

Cross Border Connection

Routeing and Siting Consultation Update

3/26/25



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1. Introduction

In autumn 2024, SP Energy Networks consulted on its preferred route for a new 400 kilovolt (kV) overhead line (the '2024 preferred route') and preferred location for a new 400kV/132kV substation which would form part of a network reinforcement between the proposed Gala North Substation and the Scotland-England border, where it would cross into National Grid Electricity Transmission's (NGET) licence area.

In response to the feedback and information received during the consultation, SP Energy Networks has made localised modifications and refinements to the 2024 preferred route. This update document describes how the 2024 preferred route has evolved and presents a modified preferred route (referred to as the '2025 preferred route') which is now subject to further consultation. It should be read in conjunction with the Routeing & Siting Consultation Document published in September 2024 and can be found here:

https://www.spenergynetworks.co.uk/userfiles/file/Gala_North_Substation_to_the_Scottish_Bord er_Routeing_and_Siting_Consultation.pdf.

In addition, this short document outlines SP Energy Networks' approach to reviewing and analysing the feedback during the first round of consultation in Q3 2024. The report outlines how this information influenced the modifications made to the preferred route.



2. Consultation process so far

2.1. Levels of engagement

In compliance with Section 37 of the Electricity Act 1989, SP Energy Networks held a wide-ranging public consultation on the preferred route between September and December 2024. Community drop-in events were arranged in locations along the length of the route.

Residents and businesses located within 5kms either side of the preferred route were notified in writing via a leaflet describing the proposals. Adverts were placed in local papers (including online versions) and community councils were notified and engaged through a series of meetings. Notifications were also issued via social media.

A total of 13 drop-in events were held, along with attendance by SP Energy Networks at 11 community council meetings. The volume of feedback received and level of engagement were significant.

This included:

- 409 attendees at drop-in events / 51 visits to virtual exhibition since end of November
- 297 responses by phone, letter or email

The total number of response forms received was 943, which comprised of:

- 782 online form responses
- 161 hard-copy feedback forms

In addition, SP Energy Networks engaged with statutory consultees – NatureScot, Historic Environment Scotland, SEPA and Scottish Borders Council – to obtain data and feedback to inform the routeing process. Public meetings were also arranged by the local MP and a local MSP, at which SP Energy Networks presented.

All feedback was recorded and collated, including capturing individual and group/ organisation submissions. SP Energy Networks have analysed the feedback according to both topical interest (e.g. concerns about heritage) and locational interest to build a comprehensive picture of issues of concern for stakeholders. In addition to the formal feedback forms, suggestions and comments made at the drop-in sessions have also been fed into the process and have helped shape the subsequent modified route.

Details of the information garnered and feedback received will be set out in the Report on Consultation which will be published in summer 2025 and submitted to the Scottish Ministers along with the application for a consent decision under Section 37 of the Electricity Act 1989.



3. Feedback on the preferred route

Below is an outline some of the headline feedback received during the public consultation process so far and how SP Energy Networks is responding to the points raised.

Table 1: Headline Consultation Feedback

Headline	Summary of issues highlighted	Proposed solutions
Visual impact on local communities	Many people expressed concern about the visual impact of the project on both views from their properties and communities and in the surrounding countryside.	The preferred route has been modified further away from potentially impacted local communities. The modifications seek to reduce visibility from Ettrickbridge and Yarrowford.
Potential impact on the local economy and tourism	Local communities expressed the view that the project could be a deterrent to tourists and visitors to the region.	The preferred route has been modified further away from major destinations for tourists and will have less impact on local businesses.
Impact on the environment and biodiversity	Concerns were expressed about the potential impact on wildlife and proximity of the route to conservation areas were highlighted, along with the potential environmental effects caused by the towers and their manufacturing.	The modified preferred route avoids all environmental designations. An Environmental Impact Assessment (EIA) will be undertaken, the scope of which will include assessment of potential impacts of the project on birds, other fauna, hydrology, peat and forestry etc.
Community benefit	Some respondents highlighted the need for direct benefits from the proposed project through community benefit and wider economic benefits.	The scale and scope of our Community Benefit Funding will be determined by the UK Government's guidance which was published in March 2025. We are currently examining the contents of this document will respond in due course.



