Scottish & Southern Electricity Networks

TRANSMISSION

Foyers substation works

Pre-application consultation

November 2024

ssen-transmission.co.uk/foyers

Contents

The consultation event will be taking place on:

28 November 2024 , 3–7pm
Stratherrick & Foyers Community Trust,
The Wildside Centre, Whitebridge, IV2 6UN

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 our local 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/**

Help shape our plans

The work we have planned has the potential to deliver benefits in your community, 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 maps to show you where everything will be located.

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. 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.

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

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, NatureScot, Scottish Environment Protection Agency (SEPA), Historic Environment Scotland (HES).

Project overview

The project is to replace the existing transformers at the Foyers pumped storage hydro electric power station substation. This includes replacing the existing underground cable connection between the substation and the existing Foyers switching station with a new underground cable. To accommodate this upgrade the Foyers switching station also requires an extension on one side. The works are to enable continued export of renewable electricity generation from the Power Station to the National Grid Transmission network.

Project requirement

The project is being driven by operational requirements. The two existing transformers serving the power station need replaced due to their condition and age. The deterioration in their condition poses a risk of failure, meaning the power station would no longer be able to generate renewable energy risking reliability of supply to customers. The existing transformers currently convert the 18 kilovolt (kV) output to 275kV for export to the Transmission network.

Anticipated size of extension

The project is proposing to extend the existing 275kV Switching Station at Foyers to facilitate crucial upgrades to the local electrical infrastructure. The extension will span approximately 30 meters in width and 118 meters in length which will integrate with the existing site layout. This expansion will primarily serve to accommodate new electrical busbar and equipment necessary for the implementation of the new 275kV connection from the upgraded transformer compound adjacent to the Foyers Power Station. Additionally, provisions are being made to facilitate a potential future connection to the Loch Kemp Pumped Storage Scheme.

Project elements

Transformer replacement

Foyers Power Station substation transformers are proposed to be replaced on a 'like-for-like' basis within the existing substation location. Since consulting in April 2024 we have determined that this works will slightly increase the red line boundary and therefore will now be included in the planning application.

Drainage

Drainage arrangements as part of the substation works will extend out with the existing substation boundary and will be included in the planning application.

Underground cable

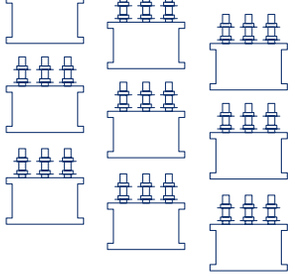
A new replacement underground cable (UGC) will connect the existing Foyers substation with the existing Foyers switching station located to the north east. This UGC will be laid under the existing tarmac access track that links the Power Station and substation with the switching station. This tarmac access track runs parallel with the B852 public road. The UGC works fall under permitted development rights and will not form part of the planning application.

Platform extension

The proposed switching station extension will extend the existing switching station platform to the east, to house new additional electrical infrastructure, similar to what already exists at the switching station. These works will form part of the planning application.

Temporary compounds

Temporary construction compounds and laydown areas will be located in the vicinity to support the construction phase. Additional temporary construction compound and laydown areas, if needed, will be identified by the construction contractor prior to commencement of works.



What has changed since we last consulted

April 2024

On 25 April 2024, we held a pre-application consultation event in Stratherrick Public Hall, where we presented changes to our proposals following initial consultation in October 2022. We proposed to replace the existing transformers at the Power Station substation and construct a new replacement underground cable (UGC) to connect the substation with the existing Foyers switching station. The switching station extension footprint had been reduced to only extend the platform to the east removing the need for a new control building and electrical infrastructure on the south side of the existing platform. A new replacement underground cable (UGC) will connect the substation with the existing Foyers switching station. The switching station extension footprint has been reduced to only extend the platform to the east. This has been achieved by removing the need for a new control building and need for electrical infrastructure on the south side of the existing platform.

Consultation Summary Report

Feedback received throughout Spring/Summer 2024 focused on the Switching Station, with themes regarding tree felling and the site extension location. Earlier this month, we published our Consultation Summary Report, detailing the feedback received and our responses. In response to feedback, we considered alternative siting of the extension but determined it not to be practicable for reasons outlined in the report such as topography, loss of ancient woodland and cost. Additional assessment also led to tree felling being removed from the project scope as the tree compartment in question must be removed regardless of the Foyers Switching Station Project development.

