



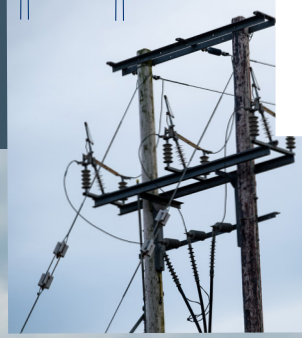
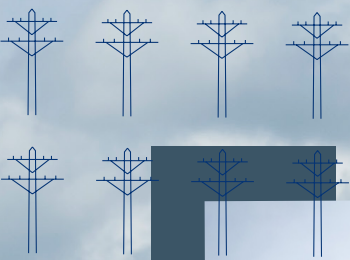
Scottish & Southern
Electricity Networks

TRANSMISSION

Glendye Wind Farm Connection

Alignment consultation

October 2024



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The consultation events will be taking place on:

Monday 7 October, 2–7pm
 Drumlithie Public Hall, Station Road,
 Drumlithie, Stonehaven, AB39 3YT

Tuesday 8 October, 2–7pm
 Stonehaven Town Hall, Stonehaven, AB39 2BU

Wednesday 9 October, 3–7pm
 Strachan Village Hall, Strachan, Banchory, AB31 6LG

Thursday 10 October, 3–7pm
 Auchenblae Village Hall, Auchenblae, AB30 1XQ



Powering change together



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 Grid Electricity System Operator 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 £20 billion into our region’s energy infrastructure this decade, powering more than ten million UK homes and 20,000 jobs, 9,000 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 and 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/

Project need and overview

As the transmission licence holder in the north of Scotland, we have a duty under Section 9 of the Electricity Act 1989 to facilitate competition in the generation and supply of electricity. We have obligations to offer non-discriminatory terms for connection to the transmission system, both for new generation and for new sources of electricity demand.

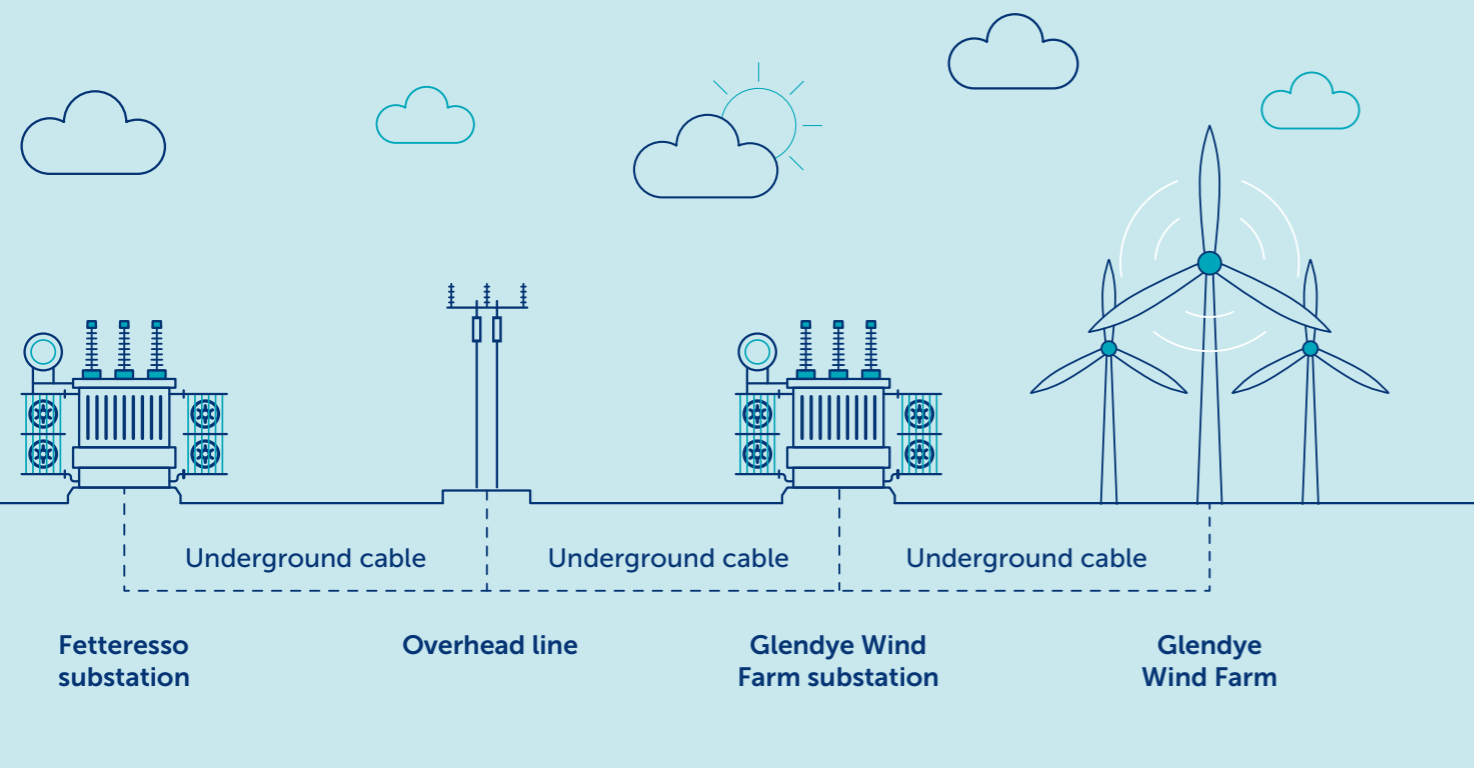
The Glendye Wind Farm has received section 36 consent and we are required to connect the development to the transmission network. To facilitate this, we are proposing to construct a new 132kV overhead line from the proposed substation at the wind farm approximately 8km North West of Fettercairn, to the existing Fetteresso substation. Under our Network Operator's Licence this connection should be efficient, coordinated and economic, whilst having the least possible impact on the environment.

