

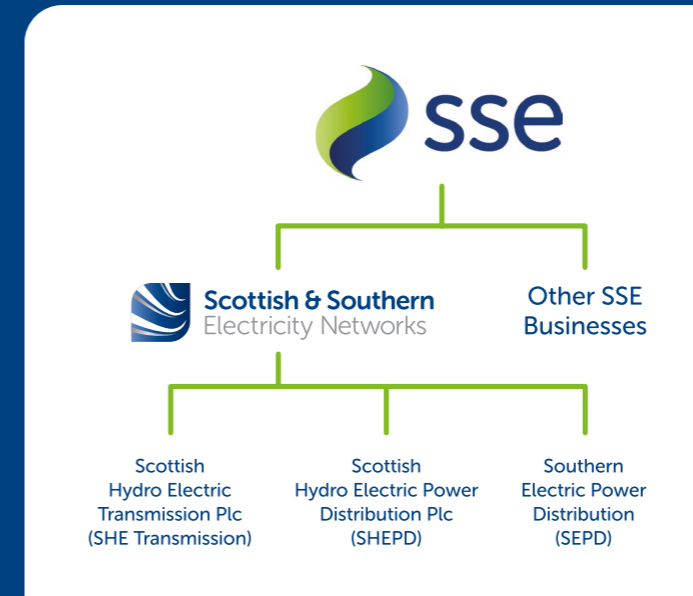
Gills Bay 132 kV Switching Station

January 2021



Who we are

We are 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 plans.

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

Overview

As the Transmission licence holder in the north of Scotland we have a duty under Section 9 of the Electricity Act 1989 to facilitate competition in the generation and supply of electricity.

We have obligations to offer non-discriminatory terms for connection to the Transmission system, both for new generation and for new sources of electricity demand.

Subject to planning consent we are required to connect the Contracted Meygen Tidal and Hollandmey Wind Farm developments to the Transmission network.

To facilitate this we are proposing to construct a new 9 Bay 132kV GIS switching station near Gills Bay, which will be connected to the existing substation at Thurso South via a new 132kV Radial circuit supported on steel lattice towers.

Our Network Operator's Licence requires us to ensure that connections should be efficient, co-ordinated and economic, whilst having the least possible impact on the environment.

There is currently no Transmission infrastructure in the Gills Bay area where this generation can be connected. As a result, SSEN Transmission developed proposals in 2013-15 to construct a new 23km double circuit 132kV overhead line (OHL) to connect the generation to the existing Transmission substation south of Thurso. An application for consent under section 37 of the Electricity Act was submitted to Scottish Ministers in 2015 and following a Public Inquiry was granted in 2019.

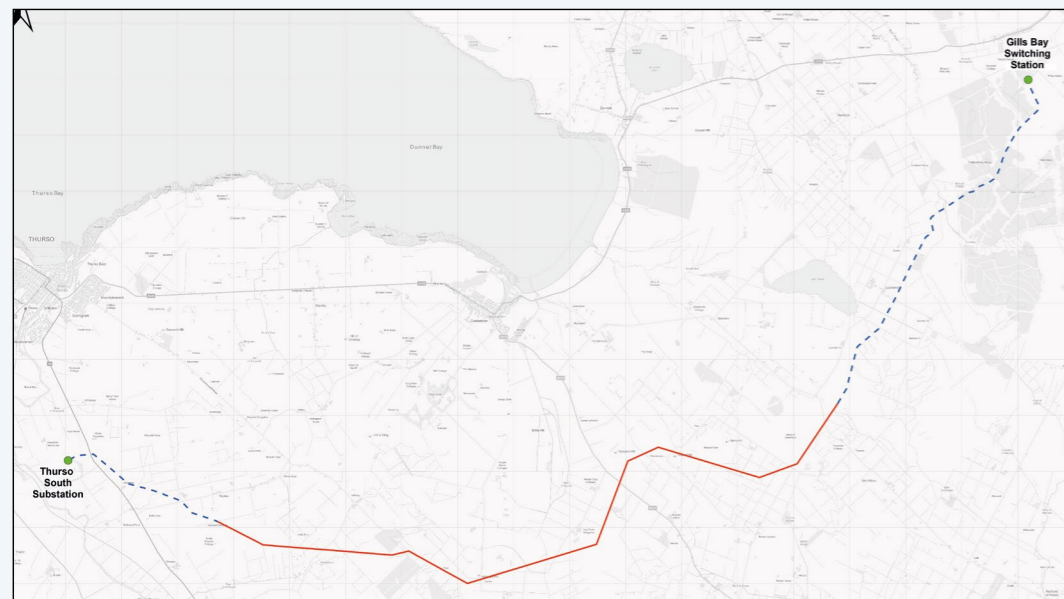
The original design was changed to include 10km of underground cable in two sections of 3km and 7km respectively to reduce impacts on birds and local visual amenity. This new line will run between the existing substation south of Thurso (Thurso South) and a proposed new substation at Philips Mains, near Gills Bay.

