



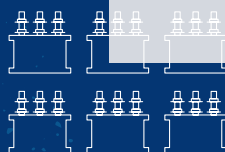
Scottish & Southern
Electricity Networks

TRANSMISSION

New Coire Mashie 400kV Substation and Earba Pumped Storage Hydro (PSH) Connection

Pre-Application Consultation Event

October 2026



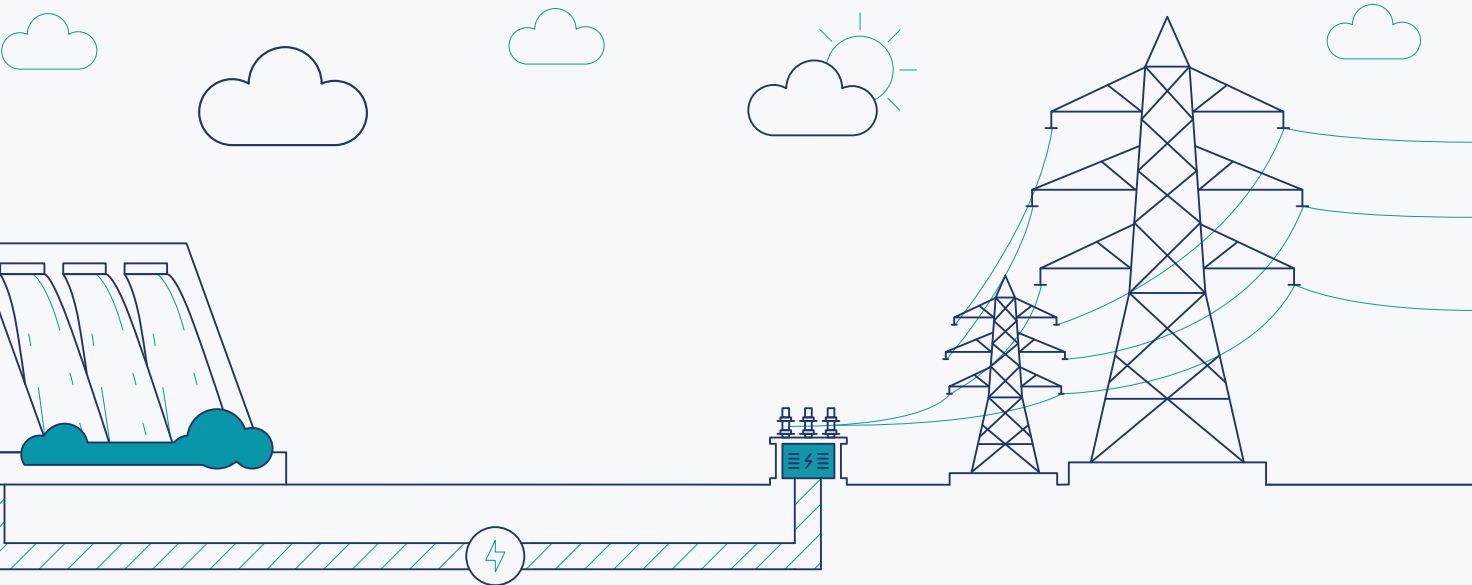
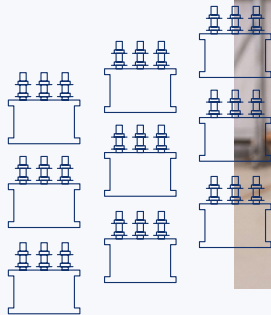
ssen-transmission.co.uk/earba-connection

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The consultation event will be taking place on:

Wednesday 7 October 2026, 3–7pm
Laggan Village Community Hall,
Gergask Avenue, Newtonmore, PH20 1AN



Powering change together



If we want to deliver on clean power and energy security targets and provide power for future generations, upgrades to Scotland’s electricity transmission infrastructure are needed.

The shift to a cleaner, more sustainable future is about more than tackling the impact of climate change, it’s about ensuring that future generations can thrive.

Countries around the world are investing in their energy infrastructure to support increasing electricity demands and to deliver on clean power targets and the UK is leading the way in building a modern, sustainable energy system for the future.

We all have a part to play

The UK and Scottish governments have set ambitious energy security and clean power targets, and we all have a part to play in delivering them.

At SSEN Transmission, we work closely with the National Energy System Operator (NESO) to connect vast renewable energy resources - like solar, wind, hydro and marine generation - to areas of demand across the country. Scotland will play a particularly big role in meeting increasing electricity demand.

But there is more to be done. By 2050, the north of Scotland is expected to contribute more than 50GW of low carbon power to the GB energy system. Today, the region has around 11GW of renewable generation connected to the network.

At SSEN Transmission, it is our role to build the energy system of the future. To do that, we are planning to invest around **£29 billion** in the coming years to upgrade the electricity transmission network in the north of Scotland. It’s an investment that will unlock cleaner, more secure energy for homes and businesses now, and for generations to come. **By 2050, annual electricity demand is expected to at least double** - our investment will support the connection of more clean power to meet that demand to the GB electricity network, supporting up to **17,500 jobs in Scotland**, with more than **8,000** of those in the north of Scotland, along the way.

Who we are

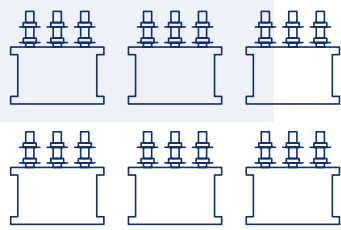
We are responsible for maintaining and investing in the electricity transmission network in the north of Scotland. We are part of SSE plc, one of the world’s leading energy companies with a rich heritage in Scotland that dates back more than 80 years. We are also closely regulated by the GB energy regulator 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 and we are committed to minimising our impacts and maximising all the benefits that our developments can bring to your area. To do that 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 and we want to hear people’s views, concerns, or ideas - and harness local knowledge - so that our work benefits communities today and long into the future. You can share your views with us at: ssen-transmission.co.uk/talk-to-us/contact-us/



