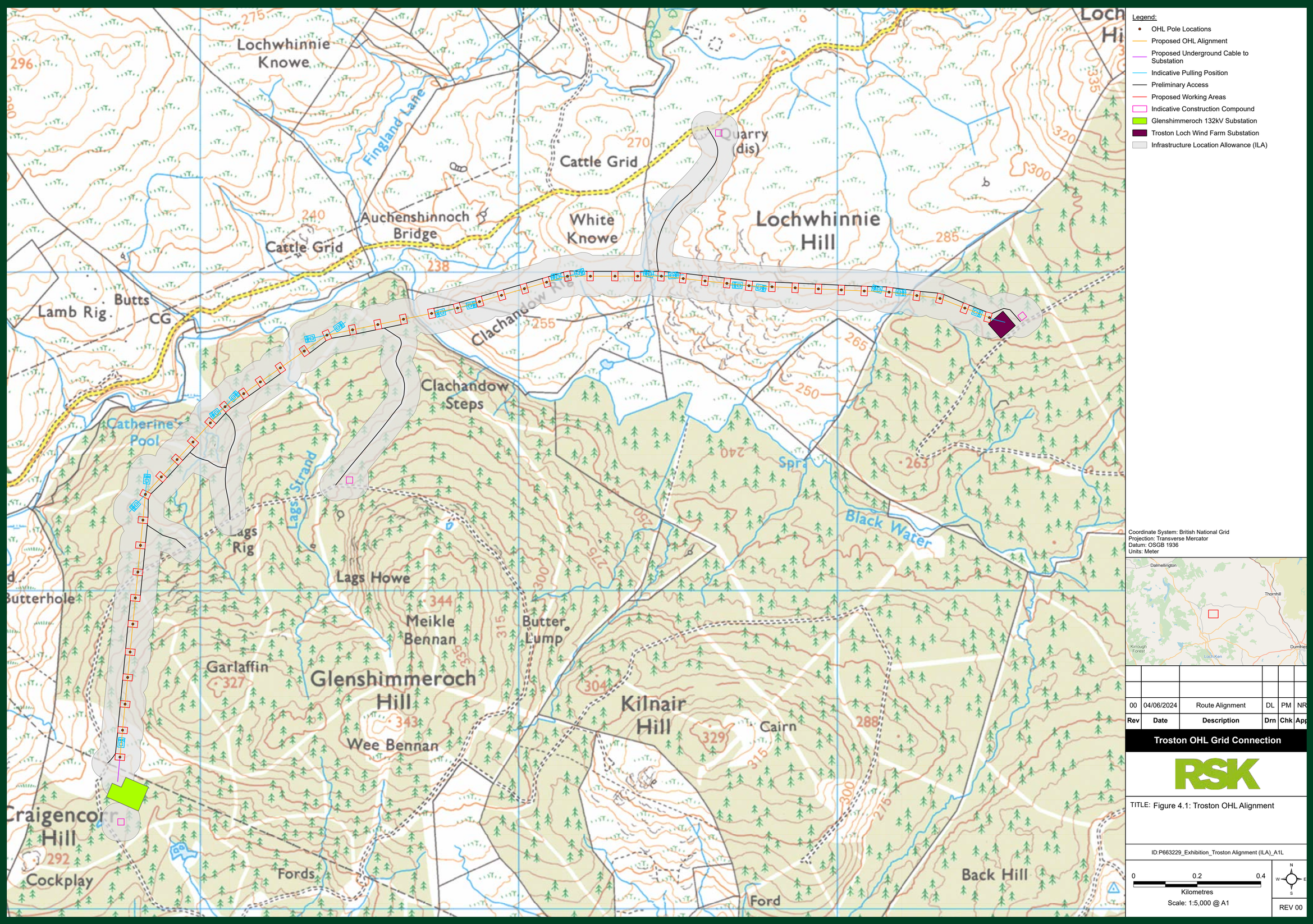
What does the project involve?

SPEN propose to construct an overhead line (OHL) between the consented Troston Loch Wind Farm substation and the proposed Glenshimmeroch collector substation in order to connect the Troston Loch Wind Farm to the national grid.

