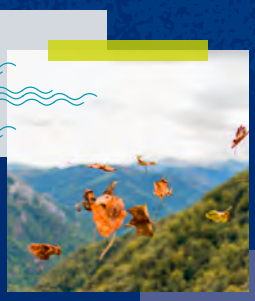
Scottish & Southern Electricity Networks

TRANSMISSION

Balliemeanoch pumped storage hydro connection

Overhead Line Routeing consultation event

September 2026



ssen-transmission.co.uk/balliemeanochpsh

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The consultation event will be taking place on:

Wednesday 23 September, 2–7pm
Portsonachan Village Hall, Portsonachan, Argyll and Bute, PA33 1BJ

Balliemeanoch pumped storage hydro connection

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 overview

SSEN Transmission is proposing a new electricity transmission connection to connect the proposed Balliemeanoch Pumped Storage Hydro (PSH) scheme to the existing transmission network at Creag Dhubh substation. The connection is needed to allow electricity to be imported and exported between the proposed energy storage facility and the national grid, supporting Scotland's transition to a secure, flexible and low-carbon energy system.

Proposed project elements

The Balliemeanoch connection project includes a new substation at Balliemeanoch (to be developed by a third party developer), approximately 5km of new 275kV transmission infrastructure, and a connection into the existing Creag Dhubh substation. The connection is currently being assessed as an Overhead Line (OHL) solution, with the potential for underground cable sections where environmental, technical or land-use considerations indicate these may be appropriate.

- Connection to proposed Balliemeanoch PSH substation (PSH substation to be developed by a third party developer)
- New 275kV transmission connection between Balliemeanoch and Creag Dhubh substation
- OHL infrastructure as the primary connection technology (approximately 4.5km in length)
- Short underground cable section for interface at Creag Dhubh substation (approximately 500m in length)
- Connection into the existing Creag Dhubh substation and wider transmission network

Help shape our plans

The work we have planned 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.

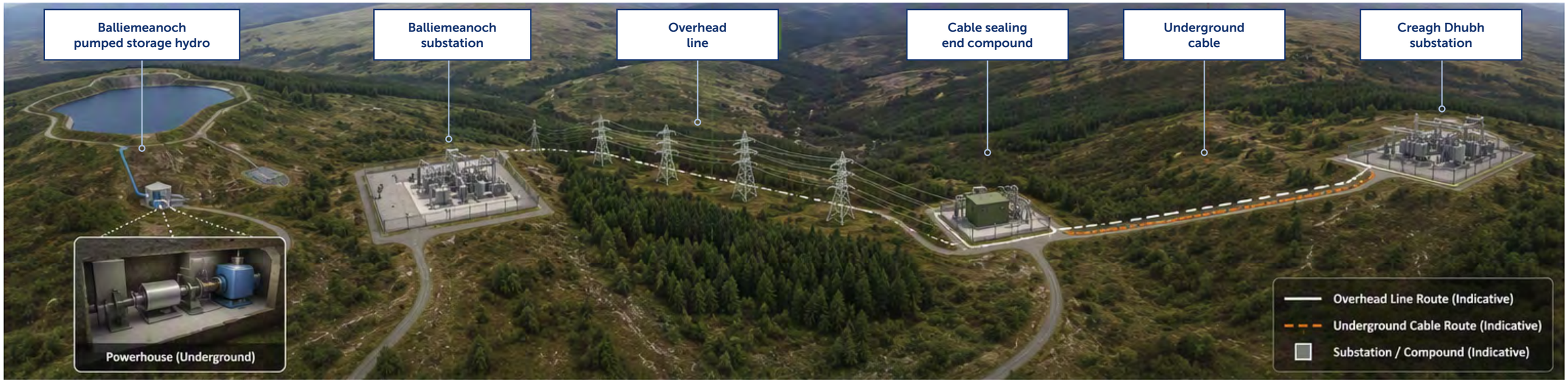
We're committed to delivering a meaningful consultation process that actively seeks the views of everyone affected by our plans. That means making our plans clear and easily accessible, so that you can give us input throughout each stage of the development process.