of approximately 19km in length. Sections of 132kV underground cable (UGC) will be required at either end of the overhead line, totalling approximately 2km in total. A number of new permanent and temporary access tracks will also be required.

The average height of the trident pole is 13 meters, with an average span of approximately 100 meters. Traffic management will be required during construction and consultation will be undertaken on this in due course.

**Diagram not to scale, for illustration purposes only*

The proposal is a single circuit 132kV steel trident pole arrangement, as shown in the image, supporting the overhead line (OHL) running over a distance



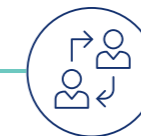
The story so far

Feb 24



We first introduced this project in February 2024, consulting on route option corridors for the overhead line.

April 24



The consultation closed on **18 April 2024**, with over **40** written responses received.

July 24



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

Why we're here today

We are currently at the alignment stage of project development. This is when we have lines on the map showing our alignment options and clear proposals for where the line is likely to go rather than the routes previously presented which are typically around 1km wide.

We have developed these alignments by carrying out further studies and assessments following consultation feedback and through engagement with landowners and wider stakeholders.

This consultation will focus on our alignment options, one of which is being presented as the potential alignment option and will include further information on how this option has been chosen as the potential one.

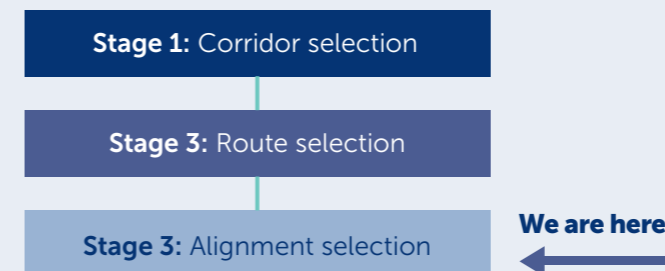
We welcome your feedback on these alignment options and will review all feedback received to inform the final design of the project.

Help shape our plans

The work we have planned is significant and has the potential to deliver massive benefits in your community, Scotland, and beyond. Yet we know that achieving our goals will require a lot of work that will impact your lives. That's why we want to work with you every step of the way throughout the planning and delivery stages of these essential and ambitious works.

We're committed to delivering a meaningful consultation 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.

Throughout the consultation, we'll present our approach to developing the project, including changes made since we last engaged with you. We will be sharing our potential alignment for the overhead line, with alternative alignment options in some locations, alongside indicative tower positions presented through maps and visualisations. These will all also be available to view and download from our project website.



What we are seeking views on

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 and what you think of the refinements or changes we've made.

If you live adjacent to the potential alignment, in particular we want to work with you to discuss potential impacts and mitigation.

By telling us what you think, you will help shape our proposals. We want to harness your local knowledge so that we spot any unforeseen challenges early and maximise the potential benefits and opportunities for your communities.

