



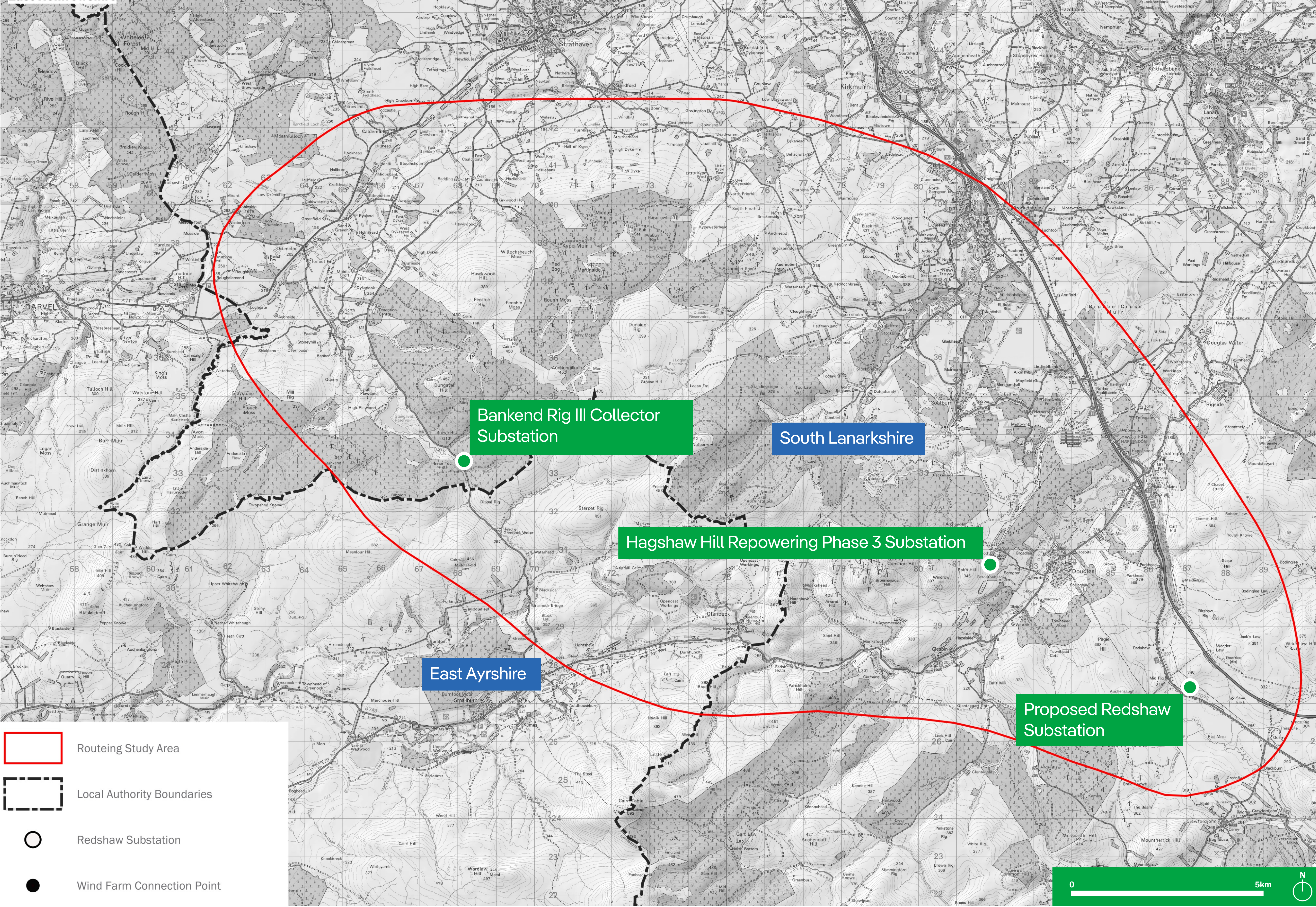
# 01. Welcome

## Welcome to our consultation event!

We are pleased to welcome you to this consultation event and introduce our proposals to construct a single circuit 132 kilovolt (kV) overhead line carried on wood poles from the Bankend Rig III Collector and Hagshaw Hill Repowering Phase 3 Substations to the proposed Redshaw Substation.

The purpose of this event is to provide you with an opportunity to learn about the project, ask questions and provide us with feedback on the preferred route corridor.

Following this consultation, the proposed route will be finalised and will be carried forward to subsequent stages, including the Environmental Impact Assessment (EIA) and the application for consent.



The Routing Study Area and Substation Locations

## The need for the proposed development

Scottish Power Energy Networks (SPEN) received a request to provide a grid connection to the proposed Hagshaw Hill Repowering Phase 3 Wind Farm and Bankend Rig III Wind Farm to connect into the electricity network if approved.

SPEN has a legal duty to keep its network up-to-date to safeguard electricity supplies. SPEN also has a duty to provide a connection for new generation to the wider electricity transmission network.





02.