Throughout the consultation, we'll present our approach to developing the project, including changes made since we last consulted with you. We will also provide some visualisations and maps to show you where everything will be located. We want you to share your thoughts and opinions on our plans for the route options being considered for the proposed OHL connection between the Balliemeanoch PSH scheme and Creag Dhubh substation.

We invite you to share where you think we can make improvements and any concerns you might have about the impact of our work. By telling us what you think, you will help shape our proposals.

Who we're 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 and environmental agencies.



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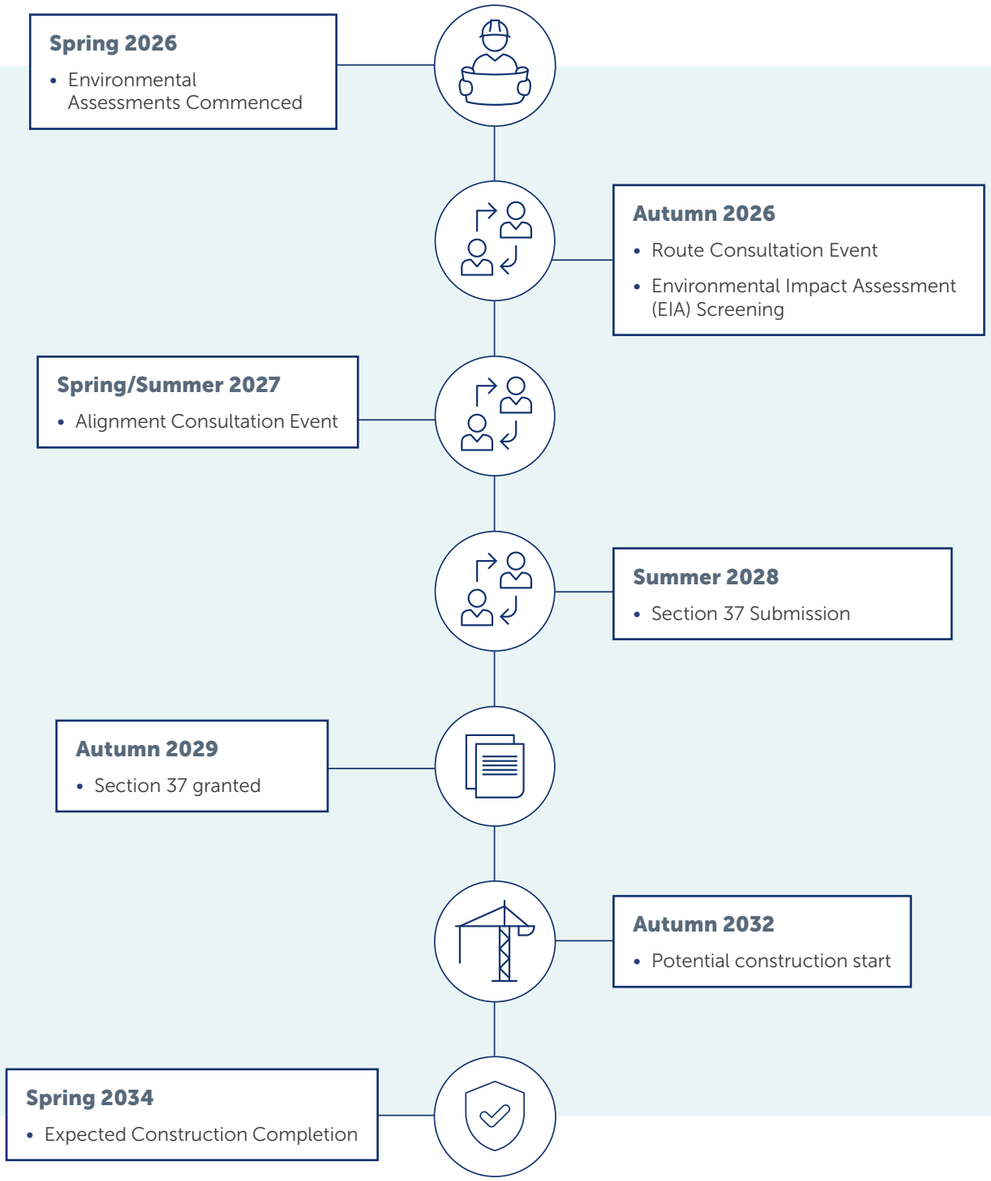
Project Timeline



*Please note that dates are indicative and subject to change.

