

Spittal to Loch Buidhe to Beauly 400kV Overhead Line

Final Pre-Application (PAC)
Alignment Consultation Events

February/March 2025



ssen-transmission.co.uk/SLBB

Contents

Todays event

These events are to present the proposed overhead line alignment for the Spittal to Loch Buidhe to Beauly 400kV Overhead Line project and our responses to feedback received at our last set of engagement events. Consultation has taken place at the corridor, routeing, refined routeing, and alignment stages, with feedback from these informing refinements. Before our Section 37 submission, at this stage we are not seeking further route refinements, but welcome comments on how we engage with you in the future.

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The consultation events will be taking place on:

Wednesday 19 Feb, 3–7pm, Kiltarlity Village Hall, Kiltarlity, IV4 7HH

Thursday 20 Feb, 2:30–6:30pm, Phipps Hall, Beauly, IV4 7EH

Monday 24 Feb, 3–7pm, Strathpeffer Pavilion, Strathpeffer IV14 9DL

Tuesday 25 Feb, 10–1pm, Contin Village Hall, Contin, IV14 9ES

Tuesday 25 Feb, 3–7pm, Fairburn Memorial Hall, Marybank, IV6 7UU

Wednesday 26 Feb, 3–7pm, Ardross Community Hall, Ardross, IV17 0XW Thursday 27 Feb, 3–7pm, Bonar Bridge Community Hall, Bonar Bridge, IV24 3EA

Monday 03 March, 3–7pm, Spittal Village Hall, Spittal, KW1 5XR

Tuesday 04 March, 3–7pm, Helmsdale Community Centre, Helmsdale, KW8 6JA

Wednesday 05 March, 3–7pm, Dunbeath Community Centre, Dunbeath, KW6 6EF

Thursday 06 March, 10–12pm, Rogart Village Hall, Rogart, IV28 3XJ

Thursday 06 March, 3–7pm,
Brora Scout and Guide Hall,
Brora, KW9 6PD



The time has come to further enhance Scotland's energy infrastructure, providing power for future generations as we move towards net zero.

The shift to a cleaner, more sustainable future is about more than climate change. It's about ensuring future generations have the same opportunities to thrive as we have all had

Countries around the world are investing in their energy infrastructure to support the demands of modern economies and meet net zero targets. The UK is leading the way in building a modern, sustainable energy system for the future.



We all have a part to play

When it comes to net zero, we have to be in it together. The UK and Scottish governments have ambitious net zero targets, and we're playing our part in meeting them.

We work closely with the National Energy System Operator (NESO) to connect vast renewable energy resources—harnessed by solar, wind, hydro and marine generation—to areas of demand across the country. Scotland is playing a big role in meeting this demand, exporting two thirds of power generated in our network.

But there's more to be done. By 2050, the north of Scotland is predicted to contribute over 50GW of low carbon energy to help deliver net zero. Today, our region has around 9GW of renewable generation connected to the network.

At SSEN Transmission, it is our role to build the energy system of the future.

We're investing over **£20 billion** into our region's energy infrastructure this decade, with the potential for this to increase to over **£30bn**. This investment will deliver a network capable of meeting **20%** of the UK's Clean Power 2030 target and supporting up to **37,000 jobs**, **17,500** of which will be here in Scotland.



Scan the QR code with your smartphone to find out more about how these policies have been assessed and determined.

Who we are

We're responsible for maintaining and investing in the electricity transmission network in the north of Scotland. We're part of SSE plc, one of the world's leading energy companies with a rich heritage in Scotland that dates back more than 80 years. We are also closely regulated by the GB energy regulator Ofgem, who determines how much revenue we are allowed to earn for constructing, maintaining and renovating our transmission network.

What we do

We manage the electricity network across our region which covers a quarter of the UK's land mass, crossing some of the country's most challenging terrain. We connect renewable energy sources to our network in the north of Scotland and then transport it to where it needs to be. From underground/subsea cables and overhead lines to electricity substations, our network keeps your lights on all year round.

Working with you

We understand that the work we do can have an impact on communities. So we're committed to minimising our impacts and maximising all the benefits that our developments can bring to your area. We're regularly assessed by global sustainability consultancy AccountAbility for how we engage with communities. That means we provide all the information you need to know about our plans and how they will impact communities like yours. The way we consult is also a two-way street. We want to hear people's views, concerns, or ideas and harness local knowledge so that our work benefits their communities: today and long into the future. You can share your views with us at: ssen-transmission.co.uk/talk-to-us/contact-us

The Pathway to 2030

Building the energy system of the future will require delivery of significant infrastructure over the next few years. In partnership with the UK and Scottish governments, we're committed to meeting our obligation of connecting new, renewable energy to where it's needed by 2030.

Achieving Net Zero

By 2030, both the UK and Scottish governments are targeting a big expansion in offshore wind generation of 50GW and 11GW respectively. The Scottish Government has also set ambitious targets for an additional 12GW of onshore wind by 2030.

Across Great Britain, including the north of Scotland, there needs to be a significant increase in the capacity of the onshore electricity transmission infrastructure to deliver these 2030 targets and a pathway to net zero.

Securing our energy future

And it's not just about net zero. It's also about building a homegrown energy system, so that geopolitical turmoil around the world doesn't severely impact the UK and push up energy prices.

The UK Government's British Energy Security Strategy further underlines the need for this infrastructure, setting out plans to accelerate homegrown power for greater energy independence. The strategy aims to reduce the UK's dependence on and price exposure to global gas wholesale markets through the deployment of homegrown low carbon electricity generation supported by robust electricity network infrastructure.

Meeting our 2030 targets

In July 2022, the National Energy System Operator (NESO), published the Pathway to 2030 Holistic Network Design (HND). This set out the blueprint for the onshore and offshore transmission infrastructure that's required to support the forecasted growth in the UK's renewable electricity. It's an ambitious plan that will help the UK achieve net zero.

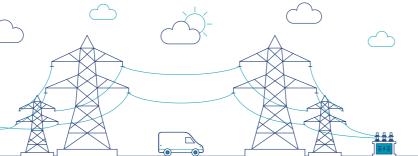
What does this mean for the North of Scotland?

The north of Scotland will play a key role in meeting these goals. The extensive studies that informed the NESO's Pathway to 2030 Holistic Network Design confirmed the requirement to reinforce the onshore corridor between Spittal and Beauly, and an offshore subsea cable link between Spittal and Peterhead.

Providing a 400kV overhead line and high voltage subsea cable (HVDC) connection between these sites provides the significant capacity required to take power from large-scale onshore and offshore renewable generation (mainly wind farms), connecting into the north of Scotland before transporting power to areas of demand. As part of these plans, we're proposing to build a new 400kV overhead line (OHL) between Spittal and Beauly via Loch Buidhe.

This requires three new 400kV substations to be constructed near Spittal (Banniskirk), Loch Buidhe (Carnaig) and Beauly (Fanellan) to enable future connections and export routes to areas of demand. In addition, high voltage converter stations are also required to convert AC electricity to DC (and vice versa), from the offshore subsea connection from between Spittal and Peterhead. These connections will also allow offshore and onshore renewable generation to connect to the reinforced electricity network.