# Who are SP Energy Networks?

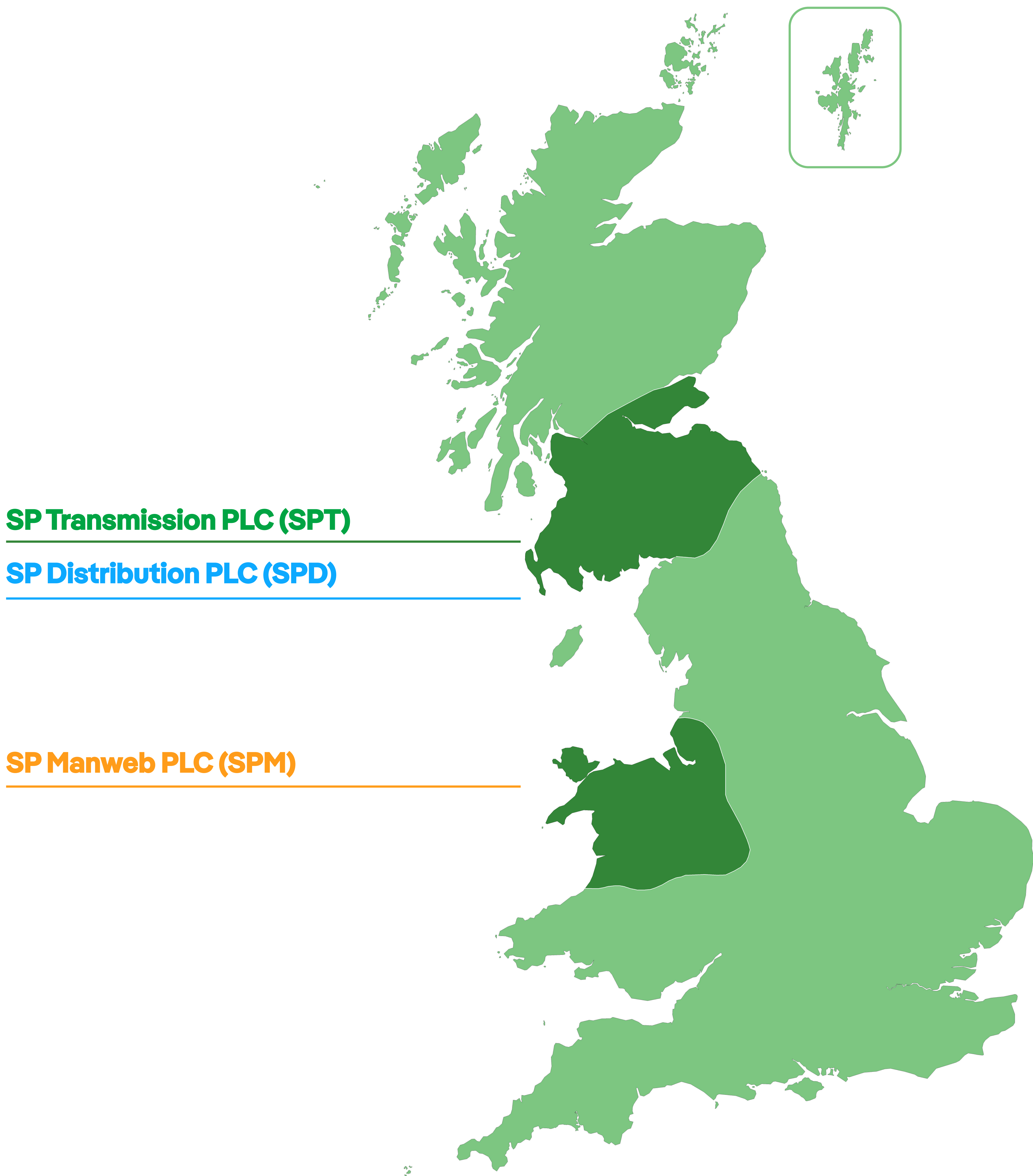
We are SP Energy Networks. As a Distribution and Transmission Network Operator we keep electricity flowing to homes and businesses throughout Central and Southern Scotland, North Wales, Merseyside, Cheshire and North Shropshire.

These businesses are ‘asset-owner’ companies holding the regulated assets and Electricity Transmission and Distribution licenses of Scottish Power. As part of this, SP Energy Networks operates, maintains and develops the network of cables, overhead lines and substations which transport electricity to connected homes and businesses in Southern and Central Scotland.

Our three regulated electricity network businesses are:

- 1. SP Transmission PLC (SPT).
- 2. SP Distribution PLC (SPD).
- 3. SP Manweb PLC (SPM).

Under Section 9 of the Electricity At 1989, SP Energy Networks has a legal duty to safeguard electricity supplies by keeping its network up to date and to enable new connections for the generation and supply of electricity.







# 03.

## The Proposal

The Redshaw to Hagshaw Tee to Bankend Rig III Collector substation Overhead Line Grid Connection Project involves a 132 kV overhead line (OHL) supported on wood poles. This will connect Redshaw Substation to the Bankend Rig III Collector Substation via a connection to Hagshaw Hill Repowering Phase 3 Substation in the South Lanarkshire Council area.

