

4. CONSULTATION

4.1 Introduction

SPEN is committed to public and stakeholder consultation to gather opinion and advice on the proposed alignment and any site-specific sensitivities. This chapter describes the consultation undertaken through stakeholder consultation and summarises comments arising from it and how these have been dealt with. Details on public consultation can be found in Technical Appendix 4.1: Report on Consultation.

4.2 EIA Screening

The screening opinion identified the following key issues raised by statutory consultees.

| Table 4.1 Summary of Consultee Responses | | |
|---|---|--|
| Stakeholder | Issue Raised | Response/ Action Taken |
| South Ayrshire Council | In terms of Regulation 8 (5) and (6) of the Regulations the planning authority are required to give their view on whether the proposed development is EIA development. It is noted that part of the development lies within Dumfries and Galloway and this response relates only to that part within South Ayrshire. From our assessment undertaken in accordance with the Regulations and taking into account the information supplied by the developer, it is South Ayrshire Council's view that the proposed development is not EIA development. | The proposed development will not be submitted as an EIA development, discussions of the anticipated effects on ecology, ornithology, noise, hydrology, and landscape and visual are presented in subsequent chapters detailing appropriate information. |
| Scottish Natural Heritage (SNH) (now known as NatureScot) | SNH confirms that the proposed power line route does not pass through any natural heritage-related designated sites although its starting point lies c. 1.3 km distant from the nearest part of the Glen App and Galloway Moors Site of Special Scientific Interest (SSSI) and Special Protection Area (SPA). The SSSI and SPA are designated respectively for the area's national and international level of importance to breeding hen harriers. The SPA's status means that proposals outwith the SPA but within habitat connected to the SPA must have their potential effect on the SPA considered before it can be consented. Aerial photos show that parts of this area are very similar in nature to the actual SPA. Connectivity to the nearby SPA is mentioned in Table 1 where the text appears to conclude that there is sufficient ground available for harriers to forage over and that, therefore, any influence on foraging due to habitat disturbance is likely to be low. Table 1 also mentions the potential for the destruction of bird nests (presumably of all species present) if ground clearance is carried out within the breeding season. Clearly this potential disturbance to foraging (and possibly nesting) harriers and the potential destruction of bird nests could be avoided if the ground | As detailed in Chapter 2 Development Description the ground clearance works will be conducted outside the bird breeding season of April to July. Full details considering the impact to birds are discussed in Chapter 7 Ecology and Ornithology. As detailed in Chapter 2 Development Description low ground pressure vehicles will be used during construction of the proposed development. The conclusions of Chapter 5 Landscape and Visual Amenity considers the potential impacts of the proposed development. The visualisations show the potential effects at a distance of 15 km. |

| Table 4.1 Summary of Consultee Responses | | |
|---|---|---|
| Stakeholder | Issue Raised | Response/ Action Taken |
| | <p>clearance works were set to take place outwith the bird breeding season, ie outwith the period April to July inclusive.</p> <p>SNH also agree that watercourses and deep peat are likely to be encountered, which will require careful consideration in order to avoid damage to those delicate habitats.</p> <p>The Landscape and Visual Amenity section of Table 1 states that the proposal has the potential to affect "the skyline north of Cross Water, and to be relatively conspicuous as it crosses the Duisk Valley". We agree that the Landscape and Visual appraisal should consider those potential effects. We are also of the view that potential effects on the Merrick Kells Wild Land Area, which is not mentioned in the report, should be included within the LVA. We accept that the potential effects on the Wild Land Area are likely to be insignificant at this distance of c. 15 km, but confirmation of that would be welcome.</p> | |
| Scottish Environmental Protection Agency | <p>Authorisation is required under The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (CAR) to carry out engineering works in or in the vicinity of inland surface waters (other than groundwater) or wetlands. Inland water means all standing or flowing water on the surface of the land (e.g. rivers, lochs, canals, reservoirs).</p> <p>Management of surplus peat or soils may require an exemption under The Waste Management Licensing (Scotland) Regulations 2011. Proposed crushing or screening will require a permit under The Pollution Prevention and Control (Scotland) Regulations 2012.</p> <p>A Controlled Activities Regulations (CAR) construction site licence will be required for management of surface water run-off from a construction site, including access tracks, which:</p> <ul style="list-style-type: none"> • is more than 4 hectares, • is in excess of 5km, or • includes an area of more than 1 hectare or length of more than 500m on ground with a slope in excess of 25° <p>See SEPA's Sector Specific Guidance: Construction Sites (WAT-SG-75) for details. Site design may be affected by pollution prevention requirements and hence we strongly encourage the applicant to engage in pre-CAR application discussions with a member of the regulatory services team in</p> | A Construction Environmental Management Plan will be developed prior to works being initiated, this will detail legislative compliance obligations and management practices for the proposed development. |

