

Report on Consultation Creag Dhubh to Inveraray 275 kV Overhead Line Reference: LT000194

August 2022





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GLOSSARY

Term	Definition	
275 kV	275 kilo-volt capacity electricity power line	
ABC	Argyll & Bute Council	
Alignment	A centre line of an overhead line OHL, along with location of key angle structures.	
Amenity	The natural environment, cultural heritage, landscape and visual quality. Also includes the impact of SSEN Transmission's works on communities, such as the effects of noise and disturbance from construction activities.	
ATV	All-terrain vehicle	
BB	Balfour Beatty the project engineering team.	
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.	
DWPA	Drinking Water Protection Area	
Environmental Impact Assessment (EIA)	A formal process set down in The Electricity Works (EIA) (Scotland) Regulations 2017 used to systematically identify, predict and assess the likely significant environmental impacts of a proposed project or development.	
Environmental Impact Assessment (EIA) Report	The formal report submitted to Scottish Ministers detailing the likely significant environmental impacts of a proposed project or development and proposed mitigation.	
GPS	Global Positioning System	
Habitat	Term most accurately meaning the place in which a species lives, but also used to describe plant communities or agglomerations of plant communities.	
HER	Historic Environment Record	
HV	High Voltage	
ITE/ITW	Inveraray to Taynuilt East/ Inveraray to Taynuilt West OHL	
LEPO	Long-established woodlands of plantation origin	
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 $A - C(s)$.	
LMP	Land Management Plan	
LV	Low Voltage	



Term	Definition	
Mitigation	Term used to indicate avoidance, remediation or alleviation of adverse impacts.	
NatureScot	Formerly known as Scottish Natural Heritage, is the public body responsible for Scotland's natural heritage, especially its natural, genetic and scenic diversity. It advises the Scottish Government and acts as a government agent in the delivery of conservation designations, i.e. national nature reserves, local nature reserves, national parks, Sites of Special Scientific Interest (SSSIs), Special Areas of Conservation, Special Protection Areas and National Scenic Areas.	
Overhead line (OHL)	An electric line installed above ground, usually supported by lattice steel towers or poles.	
OHPL	Overhead power lines	
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.	
SEPA	Scottish Environment Protection Agency	
Span	The section of overhead line between two structures.	
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.	
Stakeholders	Organisations and individuals who can affect or are affected by SSEN Transmission works.	
UXO	Unexploded Ordnance	



1. EXECUTIVE SUMMARY

In order to meet licence obligations¹ and ensure security of supply, SSEN Transmission need to provide a new 275 kV OHL transmission connection, between the proposed Creag Dhubh substation and the existing Inveraray-Crossaig 275 kV circuit. The main drivers for the Proposed Development are the forecast growth in renewable electricity generation across Argyll and the need to reinforce the electricity transmission network to transport that electricity to areas of demand, supporting the transition to net zero emissions.

SSEN Transmission identified a baseline alignment and two deviation options and invited members of the public, statutory consultees and other key stakeholders, to participate in a consultation process on the Alignment Options running four weeks from May-June 2022.

The consultation process included the publication of a Consultation Document (8 April 2022) to describe the evaluation of the different Alignment Options and invite interested parties to provide their views. In addition, SSEN Transmission published a Consultation Brochure, held face to face Consultation Events and virtual live chat sessions. Through the consultation, comments were sought from members of the public, statutory consultees and other key stakeholders on the Preferred Alignment. This report presents a summary of the consultation undertaken, the feedback received from statutory and non-statutory consultees, and SSEN Transmission's responses to the issues raised.

Key issues emerging from the consultation responses include:

- potential impacts on the Blarghour Wind Farm habitat management area;
- potential impacts on the water environment including Scottish Water Drinking Water Protection Areas;
- potential impacts on ornithology and ecology including fish habitats;
- potential impacts on forestry; and
- potential impacts on peat;
- landscape and visual impact;
- access for medical helicopters;
- adverse effects on housing, tourism and businesses in general;
- construction pollution impacts, i.e., dust from access track roads and working near PWS;
- no community benefit; and
- condition of access track roads.

Following analysis of the consultation feedback and a review of SSEN Transmission's comparative analysis of engineering, environmental and economic criteria for each of the Alignment Options. Deviation 1 from the Inveraray – Crossaig connection then moving onto the Baseline Alignment through to the proposed Creag Dhubh substation was selected as the Proposed Alignment.

This report also sets out the next steps in the project design process and identifies where specific issues raised in the consultation responses will be addressed by the scope of the Environmental Impact Assessment (EIA).

¹ As the transmission license holder for the north of Scotland, SSEN Transmission has 'licence obligations' under the Electricity Act 1989



2. INTRODUCTION

2.1 Purpose of Document

SSEN Transmission is proposing to construct and operate a new 275 kV overhead line (OHL) between a proposed new substation at Creag Dhubh, and a connection point on the recently constructed Inveraray to Crossaig 275 kV OHL, north Argyll, Scotland. This Report on Consultation documents the consultation on the alignment selection options under consideration by SSEN Transmission, which was undertaken in May-June 2022.

The programme of consultation is designed to engage with key stakeholders including: statutory and non-statutory consultees; local communities and their elected representatives; landowners, and individual residents; to invite feedback on the rationale for and approach to, the selection of the Preferred Alignment.

The Report on Consultation describes the key feedback received from statutory and non-statutory consultees and details SSEN Transmission's responses to the issues raised.

2.2 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 outlines the background to the Proposed Development and provides a description of the key elements;
- 3. The Consultation Process describes the framework for consultation and methods which have been employed;
- 4. Statutory and Non-Statutory Consultation Responses and Key Issues summarises the range of responses, key comments and issues arising from statutory and non-statutory consultees;
- 5. Project Response to Consultation Responses describes how the comments and issues raised by statutory and non-statutory consultees will be addressed; and,
- 6. 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.



3. THE PROPOSALS

3.1 Project Background

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 renewables generation and to export the wider GB network. Collectively this group of works, designed to deliver the required increase in network capacity, has been named the 'Argyll and Kintyre 275 kV Strategy'.

The Proposed Development forms part of this strategy and aims 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.

Following the route options appraisal undertaken by Ramboll in June 2021, an approximately 500 m wide Original Preferred Route (Route Option DE) was established as the starting point for developing an OHL alignment. However, following consultation on Route Option DE a high risk of unexploded ordnance (UXO) was identified within the route, and Route Option DE became unfeasible. The OHL design contractor, Balfour Beatty (BB), were instructed by SSEN Transmission to develop a new Baseline Alignment for a 275 kV OHL located to the west of the A819 (**Figure 1, Appendix 1**).

3.2 Project Description

The Proposed Development would comprise an 8.9 kilometre (km) double circuit 275 kV overhead line (OHL), supported by lattice steel towers between a proposed substation at Creag Dhubh and a connection point on the recently constructed Inveraray – Crossaig 275 kV capable OHL circuit, in Argyll.

It has been assumed that the Proposed Development would accommodate an OHL with selfsupporting fabricated galvanised steel lattice towers (**Plate 3.1** below). 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. The spacing between towers would vary depending on topography, altitude, and land use. An investigation of sub-surface and geotechnical conditions at proposed tower locations would be undertaken at a later stage. The typical span distance between towers would be between 250 m to 350 m. Permanent access tracks are likely to be required to any angle and terminal tower locations, with temporary access tracks used 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 50 m above ground level.

3.3 Alignment Options Appraisal

3.3.1 Baseline Alignment

The Baseline Alignment aims to provide the optimal alignment taking account of environmental and engineering criteria. Following the identification of the Baseline Alignment, amendments were suggested (referred to as 'deviations').

3.3.2 Alignment Deviation 1

This option moves the Alignment to the west in the vicinity of Stronmagachan and offers improvements in response to consultee feedback. Moving the Alignment west moves it further away from residential properties. Additionally, it reduces the impact on the working farm by moving the alignment out of the lambing or "in-bye" fields. It also allows the Alignment to avoid being sited on



top of a ridge, as the Baseline Alignment is, which may help reduce visual impact from the trunk road and/or local properties.

3.3.3 Alignment Deviation 2

This option extends the section that the new OHL will run in parallel to the existing Inveraray to Taynuilt East/ Inveraray to Taynuilt West OHL (ITE/ITW OHL) before an angle turns towards Creag Dhubh and offers improvement in response to landowner feedback. The rationale for moving is in theory it reduces the area of land sterilisation by the two OHLs. The area of land between the existing ITE/ITW and the Baseline Alignment will likely be sterilised due to safety concerns about being enclosed between two live lines. Extending the section that the two OHL runs in parallel, minimises the land area between the two lines and therefore limits the extent of sterilisation.

3.3.4 Preferred Alignment

From south to north, the Preferred Alignment will comprise of Deviation 1 from the Inveraray – Crossaig connection onto the Baseline Alignment and maintain this through to the Creag Dhubh connection as shown on **Figure 3**, **Appendix 1**. The Preferred Alignment will not make use of Deviation 2. The Preferred Alignment was considered to be the optimum solution in terms of environmental, engineering and cost constraints.



4. THE CONSULTATION PROCESS

4.1 Consultation History

A consultation process on the Preferred Route was undertaken running four weeks from June-July 2021. However, following consultation on the Preferred Route a high risk of unexploded ordnance (UXO) was identified and the Preferred Route became unfeasible. A new Baseline Alignment was developed located to the west of the A819 and SSEN Transmission issued a leaflet to consultees notifying them of the change in route in March 2022.

4.2 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 1**.

Table 1: List of Statutory and Non-Statutory Consultees		
Statutory Consultees		
Argyll and Bute Council (ABC)	Scottish Forestry (SF)	
Historic Environment Scotland (HES)	Scottish Government (Energy Consents Unit)	
NatureScot	Scottish Water	
Scottish Environment Protection Agency (SEPA)	Transport Scotland	
Non-Statutory Consultees		
Argyll District Salmon Fishery Board (ADSFB)	ScotWays	
Royal Society for the Protection of Birds (RSPB)	Argyll Fisheries Trust	
West of Scotland Archaeology Society (WoSAS)	British Telecoms (BT)	

4.3 Methods of Consultation

4.3.1 Consultation Document

SSEN Transmission published a Consultation Document (8 April 2022) which evaluated the different Alignment Deviation Options (**Appendix 2**) and invited the consultees listed in **Table 3** to provide their comments by 9 May 2022.

4.3.2 Booklet

In addition, SSEN Transmission published a Consultation Booklet (8 May 2022) which provided an overview of the Proposed Development and consultation process, along with providing details of the virtual public consultation and live web-based chat sessions (**Appendix 3**).

4.3.3 Face to Face Public Consultation

Face to face Consultation Events were held on 18 and 19 May 2022. The exhibitions were held at Loch Fyne Hotel in Inveraray at the following times:

- Wednesday 18 May 2022, 2pm 7pm; and
- Thursday 19 May 2022, 2pm 7pm.



4.3.4 Live Chat Public Consultation

For members of the public who were unable to attend the face to face consultation events live chat sessions were held at the following times:

- Tuesday 24 May 2022, 5pm 7pm; and
- Wednesday 25 May 2022, 5pm 7pm.

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.

4.3.5 Promotion of the Public Consultation

The consultation events were advertised using several methods, as summarised in Table 2.

Table 2: Promotion of Virtual Consultation		
Method	Details	
Mail drop – consultation brochure	Inveraray Inn, Loch Fyne Hotel and the George Hotel	
Email to stakeholders to advise of consultation	Jenni Minto MSP, Brendan Ohara MP . Inveraray Community Council, West Loch Fyne Community Council , Statutory and Non- Statutory Consultees	
Mail drop – reminder postcard	156 properties and 8 commercial properties	
Social media campaign	Promoted through our project webpage	
Advertisement in Local Press	The Oban times, Argyll Advertiser, Lochaber Times and the Campbelltown Courier	

4.4 Consultation Questions

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

- Have we explained the need for this Project adequately?
- Have we explained the approach taken to select the Preferred Alignment adequately?
- Are there any factors, or environmental features, that you consider may have been overlooked during the Preferred Alignment selection process?
- Do you feel, on balance, that the Preferred Alignment selected is the most appropriate for further consideration at the EIA and consenting stage?



5. STATUTORY AND NON-STATUTORY CONSULTEES FEEDBACK AND PROJECT RESPONSES

In developing the Creag Dhubh to Inveraray 275 kV Connection Project, technical, environmental, and economic constraints on the design and safe operation of assets have been considered, along with views expressed by stakeholders. Gathering views from a variety of stakeholders is vital to developing and shaping a balanced solution. To ensure transparency throughout the consultation process it is vital to provide the opportunity to share the feedback received from stakeholders.

5.1 Overview: Responses to the Consultation Document

A total of seven written consultation responses to the Consultation Document were received from statutory and non-statutory consultees during the consultation period from May to June 2022.

Table 3 provides a summary of the responses, along with a reply from SSEN Transmission regarding how comments will be taken into account as the Proposed Development moves forward into the next phase of development.

In addition, a summary of the feedback and questions from the virtual public consultation and SSEN Transmission's responses to these will be provided on the project website:

https://www.ssen-transmission.co.uk/projects/creag-dhubh-inveraray-275kv-overhead-line/



Table 3: Statutory and Non-Statutory Responses		
Organisation	Comment	SSEN Transmission Response
Statutory Consultees		
Historic Environment Scotland (HES)	No further comments, agree with methodology in Scoping Report.	Noted
NatureScot	The proposed route corridor crosses the Blarghour Wind Farm habitat management area as shown in the Blarghour Land Management Plan (LMP). The LMP is subject to a condition attached to the deemed planning permission of Blarghour Wind Farm (ECU reference: EC00005267). Condition 9(1) states – "No development shall commence until a Land Management Plan has been submitted to and approved in writing by the Planning Authority, in consultation with NatureScot". The specific area in question currently contains 95 ha of mature non-native conifer plantation of low biodiversity value and limited foraging opportunity for bird species. It is proposed to fell the conifers and replant with low density native broadleaves with a mosaic of open ground to provide a wider variety of foraging habitat for golden eagle and black grouse. With the provision of more focussed route information within the Alignment Selection Consultation Document it would appear that the OHL still crosses the habitat management area. In order to avoid compromising the habitat management objectives the OHL should avoid this area by rerouting or consider undergrounding if practicable. Consideration should also be given to the location of access tracks, borrow pits, construction compounds and other infrastructure etc. and the need to be placed outwith the habitat management area.	 It is not practical to reroute the Preferred Alignment for the following reasons: To avoid the HMP, would require realignment more closely to the Baseline Alignment which was ruled out due to the disproportionate impact on farming operations at Stronmagachan. It would also require an additional angle tower and additional permanent access to be retained to the angle tower. This would lead to further forestry/habitat loss which would need to be agreed with the affected landowner. It would require the alignment to approach and possibly encroach on the in-bye lambing fields which Deviation 1 seeks to avoid. It would move the alignment closer to local residences The terrain between the Preferred Alignment and Baseline Alignment is challenging. This could result in additional towers with shorter spans to achieve the required clearances which would increase the presence of infrastructure in the area. Ongoing consultation with NatureScot is being undertaken in respect to their comments and further ecology and ornithology assessment will be undertaken as part of the EIA process.
Scottish Environment Protection Agency (SEPA)	No specific concerns regarding the preferred corridor but without information on habitats and peat and the likely location of all the supporting infrastructure required to build the scheme we are not able	The location of the towers is constrained by topography. To achieve the necessary clearances between spans, towers are sited on areas of flatter ground to minimise the excavation or



Table 3: Statutory and Non-Statutory Responses		
	to give a complete view on the acceptability of the alignment from our perspective. However, in relation to the water environment it would seem that the turbines avoid direct impacts, although it may be necessary to slightly relocate those in the vicinity of the River Aray in the north of the site to ensure a suitable buffer.	"benching" requirements. Moving tower locations to increase distance from watercourses will likely introduce other constraints. Additional structures may be required to achieve clearances which would result in an overall increase in excavation and construction activities. Detailed information on habitats and the results of the peat surveys will be presented in the EIA Report, along with full details and a plan of the Proposed Development. Potential impacts in relation to the water environment will also be assessed in the EIA Report.
Scottish Forestry	Deviation 1 seems to be a slight improvement reducing impact on ancient woodland and LEPO and so we would not raise any concerns. Deviation 2 which has not been taken forward, does raise an interesting point regarding forestry work in and around powerlines, especially where they converge. The owner may still have a wish for commercial woodland, although a change in woodland type in this area may reduce the need for forest management intervention. Is it the case that the OHPL as it continues to the north west – would be connected to the Creag Dhubh station?	The OHL would connect into the Creag Dhubh substation.
Scottish Water	The LT194 Creag Dhubh to Inveraray 275 kV OHL alignment lies within the River Aray drought management source catchment. A temporary abstraction from the River Aray for drought mitigation is the preferred option for Inveraray WTW, as this watercourse is more resilient to the effects of drought than the Douglas Water. It is therefore more likely to facilitate an abstraction which would meet full demand in a severe drought situation. Nevertheless, the usual environmental protection measures will be sufficient in this area during the proposed works. Scottish Water can keep in touch as work progresses within this area and in the unlikely event of a drought, Scottish Water can let them	The appointed Contractor would be responsible for liaising with Scottish Water pre and post construction. Potential impacts to DWPAs, Scottish Water assets and the River Aray catchment will be assessed in the EIA Report.