This consultation exercise relates to the OHL elements of the connection only.

Whilst SPEN will be providing the collector substation at Bankend Rig III, they will be seeking consent for this via a separate Town and Country planning application to South Lanarkshire council in near future.

The Hagshaw Hill Repowering Phase 3 Substation will be provided by the developer of that wind farm and the detail and location of this does not form part of this consultation.

### What will the overhead line look like?

The wood pole OHL is proposed to be supported with galvanised steelwork cross arms supporting aluminium conductors on insulators. These are suitable for supporting single circuit lines operating at 132 kV.

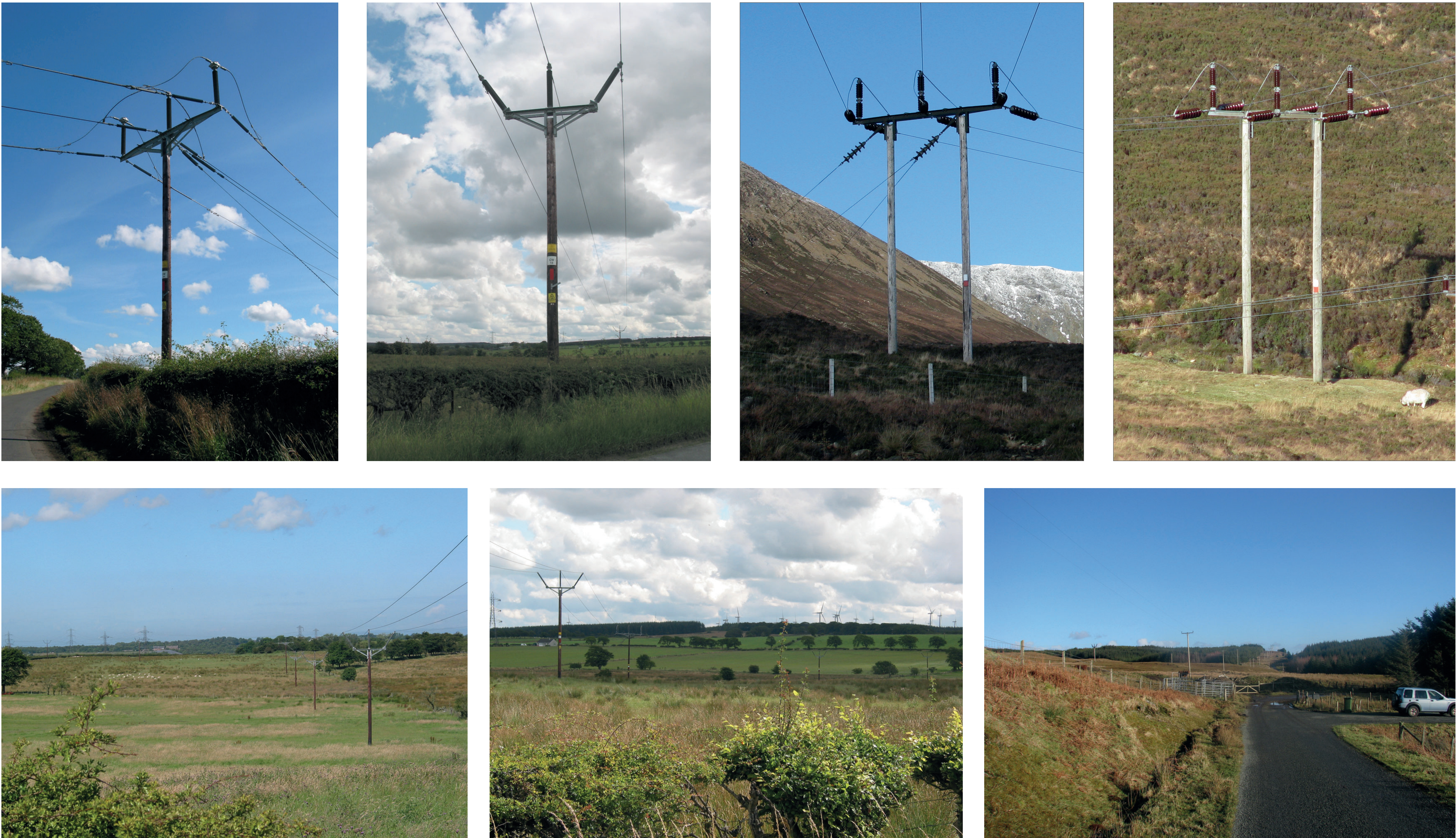
Whilst wood poles have a standard height above ground of 15m, these can be extended or reduced in height, as required.

Pole heights may require to be increased where circumstances dictate, e.g. over elevated land, structures or features.

The distance between wood poles will average between 80m to 120m, but can be increased if there is a requirement to span a larger distance due to the presence of a feature in the landscape, such as a river or loch.