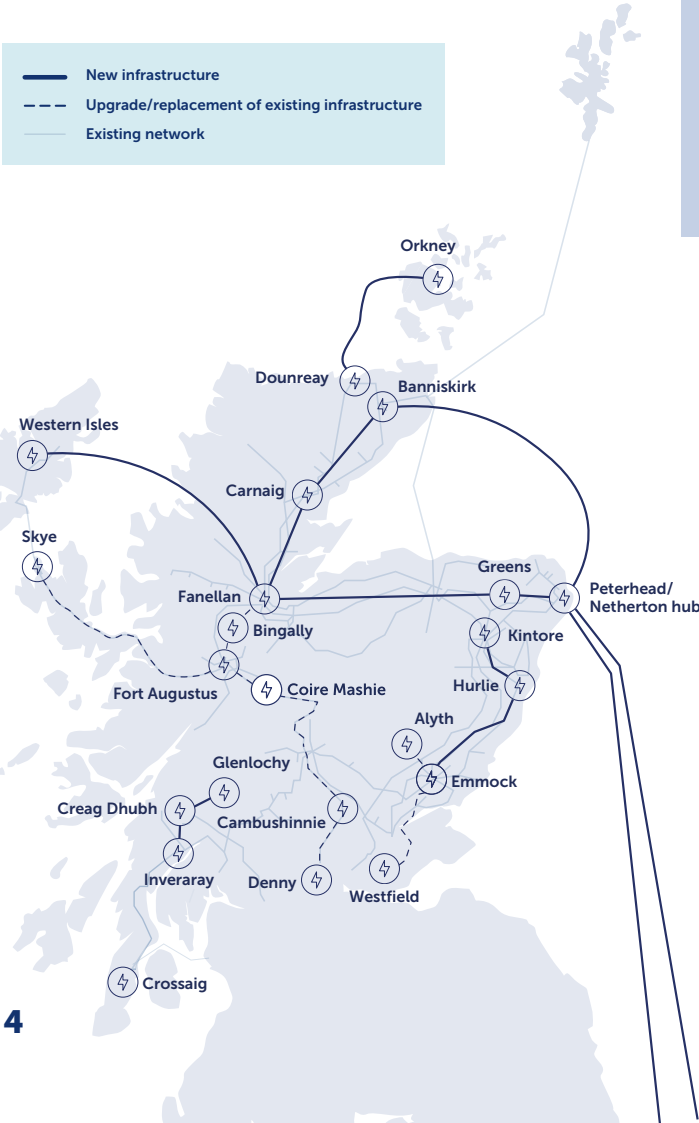
Project need and overview

As Transmission Operator for the north of Scotland, we enable electricity generators to connect to the transmission system by providing their connections which allow the electricity generated to be transported to areas of demand.

As such, we are required to provide a connection for Gilkes Energy Ltd's proposed Earba Pumped Storage Hydro (PSH) Scheme with an installed capacity of up to 1,800 MW to the transmission network.

Further information regarding the PSH Scheme can be found on Gilkes Energy Ltd website: earbastorage.co.uk

- New infrastructure
- - - Upgrade/replacement of existing infrastructure
- Existing network



Project Elements

In order to facilitate this connection, we are proposing the following project elements:

- A new 400kV substation, located near Laggan, identified as 'Coire Mashie' substation.
- A new 400kV underground cable approximately 15km in length connecting the Earba Pumped Storage Hydro Scheme to the proposed new Coire Mashie substation.
- Diversion of the existing Beauldy Denny Overhead Line to connect the substation into the grid.

The new underground cable would be connected from Earba Pumped Storage Hydro Scheme's on-site powerhouse located by the Southeast shore of Loch Earba to the new proposed Coire Mashie Substation.

The story so far

At SSEN Transmission, we are committed to delivering a robust and transparent consultation process underpinned by inclusion and accessibility. As a stakeholder led business, we understand the importance of involving communities and key stakeholders throughout each stage of our development process to deliver better outcomes for projects.

Engagement to date

We attended a Laggan Community Council meeting in May 2025 ahead of the first public consultation event at Laggan Village Hall, also in May 2025. The consultation focused on the proposed Coire Mashie 400kV Substation site selection options, and the proposed route options for the 400kV underground cable connection from the proposed Earba Pumped Storage Hydro Scheme to the proposed Coire Mashie 400kV Substation options.

A Report on Consultation (RoC) was shared and uploaded to the project webpage providing a summary of the responses received from key stakeholders (including statutory and non-statutory consultees, local communities, landowners, and individual residents) between May 2025 and September 2025. An appraisal of two additional site options was also undertaken during this period. Within the RoC, SSEN Transmission confirmed that Site Option 1 will be taken forward as the proposed site into the detailed design phase. This site option is considered to provide an optimum balance of environmental, technical, and economic factors.

A public meeting was carried out at Laggan Village Hall in November 2025 to provide an overview of the RoC document and detail next steps in the development of the project.

How the proposals have evolved

Following our 2025 public consultation, we have reviewed the feedback received alongside ongoing technical, environmental and engineering assessments. This exhibition provides an update on the project and explains the revisions and additional information developed since the previous consultation.

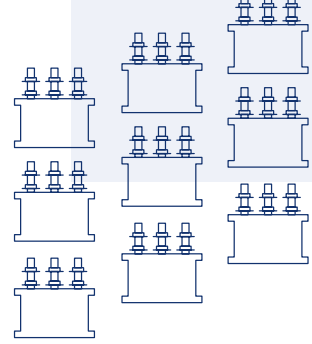
The information presented includes:

- The current substation technology options and how these have developed.
- Updated proposals for access to the substation.
- New 3D visualisations showing the proposed development.
- The proposed planning application boundary.
- The proposed planning and consenting approach.

