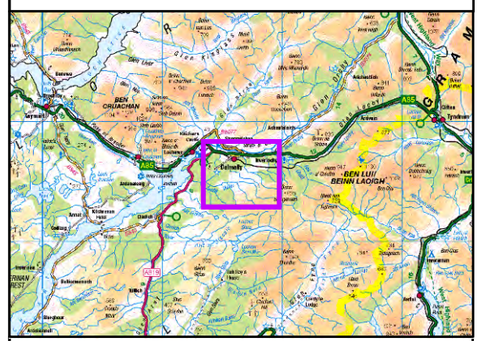
Scottish & Southern Electricity Networks
TRANSMISSION

Legend

- Baseline Tower Locations
- Baseline Alignment

Deviation Option

- GL2
- Preferred Switching Station, Site 6, 2020 Consultation
- Preferred Route, Option 3, 2020 Consultation



Project No: LT000029

Project: 1700003673

Title:
Creag Dhubh to Dalmally 275kV Connection

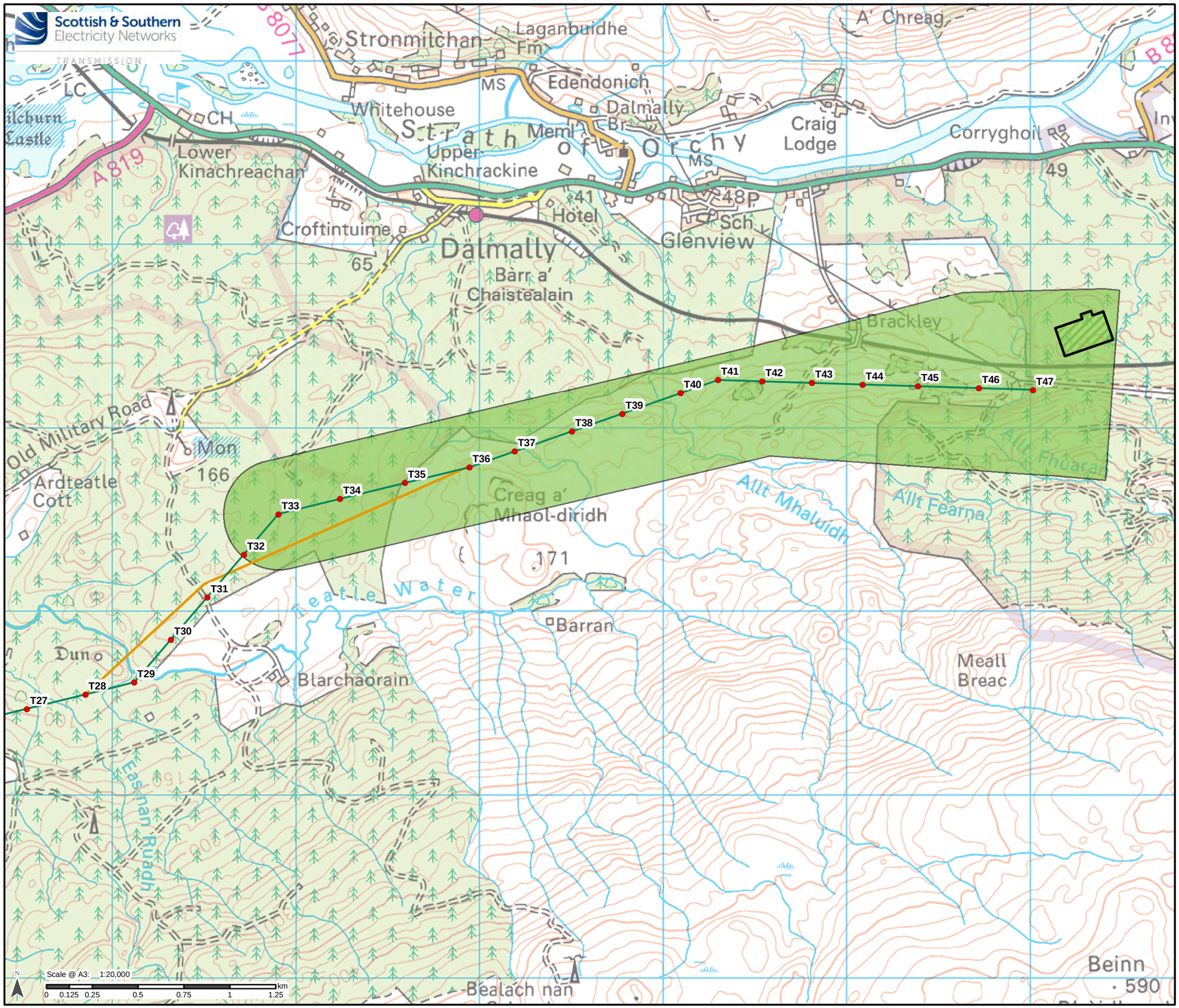
Figure 3.3:
LT29 Preferred Alignment with Deviation Option GL2

Drawn by: BM Date: 11/10/2021

Drawing: R170_3673_Fig3.3_DeviationGL2_A

Scale @ A3: 1:20,000

0 0.125 0.25 0.5 0.75 1 1.25 km

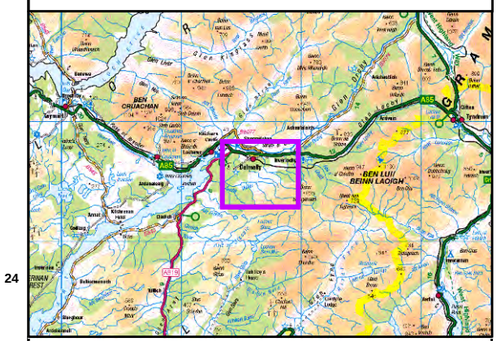


Legend

- Baseline Tower Locations
- Baseline Alignment

Deviation Option

- GL3
- Preferred Switching Station, Site 6, 2020 Consultation
- Preferred Route, Option 3, 2020 Consultation



Project No: LT000029

Project: 1700003673

Title:
Creag Dhubh to Dalmally 275kV Connection

Figure 3.4:
LT29 Preferred Alignment with Deviation Option GL3

Drawn by: BM Date: 11/10/2021

Drawing: R170_3673_Fig3.4_DeviationGL3_A

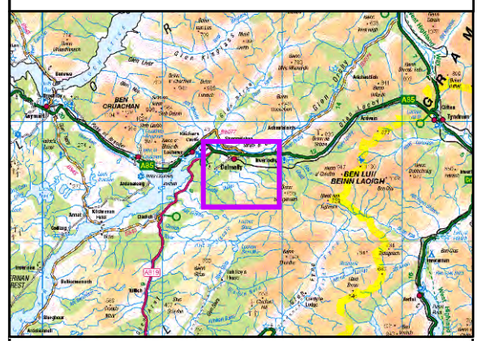
Scottish & Southern Electricity Networks
TRANSMISSION

Legend

- Baseline Tower Locations
- Baseline Alignment

Deviation Option

- GL4
- Preferred Switching Station, Site 6, 2020 Consultation
- Preferred Route, Option 3, 2020 Consultation



Project No: LT000029

Project: 1700003673

Title:
Creag Dhubh to Dalmally 275kV Connection

Figure 3.5:
LT29 Preferred Alignment with Deviation Option GL4

Drawn by: BM Date: 13/10/2021

Drawing: R170_3673_Fig3.5_DeviationGL4_A

Scale @ A3: 1:20,000

0 0.125 0.25 0.5 0.75 1 1.25 km

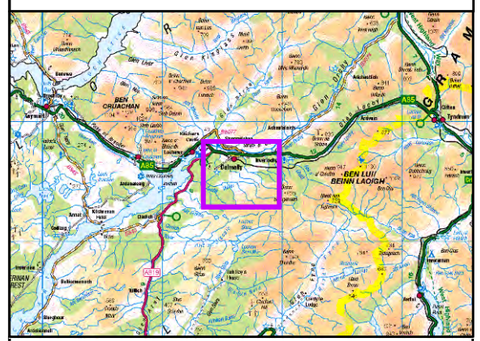
Scottish & Southern Electricity Networks
TRANSMISSION

Legend

- Baseline Tower Locations
- Baseline Alignment

Deviation Option

- GL5
- Preferred Switching Station, Site 6, 2020 Consultation
- Preferred Route, Option 3, 2020 Consultation



Project No: LT000029

Project: 1700003673

Title:
Creag Dhubh to Dalmally 275kV Connection

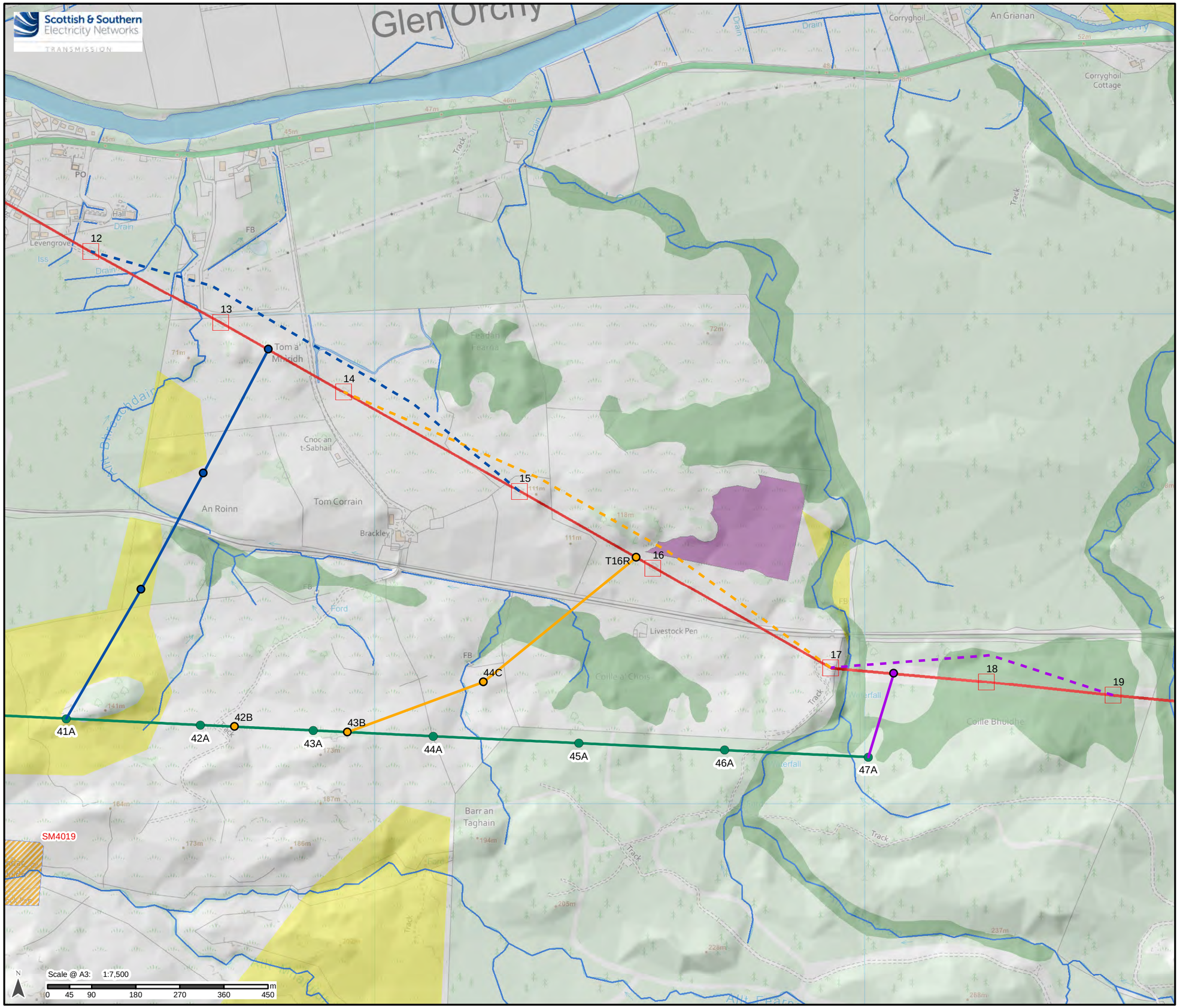
Figure 3.6:
LT29 Preferred Alignment with Deviation Option GL5

