

TRANSMISSION

# Bingally 400kV substation

Beauly Denny 400kV Upgrade Pre-application consultation feedback event



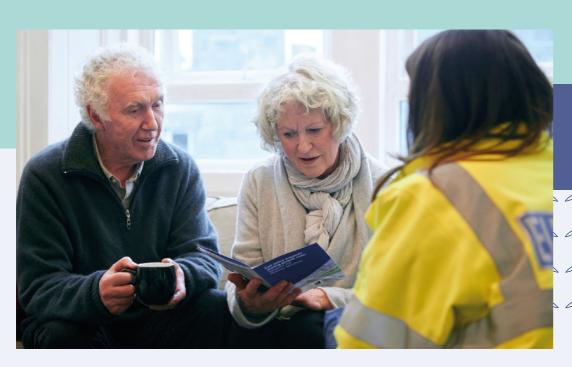
Bingally 400kV substation

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#### The consultation event will be taking place on:

Tuesday 18 June, 2 – 7pm Cannich Hall, Cannich, Beauly, IV4 7LJ



# 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 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 50Giga Watts (GW) 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.



#### Find out more

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 landmass, 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 our host 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. 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

# The Pathway to 2030

Building the energy system of the future will require delivery of significant infrastructure over the next few years. In partnership with the UK and Scottish governments, we're committed to meeting our obligation of connecting new, renewable energy to where it's needed by 2030.

#### Achieving net zero

By 2030, both the UK and Scottish governments are targeting a big expansion in offshore wind generation of 50GW and 11GW respectively. The Scottish Government has also set ambitious targets for an additional 12GW of onshore wind by 2030.

Across Great Britain, including the north of Scotland, there needs to be a significant increase in the capacity of the onshore electricity transmission infrastructure to deliver these 2030 targets and a pathway to net zero.

#### Securing our energy future

And it's not just about net zero. It's also about building a homegrown energy system, so that geopolitical turmoil around the world doesn't severely impact the UK and push up energy prices.

The UK Government's British Energy Security Strategy further underlines the need for this infrastructure, setting out plans to accelerate homegrown power for greater energy independence. The strategy aims to reduce the UK's dependence on and price exposure to global gas wholesale markets through the deployment of homegrown low carbon electricity generation supported by robust electricity network infrastructure.

#### Meeting our 2030 targets

In July 2022, National Grid, the Electricity System Operator (ESO), published the Pathway to 2030 Holistic Network Design (HND). This set out the blueprint for the onshore and offshore transmission infrastructure that's required to support the forecasted growth in the UK's renewable electricity.

It's an ambitious plan that will help the UK achieve net zero.

#### What does this mean for you?

Extensive studies informing the ESO's Pathway to the 2030 Holistic Network Design confirmed the need to upgrade the second circuit of the Beauly – Denny Overland Line (OHL) from 275kV to 400kV. To do this, we require to construct two new 400kV substations at Braco West and in the Fasnakyle area. We'll also require

modifications or extensions to other substations along the route, including Fort Augustus, Errochty, Kinardochy and Tummel. Connections to existing substations will also be required as part of the upgrade.

The upgrade of the Beauly – Denny circuit will help deliver the significant increased capacity needed to transport energy from new large scale onshore and offshore renewable generation (mainly wind farms) to demand centres via onshore and HVDC subsea links.

These projects have been highlighted as critical to delivering the UK and Scottish Government's targets, with the development of them accelerated to meet the target dates of energisation by 2030.

