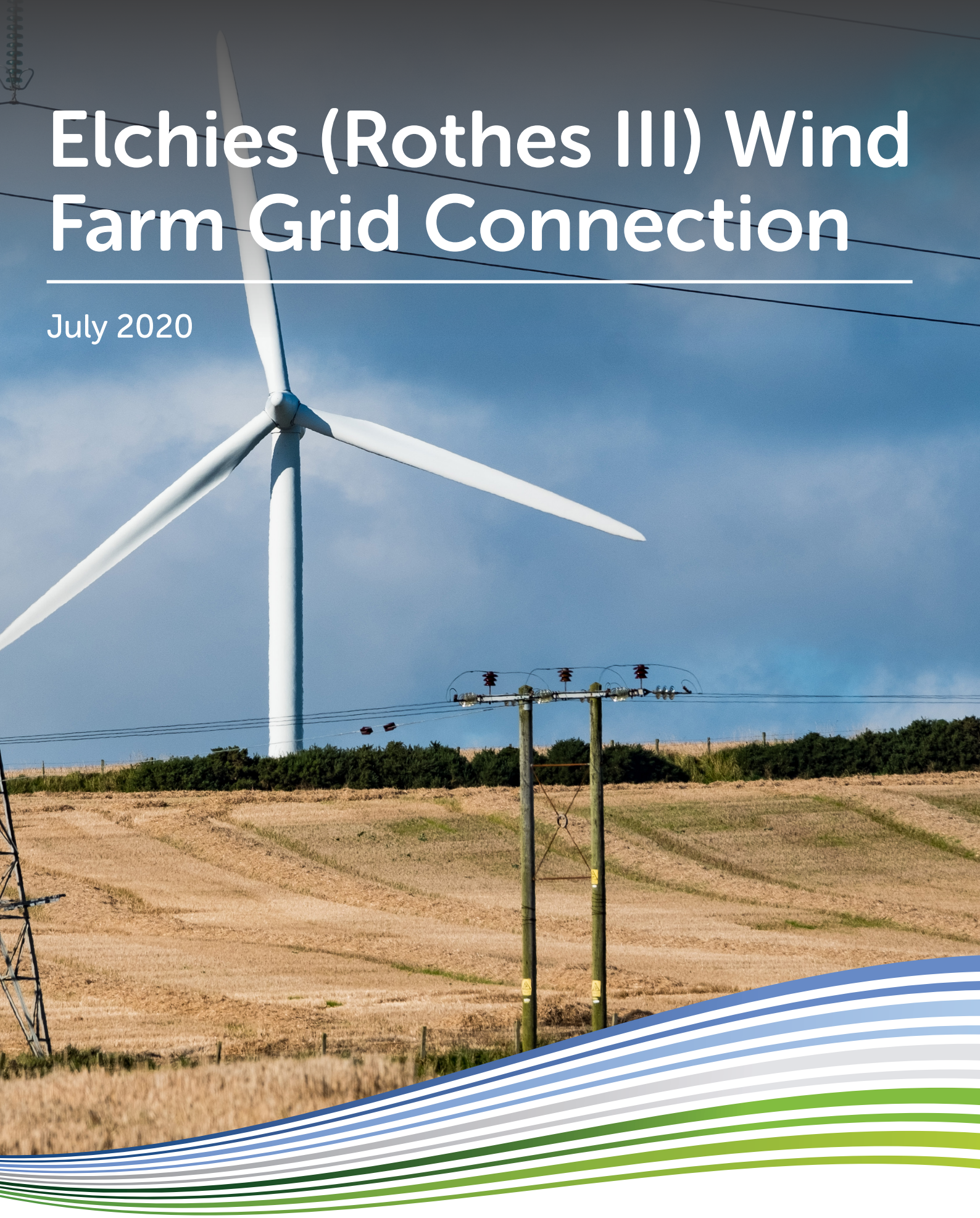
Elchies (Rothes III) Wind Farm Grid Connection