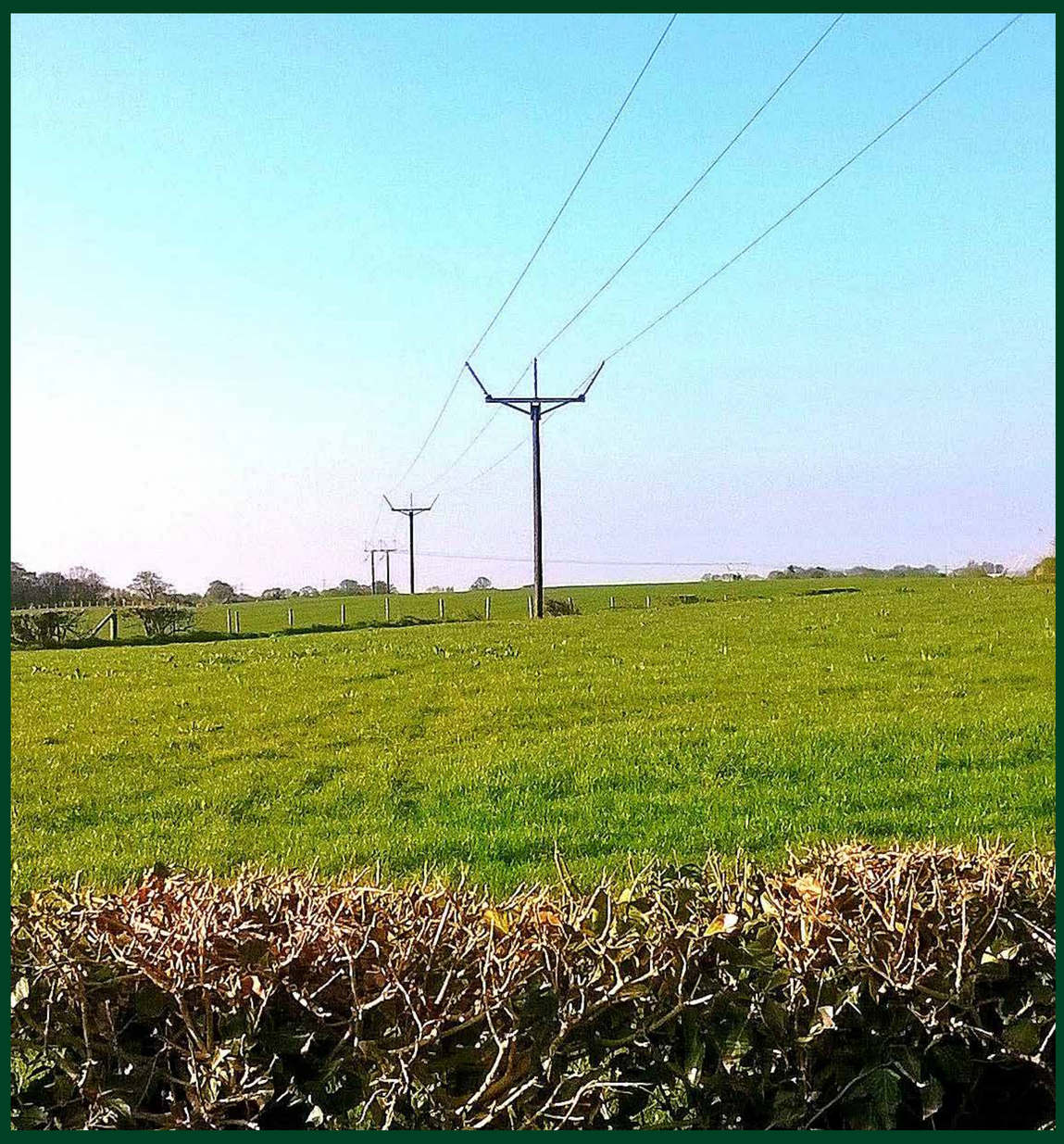
This involves the construction of a new 3.7 km-long, 132 kV single circuit wood pole OHL between the Troston Loch substation and the Glenshimmeroch collector substation. The point of connection and collector points are shown on the figure below.