Table 3: Statutory and Non-Statutory Responses		
	know if we have to abstract water from the River Aray during the summer months going forward.	
	Scottish Water have produced a list of precautions for a range of activities. This details protection measures to be taken within a Drinking Water Protection Area (DWPA), the wider drinking water catchment and if there are assets in the area. Please note that site specific risks and mitigation measures will require to be assessed and implemented. These documents and other supporting information can be found on the activities within our catchments page of our website.	
Non- Statutory Consultees		
Argyll District Salmon Fishery Board (ADSFB)	Argyll Fisheries Trust and Argyll District Salmon Fishery Board would like to highlight that the preferred alignment will bring the OHL in close proximity to the upper reaches of the River Aray, which is a spawning habitat for Atlantic salmon and sea trout. We therefore ask that the sensitivities of the site should be considered in mitigation for any disturbance of riparian habitats and drainage of work sites which enter the river.	Riparian habitats and fish populations will be considered in the EIA Report.
Royal Society for the Protection of Birds (RSPB)	Golden Eagle It is good to see that the route now does not cross the A819 into the Glen Etive and Glen Fyne SPA designated for its golden eagle population. Potential for it to impact upon the SPA still requires a Habitat Regulations Assessment.	Further ornithology assessment will be undertaken as part of the EIA process, with a view to avoiding (where possible) and reducing the effects on the SPA, and consideration of any mitigation required.
	Operational mitigation The realignment (Deviation 1) now the preferred route takes the line closer to a number of golden eagle eyries. Although on lower ground it runs close to eyries and eagles have been found to collide with deer fences i.e. structures very low to ground in periods of reduced visibility i.e. fog. To reduce potential impacts on eagles we advise that mitigation is required. Our scoping response advised that the line route follows the most eastern edge of the corridor but this does not seem	



Table 3: Statutory and	Non-Statutory Responses	
	to be an option which is disappointing. We advise that line visibility is increased where it transits close to eagle eyrie sites (the northern section of Deviation 1 outside of the forestry), measures should be for the life-time of the line so ideally some form of coloured line sheathing or failing this hanging type bird deflectors which are replaced as per line maintenance schedule. Ideally it would be good to see mitigation include positive upland management for eagles in this area.	
	Construction (& potentially operational) mitigation The Alignment is c. 1 km of some eyrie sites and therefore potential for disturbance exists within the breeding season so we advise that works especially the use of helicopters should occur outwith the breeding season (Feb-August) or only within this period if breeding is proved to be unsuccessful within that season.	
ВТ	The project indicated should not cause interference to BT's current and presently planned radio network. We have active radio links at Inveraray however both routes pass our 100 m required infringement zone.	Noted
Other		
Argyll Estates	With the exception of Keppochan and Tullich forest to the north, and Three Bridges forest further south, the new line will be hosted entirely on land belonging to Argyll Estates.	Whilst it is regrettable that Argyll Estates are hosting a large proportion of the infrastructure of this project, SSEN Transmission are very limited on the alignment of infrastructure given the connection points required on for this project. Our assessment of Alignment Options does not consider the number or identity of landowners.
	The timescales of developing the preferred route option to the west of the A819 resulting in a lack of time for consultation/feedback.	The Preferred Alignment and access tracks have been developed in conjunction with landowners and occupiers since November 2021. Comments have been continually taken on board from all parties and inputted into our evolving design.



Table 3: Statutory and Non-Statutory Responses		
	The formal public consultation documents were available from 8 April 2022, with a deadline of 6 June 2022, allowing two months for consideration and response.	
	Assessment of alignment options has been carried out fully in relation to various engineering, environmental, land based and financial considerations.	
Proposed route alteration south of Stronmagachan to pass west of Sallachry and join the LT40 south of High Balantyre. The current proposal affects a number of residential properties (Kilmun and Sallachry and High Balantyre) having a material negative affect on the residents, future development opportunities and capital value. Clarification of Holford Rules in informing route selection.	Holford Rules form the basis of the decision-making process for siting of overhead transmission lines, this includes, avoiding areas of high amenity value; a preference (all things being equal) for the most direct route to be chosen, avoiding the use of changes of direction/angle towers; preference for hill and tree backgrounds to reduce visual impact; where area is flat and sparsely planted, to keep high voltage lines away from smaller independent lines. The Alignment Options have been assessed on the above rules in arriving at our Preferred Alignment.	
	Following various site meetings and correspondence, we have considered the Estate's request to align the line to the west of Sallachry. The initial assessment of this change is estimated to result in approximately 7 additional towers as it is a longer alignment over very challenging terrain. Of these additional towers required, 4 would be angle towers. These towers are more substantial as they are required to support a directional change and must be 'anchored' to counteract the pressure placed against the angle. Per Holford rules, changes of direction should be avoided (all things being equal).	
	Further, the Estates suggested alignment west of Sallachry, would have greater visual impact being at a higher elevation, would result in a greater area of tree loss, land sterilisation and have greater environmental impact and increased cost.	



Table 3: Statutory and Non-Statutory Responses		
	We do not believe that you have issued any documents or other interpretation that assist in understanding the impact from various viewpoints, including the residential properties at Sallachry and High Balantyre. Given the significant impact on these properties, this would have been appropriate.	Visualisations were presented at the in person public consultation events held at Loch Fyne Hotel, Inveraray on 18 and 19 May. Copies of the visualisations have been subsequently sent on to all parties who have requested these.
	Access points, permanent and temporary access tracks. Safety of proposed access track arrangements and impact on agricultural tenants (ability to cross with livestock ATV's/etc.) The consultation includes no information about access, either tracks or access points.	Consultation with the Roads Authority and swept path analysis will be carried out as part of the EIA process and the detailed design stage post consent. The proposed access points have been assessed as the most suitable and safe. A full Transport Assessment will be included in our EIA and a draft Construction Traffic Management Plan (CTMP). This CTMP will be updated post consent and will be agreed with Argyll and Bute Council (ABC) prior to construction the draft CTMP has been provided to landowners, where requested. We have continually taken on board comments of landowners and occupiers of works required to mitigate impact on agricultural businesses. Crossing points for All Terrain Vehicles (ATVs) will be installed at agreed locations. Any additional measures requested can also be considered. This should be discussed directly with the SSEN Transmission Land Manager. The consultation does not cover access tracks, SSEN Transmission are not required to formally consult with the public on these. However, dialogue has been ongoing regarding access track design since January 2022 with numerous site meetings held with landowners and occupiers.
	Joint consultation of LT194 and Blarghour wind farm connection	Some Landowners affected by the Preferred Alignment are not affected by the Blarghour Wind Farm connection and vice versa. Therefore, whilst Argyll Estates are unfortunately impacted by both projects, it would not be appropriate to consider the two together as it may confuse matters for other landowners.



Table 3: Statutory and Non-Statutory Responses		
	UXO surveys of Ladyfield Plantation and acknowledgement that the estate raised this first.	We acknowledge that the Estate advised on the presence of UXO in the Ladyfield plantation at the initial meeting about this project. However, this needed to be fully assessed by a specialist UXO contractor to obtain detailed proposal and estimated costs to manage to UXO hazard along the Original Proposed Route. This report was received in October 2021 and hence our decisions could not be fully informed until this time.
	Comments from Landowners and EIA assessment.	Work on the EIA is ongoing alongside collating consultation responses from all consultees. Comments will inform the Preferred Alignment selection prior to S37 application in the autumn 2022.
	Application under Section 37 of the Electricity Act (to be submitted in July 2022) will allow for a Limit of Deviation of 100m on either side of the line and 50m on either side of the access tracks. This LoD does not leave sufficient room to address all of the estate's concerns subsequent to the grant of a S37 consent.	A Limit of Deviation of 100 m on either side of the OHL and access tracks will be applied for. The application is due to be submitted in autumn 2022.
	The document is described as the "alignment selection consultation document". Despite three pages of a glossary, the heading does not clearly indicate the purpose of the document.	The purpose of the document is to seek comments from all interested parties on the Preferred Alignment selected for the project.
	Variation in route length of between 8 and 12 km in length, a variation of up to 50%.	The variation in length is calculated based on the five originally proposed Route Options which varied in length quite significantly.
	You have advised us that there are technical constraints regarding where LT194 (Creag Dhubh to Inveraray OHL) can connect to LT40 (Inveraray to Crossaig OHL), but do not appear to have done any meaningful work in analysing this.	The pertinent connection issue in connecting the Preferred Alignment into the Inveraray to Crossaig OHL is the angle at which it connects. Angles increase pressure on the structures and as per Holford Rules, changes of direction should be avoided (all things being equal).
	Distance of proposed alignment from High Balantyre.	The Preferred Alignment is approximately 150 m from High Balantyre Farmhouse. The temporary tower is approximately 90 m away and is anticipated be in use for approximately 12 months during construction and then removed. A full Noise Impact Assessment will be carried out within our EIA.



Table 3: Statutory and Non-Statutory Responses		
	Engagement with Consultees: Reporting on estates previous response to 2021 consultation.	An addendum to the Routeing Report on Consultation was prepared to reflect the Estate's comments on the previous consultation and has been uploaded to the project website.
	Request for agreement with SSEN/Argyll Estates to be formally documented.	Noted that agreements will be formalised.



5.2 Overview: Public Consultation Responses

No feedback forms were received following the May 2022 Preferred Alignment consultation events, despite various efforts to advertise these events. Nine articles of feedback were received during inperson and virtual consultation events from the local community. Twenty four people attended the in-person consultation events, with one follow up email received which SSEN responded to. Feedback from seven community members was received via two land agencies which are representing them, these are detailed within this report and responded to by SSEN.

5.2.1 Snapshot of the Virtual engagement

Previously due to the Covid 19 Pandemic, SSEN developed a bespoke online consultation platform which allowed stakeholders to visit a virtual consultation room and view the project information at their leisure – the Preferred Alignment consultation virtual events took the same form. The virtual platform was designed to enable stakeholders to experience the full exhibition from home on a computer, tablet or mobile device. It was designed to look and feel like a face-to-face consultation in a community hall, with exhibition boards, maps, interactive videos and the opportunity to share views on the proposals. A live chat function was available at advertised times to allow attendees to ask questions and get responses from the project team.

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

Two virtual events were held, 24 May 2022 from 5pm till 7pm, and 25 May 2022 from 5pm till 7pm. These events gave the public an opportunity to speak with the project team if they were unable to make the in-person events. It also gave SSEN the opportunity to communicate relevant information to members of the public regarding the S37 application and make them aware of how they can make their representations once the application is submitted. During this five-week consultation period, the Creag Dhubh to Inveraray webpage was viewed 30 times.

5.2.2 Consultation Feedback

The common themes picked up through consultation are detailed in **Table 4**.



Table 4: Consultation Feedback				
Торіс	Who	Comments Raised	SSEN Transmission's Response	
and natural beauty, that there will be a loss selection of privacy. and in It is in Transm		and natural beauty, that there will be a loss	Landscape and visual effects were considered in detail during the alignment selection stage. These have been balanced alongside cost, technical and other environmental considerations, which informed angle support structure locations and in turn the length, extent, cost and economic viability of the new infrastructure. It is important that integrated decision making and engagement from all SSEN Transmission disciplines takes place throughout the alignment process to ensure that appropriate weight is given to all factors.	
			The EIA will assess the landscape and visual impact of the Preferred Alignment, taking into consideration topography and existing infrastructure. Visualisations of the Preferred Alignment will be provided with the application for consent.	
Consultation	Community	Not enough visuals, models or in-depth environmental analysis provided to the community	During the May 2022 consultation a 3D model was presented that allowed community members to see visual impacts from specific viewpoints. Banners with environmental analysis of the Preferred Alignment where provided, along with consultation brochures with this information that people could take away.	
Noise	Community	The noise pollution that will be caused by the project will have a detrimental impact on the property both as a place to live and financially as a holiday destination and be a constant nuisance to the community members daily life.	As part of EIA, background noise monitoring has been carried out to understand the "baseline" noise conditions – i.e., the current background noise levels. In addition, an Outline Construction Noise Management Plan will be provided with the consent application and will be updated prior to construction and managed by the chosen contractor.	
Private Water Supplies (PWS)	Community	Concerns over PWS being impacted	Discussions have been held with landowners and surveys have been completed to locate PWSs and determine if they will be affected by the Preferred Alignment. The outcome of these surveys and subsequent assessment will be documented in the EIA Report.	



Table 4: Consultation F	Table 4: Consultation Feedback				
Economic	Community	Concerns that this project will significantly reduce the value of local properties and holiday businesses	The introduction of new infrastructure would have varied effects on property value and each case is considered on its individual merits within the statutory framework of the Electricity Act 1989 and the Land Compensation Act 1961. SSEN Transmission are obliged to follow a legal framework, therefore effects on value of property will be dealt with on a case by case basis.		
Traffic Management	Community Community Community	Concerns over access for clients of local argi businesses which are dependent on them being able to access the local towns/different areas of the farm.	A full Traffic Assessment will be carried out as part of the EIA. A Construction Traffic Management Plan (CTMP) will be prepared post consent and managed by the chosen contractor and shared with the local community. The CTMP will be agreed with ABC.		
		There are concerns over the pollution and disruptions during the construction phase in relation to certain access tracks	A Construction Environmental Management Plan (CEMP) will be prepared by the appointed contractor which would include Pollution Prevention Plans and a CTMP. In terms of individual mitigation in relation to dust/noise and traffic, this will be assessed on an ongoing basis as the project progresses and appropriate mitigation will be implemented where required. i.e., water bowsers for dust suppression and silt fences to protect water courses.		
		Concerns over the road closures and diversions and the impact this will have on the emergency services and that delays that a road ambulance would incur accessing properties could prove fatal.	Consultation with the Roads Authority and swept path analysis will be carried out as part of the detailed design stage post consent. The proposed access points that will be assessed in the EIA are considered the most suitable and safe. A full Transport Assessment will be included in EIA and a CTMP will be updated and agreed with ABC prior to construction. A draft of these documents will be provided to landowners, where requested.		