Who we're consulting with

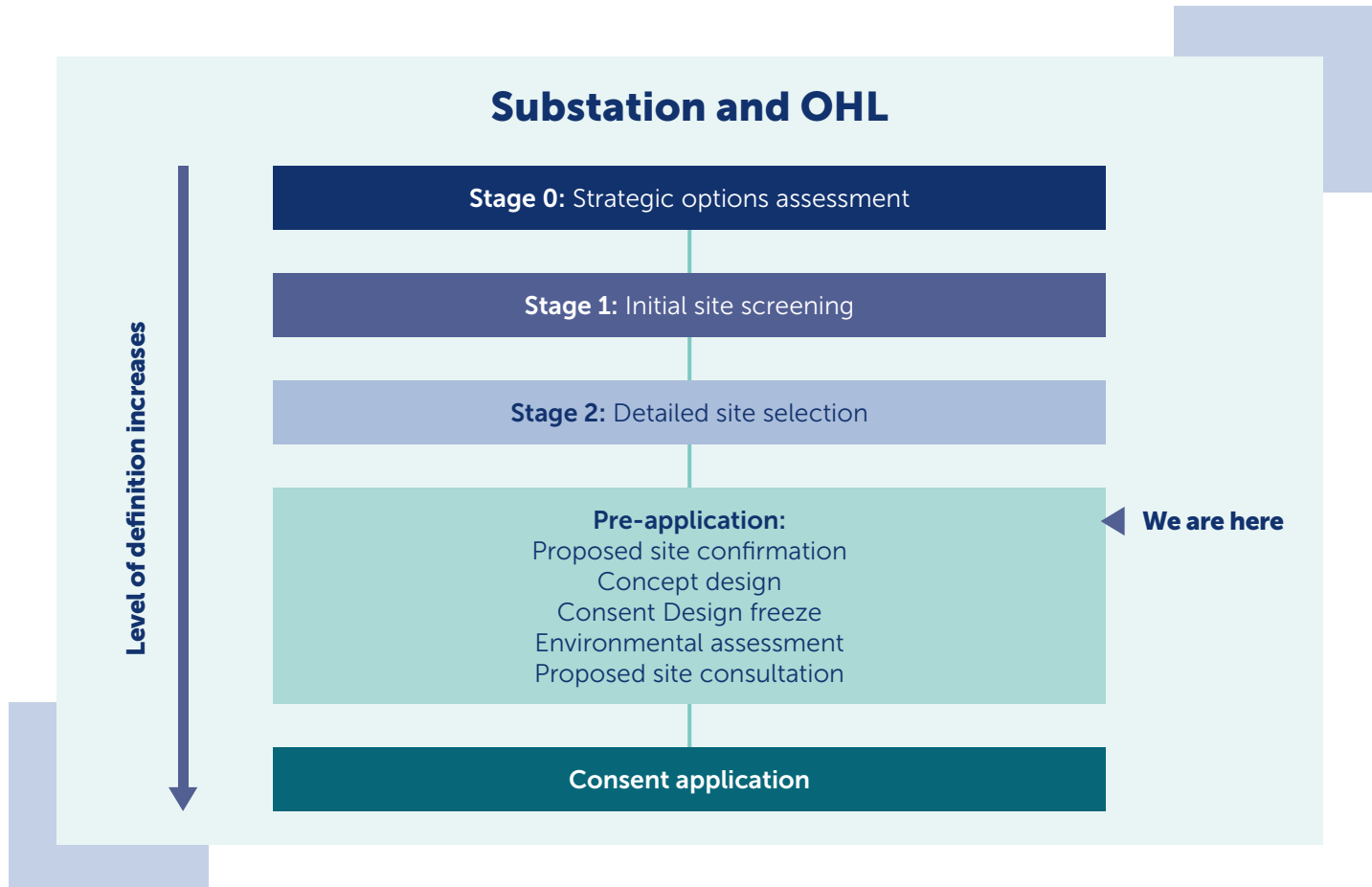
We are keen to hear feedback from a broad range of stakeholders including but not limited to local residents, landowners, businesses, non-statutory consultees and statutory consultees such as local authorities, NatureScot, SEPA, Historic Environment Scotland.

If you require additional support to submit your views, please contact our Community Liaison Manager who will happily assist you.



Current project stage

We follow formal internal guidance to enable us to consistently and rigorously select sites for new substations. Each process has a number of key stages, each increasing in detail and definition and bringing technical, environmental and cost considerations together in a way which seeks the best balance in accordance with our Transmission Network Operator's License and the Electricity Act 1989.



The Planning Process

The outcome of the optioneering processes will be developments for which consents under the respective planning regime will be sought.

Substations and UGC

These require an application for planning permission to be submitted to the relevant Local Planning Authority (The Highland Council) under the Town and Country Planning (Scotland) Act 1997.

The substation application will identify the proposed development, including:

- Site boundary clearly shown in red (the Red Line Boundary) including any permanent and temporary access routes and junctions onto public highways.
- The proposed development in relation to the site boundary with dimensions of all permanent and temporary works including structures, buildings, perimeter fencing, drainage features, key electrical equipment, construction compounds and laydown areas.
- A temporary stone access track may be required to install the UGC.

One Environmental Impact Assessment (EIA)

One singular Environmental Impact Assessment Report will be produced for both projects and submitted in support of each relevant consent application.

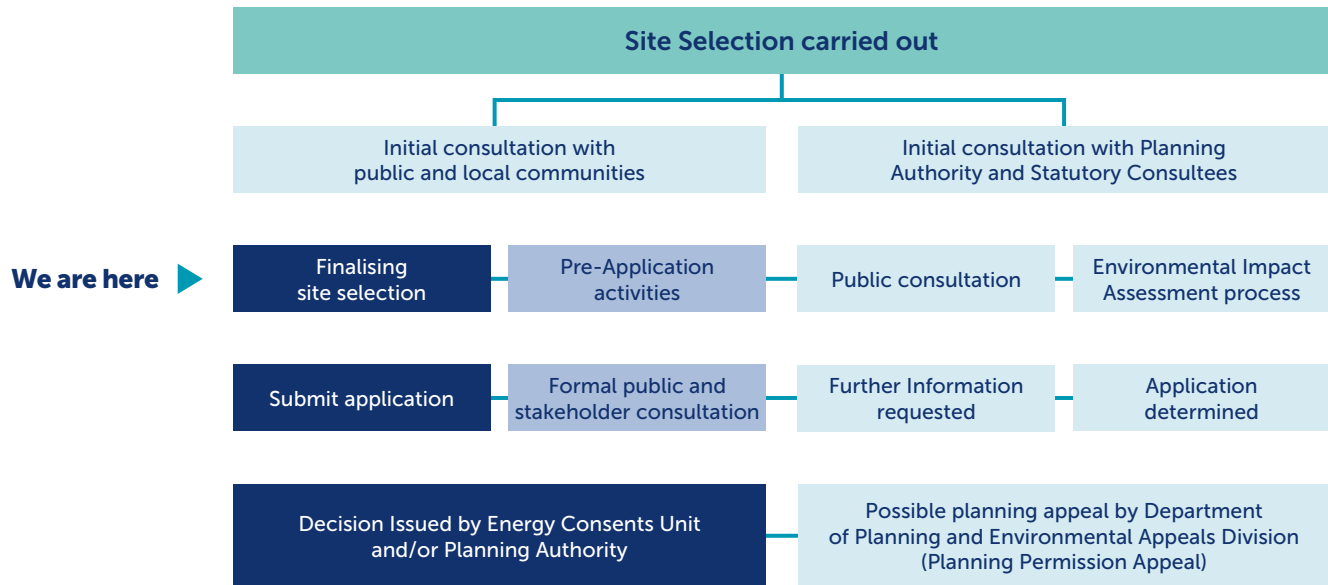
Overhead line tie-ins

These require an application for consent under section 37 of the Electricity Act 1989 to be submitted to the Scottish Ministers via the Energy Consents Unit (ECU).