Drawn by: BM Date: 13/10/2021

Drawing: R170_3673_Fig3.6_DeviationGL5_A

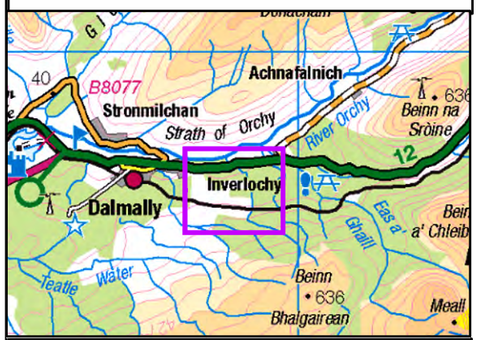
Scale @ A3: 1:20,000

0 0.125 0.25 0.5 0.75 1 1.25 km



Legend

- Option 1 Towers
- Tie In Option 1
- Temporary Diversion of North Circuit
- Option 2 Towers
- Tie In Option 2
- Temporary Diversion of North Circuit
- Option 3 Towers
- Tie In Option 3
- Temporary Diversion of North Circuit
- Preferred Tower Locations
- Existing Towers
- Preferred Alignment
- Existing 275kV Overhead Line (Scottish Power Energy Networks)
- Scheduled Monument
- Ancient Woodland
- Class 2 -Carbon and Peatland
- E1.6.1 Blanket sphagnum bog
- Watercourse
- Waterbody



Project No: LT000029

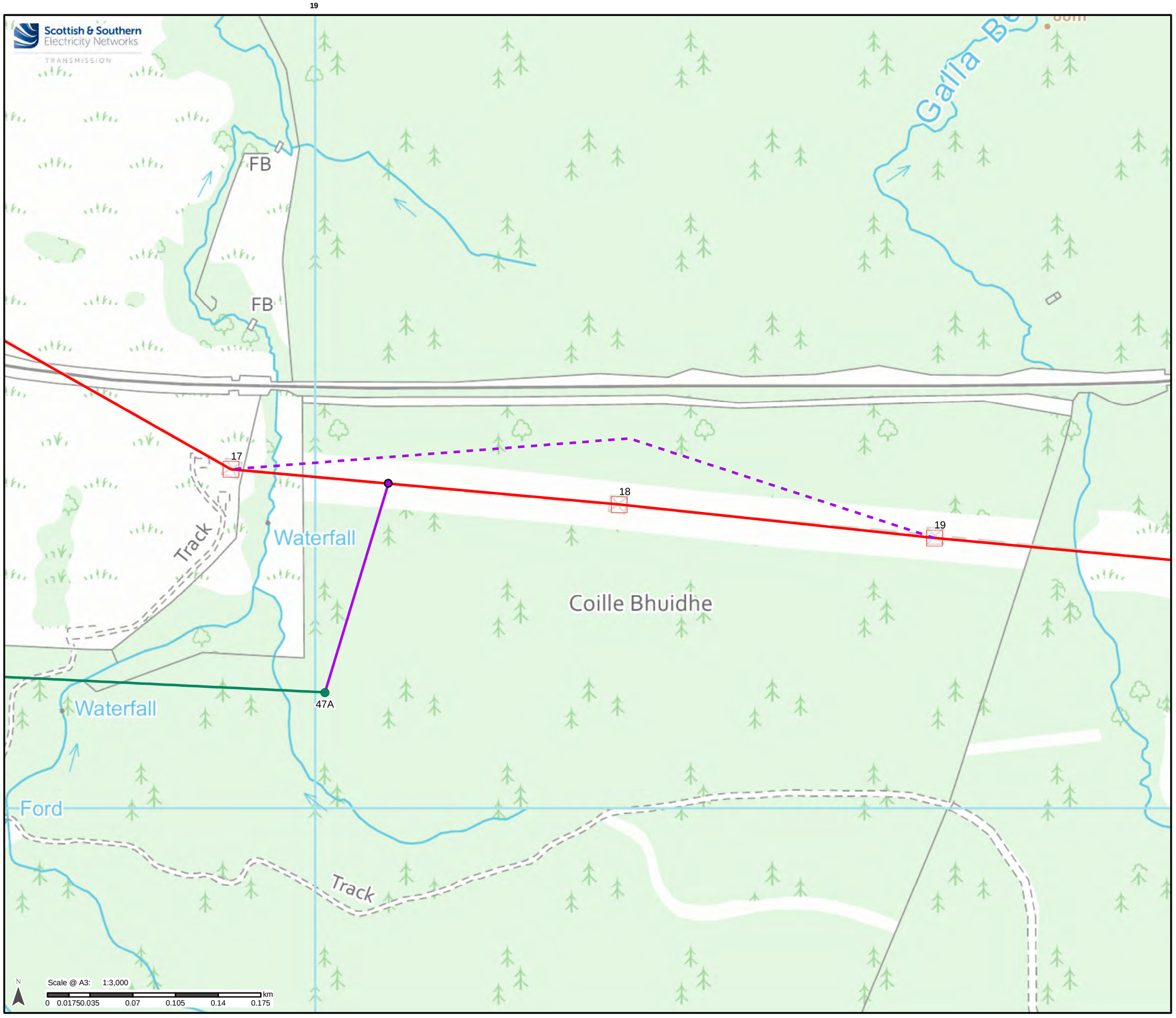
Project: 1700003673

Title:
Creag Dhubh to Dalmally 275kV Connection

Figure 6.1:
LT29 SPEN Tie in All Options with Constraints

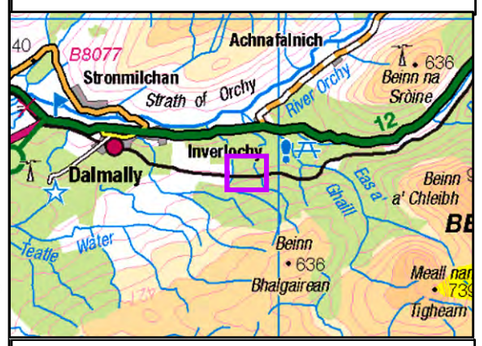
Drawn by: CF Date: 13/10/2021

Drawing: R170_3673_Fig6.1_LT29TieIn_AllOptionsConstraints_A



Legend

- Preferred Tower Locations
- Preferred Alignment
- Existing Towers
- Existing 275kV Overhead Line (Scottish Power Energy Networks)
- Option 1 Towers
- Tie In Option 1
- Temporary Diversion of North Circuit



Project No: LT000029

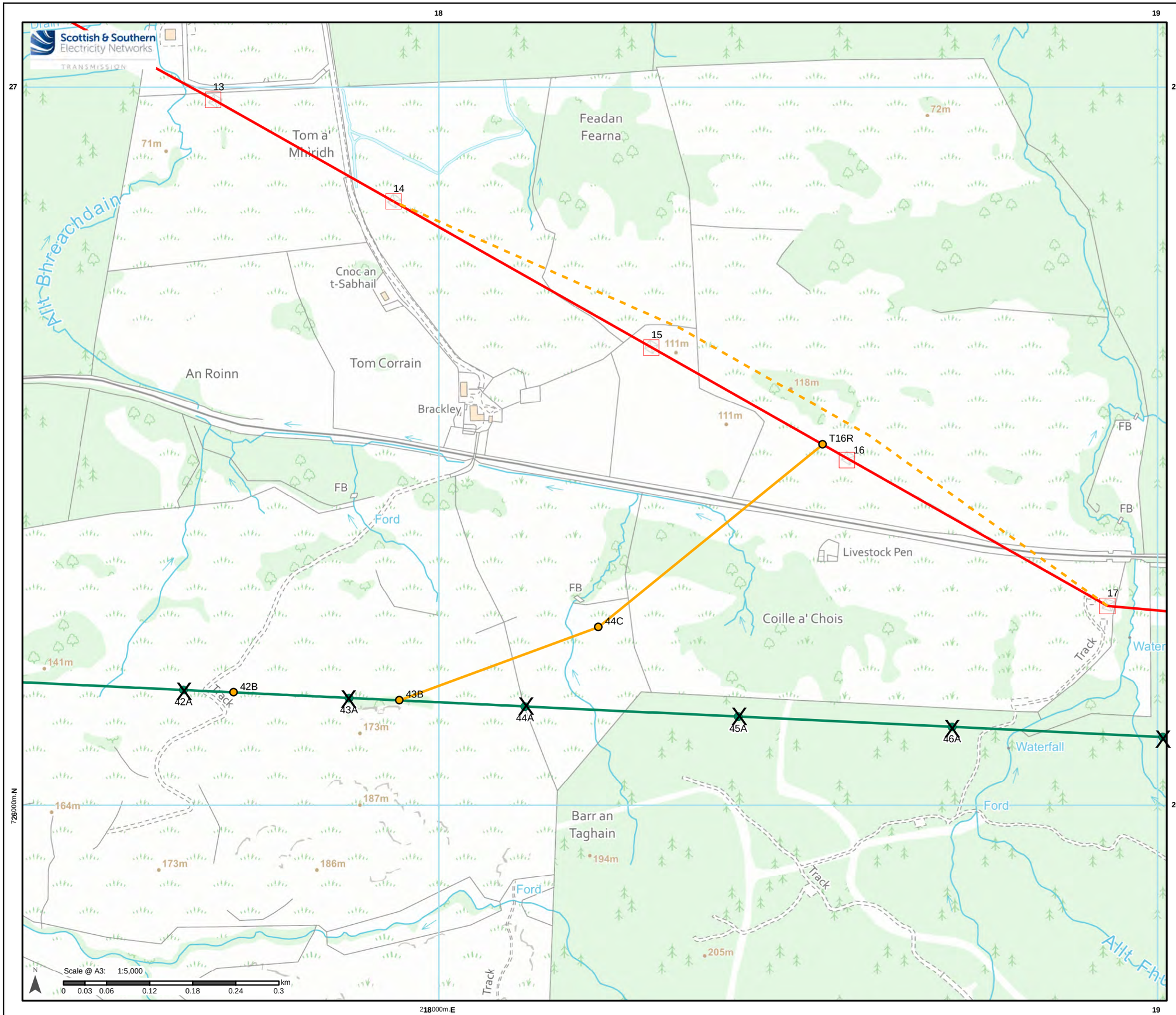
Project: 1700003673

Title:
Creag Dhubh to Dalmally 275kV Connection

Figure 6.2:
LT29 SPEN Tie in Option 1

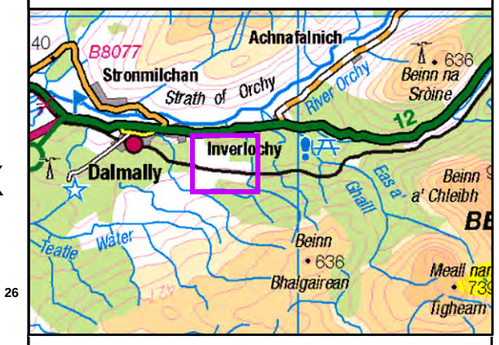
Drawn by: NJ Date: 13/10/2021

Drawing: R170_3673_Fig6.2_LT29TieIn_Option1_A



Legend

- Preferred Tower Locations
- Preferred Alignment
- Existing Towers
- Existing 275kV Overhead Line (Scottish Power Energy Networks)
- Option 2 Towers
- Tie In Option 2
- Temporary Diversion of North Circuit
- X Removed Towers