Read our Consultation Summary Report:
ssen-transmission.co.uk/globalassets/projects/foyers-substation-works/foyers-consultation-summary-report-nov24

What is different now?

Since our Spring consultation, we've identified a requirement for an additional land take at Foyers Power Station, where we will be replacing two transformers, in order to meet modern safety and maintenance standards. This means this work no longer falls within permitted development rights and will now form part of the planning application. As such, we are required to restart the pre-application process to account for these changes.

We've also increased the size of the red line boundary presented in April 2024, extending it to the north of the Foyers Switching Station, to take account of access requirements and laydown facilities.

The pre-application process

A new Proposal of Application Notice (PAN) was submitted to The Highland Council on 06 November 2024 taking account of this change. This is the first stage in the planning application process, and the beginning of a consultation period that must allow for at least 12 weeks between the start of the pre-application consultation and feedback, and submission of a planning application.

The plans we are consulting on at this event might change between now and the submission of a planning application.

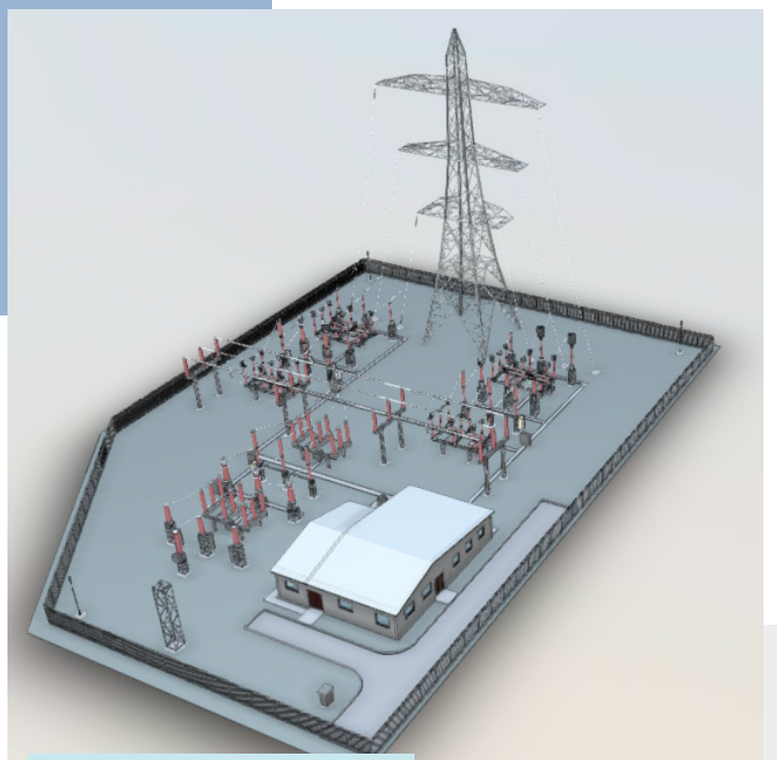
The red line boundary that has been submitted with the PAN has changed at the Foyers Power Station to accommodate the extra land take required and represents the maximum extent of the land potentially included in the application site, but this area may be reduced or rationalised as the development proposal becomes finalised. There is a requirement to hold at least two events to provide the opportunity for members of the public to comment on the proposals. This public event is the first event. A second event will be held in Q1 2025 at which feedback will be given on the views obtained at the first event. There will also be a short opportunity for comment after this second event and comments will be included in a Pre-application Consultation (PAC).