Balliemeanoch pumped storage hydro connection

Meeting our obligations

Our Transmission Operators licence requires us to provide best value for customers and GB consumers. We have developed and implemented formal Guidance for the selection of routes and alignments for our new OHL.

As a natural monopoly, we 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.

The main aim of the Guidance is to provide a consistent approach to the selection of new OHL routeing and alignments and is underpinned by our statutory obligations to:

'Develop and maintain an efficient, coordinated and economical electricity transmission system in its licenced area' and in so doing, to 'have regard to the desirability of preserving the natural beauty, of conserving flora, fauna and geological and physiographical features of special interest and protecting sites, buildings and objects of architectural, historic or archaeological interest; and do what we reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites buildings or objects'.

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

Consenting

Before a project progresses to consent application stage and depending on its scale and nature an Environmental Impact Assessment (EIA) 'Screening' through the Environmental Impact Assessment (Scotland) Regulations 2017 is recommended. 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 EIA Development, we will provide equivalent, proportionate environmental information through a voluntary Environmental Appraisal (EA) Report.

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 area of search for the proposed connection. This work has been undertaken 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 the confirmation of a potential route for the connection, further detailed studies and assessment work are ongoing to support the consenting process.

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 routeing 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 assets.
- Vicinity to any other utility, overhead or underground.
- Proximity to wind turbines and wind farm infrastructure.
- Urban development.
- Forestry and biodiversity.
- Technology costs and design parameters.
- Site accessibility.

Overhead line key stages

For new OHL projects, the process follows a number of stages, each iterative and increasing in detail and resolution, bringing cost, technical, environmental and people considerations together in a way that seeks the best balance. This staged process leads to the identification of a proposed OHL alignment that is capable of being granted consent by Scottish Ministers under Section 37 of the Electricity Act 1989. The key stages are:

Stage 0: Strategic options assessments/ routeing strategy

The starting point in all OHL projects is to establish the need for the project and to select the preferred strategic option to deliver it. This process will be triggered by the preparation of a number of internal assessments and documents which identify the technology to be used and the point on the existing Transmission network where a connection can be made. The Routeing Strategy also determines which of the following stages are required.

Stage 1: Corridor selection

Corridor Selection seeks to identify possible corridors which are as short as practicable, which are not constrained by altitude or topography and which would avoid, where possible, any interaction with man-made infrastructure and features of environmental sensitivity. Corridors may extend over several kilometres in width depending upon the scale and length of the project.

For this project the Corridor stage was omitted as the location of the proposed Balliemeanoch Substation and the point of connection on the network naturally define a Corridor of a few kilometres in width. Routeing a new OHL any further afield than this would result in additional costs and unnecessary infrastructure within the landscape.

We are here!

Stage 2: Route selection

Route Selection seeks to find a route within the corridor which avoids where possible physical, environmental and amenity constraints, is likely to be acceptable to stakeholders, and is economically viable, taking into account factors such as altitude, slope, ground conditions and access. The dimensions of a route will depend on the context provided by the corridor. A route may be several kilometres in length and may range from 200m to 1km in width, depending on the scale of the project, the nature and extent of constraints and the character of the area in question. A number of route options are usually identified and assessed, leading to a potential route being selected.