Headline	Summary of issues highlighted	Proposed solutions
Impact on the local heritage and cultural landscape	Respondents highlighted the potential impact on a number of important historic monuments, which could be compromised by proximity to the towers and the route, affecting the cultural and historic character of the local landscape.	SP Energy Networks has engaged with Historic Environment Scotland to inform the routeing process. The modified preferred route seeks to minimise impact on national heritage assets and their settings, including Penchrise Pen and Stobs Camp and Stobs Camp Rifle Ranges.
Over-development and industrialisation	Some respondents were of the view that preferred route could create an industrialised landscape when accompanied by wind farms and commercial forestry.	The modified preferred route will avoid existing energy infrastructure and makes greater use of screening through commercial forestry.
Health & wellbeing	A number of residents expressed their concerns about the impact of electromagnetic fields	The modified preferred route ensures residential properties are clearly identified and avoided. SP Energy Networks remains committed to ensuring that all towers are located within the prescribed limits of residential properties.
Protection of private water supplies	Residents highlighted the importance of access to private water supplies and springs and the importance of siting towers where the impact will be minimised.	SP Energy Networks have noted these concerns and will ensure that a full hydrology and flood risk assessment is undertaken along the preferred modified route ahead of the siting of towers.
Property values	A number of residents highlighted their concerns about the potential impact on property prices and the ability to sell properties.	The preferred modified route avoids all major settlements. Further screening and positioning of towers carefully in the landscape to reduce visual impact will further reduce the scope for any potential impact on residential properties.



Headline	Summary of issues highlighted	Proposed solutions
Traffic managements and disruption	Residents raised their concerns about the potential impact of construction work.	SP Energy Networks will develop a full plan and traffic management plan to minimise the construction impact on local communities.
RAF and aviation	A number of residents believed that aviation routes could be affected, impacting low-fly zones.	SP Energy Networks will continue to liaise with the RAF and aviation authorities on its modified preferred route.
Noise	Residents expressed concern about the potential impact of noise generated by substations.	The preferred location of Teviot Substation is in a remote area to minimise noise disruption to homes. SP Energy Networks carry out a noise impact assessment for the nearest properties and include detailed designs for noise mitigation measures, such as vegetation screening.
Undergrounding	Respondents perceived that undergrounding sections of the route may be beneficial in reducing visual impact.	Undergrounding will be considered where the likely landscape / visual impact and environmental impact is significant (as determined through the EIA) and no alternative route for an overhead line can be identified. Furthermore, where technical constraints are such that no suitable overhead line route can be identified undergrounding would need to be considered.



4. Routeing considerations

As set out in the Routeing & Siting Consultation Document, in line with SP Transmission's statutory duties and licence obligations and drawing upon established practice, routeing considerations comprise environmental, technical and economic factors. These factors informed the identification and assessment of route options ensuring that it is robust and transparent. The same principles have been applied in modifying the preferred route.

- Environmental factors: route options must take account of their potential environmental impact. Following SP Transmission's statutory obligations this is interpreted as seeking to preserve features of natural and cultural heritage interest and to mitigate as far as possible any effects route options may have on such features as well as more widely taking account of potential impact of route options on the environment and people including on:
 - Landscape including landscape designations and landscape character;
 - Visual amenity;
 - Biodiversity including ecology and ornithology;
 - o Cultural heritage including archaeology;
 - Forestry and woodland including ancient and native woodland;
 - Water resources and ground conditions such as peat;
 - o Land use; and
 - Tourism and recreation.
- Technical factors: route options must be technically feasible. This is interpreted by SP Energy Networks as it must be possible to build, operate and maintain route options.

Technical considerations include matters which would affect these aspects for example existing electricity transmission or distribution infrastructure, topography, side slope gradients, altitude, ground conditions and accessibility as well as proximity to wind farms.

• Economic factors: route options must be economically viable. This is interpreted by SP Energy Networks as meaning that as far as is reasonably practicable, and all other routeing considerations being equal, route options should be as direct as possible and should avoid areas where technical constraints would render route options unviable on economic grounds.