Project No: LT000029

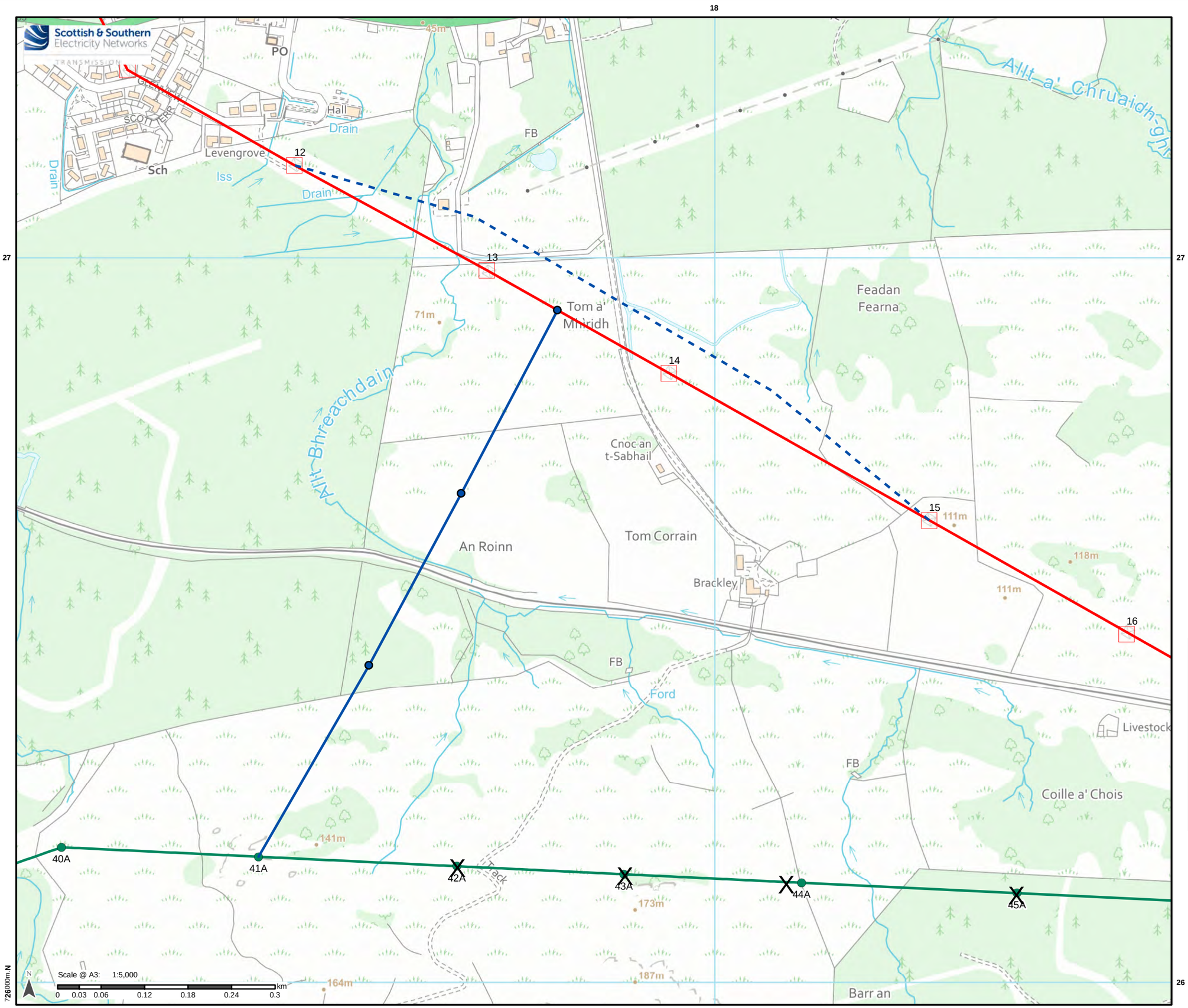
Project: 1700003673

Title:
Creag Dhubh to Dalmally 275kV Connection

Figure 6.3:
LT29 SPEN Tie in Option 2

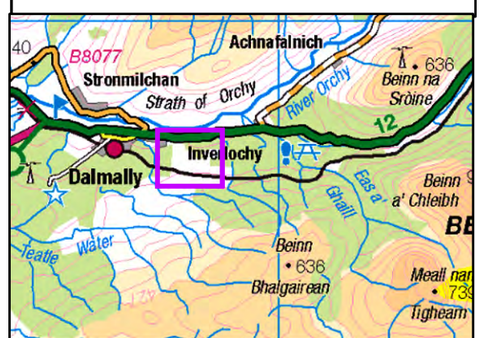
Drawn by: NJ Date: 13/10/2021

Drawing: R170_3673_Fig6.3_LT29TieIn_Option2_A



Legend

- Preferred Tower Locations
- Preferred Alignment
- Existing Towers
- Existing 275kV Overhead Line (Scottish Power Energy Networks)
- Option 3 Towers
- Tie In Option 3
- Temporary Diversion of North Circuit
- X Removed Towers



Project No: LT000029

Project: 1700003673

Title:
Creag Dhubh to Dalmally 275kV Connection

Figure 6.4:
LT29 SPEN Tie in Option 3

Drawn by: NJ Date: 13/10/2021

Drawing: R170_3673_Fig6.4_LT29TieIn_Option3_A

Scottish & Southern Electricity Networks

TRANSMISSION

APPENDIX 3: FAQ

November 2020

CREAG DHUBH TO DALMALLY 275 KV CONNECTION FREQUENTLY ASKED QUESTIONS (FAQS)

Please see Frequently Asked Questions (FAQ's) below. If you would like to discuss any of these questions further, please contact our Community Liaison Manager: Helen Batey; Email: helen.batey@sse.com; Mobile: 07778 453 993.

Q1. Why is there a need for new infrastructure in the area?

Answer: There has been an increasing number of generators applying to connect to the Argyll and Kintyre network, this is the major driver behind a need to reinforce this network. The number of generators applying to connect in the Kintyre area has continued to increase in the past year. Power system studies undertaken to assess the impact of this new generation shows that the capability of the existing network would be exceeded. As a result, it is proposed to reinforce the Argyll and Kintyre network. Individual projects, like the Creag Dhubh to Dalmally 275 kV connection, are being progressed to provide this additional capacity for new generation connections.

SHE Transmission is enabling the growth of renewable generation and the electrification of heat and transport according to the Scottish Hydro Electric Transmission (SHE Transmission) A Network for Net Zero (December 2019) http://www.ssen-transmission.co.uk/riio-t2-plan/

Climate change is already affecting people, ecosystems and livelihoods around the world. Tackling climate change is the greatest challenge of our generation. The largest role we play in combating climate change is through our part in the GB power sector. Considerable progress has been made in the decarbonisation of electricity generation over the past decade. While this change has been rapid and profound, more remains to be done.

Clean electrification has an important role to play in removing greenhouse gas (GHG) emissions from heat and transport. Smart, flexible grid networks will be an essential part of that transition. For that reason, the Committee on Climate Change argue that: "A relatively large expansion in [grid] capacity is likely to have low regrets" and consideration should be given to future-proofing to achieve net zero emissions targets.

The north of Scotland and its islands have a significant renewable energy resource from onshore and offshore wind, hydro and (potentially) marine and tidal. At the end of 2018, 15% of the UK's installed renewable generation capacity was located in the north of Scotland. By the end of the RIIO-T2 period, we expect 8.1 GW of generation to be connected to the north of Scotland transmission system. Our modelling of the requirements to meet net zero emissions targets indicates that connected generation would need to increase to between 13.6 GW and 15.7 GW.

Our stakeholders are clear that we must provide timely, cost effective whole system solutions to ensure national net zero emissions targets are met. But importantly, we must be evidence-based and pragmatic in our investment decisions to protect consumers from rising costs.

Q2. Why are overhead lines being considered when underground cables are an option and are being used on a project nearby? Could underground cables be considered for all routes?

Answer: Each project is assessed on a case by case basis following SHE Transmission's route selection guidance in combination with other factors such as stakeholder views and wider network responsibilities and demands (e.g. the need to increase capacity or replace infrastructure reaching the end of its operational life). The assessment will guide whether an overhead line or underground cable is the best solution. In general, overhead lines are the most economical way of transmitting electricity between two points and is the default solution for long distance power transfer. They are a standard, well established technology which form the majority of new and existing electricity transmission infrastructure around the world.

Undergrounding is being considered for the nearby Glen Falloch VISTA project[1]. A VISTA (Visual Impact of Scottish Transmission Assets) project[2] is an initiative designed by SHE Transmission to assess the visual impact of existing electricity infrastructure on National Parks and National Scenic Areas (NSAs) within the SHE Transmission network area. The overall aim of the policy is to identify the most effective mitigation proposals, for which specific funding can be sought from Ofgem.

The case by case approach and assessment of options is necessary to protect the interests of customers, SHE Transmission must demonstrate to the energy regulator (OFGEM) that proposed investments are necessary, efficient and economical as the charges are ultimately levied on all electricity customers and require substantial justification.

Q3: What details are available about the type and location of the renewable generation project the new connection will serve and how will this project facilitate their connection to the existing network?

Answer: There are a number of windfarms around Dalmally and the wider Argyll region that are seeking to connect to the electricity transmission network. The contracts that have been completed are with National Grid and they publish information in the public domain. This can be found in the Transmission Works Register Report here https://www.nationalgrideso.com/connections/registers-reports-and-guidance which is regularly updated. The Transmission Works Register Report for 4th September 2020, lists the following projects: Blarghour wind farm; High Constellation wind farm; Skipness & Corranbuie wind farm; Sheirdrim wind farm. This list is subject to change and does not list those projects for which a contract has not been signed.

The Creag Dhubh to Dalmally 275 kV connection will provide the additional capacity for the new generation connections. This project forms part of the wider reinforcement needed across the Argyll and Kintyre network.

Q4: How will you mitigate the environmental impact?

Answer: Environmental survey and assessment are undertaken as part of project development and the information is used to inform the design and avoid environmental impact from the outset. Where this is not possible, mitigation is provided to reduce impacts to within acceptable limits as part of the Environmental Impact Assessment (EIA) process. The EIA Report is submitted with the Electricity Act (Section 37) application to the Scottish Government for the preferred option.

Following identification of the preferred option, we will be looking to undertake detailed environmental survey and reporting from Autumn 2020 through to Spring 2021. The assessment undertaken to date for the three Options follows our internal guidance which looks to identify the least constrained option, based on environmental, technical and cost issues. This has included, but not limited to, gathering site specific information on protected species, birds, habitats, hydrology, cultural heritage and proximity to dwellings.

The EIA will cover a number of topics. To ensure the range of potential environmental sensitivities are considered, a scoping exercise will be completed. This will identify the information expected to accompany the EIA and will inform further detailed survey.

As part of SHE Transmissions new RIIO-T2 Business Plan we are committing to No Net Loss on projects from 2020, and Biodiversity Net Gain (BNG) on Projects from 2025. We are working across the industry and the public sector in Scotland to develop a new, innovative approach that embeds biodiversity considerations into every stage of the project lifecycle.

https://www.ssen-transmission.co.uk/riio-t2-plan/our-approach-to-implementing-biodiversity-net-gain/

[1] https://www.ssen-transmission.co.uk/projects/vista-glen-falloch-sloy/

[2] https://www.ssen-transmission.co.uk/media/1576/vista-booklet_v2-2.pdf

Q5: What allowance is being made for the consultation being conducted during the Covid pandemic?

Answer: Given the volume of attendees at our 2018 consultation event at Dalmally Community Centre (over 90) and the latest government Covid 19 guidelines, it was considered that socially distanced consultation meetings could not be carried out safely.

Whilst our preference would always be to conduct consultation in a face to face environment, as this was not possible, we had to use the best alternatives available. We developed a virtual consultation platform to try and provide an experience as close to a standard consultation as possible.

The virtual consultation platform included a chat function, so that visitors could ask questions about the exhibition material. Feedback received from some participants, and promoted by two Argyll & Bute Ward Councillors, was that this process did not satisfactorily meet visitors need to interact personally with the project team. A further exhibition is planned for Spring 2021. If due to continuing Covid 19 restrictions, we are required to use a virtual consultation platform; we will introduce further methods to allow visitors to the exhibition to interact more fully with the project team; for example, by including voice conferencing communication.

To ensure residents in proximity to our proposals were made aware of the virtual consultation, we sent an information booklet to all PA33 postal properties outlining the three options being presented. This included a feedback form and the address, email and phone number of the Community Liaison Manager, should community members be unable or not wish to utilise the virtual consultation platform. Alongside this, we placed an advert in The Oban Times, posted information on our social media platforms and wrote to all Local Ward Councillors and the Community Council.