Table 4: Consultation	Table 4: Consultation Feedback				
Health	Community	The amount of cables surrounding certain properties are causing concerns over any time critical emergency that could happen and would make it impossible for a Heli med landing near impossible.	It is not anticipated that the Proposed Development will interfere with helicopter medical evacuation operations. SSEN Transmission is not aware of any issues of this sort elsewhere on the transmission network.		
Environmental	Community	There are concerns when the environmental survey was carried out there was no flora as it was February so the survey won't give a true representation of what will be destroyed.	We are confident that the surveys which were undertaken, were carried out in line with best practise in terms of timings.		
Communications	Community	Concerns that the already poor Wi-Fi and radio reception will be further compromised	We have consulted with BT in terms of the Preferred Alignment and they have raised no issues in relation to connectivity.		
Environmental	Community	There are concerns that some of the pylons would stand on a peat bed and significantly disturb the homeowners land	A Peat Landslide Hazard and Risk Assessment is being undertaken as part of the EIA.		



5.2.3 Criticisms

A number of people raised that they felt there was not enough done to inform the communities that are directly affected and that the communication during the planning stage was not effective enough. Some residents/landowners feel they have not been fully consulted or had their comments acknowledged accordingly from July 2021.



6. **CONCLUSIONS** AND NEXT STEPS

This document sets out the statutory and non-statutory responses received during the stakeholder consultation process on the Preferred Alignment.

Key issued emerging from the consultation responses include:

- potential impacts on the Blarghour Wind Farm habitat management area;
- potential impacts on the water environment including Scottish Water Drinking Water Protection Areas;
- potential impacts on ornithology and ecology including fish habitats;
- potential impacts on forestry
- potential impacts on peat;
- Landscape and visual impact;
- Access for medical helicopters;
- Adverse effects on housing, tourism and businesses in general;
- Construction pollution impacts, i.e., dust from access track roads and working near PWS;
- No community benefit; and
- Condition of access track roads.

Some suggestions from the community were as follows;

- To underground the project;
- Upgrade and use the pylons that are already there; and
- Consider an alternative alignment.

Based on the responses received during statutory and non-statutory consultation there have been no issues raised that would require SSEN Transmission to revisit the Preferred Alignment. Specific issues raised within the statutory and non-statutory responses will be addressed through the consenting process. As such the Preferred Alignment will be taken forward as the Proposed Alignment and is now adopted as the Proposed Development to be taken forward into the Environmental Impact Assessment.

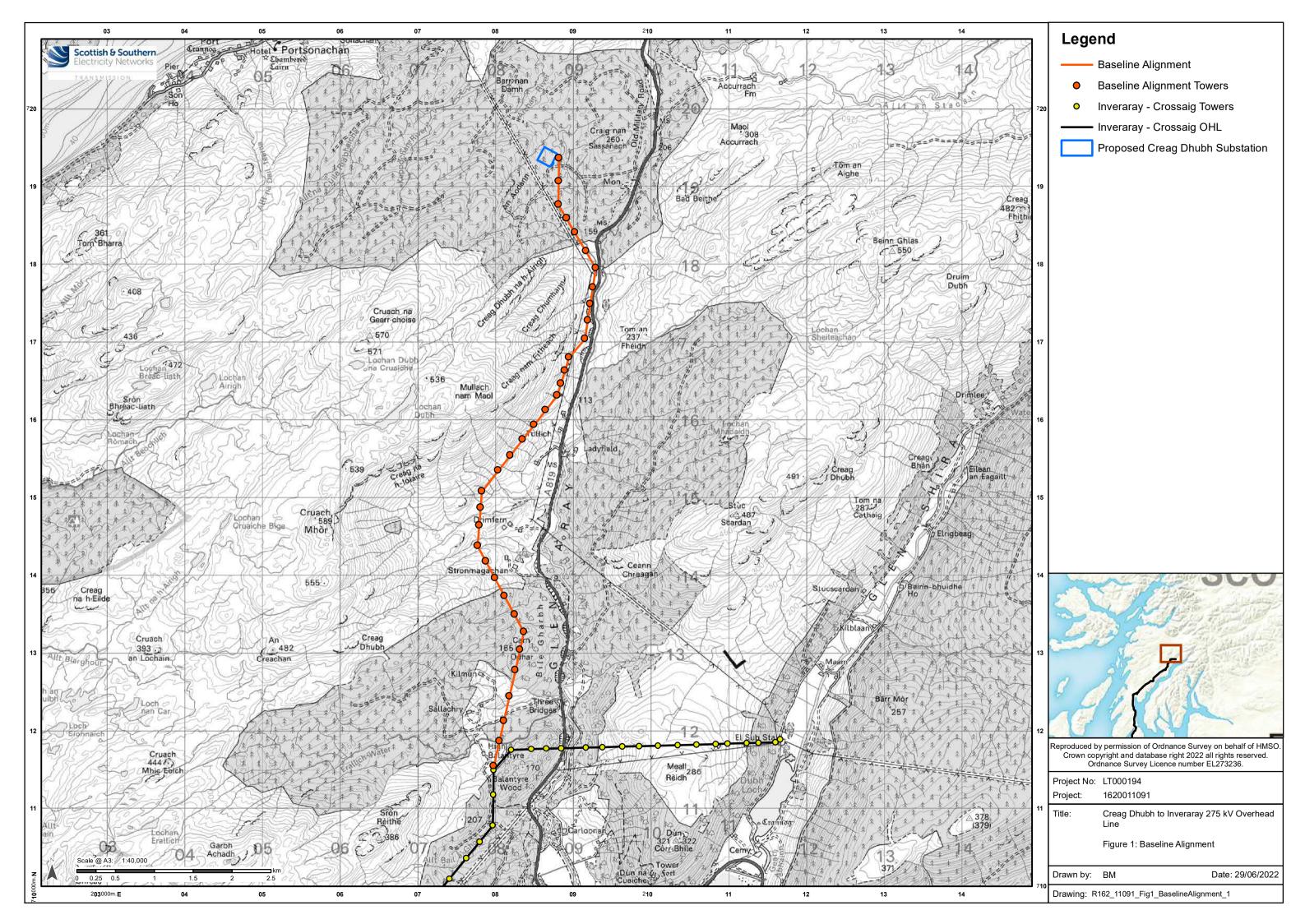
The next stages of the Proposed Development are as follows:

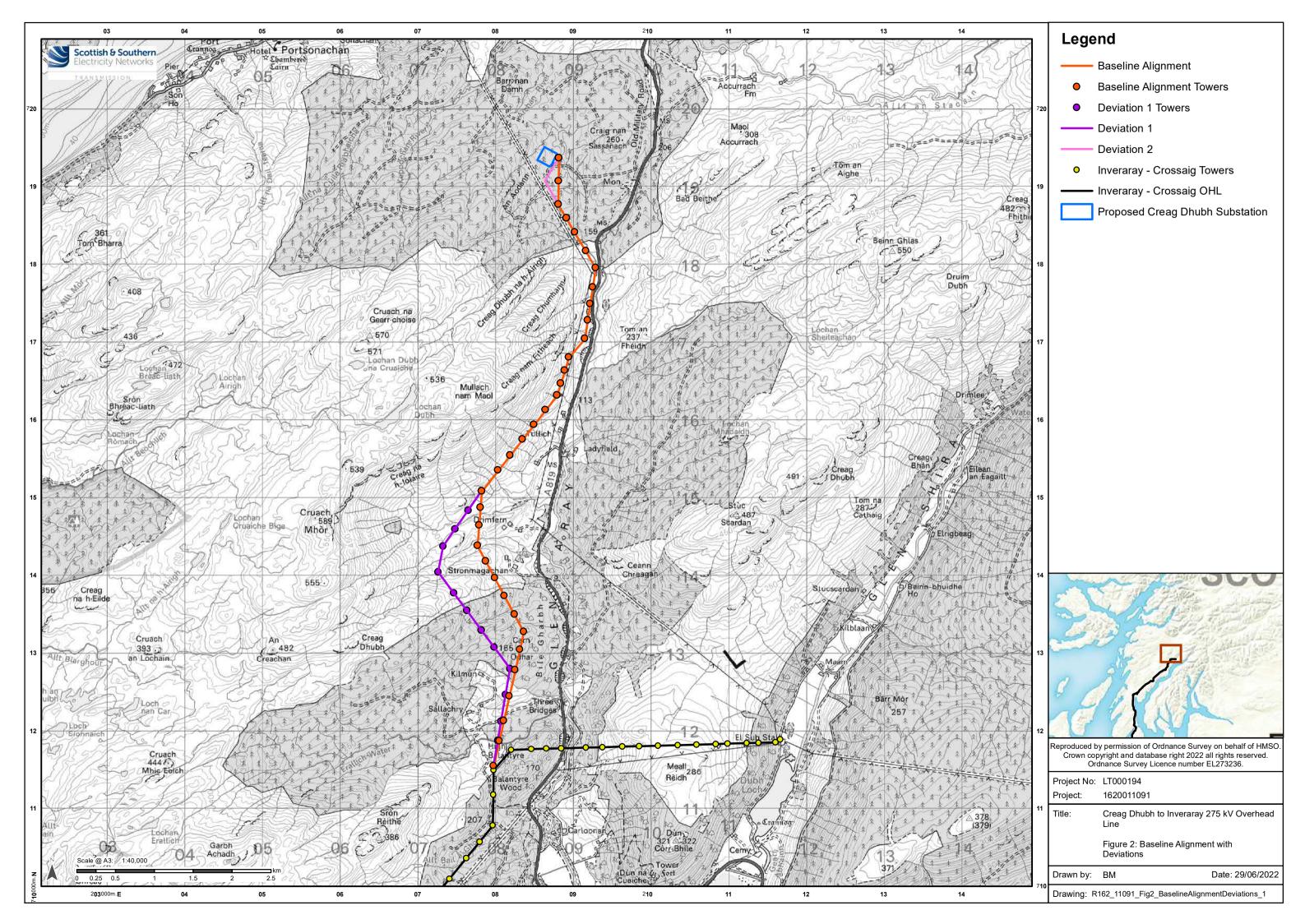
- Application Following the formal consultation stage, SSEN Transmission will consider the final details of its proposals before submitting an application for consent under Section 37 of the Electricity Act 1989. There will be a further opportunity for comments to be submitted in relation to the application and accompanying EIA Report to the Scottish Government ECU.
- 2. Further Information Further information will also be posted on the project website, including the summary of the feedback/ questions and SSEN Transmission's responses from the Virtual Consultation events at: https://www.ssen-transmission.co.uk/projects/creag-dhubh-inveraray-275kv-overhead-line/

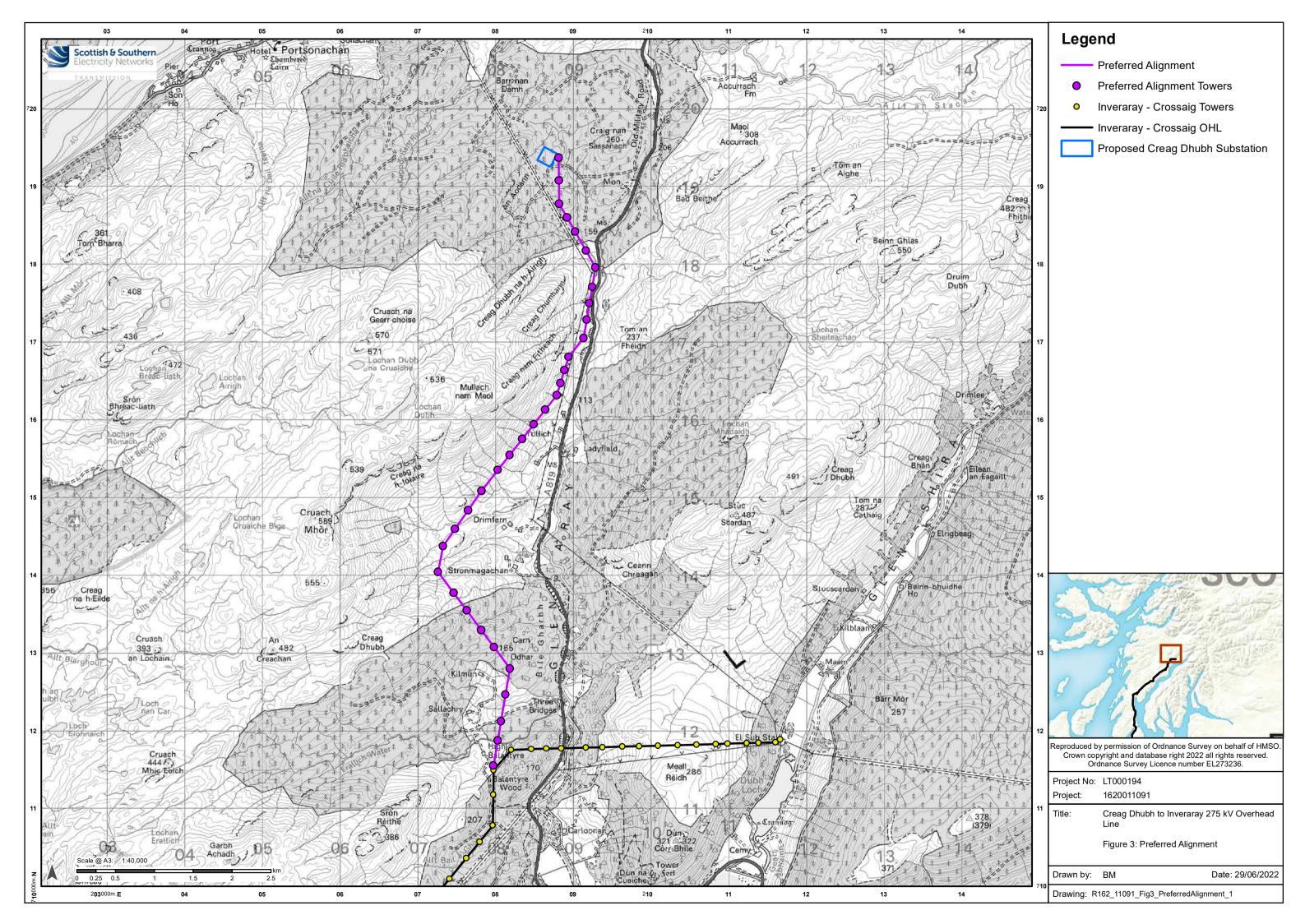
Stakeholders will have the opportunity to comment on the applications for consent either directly to the Scottish Government or through ABC. Full instructions on how to comment and the timescales for doing so will be advertised in the local press when the application is submitted.