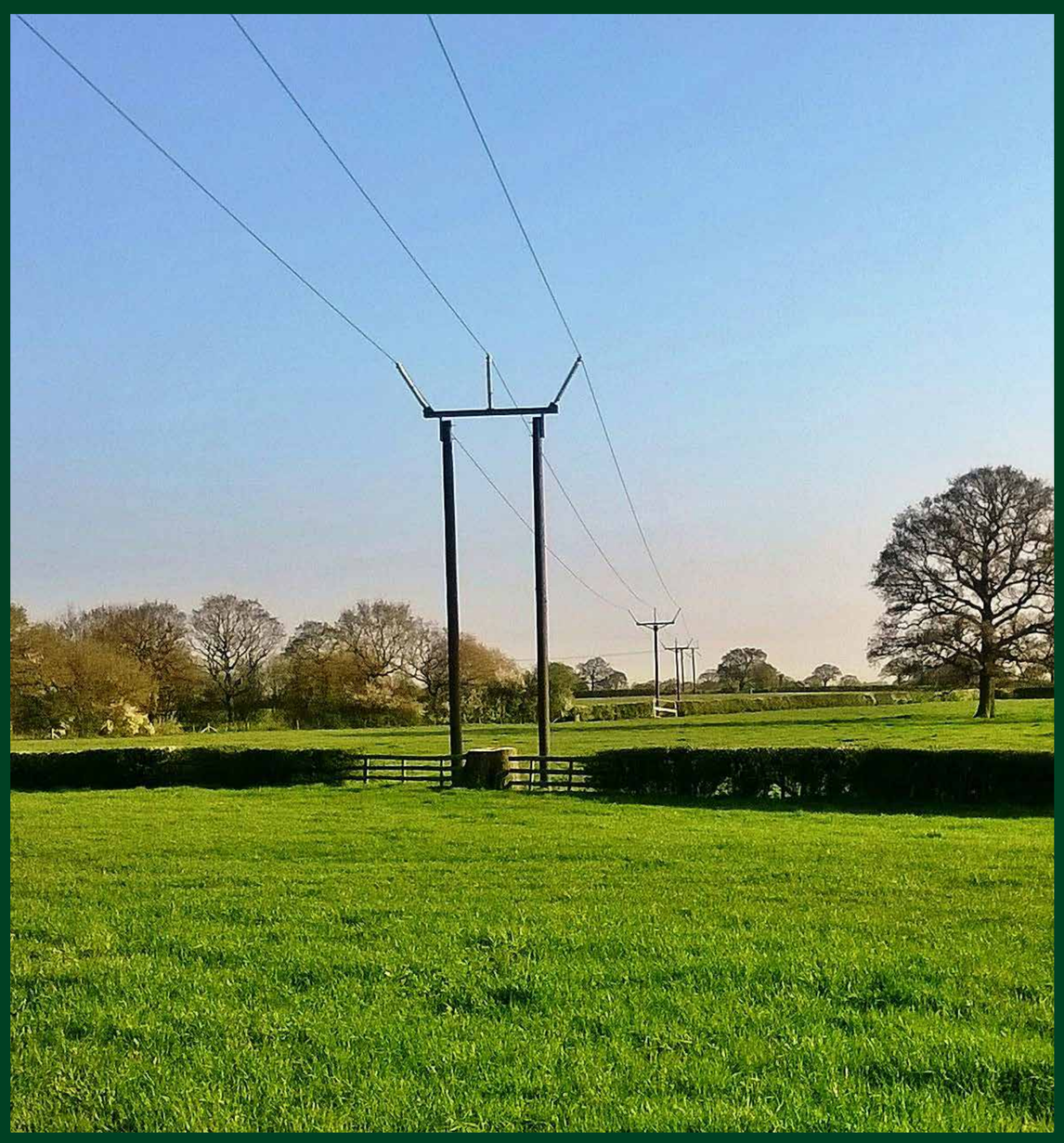
What would the overhead line look like?