The precise pole configuration, height and span will be determined after a detailed line design. This OHL design has been determined following a detailed review of the engineering and technical requirements for the connection.

The photographs show a trident ‘H’ pole and typical trident wood pole structure.



Trident wood pole examples





# 04.

## The Routeing Process

SP Energy Networks has been working to identify potential route options for the OHL connection. The project has gone through an iterative routeing process to identify a technically feasible and economically viable single circuit 132 kV OHL grid connection between Redshaw Substation and the proposed Bankend Rig III Collector Substation via providing a connection to Hagshaw Hill Repowering Phase 3 Wind Farm Substation.

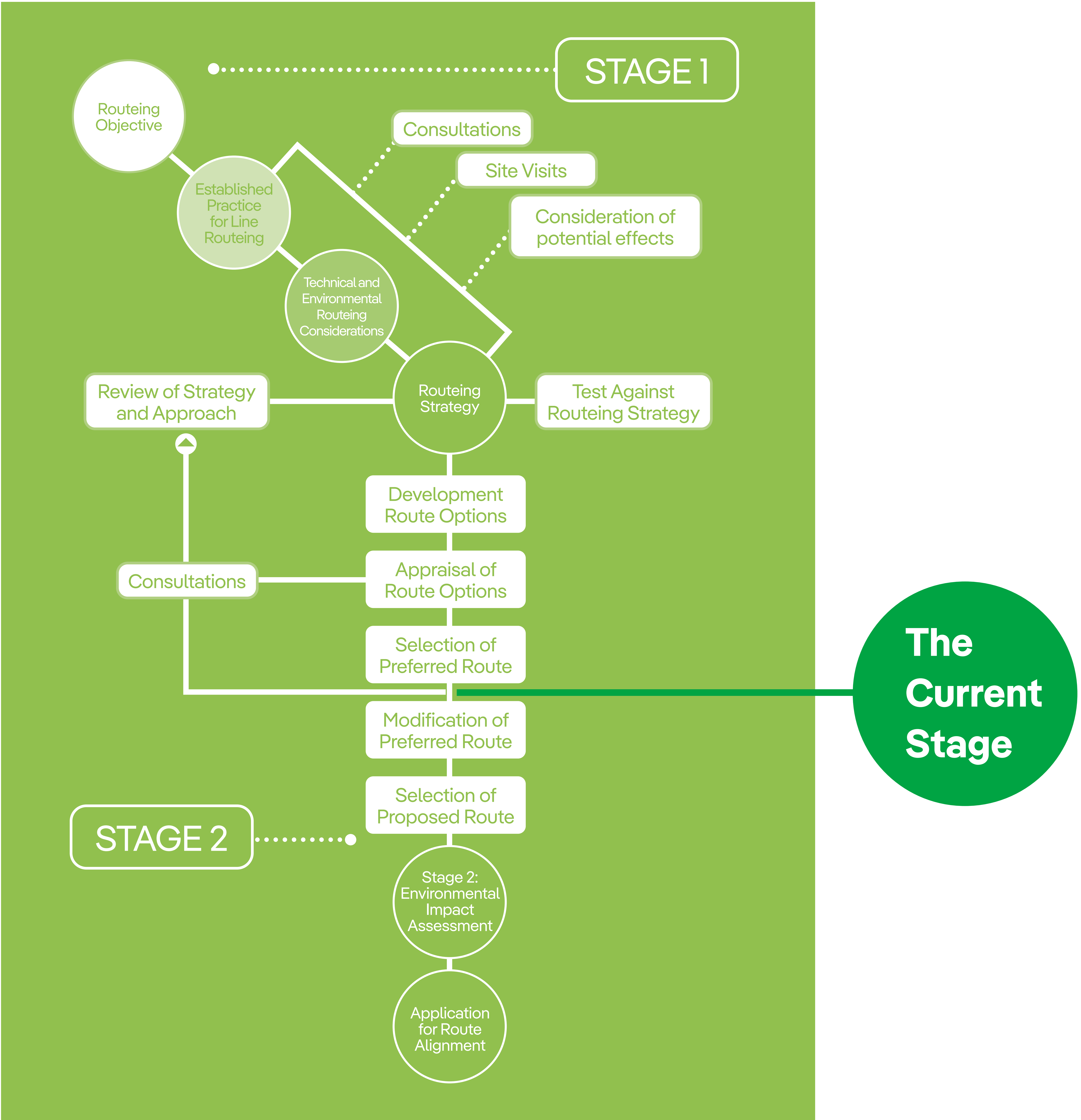
This solution causes, on balance, least disturbance to the environment of the Study Area and the people who live, work and enjoy recreation within it.

The first step was the identification of a Study Area and within this the identification of routeing considerations. These take into account areas of the highest or high environmental value or interest, local considerations and likely effects on the environment, including visual amenity and landscape character. The information gathered formed a picture of the different constraints and opportunities within the Study Area.