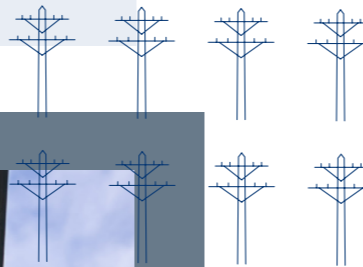
Ultimately, we want you to work with you to ensure that the energy infrastructure we build will be the best it can possibly be.

Who we are consulting with

As well as communities, we are keen to hear feedback from a broad range of other stakeholders including but not limited to landowners, businesses, non-statutory consultees and statutory consultees such as local authorities, NatureScot, Scottish Environment Protection Agency (SEPA), Historic Environment Scotland (HES) and Scottish Forestry.



Scan the QR code to visit the project webpage and feedback form.



Meeting our obligations

Our Transmission Operators licence requires us to provide best value for customers and GB consumers.

As a natural monopoly, SSEN Transmission are closely regulated by the GB energy regulator Office of Gas and Electricity Markets (Ofgem), who determine how much revenue we are allowed to earn for constructing, maintaining and renovating our transmission network.

These costs are shared between all those using the transmission system, including generation developers and electricity consumers.

We therefore work to strict price controls which means the following environmental, engineering and economic considerations form a key part of our routing process.

Environmental assessments

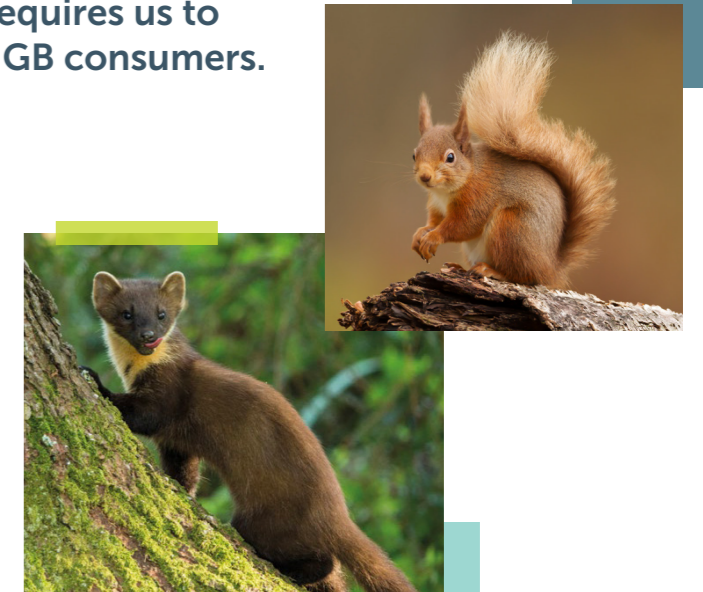
Desk-based assessments using available mapping and GIS (Geographic Information Systems) data, together with initial site walkovers by specialists, have been undertaken to gather baseline information. This is crucial to enable us to understand the key environmental constraints and sensitivities within the connection corridor.

This work has been carried out during 2024 and has helped to identify key environmental issues including landscape and visual amenity, sensitive habitats, protected ecology and ornithology, forestry, hydrology, hydrogeology, recreation and cultural heritage.

Following confirmation of a potential route and alignment, further detailed studies and assessment work will be undertaken to support the consenting process in 2025–2027.

Consenting

Before a project progresses to consent application stage (under Section 37 of the Electricity Act 1989), a Screening Opinion is requested from the Scottish Ministers (through the Energy Consents Unit) to clarify whether the project falls within the thresholds of The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017. If the project meets or exceeds certain criteria, then it is deemed to be an EIA Development and any application for consent must be accompanied by a formal EIA Report. If it is not deemed to be an EIA Development, SSEN Transmission will provide equivalent environmental information through a voluntary Environmental Appraisal (EA) Report.

