

Glenmuckloch to Redshaw Reinforcement Project

Scotland is a world leader in the fight against climate change.

The Scottish Government has set a target of Net Zero greenhouse gas emissions by 2045 – meaning that Scotland’s contribution to climate change would end, definitively, in one generation.

We are in the middle of a transformation, with the energy we use increasingly coming from greener, cleaner sources, as many new renewable generators replace older fossil-fuelled power stations.

At the same time, demand for electricity will grow rapidly over the next few years, with electric vehicles replacing petrol and diesel, and increased electrification of heating, industry and transport networks.

This huge change means we need to upgrade Scotland’s electricity transmission network, so we can get this increasing amount of energy from where it is produced to the homes, businesses, hospitals and public services that need it.

Our upgrade work includes a new transmission line connecting Glenmuckloch substation to the proposed new Redshaw substation close to the M74 in South Lanarkshire, allowing clean, green renewable energy to flow in to the national electricity network.

This leaflet tells you about our plans, where to find more information, and how you can give us your views.



Why do we need a new electricity transmission line?

SP Energy Networks (SPEN) is responsible for the transmission and distribution of electricity in central and southern Scotland. We have an obligation to maintain, operate and invest in our network to secure a safe, reliable, and economic service for current and future customers.

The existing electricity transmission network in the south of Scotland will soon be at full capacity, unable to accommodate all the clean, green renewable energy we will all need in future.

Around 2GW (gigawatts) of new renewable energy is expected to connect to the transmission network in the area around Glenmuckloch and Glenglass in the future. A new overhead line will be needed to connect this energy to the existing 400kV (400,000 volt) transmission network at Redshaw.



What does the project involve?

The Glenmuckloch to Redshaw Reinforcement Project involves construction of a new double-circuit 400kV overhead line, running north-east from Glenmuckloch substation to the proposed new Redshaw substation at Red Moss, close to the M74 motorway, where it will connect to the existing high-voltage transmission network. We will also need to create temporary accesses to tower construction areas, and construction compounds to store materials. There are well-established procedures in place for creating and then decommissioning these, to minimise impact on the environment and local communities.



What will the new overhead line look like?

The new overhead line will be carried on steel lattice towers (pylons).

The towers will have three arms on each side, and each arm will carry a set of conductors (wires). This is because there will be a circuit on each side of the towers, and each circuit has three sets of wires.

The towers are made of galvanised steel. They are grey in colour and become duller in appearance after about 18 months.

The towers (L12 design) have a standard height of 46 metres and are placed approximately 300 metres apart. The exact height and distance between them will vary depending on the landscape and any obstacles the lines need to cross, such as roads, rivers and railway lines, to ensure electrical safety clearance to the ground. Lower-height towers can also be used in some situations.



We want to hear your views

Our public consultation runs from Monday 26 February 2024 to Thursday 28 March 2024.

SPEN attaches great importance to the effect our work may have on the environment and local communities. We want to hear what local people think about our plans, to help us develop the project in the best way.

Please come along to one of our public exhibitions, where you can see our plans in more detail and ask questions of the project team.



| Date | Location | Website |
|---|---|---|
| Monday 26 February, 11.30am to 4.30pm | St Brides Centre, Braehead, Douglas ML11 0PT | www.stbridescentre.co.uk |
| Tuesday 27 February, 2.30pm to 7.30pm | Crawfordjohn Hall, Crawfordjohn ML12 6SR | www.crawfordjohnhall.org |
| Wednesday 28 February, 1.00pm to 7.00pm | Miners Memorial Centre, Needle Street, Kirkconnel DG4 6ND | www.facebook.com/MinersMemorialCentre |

All project documents are available on our project website, where you can also fill in an online feedback form.

If you don't have internet access, you can call our Freephone number to ask any questions you may have or request a personal call back from a member of the project team. We can also send you a paper feedback form and a Freepost envelope so you can complete it and return it to us free of charge.

Folders containing project information are also available to view at the following locations, during opening hours:

- St Brides Centre, Braehead, Douglas ML11 0PT
- Kirkconnel Library, Greystone Ave, Kelloholm, Sanquhar DG4 6RA

At this stage, your comments are not representations to the planning authority. If we do make an application for development consent in future, you will be able to make formal representations at that stage.

