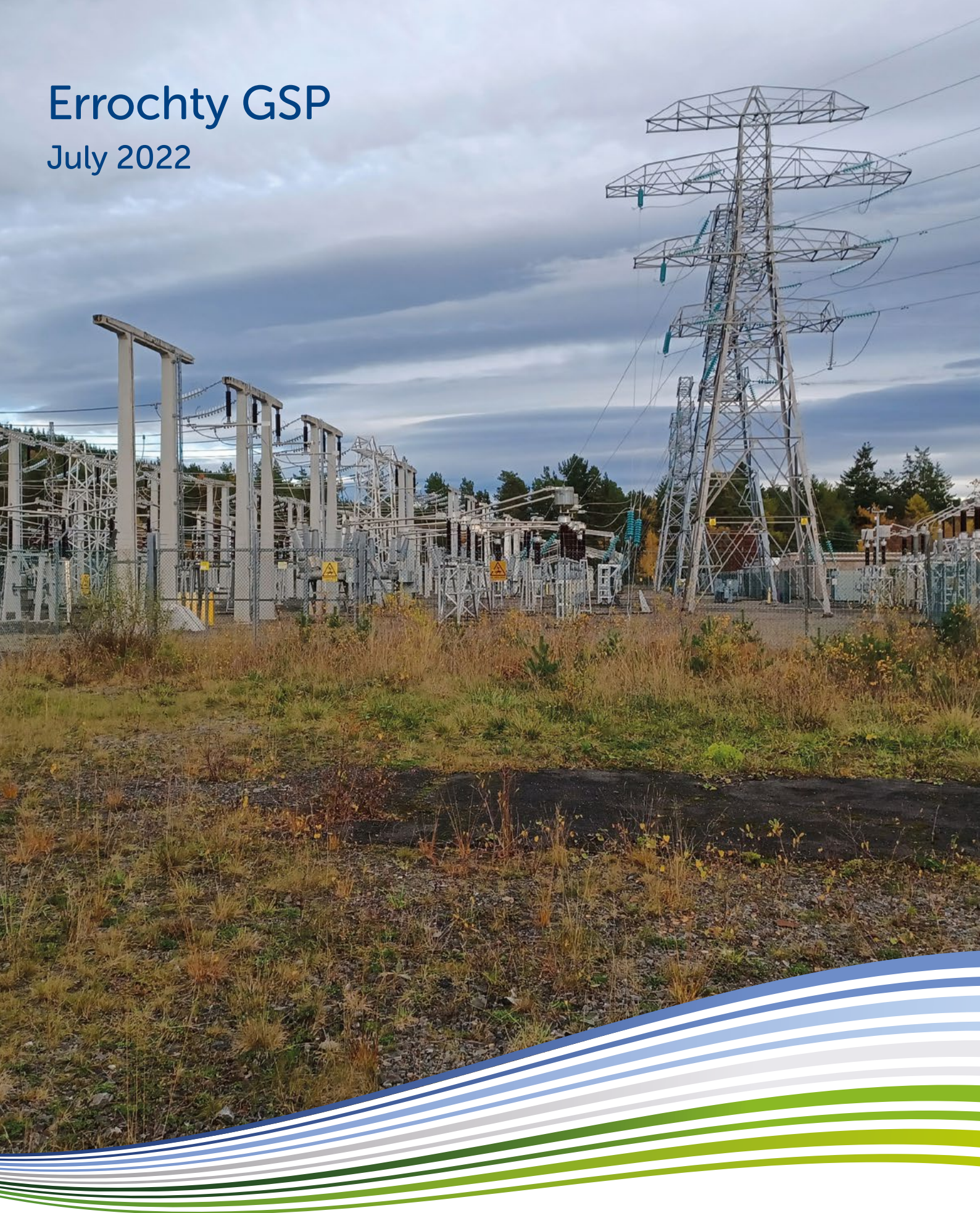


Errochty GSP

July 2022



Scottish & Southern
Electricity Networks

TRANSMISSION

Who we are

We are Scottish and Southern Electricity Networks Transmission (SSEN Transmission), operating under licence as Scottish Hydro Electric Transmission Plc (SHE Transmission) for the transmission of electricity in the north of Scotland.