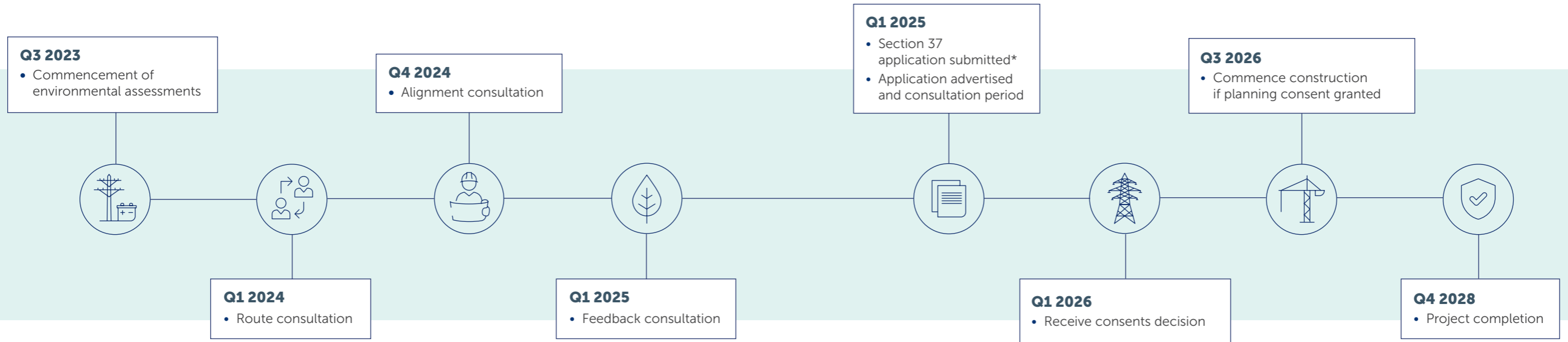


Engineering and economic considerations

In addition to the suite of environmental assessments undertaken, the following engineering and economic considerations form a key part of our routing process:

- Construction costs and buildability (largely affected by ground conditions, such as peat/rock/flooding/contaminated land, etc).
- Operations and maintenance requirements.
- Outage requirements and network constraints.
- Vicinity to other electrical OHL and underground structures.
- Vicinity to any other utility, overhead or underground.
- Proximity to wind turbines and wind farm infrastructure.
- Communications masts and infrastructure.
- Urban development.
- Forestry and biodiversity.
- Technology costs and design parameters.
- Site accessibility.
- Route length.

Project timeline



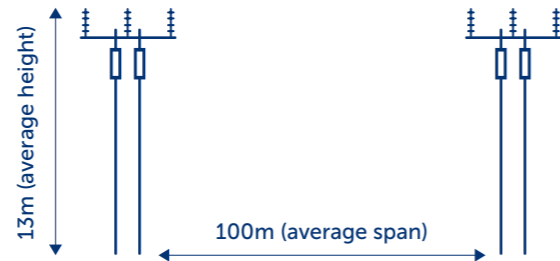
About the overhead line

132kV single circuit overhead line

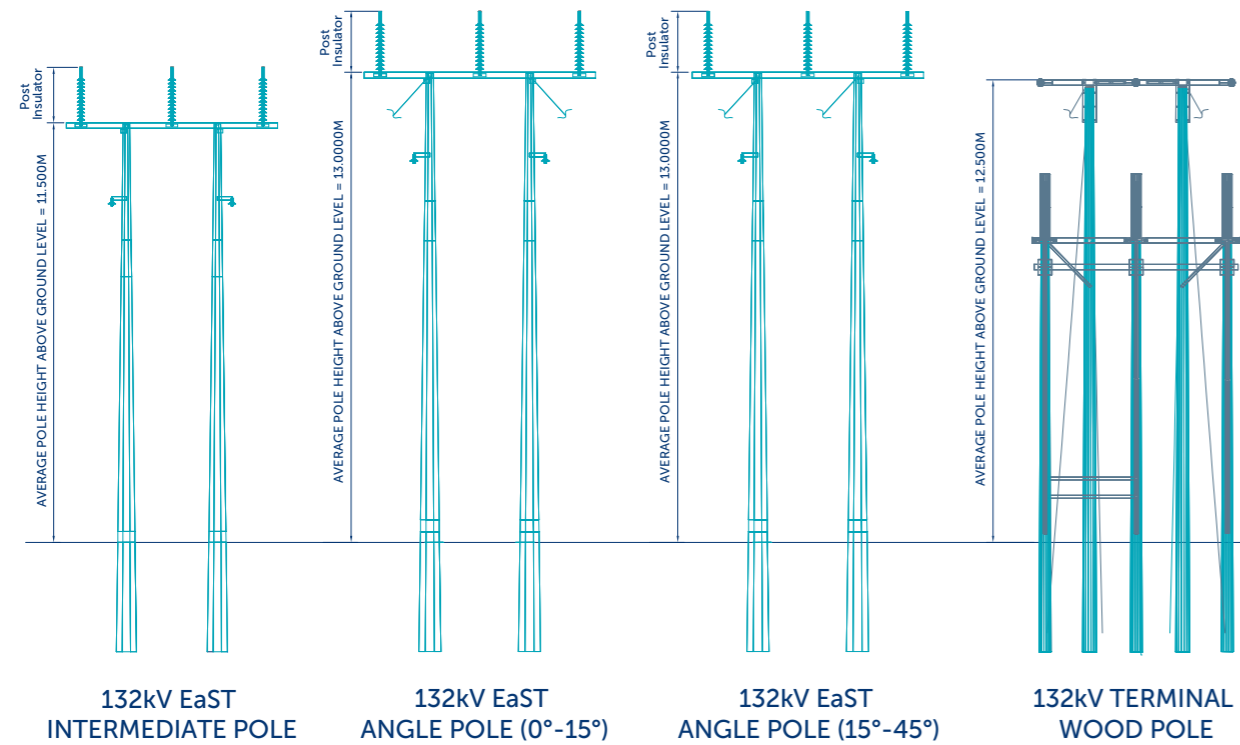
The required technology for the new 132kV connection between the proposed Glendye 132kV substation and Fetteresso 275kV substation has been determined to be a new single circuit 132kV HVAC (High Voltage Alternating Current) overhead line.