Secondly, a routeing strategy was developed to take into account the technical and environmental routeing considerations identified within the Study Area.

This was followed by the identification, assessment and refinement of route options based on routeing considerations. For example, those which avoid and/or make best use of routeing constraints and opportunities, such as avoiding designated sites or settlements, or making use of landform or landscape features to prevent sky lining (i.e. where the OHL would be seen above the landform). Through this iterative process route options may be refined or rejected with the aim of identifying a preferred route option which best meets the project objective.

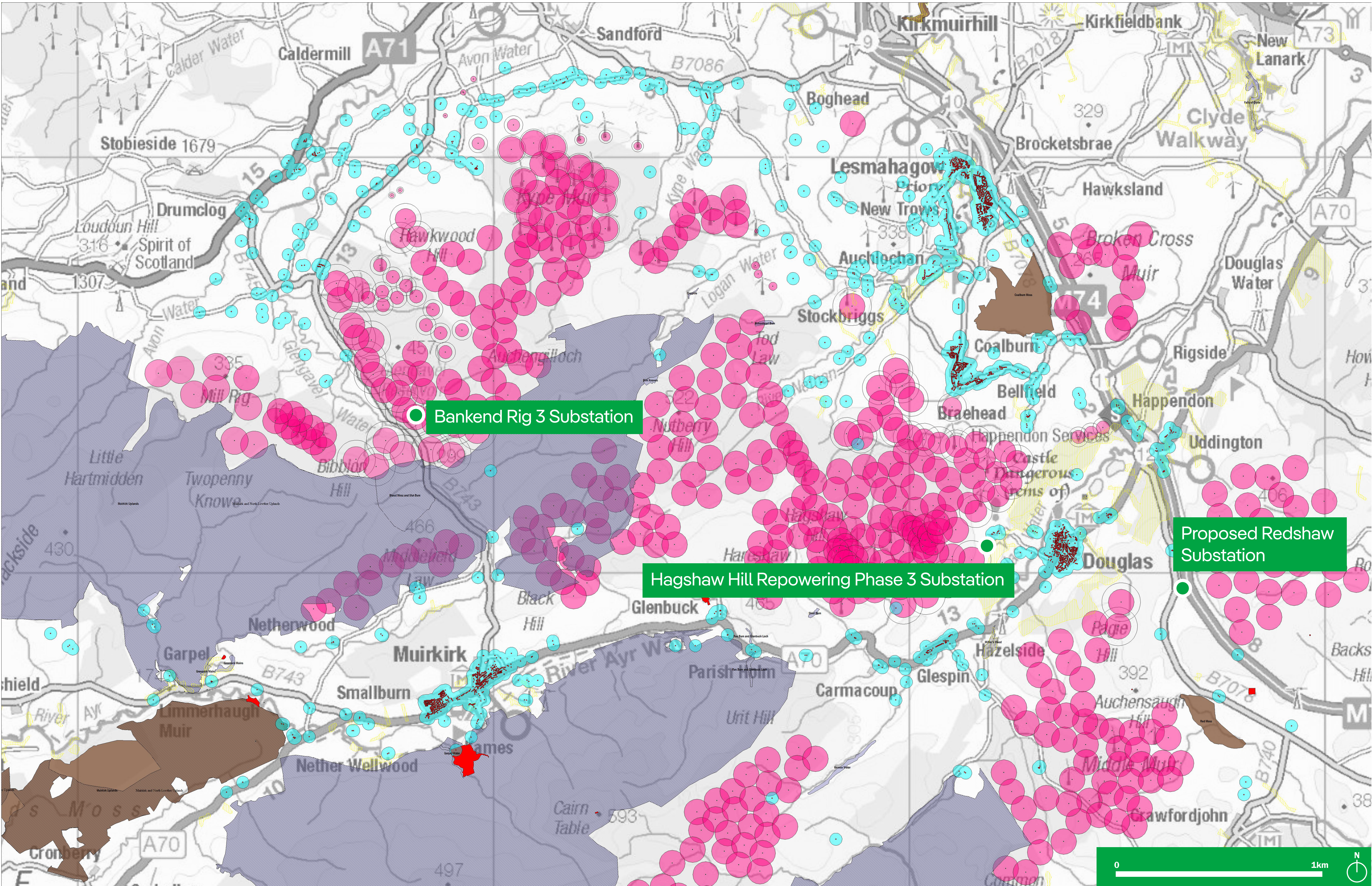
### The Key Stages of the Routeing Process



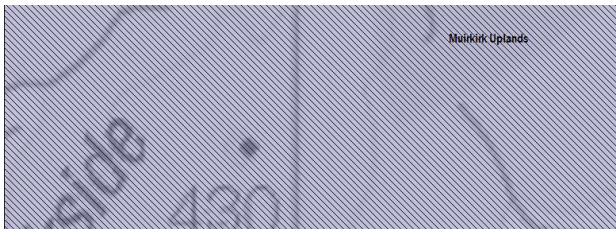



To identify and assess the route options, SPT’s statutory duties under the Electricity Act 1989 require a balance between the **Environmental, Technical** and **Economic** considerations.