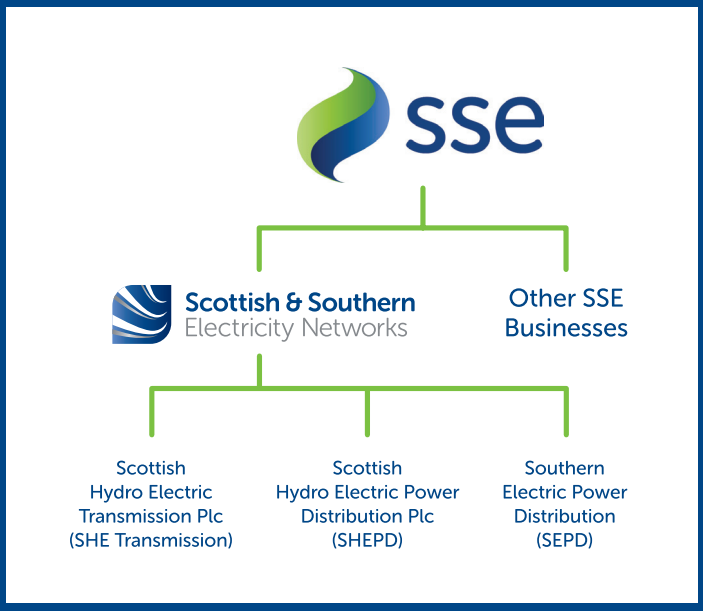
July 2020



Scottish & Southern Electricity Networks

Who we are

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



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.

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.

Overview of Transmission Projects

Project need and overview

Project overview

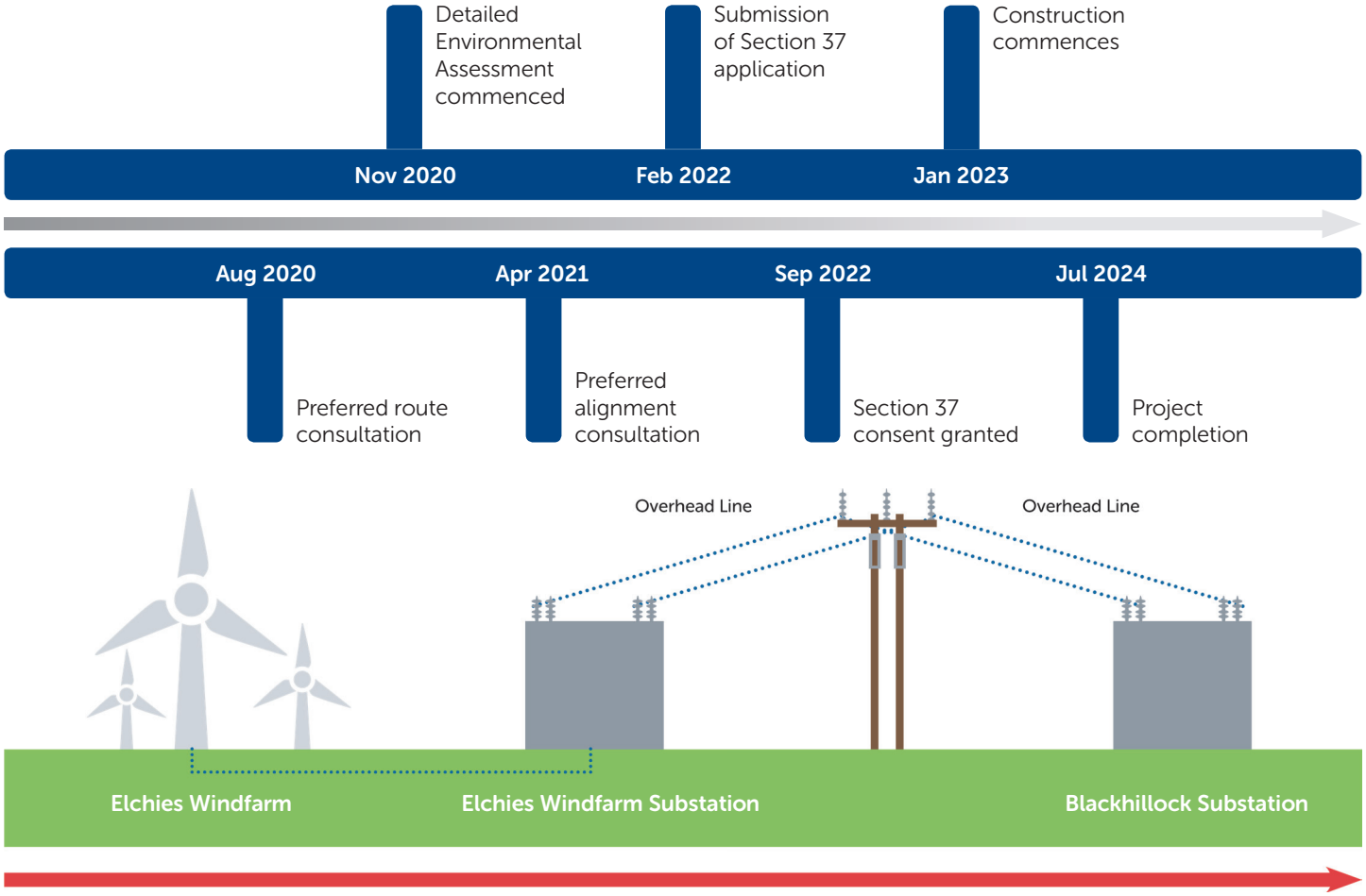
The project is needed to connect the 99MW, Elchies windfarm to the 132kV busbars at the Blackhillock substation. Under our Network Operators Licence, we are required to be efficient, co-ordinated and economic, whist having the least possible impact on people and the environment. To achieve this, a number of transmission connection options were considered against known and potential future backgrounds. As the background may change, it may be necessary to consider changes to proposed network solution, both in scope and/or timing. At this stage the connection solution comprises of a 132kV single circuit, double trident wood pole overhead line running approximately 24km.