As such, these projects have been highlighted as critical to enable the delivery of the UK and Scottish governments' 2030 net zero targets, with a requirement for accelerated development and delivery.

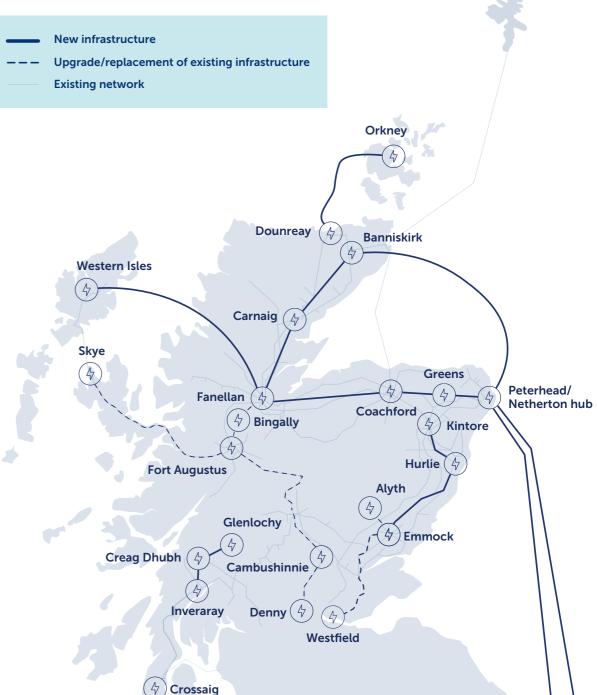


Future network investment requirements

To deliver energy security and net zero, further additional investment in new low carbon electricity generation and the enabling electricity transmission network infrastructure will be required across Great Britian, including the north of Scotland

In March 2024, NESO published its 'Beyond 2030' report, which confirmed the need for several new, replacement and upgraded transmission infrastructure projects in the north of Scotland. In December 2024, Ofgem approved the next phase of regulatory funding to take these projects through the development phase.

These additional investments will soon be subject to extensive public consultation and engagement to help inform their development, with early consultation and engagement expected to take place during 2025.



Project overview

We're leading some exciting projects to power change in the UK and Scotland. To support the delivery of 2030 offshore wind targets set by the UK and Scottish Governments, and to power local communities, we need to upgrade our existing network. In some key areas, we need to develop entirely new infrastructure.

Spittal to Loch Buidhe to Beauly 400kV Overhead Line

This project spans a significant length of the north of Scotland and will involve the construction of a new 400kV overhead line between new proposed substations near Spittal (Banniskirk), Loch Buidhe (Carnaig) and Beauly (Fanellan).

The connection will be delivered via an overhead line of steel lattice towers (commonly referred to as pylons) likely to average around 57m in height, with the overhead line spanning a total length of approx. 170km. Since the project was first consulted upon in February/March 2023, our project team has been working to refine our proposals, considering feedback from local stakeholders and we are now able to share our proposed alignment.

We believe the proposed alignment, which we intend to take forward to consent application, offers the best balance of technical and environmental impact considerations identified through initial assessment and subjected to consultation with stakeholders.

We've split our maps into Sections so that you can

refer to the areas of most interest to you in clearer detail. Copies will be available at the consultation to

the copies you need from our project webpage.

Consult our maps

New 400kV substations and **HVDC** converter stations

Alongside the new overhead line, new 400kV substations and HVDC converter stations required to facilitate the project are as follows:

- A new 400kV substation and HVDC converter station located near Spittal called Banniskirk Hub.
- A new 400kV substation near Loch Buidhe, called Carnaig.
- A new 400kV substation and HVDC converter station located near Beauly called Fanellan.

Town and Country planning applications were submitted to The Highland Council for Banniskirk Hub in November 2024, and Carnaig substation in December 2024.

The Fanellan application is expected to be submitted in mid-February 2025.

take away with you, or alternatively, you can download

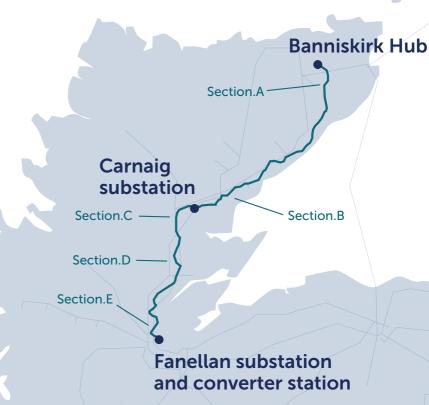
Project location

Our overhead line project spans around 170km and throughout the development of the project we have we presented the project within five sections, to allow you to focus and comment on the areas of most interest to you.

The 5 sections are as follows:

Section C Section A **Section B** Brora to Loch Buidhe Loch Buidhe to Dounie Spittal to Brora

Section D Section E Dounie to Near Strathpeffer near Strathpeffer to Beauly



The story so far

Early 23

Mid 23

Dec 23

Feb – June 24 Jan 25



We introduced this project in February 2023, consulting on approx. 1km wide route options for the overhead line. The consultation closed on 14 April 2023, with over 1000 written responses received.



Throughout spring and summer, we carried out a range of stakeholder meetings, listening to concerns and ideas and answering any further questions.



We then published a Report on Consultation, confirming our proposed route options and showing how the options taken forward to the next stage had been informed by this process.



During February/March 2024, we held local engagement events, sharing refined overhead line routes, and consulting on additional routes under consideration in Section D/E. In June 2024 we then presented our potential alignment for the overhead line alongside other options under consideration during another series of engagement events. 24 engagement events were held in total, with around 1000 attendees and over 300 written responses received.



Following consideration of the feedback received during our 2024 engagement and further studies and survey work, we published our Alignment Report on Consultation (ROC) in January 25. Within the ROC, we confirmed the proposed alignment that we will look to take forward in our planning application.

Why we're here today

We are at the alignment stage of the development of our Spittal - Loch Buidhe - Beauly 400kV overhead line (OHL) project and have identified the Proposed Alignment we are taking forward to further develop and submit as part of an application for consent. The Proposed Alignment has been refined from the various options that we have investigated during the development of the project.

We are implementing the Scottish Government's Best Practice Guidance for pre-application consultation with stakeholders who may be affected by our development proposals. The pre-application consultation comprises two consultation events that should be held in advance of applying for Section 37 consent.

Our first event was held in June 2024, where we presented the Potential (preferred) and Alternative Alignment options. Following that event we considered stakeholder feedback, completed further survey and review, and identified the Proposed Alignment we intend to take forward to a Section 37 application.

This second event presents further detail on the Proposed Alignment and provides feedback to stakeholders in respect of comments they have provided on the proposals. The feedback is also provided in the **Alignment Selection Alignment Selection Report on** Consultation (RoC).

Prior to the pre-application consultations, we have held consultations (during 2023 and 2024) on the routeing and refined routeing stages of our project. These were in addition to the pre-application consultation events and the feedback received has been fundamental in shaping the design of the Proposed Alignment that we are now presenting.

We will provide updated 3D visualisations and maps to show what the proposed overhead line will look like and where it will be located. These are available to view and download from our project website: ssen-transmission.co.uk/SLBB.

We want to know if you have any further comments in relation to how we have responded to feedback and how you would like us to best engage with you in the future, prior to the submission of our Section 37 application.

