Artfield Forest Connection Project

Frequently Asked Questions

Who is SP Transmission?

SP Transmission owns and operates the electricity transmission network in central and southern Scotland. Its role is to maintain, operate, and invest in the network to ensure a safe, reliable, and economical service for current and future consumers.

The developer of the proposed Artfield Forest Wind Farm has asked us to connect the wind farm to the national electricity network. As a licensed electricity operator, we are legally required to provide this connection.

What statutory obligations does SP Transmission have?

Our statutory obligations are outlined in the Electricity Act 1989 and our transmission licence. We are required to develop and maintain an efficient, coordinated, and cost-effective transmission system that meets security and quality of supply standards. We must also offer to connect new power generators to the system and work to minimise disturbances to the natural and built environment, as well as to the people who live, work, or enjoy it.

Who regulates SP Energy Networks?

We are regulated by Ofgem (Office of the Gas and Electricity Markets), the independent national regulatory body. Further information about Ofgem is available on:

www.ofgem.gov.uk

Consumer Affairs team on 020 7901 7295

Emailing consumeraffairs@ofgem.gov.uk

How will SP Energy Networks pay for this project?

The wind farm developer pays to connect to SPT's transmission system. Over time, the cost of maintaining and operating the grid is shared across all users of the system.

Will the cost be added to customers' bills?

Ultimately, the cost of our investment in the electricity system is partly borne by consumers through electricity bills, so we are obliged to be economic and efficient. We recover our costs through regulated charges levied by Ofgem.

When is the project needed by?

We plan to have the new overhead line in operation by Q2 2030, but there is a lot to do before then, such as conducting environmental studies, designing the project, obtaining the necessary development consent, and building it.

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Who gives you permission to construct new overhead lines?

An application for consent under Section 37 of the Electricity Act 1989 to install the proposed overhead line will be submitted to the Scottish Government Energy Consents Unit. Consequently, Scottish Ministers will make the final decision on whether it is granted.

Why is this project needed?

Scotland is in the middle of a transformation, with Scotland aiming to reach net zero across all greenhouse gases by 2045, as new renewable generators replace older fossil-fueled power stations. By connecting a new wind farm to the national electricity network, this project will help a cleaner, greener future.

What exactly are you proposing?

We are proposing to build approximately 9km of new overhead line running from the proposed Artfield Forest Wind Farm Substation near Artfield Fell to the proposed Ladyburn Collector Substation near Glenluce.

The new overhead line will carry a maximum voltage of 132kV and will be supported on wood pole structures of the Trident design, which are smaller and less prominent in the landscape than steel lattice towers.

How will you determine the route of the electricity connection?

The routeing of overhead lines is a complex process, requiring a balance to be struck between statutory obligations, engineering requirements, economic viability, the environment, and people who live, work or enjoy leisure time in the area.

Established guidelines for routeing transmission overhead lines are in place, which combine in-depth environmental assessments with technical and economic considerations. A key aspect of this is consulting with landowners, stakeholders, and the public to guide the project's development.

You can find out more about how we develop routes in our Approach to Routeing and Environmental Impact Assessment document, which is available to view on the project website.

You can find detailed information specific to the routeing of the proposed Artfield Forest Connection Project in the Routeing and Consultation Document, which explains how we arrived at the preferred route.

What will the new overhead line look like and how high will it be?

The new overhead line will mainly use Trident wood pole structures, typically 11 – 16m high. Heights may be greater where needed to cross railways, roads or challenging terrain. Some double Trident wood poles ('H-poles') will also be used, for example, where there is a change in direction.

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Wood poles are placed approximately 80 - 100 metres apart, but the exact distance between them will vary depending on the landscape and any obstacles such as roads, rivers and railway lines.

The poles are made of sustainably sourced timber. They are brown in colour but will become light grey / silver over time.

Can the new line go underground?

Under the Electricity Act 1989, SPEN is required to consider technical, economic and environmental matters, and reach a balance between them.

High voltage overhead lines are the proven choice for the bulk transmission of electricity throughout the world based on economy and reliability.

SP Transmission will consider undergrounding an overhead line, or a section of that line, in particular circumstances where no suitable route for an overhead line can be identified. You can find out more about this in our Approach to Routeing and Environmental Impact Assessment document, which is available on the project website.

Will you be consulting local people?

Yes. The first round of consultation, which involves asking people what they think of our preferred route, is currently underway. This is not a statutory requirement but is useful, as it allows us to understand local issues. After we submit our application for consent in 2027, there will also be a formal statutory consultation conducted by the Scottish Government.

Are you consulting landowners?

Yes. Owners and occupiers of land that might be affected by the preferred route will be contacted. If you believe that your land may be affected and you have not yet heard from us, please get in touch.

Can you tell me more about Electric and Magnetic Fields (EMFs)?

Wherever electricity is used, there will also be electric and magnetic fields. This is inherent in the laws of physics – we can modify the fields to some extent, but if we are going to use electricity, then EMFs are inevitable.

Like many other things that we encounter in nature, EMFs can be harmful at high enough levels. But the fields required, for example, to start interfering with the body's nervous system are much greater than those produced by the UK electricity system. Hundreds of millions of pounds have been spent investigating this issue around the world. Research still continues to seek greater clarity, although the balance of scientific evidence to date suggests that EMFs do not cause disease.

For more information, please see the 'EMF - The Facts leaflet available on the project website.

You can find out more about our approaches to both overhead lines and undergrounding in our Approach to Routeing Transmission Infrastructure document