What is the difference between transmission and distribution?

Electricity transmission is the transportation of electricity from generating plants to where it is required at centres of demand. The electricity transmission network, or grid, transports electricity at very high voltages through overhead lines, underground cables and subsea cables.

Our transmission network connects large scale generation, primarily renewables, to central and southern Scotland and the rest of Great Britain. It also helps secure supply by providing reliable connection to the wider network of generation plants.

The electricity distribution network is connected into the transmission network but the voltage is lowered by transformers at electricity substations, and the power is then distributed to homes and businesses through overhead lines or underground cables.

In total we maintain about 5,000km of overhead lines and underground cables – easily enough to stretch across the Atlantic from John O’Groats all the way to Boston in the USA.

Our network crosses some of the UK’s most challenging terrain – including circuits that are buried under the seabed, are located over 750m above sea level and up to 250km long.

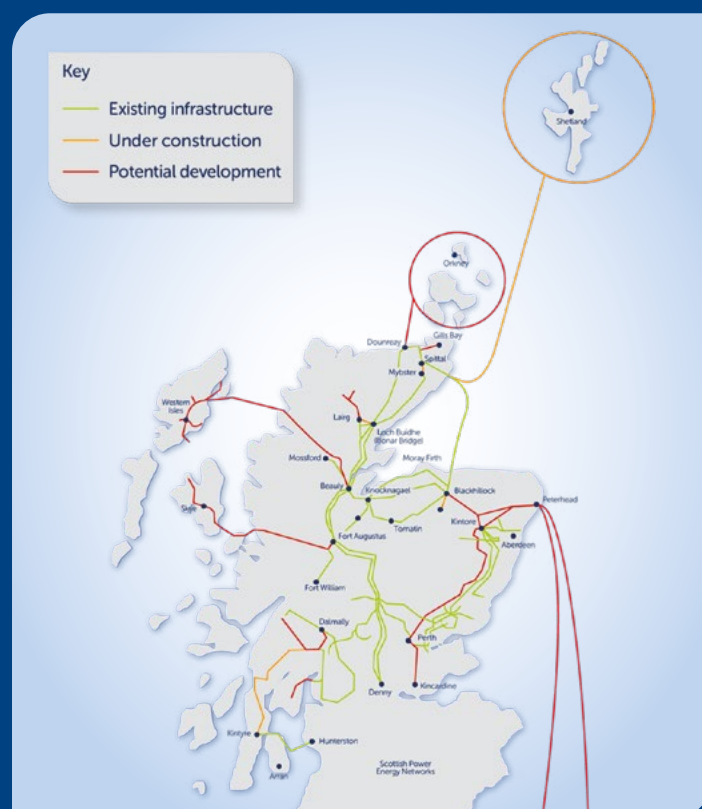
The landscape and environment that contribute to the challenges we face also give the area a rich resource for renewable energy generation. There is a high demand to connect from new wind, hydro and marine generators which rely on Scottish and Southern Electricity Networks to provide a physical link between the new sources of power and electricity users. Scottish and Southern Electricity Networks is delivering a major programme of investment to ensure that the network is ready to meet the needs of our customers in the future.

Our responsibilities

We have a licence for the transmission of electricity in the north of Scotland and we are closely regulated by the energy regulator Ofgem.

Our licence stipulates that we must develop and maintain an efficient, co-ordinated and economical system of electricity transmission.

Overview of transmission projects



Project need and overview

Project requirement

Our sister company, SSEN Distribution (SSEND) have applied to SSEN Transmission to increase the power capacity at Tummel Bridge Grid Supply Point (GSP). This means SSEN Transmission need to install larger transformers and upgrade the associated electrical plant.

There is insufficient space to meet modern safety and security of supply standards at the existing location beside Tummel Bridge power station, therefore the proposed solution is to construct a new Grid Supply Point at the nearby Errochty switching station, to be called Errochty GSP.