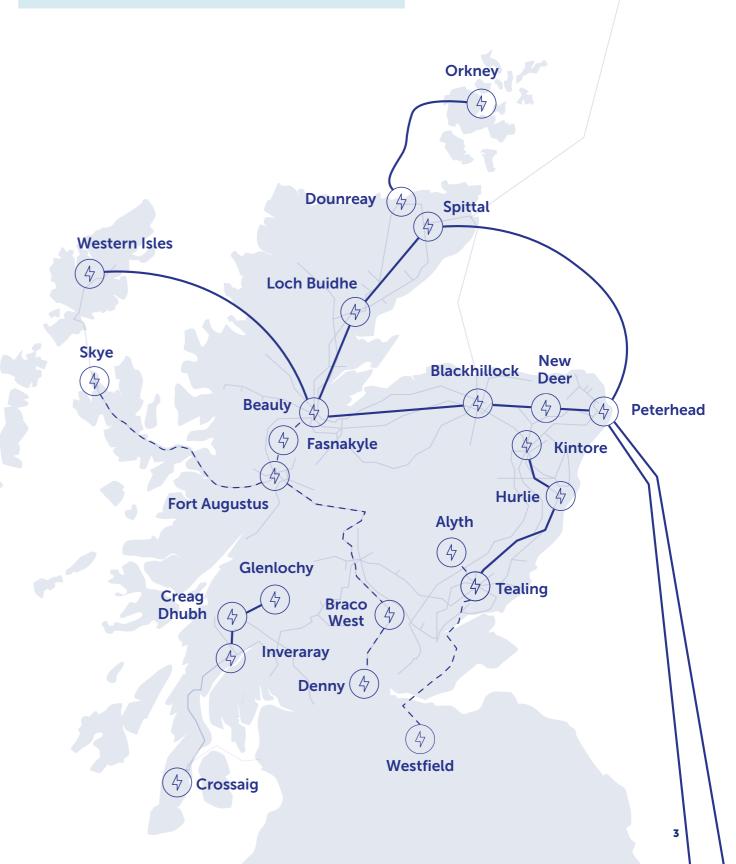
### Future network investment requirements

Our 2030 targets are the first step on the transition to net zero. The UK Government has a target to decarbonise our electricity system by 2035 and fully decarbonise our economy by becoming net zero by 2050, with the Scottish Government committing to net zero five years earlier, by 2045.

To achieve these targets, further investment in new low carbon electricity generation and the enabling electricity transmission network infrastructure will be required.

The next stage of strategic network planning across Great Britain has now been outlined in the independent Electricity System Operator, National Grid ESO's, 'Beyond 2030' report, published in March this year. For the north of Scotland, the ESO's plan recommends several new and upgraded onshore and offshore reinforcements that the ESO has assessed are required to help deliver net zero targets. These projects, which will be subject to extensive public consultation, are at the very early stages of development and further details will be set out in due course.

New infrastructure
 Upgrade/replacement of existing infrastructure
 Existing network



Bingally 400kV substation

# **Project overview**

#### **Beauly - Denny Upgrade Project**

The Beauly-Denny line was constructed for 400kV operation on each of its two circuits but put into service with one operating at the lower voltage of 275kV. This project will see the second circuit being uprated from 275kV to 400kV, to allow new renewable energy generation to be connected to the transmission network in the coming years. As the line was built to run at 400kV, no alterations are required to the existing OHL.

However, existing 275kV connections along the OHL will need to be upgraded to allow them to continue to connect to the uprated circuit. This means the following will be required at sites along the route:

- A new 400kV substation in the Fasnakyle area, named Bingally substation.
- A new 400kV substation near Braco, named Cambushinnie substation.
- Connections from the new substations to both the Beauly-Denny OHL (via small diversions) and the existing substations (via underground cable).
- In addition, modifications or extensions are required to other substations along the route, including Fort Augustus, Errochty, Kinardochy and Tummel.

#### Bingally 400kV substation

This consultation is related to our proposed new substation located near Fasnakyle.

The project will involve construction of a new outdoor, 400kV Air Insulated Switchgear (AIS) substation located southeast of Cannich, near Tomich, approximately 6km from the existing Fasnakyle 275kV substation.



#### Proposed development description

- The approximate maximum dimensions of the proposed substation platform are 376m x 290m, not including the earthworks required to create a level platform.
- Space provision to allow for connection of future renewable energy generation projects.
- Areas for drainage, landscaping/screening and habitat enhancement.
- Permanent and temporary access roads.
- Temporary areas required during construction for laydown and welfare.
- The new substation will require OHL tie in works, comprising a new terminal tower adjacent to the substation. The new terminal tower will be of a similar height (up to 63m) and type to the existing towers. A temporary OHL diversion will also be required during the construction phase to allow the new tower to be built. The OHL tie in will not form part of the planning application for the proposed Bingally 400kV substation. Instead, an application will be made to the Scottish Government's Energy Consents Unit (ECU) for consent under Section 37 of the Electricity Act.

## **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 proposed substation into the local landscape to help the understanding of the proposals in terms of the visual impact, distance, and height.

The following are some images taken from the 3D model created for the Bingally substation from a range of different topographies.