The original design required a 132/33kV double transformer substation on the land near Philips Mains due to the generation output and this was given planning permission by The Highland Council in early 2016.

However, due to changes in the generation background and system requirements since 2016, the connections were put on hold pending new offers being accepted. These new offers do not require a 132/33kV substation to be built and so the proposed Gills Bay substation has been redesigned and reduced in both scope and size. Since it no longer requires to have transformers, the site has been reduced significantly and therefore we require to obtain new consent for what has now become a 132kV switching station.

Update

Two renewable developers in the vicinity of Gills Bay - Meygen Tidal and Hollandmey Wind Farm, have accepted offers for connections phased between Q1 2025 and Q4 2027. Due to the output of these developments a connection to the Transmission system is required.



Consultation Aims

The purpose of this consultation is to provide an update of the project's progress and seek specific feedback on the new switching station proposal before an application for planning permission is submitted to The Highland Council in Q1 2021.

Proposed 132kV switching station

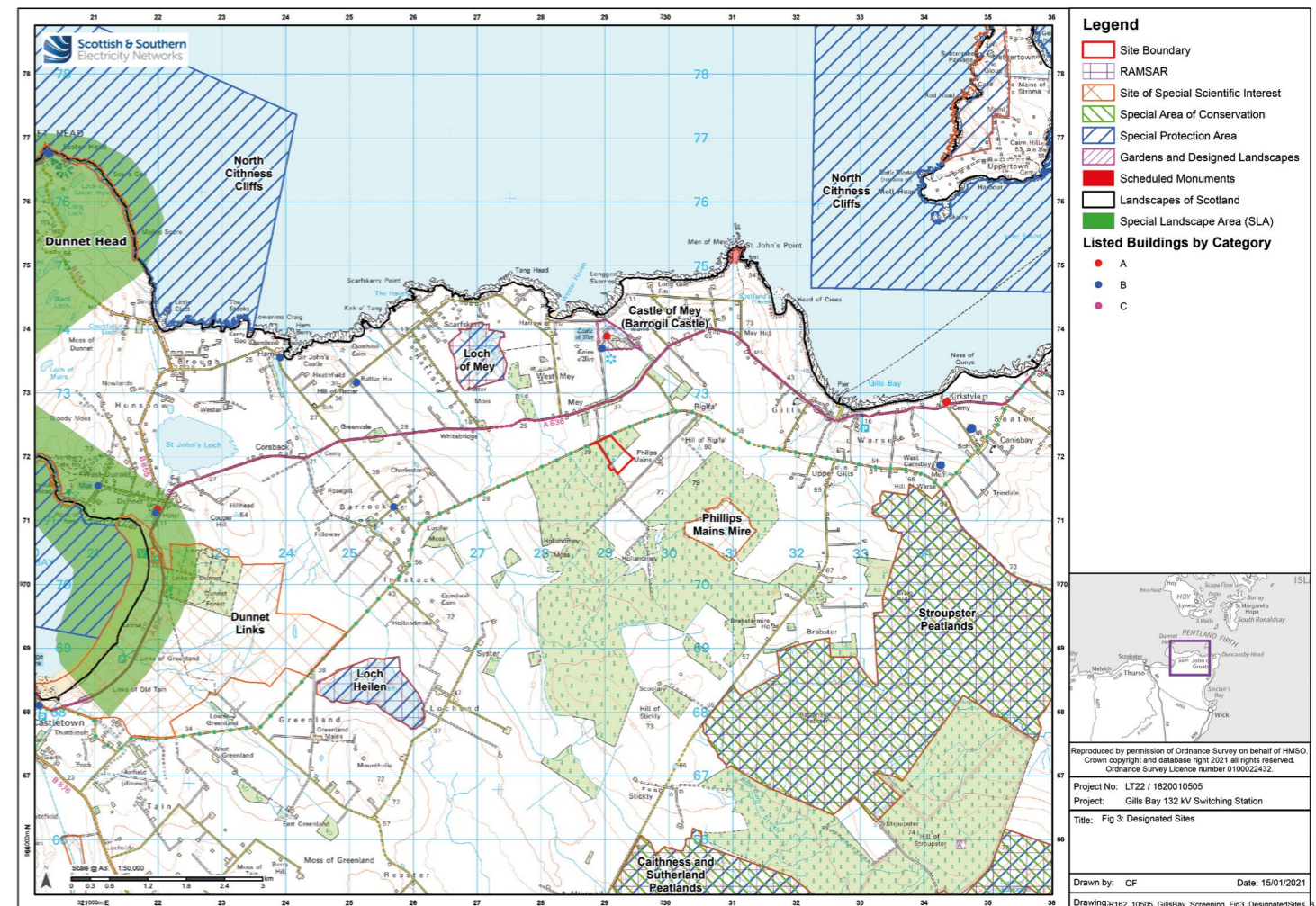
Background

A new 132kV switching station is required as part of the Gills Bay 132kV Radial project. The switching station will provide the point of connection to the Transmission network for marine renewables in the Pentland Firth and onshore wind generators in Caithness.

SSEN Transmission identified eight possible sites for the original substation proposal, which were the subject of a site selection process and public consultation exercise prior to being granted planning permission in 2016. We are proposing to keep this same site since it meets all of our technical, cost and environmental requirements.

Due to the significant design change now required for the switching station, it was agreed with The Highland Council that a new planning application would be made. A Proposal of Application Notice (PAN) was submitted in October 2020 and the proposal was deemed to be non-EIA by The Highland Council in November 2020.

A full voluntary Environmental Appraisal will be provided with the planning application, as was done in 2015 for the substation.