We are available to engage via email, telephone and online meeting where required, to ensure we reach stakeholders in a manner most suitable to them. If those with poor internet connection wish to contact us, we can email or post copies of the consultation material and respond to any specific questions. Contact details are provided at the start of this document.

Q6: What local benefits to the community can be delivered as part of this project, through the planning, construction and longer-term operation?

Answer: Reinforcing the network will ensure future security of supply. It will also increase the capacity of the network to accommodate renewable generation. These infrastructure projects can provide local employment and use local services and suppliers.

SHE Transmission appoint a Principal Contractor to build the consented project. We encourage our contractor to use local services and suppliers as far as possible (e.g. local shops, accommodation, machinery and materials suppliers). We will also investigate the possibility of setting up a 'Meet the Buyer' event at an appropriate time to allow local businesses the opportunity to meet the Principal Contractor once they are appointed.

Q7: Would this project increase the amount of electricity being transmitted through residential areas, and would this present any health risk?

Answer: For Option 1 and Option 2 the point of connection between SHE Transmission and Scottish Power Energy Networks (SPEN) would be at the existing Dalmally substation, to the west of Dalmally village. The point of connection for Option 3 is east of Dalmally village. The power flow in SSENs new network will travel north towards the connection point with SPEN and then east along SPENs existing overhead line towards Inverarnan and Glasgow.

As such Option 1 and Option 2 will result in an increase in power flow on the existing overhead line through the residential area of Dalmally. Option 3 will not result in an increase of power flow on the overhead line through the residential area of Dalmally as a result of this project. The electro-magnetic field is expected to remain within the electric and magnetic field limits set out by the UK Government.

Electric and Magnetic Fields (EMFs) are considered as part of the Environmental Impact Assessment (EIA) process. SHE 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".

Q8: Project costs and analysis are given as percentages, could you provide more specific figures to illustrate the differentials in cost. Can you advise who costed the project?

Answer: The cost estimates are calculated by SHE Transmission. The costs are provided as a percentage against a baseline cost. At this stage these are estimates only, not the final cost of the project.

The cost of an underground cable solution is unique to the design as each will consider factors such as terrain, ground conditions, access requirements, route lengths, number of crossings of water courses, bridges, roads, railways, electrical cable design and network system requirements. Typically, in comparison to an overhead line, this can vary from between 3 and 5 times more expensive, and in some cases can be considerably more, and is the reason why undergrounding cannot be considered for all routes. A summary of the costs comparison between Options is provided in the Creag Dhubh to Dalmally 275kV Connection - Consultation Document (August 2020).

Q9: Would the proposed new Glen Lochy Switching Station or new Creag Dhubh Substation require planning permission from Argyll and Bute Council?

Answer: Town & Country Planning Applications would be required for both the substation and switching station. The planning applications would be submitted to Argyll & Bute Council.

Q10: Have the following assessments been undertaken for the project:

- Health Impact
- Economic Impact
- Equality Impact
- Climate Change

Answer: As part of SHE Transmissions new RIIO-T2 Business Plan we are establishing our preferred route corridor and/preferred sites through balancing technical, environmental, cost and impact to stakeholders. This includes impacts to local communities and businesses, visitors and interest groups, customers that will benefit from the infrastructure and the impact on consumers.

As part of the planning process SHE Transmission will complete an EIA scoping exercise with stakeholders to identify the topics that should be assessed and included in the EIA. Topics identified are usually in proportion to the proposed development and reflect the anticipated impacts. The above list can be considered as part of the scoping exercise.

Q11: How does this project fit into the big picture transition strategy for Scotland?

Answer: SHE Transmission is enabling the growth of renewable generation and the electrification of heat and transport according to the Scottish Hydro Electric Transmission (SHE Transmission) A Network for Net Zero (December 2019) http://www.ssen-transmission.co.uk/riio-t2-plan/

Given the previously described increase in renewable generation in the Argyll region, we are at an early stage of assessing future network upgrade requirements, which are likely to result in further Transmission infrastructure development in Argyll and Bute. We want to be as open and transparent as possible, regarding any anticipated future works and we are in the process of planning a regional update webinar, aimed at providing transparency regarding the anticipated levels of renewable generation requiring connection and the resulting portfolio of Transmission projects in Argyll and Bute. This will take place before the end of March 2021 and details of this session will be made available once dates are agreed.

Q12: How does funding of renewable generation projects interface with transmission requirements?

Answer: SHE Transmission own the electricity transmission infrastructure in the North of Scotland. As part of our Electricity Transmission Licence, we have a number of obligations, including:

- The development and maintenance of an efficient, coordinated and economical system of electricity transmission;
- facilitating competition in the supply and generation of electricity; and,
- ensuring that the security of the network is maintained as the demand and/or generation connections change over time.

SHE Transmission do not own the generation on the network. As a Transmission Owner, we provide connections to our transmission network for generation, demand or interconnector developers in order to meet our licence obligations.

Renewable generation projects are funded by the developers/companies that own those projects. The renewable generator will pay a fee for submitting an application to connect to the transmission network. Any new connection assets that are required to connect a generator to the transmission network, are paid for by the developer. Any larger wider network transmission reinforcements, required by a developer or a number of developers, will be underwritten prior to connection and then paid for through a use of system charge, on an annual basis. This process is licenced and regulated by OFGEM.

Q13: Why was Option 3 not presented in 2018?

Answer: The options appraisal at the project outset did not identify Option 3. The options considered focussed on a direct route between the Creag Dhubh substation and Dalmally substation and considered a number of overhead line routes and alignments and cabling under Loch Awe.

Following the consultation exercise undertaken March 2018, where the majority of feedback received was in objection to the preferred route and subsequent alignment, citing landscape and visual concerns, SHE Transmission agreed to re-evaluate the options available for the northern section of the preferred alignment where it passes through the Strath of Orchy.

A cable route assessment was undertaken for Option 2 which identified potential technical and environmental constraints. This resulted in further consideration of an alternative overhead line route and consequently Option 3 was developed. Option 3 aims to avoid visual concerns raised by Option 1 and remove the technical and pollution challenges created by Option 2.

Q14: Why does the line voltage transformation have to take place at the Creag Dhubh substation? If the 275 kV connection was moved further along the line to Glen Lochy this could perhaps be done at the new substation which would result in the new power line being of smaller 132 kV pylons.

Answer: The location of the substation has been chosen at Creag Dhubh due to its vicinity to the existing 132 kV overhead line between Taynuilt and Inveraray. There is a requirement for both circuits to be turned into the newly proposed 275/132kV substation. If the substation was closer to Glen Lochy this would require us to take two overhead lines towards Dalmally.

We have also taken into consideration the location of renewable generators that would require a connection to the substation. If the proposed Creag Dhubh substation was sited further east towards Glen Lochy, then additional overhead lines would be required along the route for the generator connections, adding to the number of overhead lines currently proposed along the route.

We also need to take into consideration future network requirements as we work towards Net Zero targets and ensure the network we build now can accommodate planned and proposed renewable generation connection applications in the area. SHE Transmission is enabling the growth of renewable generation and the electrification of heat and transport according to the Scottish Hydro Electric Transmission (SHE Transmission) A Network for Net Zero (December 2019) http://www.ssen-transmission.co.uk/riio-t2-plan/

Q15: What information is currently available about the location of the potential new infrastructure associated with the new lines? (e.g. new substation / sealing end compounds)

Answer: The following documents are available:

- Consultation Document Route Selection, North Argyll substation to Dalmally 275kV Over Head Line, June 2017.
- Consultation Document, Alignment Selection, Creag Dhubh substation to Dalmally substation 275kV Overhead Line, March 2018.
- Creag Dhubh Substation to Dalmally Substation 275 kV Connection Cable Route Options: Environmental Appraisal, July 2019.
- North Argyll Cable Route Report (Engineering Constructability), April 2019.
- Glen Lochy 275 kV Switching Station Engineering Site Selection Report, July 2020.
- Glen Lochy 275 kV Switching Station, Environmental Site Selection Study, July 2020.
- Overhead Line Route Engineering Assessment for the Glen Lochy Switching Station, July 2020.
- Overhead Line Route Environmental Assessment for the Glen Lochy Switching Station, August 2020.

We have also provided a Consultation Document and Alternative Options Consultation Booklet. These documents are available on the project website here: http://www.ssen-transmission.co.uk/projects/creag-dhubh-dalmally-275kv-connection/

Please contact us if you would like an electronic or hard copy of any of the above documentation.

Q16: Why is a submarine cable under Loch Awe not considered?

Answer: In response to feedback from statutory stakeholders during previous public consultation, SHE Transmission appointed an experienced Cable Engineering Consultant in December 2016 to further explore the feasibility of undertaking a submarine cabling solution at Loch Awe. The survey found that any potential route would be constrained by the existing configuration of the underwater terrain in and around Loch Awe. These physical constraints present technical challenges to the construction and operation of a submarine cable meaning it is not feasible to proceed with this option. Further detail was provided on page 5 of our Frequently Asked Questions document 2018 https://www.ssen-transmission.co.uk/media/4489/north-argyll-faq.pdf

Q17. Are there any further transmission projects in the pipeline for this area, and if so, when will these be introduced to the local community?

Answer: Given the previously described increase in renewable generation in the Argyll region, we are at an early stage of assessing future network upgrade requirements, which are likely to result in further Transmission infrastructure development in Argyll and Bute. We want to be as open and transparent as possible regarding any anticipated future works are therefore in the process of planning a regional update webinar aimed to provide transparency regarding the anticipated levels of renewable generation requiring connection and the resulting portfolio of Transmission projects in Argyll and Bute. This is anticipated to take place before the end of March 2021 and details of this session will be made available once dates are agreed.

Q18. Would SSEN Transmission consider changing the location of the Creag Dhubh substation and the routing of the line?

Answer: We intend to build Creag Dhubh substation within the same forestry plantation at the top of Glen Aray near the existing Inveraray to Taynuilt 132 kV overhead line and do not intend to change this location.

In the Consultation events in March 2016 we described the substation study area and that this had been identified following early analysis of technical, environmental and geographical factors and that proposals take account of the outcome of these investigations. We invited feedback from the local community and other stakeholders on our proposals. The location of the substation study area has the requirement that it must be able to link to the existing 132 kV overhead line between Inveraray and Taynuilt and the proposed 275 kV overhead line to Dalmally. Responses from stakeholders were taken into account and a decision was taken to proceed with development of a substation within that substation study area.

In October 2016, we presented two substation location options within this substation study area and sought feedback from the local community as to their preference. In March 2018, we shared our preferred substation location.

In March 2018 we requested an Environmental Impact Assessment (EIA) Screening Opinion from Argyll & Bute Council. In June 2018 Argyll & Bute Council responded that that in this instance an EIA will not be required. However, the scale and nature of the development, and the quality and sensitivity of its landscape setting is such that an Environmental Appraisal should be submitted with any planning application.

Over the coming months, we will be looking at possible micrositing adjustments to ensure the best outcome is reached to mitigate landowner and environmental impacts, before a Town and Country planning consent application is submitted to Argyll & Bute Council, accompanied with an Environmental Appraisal. Prior to submitting a planning consent application, a pre-application consultation (PAC) event will be conducted with detailed plans of the proposed consent application.

Q19. Does the location of the Creag Dhubh substation determine the routing of the line?

Answer: Substation location is not the sole driver in terms of choice of location for our projects, which need to be considered on a whole project basis. When initially identifying areas where development is required, there are various different factors which must be taken into consideration, including proximity to requesting generators, topography, distance from existing infrastructure, and environmentally sensitive areas. These various considerations are assessed, and suitable areas for all associated infrastructure identified at the very beginning of a project's development.

Q20. Wouldn't the existing 132 kV link between Inveraray and Creag Dhubh require upgrading before the new Creag Dhubh to Dalmally 275 kV line can operate?