The overhead line would consist of Earthed Steel Trident (EaST) supports, with nominal heights of approx. 13m. Each support would comprise two steel poles and a linking steel crossarm, which would support three UPAS conductors and an underslung high strength earthwire. Stay wires are attached at 45° gradient (unless other gradients are justified) to all angle supports, and also to the intermediate supports where necessary.

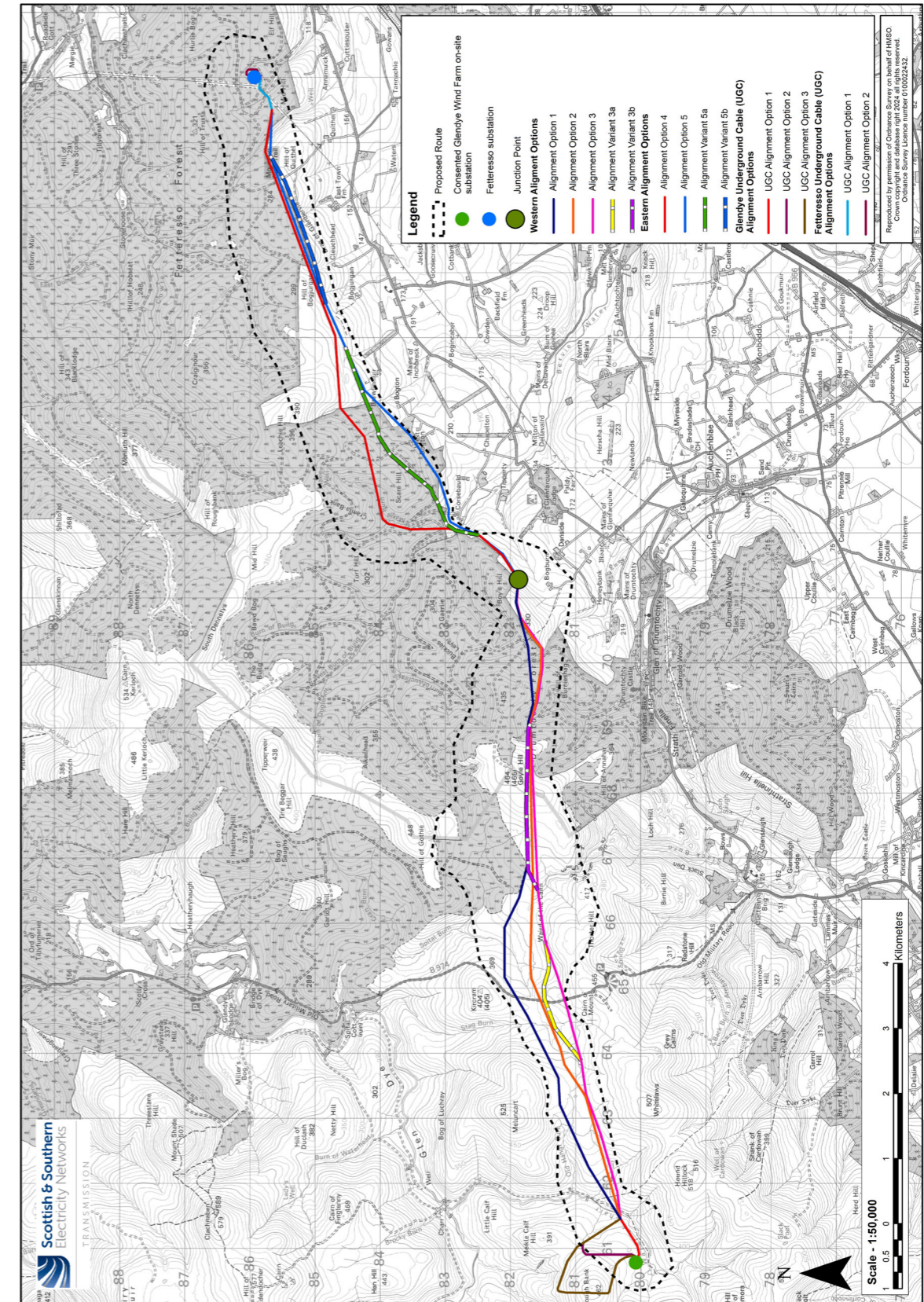
The span between the structures is approx. 100m on average. The pole height and the distance between them are subject to deviations depending on several factors, such as altitude, climatic conditions and topography.