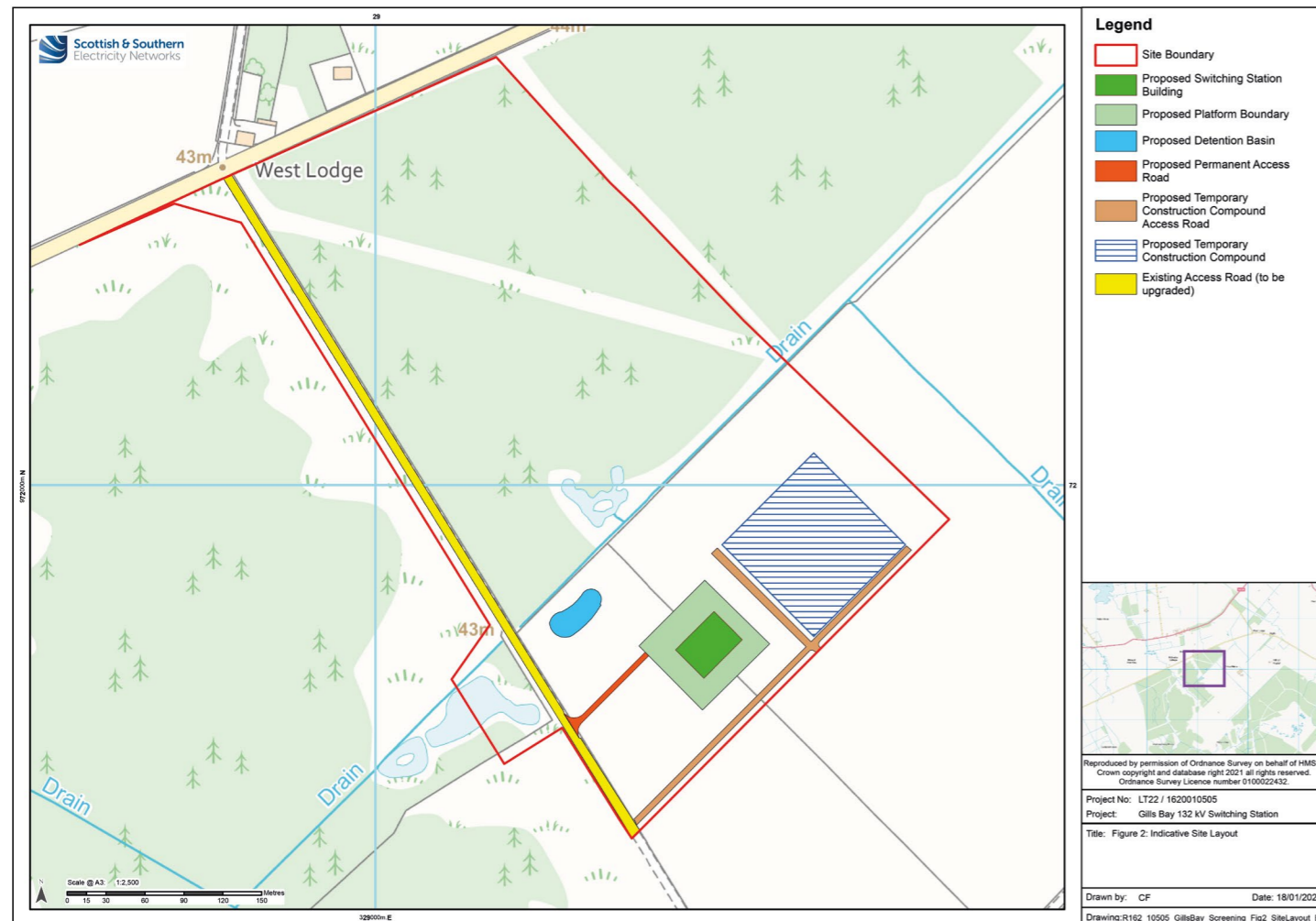
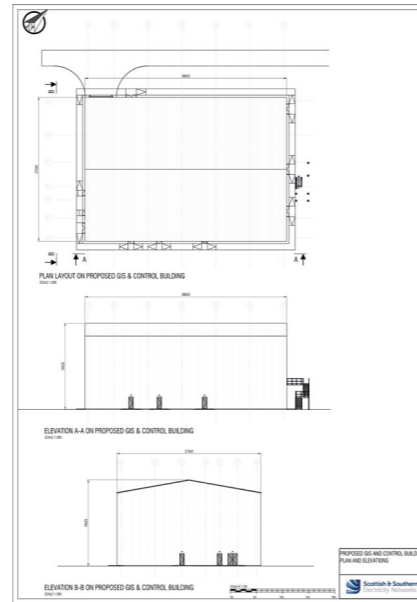