PAN boundary map

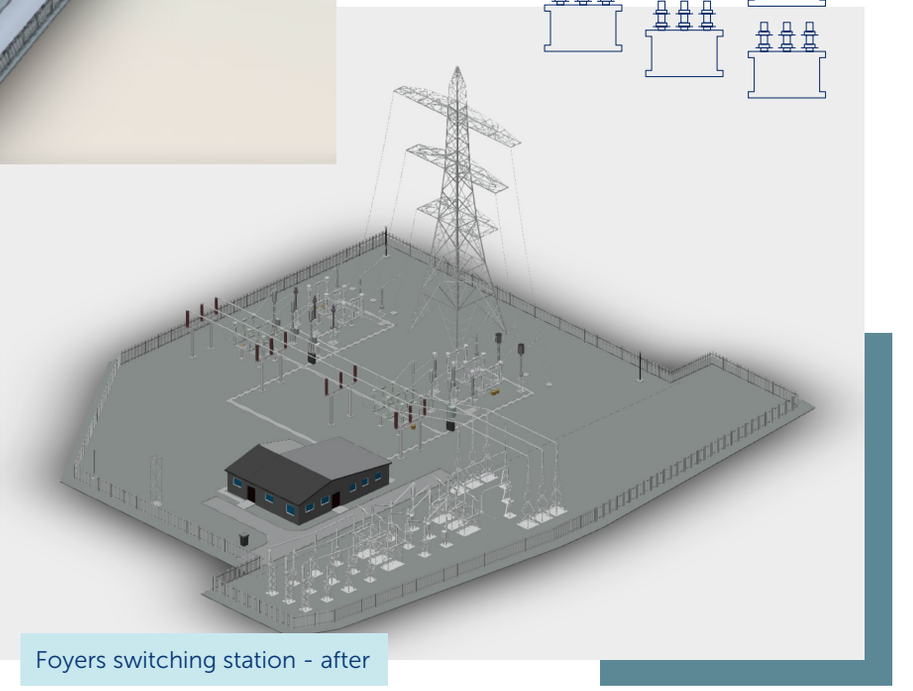
Switching station design

We understand that local stakeholders want to be able to visualise what the development may look like in their local area.

The following are some 3D drawings created for the Foyers proposal, initially presented in April 2024. The layout of our proposals remains unchanged to date following earlier consultation but should any changes occur during further refinement of the design, we'll update our model and share this on our webpage and with you at the next event.



Foyers switching station - before



Foyers switching station - after

Other SSEN Transmission 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 the Foyers Substation Works, we have other projects within the local area we are currently progressing, described below.

Proposed Loch Kemp Pumped Hydro Scheme connection

Loch Kemp Pumped Storage Hydro Scheme is located between Fort Augustus and Foyers on the banks of Loch Ness. The developer Statera have requested a connection to generate 600mw of pumped storage. To facilitate this connection, we have proposed an underground cable connection, which is currently in the 'routeing' phase of development.
Find out more: **ssen-transmission.co.uk/loch-kemp**

Aberarder Wind Farm Grid Connection Project

The Proposed Development is being driven by the requirement to connect the consented Aberarder Wind Farm to the National Grid and involves a new approx. 5km long single circuit 132kV overhead line between the consented Aberarder Wind Farm substation and the existing Dunmaglass to Farigaig 132kV overhead line.
Find out more: **ssen-transmission.co.uk/aberarder-wind-farm-connection**

Loch na Cathrach (formerly Red John Pump Storage Scheme) 275kV Connection

Statkraft's Loch na Cathrach Pumped Storage Hydro Scheme is located near Dores, around 14km south-west of Inverness. Our connection project includes construction of a new 275kV point of connection at the new Loch na Cathrach Switching Station. The Switching Station will connect to the existing Knocknagael Substation by approx. 9km of single circuit 275kV underground cable.
Find out more: **ssen-transmission.co.uk/lochnacathrach**

Find out more
Scan the QR code with your smartphone to find out more about our other projects.