APPENDIX 1: FIGURES









APPENDIX 2: CONSULTATION DOCUMENT



North Argyll 275kV Overhead Line Reinforcement

Alignment Selection Consultation Document: Creag Dhubh to Inveraray 275 kV Overhead Line

April 2022





Rev								
01	Prepared By	BM	Checked By	сс	Approved By	сс	Date of Issue	22/03/2022
02	Prepared By	BM	Checked By	сс	Approved By	сс	Date of Issue	01/04/2022



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ANNEXES

Annex A: Figures



GLOSSARY

275 kV	275 kilo-volt capacity of an electricity power line.
Alignment	The centre line of an overhead line route, along with the location of key angle structures.
Amenity	The natural environment, cultural heritage, landscape, and visual quality. Also includes the impacts of noise and disturbance, for example, on the natural environment experienced
Ancient Woodland	Woodland which has been in continuous existing 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
Angle Tower	Support structure (tower or pole) which allows a change in direction of the overhead line
APQ	Areas of Panoramic Quality
ABC	Argyll and Bute Council
BBOP	Business and Biodiversity Offset Programme
BGS	British Geological Survey
BNG	Biodiversity Net Gain
CAWL	Core Areas of Wild Land – Now classified as Wild Land Areas since 2014, Study these were extensive areas of high wildness as defined by Scottish Natural Heritage.
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
CIEEM	Chartered Institute for Ecology and Environmental Management
CIRIA	Construction Industry Research and Information Association
Circuit	Overhead line or underground cable consisting of multiple conductors, to carry electric current
Conductor	A metallic wire strung from supporting steel lattice or wood structures, or an insulated wire below ground, 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
EIA	Environmental Impact Assessment
GDL	Gardens and Designed Landscapes are defined within Historic Scotland Inventory of Designed Landscapes in Scotland (2012) as "grounds that are consciously laid out for artistic effect".
GEMP	General Environmental Management Plan
GWDTE	Groundwater Dependent Terrestrial Ecosystem
IEMA	Institute of Environmental Management and Assessment



ITE / ITW	Existing 132 kV overhead line that connects Inveraray Switching Station to Taynuilt Substation. Inveraray Taynuilt East and West refers to the names of the east and west circuit on the overhead line.
Kilovolt (kV)	One thousand volts
LCT	Landscape Character Type exhibiting distinctive pattern of elements and features.
MCA	Multi-Criteria Analysis- an evaluation of the technical and environmental constraints was undertaken in the form of constraints analysis which included a combination of desk-based analysis, field work, consultation, and liaison with the wider project team. These are then transferred to Geographic Information System (GIS) for analysis.
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.
NatureScot	Formerly known as Scottish Natural Heritage, is the public body responsible for Scotland's natural heritage, especially its natural, genetic and scenic diversity. It advises the Scottish Government and acts as a government agent in the delivery of conservation designations, i.e., national nature reserves, local nature reserves, national parks, Sites of Special Scientific Interest (SSSIs), Special Areas of Conservation, Special Protection Areas and the national scenic areas.
NETS SQSS	National Electricity Transmission System Security and Quality of Supply
Operational Corridor	The area needed for operational maintenance
OPGW	Optical Fibre Ground Wire
Overhead Line (OHL)	An electric line installed above ground, usually supported by lattice steel towers or poles.
Planning application	An application for planning permission under the Town and Country Planning (Scotland) Act 1997, as amended by the Planning etc. (Scotland) Act 2006. It should be noted that consent under section 37 of the Electricity Act 1989 usually carries with it deemed planning permission from the Scottish Ministers under Section 57 of the Town and Country Planning (Scotland) Act 1997.
Preferred Alignment	An alignment for the overhead line taken forward to stakeholder consultation following a comparative appraisal of alignment 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 double circuit 275 kV overhead line between a proposed new substation at Creag Dhubh, approximately 3 km south of Cladich, and a connection point on the recently constructed Inveraray – Crossaig circuit, in Argyll, Scotland.
Proposed OHL	The proposed new 275 kV overhead transmission line between a proposed new substation at Creag Dhubh, and a connection point on the Inveraray – Crossaig circuit.
Preferred Route	The Route Option which is considered to represent the optimum balance between the various environmental considerations
Proposed Route	The final route taken forward following stakeholder consultation within which alternative OHL route alignments will be defined and appraised.
PWS	Private Water Supply
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



Routing Study	The study undertaken to assess the potential environmental impacts of the Route Options and to identify a preferred route based upon the potential environmental impacts identified.
Section 37 (s37) application	An application for development consent under section 37 of the Electricity Act 1989
SAC	Special Area of Conservation - designated under Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora (known as - The Habitats Directive)
SAM	Scheduled Ancient Monument - monuments of national importance which have been afforded legal protection under the Ancient Monuments and Archaeological Areas Act 1979
SEPA	Scottish Environment Protection Agency
SPA	Special Protection Area – designated under Directive 2009/147/EC on the conservation of wild birds (the Birds Directive)
SPEN	Scottish Power Energy Networks
SSEN Transmission	Scottish and Southern Electricity Networks Transmission
SSSI	Site of Special Scientific Interest – designated by SNH under the Nature Conservation (Scotland) Act 2004
Stakeholders	Organisations and individuals who can affect or are affected by SSEN Transmission works.
Study Area	The area for identification of environmental constraints along the proposed alignment options. The defined Study Area varies between disciplines.
VP	Vantage Point
Volts	The international unit of electric potential and electromotive force.
Wayleave	A voluntary agreement entered between a landowner upon whose land an overhead line is to be constructed and SSEN Transmission.
Wild Land Areas (WLA)	Those areas comprising the greatest and most extensive areas of wild characteristics within Scotland, as classified by SNH (2014).
Windthrow	Windthrow refers to trees uprooted by wind.
ZTV	Zone of Theoretical Visibility - the theoretical visibility of a Proposed Development based on the terrain of the surrounding area.



PREFACE

This Consultation Document has been prepared by Ramboll on behalf of Scottish and Southern Electricity Networks Transmission (SSEN Transmission), to seek comments from all interested parties on the Preferred Alignment selected for the Proposed Creag Dhubh to Inveraray 275 kV Connection project.

The Consultation Document is available online at: https://www.ssen-transmission.co.uk/projects/creag-dhubh-inveraray-275kv-overhead-line/

Virtual and face to face public consultation events detailing the proposals described in this document will be held at the following times:

Date of Event	Location
18 and 19 May 2022 14:00 to 19:00	Loch Fyne Hotel, Inveraray
24 and 25 May 2022 17:00 to 19:00	Event can be accessed via the project website:https://www.ssen- transmission.co.uk/projects/creag-dhubh- inveraray-275kv-overhead-line/

Comments on this document should be sent to:

Sarah Cane-Ritchie

Scottish Hydro Electric Transmission PLC

Inveralmond House

200 Dunkeld Road Perth PH1 3AQ

Email: sarah.cane-ritchie@sse.com

All comments are requested by 9 May 2022



EXECUTIVE SUMMARY

This Consultation Document invites members of the public, statutory consultees, and other key stakeholders to provide comment on the Preferred Alignment selected between the proposed Creag Dhubh substation and Inveraray-Crossaig circuit project¹.

An increase in renewable generation applying to connect to the Argyll and Kintyre network is the primary driver behind a need to reinforce this regional network. The level of generation applying to connect in the Argyll and Kintyre area has continued to increase, particularly within the past 12 months. Power system studies undertaken to assess the impact of this new generation shows that the capability of the existing network would be exceeded. Therefore, reinforcement is needed to maintain compliance with the standards that we need to plan our network against. Individual projects, like the Creag Dhubh to Inveraray 275 kV connection, are being progressed to provide this additional capacity for new generation connections.

Following the route options appraisal undertaken by Ramboll in 2021, an approximately 500 m wide Original Preferred Route (Route Option DE) was established as the starting point for developing an OHL alignment. A consultation process on this route was undertaken running four weeks from June-July 2021. However, following consultation on Route Option DE a high risk of unexploded ordnance (UXO) was identified within the route, and Route Option DE became unfeasible. A new Baseline Alignment has therefore been developed located to the west of the A819.

The OHL design contractor, Balfour Beatty (BB), were instructed by SSEN Transmission to develop a Baseline Alignment for a 275 kV OHL. The Baseline Alignment aims to provide the optimal alignment taking account of engineering criteria as per Table A7 of SSEN Transmission guidance².

Following the identification of the Baseline Alignment, amendments were suggested (referred to as 'deviations'). The following deviation options were suggested to address environment and engineering issues and previous consultation:

- Deviation 1: This deviation option moves the Alignment to the west in the vicinity of Stronmagachan and offers improvements in response to consultee feedback. Moving the Alignment west moves it further away from residential properties. Additionally, it reduces the impact on the working farm by moving the alignment out of the lambing or "in-bye" fields. It also allows the Alignment to avoid being sited on top of a ridge, as the Baseline Alignment is, which may help reduce visual impact from the trunk road and/or local properties.
- Deviation 2: This deviation option extends the section that the new OHL will run in parallel to the
 existing ITE/ITW OHL before an angle turns towards Creag Dhubh and offers improvement in
 response to landowner feedback. The rationale for moving is in theory it reduces the area of land
 sterilisation by the two OHLs. The area of land between the existing132 kV Inveraray to Taynuilt OHL
 (ITE/ITW) and the Baseline Alignment will likely be sterilised due to safety concerns about being
 enclosed between two live lines. Extending the section that the two OHL runs in parallel, minimises the
 land area between the two lines and therefore limits the extent of sterilisation.

This report presents a summary of the comparative analysis of environmental, engineering and cost criteria of the two Alignment Deviation Options and the Baseline Alignment. **Overall, a combined preference of Deviation 1** and the Baseline Alignment is considered to be the Preferred Alignment.

As part of the consultation exercise, comments are sought from members of the public, statutory consultees, and other key stakeholders on the Preferred Alignment option in response to questions set out in **Section 6**.

A Report on Consultation will be produced which will document the consultations received, and the decisions made considering these responses.

¹ Project Details available at: https://www.ssen-transmission.co.uk/projects/creag-dhubh-inveraray-275kv-overhead-line/

² SSEN, 2020. Procedures for Routeing Overhead Lines and Underground Cables of 132kV and above. Document reference: PR-NET-ENV-501. September 2020



1. INTRODUCTION

1.1 Background

Scottish and Southern Electricity Networks Transmission (SSEN Transmission) is proposing to submit an application for consent to construct and operate a new 8-12 kilometre (km) double circuit 275 kV overhead line (OHL), supported by lattice steel towers between a proposed new substation at Creag Dhubh, and a connection point on the recently constructed Inveraray – Crossaig circuit, in Argyll, Scotland (the 'Proposed Development').

SSEN completed a Route Selection Study³ between the proposed Creag Dhubh Substation and Inveraray. The Original Preferred Route (Route Option DE) (**Annex A, Figure 1.1**) was selected following survey, assessment, and consultation held over four weeks running June-July 2021 (as documented in the Report on Consultation, September 2021)⁴. Following this consultation SSEN Transmission were made aware of a significant UXO issue on the Ladyfield Plantation by the landowner and engaged with the MOD to gather information. SSEN Transmission also engaged with a specialist UXO contractor to provide a detailed proposal and budget to manage the UXO hazard across the Original Preferred Route.

The UXO Contractor's proposal outlined:

- Based on the minimum tree clearance and an estimate tree density, clearance would take a minimum of 260 days and could increase the cost to deliver the scheme by c50%;
- The point at which SSEN Transmission would know the extent of UXO presence in heavily wooded areas would be after consent had been gained in mid/late 2023 as SSEN Transmission are not able to begin felling operations until consent has been received and commencement requirements discharged. This could potentially result in identifying that the prevalence of UXO is much higher than previously estimated and could potentially delay completion by years; and
- Even factoring in the 263 days for clearance there is not sufficient time to achieve the April 2026 completion date from the point of receiving Section 37 consent.

The time required would cause significant delay to the project programme and the Argyll 275 kV Strategy (approximately 1 year delay). The cost of UXO clearance and particularly the tree stump removal, is considerable and far in excess of the cost of changing the Original Preferred Route to the New Proposed Route. There is also a risk of further delay if a higher number of UXO are found than estimated. The Original Preferred Route has therefore moved to the west of the A819.

1.2 Purpose of the Document

The overall purpose of this document is to inform a face to face and virtual consultation event covering the Proposed Development summarised below, and to aid the overall project understanding for interested parties as well as allowing for potential cumulative effects to be understood.

This Consultation Document describes the different OHL Alignment Deviation Options and invites interested parties to provide their views on the Preferred Alignment put forward in this document.

All comments received will inform SSEN Transmission' selection of a Preferred Alignment to be taken forward for Environmental Impact Assessment (EIA) and more detailed technical assessment prior to submission of an application for consent under section 37 of the Electricity Act 1989, as amended (hereafter referred to as s37 consent).

³ SSEN Transmission 2021. North Argyll 275 kV Overhead Line Reinforcement. Draft Route Options Environmental Report: Inveraray to Creag Dhubh 275 kV Overhead Line (LT194).

⁴ SSEN Transmission 2021. Report on Consultation Craig Dhubh to Inveraray 275kV Connection. September 2021. Available at: https://www.ssentransmission.co.uk/projects/creag-dhubh-inveraray-275kv-overhead-line/



1.3 Document Structure

This report is comprised of the following sections as follows:

- 1. **Introduction** provides a summary of the project background, sets out the purpose of the Consultation Document and provides the document structure;
- 2. The Proposals describes project need, the project overview, and consultation history;
- Description of the Alignment Deviation Options describes the identification of Alignment Deviation Options and provides a summary of each option;
- 4. **Comparative Appraisal** a summary of the environment, engineering and cost topics, followed by a comparative analysis summary and a description of the Preferred Alignment; and
- 5. **Consultation on the Proposals** invites comments on the Preferred Alignment and describes the next steps.

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



2. THE PROPOSALS

2.1 Project Need

SSEN Transmission owns and operates the electricity transmission network infrastructure in the north of Scotland. As part of its Electricity Transmission Licence, it has a number of obligations, including:

- the development and maintenance of an efficient, coordinated, and cost effective 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.

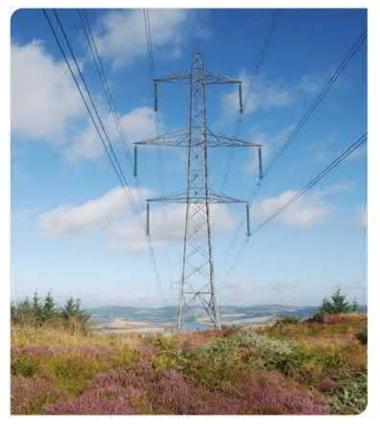
These licence obligations mean that SSEN Transmission must endeavour to connect generation to the network, and should do so in an efficient, coordinated, and cost effective way. An increase in renewable generation applying to connect to the Argyll and Kintyre network is the primary driver behind a need to reinforce this regional network. The level of generation applying to connect in the Argyll and Kintyre area has continued to increase, particularly within the past 12 months. Power system studies undertaken to assess the impact of this new generation shows that the capability of the existing network would be exceeded. Therefore, reinforcement is needed to maintain compliance with the standards that we need to plan our network against. Individual projects, like the Creag Dhubh to Inverary 275 kV connection, are being progressed to provide this additional capacity for new generation connections.

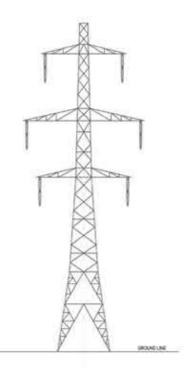
2.2 Proposed Development

The Proposed Development would comprise the construction of a new 275 kV double circuit OHL supported by lattice steel towers, between a proposed new substation at Creag Dhubh, and a connection point on the recently constructed Inveraray – Crossaig circuit, a Route of between 8 and 12 km.

It has been assumed that the Proposed Development would accommodate an OHL with self-supporting fabricated galvanised steel lattice towers (**Plate 2.1** below). 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. The spacing between towers would vary depending on topography, altitude, and land use. An investigation of sub-surface and geotechnical conditions at proposed tower locations would be undertaken at a later stage. The typical span distance between towers would be between 300 m to 350 m. Permanent access tracks are likely to be required to any angle and terminal tower locations, with temporary access tracks used 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 50 m above ground level. It is not within the scope of this study to compare overhead line with underground cable options.