The corresponding increase in capacity on the local distribution network will allow restrictions on the quantity of renewable energy being exported from the local area to be lifted.

Main elements

The works will comprise of:

- Extension of the existing Errochty switching station, to the west.
- Civil works and formation of concrete bases for new equipment. Platform foundation design optimising the volume of imported fill material from the north.
- Installation of two new grid transformers, HV switchgear, busbars and underground earth tape.
- Construction of a new switch room to house SSEND's switchgear. SSEND will install new cables between Tummel Bridge GSP and the new Errochty GSP.
- The fence around the site will be upgraded to modern standards whilst the project is underway.

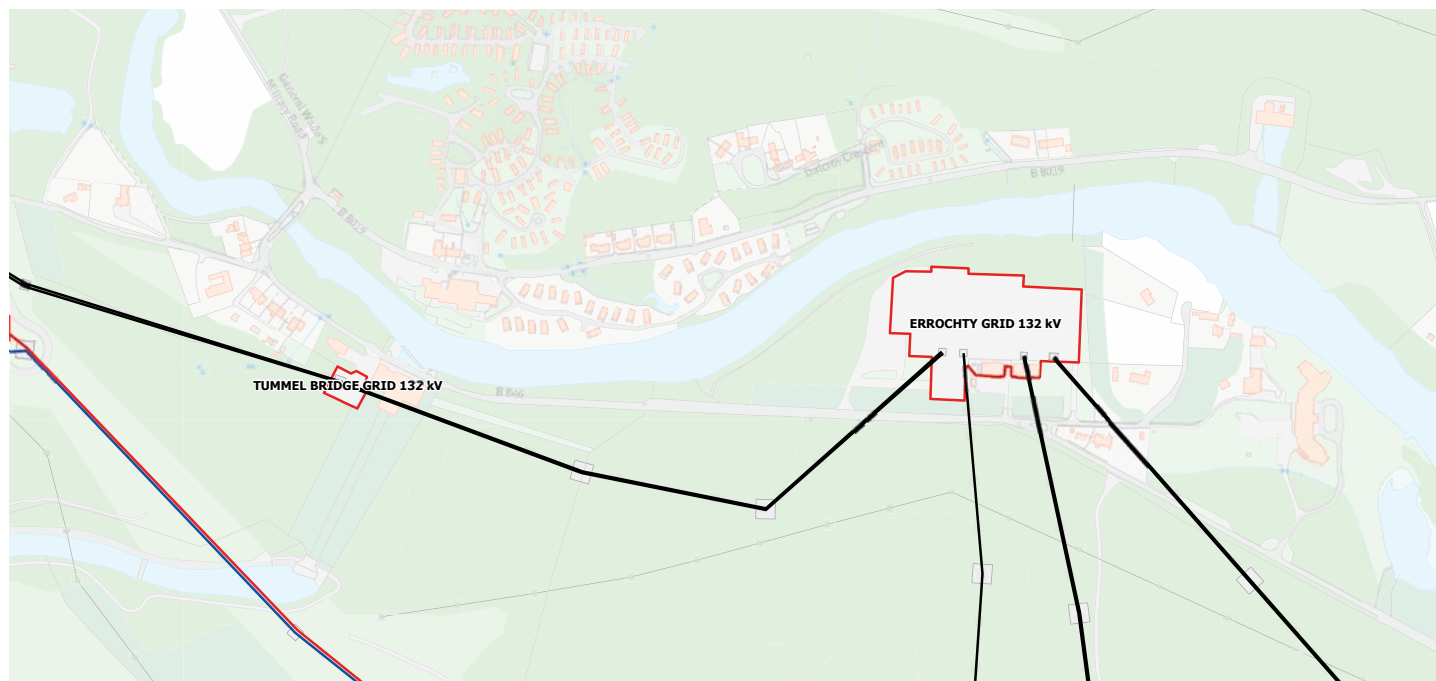


Planning application

This public event forms part of the pre-application consultation and feedback received will help inform the scope of assessments and ultimately the forthcoming planning application. We are aiming to submit the planning application to Perth and Kinross Council in August 2022 allowing for 12 weeks of pre-application consultation.