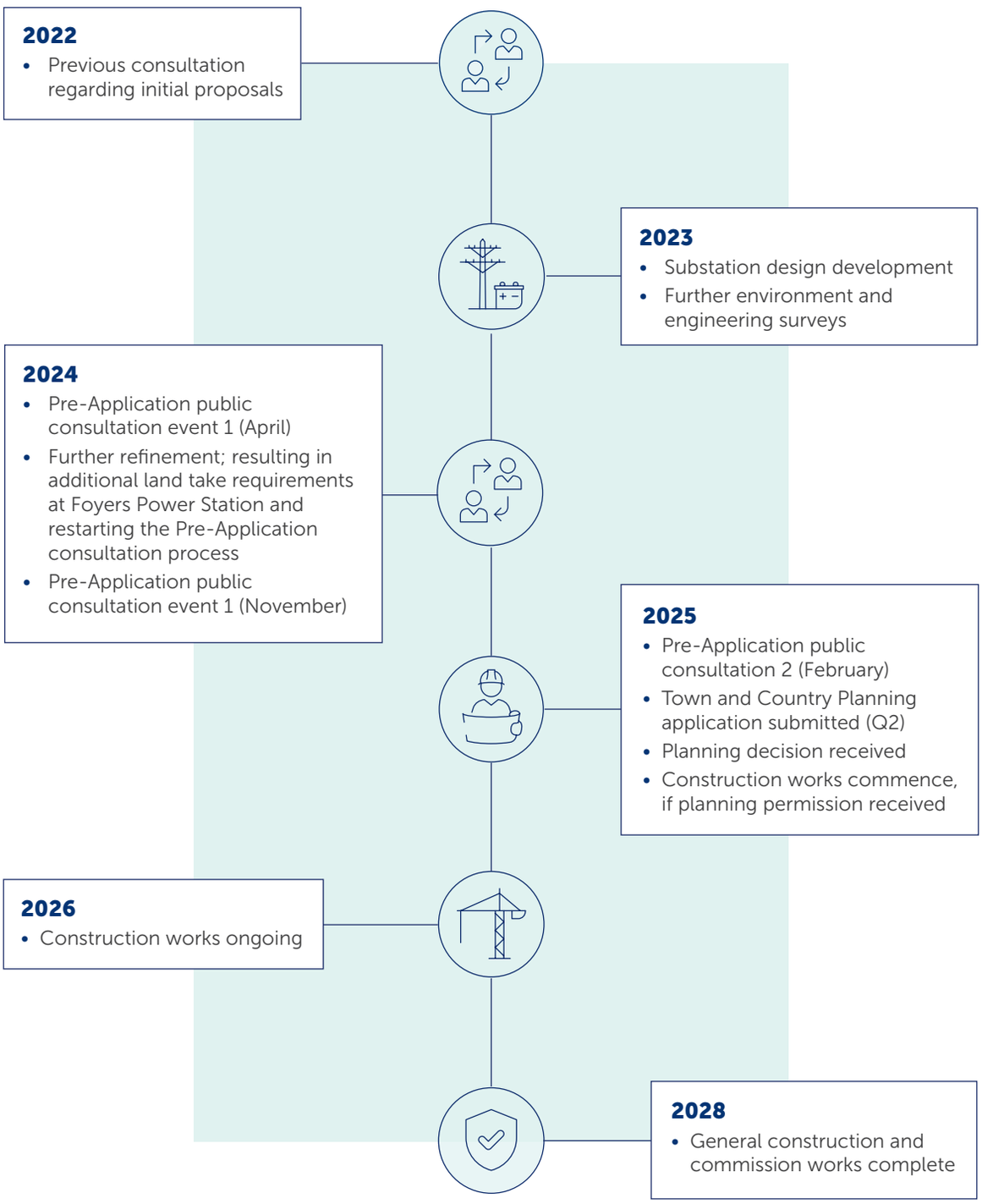
Local renewable developments

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: **neso.energy/industry-information/connections/reports-and-registers**

Project timeline



Please note that dates are indicative and subject to change.

Development considerations

During our last consultation, we outlined many of the engineering, environmental and social considerations that we take account of when establishing a practical site for the development. Now that we have identified a proposed site, we are able to share further details regarding many of our development considerations.

Water soils and drainage

The Scottish Environment Protection Agency (SEPA) flood screen maps indicate that both Foyers Power Station and the existing substation is located partially within the fluvial floodzone of Loch Ness. Localised surface flood risk zones are identified at the switching station however it is recognised this location is on an elevated position above Loch Ness.

A site water management plan will be developed to manage potential risks to the water environment during construction and sustainable urban drainage systems are incorporated into the design to account for any increased surface water runoff resulting from the proposed development.

No peat soils have been identified within the site. One private water supply has been identified within 1km of the site. It is upslope of the site and considered not at potential risk of adverse effects from the proposed development. Further assessment will take place to confirm any required mitigation. The site is located within a Surface Water and Groundwater Drinking Water Protected Area.