Proposed L8 (c) Tower Suite

Plate 2.1: Transmission Tower Design

2.3 Project History

SSEN Transmission identified six alternative Route Options in the Inveraray area and invited members of the public, statutory consultees and other key stakeholders, to participate in a consultation process on the Route Options running four weeks from June-July 2021.

The consultation process included the publication of a Consultation Document (7 June 2021) to describe the evaluation of the different Route Options and invite interested parties to provide their views. In addition, SSEN Transmission published a Consultation Brochure and Poster and held a Virtual Consultation 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 Original Preferred Route (Annex A, Figure 2.1).

Following this consultation SSEN Transmission were made aware of a significant UXO issue on the Ladyfield Plantation by the landowner and engaged with the MOD to gather information. SSEN Transmission also engaged with a specialist UXO contractor to provide a detailed proposal and budget to manage the UXO hazard across the Original Proposed Route.

The UXO Contractor's proposal outlined:

- Based on the minimum tree clearance and an estimate tree density that clearance would take a minimum of 260 days and could increase the cost to deliver the scheme by c50%;
- The point at which SSEN Transmission would know the extent of UXO presence in heavily wooded areas would be after consent had been gained in mid/late 2023 as SSEN Transmission are not able to begin felling operations until consent has been received and commencement requirements discharged. This could potentially result in identifying that the prevalence of UXO is much higher than previously estimated and could potentially delay completion by years; and
- Even factoring in the 263 days for clearance there is not sufficient time to achieve the April 2026 completion date from the point of receiving Section 37 consent.

The time required would cause significant delay to the project programme and the Argyll 275 kV Strategy (approximately 1 year delay). The cost of UXO clearance and particularly the tree stump removal, is considerable



and far in excess of the cost of changing the Original Preferred Route to the New Proposed Route. There is also a risk of further delay if a higher number of UXO are found than estimated. The Original Preferred Route has therefore moved to the west of the A819. A Route Update note was issued by SSEN Transmission to statutory and non-statutory consultees in March 2022 providing a summary of the alteration in the Preferred Route.



3. DESCRIPTION OF THE ALIGNMENT DEVIAITON OPTIONS

3.1 Study Area

As detailed above, following the route options appraisal undertaken by Ramboll in June 2021, an approximately 500 m wide Original Preferred Route (Route Option DE) was established as the starting point for developing an OHL alignment. However, following consultation on Route Option DE a high risk of unexploded ordnance (UXO) was identified within the route, and Route Option DE became unfeasible. The OHL design contractor, Balfour Beatty (BB), were instructed by SSEN Transmission to develop a new Baseline Alignment for a 275 kV OHL located to the west of the A819.

3.2 Identification of Baseline Alignment

Balfour Beatty (BB) carried out engineering assessments to produce an alignment through the following steps:

- An initial desktop analysis allowed provisional angle points to be selected and marked on maps.
- Provisional ground lines and elevations were reviewed using LIDAR survey data.
- An on-site assessment of the initial alignment and angle points was made, involving traversing the initial alignment to investigate, photograph and record the locations (via hand held GPS) of key features including buildings, roads, public footpaths, water bodies, existing service markers, existing Low Voltage (LV) and High Voltage (HV) OHLs and other infrastructure that may require specific clearance from the Proposed Development.

The information gathered in the site assessment was used to determine the most suitable engineering alignment, hereafter called the 'Baseline Alignment'. The Baseline Alignment aims to provide the optimal alignment, taking account of engineering criteria as summarised in **Table 3.1** below.

Infrastructure Crossing	<u>Major Crossings:</u> Review of major crossings (132 kV, 275 kV, Rail, 200 m+ wide river, navigable canal, and hydro/gas pipeline) (Holford Rule 6). Road Crossing: Review number of road crossings.
Ground Conditions	Terrain: Review of topography, with a preference for lower gradients and avoiding slope gradients >50% where possible. Peat: Site survey to avoid unfavourable ground, such as peat, extensive areas of rocky outcrops and wet areas and water courses/ bodies.
Construction and Maintenance	<u>Angle Poles:</u> Review of angle pole requirements. Least number of angle poles is preferable (Holford Rule 3).
Proximity	<u>Clearance Distance:</u> Review distance to existing buildings or properties. Aiming at least 100 m distance.

Table 3.1: Baseline Alignment – Engineering Appraisal Criteria

The Baseline Alignment is shown in Annex A, Figure 3.1.



3.3 Alignment Deviations Analysis

The next stage comprised the analysis of the Baseline Alignment in terms of the environmental criteria summarised in **Table 3.2** below.

Natural Heritage	Designations, protected species, habitats, ornithology, hydrology, geology.
Cultural Heritage	Designated and non-designated assets.
Proximity to Dwellings	Residential properties.
Landscape and Visual	Designations, landscape character and visual amenity.
Land Use	Agriculture, forestry, and recreation.
Planning	Policy and proposals.

Table 3.2: Baseline Alignment – Environmental Appraisal Criteria

The route selection stage, completed in accordance with the SSEN Transmission OHL routeing process and the Holford Rules, ensured that the areas of highest amenity value were avoided. Therefore, for the majority of the Baseline Alignment, no obvious benefit was identified from alternative alignment options and the Baseline Alignment is confirmed as the Preferred Alignment for the majority. However, two Deviation Options were identified as shown in **Annex 1, Figure 3.2**; these are descried briefly below.

3.3.1 Alignment Deviation 1

This option moves the Alignment to the west in the vicinity of Stronmagachan and offers improvements in response to consultee feedback. Moving the Alignment west moves it further away from residential properties. Additionally, it reduces the impact on the working farm by moving the alignment out of the lambing or "in-bye" fields. It also allows the Alignment to avoid being sited on top of a ridge, as the Baseline Alignment is, which may help reduce visual impact from the trunk road and/or local properties.

3.3.2 Alignment Deviation 2

This option extends the section that the new OHL will run in parallel to the existing 132 kV Inveraray to Taynuilt OHL (ITE/ITW) OHL before an angle turns towards Creag Dhubh and offers improvement in response to landowner feedback. The rationale for moving is in theory it reduces the area of land sterilisation by the two OHLs. The area of land between the existing ITE/ITW and the Baseline Alignment will likely be sterilised due to safety concerns about being enclosed between two live lines. Extending the section that the two OHL runs in parallel, minimises the land area between the two lines and therefore limits the extent of sterilisation.



4. COMPARATIVE APPRAISAL

4.1 Introduction

The comparative appraisal for each Alignment Deviation Option has been completed in accordance with SSEN Transmission guidance. The guidance states that each Option should be evaluated with reference to agreed environmental, engineering and cost criteria and should be considered in terms of the potential for the Proposed Development to be constrained. A Red/Amber/Green (RAG) rating has been applied to each criterion with RED indicating a high potential for constraint, AMBER indicating intermediate potential for constrain and GREEN indicating low potential for constraint. It should be noted that a RED or AMBER rating does not necessarily indicate that the Option would be unacceptable, but rather indicates the need for further consideration of the potential to mitigate potentially adverse impacts.

4.2 Comparative Analysis of Baseline Alignment with Deviation 1 and 2

4.2.1 Environmental

The RAG analysis has identified particular sensitivities in relation to those constraints shown in amber in **Table 4.1** below. Many of these do not indicate a preference between the alternative options; however, the preferences that can be drawn out are identified below and are shown in **Figure 5.1 (Annex A)**.

The Baseline Alignment is preferred in relation to:

- Ornithology due to its increased distance from a golden eagle territory;
- Geology as it crosses a lesser area of Class 2 and Class 3 peatland;
- Cultural heritage as it is a greater distance from Kilmun Chapel and Burial Ground thus reducing the potential impact on its setting;
- Landscape character as it is located on higher land within the landscape character types (LCT); and
- Planning.

Alignment Deviation 1 is preferred in relation to:

- Natural heritage as it avoids impacts on Ancient Woodland and oak woodland;
- Hydrology due to its increased distance from private water supplies (PWSs);
- People as it routes further away from the northern cluster of properties (the four Drimfern and two Stronmagachan residences) and is screened from view by local topography in some places;
- Landscape designations as the towers would be visible from a smaller area;
- Visual receptors as it would have fewer impacts on visual receptors; and
- Land use and recreation as it would have fewer visual impacts on recreational receptors.

Alignment Deviation 2 is preferred in relation to:

• Hydrology due to its greater distance from the River Aray.

Deviation 1 and Deviation 2 are both preferred to the equivalent Baseline Alignment sections as outlined above.



Table 4.1: Summary of Environmental RAG Ratings

	RAG	RAG Impact Rating														
	Nat	Natural Heritage					tural itage	People	Landscape and Visual			Land Use			Planning	
Alignment options	Designations	Protected Species	Habitats	Ornithology	Hydrology /Geology	Designated Assets	Non-designated Assets	Proximity to Dwellings	Landscape Designations	Landscape Character	Visual Receptors	Agriculture	Forestry	Recreation	Policy	Proposals
Baseline	А	A	G	A	R	А	G	A	A	A	A	G	А	A	G	A
Deviation 1	G	G	G	A	R	A	A	A	A	A	A	G	A	A	A	A
Deviation 2	А	A	G	A	А	А	G	A	A	A	A	G	A	A	G	G

4.2.2 Engineering

Deviation 1 is preferred to the Baseline Alignment as the terrain is preferable with it being flatter enabling longer spans between towers. Additionally, it is preferred as it increases clearance between the OHL and nearby properties.

Deviation 2 is not preferred to the Baseline Alignment as it will require two larger angle towers to achieve the near 90 degree turn to connect to Creag Dhubh. This also affects the angle tower that ties into Creag Dhubh which would similarly be required to be larger. The location of the angle towers also requires an additional span over access tracks which is not preferred as it introduces further risk and additional challenges.

Alignment Options	RAG Impact	Rating - Eng	ineering			
options	Infrastructu	re Crossing	Ground Con	dition	Construction and Maintenance	Proximity
	Major Crossings	Road Crossings	Terrain	Peat	0	Clearance Distance
Baseline comparable to Deviation 1	A	G	R	G	G	A
Deviation 1	A	G	A	G	A	G
Baseline comparable to Deviation 2	G	G		A	A	G
Deviation 2	G	A	A	A	R	A

Table 4.2: Summary of Engineering RAG Ratings



4.2.3 Cost

Deviation 1 is preferred to the equivalent Baseline Alignment from a cost perspective. It requires one less tower and significantly less felling. This will save the cost of felling the trees and the timber compensation and compensatory planting costs.

Deviation 2 is not preferred to the Baseline Alignment as the substantial angle towers required will be more expensive than those required to construct the Baseline Alignment section.

	RAG Imp	act Rating	g – Cost					
Route	Capital Diversions		Public Road Improvement	Tree Felling	Land Assembly	Consent Mitigations	Inspections	Maintenance
Baseline comparable to Deviation 1	А	G	G	A	A	A	G	G
Deviation 1	G	G	G	G	G	А	G	G
Baseline comparable to Deviation 2	G	G	G	A	G	A	G	G
Deviation 2	А	G	G	А	G	А	G	G

Table 4.3: Summary of Cost RAG Ratings

4.3 Preferred Alignment

From south to north, the Preferred Alignment will comprise of Deviation 1 from the Inverary – Crossaig connection on to the Baseline Alignment and maintain this through to the Creag Dhubh connection. The Preferred Alignment will not make use of Deviation 2.

From an engineering perspective Deviation 1 has been selected over the Baseline Alignment as it makes use of flatter more open terrain and in doing so is able to increase distance from local properties and use less towers. This will also reduce the impact on the local farming operations and residences. Deviation 1 will require less extensive felling, making use of previously felled areas, and should result in an overall less costly and less complex construction. The most challenging section of the alignment is likely to be from where Deviation 1 rejoins the Baseline Alignment until after the new OHL has crossed the existing ITE/ITW.

From an environmental perspective Deviation 1 is preferred over the Baseline Alignment with respect to:

- Natural heritage as it avoids impacts on Ancient Woodland and oak woodland;
- Hydrology due to its increased distance from private water supplies (PWSs);
- People as it routes further away from the northern cluster of properties (the four Drimfern and two Stronmagachan residences) and is screened from view by local topography in some places;
- Landscape designations as the towers would be visible from a smaller area;
- Visual receptors as it would have fewer impacts on visual receptors; and
- Land use and recreation as it would have fewer visual impacts on recreational receptors.

The Preferred Alignment will not make use of Deviation 2 due to the cost and complexities of requiring the larger angle towers capable of achieving near ninety degree turns. The Preferred Alignment aims to balance these constraints and identify an alignment that is safe and practicable to construct.



5. CONSULTATION ON THE PROPOSALS

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

5.1 Questions for Consideration by Consultees

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

- Have we explained the need for this Project adequately?
- Have we explained the approach taken to select the Preferred Alignment adequately?
- Are there any factors, or environmental features, that you consider may have been overlooked during the Preferred Alignment selection process?
- Do you feel, on balance, that the Preferred Alignment selected is the most appropriate for further consideration at the EIA and consenting stage?

5.2 Next Steps

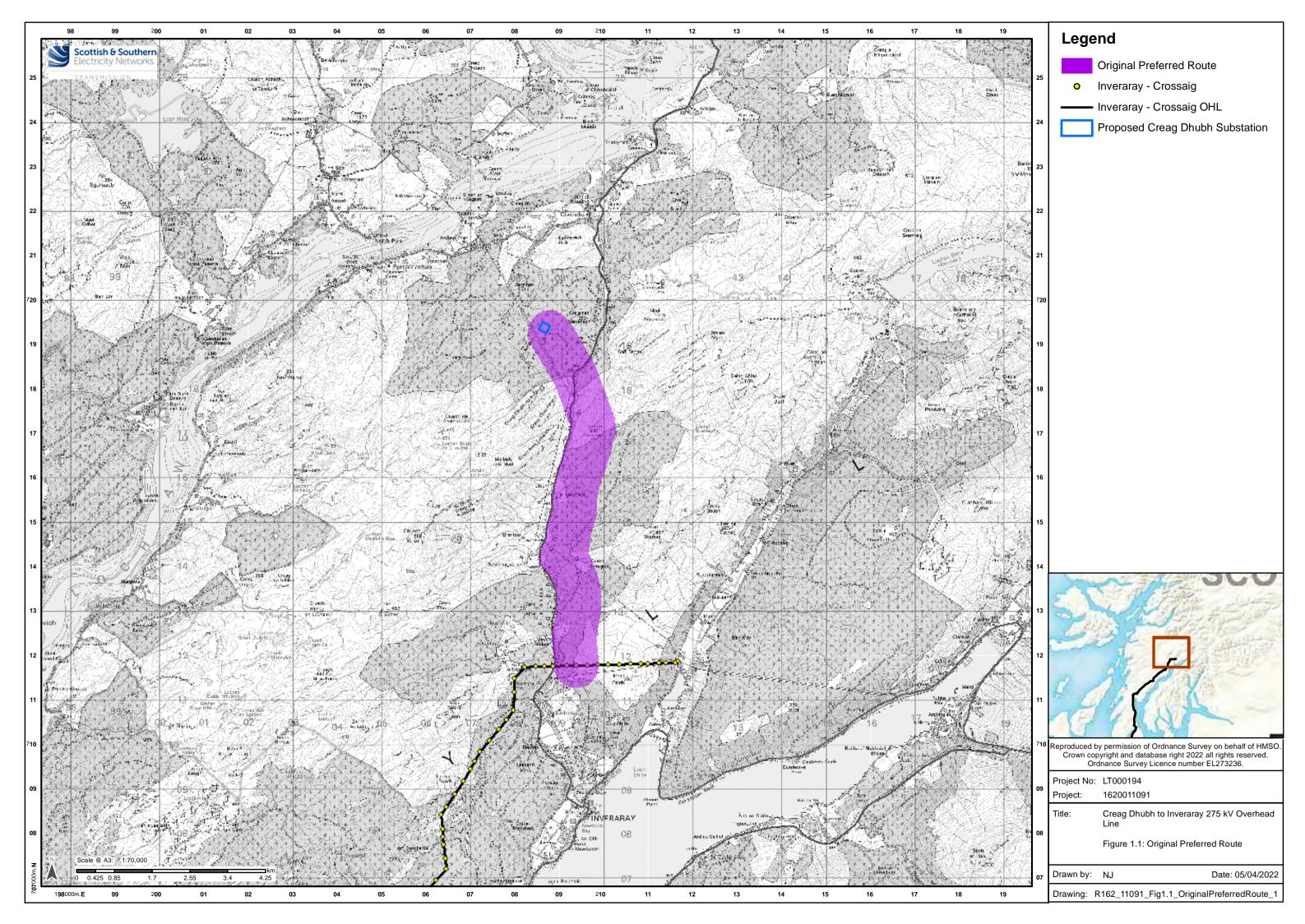
Virtual online and face to face public consultation events will be held, as detailed in the preface of this document. The responses received from these consultation events, and those sought from statutory consultees and other stakeholders, will inform further consideration of the Preferred Alignment put forward, and the identification of a Proposed Alignment to take forward to the next stage on the process.