Answer: The Creag Dhubh to Dalmally 275 kV overhead project can function using only the infrastructure included in this project's description and existing infrastructure. The Creag Dhubh substation can change the voltage from 275 kV to 132 kV. Therefore, the existing overhead line between Inveraray and Creag Dhubh can continue to function as a 132 kV connection; the only change required is that the overhead line must be connected to the new Creag Dhubh substation, which is included in this project.

Scottish & Southern Electricity Networks

TRANSMISSION

OCTOBER 2021

SSEN Transmission's Overhead Line Proposal East of Dalmally

We would like to thank the Dalmally community and local MSP for Argyll and Bute, Jenni Minto, for taking the time to meet with our team to discuss proposals to construct a new overhead line from Creag Dhubh to land adjacent to the east of Dalmally, during our meeting at Dalmally Community Centre on Monday 4 October.

We recognise the strength of local opposition to the introduction of new transmission towers in the local area, and believe there is a degree of misunderstanding about our actual proposals, including several false claims made in the change.org petition.

We fully accept that there will always be some members of the community opposed to new infrastructure in its entirety, in part, we believe, due to the proximity of the existing SP Energy Networks transmission line that runs through the village.

We believe it is important that the community is supported to take an informed view of our plans. By setting out the facts associated with our proposals, we hope this will allow the community to take a considered view of our proposals and in doing so, ensure any representation to our forthcoming Section 37 Planning Application is accurate and reflective of our proposals.

We have therefore prepared the following 'Frequently Asked Questions' to try to address local concerns and to help ensure the community and wider stakeholders have a factual understanding of our proposals.

Frequently Asked Questions

1. How close to the village is the proposed line?

We recognise there is a lot of anxiety locally about the perceived impact and proximity of our proposed overhead line to Dalmally. We would like to reassure the local community that our proposals have been carefully developed to avoid close proximity to Dalmally and local properties in the area.

Following community and stakeholder feedback during the development of the project, the proposed overhead line now runs south of the village connecting east of Dalmally, avoiding crossing the Strath of Orchy which we were asked to avoid following consultation on our initial preferred route back in 2018. As a result of the fundamental change in the project design, there has been a significant reduction in the proximity and impacts of our proposed infrastructure on the local community.

- The number of properties located within 500 metres of the overhead line has reduced from 33 to 5 when compared to our original preferred route from 2018 – a reduction of 85%.
- The closest property in the area to the overhead line is 395m away.
- Previous concerns regarding the preferred route from 2018 included the crossing of the A85 and proximity to the B8077 Stronmilchan Road. The proposed overhead line now runs over 1km away from the A85, avoiding the B8077 entirely.
- The overhead line is around 1km away from all properties in Dalmally village, including the school, which is 922m from the proposed overhead line.

2. Has community feedback been considered?

Throughout the development of the project, we have sought to consider local and wider stakeholder feedback at every stage of consultation.

- The new proposed line, introduced in September 2020, was created in direct response to community feedback to our previous proposal, which asked us to look at both an undergrounding option and for the line not to cross the village at the Strath of Orchy.
- As such, we spent two years investigating feasible underground cabling solutions across the Strath of Orchy.
- We also identified an alternative overhead line connection option which connects to the east of the village rather than via the west into Dalmally switching station, reducing its overall impact on, and proximity to, the local community.
- In September 2020[1] we presented this new proposed route, along with the original, and undergrounding options, for further public consultation.
- This additional consultation was a direct result of listening and reacting to local community feedback strongly objecting to the initial proposed overhead line alignment crossing the Strath of Orchy.
- In our September 2020 consultation, 38% of responders selected the undergrounding option as their preference and 24% selected the new proposed overhead line solution.
- 0% of responders selected the originally preferred option, with the remaining 38% of responders not selecting an option.

3. Why did you not progress with undergrounding when it was the most popular option with the Community?

The option to underground the overhead line was assessed by one of our delivery contractors and during their assessment of the potential undergrounding, there were several issues encountered that led to this option being discounted:

1. The underground cable would be installed in an area of high flood risk with pollution risks to Loch Awe due to the presence of deep peat in the area. This would be exposed during construction and could be disturbed during a flood event, risking a pollution incident.
2. The materials required to surround an underground cable to attempt to provide a suitable backfill to allow it to operate at the correct parameters, also carry a significant risk of pollution should a flood event disturb these materials and deposit them in Loch Awe.
3. The nature of the ground conditions presents significant challenges to maintain the cable in position during operation as these conditions can allow the cable to move, causing the cable joints to be put under strain and ultimately risk faults during the operational phase. This would disrupt the operation of the cable and is not an acceptable risk for SSEN Transmission, risking pollution to Loch Awe during any remedial works to repair cable damage and reducing the reliability of the Transmission Network.
4. The safety of the cable operation was also highlighted with placing this in a known flood plain presenting significant operational issues.

[1] https://www.ssen-transmission.co.uk/media/4625/ssen-creag-dhubh-to-dalmally-argyll-12pp-24126-artwork-web.pdf

5. Concerns were highlighted with infrastructure (road, railway) crossings; terrain and gaining access for works, both during construction and operation.

The cumulative impacts of these high-risk issues and consideration of other stakeholder feedback, including that of the statutory consultees, led to the new proposed overhead line solution becoming our preferred route.

In progressing the new proposed overhead line route, we were also able to mitigate the following concerns raised by our statutory stakeholders:

- Addressing Argyll & Bute Council's previously expressed concerns over visual impacts within the Strath of Orchy and head of Loch Awe associated with the initial overhead line proposal.
- NatureScot agreed this option appears to minimise landscape impacts and noted this option lies outside of the Special Protected Area (SPA) designated for the protection of birds and, as such, no likely significant effects are foreseen in terms of the Habitat Regulations.

Full details regarding our decision are outlined within the Report on Consultation, November 2020[2].

4. Have you considered undergrounding the new preferred route?

No. Undergrounding would generally only be considered when a landscape and visual assessment identifies substantial adverse impacts.

The assessment of effects is completed using established Environmental Impact Assessment guidance, and standard accepted industry practice. Further details can be found in our EIA Scoping Report[3].

As set out below, there are also a number of constraints associated with the use of underground cables within the Transmission System which limit its use:

Economics - Underground cable is significantly more expensive than overhead line solutions. Typical ranges of the ratio of cost difference lie in the range of 5:1 – 12:1. As the costs of transmission infrastructure are ultimately recovered through GB consumers' electricity bills, cost is a material consideration in the assessment of our infrastructure developments, in line with our licence obligation to develop an economic, efficient and coordinated network.

Security of Supply - For overhead lines, many faults are temporary and only last a few seconds. Sustained faults are usually relatively easy to find and repairs can normally be carried out within 24 hours. For underground networks, whilst fault rates are generally lower, repair times are considerably longer where three weeks would be considered the minimum time required, running into months in some cases. Repair costs are also considerably higher.

Environmental - Transmission cable installations can have a significant effect on the environment during construction and restrict use of land after installation. Underground cable installations

[2] https://www.ssen-transmission.co.uk/media/4939/report-on-consultation-creag-dhubh-to-dalmally-275kv-connection-november-2020-web-version.pdf
[3] https://www.ssen-transmission.co.uk/media/5867/creag-dhubh-to-dalmally-275-kv-connection_eia_scoping_report_issue.pdf

generally take up to five times longer to complete and cause more disturbance and environmental impacts to hydrology, habitats, flora, fauna and land use.

In terms of land take, a 275kV underground cable would require 12 parallel cables, with 3m separation between circuits (36m in total), with a construction working width of approximately 50m. The ground disturbance associated with an overhead line is likely to be significantly less.

On-going land use above underground cables has to be restricted, whereas the operational corridor for an overhead line can be allowed to develop with valuable habitats such as native scrub.

As part of our assessment of this route there has not been a significant adverse impact identified to a scale which we feel would require the use of underground cable to mitigate, therefore, based on the above constraints the use of underground cable has not been taken forward as our preferred option. An overhead line in our view and on balance, presents a better overall solution for both construction and operation, as well as providing better cost benefit to the end consumer.

5. Does the new preferred route involve more transmission towers than the originally preferred option from 2018?

No. Our initial preferred route from 2018, from the proposed Creag Dhubh substation crossing the Strath of Orchy and connecting into SP Energy Networks existing switching station involved 49 transmission towers.

Our new preferred overhead line route from Creag Dhubh substation connecting to the east of Dalmally, would have 47 transmission towers.

6. Does the new preferred route threaten endangered species?

No. Part of our licence and legal obligations is to identify endangered species living close to our assets during construction and operation and where necessary include mitigation to protect them.

Protected species surveys have been undertaken to inform the routeing and alignment processes and the Environmental Impact Assessment (EIA). We develop mitigation and employ Species Protection Plans to ensure species are not subject to significant effects from construction or operation of the overhead line. Further information on the surveys undertaken and the results can be found in the publicly available Scoping Report and the associated figures – available here: Scottish Government - Energy Consents Unit - Application Details[4]

The EIA will be made publicly available as part of our Section 37 application.

7. What will the Environmental Impact Assessment (EIA) include?

As part of our Section 37 Planning Application, we will provide a detailed Environmental Impact Assessment, which will robustly assess the impacts of our proposals on the surrounding environment, landscape and local properties. This information will be publicly available.

In December 2020, we published our EIA Scoping Report[3] describing the proposed content of the EIA Report, which will also include any requirements provided by the Scottish Government in its EIA Scoping Opinion, once received.

[4] https://www.energyconsents.scot/ApplicationDetails.aspx?cr=ECU00002199

We have proposed that the EIA includes assessment of the following:

- Landscape Character and Visual Impact
- Biodiversity
- Ornithology
- Cultural Heritage
- Traffic and Transport
- Hydrology, Hydrogeology, Geology, and Soils
- Forestry
- Noise and Vibration

The EIA Scoping Report and supporting documents is available on the Scottish Government Energy Consent Unit website http://www.energyconsents.scot/ under case reference ECU00002199.

8. Why is the amended overhead line still in proximity to the village of Dalmally, can it not be routed further west?

Alternative suggestions proposed by the Dalmally community during the most recent consultation and meeting had already been considered during the options assessment process, including taking the connection out via Inveraray to Sloy and Inverarnan and utilising subsea connections from Crossaig and Carradale.

The option to connect via Inveraray towards Sloy and Inverarnan was discounted due to the following challenges being identified:

- Our engineering and construction teams raised concerns over the steep and challenging terrain on the route to Sloy and Inverarnan, with this raising significant health and safety concerns over the ability to safely design, construct and then operate the asset.
- This option would encroach on the Loch Lomond and Trossachs National Park and would have the potential to impact on this national designation.

Impacts on the Glen Etive and Glen Fyne Special Protection Area (SPA) for golden eagles also led to the alternative options proposed being discounted given the international protected designation of these areas.

Finally, options to utilise subsea cables were ruled out during the Cost Benefit Analysis, primarily due to the significant cost associated with this option and our regulatory requirement to develop an economic, efficient and coordinated network.

9. Why can you underground cables in Loch Lomond and Trossachs National Park but not at Dalmally?

From an engineering perspective, the undergrounding of cables in Loch Lomond and the Trossachs is achievable due to the presence of suitable ground conditions and topography in the area which allowed these works to be carried out.

Additionally, with regards to the works in Loch Lomond and Trossachs National Park, these are being undertaken through funding made available by the energy regulator, Ofgem, to all three GB Transmission Owners, to address the visual impact of historical overhead transmission infrastructure

in National Parks and National Scenic Areas. This funding cannot be applied for and used to mitigate the visual impact of new or planned infrastructure projects, or for any projects out with qualifying designated landscapes.