Given the scale of the SP Energy Networks Project, a two-stage approach was taken to the identification of overhead line routes, firstly the identification of strategic corridors and secondly the identification of route options.

Strategic route corridors are typically wider having been identified taking account of a narrower range of routeing considerations including larger sites or areas of the highest or high environmental value such as designated sites and settlements as well as landscape and landform. This approach helps to focus development of route options within areas in which overhead line routeing is considered most feasible and also allows for routeing work to be undertaken in parallel with substation siting.



Based on the appraisal of strategic route corridors, shortlisted route corridors were taken forward for further development either refining them into route options or developing route options within them in response to more detailed or localising routeing considerations.

Following the appraisal of strategic route corridors and considering all of the environmental, technical and economic assessments, a preferred route was identified, and local residents, businesses and stakeholders were consulted from September to December 2024. The results of this have fed into the appraisal and identification of the modified preferred route, as set out in this document.

Details of the routeing process for the Cross Border Connection are set out in the Routeing and Siting Consultation Document¹ and the Approach to Routeing and Environmental Impact Assessment².

¹ https://www.spenergynetworks.co.uk/userfiles/file/Gala_North_Substation_to_the_Scottish_Border_Routeing_and_Siting_Consultation.pdf ² https://www.spenergynetworks.co.uk/userfiles/file/SPEN_Approach_to_Routeing_Document_2nd_version.pdf



5. The Modified preferred route

Since the first round of engagement in 2024 SP Energy Networks has reviewed feedback and information received and made modifications to the preferred route option. As a result, the overall length of the modified preferred route option has increased. It is around 92km located entirely within the Scottish Borders from the proposed Gala North Substation south of Lauder to the Scotland-England border southeast of Newcastleton.

It is routed west and southwest from the proposed new Gala North substation toward the Gala Water. It crosses the Gala Water and Borders Railway Line to the south of Torsonce and continues southwest across the lower slopes of the Moorfoot Hills towards the River Tweed. The crossing point of the River Tweed has been moved slightly further west into commercial forestry which sits either side of the Tweed Valley.

The preferred route option continues south on the eastern extent of the Tweedsmuir Hills routeing within Elibank and Traquair Forest and the southern extent of Tweed Valley Forest Park at Minch Moor. It has been moved further west crossing the Yarrow Water to the west of Sundhope, approximately 5km east of St Mary's Loch. It continues directly south across the lower part of the Ettrick Hills crossing the Ettrick Water west of Gilmanscleuch.

From here the preferred route option runs southeast through Craik Forest avoiding the proposed Mid Hill Wind Farm identified during the previous consultation. It crosses the A7 and River Teviot in an eastern direction just north of Teviothead, approximately 9km southwest of Hawick. The preferred route has been amended as it crosses land to the north of the proposed Teviot Wind Farm continuing towards Stobs Castle and then south to the proposed new Teviot Substation on the margins of commercial forestry northwest of Whitrope.

From the proposed Teviot Substation the preferred route continues south to the east of Hermitage across Arnton Fell, partly following the safeguarded railway line. It continues south towards Newcastleton Forest and is routed to the east of the valley on the boundary of the forest and the proposed Borders Wind Farm. The route continues south until it reaches the Scotland-England border.

5.1. Previous Routeing and Siting Study

For the purpose of the routeing and siting study (see Cross Border Connection - Routeing and Siting Consultation Document, 2024³), the study area was split into four sections (sections A-D) in which alternative route options were identified and assessed. The routeing and siting study concluded with the identification of the 2024 preferred route option. This comprised a corridor approximately 80km long from the proposed Gala North Substation south of Lauder to a new Teviot Substation located west of Whitrope and from here south to the Scotland-England border to the south/southwest of Newcastleton.

Figure 1 shows the original preferred route alongside the modified route. Table 2 details the modifications that have been made and reasons behind them.