Site layout

This site has been chosen because there is insufficient room at the existing site; Tummel Bridge GSP, which is also over sailed by 132kV overhead lines, providing a considerable construction challenge. Therefore the proposal is for the new transformers to be relocated to Errochty along with construction of a new 33kV switch room for SSEN Distribution.



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Direct upgrading of the two existing 21MVA transformers currently in place at Tummel Bridge GSP was considered as a possible option. This option was discarded however due to:

- The lack of available space at Tummel Bridge GSP to accommodate the new transformers, oil containment bunds and the fire damage zone to meet the most recent specifications and separation between main plant items required for the proposed 90MVA transformers.
- The existing transformers would have to be decommissioned and removed prior to commencement of construction works for the proposed upgraded transformers. To minimise outage times and ensure security of energy supplies to our network and customers, the preferred practise is to build off-line where feasible and practicable.
- The existing site is also over sailed by 132kV overhead lines, which would present a considerable construction challenge, as well as leaving a significant residual risk to the proposed plant and maintenance staff, should it be installed in situ.



Existing Tummel Bridge GSP

Therefore, the proposal is that the new transformers will be relocated to Errochty switching station, along with construction of a new 33kV switch room for SSEN Distribution. The initial outline design shown on page 6 shows Errochty switching station extended to the west of the existing compound, to facilitate construction of the proposed 90MVA grid transformers, directly connected to the existing Errochty 132kV busbar, with a new 33kV switchroom building for the connection to the generator at Tummel Bridge power station and the wider distribution network. This 33kV connection will be via underground cable and will be undertaken by SSEN Distribution.

Our proposed solution

As well as insufficient space, modern safety and security of supply standards require separation between main plant items, which cannot be achieved at Tummel Bridge GSP.

Locating the transformers alongside existing 132,000kV busbars at Errochty means there is no requirement to install more cables or overhead lines to connect the transformers to the network.

The proposed extension to Errochty switching station achieves a balance of minimising the visual impact by building alongside almost identical infrastructure, which is familiar and relatively

well screened. By extending an existing site, many existing infrastructure items can be shared, rather than having to be replicated if a new site was proposed elsewhere. The type and style of the new equipment will match what is already installed and we do not need to install any more steel tower overhead lines in the area as part of the project.

As part of the works the security of the switching station will be upgraded to be in compliance with the latest requirements. Following the first round of consultation, further checks have confirmed that the existing plastic-coated wire fence will be replaced with a 2.4m high galvanised steel palisade fence.



Key components

The key components of the Errochty GSP project will comprise of :

- Two new grid transformer bays, connecting onto the existing busbar at Errochty switching station, comprising:
 - Oil containment bunds incorporating foundations to support the grid transformers and associated electrical plant.
 - Two new 90MVA grid transformers, with 132,000kV outdoor circuit breakers and associated busbars.
- A new switch room to house SSENDs 33,000kV indoor Gas Insulated Switchgear (GIS). This is expected to be in a 1 storey steel portal frame building with metal cladding, in the style of a typical agricultural building.

The works are proposed on the developed area to the west of the existing Errochty switching station, with access being taken through the existing entrance onto the B846.

Following the first round of public consultations and further internal reviews, our proposals have been revised to make better use of our standard layouts, which improves the functionality, operability, and ability to upgrade the site in the future, without taking up more space.

Key considerations

Transport, infrastructure and construction methods

Construction will require plant and machinery, along with vehicles to transport materials and workers to the site. We anticipate that normal construction traffic will utilise the existing road infrastructure. However, we are undertaking investigations to confirm if improvements are required. A construction traffic management plan shall be produced to outline and manage vehicle movements associated with the development.

The largest plant item to be delivered to the switching station will be the two new 90MVA transformers.