10. Are you progressing the cheapest option?

In Summer 2020, we consulted on three options for the Creag Dhubh – Dalmally connection**:**

Option 1: an overhead line to the existing Dalmally substation (*identified as the most economic solution*)

Option 2: a combination of overhead line and underground cable to the existing Dalmally substation. (*This had significantly increased whole project costs compared to Option 1)*

Option 3: an alternative overhead line connection location east of Dalmally and new switching station. (*This had the highest whole project costs at the time due to the requirement for a new switching station to be built)*

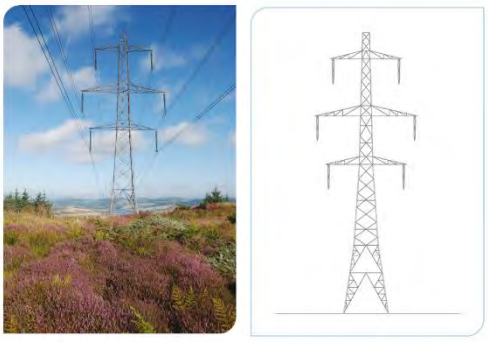
We selected Option 3 as our preferred option, despite it having the highest associated whole project costs at the time, primarily due to the environmental and engineering challenges associated with Option 2, and the local community and stakeholder objections received regarding Option 1.

However, the removal of the proposed Glen Lochy switching station, following a review of the system requirements, has subsequently reduced the cost of our preferred option. This is now comparable in cost to our original overhead line option and is more cost effective than the underground cable option thus reducing the impact to the GB electricity bill payer.

Costing information relating to the three options considered is available via the Consultation Document from 2020[5].

11. Will the towers be nearly double the height of the existing Scottish Power towers that run through the village?

No, our towers will be 50 metres on average, comparable in size to the existing SP Energy Networks towers in the area.



Our proposed 275kV towers

[5] creag-dhubh-to-dalmally-275kv-connection-consultation-document-web-version.pdf (ssen-transmission.co.uk)

12. Will there still be a new additional substation close to Dalmally?

No. Following consultation in July 2021 and further discussion with SP Energy Networks, it has been determined that the previously proposed Glen Lochy switching station (to the east of Dalmally) is not currently required and has been removed from our plans, with a tee in (direct connection) to the existing overhead line now proposed instead. It should be noted that, dependent on generation requirements, a switching station may be required to replace the tee in the future.

Creag Dhubh Substation does remain a part of our proposals, located around 10km away from the village. This site will not normally require round the clock working (either during or post construction) from our operatives as has been suggested, nor will it normally be lit up at night. Works will only be undertaken out of hours at Creag Dhubh should there be specific works such as commissioning of equipment or responding to maintenance or fault issues that require this. In these instances, it is noted the substation will be lit as required to provide a safe working environment for our staff and our contractors.

13. How does your new SSEN Transmission overhead line relate to the Cruachan 2 Drax Project?

It doesn't. Whilst Drax are the owner and operator of Cruachan pumped storage hydro scheme, the existing 275kV transmission line is owned and operated by SP Energy Networks.

As such, any proposed connections to the network at Cruachan or Dalmally would be assessed by SP Energy Networks as the host Transmission Owner. We would also undertake our own network assessments to consider any new connections, as an affected Transmission Owner. We work closely with SP Energy Networks as a neighbouring Transmission Owner to consider the impact of generation connections on both networks within this area.

14. Will this project affect the local broadband?

No. Premises which do not already have full fibre superfast broadband connections are instead usually connected to a local broadband cabinet by copper wire, which is the case in Dalmally. Broadband speeds are dictated by the distance of properties from this cabinet and are not related to the proximity of the overhead transmission line. More information can be found at www.scotlandsuperfast.com/

15. Will train services will be affected by construction of the overhead line?

No. Construction of our preferred overhead line would not result in disruption to the train services at Dalmally railway station.

16. What will be the visual impact of the proposed line on the local environment?

The visual impact will vary depending on your viewpoint of the preferred alignment. We assess the landscape and visual impact from the outset to inform the alignment design and have undertaken studies that identify visual receptors and model the alignment based on tower size and their ground position.

- We are currently assessing the visual impact, based on the information collated through the routing and alignment processes. The EIA chapters are being drafted and will include a detailed assessment and technical appendix.
- The assessment includes any impacts on local properties, as well as visual representations of our proposals from key local locations. This will form part of our Section 37 planning application.
- Where possible, we aim to site towers to minimise the impact on views from residential properties and cultural heritage features.
- To reduce visual impacts as far as possible, we look, where possible, to position towers where their outline is absorbed by the landscape features behind the tower, such as hills and forestry (known as a backcloth). The EIA may identify mitigation measures such as moving towers within a pre-determined limit or tree planting, to minimise visual impacts.
- Taking into account a holistic view of all environmental (including landscape, economic, and social) factors, we believe these will demonstrate an acceptable impact on the local landscape.

We also have a 3D visualisations portal, which allows stakeholders to view what our proposed line will look like from various local viewpoints:

https://3dwtech.co.uk/dashboard/ssen/dalmallylt29/portal-update/

If there are additional viewpoints you are interested in, or if you would like us to send you snapshots from particular locations, please contact our Community Liaison Manager (contact details at the end of this document).

We will be hosting a drop-in session at Dalmally Community Centre next month, providing an opportunity for local community members who may not have access to our online 3D visualisation portal to view our model in person, further details at the bottom of this document.

17. Would there be any local community benefit?

As an economically regulated company, we are required to be mindful of all GB energy bill payers and are currently unable to offer monetary benefits such as Community Benefit Funds in the same way as windfarms.

We will continue to work constructively and openly with the local community and wider stakeholders as we take forward this project of critical national importance to support the transition to net zero emissions.

We are actively committed to maximising opportunities to support local businesses and the economy throughout the construction phase and have strengthened the commitment with our main contractors to increasingly consider using the local supply chain where possible.

As part of our sustainability commitments, we have committed to deliver biodiversity no net loss on all our transmission projects from April 2021, working towards biodiversity net gain for all projects consented from 2025. This means we will leave the local biodiversity no worse than we found it.

We are also committed to deliver compensatory replanting of trees that require felling during the construction of our projects, looking to use native species where possible, further supporting biodiversity. As part of this, we are actively exploring working with local organisations on our compensatory planting commitments.

We're also increasing our efforts to look at ways we can offer additional benefits which would ensure a lasting positive legacy for local communities and are keen to hear your views as we engage further on this.

18. How can I provide feedback as part of the planning process?

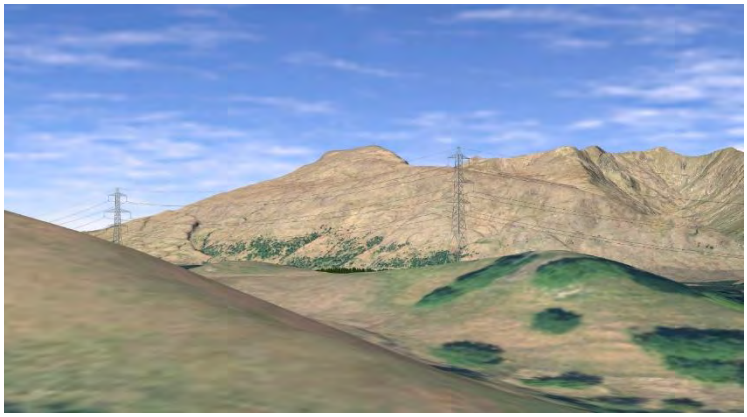
We are due to submit a Section 37 application for the Creag Dhubh – Dalmally overhead line to the Scottish Government Energy Consents Unit before the end of 2021. We will also submit our Town and Country Planning application to Argyll and Bute Council for the Creag Dhubh Substation during this time.

We will ensure local stakeholders are made aware of when applications are submitted and how they can make representations.

Next Steps: A Community Drop-in Session ahead of our Planning Application Submission

During the recent Dalmally Community Centre meeting, some local residents told us they wanted to see printed stills from our online visualisation portal and for our team to be there to discuss these with them. This is due to some residents having limited access to broadband.

We also committed to providing more details and seeking views on the removal of the Glen Lochy (Succoth Glen) switching station from our proposals.



Screenshot taken from the 3D visualisations portal

Therefore, we will be holding a pre-planning application submission drop-in session for local stakeholders who wish to view visualisations and speak to the team in person regarding the current proposals. The session will be held on:

Tuesday 23 November 2021
1pm – 7pm
Dalmally Community Centre

As Covid-19 guidance continues to relax and due to the drop-in format, there will be no requirement to register in advance for this event and local residents can drop by to speak to the team and view our 3D model at any point during the above date and times.

Keeping in Touch & Providing Feedback

If you have any additional questions which have not been addressed here please do not hesitate to contact our Community Liaison Manager via email, phone, or letter.

Paper copies of the additional information referred to in this document will be available for reference at the drop-in session mentioned above.

Feedback from residents suggests they want to continue to be updated by direct emails and letters and for paper copies of information to be posted to the Community Centre and to local councillors.

If you are concerned that you are not on our email or postal register, or would indeed like to be removed from these, please contact Caitlin Quinn also.

Caitlin Quinn
SSEN Transmission,
1 Waterloo St,
Glasgow, G2 6AY

Email: caitlin.quinn@sse.com

Phone: 07901 135 758

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Scottish & Southern Electricity Networks

TRANSMISSION

APPENDIX 4: COMPARATIVE ENVIRONMENTAL ASSESSMENT OF TIE-IN OPTIONS

<table>
<tr><th>Topic</th><th>Environmental Analysis</th><th colspan="3">RAG Rating</th></tr>
<tr><th></th><th></th><th>Option 1</th><th>Option 2</th><th>Option 3</th></tr>
<tr><td>Natural Heritage (Designations)</td><td>
Study Area Baseline

At its closest point (T45), Glen Etive and Glen Fyne SPA is approximately 800 m south of the Preferred Alignment. This SPA supports populations of golden eagle Aquila chrysaetos (Annex 1 species). Ninetie-inn territories were recorded as active across this SPA in 2003, constituting 4.2% of the UK population. This SPA also covers area 5.6 km to the north of the Preferred Alignment, within the 10 km study area for ornithology. No direct impact is predicted, however there is potential for connectivity between golden eagle habitats to be impacted.

The Preferred Alignment would also result in the loss of approximately 1.4 ha of Ancient Woodland (of semi natural origin) directly north of Uachdar Mhaluidh.

Tie-in Options

The Tie-in Options are not likely to have any direct impact on the SPA, however there will be a loss of AW due to each Tie-in Option (including temporary diversion). Table 2 shows the loss of AW as a result of each Tie-in Option, whilst taking account of the savings due to the reduced tower numbers for Option 2 and 3.

Ancient Woodland Loss for each Tie-in Option
<table>
<tr><th>Tie-in Option</th><th>Loss of AW (ha) within Study Area</th><th>Loss of AW (ha) from Tie-in connection</th><th>Loss of AW (ha) from temporary diversion</th><th>Total AW loss (ha) from Tie-in Option</th><th>Reduction in AW loss (ha) due to fewer towers</th><th>Actual total loss of AW (ha) (Preferred Alignment plus Tie-in Option</th></tr>
<tr><td>Option 1</td><td>1.4</td><td>0.4</td><td>2.8</td><td>3.2</td><td>0</td><td>4.6</td></tr>
<tr><td>Option 2</td><td>1.4</td><td>0.9</td><td>0</td><td>0.9</td><td>0.5</td><td>1 .8</td></tr>
<tr><td>Option 3</td><td>1.4</td><td>0.2</td><td>0</td><td>0.2</td><td>0.5</td><td>1.1</td></tr>
</table>
</td><td>A</td><td>R</td><td>G</td></tr>
</table>

Topic	Environmental Analysis	RAG Rating		
		Option 1	Option 2	Option 3
	Option 2 crosses directly through areas of AW, resulting in an increase in AW loss from the Study Area Baseline. This would be a permanent feature causing the loss of AW and fragmentation and has therefore been rated RED. The temporary diversion for Option 1, has been designed to the south of the SPEN line to reduce the actual loss of mature semi-natural AW. The area to the south of the SPEN line is also classified as AW. However, despite the area's classification, most of the current habitat comprises scattered scrub and coniferous plantation[8] as opposed to mature oak broadleaf woodland. The open habitats in this location, may allow for micrositing the temporary diversion infrastructure and avoid tree loss or disturbance to sensitive ground flora. Option 1 would impact a small section of mature broadleaf woodland near existing SPEN tower 17. Considering this and the temporary nature of the diversion, Option 1 has been rated as AMBER. However, if the temporary diversion was moved north of the SPEN line, Option 1 would be rated as RED. Habitats north of the SPEN line represent more typical AW composition and it would not be possible to avoid felling broadleaves trees. **Option 3 clips the edge of a section of AW, resulting in the smallest loss of AW as well as a decrease from the Study Area Baseline. Therefore Option 3 is rated as AMBER and would be the preferred Tie-in Option.**			
Natural Heritage – Habitats (Annex 1, GWDTE's, Biodiversity)	**Study Area Baseline** The Preferred Alignment clips approximately 280 m of Blanket bog (Annex 1 Habitat[9]) around T41. **Tie-in Options** Tie-in Option 1 will not impact any further areas of blanket bog or wet modified bog and is therefore rated as GREEN. Tie-in Option 3 crosses additional areas of wet modified bog but will not impact upon further areas of blanket bog and is also rated as GREEN. The temporary diversion required as part of Option 2 will clip the edge of blanket bog habitat (0.3 ha) and has therefore been rated at AMBER. If possible, the temporary poles should be sited to avoid this area of blanket bog. **Therefore Option 1 or 3 would be preferable, as it does not impact upon Annex 1 Habitat.**	G	A	G

[8] Filed survey to be undertaken by an experience ecologist on 28th October 2021, to confirm and map the habitats that are present and identify sensitive habitats or features.