Main elements

This transmission connection will be known as the Elchies Windfarm Connection. There will also likely be a connection to the distribution network at a different point and this will be known as the Rothes III Windfarm Connection. The Rothes III Windfarm Connection will not be considered further at this consultation and will be consulted on separately where appropriate.

- Single circuit double trident wood pole overhead line
- Access tracks
- Establish a new 132/33kV outdoor substation at Elchies windfarm site
- Connection into the existing substation at Blackhillock

Project timeline



Construction of an overhead wood pole line

A typical single trident overhead line is formed of a H pole, an example of this is shown below. The installation generally requires foundations of approximately 2.5 metres by 3.0 metres and to a depth of 2.0 metres. Access tracks are kept to a minimum wherever it is possible to help reduce the impact of the construction.

Helicopters may be used to support the construction of this overhead line by delivering materials or assisting with the stringing of conductors.

The picture below shows a typical helicopter delivery.

Construction of access tracks

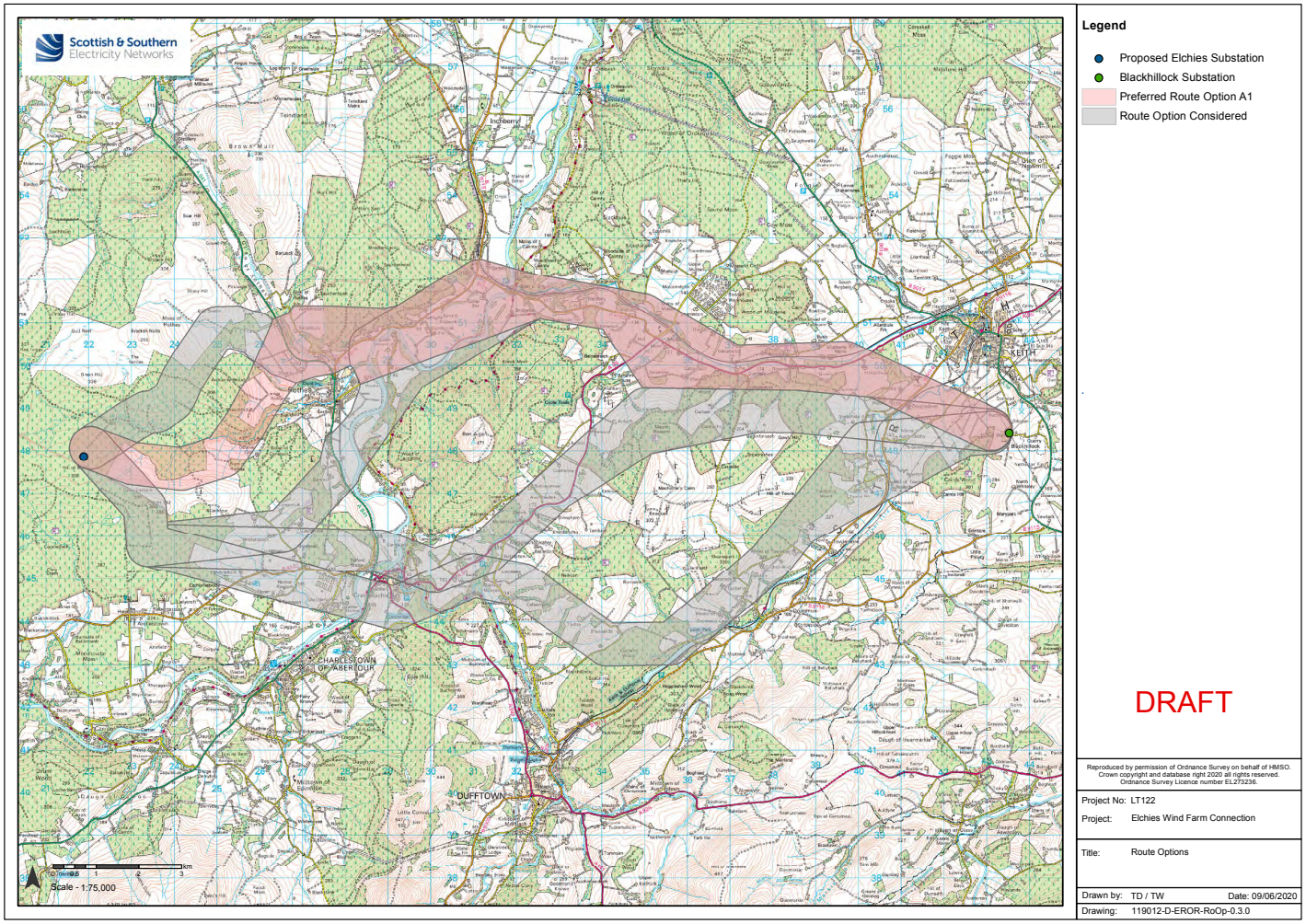
Access tracks will be constructed where the terrain and ground conditions mean access cannot be achieved by using all-terrain vehicles. Access tracks will be constructed with imported and/or locally won material. It is not envisioned that access tracks will be retained after construction of the overhead line.

Preferred route

SHE Transmission published the Overhead Line Route Selection Consultation Document in June 2020.

The project is subject to a detailed routing process. This ensures the final route meets technical requirements, is cost effective, causes the least impact on the environment and least disturbance to those living, working or visiting the area. Once the start and end points of a route are chosen a selection of 1km wide routes are identified, the preferred option of these routes is then consulted on before a preferred alignment is developed and further consultation takes place.