Local wildlife and ecology

The site has been surveyed to identify habitats, protected species and birds. The surrounding area is dominated by native woodland, commercial forestry and Loch Ness. Seven European designated sites for nature conservation are located within 20km. The closest such designation is Ness Woods, a Special Area of Conservation (SAC) located approximately 2.4km northeast, for which its qualifying interest is Otter (Lutra Lutra), Western acidic oak woodland (Old sessile oak woods with Ilex and Blechnum in the British Isles) and mixed woodland on base-rich soils associated with rocky slopes (Tilio-Acerion forests of slopes, screes, and ravines).

Inverfarigaig Site of Special Scientific Interest (SSSI) is a national designation recorded 2km northeast. This overlaps with Ness Woods SAC. The qualifying interest for which Inverfarigaig SSSI is designated is Upland Mixed Ash Woodland.

Ecology and bird surveys encompassing the site and a buffer up to the public road were undertaken in 2022 and 2023. Surveys indicate that the site and surrounding area support widespread and common breeding birds. The Survey Area contains suitable habitats to support protected and notable species including pine marten, red squirrel, badger, bats, reptiles and amphibians. A programme of bat survey has been undertaken (2022 and 2023). The proposed development will seek to maintain and enhance such habitats which reflects the proposed design.

No significant effects are anticipated as a result of the proposed design. Ecology and habitat appraisals are underway and will be reported in the voluntary Environmental Appraisal along with any relevant mitigation measures.

Size and drainage

The extension to the 275kV Switching Station will span approximately 30 meters in width and 118 meters in length which will integrate with the existing site layout. This expansion will primarily serve to accommodate new electrical busbar and equipment necessary for the implementation of the new 275kV connection from the upgraded transformer compound adjacent to the Foyers Power Station. Additionally, provisions are being made to facilitate a potential future connection to the Loch Kemp Pumped Storage Scheme.

To accommodate the extension, a retaining wall structure will be required along the length of the proposed extension, adjacent to an existing operational access road and will range between 6 to 8 meters in height (at its highest point).

Detailed consideration regarding the composition of the wall will be undertaken as the project design progresses, prioritising both functionality and aesthetic harmony with the surroundings.

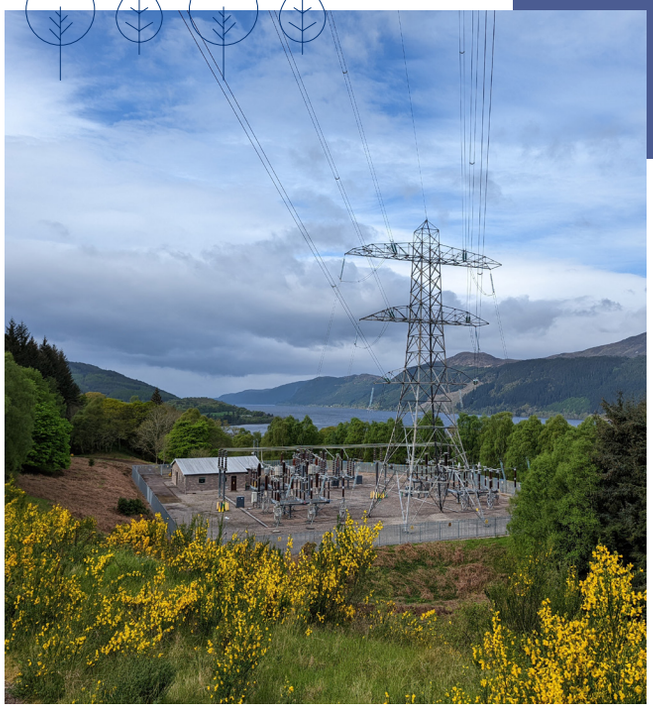
With regards to site drainage provision, the switching station will be mostly covered in gravel and be free draining.

The additional hardstanding areas resulting from the proposed development will be captured by a filter drain along the access road. This will outfall into an existing ditch which will be formalised into a swale feature, prior to discharge. Given the topography of the area, check dams will be located within the swale which will help retain water and provide water quality benefits. To capture run-off from the upstream greenfield catchment, there will be a cut off drain from the retaining wall. This will also discharge into the swale.

Landscape and visual

The appearance and character of the landscape is already influenced by transmission infrastructure including the existing Foyers Switching Station, nearby steel lattice towers and overhead lines.