[9] Annex I lists 233 European natural habitat types, including 71 priority habitats (i.e. habitat types in danger of disappearance and whose natural range mainly falls within the territory of the European Union), as well as the specific habitats which have been designated as a Special Area of Conservation, to which a common EU-wide legislation applies

Topic	Environmental Analysis	RAG Rating		
		Option 1	Option 2	Option 3
Natural Heritage (non-avian protected species)	**Study Area Baseline** Woodland habitat present within the Preferred Alignment is suitable for protected species such as bats, pine marten *Martes martes*, badger *Meles meles*, and red squirrel *Sciurus vulgaris*. Watercourses, and associated riparian habitats, which intersect the Preferred Alignment, are suitable to support protected species such as otter *Lutra lutra* and water vole *Arvicola amphibius.* **Tie-in Options** All Tie-in Options will result in loss of AW (**Table 2**) which will reduce the foraging and nesting habitat available for protected species, including pine martin and red squirrel. However, there are other habitats in the wider environment that will continue to support protected species such that the conservation status of these species are unlikely to be affected. **Therefore all Options have been rated as AMBER.** **Option 3 results in the smallest loss of AW habitat and will have a lesser impact on any protected species present. Therefore Option 3 would be the preferred Tie-in Option.**	A	A	A
Natural Heritage (Ornithology)	**Study Area Baseline** Vantage Point (VP) surveys conducted by Ramboll (October 2019- October 2020) recorded low levels of flight data from target species, including white-tailed eagle *Haliaeetus albicilla*, black grouse *Tetrao tetrix*, merlin *Falco columbarius*, and hen harrier *Circus cyaneus*. Barn owl *Tyto Alba* (Schedule 1) have been recorded within Brackley Farm. A black grouse Lek is located approximately 100 m from the Baseline Alignment (T36). This is out with the location of the 3 Tie-in Options. **Tie-in Options** The Tie-in Options (including temporary diversions) are not predicted to impact upon the foraging or breeding activity of the above bird species. **Therefore, all Options have been rated as GREEN.**	G	G	G

Topic	Environmental Analysis	RAG Rating		
		Option 1	Option 2	Option 3
Natural Heritage (Hydrology/geology)	**Study Area Baseline** The Preferred Alignment crosses five tributaries of the River Orchy including three named tributaries: Allt an Daimh, Allt Mhaluidh and Allt Fhunaran. The Preferred Alignment intersects Class 2[10] peatland[11] between T34 and T42. The results of the Stage 1 and 2 peat probe surveys show that the levels of peat across the Study Area are negligible. Private Water Supply (PWS)– There is a natural spring located between T43 and T44 (NN17926 26188) which provides Brackley Farm with a water supply. It appears that this spring flows north from this point to a water settlement tank just south of Brackley Farm. **Tie-in Options** All Tie-in Options are within areas of negligible peat, with Option 2 and 3 crossing unnamed burns. There should be very little implication on hydrology as long as the towers are sited an appropriate distance (50 m) from watercourses. The temporary diversion for Option 2 clips (280 m) blanket bog habitat (Annex 1) around T41. As stated above, the temporary poles should be sited to avoid this area of blanket bog, if possible. Blanket bog habitat is not a Groundwater Dependant Terrestrial Ecosystem (GWDTE), therefore any peat excavation required is unlikely to compromise the surrounding blanket bog habitat. In accordance with SEPA guidance a 250 m/100 m buffer must be maintained around the PWS source during construction. The Principal Contractor would be responsible for identifying the PWS (source and any storage tanks / pipes), undertaking a detailed risk assessment and water quality testing pre and post works, and identifying if there was a risk the supply was going to be disrupted and sourcing an alternative supply. **Until further investigations are undertaken, there is a risk that the water flow or quality from the PWS could be impacted during construction. Considering this, all Tie-in Options have been rated AMBER.**	A	A	A

[10] Class 2 peatland is defined as: Nationally important carbon-rich soils, deep peat, and priority peatland habitat. Areas of potentially high conservation value and restoration potential. Scotland's soils Carbon and peatland 2016 map.https://soils.environment.gov.scot/maps/thematic-maps/carbon-and-peatland-2016-map/

[11] Peatlands are ecosystems with a peat deposit that may currently support a vegetation that is peat-forming, may not, or may lack vegetation entirely. Therefore the present of peat soils does not always mean that peatland habitat is present.

Topic	Environmental Analysis	RAG Rating		
		Option 1	Option 2	Option 3
Cultural Heritage - Designated Assets	**Study Area Baseline** The closest designated heritage asset to the Preferred Alignment is Scheduled Monument Auchtermally or Uachdar Mhaluish, deserted township (SM 4019), which is located c.0.2 km east southeast of the Preferred Alignment. T41-T47 would be visible to the north and northwest of the Scheduled Monument, crossing open farmland that surrounds the township remains and would introduce a new modern element into undeveloped farmland. The introduction of the proposed OHL would result in an adverse impact on the setting of the deserted township. **Tie-in Options** Tie-in Option 1 would run from T47 to the existing SPEN OHL and there would be no change from the assessment for the Preferred Alignment. Tie-in Option 2 would remove T44-T47 along the Preferred Alignment, with the proposed Tie-in to the SPEN OHL running northeast from a new proposed Tower position (T43B). The removal of T44-T47 would reduce the number of towers visible to the northeast of Scheduled Monument Auchtermally or Uachdar Mhaluish, deserted township (SM 4019) although towers would still pass the Scheduled Monument on its north side, being visible in arc from the north to the west, and visible from the township. Therefore, the removal of T44-T47 would be slightly beneficial, but unlikely to significantly reduce the impact of the proposed development on the setting of this monument. Tie-in Option 3 would remove T42-T47 along the Preferred Alignment, with the proposed Tie-in to the SPEN OHL running northeast from T41. The removal of T42-T47 would reduce the number of towers visible to the northeast of Scheduled Monument Auchtermally or Uachdar Mhaluish, deserted township (SM 4019), although towers would still pass the Scheduled Monument on its north side, being visible in arc from the north to the west, and visible from the township. Therefore, the removal of T42-T47 would be beneficial, but unlikely to significantly reduce the impact of the proposed development on the setting of this monument. Tie-in Option 3 brings the OHL route closer to the Listed Buildings located within Dalmally and the Scheduled Monument Barr a Chaistealain dun and township (SM 3858) but it is considered that this is unlikely to result in any adverse impacts on the settings of these designated heritage assets. **Considering the likely impact that all the Tie-in Options have on the setting of Scheduled Monument Auchtermally or Uachdar Mhaluish, deserted township (SM 4019), all Tie-in Options have been rated AMBER**.	A	A	A

Topic	Environmental Analysis	RAG Rating		
		Option 1	Option 2	Option 3
Cultural Heritage – Non-Designated Assets	**Study Area Baseline** There are some small sections of relict rig and furrow remains / field banks surviving around the proposed locations for Towers T41 to T47, within the farmland to the south of Brackley Farm. Construction of the Preferred Alignment Baseline would likely only directly affect small sections of the relict field systems and would not have a significant effect. **Tie-in Options** There are no recorded heritage assets in close proximity to, or crossed by, Tie-in Option 1 and there are consequently no heritage constraints. **Considering this, Option 1 has been rated GREEN.** There are a number of recorded heritage assets in close proximity to Tie-in Option 2, in the farmland surrounding Brackley Farm. These include small areas of relict rig and furrow cultivation, a former whiskey still, some sections of surviving field banks, and the remains of a former farmstead. T44c is positioned close to the former farmstead remains. These heritage assets would require to be avoided by the proposed development. **Considering this, Option 2 has been rated AMBER.** The proposed Tie-in with the SPEN OHL would be located within a field / field system recorded at Tom Mhaire. Some small sections of relict rig and furrow remains / field banks survive around the proposed locations for T41 and T42. Construction of the proposed Tie-in would likely only direct affect small sections of the relict field system and would not have a significant effect. **Considering this, Option 3 has been rated GREEN.**	G	A	G
People – Proximity to Dwellings	**Study Area Baseline** Brackley Farm is located approximately 396 m north of T44. The Brackley Farm property is located outwith the distance of 4 times the maximum height of the proposed transmission towers (4 x 60m = 240 m)[12]. **Tie-in Options** Tie-in Option 1 is the most distant of the Tie-in Options from residential properties (approximately 1 km south east from Brackley Farm).	G	G	G

[12] Please refer to SSEN, 2020. Procedures for Routeing Overhead Lines and Underground Cables of 132kV and above. Document reference: PR-NET-ENV-501. September 2020 for information on why this threshold has been applied.

Topic	Environmental Analysis	RAG Rating		
		Option 1	Option 2	Option 3
	Tie-in Option 2 passes at least 320 m to the south east of the nearest residential property (Brackley Farm). The conductors of Tie-in Option 3 pass the Cnoc an t-Sabhail property within the distance equating to 2-4 times the height of the tower structure. Towers on this Tie-in Option are located outwith this threshold, at a distance of at least 255 m. **This Option also brings the OHL closer to the village of Glenview (approximately 400 m), however it would be connecting into existing infrastructure and would not significantly change the existing view. The existing views from Glenview are also partially screened by woodland.** **Therefore, as all properties are located within a distance of greater than 4 times the nominal height of the structure, all options are rated GREEN. Refer to Visual Receptor and Residential Visual Amenity (RVA) sections for further detail.**			
Landscape and Visual - Designations	All Tie-in Options are located within the North Argyll Area of Panoramic Quality (APQ). There would be direct impacts upon this landscape designation as a result of all proposed Tie-in Options. It is likely there would be theoretical visibility of the proposed Tie-in Options from the Ben Lui Wild Land Area, and from the Loch Etive Mountains WLA, and from high peaks on the western edge of the Loch Lomond and Trossachs National Park. An assessment of effects is being undertaken for the full OHL alignment and it is anticipated that any effects associated with all Tie-in Options would be contained to within the local area surrounding the OHL alignment due to the presence of forestry and woodland, which would restrict the influence of any of the Tie-in Options across designated areas. **Significant effects on designated landscapes as a result of any of the Tie-in Options are considered unlikely and have been rated as GREEN.**	G	G	G
Landscape and Visual – Landscape Character	All Tie-in Options would be located within the Craggy Upland LCT. Each Option would introduce transmission infrastructure to an area of landscape which currently hosts the existing SPEN OHL. The Proposed Development (in its entirety) would increase the influence of high voltage transmission infrastructure within the host LCT, and across parts of the neighbouring Upland Glens, Rugged Mountains and Stie-inp Ridges and Mountains LCTs. It is not considered that any of the proposed Tie-in Options would reduce this influence substantially, to a degree where one is preferred over another. Option 1 would generally fit with the existing grain of the topography, following the contours of the upland moorland landscape to Tie-in with the existing OHL without the requirement of any significant sharp turns or corner towers, or any	G	G	G