To get a better sense of the proposals in full, a visualisation portal including flythrough video is also available to view from the project webpage and our consultants, 3D Webtech, will be assisting us at our consultation event with copies of the model that attendees can interact with during the event.

The layout and colour of 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.

#### **Photomontages**

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



Find out more Scan the QR code to watch a flythrough video.







## The story so far



**Sep '23** 

We introduced the project in September 2023 to show the three site options being considered as part of site selection.

Nov '23 - Jan '24



Ground Investigation works undertaken at site 9.

Mar '24





Report on Consultation published to confirm site 9 is the proposed site.

The first Pre-Application Consultation event was held in Cannich to confirm site 9 is the proposed site and present the design progress to date.

#### Help shape our plans

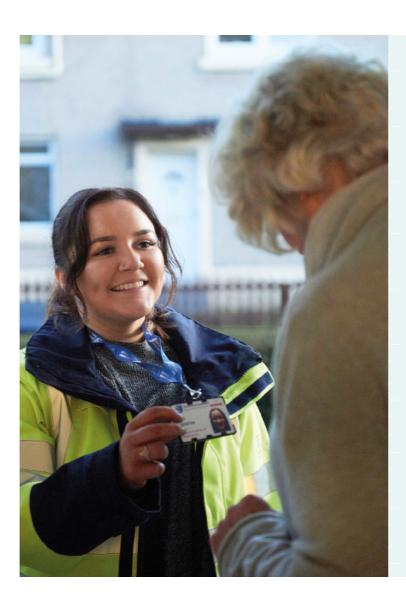
The work we have planned is significant and has the potential to deliver massive benefits in your community, Scotland, and beyond. Yet we know that achieving our goals will require a lot of work that will impact your lives. That's why we want to work with you every step of the way throughout the planning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

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

Throughout the consultation, we'll present our approach to developing the project, including changes made since we last consulted with you. We will also provide some visualisations and maps to show you where everything will be located and to allow you to see what the proposed substation will look like. These will also be available to view and download from our project website.

#### Who we are consulting with

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



#### What we are seeking views on

We want you to share your thoughts and opinions on our plans, where you think we can make improvements, concerns about the impact of our work and what you think of the refinements or changes we've made.

This event is the second of two planned, sequential, public consultation events following the submission of the Proposal of Application Notice (PAN). The PAN submission triggered the initial formal Town and Country Planning (major application) consultation process for this site, including the 12-week (minimum) pre-application consultation period.

Following the initial consultation event, the project team has sought to ensure that comments or concerns raised have informed, where possible, the primary considerations for the designs as they have progressed. This includes substation layout design, landscaping enhancement and screening. Outside of the formal consultation periods and events, we have continued to provide a dedicated webpage for the projects and liaise with a wide range of stakeholders to help inform the development and design.

We are therefore holding this feedback event to present our proposed substation extension design, which has been informed by stakeholder feedback, and have set out our responses to feedback received to date.

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





### **Feedback**

Following submission of the PAN in March 2024, the first of two pre-application consultation events were held at Cannich Hall, Cannich, on 27 March 2024. There were a total of 66 attendees.

During the six week feedback period which closed on 8 May 2024, 11 responses were received specific to this project. Whilst this feedback is acknowledged, only tangible, direct feedback specific to the development of the proposals is summarised and responded to within the following table.

Some of the responses posed general questions covered in our Frequently Asked Questions (FAQ) page and additional handouts such as project need, sustainability considerations and compensation. More information regarding these topics and other FAQs can be accessed at: ssen-transmission.co.uk/2030fags



#### Find out more

Scan the QR code with your smartphone to access our FAQs.

We have included both event feedback and statutory stakeholder feedback through the PAN and pre-application process, as well as design feedback, within the next three pages via themes.

#### Theme

#### Landscape and visual amenity

Concern about visual impact of substation in the wider Glen Affric area, potential light pollution and limited screening opportunities.

#### Response

As part of the planning application, we are undertaking a Landscape and Visual Impact Assessment which will consider views of the Proposed Development from residential properties, other sensitive receptors and key local viewpoints with the aim of designing the proposed substation to minimise visual impacts.

Design considerations will aim to reduce the platform level and building heights (reducing the potential for sky lining) and installing hard and soft landscaping to screen the site from key viewpoints. Building colours can have a significant role in reducing visual impact and will be agreed through the planning process.