This consultation seeks views from statutory authorities and other interested stakeholders on the approximate 1km wide route options identified. The area surrounding the River Spey on Route A1 was widened during our assessment with the aim of identifying technically feasible crossing points which minimise the impact on the environment and communities within it. The route options that have been considered are shown below.



SHE-Transmission have selected Route A1 as the preferred option. This option has fewer technical constraints and therefore the greatest potential to avoid and/or limit interactions with the environment and communities within it.

The information obtained from this initial consultation will be used by SHE Transmission to develop a preferred overhead line alignment, for which we will seek your opinion.

All consultation documentation is available from our project website:
www.ssen-transmission.co.uk/projects/rothes-iii-grid-connection/)

Environment

Desk-based and high level site walkovers have been undertaken to gather data and understand the key environmental constraints and opportunities within the local area. This process has helped to identify the key environmental issues for this project to be landscape and visual amenity, ecology/ornithology, forestry, hydrology/hydrogeology, recreation and cultural heritage.

Following confirmation of the proposed route, further detailed studies and assessment work will be undertaken to narrow this down and identify a preferred alignment. The preferred alignment will be consulted on, feedback sought and incorporated where possible before the project progresses to the Environmental Impact Assessment (EIA) stage. At this stage the development will go through EIA Screening and Scoping, culminating in an EIA Report being produced in line with The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017. The EIA Report will support the application for consent under Section 37 of the Electricity Act 1989. This is due for submission to Scottish Ministers in early 2021.

