Appendix D – Consultation Banners PAC 1

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The Pathway to 2030

Building the energy system of the future will require a significant acceleration of work 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, National Grid, the Electricity System Operator (ESO), 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 ESO'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 new400kV overhead line (OHL) between Spittal and Beauly via Loch Buidhe. This requires three new 400kV substations to be constructed at Spittal, Loch Buidhe and Beauly 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.

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The Pathway to 2030

Future network investment requirements

Our 2030 targets are the first step in the transition to net zero. The UK Government has a target to decarbonise our electricity system by 2035 and fully decarbonise our economy by becoming net zero by 2050, with the Scottish Government committing to net zero five years earlier, by 2045.

To achieve these targets, further investment in new low carbon electricity generation and the enabling electricity transmission network infrastructure will be required. The next stage of strategic network planning across Great Britain has now been outlined in the independent Electricity System Operator, National Grid ESO's, 'Beyond 2030' report, published in March this year. For the north of Scotland, the ESO's plan recommends several new and upgraded onshore and offshore reinforcements that the ESO has assessed are required to help deliver net zero targets.

These projects, which will be subject to extensive public consultation, are at the very early stages of development and further details will be set out in due course.

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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, Loch Buidhe and Beauly.

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 potential alignment.

We believe the potential alignment offers the best balance of technical and environmental impact considerations identified through initial assessment. This is then subject to consultation with stakeholders, where local and previously unknown considerations may confirm or alter the initial preference. Once the initial preference is confirmed, this becomes the Proposed Alignment to take forward to consent application.

Project location

Our overhead line project spans around 170km and throughout its development, we have 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 A Spittal to Brora

Section B Brora to Loch Buidhe

Section C Loch Buidhe to Dounie

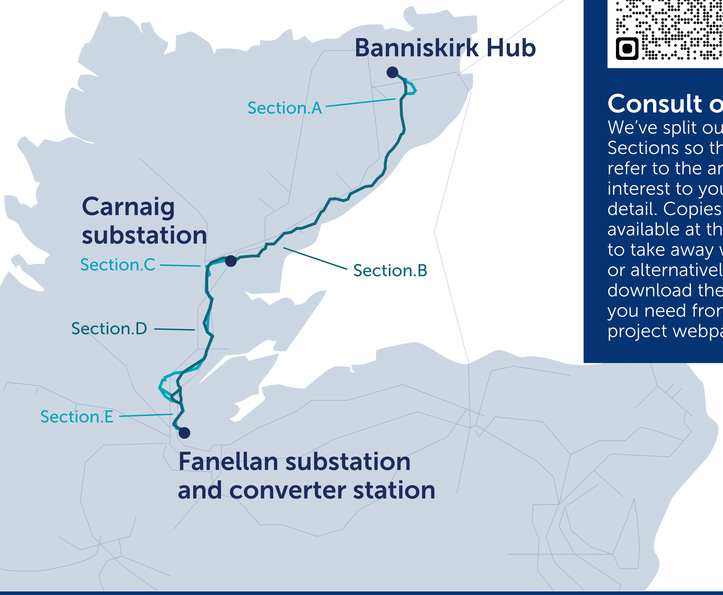
Section D Dounie to near Strathpeffer

Section C Near Strathpeffer to Beauly

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.



Consult our maps

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 take away with you, or alternatively you can download the copies you need from our project webpage.

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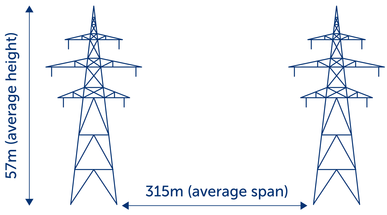
About the overhead line