The route for all electrical plant including the grid transformers will be from the south of the site along the B846. Material required to build the switching station platform extension will most likely be from the Shierglas quarry between Killiecrankie and Blair Atholl on the A9 via either the B8019 or B847.



Laydown and office

Temporary offices, welfare and storage facilities for the main work force will be established during the planned construction period. To mitigate any potential impact upon the screening to the holiday properties on the North bank of the river Tummel from clearance of the scrub/vegetation, the proposed welfare facilities will be set up to the west of the proposed development, remaining close to the B846. This also keeps the construction works further from the potential otter habitat along the river.



Example of temporary offices.

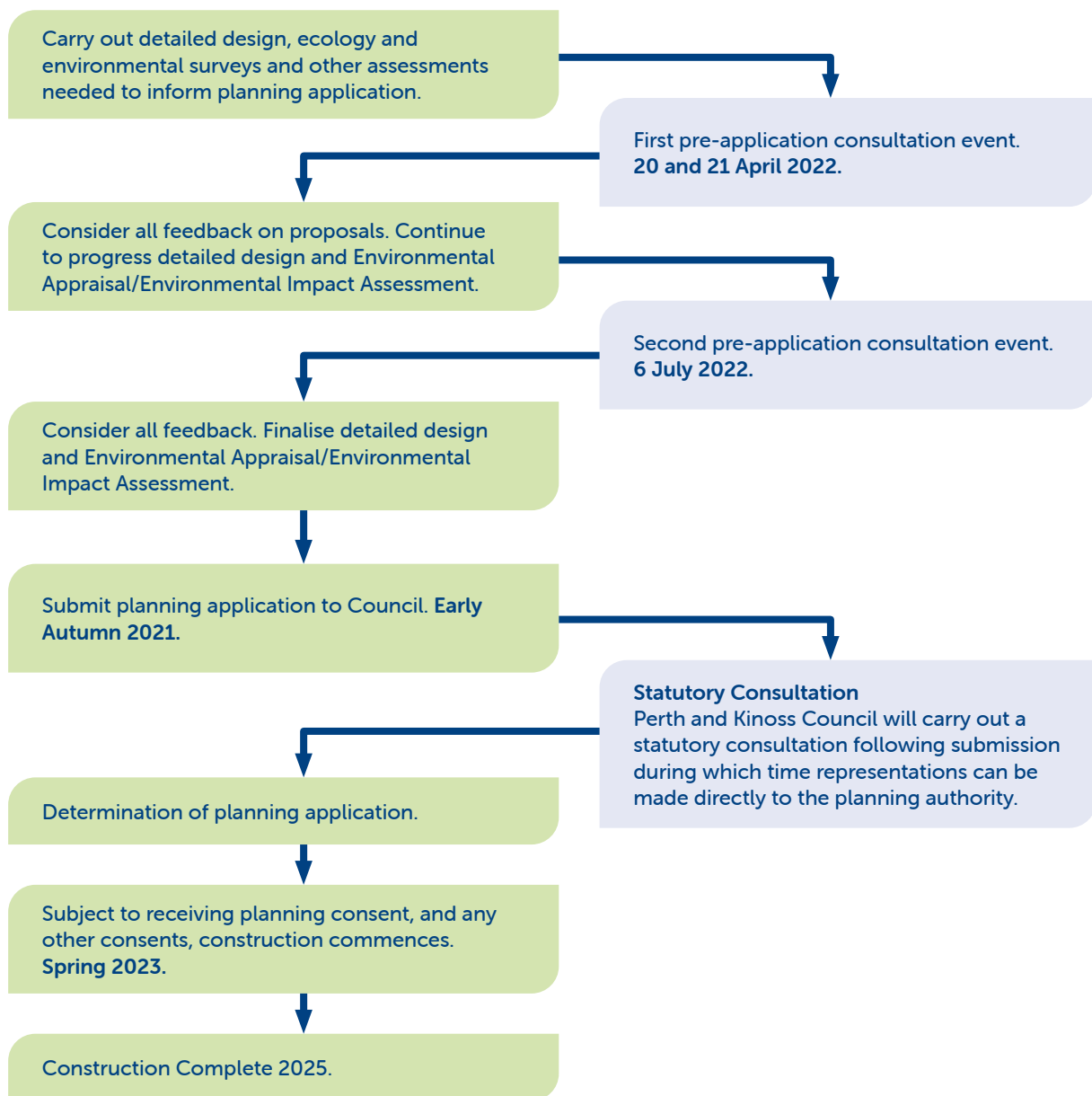


What happens now?