Stage 3: Alignment selection

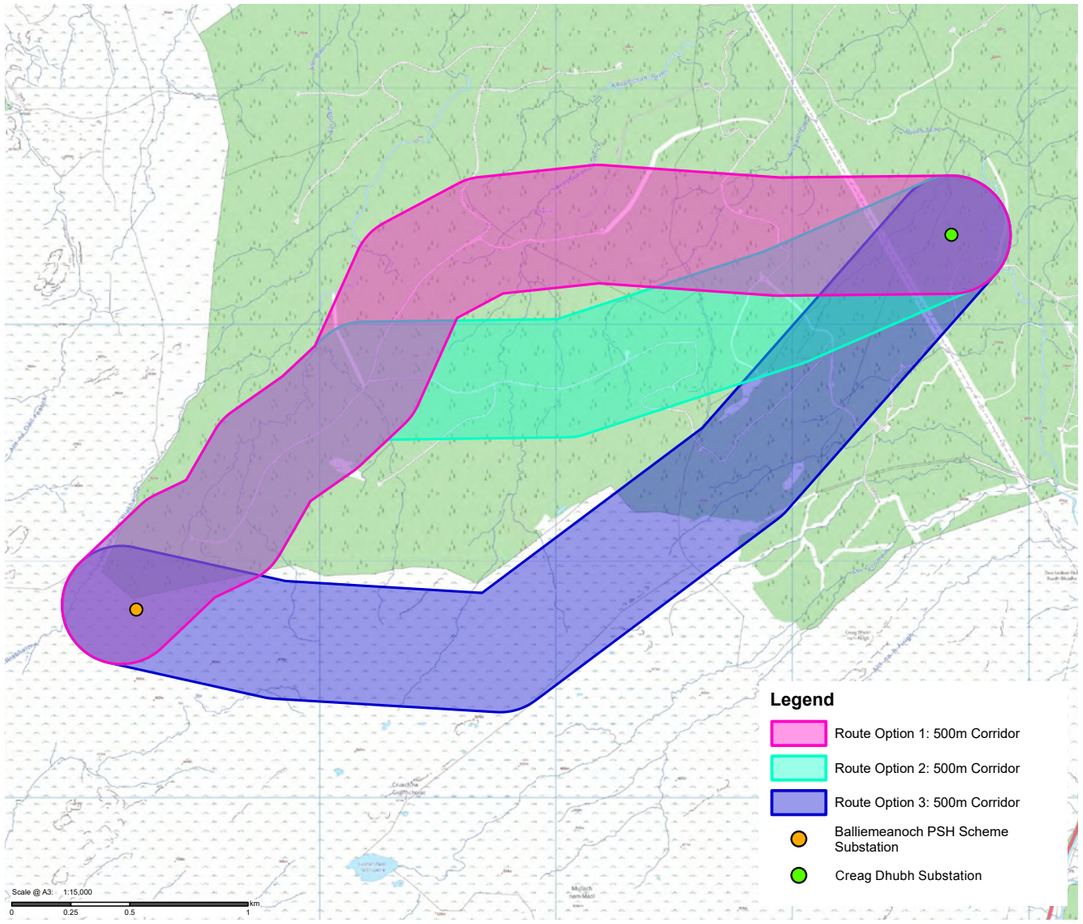
Alignment Selection seeks to identify an alignment within the potential route and to define the access strategy which will be adopted in terms of, for example, the nature and extent of temporary and/ or permanent access tracks and possible road improvements. The alignment will be defined by, amongst other things, the location of terminal and angle support structures for OHLs and sealing end compounds for underground cables. It will be influenced by local constraints, such as individual properties, their aspect, and amenity; ground suitability; habitats; and cultural heritage features and setting. There may be more than one distinct alignment option through the optimal route. It is more likely however that variants to sections of an alignment may arise where there are different ways to avoid a constraint.

What happens next?

The current status of the connection is Route selection (Stage 2). Following stakeholder engagement with the public, statutory bodies and landowners, this will be finalised as a proposed route taken forward to Alignment selection (Stage 3) for formal environmental assessment and consent application.

Routeing options

To identify a suitable route for the proposed connection between the Balliemeanoch substation and Creag Dhubh substation, we have undertaken a programme of engineering, environmental and technical studies. These assessments have informed the development of three route options, referred to as RO1, RO2 and RO3.