We will work with The Highland Council, the local Community Council and our Landscape Architects to ensure appropriate viewpoints are captured within the assessment and appropriate design mitigation is put forward in the planning application.

During construction, lighting will be switched off when not in use and overnight.

Construction working is likely to be during daytime periods only. During winter months when there is reduced daylight, lighting will be required to aid construction activity. A Light Management Plan will be adopted by our contractor to minimise any impacts associated with this.

During operation, lighting would be installed at the substation but would only be used in the event of a fault during the hours of darkness, during the over-run of planned works, or when sensor activated as security lighting for nighttime access.

#### **Access road**

Comments regarding the proposed access road location, length and width, and the environmental impact it will have; impact to public access for pedestrians, cyclists and horse riders.

We are aware of the community concerns regarding the potential impact of the proposed access road. The impact on core paths has also been highlighted by The Highland Council as part of this consultation.

The environmental assessment will assess the impact on core paths and public rights of way and detail how access will be managed and maintained throughout construction and operation, including accommodating continued public access where possible. This assessment and reporting will be submitted as part of a planning application.

#### Theme

#### Noise

Comments on noise during construction period and substation in operation. Request for more information on noise mitigation measures.

#### Response

We recognise that noise impacts during construction and operation of our assets can be a concern to residents.

Potential noise impacts during construction and operation will be assessed within the environmental assessment. The proposed development would be required to meet noise limits set by The Highland Council. Appropriate mitigation would be implemented to ensure these limits are met at all noise sensitive receptors.

The environmental assessment (which will include details on the background noise monitoring) will be publicly available when the application is submitted to The Highland Council.

#### Local wildlife and habitats

Concern for impact on Glen Affric wildlife and habitats including peat and bog habitats and red listed birds. Request for further information on how the project will enhance plant and animal life. Environmental assessment survey work is currently underway to establish the full extent of all habitats and protected species present on site.

Where sensitive habitats and species are present we will seek to avoid them wherever possible, but where unavoidable, suitable mitigation measures will be identified and agreed in consultation with the Planning Authority and NatureScot.

Where mitigation measures are agreed, these will be passed onto the contractor in the form of a Commitments Register, supported by our own Species Protection Plans and General Environmental Management Plans, to ensure that the measures are implemented as required. These measures will also form part of the Construction Environmental Management Plan (CEMP) for the project.

#### Traffic and construction

Concerns raised about impact of construction traffic on the road network, including the A831 between Drumnadrochit and Cannich. Request for measures implemented to ensure traffic avoids Tomich.

We understand that with large construction projects, increased construction traffic and road condition will often cause concern. In developing the Bingally 400kV substation proposals, traffic and road use is a primary consideration for us and our contractors.

An outline Construction Traffic Management Plan (CTMP) is currently in development and will be included in the planning application. This will detail expected traffic volumes and will be utilised during detailed design to optimise vehicle routes to and from the site.

We will liaise with the Local Planning Authority to ensure any traffic management and traffic calming measures are implemented for the duration of the works, and all permanent works required are installed.

#### Water soils and drainage

Concern for drainage from the development and potential impact on local water courses. Local knowledge shared regarding local rivers, lochs and areas of risk. Request for information on how water pollution will be negated.

Full Drainage Impact and Flood Risk Assessments (DIA/FRA) are currently being undertaken and will be supported by a Drainage Strategy for the site, which will ensure that surface water run-off is controlled to a level equivalent to the current run-off rate of the site to ensure no worsening of the current situation.

The Drainage Strategy, DIA and FRA will form part of the planning application submission and will be assessed by the Planning Authority and SEPA.

A full Private Water Supply (PWS) survey has been undertaken of potentially affected PWS in proximity to the site to understand the full impact of the development and any mitigation measures required to preserve residents' PWS provision.

Please also see our 'Protecting Private Water Supplies' handout for more information, available from our project webpage or at our consultation events.

### **Feedback**

#### Theme

### Holistic overview and connections

Industrialisation of the area from current developments and future developments connecting into the substation.

#### Response

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

We recognise that other future projects may connect into the substation and we know that residents are keen to understand the full extent of renewable developments being proposed in the area. The environmental assessment will include cumulative assessments considering other development projects in the area.