 $^{^3}$ https://www.spenergynetworks.co.uk/userfiles/file/Gala_North_Substation_to_the_Scottish_Border_Routeing_and_Siting_Consultation.pdf



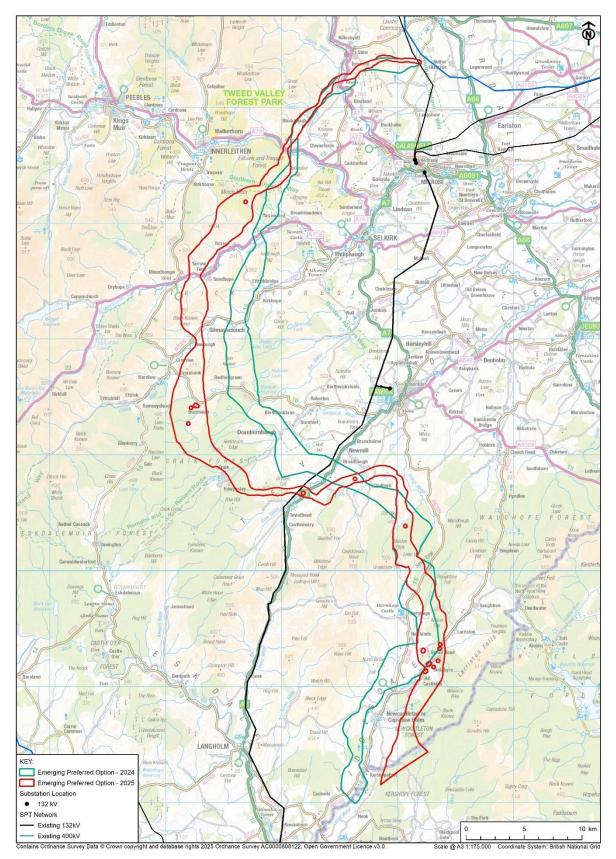


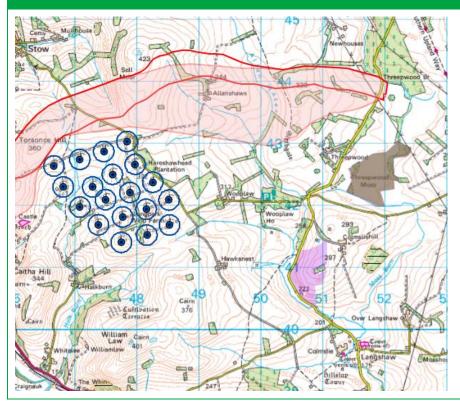
Figure 1: Original and Modified Preferred Route



5.2. Route Modifications and Refinements

In response to consultation feedback and information provided, modifications have been made to the preferred route as described and explained in Table 2 below.

Section A: Proposed Gala North Substation to the River Tweed



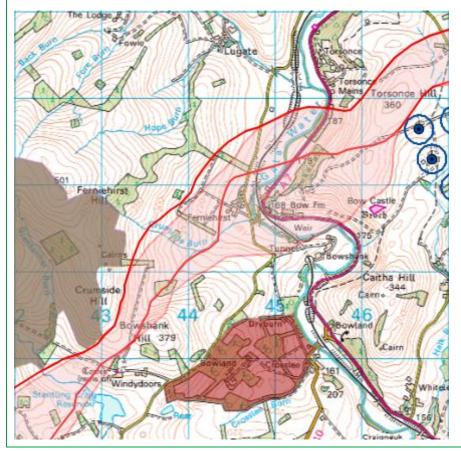
Proposed Gala North Substation to Torsonce Hill

The 2025 preferred route has been narrowed to the south of Allanshaws and widened slightly to the north on the west facing slope of Sell Moor.

This removes the properties at Allanshaws from the corridor and also takes account of the proposed Dun Law Extension to Galashiels 132kV Reinforcements line, which would connect to the proposed Gala North Substation from the west.



Section A: Proposed Gala North Substation to the River Tweed



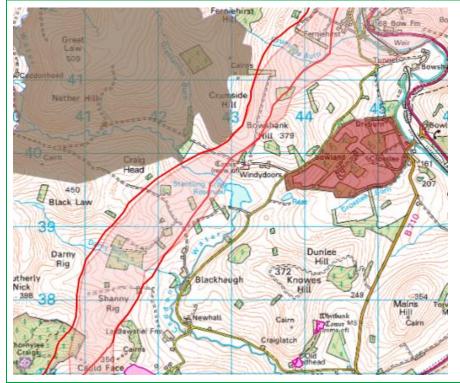
Gala Water Crossing South of Torsonce

The 2024 preferred route option provided scope to cross the A7, Gala Water and Borders Railway to the north or south of Bow Farm.