Ecology/Ornithology

The River Spey along with the River Fiddich and tributaries have been designated as a Special Area of Conservation (SAC). SAC's are internationally designated sites under the Habitats Directive. The qualifying features of the River Spey SAC include Atlantic salmon, freshwater pearl mussel, otter and sea lamprey.

Other areas of woodland and sensitive habitats are located throughout the corridor. Protected species such as otter, capercaillie, pine marten, badger, bat and red squirrel will likely reside in these habitats. The woodland and scrub habitat throughout the area will support breeding bird species, whilst more wetland areas could provide habitats of value to breeding waders and wildfowl.

Landscape and Visual Amenity

The Spey Valley has been designated as a regionally important landscape by Moray Council due to its diverse and attractive landscape comprising a broad, gently weaving river, floodplain farmland, wooded valley sides and distinctive settlements together with the romance associated with the Spey due to its connection with whisky distilling.

Cultural Heritage

The local area comprises a number of culturally important sites and buildings. These include the Church of Dundurcas and Cauddwell Castle Scheduled Monuments and Category A Listed Buildings including the Boat of Brig Toll house, Telford Bridge, Drummuir Castle and Mill of Towie. There are also a range of non-designated assets of archaeological and cultural heritage interest.

Forestry

Forestry is a common land use within the local area, with a number of productive conifer plantations on a fell and restock cycle. Many of these plantations form part of the National Forest Estate and are managed by the Scottish Government's agency Forestry and Land Scotland. Private woodland, comprising both a mix of conifer and mixed broadleaf woodland, also exist throughout the area.

Notes

Notes

What happens now and 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 explained the approach taken to select the proposed route adequately?
- 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 route?
- Following review of the provided information, how would you describe your understanding of the Elchies (Rothes III) Grid Connection project?
- Overall how do you feel about the Elchies (Rothes III) Grid Connection 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 the members of the public and Statutory Bodies until **7 August 2020**

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

Community Liaison Manager, Louise Anderson

louise.anderson@sse.com

07384 454 233

Louise Anderson
Scottish and Southern Electricity Networks,
200 Dunkeld Road,
Perth, PH1 3AQ

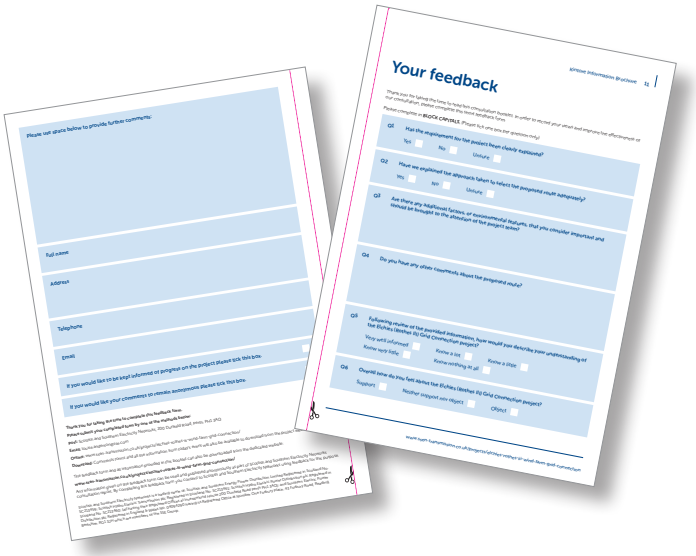
Additional information

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

Project Website: www.ssen-transmission.co.uk/projects/elchies-rothes-iii-wind-farm-grid-connection

Follow us on Twitter:
@ssencommunity

Follow us on Facebook:
@ssencommunity



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 approach taken to select the proposed route adequately?**

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 route?**

Q5 **Following review of the provided information, how would you describe your understanding of the Elchies (Rothes III) Grid Connection project?**

Very well informed ☐ Know a lot ☐ Know a little ☐

Know very little ☐ Know nothing at all ☐

Q6 **Overall how do you feel about the Elchies (Rothes III) Grid Connection project?**

Support ☐ Neither support nor 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, 200 Dunkeld Road, Perth, PH1 3AQ

Email: louise.anderson@sse.com

Online: www.ssen-transmission.co.uk/projects/elchies-rothes-iii-wind-farm-grid-connection/

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/elchies-rothes-iii-wind-farm-grid-connection/

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.