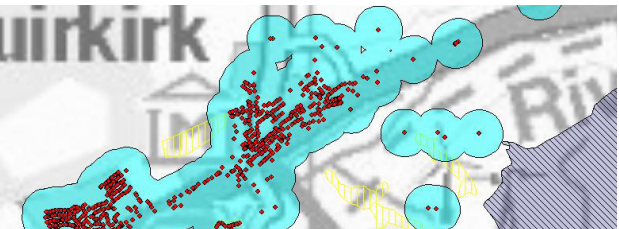
Duties imposed by Schedule 9 of the Electricity Act 1989 requires that the proposed connection is economically viable. SP Energy Network’s proven choice for an economic grid connection takes the form of an OHL, involves ensuring the directness of route options, and avoids areas where technical difficulty or compensatory schemes would render the connection uneconomical.



Key Constraints within the Routing Study Area

 Ecology/Ornithology Designations

 Wind Turbine Offsets

 Residential Buffers

## Technical Considerations

Technical considerations are a matter of SP Energy Network’s ability to build, operate and maintain an OHL within the route options identified. For example, taking into account existing electricity transmission or distribution infrastructure, topography, side slope gradients, altitude, ground conditions and accessibility.

## Environmental Considerations

SPT is subject to duties under Schedule 9 of the Act:

“(a) to have regard to the desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest and of protecting sites, buildings and objects of architectural, historic or archaeological interest; and (b) to do what it reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites, buildings, or objects.”

When considering environmental factors, the approach to routing is sequential in that the most important environmental constraints are considered first, followed by those of lesser, and reducing, importance. The range of environmental factors considered includes the following:

- o **Landscape & visual** matters, including sensitive landscapes and effects on landscape character.
- o **Ecological** factors - including here nationally and internationally important designations.
- o **Ornithological** factors, including breeding and wintering birds and raptors.
- o **Archaeological and cultural heritage** assets, including above and below-ground assets.
- o **Hydrological & geological** factors, private water supplies, watercourses, waterbodies & habitats.
- o Land uses including **mineral operations, agriculture** and **forestry**.
- o Buffer zones to **private residences**.
- o **Recreation** and **tourism** factors, including locally valued facilities.
- o **Traffic and transport** matters, including access provision and road crossings.

Taking this approach has ensured that areas of high value amenity have been entirely avoided and routed to ensure that the designations are not significantly affected. Particular regard was taken to the Muirkirk Uplands Site of Special Scientific Interest (SSSI) and the Muirkirk and North Lowther Uplands Special Protection Area (SPA), which cover a large proportion of the central parts of the Routing Study Area.

Additional ecological sites were considered, including SSSIs and ancient woodlands, as were heritage constraints including the area around Douglas Castle, listed buildings and scheduled monuments. Residents were avoided through buffers, whilst other environmental factors including watercourses and flood zones informed the routing process.





# 06.

## Routeing Options

### Primary Route Corridor

Based upon the areas of highest environmental value identified in the previous section and the distribution of landscape and other features, alongside technical and economic considerations, there is only a single high level route corridor option available.

This is identified as the Primary Route Corridor (PRC) on the plan below.