It should be noted that our alignment proposals presented at this consultation are the result of extensive engagement and project design, as such, there is limited scope to make significant changes to the proposals at this stage.

Working with you

The work we have planned is significant and has the potential to deliver wide ranging benefits in your community, Scotland, and beyond. We know that delivering our projects will require a lot of work that has the potential to impact on you. That's why we want to work with you at every step of the way throughout the planning and delivery stages of these essential works.

We are committed to ensuring a meaningful engagement process that actively seeks the views of everyone affected by our plans. That means making our plans clear and easily accessible, so that you can give us input throughout each stage of the development process. We appreciate all feedback received to date which has been analysed by the project team. All comments have been considered and actioned where constraints allow.

A more detailed appraisal of feedback regarding our alignment, can be accessed via our Alignment Report on Consultation, published January 2025.



Selecting an alignment

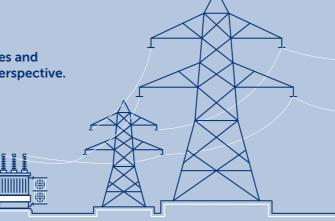
The consideration of alignment options and design solutions brings together work by four main disciplines:

Engineering Team

Who identify engineering constraints and where overhead lines and cables can be installed from a construction and operational perspective.

Key considerations include:

- Infrastructure crossings
- Environmental design
- Ground conditions
- Accessibility
- Proximity to existing infrastructure and properties



Communities Team

Who work with communities and make sure that their feedback during the consultation process is closely considered during project refinement.

Key considerations include:

- Community engagement
- Consultation responses review
- · Recreational areas and areas of local interest

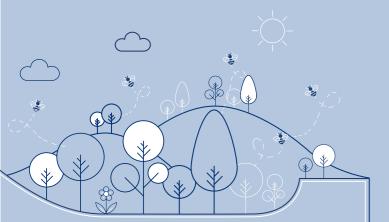


Land Team

Who engage with landowners to identify key land use constraints.

Key considerations include:

- Landowner engagement
- Mitigating effects of infrastructure on land and properties
- Reaching land agreements



Environmental Team

Who identify key environmental, community and social constraints along the routes which the new infrastructure could impact upon.

Key considerations include:

- Engagement with statutory consultees and planning authorities
- Results of specialist environmental surveys including archaeology, ornithology, ecology, geology and hydrology
- International environmental designations including Special Areas of Conservation (SACs - designated for habitats), Special Protected Areas (SPAs designated for bird species), Ramsar sites (wetlands of international importance identified under the terms of the Ramsar Convention) and World Heritage Sites
- National designations including Scheduled Monuments, Listed Buildings, National Scenic areas, National Nature Reserves, Sites of Special Scientific Interest (SSSI), Gardens and Designed Landscapes
- Regional environmental sensitivities including Local Landscape Areas
- Local environmental aspects including visual amenity, local and RSPB nature reserves, recreation uses

Striking a balance

When selecting an alignment, we need to carefully balance key considerations relating to engineering, environment, cost and social aspects, in each section of the overhead line route. We then consider the likely effect and level of impact of each consideration, which will vary from section to section. This can be based on how populated the area is, the outcomes of environmental and engineering surveys, the presence of peat, the local water environment, if there is existing infrastructure we need to avoid, if the effects on land and property can be mitigated and if a constructable alignment can be identified.

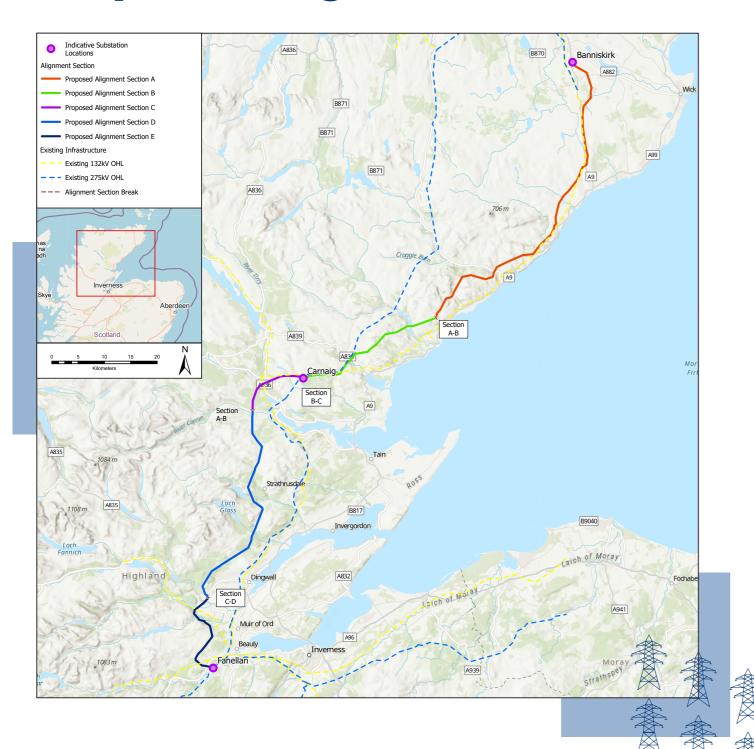
Ultimately, we need to balance a range of factors and present the solution we consider most viable, to then put forward for consultation.

We consulted on our Potential Alignment in Summer 2024, and confirmed the option we were taking forward as proposed within our Report on Consultation published January 2025

Our Alignment Report on Consultation details the consultation responses received as part of our Refined Route and Alignment Options consultation process for the project and where appropriate, shows how the alignment option being taken forward to consent has been informed by this process. This can be downloaded from the project webpage or viewed during the consultation events.

You can download our Alignment Maps, Alignment Consultation Document and our Alignment Report on Consultation from our website: ssen-transmission.co.uk/SLBB

Proposed Alignment overview



The consenting process

The legislation governing the consenting of overhead line (OHL) projects in Scotland is the Electricity Act 1989. Applications for consent to construct and operate new overhead lines are made under Section 37 of this Act and are referred to as "Section 37 Consents".

The Section 37 application will be accompanied by an Environmental Impact Assessment (EIA) Report, as well as standalone reports such as a planning statement, and detailed design drawings. A Pre-Application Consultation (PAC) Report will also be provided, and this will provide details of the public and stakeholder consultation undertaken, a summary of the feedback received, and our response to that feedback.

We plan to submit our Section 37 application to the Scottish Government's Energy Consents Unit (ECU) in Spring 2025.

Once an application for consent has been submitted, all documents relating to the submission will be made publicly available on the ECU portal and our own website, printed copies will also be provided at publicly accessible locations.

Please note that feedback provided as part of this final pre-application consultation event are not formal representations to the Energy Consents Unit (ECU). Once an application for consent has been submitted, there will be an opportunity for the public to make formal representations to the ECU before it takes a decision.

We will update stakeholders once the application for consent has been submitted and we will also publish newspaper advertisements to inform local communities and the general public of the applications being made to Scottish Ministers.

Determining a Section 37 application and communicating outcomes

Section 37 applications are determined on a case-by-case basis by the Scottish Ministers.

We anticipate receiving a decision on the consent application within 12 months from the application date, however timescales may vary.