What happens next?

Following this first round of consultation we will develop a detailed design and alignment for the new overhead line, including locations for towers, access routes and working areas. We will publish a report summarising the feedback received in this first round of consultation and how this has influenced our proposals.

We will then carry out a detailed Environmental Impact Assessment and hold a second round of public consultation, so that people can give us their views on the detailed route alignment.

After considering feedback received in the second round of consultation, we will finalise our proposals and submit consent applications to the Scottish Government's Energy Consents Unit, for consideration by the Scottish Ministers.

The Scottish Ministers will then undertake a final round of statutory consultation before making any decision on our applications.



How to contact us

Website: www.spenergynetworks.co.uk/pages/grpp.aspx

Email: grpp@communityrelations.co.uk

Freephone: 0800 0217890

Freepost: FREEPOST SPEN GRRP



Our preferred route

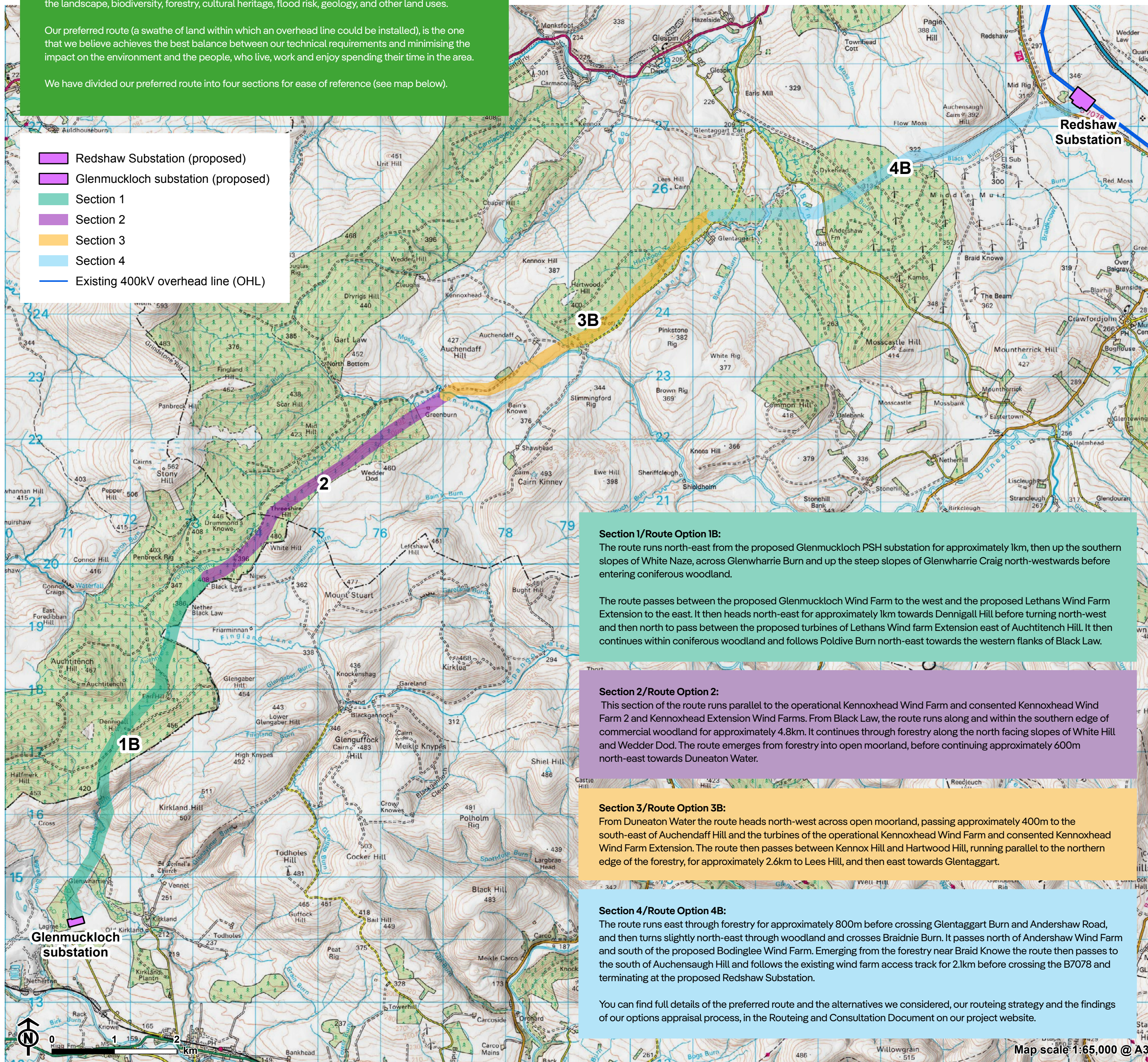
SPEN has been working with environmental consultants to identify potential routes for the new overhead line between the proposed Glenmuckloch and Redshaw substations.