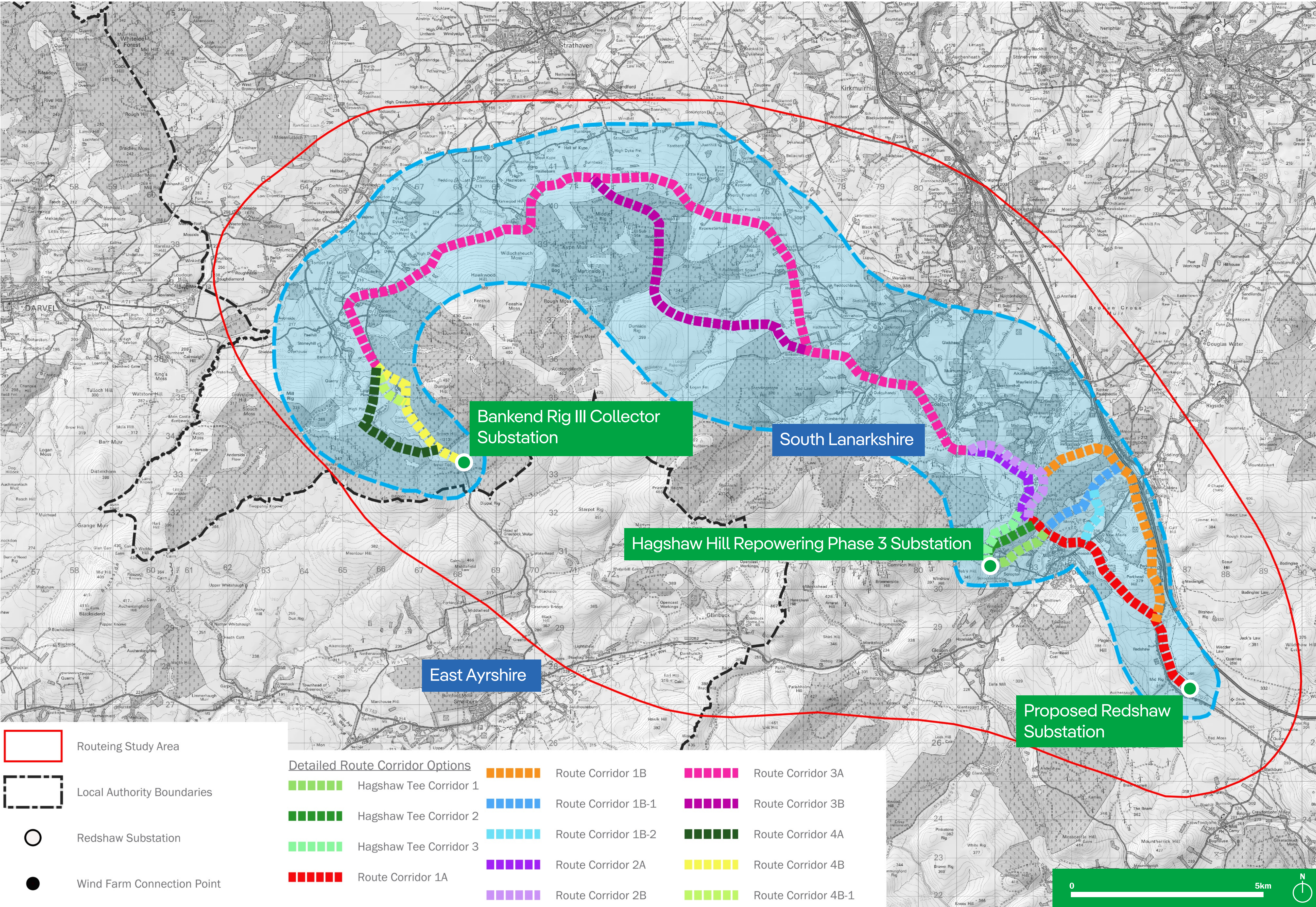
Whilst a wide range of technical, economic and environmental constraints were considered at this stage, the location of the Muirkirk and North Lowther Uplands SPA and the Muirkirk Uplands SSSI represent key constraints due to their sensitivity and the route corridors avoid these areas.

### Detailed Route Corridor Options

Having defined the range of high level route corridors within which the connection could be located, it was necessary to undertake a more detailed appraisal process and to consider more detailed route corridors. The detailed route options identified on the plan below have been reviewed in light of the following environmental and technical considerations:

- o Landscape quality.
  - o Visual amenity.
  - o Residential amenity.
  - o Potential route length.
- o Environmental designations.
  - o Land use and forestry.
  - o Technical constraints.
  - o Cultural constraints.

Throughout the appraisal process, those parts of the Holford Rules which are applicable to the different appraisal principles are encompassed within the general review.