Proposed 132kV switching station

Description

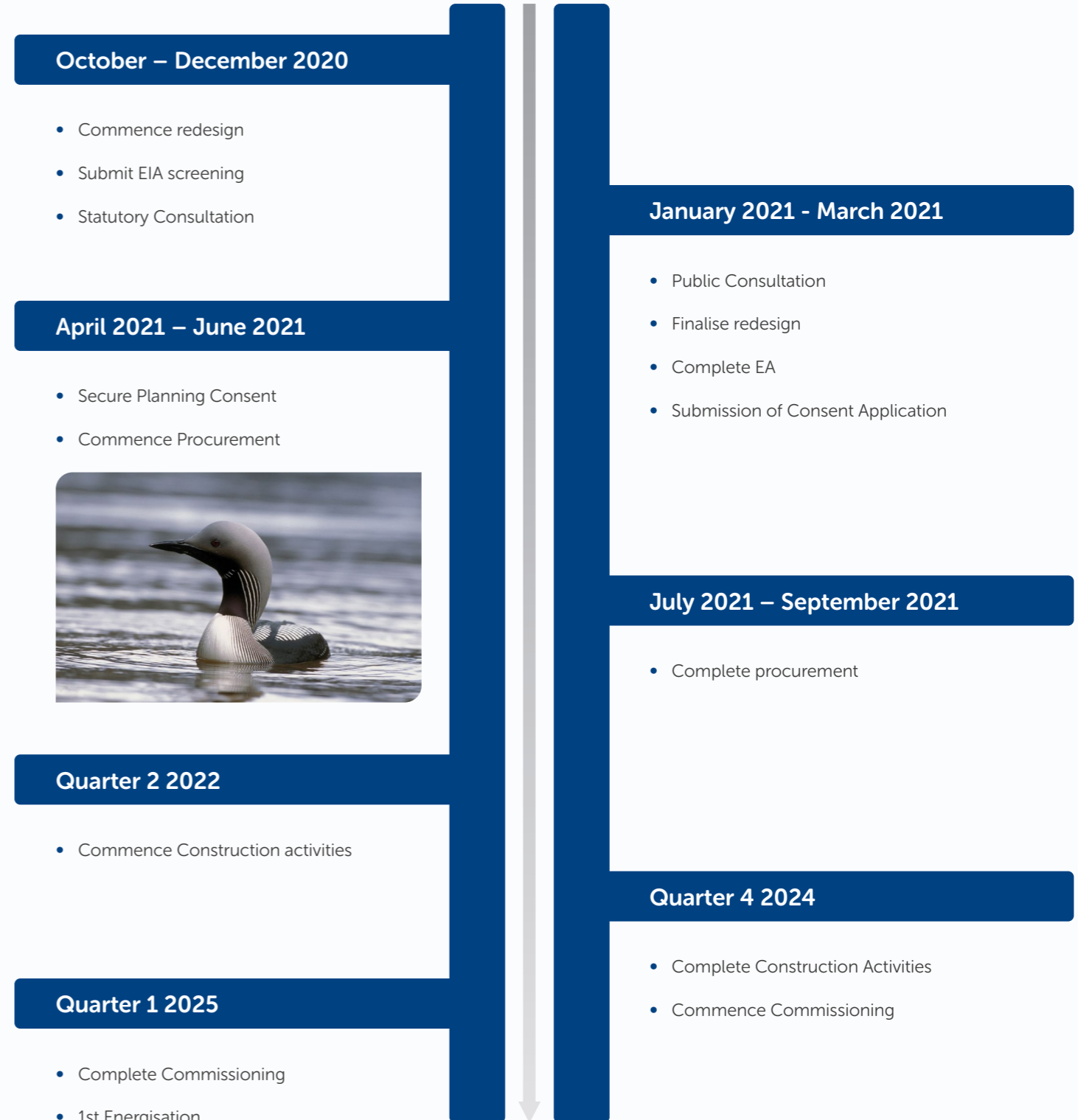
The new switching station will comprise:

- Upgrade of the existing access road to Hollandmey Mains to include potential passing places and widening of the existing junction off the C1033
- A stone platform approximately 0.7 hectares with standard 2.4m palisade security fence around the compound
- A new Gas Insulated Switchgear (GIS) and Control building measuring 23m x 27m x 11m high containing GIS switchgear, battery room, control and communications room, mess room and toilet/wash room
- Parking and manoeuvring space within the compound for operation and maintenance of the facility
- Site drainage including retention basin
- Temporary works including the creation of a construction compound with offices and laydown area
- Retention of existing trees between the site and the C1033 to provide screening, along with additional planting as deemed necessary through the Landscape & Visual Assessment.