As described within 'planning application' information on page 4, the 12-week formal consultation period for the Pre- Application Notice (PAN) commenced on submission on 4 April 2022.

Following the planned public event on 6 July we welcome feedback for a further 14 days until 22 July 2022. We will collate responses and consider how best to respond including amending design/project proposals where appropriate. Feedback on our consideration of comments will be collated within the statutory PAC Report which is a requirement for a formal planning submission. This document will set out the consultation steps undertaken, outline how we considered the issues raised and set out our responses. Thereafter, it is our intention to prepare final documents for a formal planning submission in early Autumn. At that time interested parties will have an opportunity to make formal submissions to Perth and Kinross Council to support or object to the proposals.

Please see our planning application timeline below:



Environment

The impact of the proposed development on the environment and ecology has been considered at every step in the site selection and the design process.



Protected species

Habitats present within and adjacent to the Errochty GSP site have the potential to support protected and/or notable species such as red squirrel, otter, beaver, pine marten, water vole, bats, reptiles, breeding birds and amphibians.

Squirrel dreys have been identified in the mature coniferous plantation to the north-east of the existing switching station. Otter holt (same one identified in the baseline report) spraints were also all identified along the river.

The squirrel dreys are beyond the existing switching station and the otter holt are over 30m away and therefore further surveys are not required and risks will be managed via Species Protection Plans.



Landscape and visual amenity

A landscape and visual amenity appraisal will be undertaken of the site and surroundings to identify the key considerations for the proposals. At a local scale, this will include the trees and woodland surrounding the site, their contribution to the landscape character, and opportunities they create for natural screening of the proposals.

Retention of trees and woodland will be a key priority with potential to plant more trees to strengthen screening and enhance landscape value and visual amenity. At a wider scale, this also has the potential to support the special qualities of the Loch Tummel National Scenic Area, and character of the lower upland glen landscape.

The visual amenity of local residents, road users and holiday makers around the site and Loch Tummel will also be an important factor in the location and design of the site.



Noise

A detailed noise assessment will be undertaken to determine baseline noise levels and to help determine the need for any site specific mitigation, if required.



Hydrology

The Errochty GSP is situated within the River Tay catchment. The River Tummel, a tributary of the River Tay, located immediately to the north of the site and joins Loch Tummel approximately 1km downstream. SEPA flood maps indicate that there is a risk of localised surface water flooding within the site, and a medium risk of fluvial flooding from the River Tummel where the current switching station is situated. Discussions are ongoing with SEPA regarding the scope of an updated Flood Risk Assessment for the proposed development and how this will feed into our drainage designs.



Habitats

The existing Errochty GSP is located adjacent to the River Tummel. It is not located within any designated sites for nature conservation although three Special Areas of Conservation (SAC) are located within 10km which are River Tay, Tulach Hill and Glen Fender Meadows and Keltneyburn. The nearest is River Tay SAC directly adjacent.

Additionally, two Special Sites of Scientific Interest (SSSI) are located within 2km; Meall Reamhar and Dalcroy Promontory. No woodland classified on the Ancient Woodland Inventory (AWI) is present within or adjacent to the Errochty GSP site, however, the woodland along the River Tummel is recorded as an area of native woodland on the Native Woodland Survey of Scotland (NWSS).

Connectivity to all sites of nature conservation, and any potential impacts on these from Errochty GSP, will be fully considered as part of the ecological assessment and will be avoided and mitigated where required.

How do I have my say?

We understand and recognise the value of the feedback provided by members of the public during all engagements and consultations. Without this valuable feedback, the project development team would be unable to progress projects and reach a balanced proposal.