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.



Alignment options



Other projects in the local area

As the transmission operator in the north of Scotland, we need to maintain and invest in the high voltage electricity transmission network in our area to provide a safe and reliable electricity supply to our communities.

We also need to offer terms for connections to the transmission network for new generation such as wind farms and pumped storage schemes and for new sources of electricity demand. Therefore, as well as Glendye Wind Farm Connection, we have a number of other projects within the local area we are currently developing, described below.



Tealing to Kintore 400kV OHL upgrade

Based on the requirements outlined in National Grid ESO's Pathway to 2030 Holistic Network Design we have developed proposals to reinforce the transmission system. As part of this we are proposing to establish a new 400kV overhead line (OHL) between Kintore and Tealing. This requires two new 400kV substations to be constructed to connect to this new OHL, one near Fetteresso Forest, known as Hurlie, and one near Tealing in Angus, known as Emmock, to enable required future connections and export routes to areas of demand. Together, these three projects form the Kintore to Tealing 400kV Projects. This connection will be provided via an overhead line of steel lattice towers (commonly referred to as pylons) likely to average around 56m in height.

ssen-transmission.co.uk/tkup

Hurlie 400kV substation

A new 400kV substation, known as Hurlie, is required near the existing 275kV substation in Fetteresso Forest to provide a connection for the new proposed Kintore – Tealing 400kV OHL. Hurlie also provides an onshore landing point for the proposed co-ordinated Offshore Network currently being developed which is intended to deliver offshore connections more efficiently.

These projects are completely separate to the Glendye Wind Farm Connection we are consulting on today.

ssen-transmission.co.uk/hurlie

Fetteresso substation 400kV upgrade

The existing Fetteresso substation was fully constructed in 2016 to operate at a voltage of 275kV, with the intention of upgrading to 400kV in the future. The aim of this new project is to upgrade the substation to operate at 400kV. The project elements include:

- Replacement of existing 275kV transformer with 400kV transformers;
- Replacement of existing 275kV equipment such as Surge Arrestors and Capacitive Voltage Transformers with 400kV equivalents;
- Any associated works (i.e. nomenclature changes, protection updates, etc.)

There are plans to upgrade the transmission system in the north east and on the east coast of Scotland to 400kV over the next decade. In order to facilitate this, we are proposing to upgrade the existing overhead line network in the region and install new substations at various points.

The construction works will be contained to the existing site boundary and are taking place from late August through to late 2026.

ssen-transmission.co.uk/fetteresso-upgrade

Fetteresso substation extension

Due to various upcoming connections in the area, there is a requirement to extend and secure the current Fetteresso 275kV substation.

The project consists of a platform extension, earthworks, upgrading equipment, installing transformers including Super Grid Transformers (SGTs), additional bays to facilitate all required connections and all associated protection and control upgrades. We are aiming to commence work in summer 2026 and targeting the majority of substation works completed for 2028 with works following depending on the connection requirements. This extension has a number of drivers including:

- Connection for Network Rail as part the east coast electrification strategy. (Commence in summer 2027 and energised for early 2029).