When a decision is made, the ECU will send us a decision notice, copying in the local planning authority and other consultation bodies. The decision notice is a record of the reasons for the decision and, if consent is granted, it contains the conditions that must be satisfied in order to implement the consent.

The ECU and local planning authority will publish the decision notice via their own channels, and we must publicise the outcome on our website, in the Edinburgh Gazette, and in a local newspaper. We'll also communicate the decision by mainstream media and other various means, including email updates to Elected Members and those signed up to project updates, social media, and press releases.



Read more here about the Section 37 process here

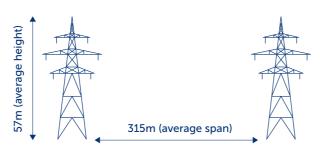
About the overhead line

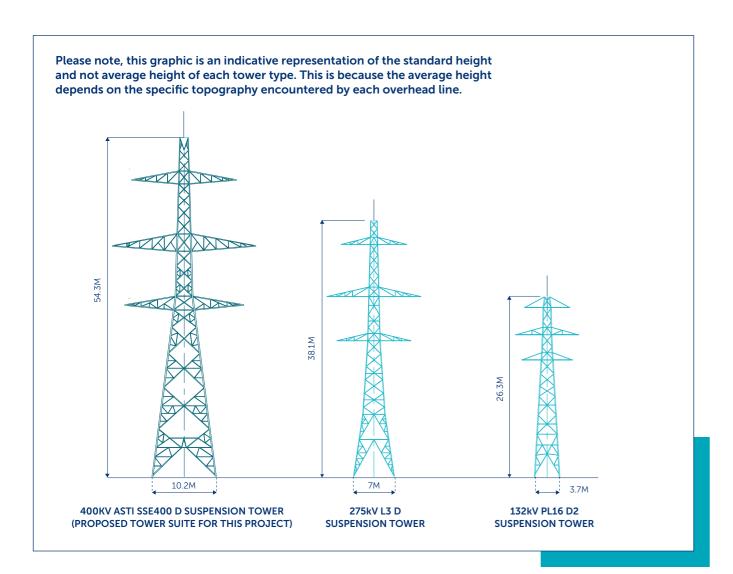
400kV double circuit overhead line

The required technology for the new 400kV link between Spittal to Loch Buidhe to Beauly has been determined to be a new double circuit 400kV HVAC (High Voltage Alternating Current) overhead line.

The overhead line would consist of steel lattice towers with an average height of approx.57m. There will be six conductors (cables) on the six cross arms and an earth wire between the peaks for lightning protection. The average distance between towers is expected to be 315m. Tower height and the distance between them will vary depending on several factors such as altitude, climatic conditions and topography.

This is similar to our Beauly to Denny line, where 80% of its 600-plus towers are below 57m, ranging from 42m to 65m in height.





Managing construction impacts

We are committed to minimising the impact of construction through avoiding potential issues by designing them out, undertaking thorough environmental assessments and working closely with the local community.

Where we cannot avoid impact, our focus includes mitigating effects, for example to people, biodiversity, water, soil, and traffic disturbances. A Construction Environment Management Plan will be set up, to ensure mitigation is put in place and its effectiveness is monitored throughout the construction phase.

During construction, expected short-term impacts may include noise and traffic disruptions. Before starting, we'll have a plan to manage these, including organising deliveries and travel to avoid busy times and sensitive areas.

We'll work closely with community groups and contractors to ensure adherence to mitigation measures. Typically, most project components will take around four years to complete, however these works will be phased across the length of the overhead line with bursts of activity and quiet periods.

The challenges with undergrounding at 400kV

The environmental, technical, and operational constraints associated with undergrounding at 400kV make it extremely challenging to deliver in many areas of Scotland. For underground cables longer than 1-2km, additional substation infrastructure would also be needed, enlarging the project's footprint.

To deliver the necessary capacity, up to 30 parallel cables will be required. To achieve the required spacing, a trench of over 40m wide would need to be excavated, typically between 1m and 7m deep. During construction, a working corridor of over 70m wide is required for cable installation. This can result in significant land use constraints, typically more so than overhead line construction activities, particularly for farming operations.

Underground cables at 400kV are estimated to be between 5 and 10 times more expensive than overhead lines, and since these costs are reflected in consumer bills, it's a factor that needs to be considered.

Trench of
OVER 40M
WIDE AND
1-7M DEEP
would need to

.—7M DEEP
would need to
be excavated

Parallel cables
required

5-10x

More expensive than overhead lines

OVER
70M WIDE
working corridor,
which can result
in significant land
use constraints

Why can't the development be placed offshore?

In its assessment of what is required to meet 2030 targets, NESO concluded there is a need for both onshore and offshore projects.

Overhead lines can carry roughly three times more power than subsea cables, making them more efficient and cost effective for energy bill payers, whilst technical challenges and constraints limit the use of only offshore solutions.

Moreover, onshore energy infrastructure helps support local electricity needs and improves the network's reliability across northern Scotland.

Visit our Frequently Asked Questions page to find out more about our engineering and technology considerations, including more details regarding underground and offshore cables: **ssen-transmission**.co.uk/projects/2030-projects/2030-faqs

Additional Considerations

Additional works that will also be required as part of the construction of the new overhead line include:

- Localised realigning or undergrounding of sections of existing overhead transmission and distribution lines that cross the alignment sections or are within safety clearances;
- Temporary line diversions to accommodate undergrounding and realigning works;
- Woodland clearance and management;
- Establishment of suitable temporary laydown areas for materials and working areas for tower foundations and erection equipment;
- Public road improvements as required;
- Upgrade of existing and creation of new access tracks:
- Delivery of components and materials to site;
- Other temporary measures such as road, railway and water crossing protection and establishment of construction compounds. Final location and design of temporary construction compounds will be confirmed by our Contractor and separate planning consents will be sought as required.

Existing overhead line crossings

Where the proposed 400kV overhead line crosses existing transmission infrastructure, either a 'diamond crossing' or 'duck under' tower arrangement will be used to allow the existing overhead line to pass underneath the proposed.

Works will also be required to some existing distribution network infrastructure (voltages of 66kV and below) to facilitate safe working and operating conditions for the new overhead line. These works are likely to include short sections of undergrounding in the vicinity of the new overhead line and will be undertaken by Scottish Hydro Electric Power Distribution (SHEPD).

Temporary overhead line diversions

A number of temporary overhead line diversions will also be needed to enable the changes to existing overhead lines to allow for continued operation of the electricity network during the construction works. Temporary diversions will require the construction of temporary towers, onto which the existing overhead line conductors (wires) will be moved. Once the main construction works have been completed, the temporary towers will be dismantled and the surrounding areas reinstated.

Limits of Deviation

Limits of Deviation (LoD) define the maximum extent within which a development can be built. The location of the proposed tower positions, access tracks and associated temporary and permanent infrastructure has been determined based on environmental and technical considerations, including analysis of ground conditions and suitability based on desk studies and site walkover surveys. Investigation of sub-surface and geotechnical conditions at the proposed tower locations has not yet been completed. It is therefore possible that individual tower locations, working areas and access tracks might need to be altered following completion of these investigations (referred to as micrositing). To strike a balance between providing certainty of the location, and the need for some flexibility over individual tower locations, horizontal and vertical LoD need to be defined within which the proposed development will be constructed. No towers or working areas would be located outside the LoD proposed.