We are keen to receive your views and comments in regards to the following questions:

- Has the requirement for the project been clearly explained?
- Have we responded to previous comments/concerns relating to these project proposals?
- Are there any additional factors, or environmental features, that you consider important and should be brought to the attention of the project team?
- Following review of the provided information, how would you describe your understanding of the Errochty GSP project?
- Overall, how do you feel about the Errochty GSP project?

Comments

Your views and comments can be provided to the project team by completing a feedback form or by writing to Louise Anderson, Community Liaison Manager.

We will be seeking feedback from members of the public and Statutory Bodies by 22 July 2022.

All received feedback will be assessed and the proposed options adapted where necessary.



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.

Feedback can be submitted online via the project website or via the project Community Liaison Manager:

Louise Anderson
Community Liaison Manager



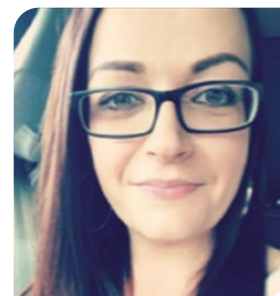
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200 Dunkeld Road, Perth,
PH1 3AQ



Additional Information

Information will also be made available via the project web page and social media channels:

Project Website:

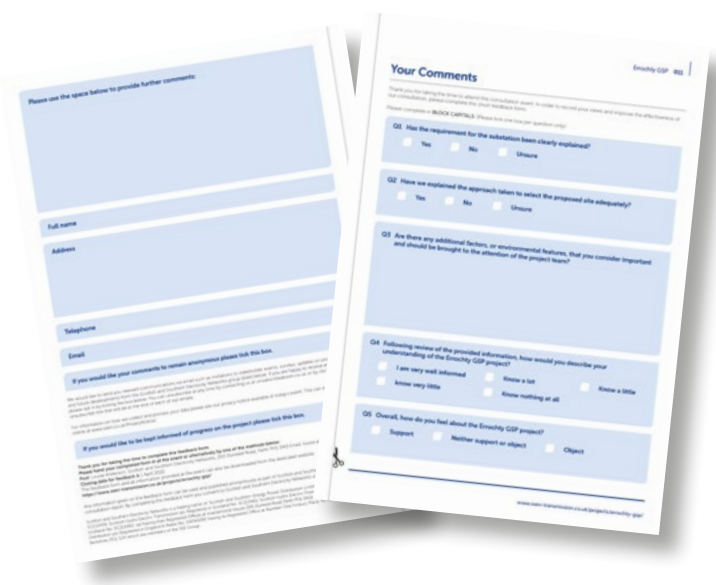
www.ssen-transmission.co.uk/projects/errochty-gsp

Find us on Facebook:

SSEN Community

Follow us on Twitter:

@asstransmission



Your Comments

Thank you for taking the time to attend this consultation event. 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 requirement for the project been clearly explained?

Yes

No

Unsure

Q2 Have we responded to previous comments/concerns relating to these project proposals?

Yes

No

Unsure

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

Q4 Following review of the provided information, how would you describe your understanding of the Errochty GSP project?

I am very well informed

Know a lot

Know a little

know very little

Know nothing at all

Q5 Overall, how do you feel about the Errochty GSP project?

Support

Neither support or object

Object



Please use the space below to provide further comments:

Full name

Address

Telephone

Email

If you would like your comments to remain anonymous please tick this box.

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 unsubscribe@ssen.co.uk or by clicking on the unsubscribe link that will be at the end of each of our emails.

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 www.ssen.co.uk/PrivacyNotice

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 hand your completed form in at the event or alternatively by one of the methods below:

Post: Louise Anderson, SSEN Transmission, 200 Dunkeld Road, Perth PH1 3AQ Email: louise.anderson@sse.com

Closing date for feedback is 22 July 2022.

The feedback form and all information provided at the event can also be downloaded from the dedicated website:

www.ssen-transmission.co.uk/projects/errochty-gsp

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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