Applications to connect to the transmission network in our license 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.

#### Information provision

Feedback that information presented has not provided enough detail on project plans and impact on the community and environment.

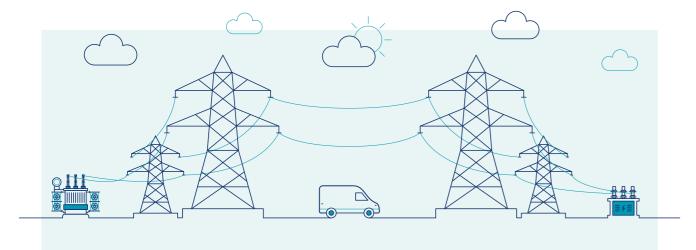
At the first Pre-Application Consultation event held in March 2024, we presented a high-level design in order to gather initial feedback from stakeholders and the community. This consultation event is the second and final statutory event where we are presenting our final substation design.

We understand we were not able to answer all of your questions throughout this process as we undertake surveys and progress design. Further project updates and refinement at this stage have been provided within this booklet, and all final information and detail on the project will be provided within the planning application.

#### Tourism

Concern for impact on tourism and visitors to the area.

For each project we develop, we conduct a Landscape and Visual Impact Assessment. In this assessment, we consider the likely significant effects on visual amenity arising from the proposed development during construction and operation, including from tourism and recreation sites, and where possible mitigate any potential impacts.



#### Theme

#### Health

Mental and physical health concerns for local community due to concern about the impact to the natural environment.

#### Response

We are mindful of the uncertainty that our proposals can pose to communities who may be affected. Our process for project development seeks to identify proposed options that provide an appropriate balance across a variety of considerations and interests. We aim to do this as swiftly as possible in order to minimize the duration of uncertainty for affected communities.

However, we are also committed to providing sufficient time and opportunity for all stakeholders to feed into each stage of our project development process, so that views can be understood and wherever possible incorporated into design decisions. This is a balance which has to be carefully managed.

Our staff are cognisant of the impact and uncertainty that is being felt within communities and have taken a number of steps to minimise this for the people who may be affected. Some of the steps we have taken include working closely with communities at early stages, being transparent on decision making, having clear routes of communication with our stakeholders through multiple methods such as public exhibition events, community council meetings, website updates and via the Community Liaison Manager.

Whilst we have committed to these steps, we understand that everyone may be impacted in different ways and would be interested in your views regarding any additional activities that would help to address your specific concerns.

We remain committed to promoting developments that maintain or enhance economic opportunity and achieve the long-term ambitions to ensure a net zero future, while protecting and restoring the natural environment.

### Community Benefit Opportunities

Opportunities for Community Benefit Funding shared including provisions for cyclists and pedestrians in the area; re-purposing disused sites in the area; funding and compensation. We'd like to thank residents for providing their feedback suggesting community benefits they would like to see implemented within the local area.

While some of the suggestions are outside of the scope of the project to deliver, it is our intention to work with the community to further explore opportunities in this area. This feedback has been noted and when it is appropriate to do so, will be considered by our construction team, contractors and our community benefit fund team.

SSEN Transmission is in the process of establishing a Community Benefit Fund which will enable us to work directly with local communities to support initiatives across northern Scotland and help fund projects that can leave a lasting, positive legacy. We appreciate that as the fund is being developed the information we've been able to share has been limited. More information regarding the community benefit funding will be available later this year.

In terms of broader community benefits, our Pathway to 2030 projects will boost the economy, support local jobs and businesses. Recent studies show our Pathway to 2030 programme could contribute over £6 billion to the UK's economy, support 20,000 jobs across the UK and benefit Scotland by around £2.5 billion, supporting 9,000 Scottish jobs.

### The substation site

#### **About the site**

Following site selection consultation in September 2023, we advised within our Report on Consultation that Site 9 had been selected as our proposed site for the proposed Bingally 400kV substation ahead of our first Pre-Application Consultation event earlier this year.

The site is located to the south of Tomich and is considered best on balance due to having fewer environmental constraints, including the limited impact on protected habitats and species and being situated further away from watercourses, natural and cultural designations, and listed buildings than other options.

The site has sufficient size to house all proposed infrastructure and construction requirements and is well situated for connecting into existing overhead line infrastructure. The wider site area has sufficient size to support landscaping and biodiversity net gain improvements.