As we undertake our Environmental Impact Assessment (EIA) and more detailed design work, we are working to identify the exact LoD required. We have currently allowed a horizontal LoD of up to 100m either side of the alignment centreline, extending around angle tower positions and existing transmission overhead line crossings. A vertical LoD of ±9m is likely to be sought for the proposed tower heights, to ensure minimum statutory ground clearances can be maintained once further engineering work has been completed. The LoDs will be further refined and confirmed within our consent application.



Tower Crossings



Housing our Workers Strategy

Woodland clearance and management

When developing the proposed alignment, we have sought to avoid and minimise impacts on woodlands and forestry where possible, however given the numerous environmental and technical constraints, impacts on forestry are unavoidable.

Where the proposed alignment passes through woodland and commercial forestry, an Operational Corridor is identified to ensure the safe operation of the overhead line and trees are removed within the Operational Corridor to facilitate this. The operational corridor width will typically be 45m either side of the overhead line centreline, but this will vary depending on the type of woodland/ forestry and local topography.

As a result, there will be a loss of woodland area. In accordance with the Scottish Government's Control of Woodland Removal Policy, we are committed to providing appropriate compensatory planting for any net loss of woodland and a specific chapter on Forestry will be included within the Environmental Impact Assessment report.

Worker Accommodation

To ensure that the development of these critical infrastructure projects' positively impact local people we recently announced the first part of our accommodation strategy.

This includes a commitment to contribute to the development of 1000 properties across the north of Scotland, which upon completion of the transmission infrastructure projects, will be handed to local organisations to provide accommodation for local people across the north of Scotland, delivering a lasting legacy for future generations.

This is expected to include new and renovated homes, as well as fully serviced sites for temporary accommodation camps for workers, delivered to the standard required to support future housing and wider economic development activities.

To help inform our accommodation strategy, we have commenced engagement with Local Authorities and wider stakeholders to help identify local property needs in the location of projects, including to help address the rural housing crisis.



Construction Access Strategy

The construction of a new overhead line (OHL) approximately 170km in length is a major undertaking, presenting significant construction challenges not just in terms of scale but also remoteness, terrain and seasonal weather conditions.

We are currently developing our access strategy, which considers access requirements for construction and maintenance of the overhead line. Access requirements have also informed the Proposed Alignment selection process, as a key engineering consideration.

We have now determined our proposed access routes for each tower location and established which of these are planned to be upgrades to existing access tracks or new temporary or permanent access tracks. A detailed traffic and transport assessment will form part of the EIA, which assesses potential impacts of construction traffic and the capacity of local roads to accommodate this traffic. A Construction Traffic Management Plan (CTMP) will be agreed with local authorities prior to works commencing.

Public road improvements (PRI)

Public road improvements will be required in some locations to facilitate construction traffic travelling along existing public roads. These works could include upgrades such as road widening, installation of temporary or permanent passing places, new or upgraded road junctions, and upgrades to or replacement of existing bridges. Further information on PRI works will be provided in the EIA as part of the application for s37 consent.

Existing tracks and bellmouths

In general, proposed construction site access would make use of existing forest and estate tracks as far as practicable, upgraded as required. Existing bellmouths would be utilised where possible, subject to improvements. New bellmouths will however still be required at several locations.

Stone tracks

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

Temporary trackways

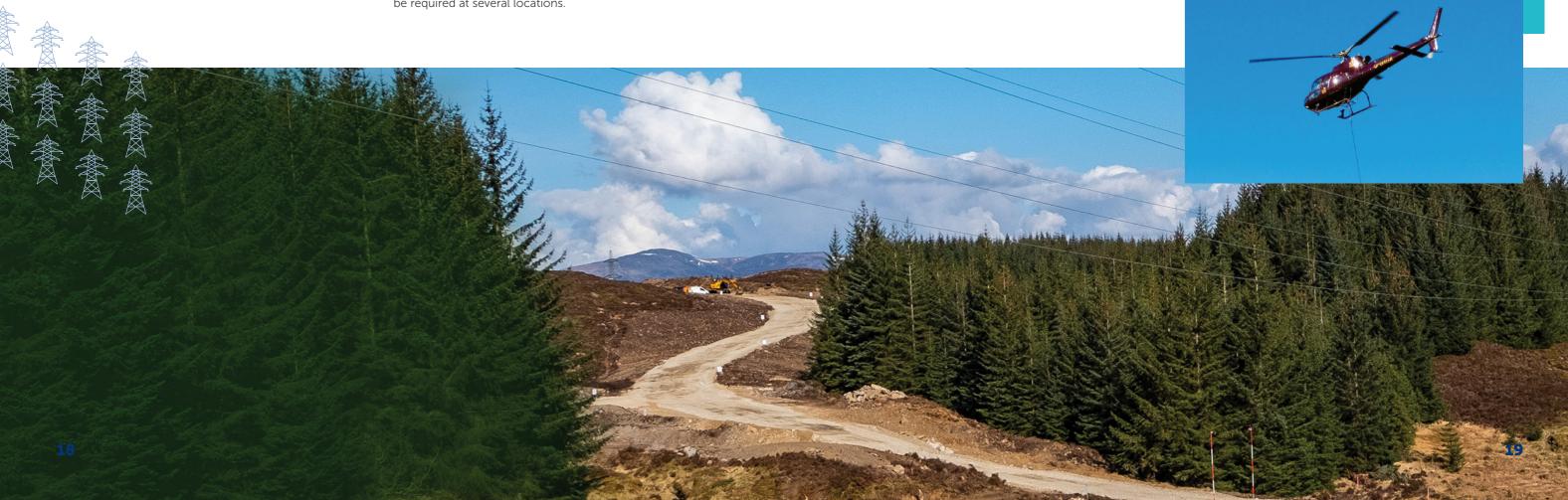
Temporary trackways are an alternative access method, dependent on ground conditions. Although there may be localised areas where trackways may be suitable and used for certain tasks, they are not considered appropriate for construction of steel lattice towers in their entirety, due to the length of time they are required to be in place and the weight and size of construction plant required to track over them.

Operational/Maintenance Access

Where operational access is required, this would likely range from All Terrain Vehicle (ATV) routes with no formal track, to a stone road suitable for 4x4 and wagon access. The selection of the type of track required will consider the proximity to a public road, environmental impacts, structure type and potential maintenance activities/ vehicles required in future to a given location (taking legal health and safety requirements into account). General access track details will be included in the Environmental Impact Assessment (EIA) stage of the project and presented to illustrate where each access type will be deployed, and the rationale for that selection.

Helicopters

The use of helicopters for construction of steel lattice towers is feasible, however, the operational restrictions (e.g. weather, proximity to public roads and environmental factors), and the significant cost implications for a project of this scale are key considerations. The use of helicopters may be required in more remote sections, where environmental or geographical constraints necessitate their use. Where helicopters are used, construction plant would still require access to each tower location to facilitate construction and erection of towers. Helicopter landing zones would also require to be identified.



Addressing feedback

Consulting on the alignment

In May 2024 we launched our Alignment Consultation, seeking comment on the Potential Alignment identified for the new 400kV overhead line (OHL) proposed between new substation sites near Spittal (Banniskirk), Loch Buidhe (Carnaig) and Beauly (Fanellan).