Priority Project

The Scottish Government's Priority Applications for Transmission Infrastructure guidance sets a target 52-week (one-year) determination period for critical Section 37 electricity overhead line applications under the Electricity Act 1989. This framework aims to accelerate net-zero and energy security projects by streamlining consultations and inquiries.

Planning application for substation, underground cable and Section 37 application for OHL tie-ins



We are here

Planning and consent strategy

Section 37 of the Electricity Act (1989)

The scope of these works include reconfiguration of the Beaully Denny 400kV Overhead Line, including installation of two new permanent towers (which would replace two existing towers), the installation of two sections of approximately 0.4km of new 400kV conductors and the installation of downloads into a proposed new 400kV substation.

Application for Full Planning Permission

The scope of works includes:

- The proposed Coire Mashie Substation.
- The areas that may be needed to facilitate the upgrading access tracks, and for the construction of temporary and permanent access tracks.
- The installation of a 400kV UGC, approximately 15km in length, between the consented Earba PSH Scheme's powerhouse and the Proposed Coire Mashie Substation.

Determining a Section 37 application and communicating outcomes

Determining the consent application and communicating outcomes

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

When a decision is made, the determining authority will send us a decision notice, copying in the statutory consultees. The decision notices are a record of the reasons for the decision and, if consent is granted, contains the conditions that must be satisfied in order to implement the consent.

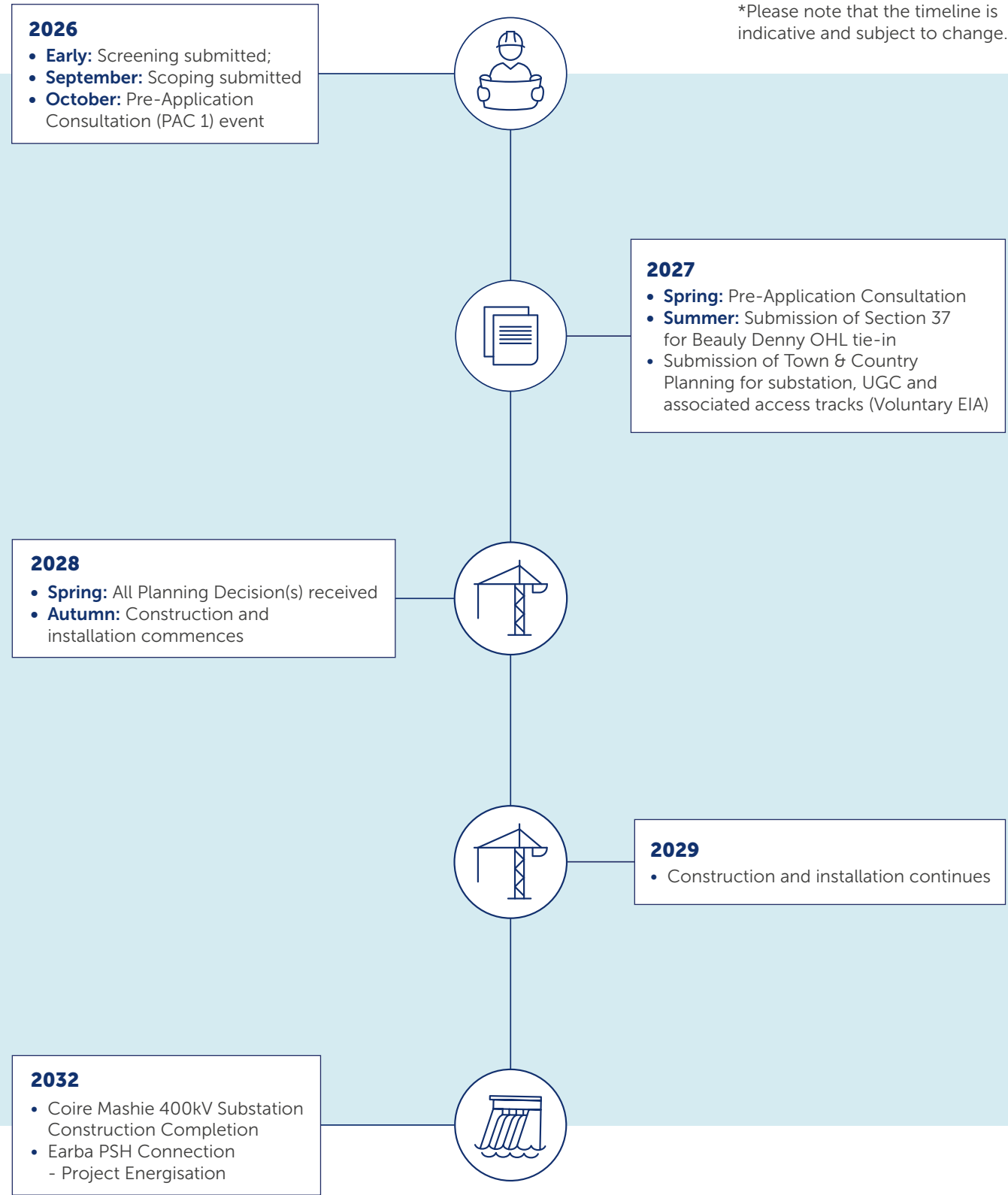
The ECU and the Local Planning Authority will public each decision notice via their own channels, and we must publicise the outcome on our website and via mainstream media and other various means including email updates to Elected Members, and those signed up to project updates, social media and press releases. The S37 decision will also be published in the Edinburgh Gazette and in the Strathspey and Badenoch Herald.



Read more here about the Section 37 process here

Project Timeline

*Please note that the timeline is indicative and subject to change.



Substation Technology Options

What is a substation?

An essential component in the energy network, substations connect sources of generation, such as wind farms and power stations.

They connect overhead and underground circuits and can connect nearby utility systems. Substations manage electricity flows within the network, which can include connection and disconnection of circuits to direct the flow, transform voltages to higher or lower levels (step-up or step-down, for example 132kV stepping-up to 275kV), manage the frequency of the electricity and increase efficiency and reliability of the power supply.