- Reinforcements and upgrades required on the transmission network to enable contracted connections on the distribution network. (Commence in summer 2026 and conclude for summer 2028)
- Connections back to the existing Fiddes substation as part of asset management and capacity requirements. (Still subject to OFGEM approval. Targeting completion by 2031)
- Potential incoming onshore wind farm. (Subject to accepting a connection agreement. Connection date likely to be post 2030)

These projects are in the early phases of design and development. More information will be available in the near future on the dedicated project website. ssen-transmission.co.uk/fetteressoextension



Local renewable developments

We know that local stakeholders are keen to understand the full extent of renewable developments being proposed in their local area.

Applications to connect to the transmission network in our licence area are made to National Grid ESO and undergo a lengthy process of assessment before we begin to develop a network connection for those developments. We aim to be transparent about the renewable

developments looking to connect to our network but are not permitted to disclose any details of these developments until they are in the public domain.

A list of projects that hold contracts for Transmission Entry Capacity (TEC) with National Grid, the Electricity System Owner is available from their website: nationalgrideso.com/data-portal/transmissionentry-capacity-tec-register

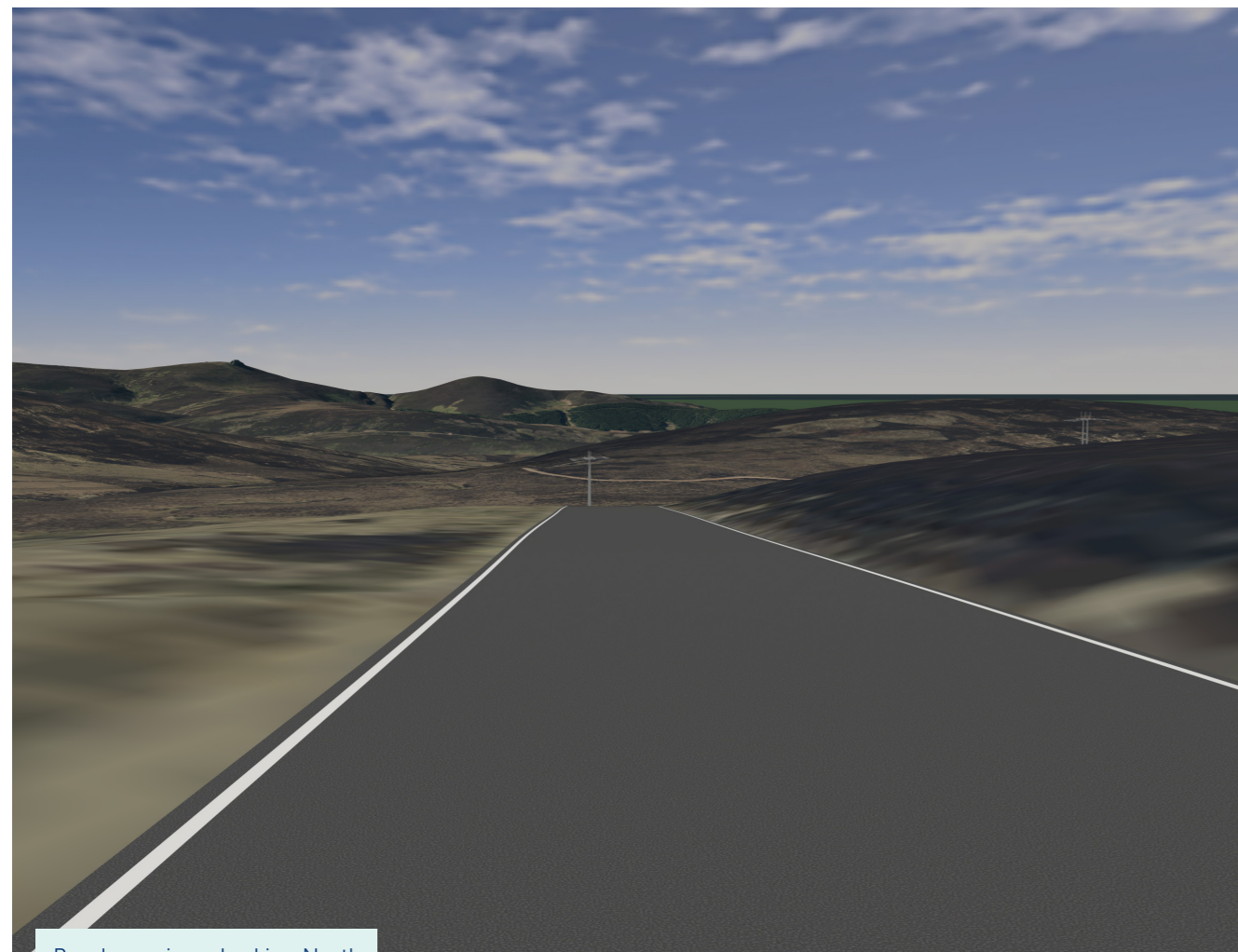
3D visualisations

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 model 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 the overhead line from a range of different angles.