The 2025 preferred route option has been amended to cross these constraints between Torsonce Mains and Bow Farm seeking to reduce the potential impact on properties with views of the Gala Water valley as much as possible.



Section A: Proposed Gala North Substation to the River Tweed



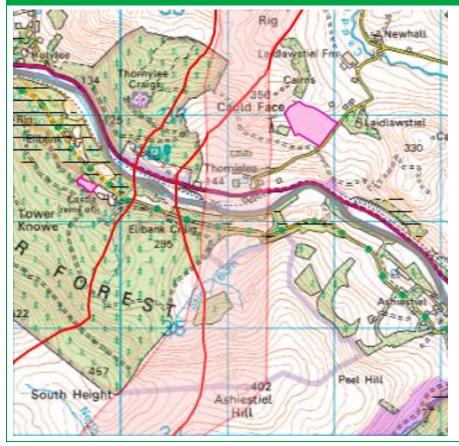
Bowshank Hill to Cauld Face

The 2025 preferred route has been narrowed and moved further west as it crosses hillslopes behind Bowland Garden and Designed Landscape. A combination of landform and woodland in both the foreground and background would help to reduce the prominence of an overhead line behind Bowland.

Moving south, the 2025 preferred route has been narrowed slightly to increase separation from Windydoors, as well as Stantling Reservoir.



Section A: Proposed Gala North Substation to the River Tweed

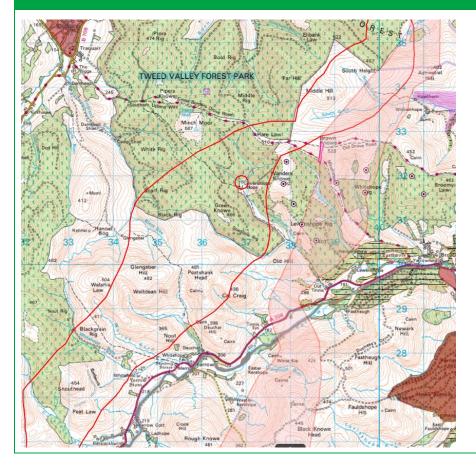


River Tweed Crossing west of Thornielee

The 2025 preferred route has been amended where it crosses the Tweed Valley / River Tweed. It has been moved further west to increase the separation distance from a small cluster of residential properties at Thornielee and utilises the margins of commercial forestry to the north of the Tweed.

On the south side of the Tweed the 2025 preferred route ascends the valley toward Traquair Forest seeking to use a combination of landform and forest cover to reduce potential impacts on Elibank Castle, a scheduled monument, as much as possible.



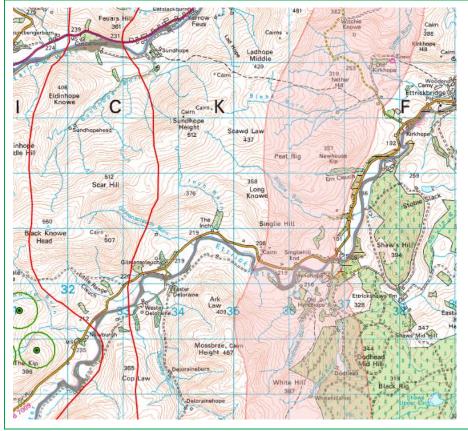


River Tweed to Yarrow Water

From south of the River Tweed, the 2025 preferred route is routed southwest on the margins of commercial forestry at Tweed Valley Forest Park and across Minch Moor towards the Yarrow Water.

The 2025 preferred route traverses more elevated land to the west of the 2024 preferred route option. This increases separation from scattered settlement along the A708 for a longer distance until it requires to be crossed at Feuars Hill between Mountbenger and Sundhope.