We appraised each option for its impact on a range of criteria including local views, the character of the landscape, biodiversity, forestry, cultural heritage, flood risk, geology, and other land uses.

Our preferred route (a swathe of land within which an overhead line could be installed), is the one that we believe achieves the best balance between our technical requirements and minimising the impact on the environment and the people, who live, work and enjoy spending their time in the area.

We have divided our preferred route into four sections for ease of reference (see map below).

- Redshaw Substation (proposed)
- Glenmuckloch substation (proposed)
- Section 1
- Section 2
- Section 3
- Section 4
- Existing 400kV overhead line (OHL)



Redshaw overhead line diversion

We will also need to divert a short section of the existing 400kV overhead line (the one that runs parallel to the M74) at Redshaw, to connect into the proposed new Redshaw substation.

To do this, we will need to build a short new stretch of overhead line, including three new towers and replacing two existing towers with angle towers (ZV108 and ZV111), to 'bypass' the section that currently crosses the proposed new substation site (see Figure 1). We will then remove that section and build the substation. Once the substation is built, we will connect it to two of the new towers (see Figure 2).

Please give us any comments you may have on the proposed overhead line diversion, which will be subject to a separate consent application in due course.

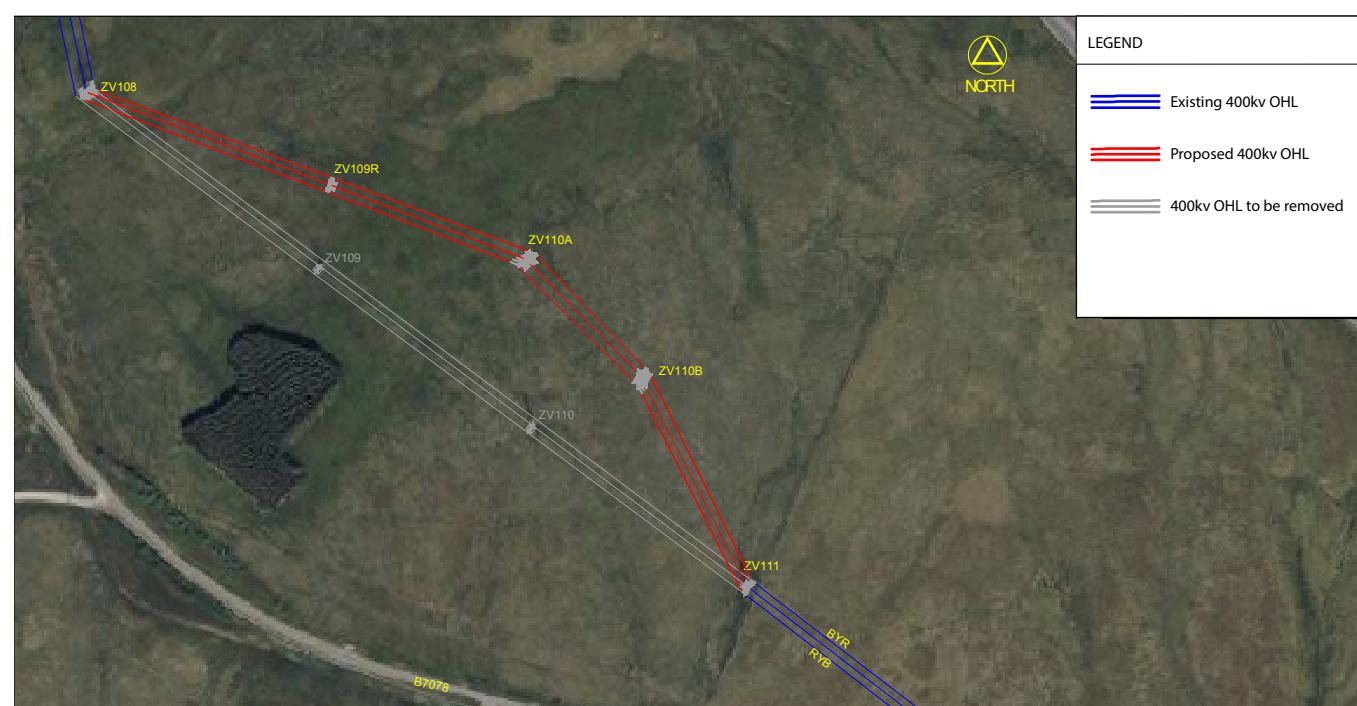


Figure 1

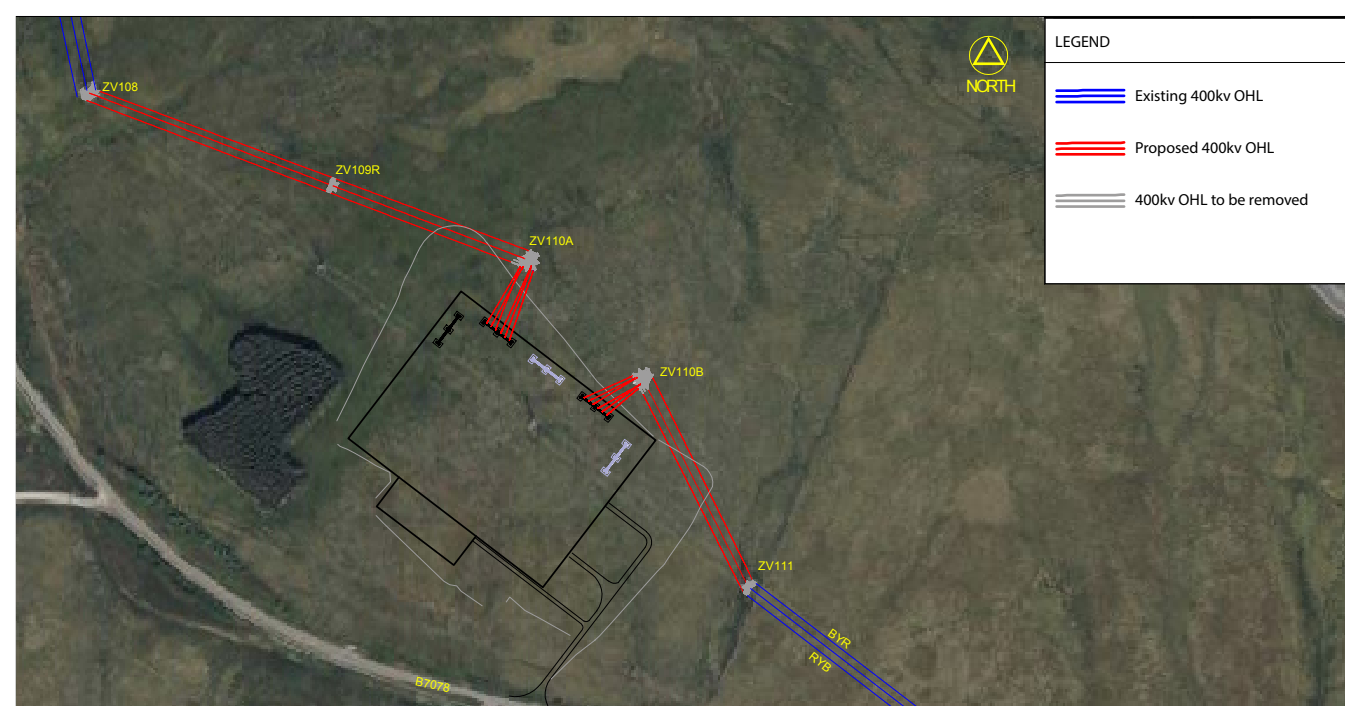


Figure 2