As part of our site selection process for the proposed Coire Mashie substation, we have undertaken a comprehensive assessment of the two potential substation technology options available to meet the network requirements for this connection.

This assessment is based on the specific environmental and technical constraints and characteristics of the preferred site, alongside wider stakeholder feedback.

- The two technology options that have been considered, both of which are operational in our network area, are:
- **Air Insulated Switchgear Substation (AIS)**
An AIS substation is constructed with switchgear which utilises air to insulate it and allow safe operation via implementing defined clearance distances between equipment. AIS is generally exposed to the wider environment and not contained within buildings. This is generally the starting position for technology selection for substations within our network area due to its operational flexibility and proven, reliable operation over a number of our sites. The vast majority of our existing and proposed substation sites use AIS technology.
 - **Gas Insulated Switchgear Substation (GIS)**
A GIS substation is constructed with switchgear utilising insulating gas compounds to allow safe operation and safety clearances to be reduced when compared to AIS. It is generally considered where there may be space constraints, given the technology results in a reduced footprint overall for the substation platform, or due to climatic reasons, where housing the substation technology outdoors presents challenges. GIS does, however, provide less operational flexibility when compared to AIS.

For the technology selection review at Coire Mashie a quantitative scoring and weighting system was used to allow a multi-criteria assessment to take place with key areas of assessment including: Location, Land, Environmental & Consent, Civil Works, Cost, Carbon Footprint, Technology Readiness, Programme, Operation and Maintenance and Future requirements.

As part of the assessment, key items that impacted on our decision included the Location and its associated characteristics, particularly the prevailing wind speed. The wind speed at this location is beyond that set out within SSEN Transmission's specifications for the operation of outdoor AIS equipment, with our current supply of AIS equipment not rated to operate at this wind speed. This drove a requirement to house the substation equipment indoors to protect this from the prevailing climatic conditions, whether the technology be AIS or GIS.

Furthermore, SEPA has highlighted Environmental constraints and specifically, the need to avoid impacts to watercourses in the area of the preferred site that can be achieved through a smaller substation platform which cannot be achieved with an indoor AIS solution, which has a larger footprint than that of its outdoor equivalent.

It was therefore determined that, on balance, that a GIS solution was required in this specific instance to address the climatic conditions and statutory stakeholder feedback.



Location of proposed GIS substation



Proposed Coire Mashie 400kV Substation would be located to the south of the Beaully Denny line following feedback received at previous consultation. Coire Mashie 400kV Substation is located close to the Beaully Denny line to avoid excess lengths of overhead line.

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 commissioned 3D visualisations which model the substation into the local landscape to help understanding of the proposals in terms of the visual impact, distance and height.

A flythrough video is also available to view from the project webpage or via the QR code at the bottom of this page.

Our proposals may change based on feedback and further refinement of the design, if that happens, we'll update our model and video and share this on our webpage and with you at the next event.

Photomontages

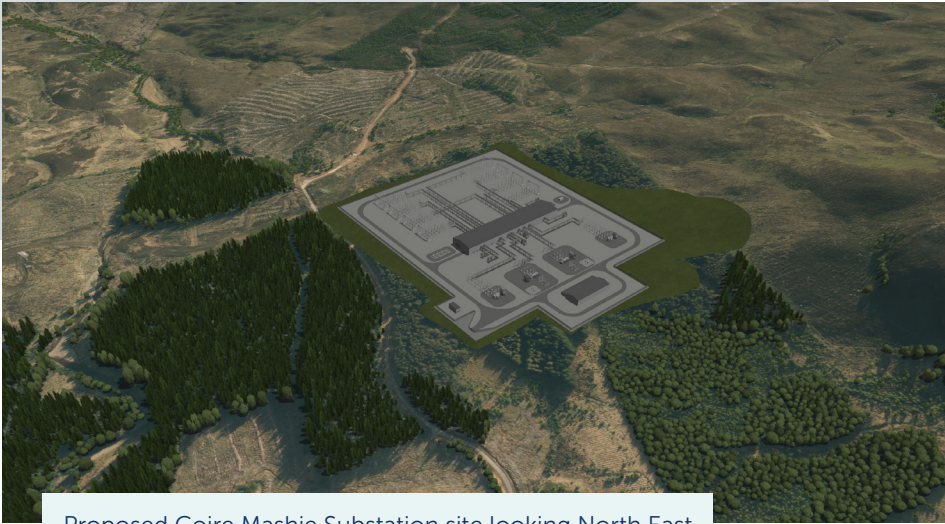
Photomontage visualisations will also be produced as part of the Environmental Impact Assessment (EIA). Once the EIA is completed, we'll ensure these photomontages are easily available to view.