#### What size is the site?

The substation footprint will be approximately 376m x 290m and will consist of Air Insulated Switchgear, associated equipment, control building, access tracks and fencing.

### What else will the development consist of? 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. This includes a drainage basin for the substation and access track, leading to associated outfall locations to the north-east and west of the site.

#### **Temporary compounds**

Temporary construction compounds and laydown areas will be located in the vicinity of the substation 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.

#### Lighting

During construction, lighting will be managed by the construction contractor through a previously prepared Lighting Management Plan. Once operational it is anticipated that the site will run on a dark site basis. An operational lighting strategy will be prepared during the project refinement phase.

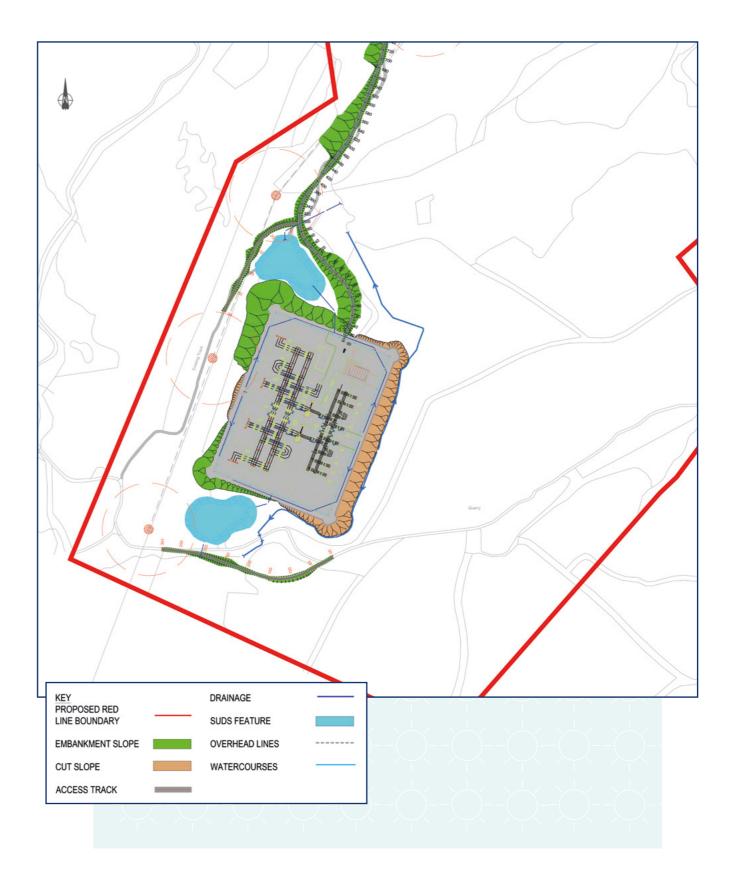
#### Landscaping and screening

A Landscape Strategy will be prepared to support the planning application and inform the landscaping and screening for the site. Indicative landscaping and screening are illustrated in drawings that support this consultation process.