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Route Options Identified

- **RO1 – Northern route option and the current potential route.**
- **RO2 – Route option located south of R01, central route.**
- **RO3 – Southernmost route option.**

All routes will consist of OHL from the proposed Balliemeanoch PSH substation converting to UGC approximately 500m from the Creag Dhubh substation

Route 1 (RO1)

RO1 is 4.25km in length and follows a predominantly north-easterly route through mature conifer plantation woodland before turning east and connecting into Creag Dhubh substation. The route generally descends from approximately 390m above sea level at the proposed Balliemeanoch PSH substation to approximately 205m above sea level at Creag Dhubh substation.

Route 2 (RO2)

RO2 is 4.05km in length and initially follows the same route as RO1 before diverging to the south-east through mature conifer plantation woodland and then turning north-east towards Creag Dhubh substation. The route descends from approximately 390m above sea level to approximately 205m above sea level along its length.

Route 3 (RO3)

RO3 is 4.25km in length and extends south-east across open moorland before turning north-east through mature conifer plantation woodland to reach Creag Dhubh substation. The route initially rises to approximately 521m above sea level before descending to approximately 205m above sea level at the substation.

The potential route would require the careful placement of steel towers and underground cable corridor; particularly in relation to targeting the avoidance of sensitive habitats, such as priority peatland. The alignment selection would also require the application of further mitigation, at both construction and operational stages, to avoid and reduce potential effects on any specific environmental receptors.

Route assessment

Routeing stage - key environmental constraints

The route options have been developed and assessed using engineering, environmental and land appraisal information. The assessment process seeks to identify a route that balances technical feasibility with environmental and community considerations.

The route corridor between the proposed Balliemeanoch PSH substation and Creag Dhubh substation passes through a landscape characterised by commercial forestry, upland moorland, blanket bog habitats and a number of watercourses that cross the wider study area. Route options have been developed to minimise environmental effects whilst maintaining a technically viable connection.

There are no internationally or nationally designated nature conservation sites within the route corridor itself. However, the Glen Etive and Glen Fyne Special Protection Area lies approximately 1.2km east of Creag Dhubh substation. The surrounding area includes areas of Annex I blanket bog, carbon-rich soils and peatland, together with habitats that may support protected species such as bats, otter, pine marten, red squirrel and water vole. Records from the wider area also indicate the presence of notable bird species including golden eagle, white-tailed eagle, hen harrier, osprey and peregrine falcon.

The route options lie within the North Argyll Local Landscape Area and are visible from a number of valued receptors, including nearby communities, transport routes and recreational areas around Loch Awe. The routeing process has sought to reduce impacts on landscape character, visual amenity and cultural heritage features, including Kilchurn Castle.

No designated heritage assets would be directly affected by the proposed connection. However, there remains the potential for previously unrecorded archaeological remains to be present within the wider study area and these will be considered as the project progresses.

This figure highlights some of the key environmental constraints that have been considered during the assessment of potential overhead line (OHL) routes. Route development has sought to minimise potential effects on a wide range of habitats and species known or anticipated to be present within the study area, including peatland, forestry, birds and mammals.