The wood pole heights would range from 10 to 18 m, with a typical height of 12 m. The spans between poles would range from 63 m to 90 m, depending on landscape variations and any environmental and technical constraints.

The wood pole would support three conductors (wires) in a horizontal flat formation. Insulators, attached to the pole cross-arms, support the conductors and prevent the electric current from crossing to the pole body.



The photos below show some examples of typical trident double wood poles, section and terminal structures, and similar poles and structures would be used for the Troston OHL grid connection.



How was the route selected?

SP Energy Networks

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, enjoy recreation and pass through.

We are following established guidelines for routeing transmission overhead lines, which combine in-depth environmental studies with technical and economic factors. A key part of this is consultation with landowners, stakeholders and the public to inform the development of the project.

To allow identification of a preferred route, an appraisal of a number of identified route options was undertaken. Each route option was subjected to an environmental and technical appraisal, where the goal was to identify a preferred route.

From this process, the route below was selected because it would have the least impact on the surrounding environment and society, compared to the other route options assessed.

Environmental appraisal

An environmental appraisal has been undertaken to inform the design of the proposed OHL and to provide environmental information to support the application for consent under Section 37 of the Electricity Act 1989.

The scope of the environmental appraisal included:

- landscape and visual
- ecology and ornithology
- archaeology and cultural heritage
- geology, peat, hydrology and hydrogeology
- forestry
- traffic and transportation.

Landscape

A landscape and visual appraisal was carried out which concluded that the proposed OHL would not materially change the landscape character or visual amenity of the local area, and a landscape of this scale can accommodate an OHL of this nature without fundamentally impacting the character of the landscape.

Ecology and ornithology

The appraisal comprised a desk-study and a series of ecology surveys including habitat surveys, bird surveys and other protected species survey. A number of mitigation measures would be undertaken to minimise impacts on habitats and species, including:

- pre-construction surveys
- restricting work from certain areas
- installation of line markers on the conductors to minimise bird collision risk
- nesting bird checks prior to vegetation clearance and construction works to identify and protect active nests
- compensatory planting, and
- habitat enhancement and restoration.

With the inclusion of the proposed mitigation measures, all effects were assessed to be negligible or minor.

Environmental appraisal

SP Energy Networks

Geology, peat, hydrology and hydrogeology

The appraisal included a desk study and site visit to identify sensitive features as well a peat depth survey. The location of the wood poles have been sited to avoid areas of deep peat. Good construction practice and mitigation measures would be undertaken to prevent or reduce the pollution of surface water, groundwater and private water supplies.

With the inclusion of the mitigation measures, potential effects are assessed to be no more than minor.

Forestry

The area of the proposed OHL route is mostly made up of commercial conifer plantations. The aim of the proposal has been to minimise the amount of tree felling, and all felling for the installation of the OHL would be based on linear felling and felling back to windfirm edges where required. Compensatory planting would be carried out for the loss of trees along the OHL route and other areas restocked up to the windblown edge.

Archaeology and cultural heritage

A desk study and site visit were carried out to identify cultural heritage assets. There are no designated heritage assets within a 1 km study area and only 13 non-designated heritage assets within a 200 m study area.

None of these assets are considered to derive cultural significance from their setting, and their significance would be fully preserved. With the inclusion of mitigation measures, no residual effects are likely.

Traffic and transport

The existing road network has sufficient capacity to overcome any temporary increase in traffic movements generated during the construction period. Any effects during the construction period would be mitigated through a Construction Traffic Management Plan and it is considered the proposed development would have a negligible effect on the local road network.

Thank you for coming to our event

We would like to know your opinion.

Please contact us for more information or share your thoughts on the proposed OHL. You can do this by:

Completing the feedback form

Post (write to):
Troston Overhead Line Grid
Connection Project
Land and Planning Team
SP Energy Networks
55 Fullarton Drive
Glasgow
G32 8FA

Email: trostonprojectmanager@spenergynetworks.co.uk

Thank you for participating in this proposal. Your input is valued and your contribution is appreciated.