Proposed Coire Mashie Substation site looking North

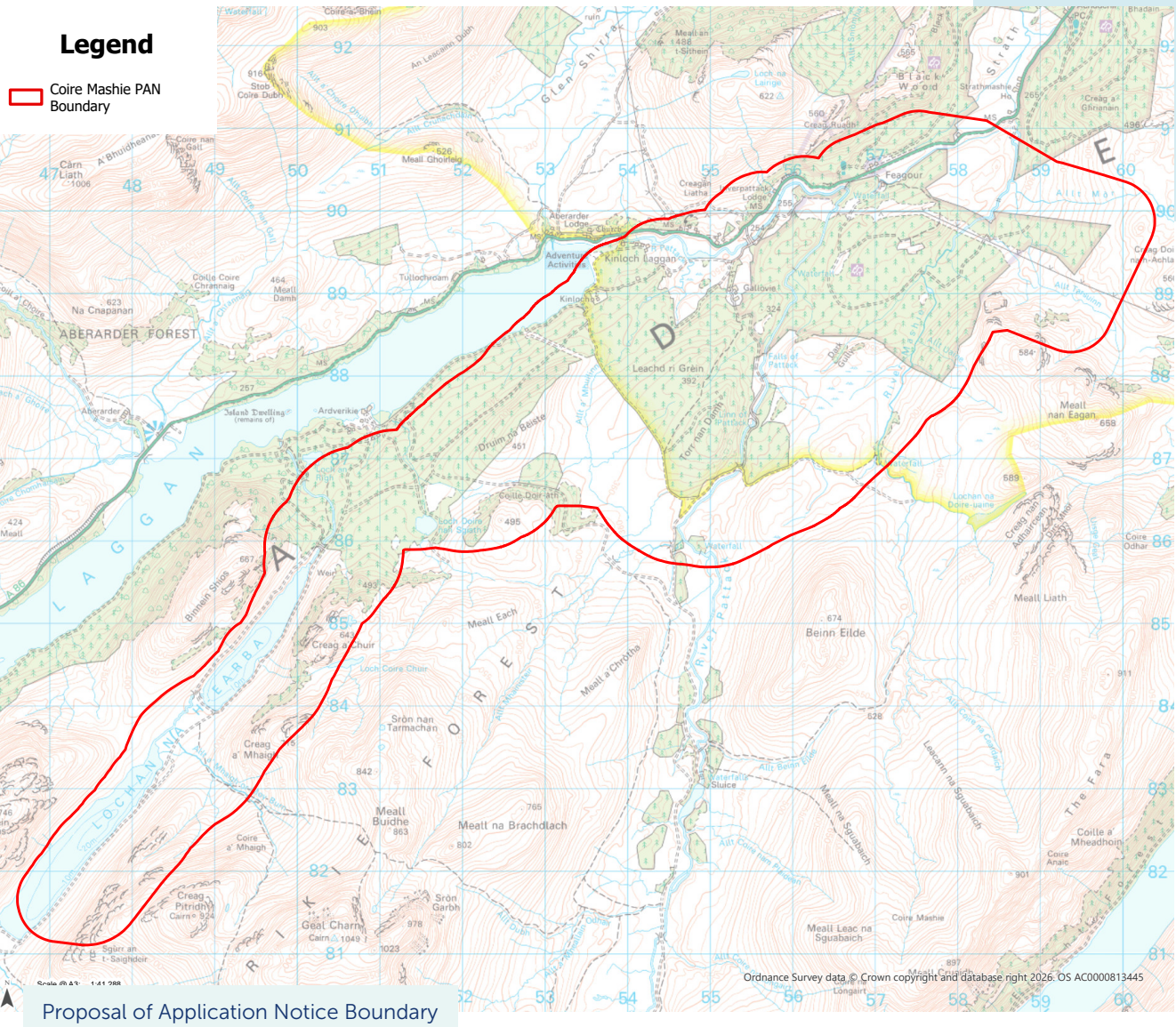


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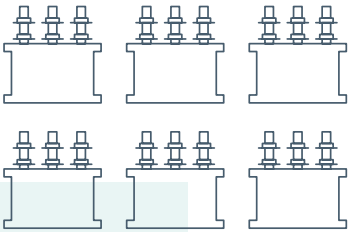
Proposed Coire Mashie Substation site looking North East

PAN Boundary



Please note: As well as the Earba Pumped Storage Hydro connection and Coire Mashie 400kV Substation site footprints, the PAN (Proposal of Application Notice) boundary must include all other site requirements, including temporary site compounds, temporary and permanent drainage, access and on-site parking, laydown and storage areas for materials and soils, as well as hard and soft landscaping proposals. Many of these requirements will be temporary, during the construction phase and will be permanently removed upon completion of the project.

The PAN boundary, therefore, does not represent the permanent footprint of the substation itself but indicates the full development area.

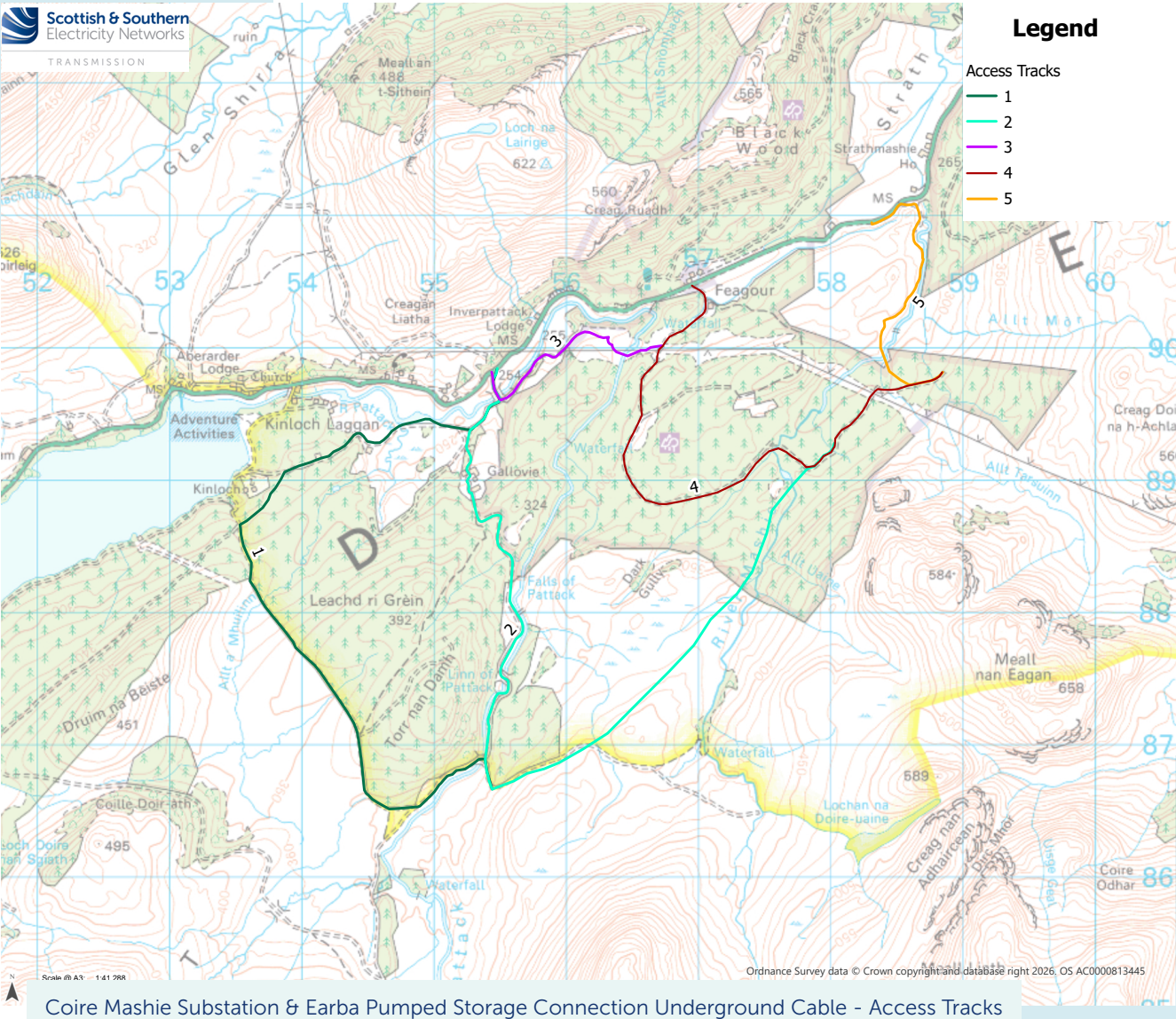


Access tracks to Coire Mashie 400kV Substation

The red line boundary includes all potential access tracks to Coire Mashie 400kV Substation considered to date based on feedback from stakeholders.