We presented a Potential Alignment for the OHL, alongside identified alternatives which had also been considered. We sought comments from statutory authorities, key stakeholders, elected representatives, the public and landowners on the alignment selection process undertaken and the Potential Alignment.

Comments received then informed further consideration of the Potential Alignment with a view to confirming a **Proposed Alignment** to be taken forward to consent application.



Our Report on Consultation (ROC)

A detailed response to feedback received on our potential alignment can be accessed via our Alignment Report on Consultation, published January 2025. Scan the QR code to access our Report on Consultation.



When we consulted on our Potential Alignments, we held events in 14 locations along the length of the route, between 03 and 20 June. An estimated total of around 1.000 attendees attended.

During the 8 week feedback period which closed on 22 July, 130 responses were received. This feedback was then analysed and reviewed by the project team to determine where changes could be considered.

Changes since we consulted on the Potential Alignments have been minimal, with the Potential Alignments proposed at consultations being taken forward as the Proposed Alignment. Feedback received regarding the Alternative Options presented was limited, with the exception of Section E around the Strathpeffer, Contin and Marybank area.

In some areas, we were asked to consider a different alignment to the options we presented at consultation. Due to the vast environmental and considerable engineering constraints that span the length of the Spittal – Loch Buidhe – Beauly 400kV project, the suggested alignments have not been considered to be better on balance at alleviating the constraints we must seek to avoid.

The following is a high-level overview of where changes have been made, or feedback requests have been considered but not been taken forward with rationale as to why.

For full details regarding feedback received and our responses, please refer to our Report on Consultation.



Section A - Spittal to Brora

Feedback

Feedback received from stakeholders near Berriedale proposed an alternative option which would increase the distance of the overhead line from residential properties. Due to the presence of scheduled monuments and significantly more class 1 peatland and deep peat observed in this area, which we must seek to avoid as far as practicable, it was determined that an alignment change which doesn't result in greater environmental impacts would not be achievable.

Stakeholders raised concerns for the Loch Fleet, Loch Brora and Glen Loth Special Landscape Area (SLA) and suggested an alternative option. This option would go west of Helmsdale to avoid the SLA before running parallel to the existing 275kV OHL between Loch Buidhe and Dounreay. This option would provide significantly more challenging terrain including steeper slopes and higher peaks. An OHL option further inland would impact on significantly more class 1 peatland. The current proposed OHL looks to limit impacts on class 1 peat where possible while considering on balance the other constraints and challenges in the area. The existing windfarm that is constructed in the area also restricts the extent to which a further inland option can be developed due to the required standoff distance the OHL must maintain from a wind turbine. It was determined that due to the constraints this would not be a viable option.

Around Helmsdale and further South, following feedback and engagement with Historic Environment Scotland, we are carrying out micrositing work to minimise impacts on scheduled and historical monuments as far as practicable.

The presence of peat has been a common feature in feedback provided and is particularly difficult to avoid in Section A. There has been minor movement of the alignment to locate infrastructure in areas of shallower peatland following the result of Peat Probing Results.

Section B - Brora to Loch Buidhe

Owing to a combination of environmental and technical constraints, there was no alternative alignment option identified in Section B of the project and presented for consultation.

Feedback

See Section A for an alternative option which was provided by stakeholders running from Section A into Section B. Due to numerous constraints which would result in challenges for consent, construction and ongoing maintenance, this option was not taken forward.

We received a lot of feedback regarding the potential alignment's proximity to Carrol Rock at the crossing at Loch Brora, with many citing the impact on the Site of Special Scientific Interest (SSSI). We fully recognise the strength of feeling regarding the crossing in this area, however, as demonstrated in our constraints map, moving the alignment more northernly would have a greater impact on the SSSI as the potential alignment does not infringe on the designation, and would result in the disturbance of ancient woodland and greater disturbance of class 2 peat. For these reasons, we were not able to account for the requests made by local stakeholders to re-route the alignment and have determined the potential alignment as proposed.

Section C - Loch Buidhe to Dounie

Feedback

Local community members raised concerns about the proximity to property as the Alignment crosses the Kyle of Sutherland and suggested crossing further south towards Carbisdale Castle. We acknowledge that there are dispersed properties adjacent to the Proposed Alignment and the closest property within Section C is within c. 250m of the alignment centreline. The alignment has been selected on balance considering the environmental and engineering constraints in this area. Some of the challenges navigating the alignment in this area include crossing Kyle of Sutherland River and associated flood plain, Kyle of Sutherland Marshes SSSI, cultural heritage assets and designations.

Based on the feedback received in June, the Potential Alignment has been moved slightly north to minimise impacts on the watercourses in the area between the proposed Carnaig substation and Invershin Forest and slightly southeast due to the topography of the area at the Carbisdale Hillside.

Section D - Dounie to Near Strathpeffer

Feedback

During the Route Option consultations held in early 2023, concerns were raised about the impact on Strath Rusdale and an amended route further west was suggested. At the Potential Alignment consultation, we presented an updated alignment further west which provided a balance of the feedback received and consideration of local constraints. Following further feedback, the Proposed Alignment was moved slightly to the west between River Carron and Creagan a' Choin Ruaidh hill and along the Allt Coire a' Chaorainn Mor watercourse to minimise impacts on the watercourse in the area.

Local stakeholders had raised concerns regarding the Route Option at Strath Sgitheach and the impact on cultural heritage including non-designated assets in the area. Our Potential Alignment was located to the north to reduce changes to the setting and possible impact on the cluster of non-designated assets.

Based on the feedback received in June, the Proposed Alignment in this section was slightly amended to minimise impacts on the watercourses in the area.

Section E - Near Strathpeffer to Beauly

Feedback

In total, four Alignment Options were presented at consultation for Section E around the Strathpeffer, Contin, Marybank and Tarvie area, and were presented as Potential 1, Potential 2, Alternative 1 and Alternative 2.

Following the options assessment and consultation the Potential 2 option has been determined as the Proposed Alignment. This decision was based on reducing impacts on properties at Marybank and Fairburn Tower, as well as alleviating engineering constraints.

The Proposed Alignment in Section E has been marginally amended in Torrachilty Forest to minimise impact on the tracks which are used for forest operations and public recreation. It was also adjusted in the Muirton Wood area to increase the proximity to properties and reduce impact on the ancient woodland at the 132kV OHL line crossing.

We believe that the Proposed Alignment for Spittal – Loch Buidhe – Beauly 400kV OHL provides the best on balance option when considering the environment and engineering constraints. Our Proposed Alignment is the alignment we intend to take forward to a Section 37 application.



FAQs

Since we first consulted on the project in early 2023, the most common questions received have been regarding project need and technology choices. To fully address these questions and more, our Frequently Asked Questions webpage (ssen-transmission.co.uk/2030faqs) provides further explanation and additional documents addressing these questions. For ease, we've also included some information addressing the chosen technology in our 'About the overhead line' section of this booklet (Page 14) and information regarding the project requirement in the 'Pathway to 2030' pages.