Potential route

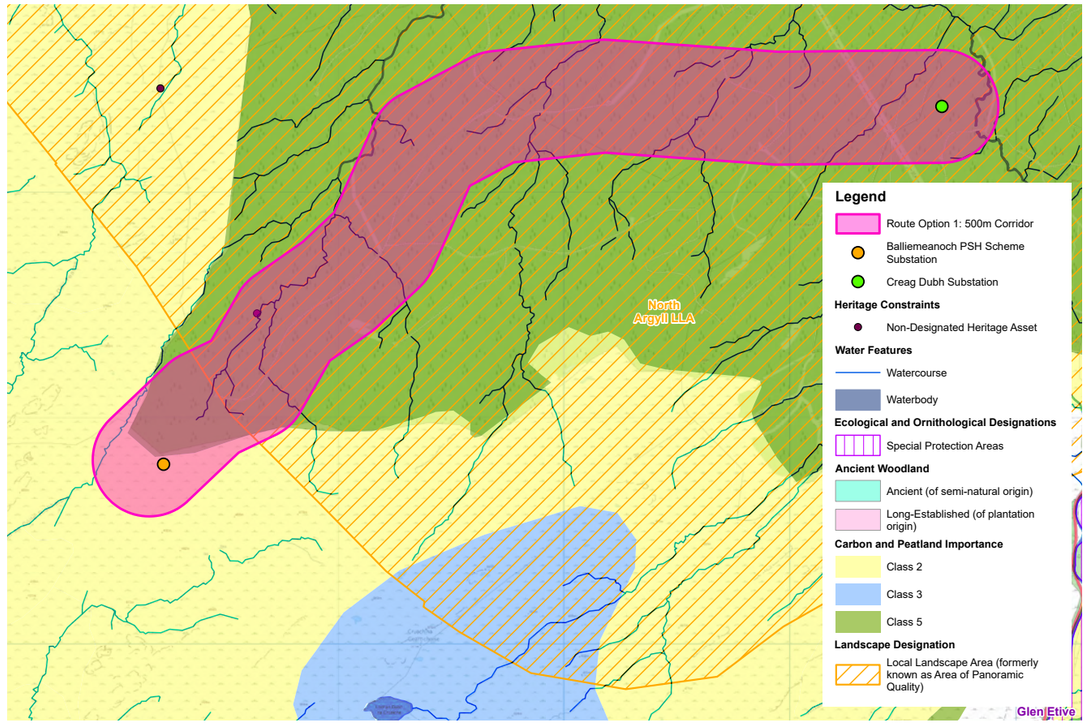
Following environmental, technical and economic assessment of the route options identified for the proposed connection between the proposed Balliemeanoch Pumped Storage Hydro scheme and Creag Dhubh Substation, Route Option 1 (RO1) has been identified as the potential route.

The potential route follows a corridor through existing commercial forestry for much of its length, helping to reduce visibility of the overhead line within the wider landscape. Existing forestry tracks and breaks within the forest also provide opportunities to reduce the extent of new access requirements and woodland removal where practicable.

While all three route options were considered technically feasible, RO1 was selected because it provides the most balanced outcome when environmental, engineering and cost considerations are considered together. In particular, it offers reduced landscape and visual effects compared with the alternative options, while avoiding larger areas of sensitive peatland and blanket bog habitat.

The route shown in this consultation is indicative and represents a corridor within which the overhead line could be located. Feedback received through this consultation, along with ongoing environmental surveys, engineering assessments and landowner engagement, will be used to help refine the proposals and identify a preferred alignment within the route corridor.

Following consultation, the potential route will be taken forward for more detailed design and environmental assessment, helping to inform future consent applications for the proposed connection.



Other projects in the local area

Taynuilt to Creag Dhubh reinforcement – 132kV overhead line (OHL)

The project comprises two main elements, approximately 12.5km replacement of the Taynuilt to Creag Dhubh 132kV OHL and approximately 4.1km replacement of the Nant 132kV OHL. The replacement of the Taynuilt to Creag Dhubh 132kV OHL, spanning between Taynuilt substation and Creag Dhubh substation that is currently in construction, will have capacity to run at 275kV. This upgrade is required to increase capacity and future proof the network for renewable energy generation projects as the assets condition of the existing OHL is approaching end of operational capability. The replacement of the Nant 132kV single circuit OHL, spanning between the Nant substation and hard teeing into the proposed Taynuilt to Creag Dhubh OHL is required due to the assets condition and age reaching end of operational capability.

Creag Dhubh - Inveraray 275kV OHL

We are constructing a new 275kV double circuit overhead line between Creag Dhubh substation and a tee point on the Inveraray - Crossaig circuit. The overhead line is proposed to be between 8-12km. The existing 132kV overhead line between Creag Dhubh substation and Inveraray switching station will be dismantled. As a result, Inveraray switching station will be disconnected from the Kintyre circuit.