400kV double circuit overhead line

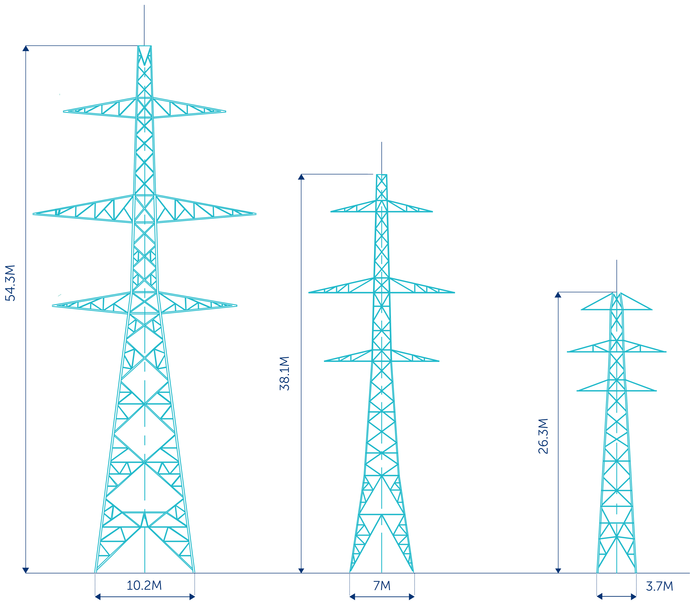
The required technology for the new 400kV link between Spittal to Loch Buidhe to Beauly has been determined to be a new double circuit 400kV HVAC (High Voltage Alternating Current) overhead line.

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.



Please note, this graphic is an indicative representation of the standard height and not average height of each tower type. This is because the average height depends on the specific topography encountered by each overhead line.



400kV ASTI SSE400 D SUSPENSION TOWER

275kV L3 D SUSPENSION TOWER

132kV PL16 D2 SUSPENSION TOWER

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Selecting an alignment

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

Environmental Team

Who identify key environmental 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), Sites of Special Scientific Interest (SSSI), 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, Gardens and Designed Landscapes
- Regional environmental sensitivities including Wild Land Areas and Special Landscape Areas
- Local environmental aspects including visual amenity, local and RSPB nature reserves, recreation uses

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

You can download our Alignment Maps, Alignment Consultation Document and Routeing Process from our website:
ssen-transmission.co.uk/BBNP

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

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, stakeholder and community feedback, 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 have now identified a potential alignment alongside indicative tower locations which we are seeking your views on.

Our Alignment Selection Consultation Document describes the alignment options and comparative appraisal of each section in detail, and this can be downloaded from the project webpage or viewed during the consultation events.

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Project timeline

2022
- Project need and scope confirmed
- Connection options appraisal
- Corridor and Route Options appraisal

2023
- **Early 2023:** Public consultation events (Route)
- **Late 2023:** Further route refinement and alignment development
- Bird surveys: ongoing

2024
- **Mid 2024:** EIA Scoping
- **March 2024:** Public information event (Refined route)
- Ongoing alignment development
- Bird surveys ongoing and other environmental surveys undertaken

2024 (continued)
- June 2024: Public consultation events (Alignment)
- Environmental Impact Assessment: ongoing
- Autumn 2024: Public consultation events (Final alignment)
- Land negotiations: ongoing
- Late 2024: Submission of Section 37 Application

2025
- Section 37 review: ongoing

2026
- **Early 2026:** Receive consents decision
- **Spring 2026:** Commence construction if planning consent granted

2027–2029
- Phased construction: ongoing

2030
- **Spring 2030:** Construction complete
- **Summer 2030:** Commissioning

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Have your say

The feedback period
We will accept feedback from now until **22 July 2024**.

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.

Recite me

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

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

What we're seeking views on
Now that we have presented a potential alignment, we want you to share your thoughts and opinions on our plans, where you think we can make improvements, concerns about the impact of our work andwhat you think of any changes and refinements we've made. We particularly want to hear from you if you live close to the potential alignment.

We are actively looking to avoid and mitigate the impacts of the overhead line as much as possible over the coming months. It would be helpful to understand what you believe we should be doing to help minimise these impacts and if there are any opportunities to deliver local community benefits you would like us to consider.

We encourage all interested community members to fill in a feedback form when submitting feedback, however if you prefer, you can email us to provide your feedback or ask any questions.

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

Martin Godwin

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Additional information:

The best way to keep up todate is to sign up to projectupdates via the project webpage: **ssen-transmission .co.uk/SLBB**

You can also follow us on social media:

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