In October, we hosted a webinar to outline the differences behind technology options regarding our Pathway to 2030 projects, titled 'Overground, underground, or subsea - how decisions are made on where electricity transmission lines go'. The recording of the webinar can be accessed via the project webpage.

More recently, we've received some project specific questions in particular relating to the following topics, where we've looked to address as follows:

Are there any socio-economic benefits arising from the project?

Our next business plan, which includes our Pathway to 2030 projects will see us invest over £20bn in the north of Scotland's electricity grid, potentially increasing to over £30bn, with these investments key to support the UK Government's Clean Power 2030 target and to help deliver energy security.

This investment will create a major economic opportunity for people and businesses within the UK, particularly in Scotland. Through our supply chain partners, hundreds of local businesses will be utilised to provide services to deliver these projects.

We forecast that our investment could contribute up to £15bn of value the UK economy, £3bn of which in the north of Scotland. Furthermore, the plan will be a significant driver of employment, supporting up to 37,000 jobs across the UK, with over 8,000 specifically in the north of Scotland.

With the launch of our Housing Strategy, we've also pledged to support the delivery of over 1,000 new homes across the north of Scotland, as we focus on finding workforce accommodation solutions that will provide a legacy for communities where the lack of housing for local people is a key issue.

Alongside this, our Community Benefit Fund will allow a share of the benefits to go directly to communities where this new infrastructure is located as well as to projects benefitting communities across our Network region.

You can read more about our socio-economic benefits at www.ssen-transmission.co.uk/2030faqs, or ask a member of staff for a leaflet about the benefits these projects are anticipated to bring.

We're also keen to hear any suggestions you may have regarding leaving a lasting socio-economic legacy.

How are environmental constraints considered against the feedback from communities?

Some attendees at our consultation events have raised concerns that the route for Spittal – Beauly is not further away from some residential settlements and areas of recreational activity, due to constraints associated with environmental and cultural designations.

When seeking routes and alignments for new infrastructure, there are numerous environmental and cultural designations we must consider, since they are legally protected, and therefore seek to avoid as far as practicable.

Many sections of the proposed route are particularly constrained from an environmental perspective, with Wild Lands and peatland in the north meaning that the new overhead line needed to be relatively close to the coast. There's also a large number of nationally and internationally designated areas for ecology including Special Sites of Scientific Interest (SSSI), Special Protection Areas (SPA) and Special Areas of Conservation (SAC) in these areas, particularly Caithness, in comparison to the rest of Scotland. In addition, Sections C, D and E have significant swathes of Ancient Woodland inventory.

Where our infrastructure could have a significant negative impact on the qualifying features of these areas, we would likely attract objections from the Statutory Bodies whose role it is to protect those interests, meaning we would be unable to consent and build the proposed development. From a planning perspective, we must adhere to the principles set out in National Planning Framework 4 (NPF4), which is the Scottish Government's national spatial strategy for Scotland. The principles of NPF4 mean that we must avoid siting infrastructure within such designations as far as practicable along with Irreplaceable Habitats such as high-quality peatland and Ancient Woodland.

Where infrastructure cannot be routed away from communities this creates competing interests between minimising the visual impact on properties and areas of recreation and mitigating impacts on designated areas. Whilst we will endeavour to minimise both as much as possible, we must often place higher consideration to ensuring we adhere to NPF4, Government policies and legislation implemented to protect our natural environment.

This does not mean that the feedback from members of the community is not still closely considered, but it does mean that the extent to which we can accommodate certain asks may be limited. We will always seek to find the best balance between protecting the environment and respecting the importance local communities rightly place on the areas where they live, work and play.

Archaeology

Alongside the numerous environmental constraints, there is a rich archaeology and cultural heritage in the north of Scotland which has been identified as an area of concern by some stakeholders, who have sought assurances this is being closely considered and mitigated against.

Potential impacts on Cultural Heritage assets have been a key consideration during the design development process. The alignment design process has, as much as possible, sought to avoid direct impact on designated assets of national importance such as Scheduled Monuments, Historic Battlefields, Gardens and Designed Landscapes, and Listed Structures. We have also considered potential for impact on non-designated assets

that are included on the Canmore register and Highland Council's Historic Environment Record (HER), with design seeking to avoid siting infrastructure immediately adjacent to specific locations recorded as being of historical significance. We have engaged with local and regional heritage groups and societies to understand concerns in relation to local history; where concerns have been raised, these will be considered as much as possible during the environmental assessment of options.

We are also continuing to liaise closely with Historic Environment Scotland (HES) in relation to impacts on Cultural Heritage assets at key points along the alignment. This includes sections of the proposed overhead line that have been highlighted by local communities as having sensitive Cultural Heritage assets.

How is risk of flooding being considered and mitigated?

Throughout the development process, residents have alerted us to areas in proximity to our proposals that are prone to flooding. This local knowledge has assisted us in mitigating potential impacts and we would like to thank those who took the time to share areas of concern with us.

Areas at risk of flooding have been avoided where possible, although it is acknowledged that in some areas, the OHL may need to cross short sections of land prone to flooding. We note the legislative requirements regarding flood risk and water resources. It is also recognised that national and local government planning policy has a number of policy objectives related to avoiding and minimising impacts on the water environment.

The requirement for flood risk assessments will be progressed considering future climate change predictions, and discussions with SEPA are being undertaken. Design development will aim to ensure that the project is not increasing the risk of flooding on project land or elsewhere. We will continue to liaise with consultees throughout the EIA process (notably SEPA, the local authorities and Scottish Water).



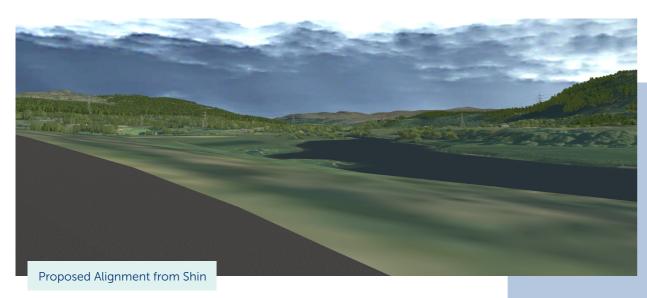
3D visualisations

We understand that local stakeholders need to be able to visualise what the development may look like in their local area. We've provided 3D visualisations which provides an illustration of the potential alignment into the local landscape to help understanding of the proposals in terms of the visual impact, distance and height.

The following are some images taken from the 3D model created for Spittal – Loch Buidhe – Beauly 400kV OHL project from a range of different vantage points.