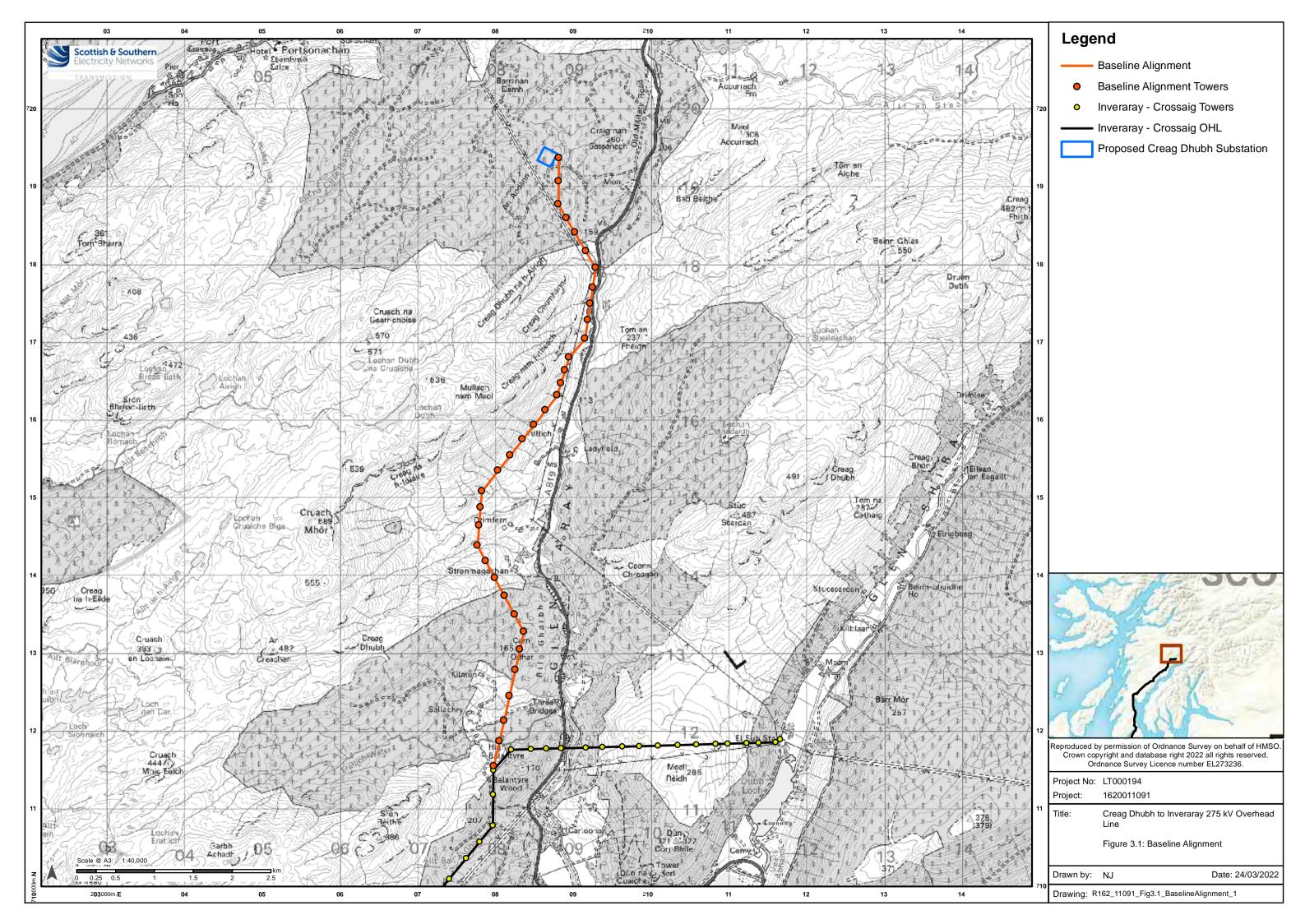
All comments are requested by **9 May 2022**. A Report on Consultation will be produced which will document the consultations received'

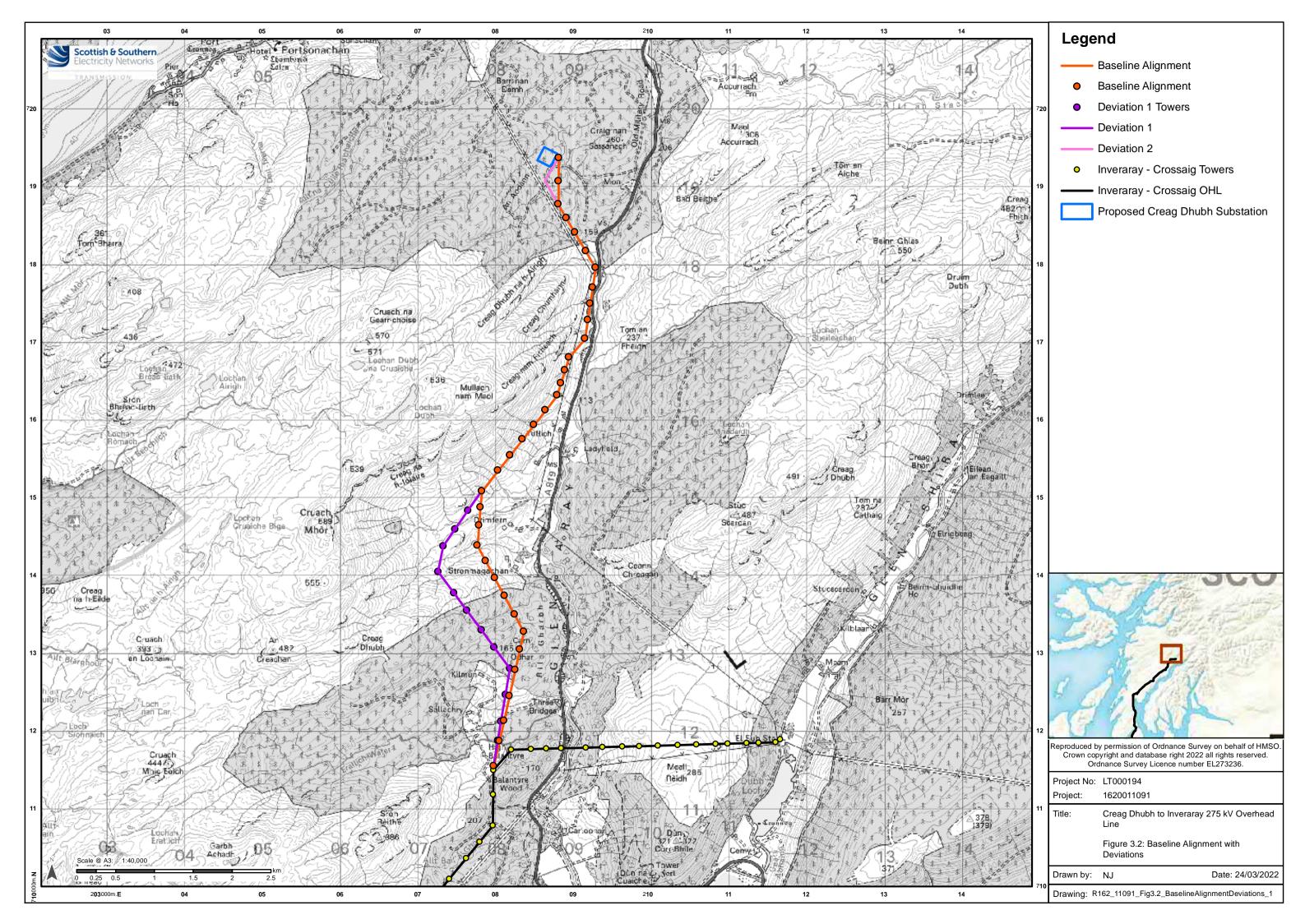
All comments received will inform SSEN Transmission's selection of a Preferred Alignment to be taken forward for EIA and more detailed technical assessment prior to submission of an application for s37 consent.

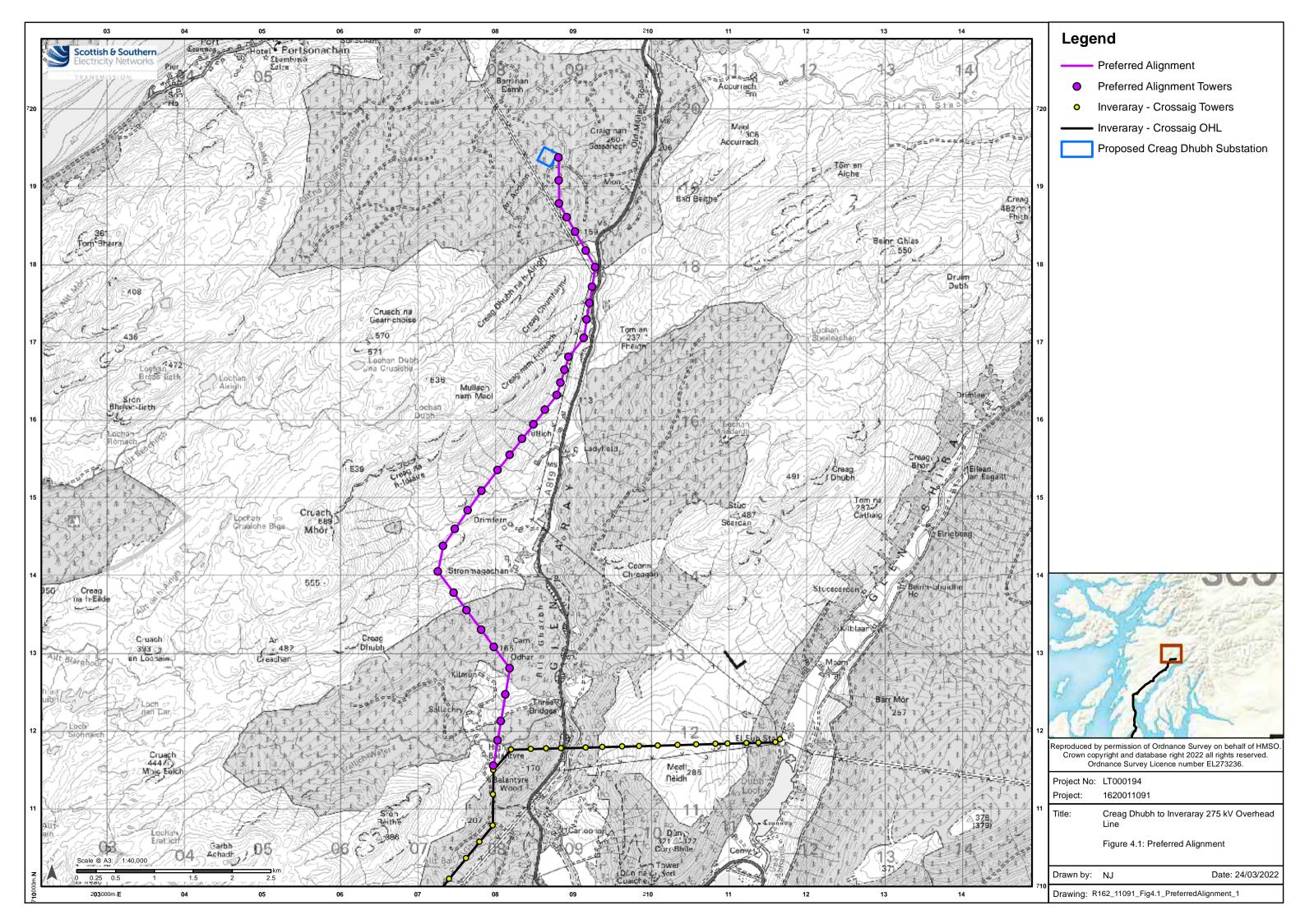


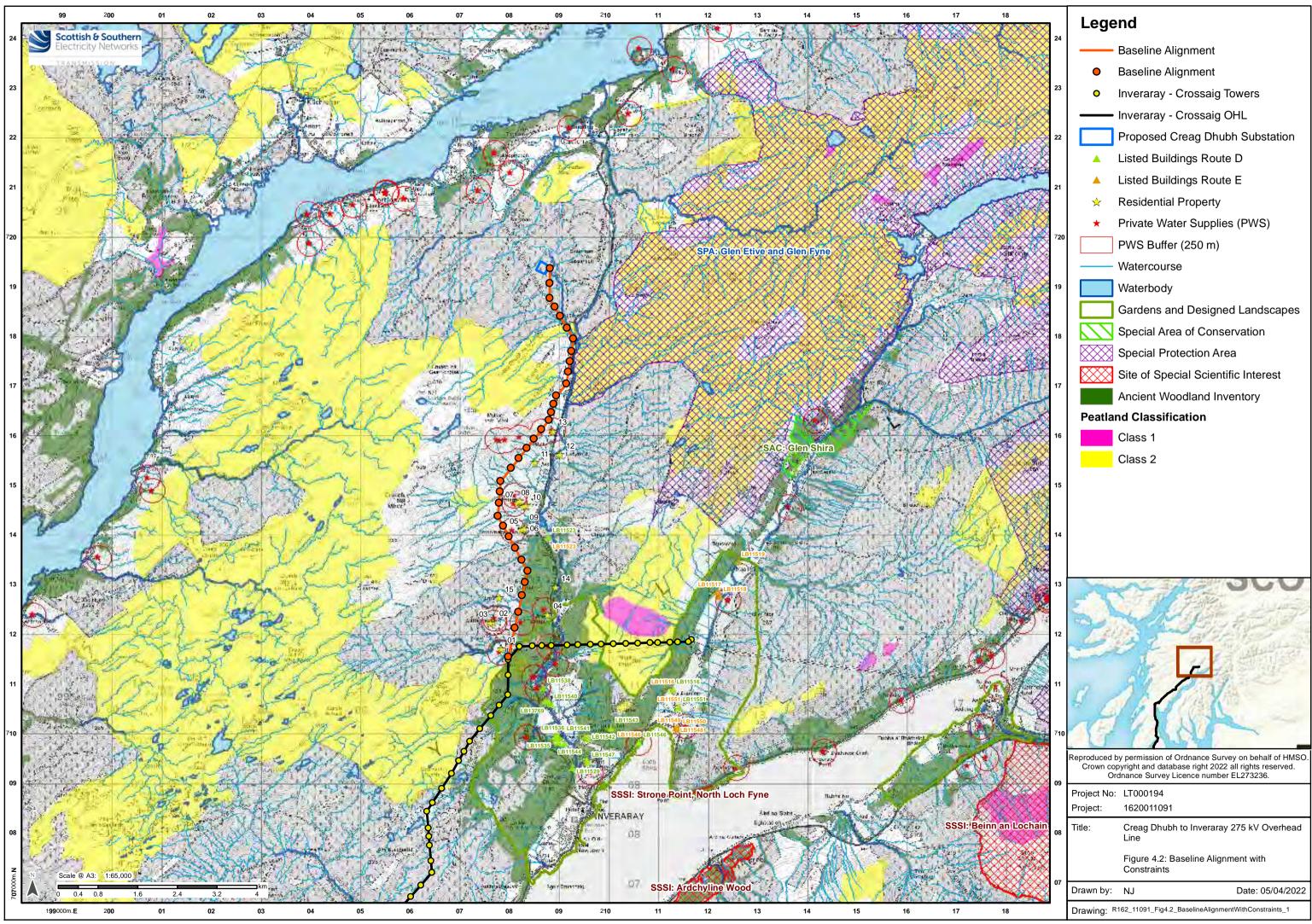
ANNEX A: FIGURES













APPENDIX 3: CONSULTATION BOOKLET

Argyll and Kintyre 275kV Strategy Consultation

Creag Dhubh - Inveraray 275kV Overhead Line -Alignment Consultation

Blarghour Windfarm Connection – Route Options Consultation

Share your views with us:

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

- Creag Dhubh Inveraray 275kV Overhead Line. The route options for this project were consulted on as part of the Argyll and Kintyre 275kV Strategy in July 2021. We request your feedback on our Preferred Alignment.
- The proposed Blarghour Windfarm Connection project. We request your feedback on the route options.