Creag Dhubh - Dalmally 275kV Connection

The existing transmission network in the Argyll region needs reinforcing to enable renewable generation to connect to the GB transmission network and to ensure security of electricity supply. The project elements include: A new 13.3km 275kV overhead line between the proposed Creag Dhubh Substation and the tie into the existing Scottish Power Energy Networks overhead line at Glen Lochy (Succoth Glen) (ECU Ref: ECU00002199) A tie in connection of the existing 132kV Taynuilt to Inveraray Overhead Line to the proposed new Creag Dhubh Substation (in development).

Creag Dhubh substation

This project consists of the construction of a new 275/132kV Gas Insulated Switchgear (GIS) substation at Creag Dhubh, with this connected from Creag Dhubh to the Scottish Power Transmission Dalmally - Windyhill 275kV OHL via 13.5km of proposed new 275kV double circuit steel tower OHL. Construction works anticipated completion date for energisation Summer 2027.

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: Transmission Entry Capacity (TEC) register | ESO (nationalgrideso.com).

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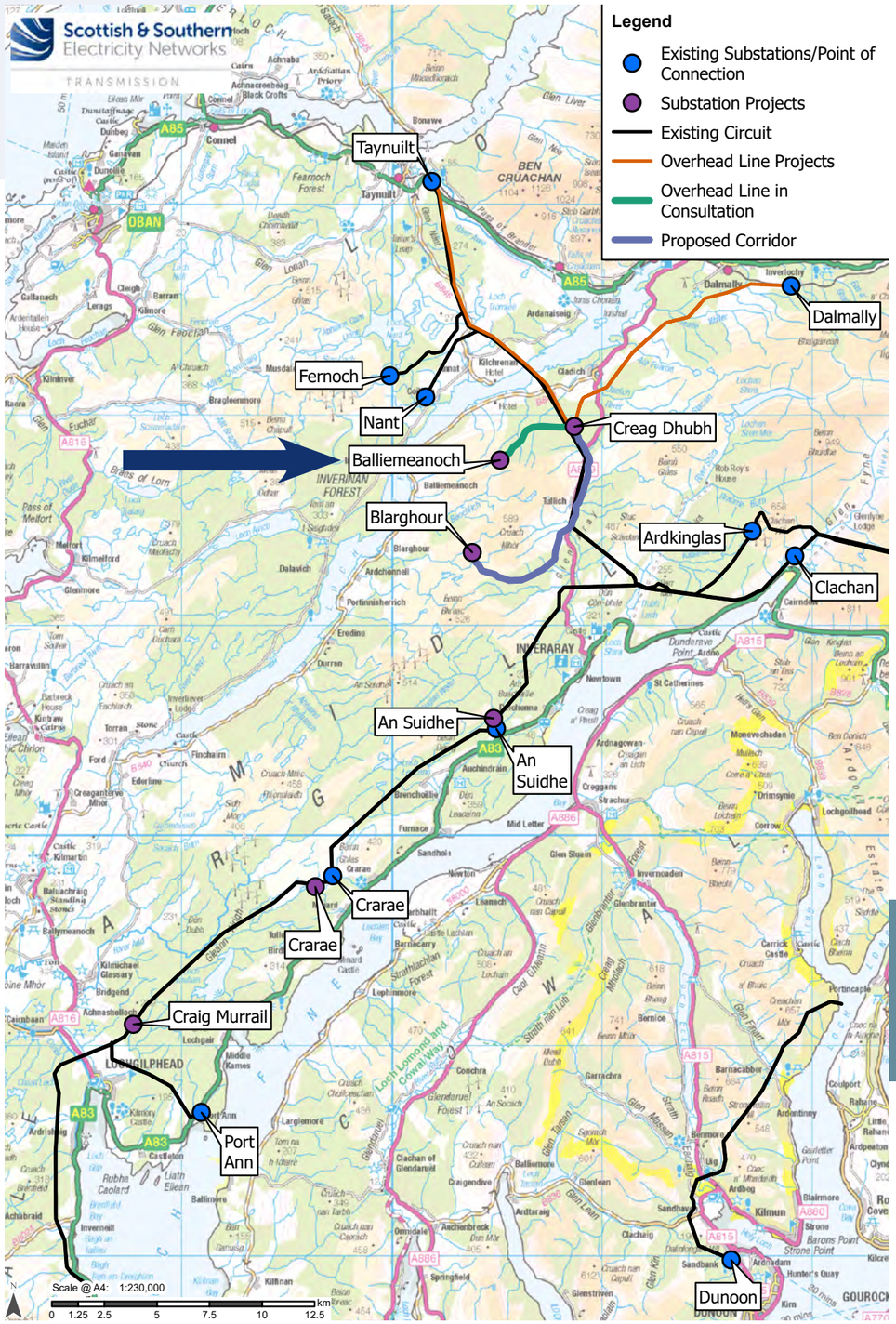