To find the 3D flythrough video, scan the QR code or visit the following webpage: ssen-transmission.co.uk/SLBB





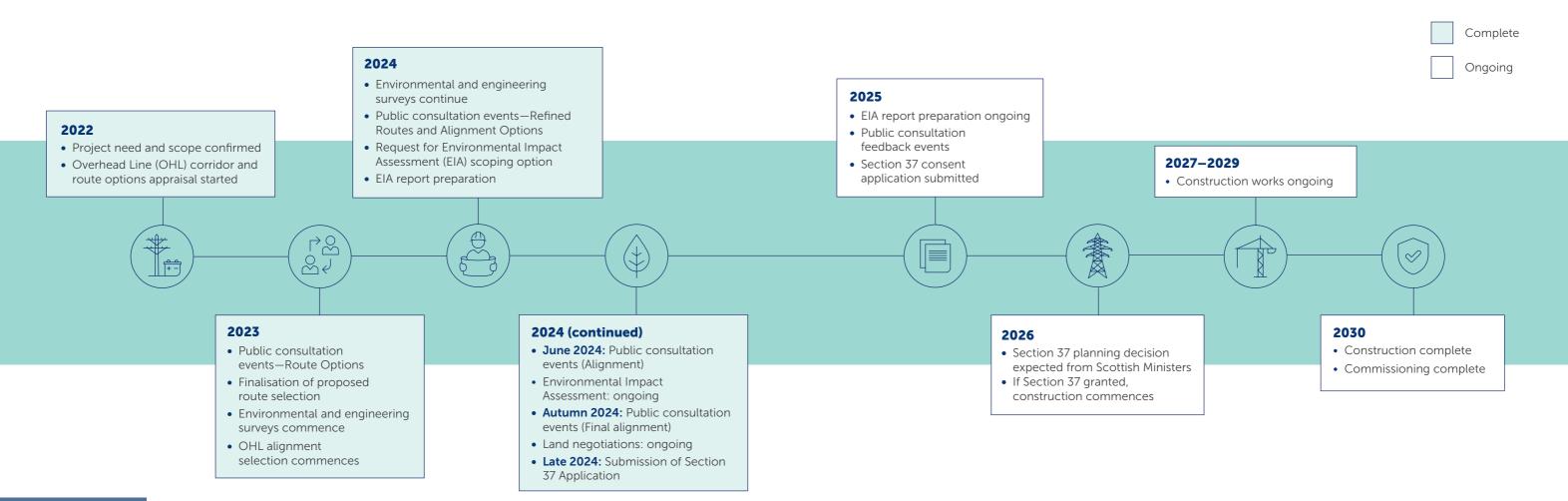


Photomontages

Photomontage visualisations will also be produced as part of the Environmental Impact Assessment (EIA). Once the EIA is completed, we'll ensure these photomontages are available to view.

To get a better sense of the proposals in full, a visualisation portal including flythrough video is also available to view from the project webpage and our consultants, 3D Webtech, will be assisting us at our consultation events with copies of the model that attendees can interact with during the events.

Project timeline





Have your say

We value community and stakeholder feedback. Our alignment proposals are the result of extensive engagement with a wide range of different stakeholders and we believe the proposed alignment strikes a balance between the various different considerations that we must take into account.

As part of the Section 37 application process, we are expected to hold at least two PAC events prior to submitting the application. This is the second and final alignment event providing the opportunity for members of the public to respond to the proposed alignment and consider our responses to the feedback we have received from our previous consultation events.

Earlier additional public consultation was also undertaken at the Route Option and Refined Route stages.

Submitting your final comments to us:

We intend to submit our application for consent in Spring 2025. Prior to this, you can submit your final formal comments to us before our feedback period closes on Friday 21st March. We welcome final comments from members of the public, statutory consultees and other key stakeholders regarding our proposals until such time as we submit our planning application.

Once an application for consent has been submitted, there will be an opportunity for the public to make formal representations directly to the Scottish Government's Energy Consents Unit before it takes a decision.

What we're seeking views on

During our last public consultation event in June 2024, we wanted to know your thoughts on our potential and alternative alignments.

Now that we have selected our proposed alignment, we want to know if you have any further comments in relation to how we have responded to feedback and how you'd like us to best engage with you in the future, prior to the submission of our Section 37 application.

Additional information:

The best way to keep up to date is to sign up to project updates via the project webpage:

ssen-transmission.co.uk/SLBB

How to provide feedback

Submit your feedback online by scanning the QR code on this page or via the form on our project webpage at: ssen-transmission.co.uk/SLBB

Email the feedback form to the Community Liaison Manager, or write to us enclosing the feedback form at the back of this booklet.

Our Community Liaison team

Each project has a dedicated Community Liaison Manager who works closely with community members to make sure they are well informed of our proposals and that their views, concerns, questions, or suggestions are put to our project teams.

Throughout the life of our projects, you will hear from us regularly. We aim to establish strong working relationships by being accessible to key local stakeholders such as community councils, residents' associations, and development trusts, and regularly engage with interested individuals.

Community Liaison Manager

The best way to contact us regarding this project is through our Community Liaison Team.

Martin Godwin



Scottish Hydro Electric Transmission, 10 Henderson Road, Inverness, IV1 1SN



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You can also follow us on social media:



assentransmission



@SSETransmission

Your feedback

Thank you for taking the time to read this consultation booklet. In order to record your views and improve the effectiveness of our consultation, please complete this short feedback form.

Please complete in BLOCK CAPITALS. (Please tick one box per question only)

Q1.	Whi	ch consultati	on e	ent did you atte	end?	(Select all tha	it app	oly)		
		Spittal		Helmsdale		Dunbeath		Rogart		Brora
		Ardross		Bonar Bridge		Contin		Marybank		Strathpeffer
		Beauly		Kiltarlity		None		Accessed info	orma	tion online
Q2.	Is there a specific section of the overhead line alignment that you are interested in? (Please detail name of section(s) or closest settlement)									
		Section A		Section B	Se	ction C	Sec	ction D	Secti	on E
	Clo	sest settleme	nt:							
Q3.	or c			comments rega o the constructi						
Q4.	and con	at key milest nmunication l	ones base	we will continue . We continuous d on community dates so that we	sly se nee	eek to identif ds. Please tel	y the l us h	best methods now you would	of pre	fer
		Newsletter		Email to a mai	iling	list Te	xt m	essage	Lette	er
		Public mee	tings	Website	upda	ntes C	ther	(please state)		



	Q5.	Our Community Benefit Fund will provide an opportunity for local groups and organisations to apply for community funding. Do you have any suggestions for local community benefits or local initiatives, such as volunteering, that we could support to leave a positive legacy in your area?
		Comments:
	Q6.	We are committed to achieving biodiversity net gain as part of our proposals. Do you have any suggestions for nature projects that we could consider to leave a positive nature legacy in your area? Comments:
	Full name	e:Email:
	Telephon	e: Address:
	projects, se are happy	like to send you relevant communications via email such as invitations to stakeholder events, surveys, updates on ervices and future developments from the Scottish and Southern Electricity Networks group listed below. If you to receive email updates please opt in by ticking the box below. You can unsubscribe at any time by contacting holder.admin@sse.com or by clicking on the unsubscribe link that will be at the end of each of our emails.
	If	you would like to be kept informed of progress on the project, please tick this box
	•	for taking the time to complete this feedback form. mit your completed form by one of the methods below:
	Post: FAO	Martin Godwin - SSEN Transmission, 10 Henderson Road, Inverness, IV1 1SN
	Email: SLB	B@sse.com
	Online: sse	en-transmission.co.uk/SLBB

This can also be obtained online at: ssen-transmission.co.uk/privacy

For information on how we collect and process your data please see our privacy notice available at today's event.

Comments forms and all the information from today's event will also be available to download from the project website.

We intend to use Artificial Intelligence (AI) to assist our experienced teams in the analysis of your feedback, so we can categorise key points raised more quickly. You can learn more about how we're utilising AI at: ssen-transmission.co.uk/AIFAQ

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

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