The Primary Route Corridor and Detailed Route Corridor Options

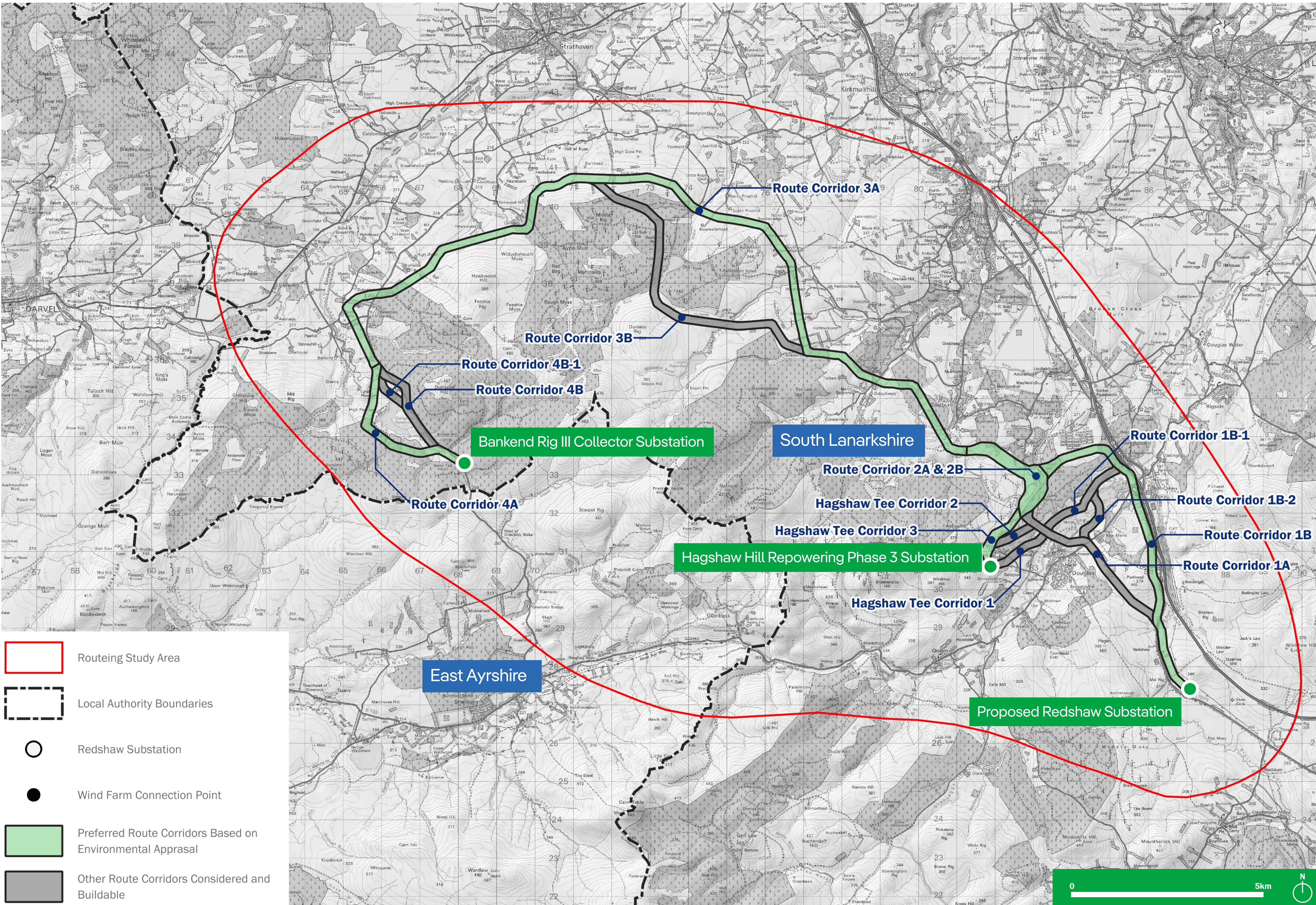




# 07.

## The Preferred Route

The Preferred Route corridor was identified following a systematic process of addressing in greater detail the range of technical, environmental and economic constraints within the study area and through the process described on the previous boards. It has also taken account of the guidance provided by the Holford Rules (and their appendices) and the routeing strategy identified for use on this project.



The Routing Study Area and Key Grid Connection Elements

## The Preferred Route Alignment

The Preferred Route Corridor for the proposed grid connection will include the following sections, as illustrated on the plan above:

- o Section 1B.
- o Section 2A or 2B.
- o Hagshaw Tee Option 3.
- o Section 3A.
- o Section 4A.

The route runs north from the Redshaw substation, before passing through the former forest area at Mainshill. It then crosses the A70 before running broadly parallel with the M74 and crossing the Douglas Water, in doing so avoiding Douglas Castle and its ornamental grounds, and the settlement of Douglas.

Turning south-westwards the route runs towards and past Poniel Hill, avoiding the strip of ancient woodland here. The Hagshaw Tee continues south-westwards to the south of the wind farms, whilst the main route heads north towards Strathaven. South of Strathaven the route turns westwards towards Glengavel. The final section of the route runs to the west of Glengavel Reservoir before terminating in the forest at Bankend Rig III Collector Substation.

The total length of the Preferred Route at this point is c.38km for the main route and 3km for the Hagshaw Tee. This route is to be adopted as the Preferred Route for the purposes of consultation and until such time as this is revised to form the Proposed Route.

## Next Steps...

This public consultation event forms part of the wider consultation phase of the project. During this phase the Preferred Route will be subject to consultation across the range of statutory and non-statutory consultees, members of the public and local communities.

Comments made during this process will be considered in the identification of the ‘Proposed Route’, which will then be appraised as part of the Environmental Impact Assessment.





# 08.

## Have your say

Involving local people in the project is extremely important to us. By talking to you we are able to better understand the issues and your concerns and are more able to address these concerns in the delivery of the project. Views of people from the local area really do count and will help inform the next stages in our decision making.

### Feedback

Your feedback is important to help us finalise the proposed route option that best balances technical, economic and environmental issues.

You can provide your feedback by the following channels:

Email via:

**[RedshawToBankendRig@spenergynetworks.co.uk](mailto:RedshawToBankendRig@spenergynetworks.co.uk)**

Write to:

**Redshaw to Bankend Rig Project Manager**

Land and Planning Team

SP Energy Networks

55 Fullarton Drive

Glasgow

G32 8FA

Telephone: 07516 461129

The consultation will be live for four weeks between Monday 21st April and Monday 26th May 2025, however, the information will remain accessible online at the website. Please submit any comments by midnight on Monday 26th May 2025.

Please note that comments made in response to this consultation are not representations to the Scottish Government's Energy Consents Unit. When the Section 37 application is submitted there will be an opportunity to make representations to the Scottish Government's Energy Consents Unit as part of the planning process.



**We look forward to any comments you may have, and thank you very much for your time and for engaging with our consultation.**