Information on our proposals is available within this consultation booklet and on the project webpages. We intend to hold both face to face and virtual consultations. Please note, a face to face event will be subject to covid restrictions and updates on whether these will go ahead will be available on our webpages:

www.ssen-transmission.co.uk/projects/argylland-kintyre-275kv-strategy/



TRANSMISSION

02 Argyll and Kintyre 275kV Strategy Consultation

Who We Are

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



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

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

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

Our responsibilities

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

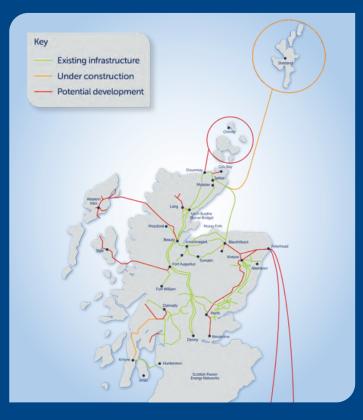
Our licence stipulates that we must develop and maintain an efficient, co-ordinated and economical system of electricity transmission.

What is the difference between Transmission and Distribution?

Electricity Transmission is the transportation of electricity from generating plants to where it is required at centres of demand.The Electricity Transmission network, or grid, transports electricity at very high voltages through overhead lines, underground cables and subsea cables. Our transmission network connects large scale generation, primarily renewables, to central and southern Scotland and the rest of Great Britain. It also helps secure supply by providing reliable connection to the wider network of generation plans.

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

Overview of Transmission Projects



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.

Our Argyll and Kintyre 275kV Strategy consists of three projects which are at various stages of consenting and public consultation process:



Creag Dhubh Dalmally 275kV Connection



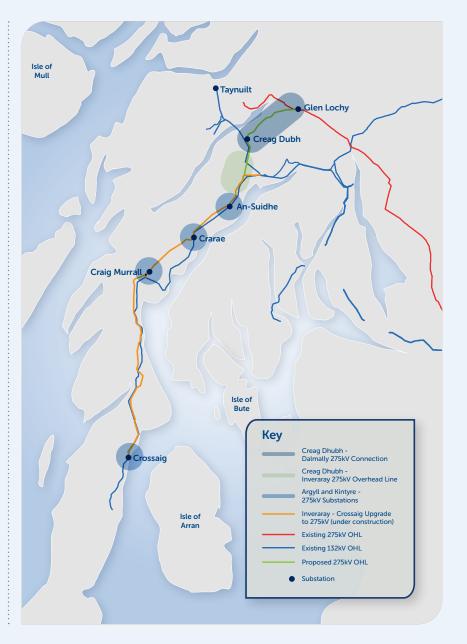
Creag Dhubh Inveraray 275kV Overhead Line



Argyll and Kintyre 275kV 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/ This means we need 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'.



Creag Dhubh – Inveraray 275kV Overhead Line (OHL)

Project Need

An increase in generation seeking connection to the SSEN Transmission network in the Argyll and Kintyre area is driving the requirement for further reinforcement to the network. The volume of contracted generation has significantly increased since 2019, with approximately 612MW signing connection offers since October 2019. On top of this further developers have submitted connection applications, and a large volume of scoping generation has been identified by local stakeholder engagement events that were held in 2021. This significant increase in the generation background requires reinforcement of the network in order for SSEN Transmission to maintain compliance with the National Electricity Transmission System Security and Quality of Supply Standard (NETS SQSS).

In order to meet licence obligations and ensure security of supply, SSEN Transmission need to provide a new 275kV OHL transmission connection between the existing Inveraray-Crossaig circuit and the proposed Creag Dhubh substation.

Project History

In July 2021 we consulted on the Route Options for the Proposed Development. Following analysis of the consultation feedback, along with engineering, environmental and cost considerations, we published our Report on Consultation in September 2021 which outlined that Route Option D/E would be taken forward as the Preferred Route Option. The project then moved into the alignment stage where we determine the proposed alignment of the OHL within the Preferred Route Option.

During the alignment stage, more detailed survey work and discussions with landowners and the Ministry of Defence revealed that Route Option D/E was not suitable as it passes through an area that posed a high risk from unexploded ordinance (UXO). Route Option B was selected as the new Preferred Route Option as of the original route options considered this was the least constrained from an environmental, engineering, and cost perspective and avoids the area of high UXO risk. Route Option D/E and Route Option B are shown in the **overleaf**.

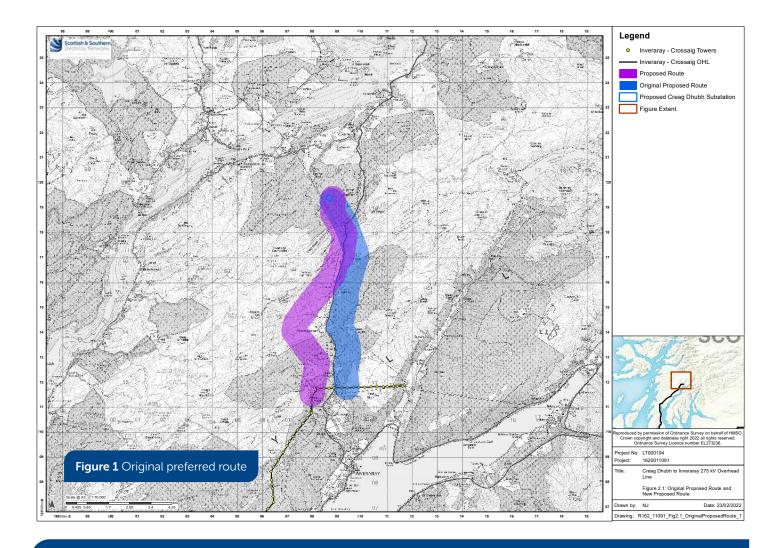
Project Overview

This project involves constructing nearly 9km of new 275kV OHL, supported by steel lattice towers, between the proposed new substation at Creag Dhubh and a connection point at Tower 18 on the recently constructed Inveraray to Crossaig overhead line.

The new line will be operated at 275kV once the associated transmission network in the Argyll and Kintyre region has been upgraded to 275kV capability. This will be done one circuit at a time over the summer of 2026 into Spring 2027.

Once the new OHL is operational, the existing 132kV OHL between Inveraray and the proposed new Creag Dhubh substation will be removed. The remaining 132kV OHL from Creag Dhubh substation to Taynuilt will not be altered during this project.

Due to the constraints on the route corridor, the new 275kV is required to cross the existing 132kV Inveraray - Taynuilt OHL. During the construction of the Creag Dhubh - Inveraray 275kV OHL SSEN Transmission will need to maintain the local electricity supply and therefore are required to build temporary OHL diversions on wood poles to allow the new OHL to safely oversail the existing.



Our consultation process

OHL routing is a balance between environmental, engineering and cost consideration, with stakeholder and public consultation also making up a key element of this process.

This project is at the alignment optioneering stage of development, and we are consulting with local stakeholders to update them on our proposals and to share considered alignment options and the Preferred Alignment. We have identified a Preferred Alignment on which we are keen to hear your views. After receiving feedback on our Preferred Alignment and carrying out further survey work and analysis to help us refine our proposals we will confirm the Preferred Alignment and take this forward to consenting as a Proposed Alignment, undertaking an Environmental Impact Assessment to support our eventual consent application.

SSEN Transmission are now consulting on the Preferred Alignment for this new OHL within Route Option B.

Alignment – route alignment selection process

The OHL design contractor was instructed by SSEN Transmission to develop a Baseline Alignment for a 275kV OHL. The Baseline Alignment aims to provide the optimal alignment taking account of Environmental and Engineering criteria. Following the identification of the Baseline Alignment, amendments were suggested (referred to as 'deviations'). The following deviation options were suggested to address environment and engineering issues and previous consultation.

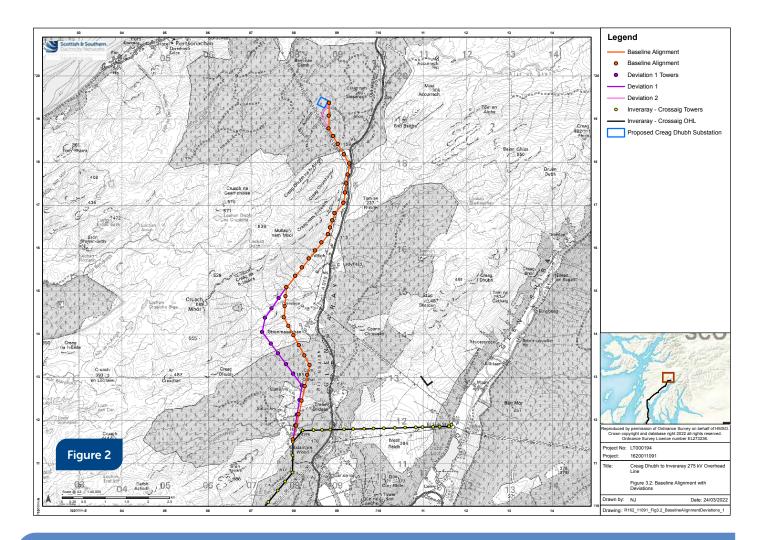
Two deviations were identified for further assessment, and reviewed in terms of cost, engineering and environment. These deviations can be viewed in the figure 2 on the next page.

Deviation 1

This deviation option moves the Alignment to the west in the vicinity of Stronmagachan and offers improvements in response to consultee feedback. Moving the Alignment west moves it further away from residential properties. Additionally, it reduces the impact on the working farm by moving the Alignment out of the lambing or "in-bye" fields. It also allows the Alignment to avoid being sited on top of a ridge, as the Baseline Alignment is, which may help reduce visual impact from the trunk road and/or local properties

Deviation 2

This deviation option extends the section that the new OHL will run in parallel to the existing 132 kV Inveraray to Taynuilt OHL before an angle tower turns towards Creag Dhubh and offers improvement in response to landowner feedback. The rationale for moving is in theory it reduces the area of land sterilisation by the two OHLs. The area of land between the existing 132 kV Inveraray to Taynuilt OHL and the Baseline Alignment will likely be sterilised due to safety concerns about being enclosed between two live lines. Extending the section that the two OHL runs in parallel, minimises the land area between the two lines and therefore limits the extent of sterilisation.



Comparative Analysis of Baseline Alignment with Deviation 1 and 2

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

Environmental

The RAG analysis has identified particular sensitivities in relation to those constraints shown in amber in the table on page 11. Many of these do not indicate a preference between the alternative options; however, the preferences that can be drawn out are identified below.

The Baseline Alignment is preferred in relation to:

- Ornithology due to its increased distance from a golden eagle territory;
- Geology as it crosses a lesser area of Class 2 and Class 3 peatland;
- Cultural heritage as it is a greater distance from Kilmun Chapel and Burial Ground thus reducing the potential impact on its setting;
- Landscape character as it is located on higher land within the landscape character types (LCT); and
- Planning



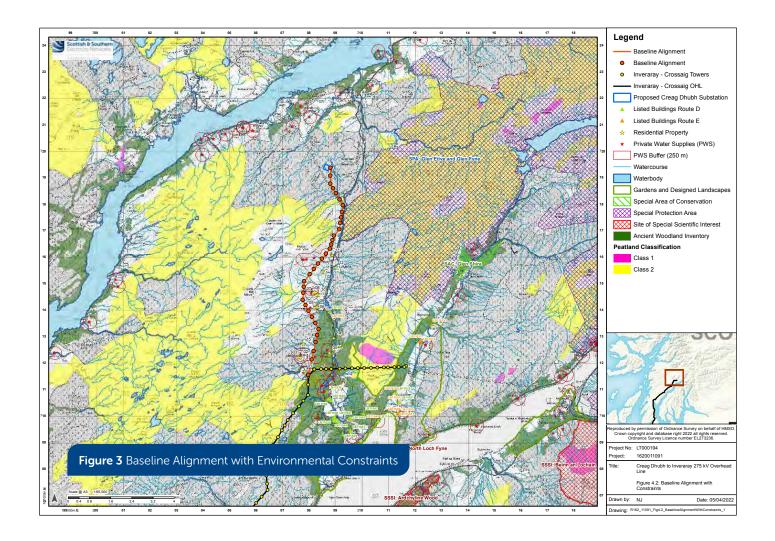
Alignment Deviation 1 is preferred in relation to:

- Natural heritage as it avoids impacts on Ancient Woodland and oak woodland;
- Hydrology due to its increased distance from private water supplies (PWSs);
- People as it routes further away from the northern cluster of properties (the four Drimfern and two Stronmagachan residences) and is screened from view by local topography in some places;
- Landscape designations as the towers would be visible from a smaller area;
- Visual receptors as it would have fewer impacts on visual receptors; and
- Land use and recreation as it would have fewer visual impacts on recreational receptors.

Alignment Deviation 2 is preferred in relation to:

• Hydrology due to its greater distance from the River Aray.

Deviation 1 and Deviation 2 are both preferred to the equivalent Baseline Alignment sections as outlined above.



	RAG I	mpact	Rating													
suoj	Natural Heritage						Cultural Heritage		Landscape and Land Use Visual			Use	Planning			
Alignment options	Designations	Protected	Habitats	Ornithology	Hydrology /Geology	Designated Assets	Non-designated Assets	Proximity to Dwellings	Landscape Designations	Landscape Character	Visual Receptors	Agriculture	Forestry	Recreation	Policy	Proposals
Baseline	A	A	G	A	R	A	G	A	A	A	A	G	A	A	G	A
Deviation 1	G	G	G	A	R	A	A	A	A	A	A	G	A	А	A	A
Deviation 1	A	A	G	A	А	A	G	A	A	A	A	G	A	A	G	G

Engineering

Deviation 1 is preferred to the Baseline Alignment as the terrain is preferable with it being flatter enabling longer spans between towers. Additionally, it is preferred as it increases clearance between the OHL and nearby properties.