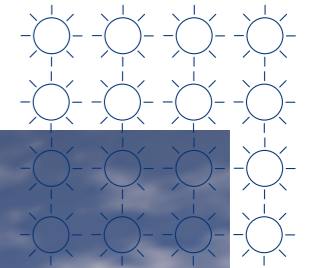
To find the 3D flythrough video, scan the QR code or visit the following URL: ssen-transmission.co.uk/glendye



Road crossing - looking North

To get a better sense of the proposals in full, visualisations which include flythrough video are 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.

The 3D model has been developed using indicative trident pole locations, identified by our contractor following walkover surveys of the alignments. The exact location and design of each individual tower may change based on feedback and further refinement of the design. If that happens, we'll update our model and videos and share these on our webpage and with you at the next series of consultation events.



Road Entrance to Denside - looking northwest



Road to Corsebauld - looking northwest

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 on the dedicated project website: ssen-transmission.co.uk/glendye

Have your say

We understand and recognise the value of feedback provided by the community and stakeholders. Without this valuable feedback, we would be unable to progress projects and reach a balanced proposal.

The feedback period

We will accept feedback from now until **21 November 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: ssen-transmission.co.uk/glendye
- Email the feedback form to our Community Liaison Manager, or write to us enclosing the feedback form at the back of this booklet.

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 and what 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.

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.



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."

Community Liaison Manager

Rob Whytock

200 Dunkeld Road, Perth, PH1 3GH

glendye@sse.com

+44 7721 404 576

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/glendye

You can also follow us on social media:

@ssentransmission @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. Which consultation did you attend?

Drumlithie Stonehaven Auchenblae

Strachan I did not attend any events

Comments:

Q2. Has the approach taken to select the potential alignment been clearly explained?

Yes No Unsure

Comments:

Q3. Do you have any specific concerns relating to the alignment? If so, is there anything we could do to mitigate the impact of this?

Comments:



Q4. Is there anything you'd like to bring to our attention regarding our proposed alignments that you believe we may not have already considered such as environmental designations, water courses, local recreational areas etc.?

Yes No Unsure

Comments:

Q5. Do you feel, on balance, that the potential alignments selected are the most appropriate for further consideration at the Environmental Impact Assessment stage?

Comments:

Q6. SSEN Transmission are currently developing a Community Benefit Fund to support communities in areas with new infrastructure. What suggestions for social or environmental community benefit opportunities do you have that you would like us to consider, or are there any local initiatives you would like us to support?

Comments:

Q7. Do you have any questions that were not answered within our materials or by the project team on the day?

Comments:

Full name: **Email:**

Telephone: **Address:**

We would like to send you relevant communications via email such as invitations to stakeholder events, surveys, updates on projects, services and future developments from the Scottish and Southern Electricity Networks group listed below. If you are happy to receive email updates please opt in by ticking the box below. You can unsubscribe at any time by contacting us at stakeholder.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

Thank you for taking the time to complete this feedback form. Please submit your completed form by one of the methods below:

Post: SSEN Transmission, 200 Dunkeld Road, Perth, PH1 3GH

Email: glendye@sse.com

Online: ssen-transmission.co.uk/glendye

For information on how we collect and process your data please see our privacy notice available at today's event. This can also be obtained online at: ssen-transmission.co.uk/privacy

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.

Scottish and Southern Electricity Networks is a trading name of: Scottish and Southern Energy Power Distribution Limited Registered in Scotland No. SC213459; Scottish Hydro Electric Transmission plc Registered in Scotland No. SC213461; Scottish Hydro Electric Power Distribution plc Registered in Scotland No. SC213460; (all having their Registered Offices at Inveralmond House 200 Dunkeld Road Perth PH1 3AQ); and Southern Electric Power Distribution plc Registered in England & Wales No. 04094290 having its Registered Office at Number One Forbury Place, 43 Forbury Road, Reading, Berkshire, RG1 3JH which are members of the SSE Group.



Notes