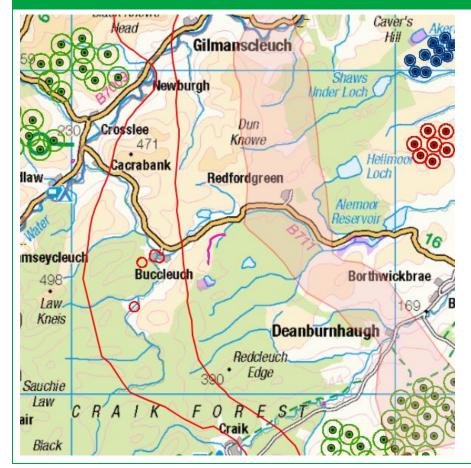




Yarrow Water to Ettrick Water

The 2025 preferred route has been moved further west of the 2024 preferred route between the Yarrow and Ettrick Waters. It crosses a more elevated area in which no settlement is present until it reaches the Ettrick Water west of Gilmanscleuch.



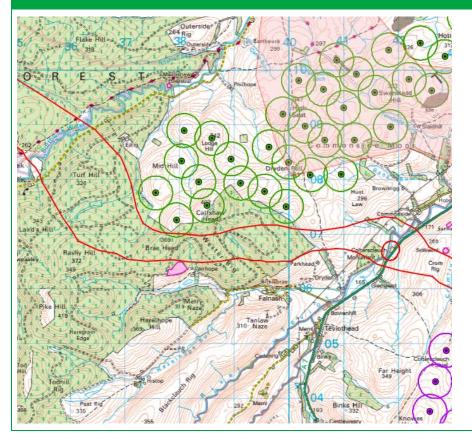


Ettrick Water to Borthwick Water

The 2025 preferred route continues further west of the 2024 preferred route between the Ettrick and Borthwick Waters. This continues across relatively more upland areas which are sparsely settled into Craik Forest.

By moving the 2025 preferred route to the west it provides opportunities to reduce impacts on scattered settlements and properties along the Borthwick Water, as well as avoiding the proposed Mid Hill Wind Farm. However, it increases proximity to a settlement cluster at Craik on the margins of the forestry.



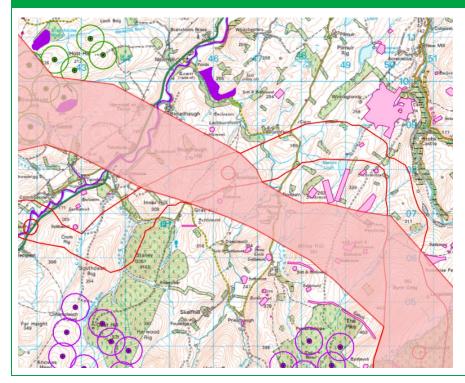


Borthwick Water to the A7

As a result of moving further west and the location of the proposed Mid Hill Wind Farm, the 2025 preferred route option crosses the A7 south of the 2024 preferred route. It extends through commercial forestry in a southeastern and eastern direction towards the Teviot Water and A7.



Section C. A7 to new Teviot Substation



A7 to Penchrise

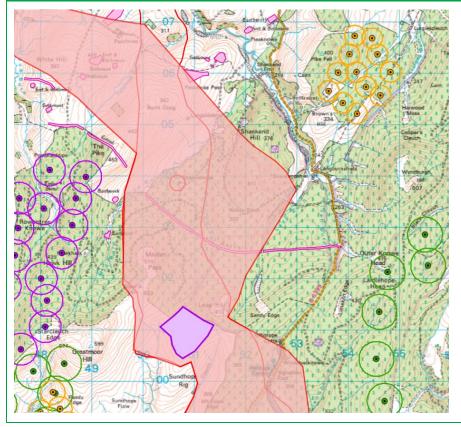
The 2025 preferred route has been modified to reduce potential setting impacts on scheduled monuments as far as possible. There are a number of monuments present within the area including hill forts and earthworks thought to date back to the Iron Age, as well as more recent features such as Stobs Camp.

Consideration has been given to the extent to which the setting of the monuments contributes to their significance. It was concluded that the setting of monuments at Penchrise is more sensitive to an overhead line compared to the more recent monuments associated with Stobs Camp.

As a result, the 2025 preferred route has been diverted to avoid/reduce impacts on Penchrise Pen by routeing to the north and east of it.