Next steps

At this stage, we are seeking feedback on the three route options identified between the proposed Balliemeanoch substation and Creag Dhubh substation. Your comments, together with the findings of our engineering, environmental and technical assessments, will help inform the selection of a potential route for the project. The project team is currently assessing three route options (RO1, RO2 and RO3), with RO1 identified as the current potential option for assessment purposes.

What happens next?

Following the consultation period, all feedback received will be reviewed by the project team and considered alongside ongoing technical and environmental assessments.

The feedback received through this consultation will be documented within a Report on consultation, which will explain the comments received and how they have been taken into account in the development of the project.

Following completion of the assessment process and consideration of consultation feedback, a potential route will be identified and taken forward for further development.

Future consultation

Once a potential route has been confirmed, further engineering and environmental work will be undertaken to identify a proposed overhead line alignment within the route corridor.

We expect our next phase of consultation to focus on the proposed alignment and associated infrastructure, providing communities and stakeholders with a further opportunity to review and comment on the developing proposals.

Have your say

We understand and recognise the value of feedback provided by communities, landowners, stakeholders and consultees. Your feedback plays an important role in helping us develop balanced, informed proposals and identify opportunities to reduce potential impacts. By sharing your views, local knowledge and suggestions, you will help shape the future development of the proposed Balliemeanoch Pumped Storage Hydro Scheme Overhead Line Connection Project.

The feedback period

All feedback and comments on the route selection process are requested by **Wednesday 21 October 2026**.

How to provide feedback:

You can provide feedback in the following ways:

- Complete the online feedback form available on the project webpage.
- Scan the QR code provided within this booklet.
- Email your completed feedback form to the Community Liaison Manager.
- Write to us using the feedback form provided and return it by post.
- Speak to members of the project team at one of our consultation events.

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.

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 we're seeking views on

We'd like to hear what you think about our plans, particularly the potential route we've identified. Your feedback can help us understand any concerns, identify where improvements could be made, and consider any changes or refinements as the project develops. 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

Amanda McClintock

SSEN Transmission, 200 Dunkeld Road, Perth PH1 3GH

07901135758

amanda.mcclintock@sse.com

You can also follow us on social media:

@ssentransmission 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/balliemeanochpsh

Feedback form

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.

Q1. Have we adequately explained the need for the proposed Balliemeanoch Pumped Storage Hydro Connection project?

☐ Yes ☐ No ☐ Unsure

Comments:

Q2. Do you have any questions regarding the route?

☐ Yes ☐ No ☐ Unsure

Comments:

Q3. Are there any additional factors, or environmental features, that you consider important and should be brought to the attention of the project team?

Comments:

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Q4. Do you have any other comments (positive or negative) or concerns in relation to the need for the project, the transmission infrastructure requirements or about the potential route?

☐ Yes ☐ No ☐ Unsure

Comments:

Any other 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: amanda.mcclintock@sse.com

Online: www.ssen-transmission.co.uk/balliemeanochpsh

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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