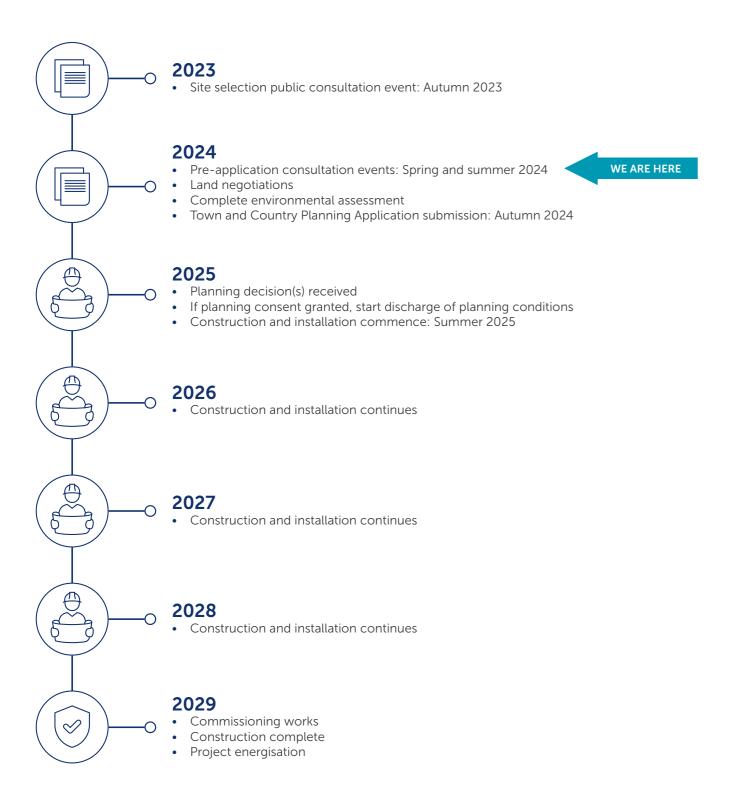
#### Connections

The substation will connect into the existing Beauly to Denny Overhead Line (ssen-transmission.co.uk/bdup), which will require one new permanent 'junction' tower located adjacent to the substation platform to connect the overhead line into the substation, an additional an additional permanent tower to support the new alignment of the overhead line into the substation, and two temporary towers to allow the circuits to be diverted and remain live during the construction of the aforementioned permanent towers. Each tower noted here will have a dedicated access track leading to it. The towers will be about 63m high and will be submitted for approval as part of a separate Section 37 application.





## **Project timeline**



# 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 intend to submit our planning application in September 2024. Our formal feedback period will close on 30 July 2024, however we will welcome final comments from members of the public, statutory consultees and other key stakeholders regarding our proposals until we submit our planning application.

#### How to provide feedback

Submit your comments and feedback by emailing or writing to your Community Liaison Manager.

#### What we're seeking views on

During our last public consultation event in March 2024, we wanted to know your thoughts on our project plans, where you thought we could make improvements, and any changes and refinements we'd made.

We are now asking for any final comments or feedback ahead of submitting planning applications for the Bingally 400kV substation project.

We'll be actively looking to mitigate the impacts of the site 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.

# Recite. \*\*

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.

#### **Community Liaison Manager**

Rosie Hodgart Community Liaison Manager

SSEN Transmission, 1 Waterloo Steet, Glasgow, G2 6AY

**T**: 07879 793652 **E**: BDUP@sse.com



#### **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/bingally

You can also register for updates at our consultation events, just ask our staff at the welcome desk.

You can also follow us on social media:



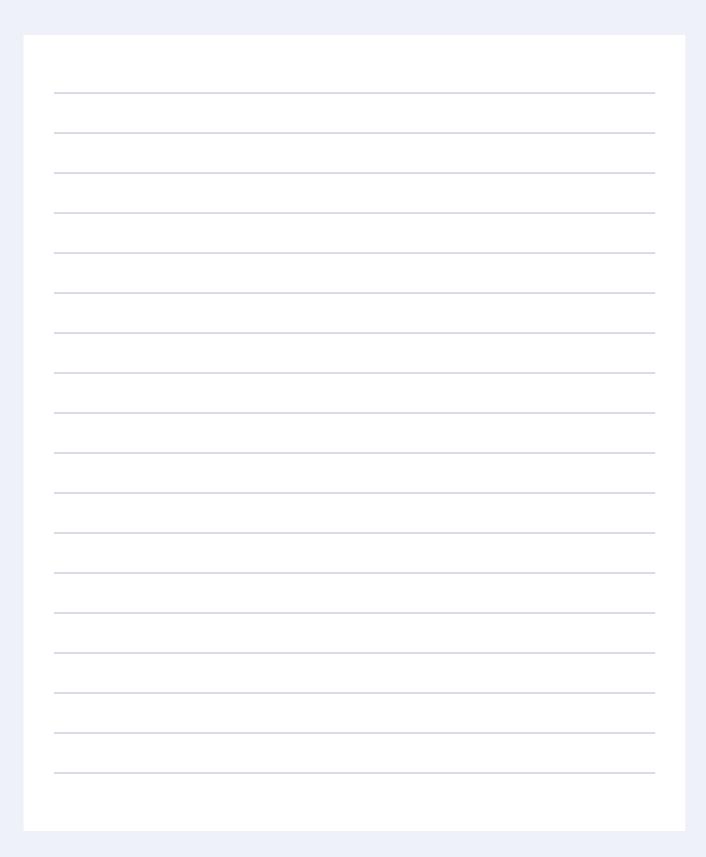


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# **Notes**



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