Project timeline

The chart below shows the main stages of the development process and the opportunities there will be for members of the public to give feedback as project site design is refined.



Notes



Notes




What happens now and how do I have my say?


We appreciate and recognise the value of your feedback during all engagement and especially at our consultation events. Without this valuable feedback, the Project Development Team would be unable to progress projects and reach a balanced proposal to submit for planning.


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 explained the history of the project and what we are consulting on today?
- Are there any additional factors, or environmental features, that you consider important and should be brought to the attention of the project team?
- Do you have any other comments about the proposed switching station?
- Following review of the information provided, how would you describe your understanding of the Gills Bay project?
- Overall how do you feel about the Gills Bay 132kV Radial project?

Community Liaison Manager, Lisa Marchi

 lisa.marchi@sse.com

 01463 728 072

 07825 015 507

 **Lisa Marchi**
Scottish and Southern
Electricity Networks,
10 Henderson Road,
Inverness, IV1 1SN



Additional information

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

Project website:
www.ssen-transmission.co.uk/projects/gills-bay-radial

Follow us on Twitter:
[@ssencommunity](https://twitter.com/ssencommunity)

Follow us on Facebook:
[@ssencommunity](https://www.facebook.com/ssencommunity)



Feedback

We will be seeking feedback from members of the public until **Friday 19th March 2021**.

Once the planning application has been submitted there will be an opportunity for the public to make formal representations to The Highland Council for the Gills Bay 132kV Switching Station, before they make a decision on our application.

Additional information will be made available via the project webpage and social media channels. Comments and feedback can be given using the form in the back of the brochure that accompanies this event.

Your feedback

Thank you for taking the time to read this consultation booklet. In order to record your views and improve the effectiveness of our consultation, please complete this short feedback form.

Please complete in **BLOCK CAPITALS**. (Please tick one box per question only)

Q1 Has the requirement for the project been clearly explained?

Yes No Unsure

Q2 Have we explained the history of the project and what we are consulting on today?

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 Do you have any other comments about the proposed switching station?

Q5 Following review of the information provided, how would you describe your understanding of the Gills Bay project?

I am very well informed Know a lot Know a little
 Know very little Know nothing at all



Q6 Overall how do you feel about the Gills Bay 132kV Radial project?



Support



Neither support or object



Object

Please use space below to provide further comments:

Full name

Address

Telephone

Email

If you would like to be kept informed of progress on the project please tick this box.

If you would like your comments to remain anonymous 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 and Southern Electricity Networks, 10 Henderson Road, Inverness, IV1 1SN

Email: lisa.marchi@sse.com

Online: www.ssen-transmission.co.uk/projects/gills-bay-radial

Download: Comments forms and all the information from today's event will also be available to download from the project website.

The feedback form and all information provided in this booklet can also be downloaded from the dedicated website:

www.ssen-transmission.co.uk/projects/gills-bay-radial

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.

Scottish and Southern Electricity Networks is a trading name of: Scottish and Southern Energy Power Distribution Limited Registered in Scotland No. SC213459; Scottish Hydro Electric Transmission plc Registered in Scotland No. SC213461; Scottish Hydro Electric Power Distribution plc Registered in Scotland No. SC213460; (all having their Registered Offices at Inveralmond House 200 Dunkeld Road Perth PH1 3AQ); and Southern Electric Power Distribution plc Registered in England & Wales No. 04094290 having its Registered Office at Number One Forbury Place, 43 Forbury Road, Reading, Berkshire, RG1 3JH which are members of the SSE Group.