Topic	Environmental Analysis	RAG Rating		
		Option 1	Option 2	Option 3
	areas where transmission infrastructure would route perpendicular with the alignment of other infrastructure in the landscape (i.e. the West Highland railway line, the A85). However, the proposed alignment in this area is located across more elevated landscape, and therefore the influence of this part of the line across the wider area would be greater than for example, Option 3, where the alignment is located at a lower elevation and therefore would have marginally lower influence across the wider area. When considered on their own, not as part of the overall development, it is considered unlikely that any of the Tie-in Options would compromise the characteristic elements of the host landscape character type or cause cross landscape boundary effects. In this respect, all Options would be rated **GREEN**.			
Landscape and Visual - Visual receptors	Visual receptors with potential views of the proposed Tie-in Options would be: Users of Core Path C528 Dalmally Circular as it routes on elevated topography near Edendonich, to the east of Stronmilchan Users of the A85 as it routes to the south of the River Orchy, on the eastern approach to Dalmally Residents of Dalmally (particularly the eastern edge of the village such as Glenview and including those using facilities at the Dalmally Post Office and Community Centre) Tie-in Options 1 and 2 would be most notable in views from the wider area due to their elevated position on the upland moorland above Dalmally. Option 3 would avoid this higher ground and would be filtered in views by existing woodland in the immediate area, however, would be located in closer proximity to users of the A85 and the eastern edge of the settlement of Dalmally. Close proximity view would be likely from the Dalmally Post Office etc. and would therefore increase the visual complexity of transmission infrastructure within the view from these areas, in views to the south east. From the Core Path at Edendonich, each of the Tie-in Options would be viewed within the context of the existing SPEN OHL which routes directly across the circular core path in a number of locations. **Considering the above, all Options have been rated at AMBER.**	A	A	A

Topic	Environmental Analysis	RAG Rating		
		Option 1	Option 2	Option 3
Landscape and Visual – Residential Visual Amenity (RVA)	There are two residential properties which have the potential to be affected by all three Tie-in Options, these include Brackley Farmhouse and Cnoc an t-Sabhail (refer to **Figures 4.1-4.3, Appendix 2**). **Option 1** *Cnoc an t-Sadhail* The Preferred Alignment would be visible in an elevated position across the hillside in views to the south and south east of Cnoc an t-Sadhail, (refer to wireline **Figures 4.4a-4.4b, Appendix 3**). The Option 1 Tie-in would be theoretically visible from the property in medium distance views to the south east, at the eastern end of the Preferred Alignment (**see Figure 4.4a-4.4b).** The main elevation of the property faces northeast, away from the Proposed Development. The proposed alignment of the OHL would be appreciable in views from the rear of the house and when using the access road to the property. The property is surrounded by mature boundary vegetation which would provide an increased level of filtering/ screening in views towards the proposed OHL Tie-in Option 1 (**see Figures 4.4c – 4.4e**). The proposed development and Tie-in Option 1 would form a discernible, but not overbearing or overwhelming feature in views from this property. An existing transmission line passes to the north east of the property. While the proposed Baseline Alignment and Tie-in Option 1 wouldn't be considered to be overbearing in views from Cnoc an t-Sadhail as a standalone development, there is the potential for cumulative visual issues, such as encirclement which has potential to compromise the residential visual amenity at this location. *Brackley Farmhouse* From Brackley Farmhouse, Tie-in Option 1 would be theoretically visible in medium distance views to the south east, at the eastern end of the Preferred Alignment. Up to 16 towers of the Preferred Alignment would be theoretically visible at an elevated position across the hillside in views to the south, south west and south east of Brackley Farmhouse (as shown in wireline **Figures 4.5a-4.5b**). OHL Towers 40 to 42, to the southwest, would be screened by mature boundary vegetation and a series of outbuildings located to the south of the property, with the exception of one first storey dormer window facing west which would have potential views to the alignment. The proposed OHL towers to the south and southeast (Towers 43 – 47) would be most prominent in views from the rear elevation of the property, and when entering the property via the access road. Isolated mature trees would provide localised screening/ filtering of views but given the	A	R	G

Topic	Environmental Analysis	RAG Rating		
		Option 1	Option 2	Option 3
	size and scale of the OHL towers, they would form new features in the view to the south and southeast (**see Figure 4.5c – 4.5f)**. The proposed development and Tie-in Option 1 would form a notable, but not overbearing or overwhelming feature in views from this property. An existing transmission line passes to the north/ north east of the property. While the proposed Baseline Alignment and Tie-in Option 1 wouldn't be considered overbearing in views from Brackley Farmhouse as a standalone development, there is the potential for cumulative visual issues, such as encirclement. **It is predicted that Tie-in Option 1 would form a notable or even prominent element in views to the southeast in close proximity to the property, resulting in a notable change to the quality and character of views, and corresponding loss of visual amenity and has been rated as AMBER.** **Option 2** *Cnoc an t-Sadhail* The proposed Option 2 Tie-in would be theoretically visible from Cnoc an t-Sadhail. The Preferred Alignment (with amended tower locations) would be visible from the property in views to the southwest and southeast (refer to wireline **Figures 4.6a-4.6b**). Those OHL towers to the southeast (40 – 43B) would be largely screened by topography and mature vegetation in the intervening landscape. The slight movement of Tower 43B would bring the structure below the skyline, ensuring it is fully backclothed by topography in the distance. The OHL towers to the southwest (i.e. towers west of Tower 41) would be theoretically visible from the southern extent of the property, however local topography would provide screening. Tie-in Option 2 would introduce towers in closer proximity views to the east of the property, running across the view to connect with an existing transmission line. As a standalone development, Tie-in Option 2 is unlikely to create an overbearing effect on residential amenity at Cnoc an t-Sadhail. However, when viewed in combination with existing infrastructure and the proposed Preferred Alignment, it would result in transmission infrastructure being located to the north, south and east of the property and from a residential visual amenity perspective, could be viewed as encircling the property with transmission lines. Currently, there is dense boundary vegetation surrounding the Cnoc an t-Sadhail property which provides a high degree of screening in views of the proposed development, Tie-in Option 2, and existing transmission infrastructure to the north of the property which reduces this encirclement effect. However should this vegetation be removed; the proposed Tie-in Option 2 is likely to compromise the visual amenity at this location. *Brackley Farmhouse*			

Topic	Environmental Analysis	RAG Rating		
		Option 1	Option 2	Option 3
	Brackley Farmhouse would have theoretical views of Towers 40[13] – 44C + SPEN T16R as they sit at an elevated location across the hillside to the southwest and southeast of the property (as shown in wireline **Figures 4.7a-4.7b**). OHL Towers 40 - 41 to the southwest would be fully/ partially screened by mature boundary vegetation and backclothed by the lower slopes of Beinn Bhalgairean, reducing its visibility within views. OHL towers to the southeast (Towers 42B to 44B) would be the most prominent towers in the view, located across the skyline in the middle distance in direct views to the south. The proposed Tie-in Option 2 would route the alignment to the north east, introducing transmission infrastructure in views to the south and east of the property and, when connecting into the existing transmission line which routes to the north of Brackley Farmhouse, would encircle the property with transmission infrastructure. Conductors would be visible in every direction from the property except in views to the west where topography foreshortens views from the house. A number of small trees within the farmyard and along the property boundary would provide some localised transitory screening from select locations from the property however would not form substantial screening features. **It is predicted that Tie-in Option 2 would create encirclement by transmission infrastructure in views from the property at Brackley Farm, which is likely to compromise the quality and character of views, and result in a loss of visual amenity. Therefore Option 2 has been rated as RED.** **Option 3** *Cnoc an t-Sadhail* Views from the main elevation of the property extend to the north east and would not contain the OHL or Tie-in Option 3. Tie-in Option 3 would be viewed from the rear elevation of the property at Conc an t-Sadhail, in views to the northwest and south west from Cnon an t-Sadhail. The upper extent of Towers 41 and 42C as their associated conductors would extend above the intervening topography and would be partially visible above the skyline in views to the south west. Tower 42C would form a notable feature in theoretical views to the west however in actual views would be largely screened by a small area of mature woodland in the intervening landscape (refer to wireline **Figures 4.8a-4.8e**) with only a small extent of the tower extending above this vegetation. Tower 44C (the Tie-in tower) would be visible when exiting the property via the shared access travelling north/ northwest, viewed in the context of an existing transmission line. Views of this tower would be transitory.			

[13] Please note, this assessment only takes into account Tower 40 to 47 (as associated Tie-in Options). Towers 1 – 39 on the Preferred Alignment are not considered and therefore may also be visible from these receptors.

Topic	Environmental Analysis	RAG Rating		
		Option 1	Option 2	Option 3
	While it is predicted the proposed OHL would be appreciable in views from a small number of locations from the property, including from the rear elevation and when entering and exiting the property via the shared access road routing northwest/ southeast, it is not anticipated that the proposed development would notably compromise the residential amenity of the property. *Brackley Farmhouse* Tie-in Option 3 would be viewed from the rear elevation of Brackley Farmhouse, in views to the north west and south west. The upper extent of Towers 40 to 42C as their associated conductors would extend above skyline in views to the south west (**see Figures 4.9a and 4.9b**). Tower 42C would form the most notable feature in theoretical views to the south west however in actual views would be largely screened by outbuildings and mature boundary vegetation **(see Figure 4.9f)**. Tower 43C would be visible from limited locations on the periphery of the farmyard, and possibly from a single upper storey dormer window on the western side of in the property. The wireline indicates this tower would be backclothed by topography which would reduce its prominence in views. As noted for Conc an t–Sadhail, Tower 44C (the Tie-in tower) would be visible when exiting the property via the shared access travelling north/ northwest, viewed in the context of an existing transmission line. Views of this tower would be transitory. While it is predicted the proposed OHL would be appreciable in views from a small number of locations from the property, including from the rear elevation and when entering and exiting the property via the shared access road routing northwest/ southeast, it is not anticipated that the proposed development would notably compromise the residential amenity of the property. **Tie-in Option 3 would not form a prominent or dominant element in views from Brackley Farmhouse or from Conc an t-Sadhail and is considered unlikely to compromise the residential amenity of the property and has been rated as GREEN.** **Preference** Based on the preceding analysis the **Tie-in Option number 3 would be the most preferable.** Selection of Tie-in Option 3 would avoid the potential for encirclement of the properties by transmission infrastructure and would reduce the prominence of the OHL in views from each property. Localised planting could also be implemented to further reduce impacts.			

Topic	Environmental Analysis	RAG Rating		
		Option 1	Option 2	Option 3
Land Use- Agriculture	Scottish Government Soil Maps indicate that the majority of the Preferred Alignment runs through an area with an agricultural land classification of Grade 6.3[14]. All Tie-in Options (including temporary diversions) cross areas with an agricultural land classification of Grade 6.3 and 5.3[15]. **Therefore, all Options are rated as GREEN**	G	G	G
Land use – Forestry (Commercial plantation)	**Study Area Baseline** A strip of commercial plantation would require felling along the Preferred Alignment, between T44 and T47. **Tie-in Options 2 and 3 would not cross any further areas of commercial plantation and have therefore been rated as GREEN. Option 1 would result in a 0.1 ha loss of commercial plantation and has been rated AMBER.**	A	G	G
Land use - Recreation	**Study Area Baseline** There are several forestry tracks within the Study Area, with one track linking Brackley Farm to Uachdar Mhaluidh sheepfold. There are no National Cycle Network routes or core paths. **Tie-in Options** The Tie-in Options (including temporary diversions) are unlikely to have any impact on recreation and have been rated GREEN.	G	G	G
Planning	**Study Area Baseline** Land is allocated in the Argyll and Bute Local Development Plan 2015. Other relevant projects known to the planning system include the proposed Upper Sonachan Forest Wind Farm (currently under appeal), located near Portsonachan, approximately 9 km form the Study Area. **All Tie-in Options are predominantly located in an area allocated as a Countryside Zone and as such, have been allocated an AMBER rating.**	A	A	A

[14] Land capable of use as rough grazing with low quality plants

[15] Land in this class has the potential for use as improved grassland.