Section C. A7 to new Teviot Substation

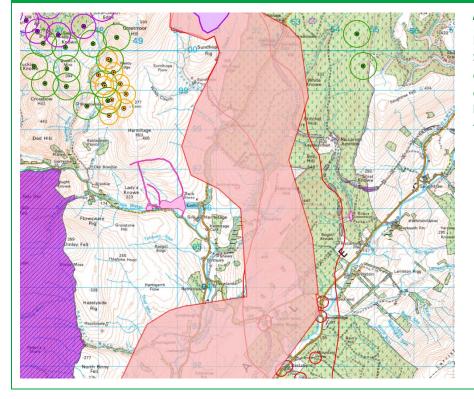


Penchrise to new Teviot Substation

The 2025 preferred route has been narrowed between Penchrise and the preferred site for the new Teviot Substation. This section is routed through forestry and would either pass through a 'gap' in the Catrail scheduled monument, or span it with overhead line towers set back from the monument.



Section D New Teviot Substation to Scotland-England border

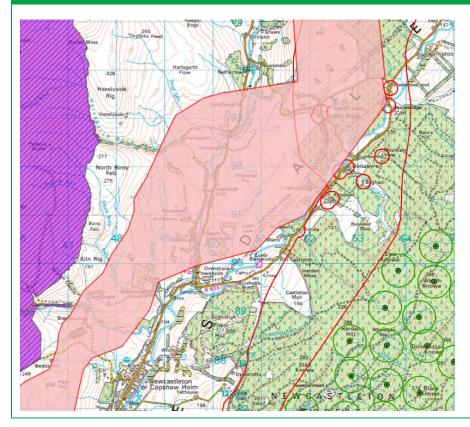


New Teviot Substation to south of Hermitage

Moving south from the preferred site for the new Teviot Substation, the 2025 preferred route has been narrowed and extended slightly further east. This extension increases the distance from Hermitage Castle while also utilises the intervening landform to provide opportunities to avoid or reduce impacts on the setting of the Castle.



Section D New Teviot Substation to Scotland-England border



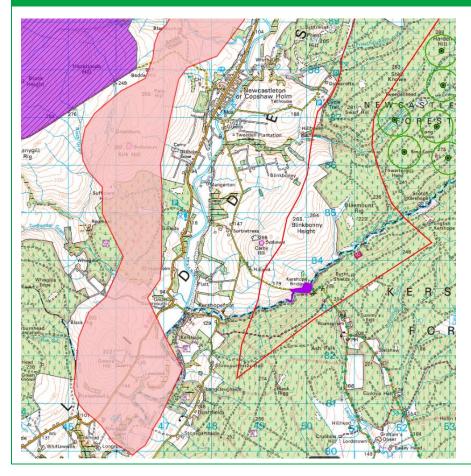
South of Hermitage to north of Newcastleton Forest

South of Hermitage the 2024 preferred route was routed to the west of Newcastleton.

The 2025 preferred route has been moved to the east of the valley and is routed towards Newcastleton Forest and the proposed Borders Wind Farm. This avoids proposed recreational developed by the Newcastleton and District Community Trust located to the west of the valley.



Section D New Teviot Substation to Scotland-England border



North of Newcastleton Forest to the Scotland-England border

The 2025 preferred route option continues on the east of the valley and is routed towards the Scotland-England border where, subject to National Grid's route selection, it would connect at Kershope Forest.



6. Localised Consultation on the Modified Preferred Route

SP Energy Networks are holding public consultation events in the local community at which physical consultation materials will be available to view. We would be delighted if you could attend one of the following drop-in events to speak with the team and learn more about the project:

- Wednesday 26th March: Yarrow Feus Hall (3-7pm)
- Thursday 27th March: Kirkhope Parish Hall, Ettrickbridge (3-7pm)
- Monday 31st March: Newcastleton Village Hall (3-7pm)
- Tuesday 1st April: Teviothead Village Hall (3-7pm)
- Wednesday 2nd April: Forman Memorial Hall, Roberton (3-7pm)

We hope that you will take this opportunity to engage with this consultation process and share any feedback you may have with the team.