Dedicated vehicular access to the work locations and future permanent assets is required to facilitate the construction and operation of the proposed Coire Mashie Substation. A high-level overview of the strategy for this vehicular access and the design parameters assumed has been completed with ongoing review. High level access route options are presented within the image below.

A combination of access tracks 3 and 4 from the A86 Gallovie entrance to Coire Mashie Substation is the proposed option.

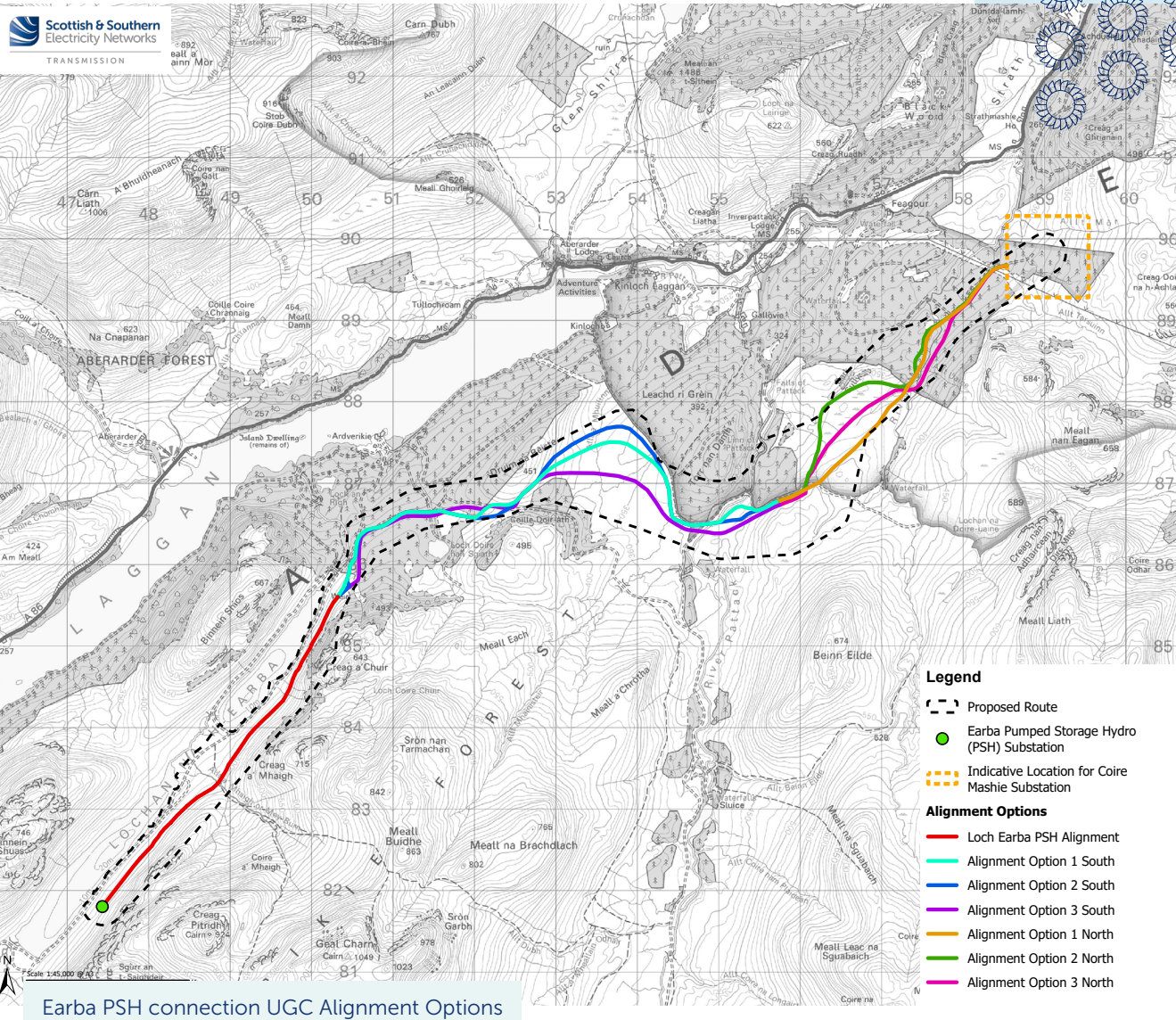


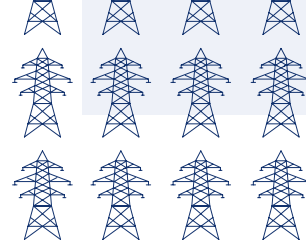
Proposed UGC Alignment

Following review of the consultation feedback in October 2025, we identified a proposed route option that has been taken forward to the Route Alignment Stage.

Six Alignment Options were then identified within the Proposed Route Option (see Figure below). The key environmental constraints which have been considered include peatland, Annex 1 Habitats, landscape and visual receptors, protected species and ancient woodland.

The key engineering constraints which have been considered include ground conditions, drainage, weather conditions, water crossings and existing infrastructure.