Deviation 2 is not preferred to the Baseline Alignment as it will require two larger angle towers to achieve the near 90 degree turn to connect to Creag Dhubh. This also affects the angle tower that ties into Creag Dhubh which would similarly be required to be larger. The location of the angle towers also requires an additional span over access tracks which is not preferred as it introduces further risk and additional challenges.

SU	RAG Impact Rating - Engineering												
nent options	Infrastructure Cro	ssing	Ground Condition	ı	Construction and Maintenance	Proximity							
Alignment	Major Crossings	Road Crossings	Terrain	Peat	Angle Towers	Clearance Distance							
Baseline comparable to Deviation 1	A G		R	G	G	A							

su	RAG Impact Ratin	g - Engineering					
Alignment options	Infrastructure Cro	ssing	Ground Condition	n	Construction and Maintenance	Proximity	
Alignr	Major Crossings	Road Crossings	Terrain	Peat	Angle Towers	Clearance Distance	
Deviation 1	A	G	A	G	A	G	
Baseline comparable to Deviation 2	G	G	A	A	A	G	
Deviation 1	G	A	A	A	R	A	

Cost

Deviation 1 is preferred to the equivalent Baseline Alignment from a cost perspective. It requires one less tower and significantly less felling. This will save the cost of felling the trees and the timber compensation and compensatory planting costs.

Deviation 2 is not preferred to the Baseline Alignment as the substantial angle towers required will be more expensive than those required to construct the Baseline Alignment section.

	RAG Impact I	Rating						
Route	Capital	Diversions	Public Road Improvement	Tree Felling	Land Assembly	Consent Mitigations	Inspections	Maintenance
Baseline comparable to Deviation 1	A	G	G	A	A	A	G	G
Deviation 1	G	G	G	G	G	A	G	G
Baseline comparable to Deviation 2	G	G	G	A	G	A	G	G
Deviation 2	A	G	G	A	G	A	G	G

Preferred Alignment

From south to north, the Preferred Alignment will comprise of Deviation 1 from the Inverary – Crossaig connection on to the Baseline Alignment and maintain this through to the Creag Dhubh connection. The Preferred Alignment will not make use of Deviation 2.

From an engineering perspective Deviation 1 has been selected over the Baseline Alignment as it makes use of flatter more open terrain and in doing so is able to increase distance from local properties and use less towers.

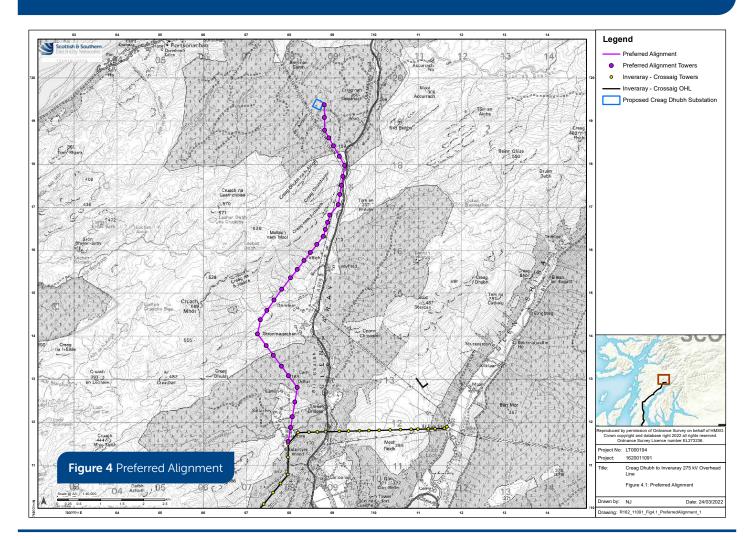
This will also reduce the impact on the local farming operations and residences. Deviation 1 will require less extensive felling, making use of previously felled areas, and should result in an overall less costly and less complex construction.

The most challenging section of the alignment is likely to be from where Deviation 1 re-joins the Baseline Alignment until after the new OHL has crossed the existing 132kV OHL.

From an environmental perspective Deviation 1 is preferred over the Baseline Alignment with respect to:

- Natural heritage as it avoids impacts on Ancient Woodland and oak woodland;
- Hydrology due to its increased distance from private water supplies (PWSs);
- People as it routes further away from the northern cluster of properties (the four Drimfern and two Stronmagachan residences) and is screened from view by local topography in some places;
- Landscape designations as the towers would be visible from a smaller area;
- Visual receptors as it would have fewer impacts on visual receptors; and
- Land use and recreation as it would have fewer visual impacts on recreational receptors.

The Preferred Alignment will not make use of Deviation 2 due to the cost and complexities of requiring the larger angle towers capable of achieving near ninety degree turns. The Preferred Alignment aims to balance these constraints and identify an alignment that is safe and practicable to construct.



Blarghour Windfarm Connection Consultation

What is the Project

This project aims to connect the consented Blarghour Wind Farm to the proposed Creag Dhubh Substation via approximately 10km of overhead line by Spring 2026.

SSEN Transmission is proposing to construct and operate a single circuit 132kV overhead line to connect Blarghour Wind Farm to the proposed Creag Dhubh Substation (the 'proposed development'). Coriolis Energy and ESB are the developer for the 73.1MW Blarghour Wind Farm, which gained Section 36 consent on 29th October 2021. SSEN Transmission has a statutory duty under Schedule 9 of the Electricity Act 1989 to connect Blarghour Wind Farm to the transmission network.

The proposed Project would involve:

- Felling commercial forestry to create an operational corridor to enable the safe operation and maintenance of the OHL.
- Establish temporary laydown areas for welfare facilities and material storage.
- Upgrade existing access tracks and install new temporary and permanent access tracks, where required.
- Delivery of structures and materials to site.
- Assemble and erect steel lattice or wood pole structures and stays and string conductors using hauling ropes and winches.
- Excavate trench and install any underground cable (UGC).
- Instal substation equipment within a new building at Blarghour Wind Farm.
- Remedial works to reinstate the immediate vicinity of the works and any ground disturbed to pre-existing use.



Route Options

We have identified two potential Routes for the new overhead line. The Route selection process identifies a wide corridor in which a preferred Alignment for the overhead line can be determined.

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

• Route 1

Heads northeast from the proposed Blarghour Windfarm substation for approximately 8km following the Cruach Mhor ridge line to the proposed Creag Dhubh substation. Upon exiting Blarghour substation, the route passes multiple turbines to the south of the proposed wind farm.

Route 2

Heads east from the proposed Blarghour Windfarm substation for approximately 4.8km towards Drimfern where the route then continues north following a similar route to the existing Inveraray – Taynuilt OHL running alongside the A819, before terminating at the proposed Creag Dhubh substation. Route 2 is approximately 10km long.

What are the potential risks associated with these options?

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

1. Environmental

- Both route options pass through areas of blanket bog and peat. Within Route 1 there is approx.
 5.17km² of peatland present which is the largest of the two routes. In Route 2, there is approx.
 3.23km² of peatland present.
- **b.** Both route options are close to the Glen Etive and Loch Fyne Special Protection Area (SPA) and there is potential for impacts to Schedule 1 birds and qualifying interests of the SPA.
- **c.** The northern section of Route 1 is located within the North Argyll Area of Panoramic Quality. There is potential for distant views of the OHL from the local road network to the north west and north and for the OHL to be visible on the skyline.
- **d.** No designated heritage assets are present within the route options. There are non-designated cultural heritage features that may be impacted by both route options.

2. Engineering

- a. Both route options present technical challenges due to the high elevation with over 50% of each route exceeding elevations of 200 m.
- **b.** Both options pass through areas of peat, which presents design challenges such as foundation design and access.
- c. For Route 1 the combined effects of peat and altitude may limit the design options to steel lattice towers. These are likely to result in a higher visual impact in the landscape.
- **d.** Route 2 was identified to have approximately 14% of the route within a 1 in 200-year flood zone, as it passes close to the River Aray. It is likely the OHL can be routed to avoid flood risk areas.

	RAG Ir	npact R	ating												
	Natural Heritage						Cultural Heritage		Landscape and Visual			Land U	Planning		
Route	Designations	Protected Species	Habitats	Hydrology /Geology	Ornithology	Designated	Non designated	Proximity to dwellings	Designations	Character	Visual	Agriculture	Forestry	Recreation	Planning
Route 1	м	L	н	м	м	м	L	L	м	м	м	L	м	L	м
Route 2	м	L	н	м	м	м	м	м	м	м	м	L	м	L	м

Environment RAG rating of the two route options

Engineering RAG rating of the two route options

	RAG Impact Rating											
Route	Infrastructure Crossings		Environmental Design		Ground Conditions		Construction and Maintenance	Proximity			Additional Considerations	
	Major Crossings	Minor Crossings	Elevation	Contaminated Land	Flooding	Terrain	Peatland	Access	Clearance Distance	Windfarms	Communication Masts	Route Length
Route 1	L	L	н	L	м	L	н	м	L	м	L	L
Route 2	м	L	н	L	н	L	н	L	н	L	н	L

What else is happening in Argyll?

SSEN Transmission consulted on the three projects which make up the Argyll 275kV Strategy

- 1. Creag Dhubh to Dalmally 275kV Connection.
- 2. Creag Dhubh to Inveraray 275kV Overhead Line.
- 3. Argyll and Kintyre 275kV Substations in July 2021.

The Report on Consultation for each of these projects can be found on the project specific website:

- 1. <u>ssen-transmission.co.uk/projects/creag-dhubh-dalmally-275kv-connection/</u>
- 2. <u>ssen-transmission.co.uk/projects/creag-dhubh-</u> inveraray-275kv-overhead-line/
- 3. <u>ssen-transmission.co.uk/projects/argyll-and-kintyre-275kv-substations/</u>

Creag Dhubh to Dalmally 275kV Connection

We continue to engage with the Community in Dalmally regarding the alignment which has been taken forward in our Section 37 Application for the Creag Dhubh to Dalmally 275kV Connection. This application will be made in early 2022 and we anticipate a decision on the application in summer 2023. If consented, we anticipate construction will commence early 2024.

Argyll and Kintyre 275kV Substations

We sought feedback from the public in our Pre-Application Consultation Events for the Argyll and Kintyre Substations in December 2021 - January 2022. SSEN Transmission intends to submit the Planning and Section 37 applications for these four substations in Summer 2022 with construction anticipated to commence in Summer 2024 if the planning applications are successful.

Other Argyll Projects

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.

Sloy Power Station Substation Rebuild

Transmission assets at Sloy Power Station Substation are reaching the end of their operational capabilities and need to be replaced. This project includes 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 soon.

Inveraray – Crossaig Reinforcement

This project involves the rebuild of the existing overhead line between Inveraray and Crossaig and has been in construction since late 2019. Construction of Phase 1 of the project (Inveraray to Port Ann) is now complete, and construction of Phase 2 commenced in Autumn 2021. Find out more: www.ssen-transmission.co.uk/projects/inveraray-crossaig

Carradale Substation

The aim of this project is to reinforce Carradale Substation in order to enable renewable generation connection requests. This involves the replacement of four existing transformers with higher capacity unity to enable this upgraded connection. Work is ongoing and due to be completed by the end of 2022. Find out more:

www.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 towards the end of their operational life. The project is currently in development and following consultation on the preferred route alignment in August 2021, SSEN Transmission plan to submit a Section 37 application for this project in 2022. Find out more:

www.ssen-transmission.co.uk/projects/Dunoon/

Glen Falloch and Sloy VISTA

As part of the SSEN Transmission VISTA (Visual Impact of Scottish Transmission Assets) initative, we are installing a 132kV twin cable section of the existing 132kV double overhead line circuit at Sloy and Glen Falloch. Construction commenced 2021 and 26 steel towers are scheduled to be removed by the end of 2022. Find out more:

www.ssen-transmission.co.uk/projects/vista-glen-falloch-sloy

Windfarm Connection Projects

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

Windfarm Connection Projects with consultation planned for Spring 2022:

Earraghail Wind Farm: The project aims to connect the Earraghail Wind Farm development via c.3km of 275kV Double Circuit Overhead Line onto the existing Craig Murrail – Crossaig Overhead Line for Spring 2027. Consultation on the preferred route for the Overhead Line will be undertaken in Spring/ Summer 2022.

Tangy IV Wind Farm: The project aims to connect the Tangy IV Wind Farm development via approximately 22km of 132kV Single Circuit Overhead Line onto the existing Crossaig Carradale Overhead Line for Spring 2027. Consultation on the preferred corridor for the Overhead Line will be undertaken in Spring/ Summer 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.



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

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

All feedback received will be collated, reviewed and included in the report on consultation which will be published on the project webpage.

Keep in touch

If you have any questions or require further information regarding either of these projects, please do not hesitate to contact the Community Liaison Manager, Caitlin Quinn:

Caitlin.Quinn@sse.com,

07901135758, Scottish and Southern Electricity Networks, 1 Waterloo St, Glasgow, G2 6AY

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

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

Join our face to face and virtual consultation

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

Tuesday 18th and Wednesday 19th May 2022 from 2pm - 7pm Loch Fyne Hotel, Inveraray, PA32 8XT

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

Tuesday 24th and Wednesday 25th May 2022 from 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.

Feedback

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

We kindly request that all comments and feedback forms are received by Monday 6th June 2022. Further information, should you require it, is available on the project webpage or can be made available in printed format by contacting the Community Liaison Manager.

Your feedback

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Creag Dhubh – Inveraray 275kV Overhead line alignment

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

Please submit your completed form by one of the methods below: **Post:** Scottish and Southern Electricity Networks, 1 Waterloo St, Glasgow, G2 6AY **Email:** Caitlin.Quinn@sse.com

Q1	Do the alignment options presented at this consultation respond to any concerns you had over the project? Please provide an explanation for your answer.
Q2	Do you agree with the preferred alignment? (Deviation 1) Yes No Unsure
Q3	If no to Q2, please indicate your preferred alignment: Baseline Deviation 2
Q4	Which of the alignment options presented would you consider the least preferable option for SSEN Transmission to develop? Please provide an explanation for your answer.BaselineDeviation 1Deviation 2
Q5	Do you have any comments to support the project?

Blarghour Windfarm Connection – Route Options

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

Q1	Do you feel sufficient information has been provided to enable you to understand what is being proposed and why? If no, please tell us how we could provide further explanation. Yes No
Q2	Which of the Route Options presented at this consultation would you consider the best option for SSEN Transmission to develop? Please provide an explanation for your answer.
Q3	Which of the Route Options presented at this consultation would you consider the least preferable option for SSEN Transmission to develop? Please provide an explanation for your answer.
Q3	Are there any potential risks or benefits associated with Blarghour Wind Farm Connection that you believe have not been included in the Consultation Document?

Do you	have any	other	comments	on the	Proposed	Develo	pment?
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Full name	
Address	
Telephone	
Email	
If you would like to be kept informed of progress on the project please tick this box.	
If you would like your comments to remain anonymous please tick this box.	
Thank you for taking the time to complete this feedback form.	

Please submit your completed form by one of the methods below: **Post:** Scottish and Southern Electricity Networks, 1 Waterloo St, Glasgow, G2 6AY **Email:** Caitlin.Quinn@sse.com

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