The proposed development would be seen in relation to this and the existing Foyers Pumped Storage HydroPower Station. The site is located within the Loch Ness and Duntelchaig Special Landscape Area (SLA), a locally designated area highlighting special landscape qualities. A landscape and visual assessment will be carried out to understand how the proposed development will be viewed within the surrounding area, to identify any significant effects and propose recommendations to mitigate these effects. The assessment will be included in the planning application.



Noise

The current daytime noise climate in the wider rural area is low, consisting primarily of operational noise from the existing Foyers Hydro Electric Power Station and associated Transmission substation, with distant road traffic noise and occasional water activity using Loch Ness. Construction noise is considered to be short term and intermittent and can be controlled through the implementation of a noise management plan, which would include working hours agreed with The Highland Council.

Baseline noise monitoring surveys have been undertaken at noise sensitive receptors within the vicinity of the site to inform an operational noise assessment. Appropriate mitigation measures will be considered dependent on the results of the assessment.

Traffic

The construction of the proposed development will require vehicles to deliver plant, machinery and workers to the site. Access would use the existing entrance off the B852 at the northeast corner of the site as is used currently for the existing switching station.

An appropriate construction traffic management plan will be developed to ensure road safety for all other road users during the construction works including suitable management of all abnormal loads and vehicle movements.

Cultural heritage

A walkover survey of the site and surrounding area has been undertaken to understand the potential effects on the historic environment. Potential effects will be appraised and reported within the Environmental Appraisal which will be submitted as part of the planning application.

There are no designated assets identified within the proposed development boundary. Dun Scriben fort and Dun Deardail forts scheduled monuments 2km northwest and 2.2km northeast respectively are the nearest designated assets. Three undesignated heritage assets are within 250m of the site.

There are six listed buildings within 250m of the site, and a further nine within 2km; with the closest being the Category B Old Boleskine Church, Burial Ground and Watch House 80m to the east.

General Wade's Military Road (B852) runs in close proximity to the east of the site.

We will continue to consult with The Highland Council to identify any on-site archaeological investigation that would be required before construction works commence, and if required a Written Scheme of Investigation would be prepared which would set out a strategy for archaeological mitigation in advance of the construction works.

Woodland and forestry

The Site is surrounded by woodland and forestry, with some of the woodland categorised within the Ancient Woodland Inventory.

The current design avoids any felling of native trees located within the Ancient Woodland Inventory. Survey to date has found the surrounding woodland habitat has a diverse structure with a developed canopy, shrub layer and ground flora; overly mature and mature trees, standing and fallen deadwood, and obvious signs of regeneration. Evidence of ancient management within the wider area was also noted including historical coppicing, wood banks and dry-stone walls.

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 20 December 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/foyers**
- 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

During our last public consultation event in April 2024, we wanted you to share your thoughts and opinions on our plans, where you think we could make improvements, concerns about the impact of our work and what you thought of any changes and refinements we'd made following initial consultation in October 2022.

Following consideration of this feedback we published our Consultation Summary Report, detailing our responses to feedback received.

During this consultation, we're seeking feedback regarding the changes proposed at Foyers Power Station in terms of the increased land take 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.

Our Community Liaison team

Each project has a dedicated Community Liaison Manager who works closely with community members to make sure they are well informed of our proposals and that their views, concerns, questions or suggestions are put to our project teams.

Throughout the life of our projects, you will hear from us regularly. We aim to establish strong working relationships by being accessible to key local stakeholders such as community councils, residents' associations and development trusts, and regularly engage with interested individuals.

Recite me

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

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

Community Liaison Manager

Maren Ebeling

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

maren.ebeling@sse.com

+44 7721 462 330

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/foyers

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. **Now that we have shared updated design plans for this site, is there anything you'd like to bring to our attention that you believe we may not have already considered during project development?**

Comments:

Q2. **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:

Q3. **Is there anything regarding the Foyers Substation Works proposals that you feel you require more information about? If so, please detail below.**

Comments:

Q4. Do you have any other comments?

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: Scottish Hydro Electric Transmission, 10 Henderson Road, Inverness IV1 1SN

Email: maren.ebeling@sse.com

Online: ssen-transmission.co.uk/foyers

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