Beauly - Denny Reconfiguration OHL

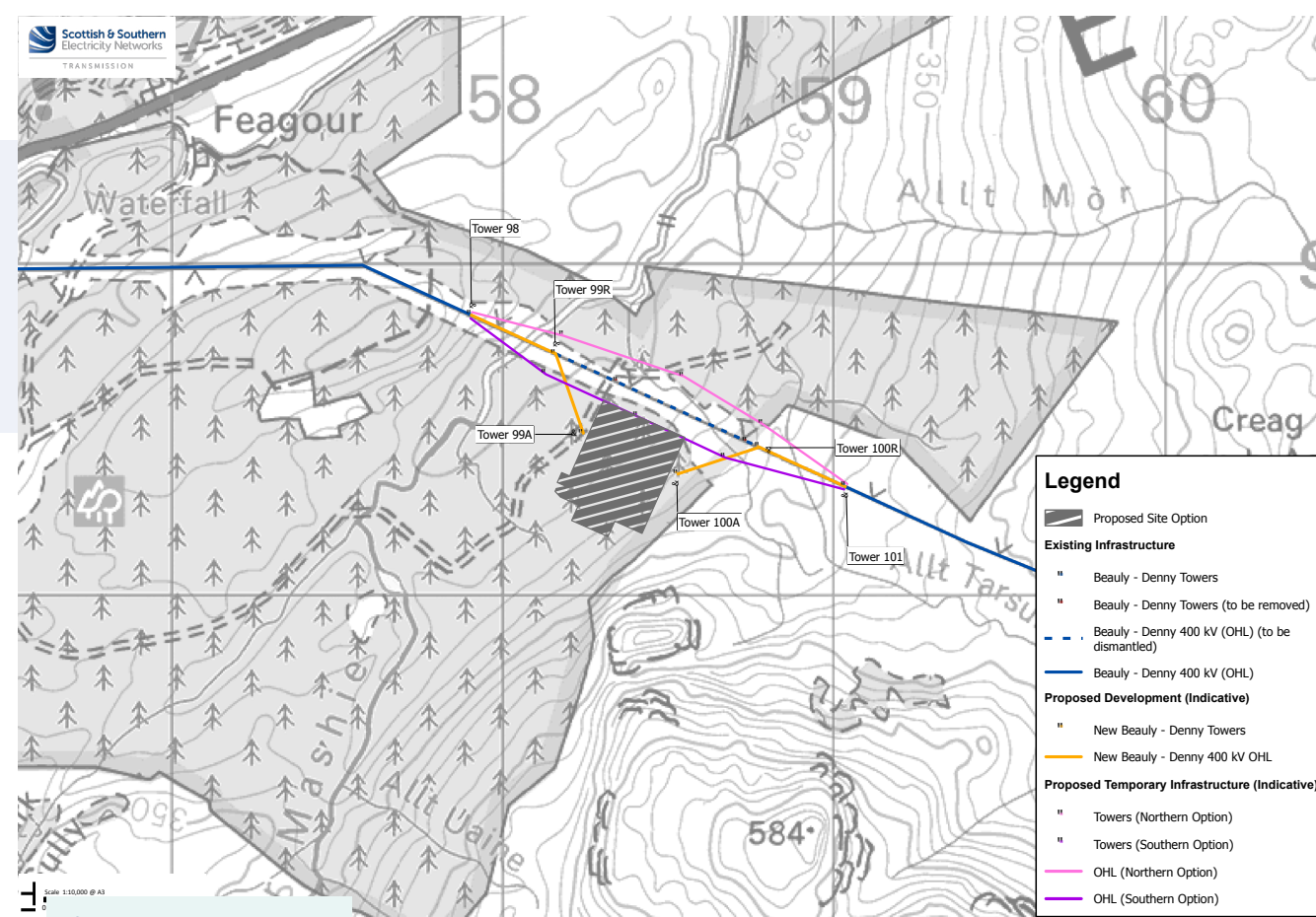
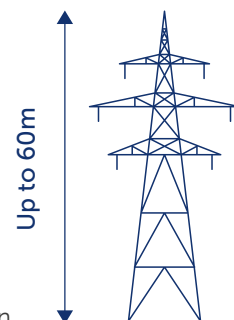
Two existing towers on the Beauly - Denny 400kV OHL, Tower 99 and Tower 100, would be replaced by two new towers, Tower 99R and Tower 100R. The replacement towers are anticipated to be a similar height to the existing towers, up to 60m in height.

Approximately 0.4km of new 400kV OHL conductor would be installed between Tower 99R and a new terminal tower (Tower 99A), and between Tower 100R and a new terminal tower (Tower 100A). The terminal towers are also anticipated to be up to 60m in height.

Two sets of downleads would connect the terminal towers to the proposed Coire Mashie substation.

Temporary OHL infrastructure would be required during construction to maintain transmission of electricity along the Beauly - Denny 400 kV OHL while the permanent works are installed. This would comprise a temporary diversion of the line supported by three temporary towers located either immediately north or south of the existing OHL between Tower 99 and Tower 100. The temporary towers are anticipated to be up to 60m in height.

Following commissioning of the permanent infrastructure, the temporary OHL diversion and temporary towers would be removed, together with the existing section of OHL and the existing Tower 99 and Tower 100 structures.



Overhead Line Diversion

Have your say

We value community and stakeholder feedback. Without this, we would be unable to progress projects and reach a balanced proposal.

The feedback period

We will accept feedback from now until **Friday 6 November 2026**.

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/earba-connection

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

We want you to share your thoughts and opinions on our plans, where you think we can make improvements and concerns about the impact of our work.

We'll be actively looking to mitigate the impacts of the project as much as possible over the coming months, but 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 a local community benefit 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.



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."

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.

What next?

Following the feedback closing date, our project team will review all comments received in relation to our updated proposals and consider if any adjustments are required/can be accommodated based on feedback. We will then hold a further consultation event, currently scheduled for October 2026 to report on feedback and allow for any final comments to be received ahead of submission of our relevant consenting applications.

Community Liaison Manager

Lisa Marchi

SSen Transmission, 10 Henderson Road, Inverness, IV1 1SN

lisa.marchi@sse.com

07825 015 507

You can also follow us on social media:

@assentransmission SSenTransmission

SSen Transmission

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/earba-connection

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. Has the need for the project been clearly explained?

☐ Yes ☐ No ☐ Unsure

Comments:

Q2. Do you have any comments on the proposed Coire Mashie Substation, including the proposed technology solution and site location?

☐ Yes ☐ No ☐ Unsure

Comments:

Q3. Do you have any comments on the UGC alignment options presented?

Comments:



Q4. Do you have any comments on the proposed Beaully Denny reconfiguration?

☐ Yes ☐ No ☐ Unsure

Comments:

Q5. Are there any additional factors, or environmental features, that you consider important and should be brought to the attention of the project team?

Comments:

Q6. Do you have any suggestions that could help inform the ongoing design and development of the project?

Comments:



Q7. Do you have any community benefit opportunities or local initiatives that SSEN Transmission should consider supporting?

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, 10 Henderson Road, Inverness, IV1 1SN

Email: lisa.marchi@sse.com

Online: ssen-transmission.co.uk/earba-connection

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.

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