| Table 4.1 Summary of Consultee Responses | | |
|--|--|--|
| Stakeholder | Issue Raised | Response/ Action Taken |
| | <p>your local SEPA office. We note that applicant intends to develop a Construction Environmental Management Plan.</p> <p>Below these thresholds you will need to comply with CAR General Binding Rule 10 which requires, amongst other things, that all reasonable steps must be taken to ensure that the discharge does not result in pollution of the water environment. The detail of how this is achieved may be required through a planning condition.</p> | |
| Dumfries and Galloway Council | <p>Considering the information submitted with your application, and having regards to the selection criteria contained in Schedule 3 of the regulations relating to the characteristics of the development, the location of the development and the characteristics of the potential impact as well as any proposed mitigation measures, it is the view of the Council as planning authority that the proposed development unlikely to have significant impacts on the environment and will therefore not require EIA.</p> <p>In summary, following consideration of the proposal against the relevant Schedule 3 criteria, it is considered that an Environmental Impact Assessment is not required in this case.</p> | The proposed development will not be submitted as an EIA development, discussions of the anticipated effects on ecology, ornithology, noise, hydrology, and landscape and visual are presented in subsequent chapters detailing appropriate information. |

4.3 Post Screening

Additional consultation was held with NatureScot on the proposed methodology to address the potential presence of great crested newts *Triturus cristatus* (GCN) in the area.

| Table 4.1 Summary of Consultee Responses | | |
|--|---|--|
| Stakeholder | Issue Raised | Response/ Action Taken |
| NatureScot | <p>Thank you for your enquiry of 04/09/2020 requesting comment from NatureScot on the proposed methodology and mitigation to take account of the potential presence of great crested newts in the area. We agree with the rationale supporting the adoption of a 250m buffer between the proposed works and the water bodies concerned. We are satisfied that this will provide sufficient assurance to manage any risk. We welcome the commitment to undertake e-DNA work in April 2021 to confirm presence or absence of GCN. NatureScot would be extremely keen to be informed of the results of this survey.</p> <p>This advice is provided by SNH, acting under its current operating name NatureScot.</p> | In support of Chapter 7 Ecology and Ornithology an eDNA survey will be completed in April 2021, after submission of the application. The purpose of the survey is to confirm the presence or absence of great crested newts in the area. In the event that great crested newts are found to be present, additional mitigation measures would be applied at the construction phase. |

TECHNICAL APPENDIX 4 – EIA SCREENING

4.1: Report Consultation

Intended for
SP Energy Networks

Date
November 2020

Project Number
UK12-22885

TECHNICAL APPENDIX 4.1: REPORT ON CONSULTATION

A 132KV, OVERHEAD LINE CONNECTION BETWEEN STRANOCH AND CHIRMORIE WIND FARMS TO MARK HILL SUBSTATION

CONTENTS

| | |
|---|-----------|
| EXECUTIVE SUMMARY | I |
| 1. INTRODUCTION | 1 |
| 2. PROPOSED DEVELOPMENT | 3 |
| 2.1 Project Background | 3 |
| 2.2 Project Description | 3 |
| 3. THE CONSULTATION PROCESS | 6 |
| 3.1 Overview | 6 |
| 3.2 Methods of consultation | 6 |
| 4. CONSULTATION RESPONSES AND KEY ISSUES | 10 |
| 4.1 Overview | 10 |
| 4.2 Matters emerging from consultation feedback | 10 |
| 5. PROJECT RESPONSES TO CONSULTATIONS | 12 |
| 5.1 Introduction | 12 |
| 5.2 Consultation Events | 12 |
| 5.3 Project Rationale | 12 |
| 5.4 Engineering, Design and Construction | 14 |
| 5.5 Environment | 15 |
| 5.6 Socio-Economics | 18 |
| 6. SUMMARY AND NEXT STEPS | 19 |
| 6.1 Summary | 19 |
| 6.2 Next Steps | 19 |

ANNEXES

Annex A: Figures

Annex B: Stakeholder Contact Details

Annex C: Information Booklets

Annex D: Consultation Event Adverts

Annex E: Consultation Event Letters

Annex F: Exhibition Boards

Annex G: Feedback Forms

EXECUTIVE SUMMARY

SP Energy Networks proposes to construct a new 132 kilovolt (kV) overhead line (OHL) to connect both the consented Stranoch wind farm and the consented Chirmorie wind farm to the existing Mark Hill substation, approximately 4 km north of Barrhill.

The OHL will be supported on double wood poles of a typical height of 12.1 m, and an average span length of 100 m.

This Report on Consultation documents the consultation process undertaken between March 2017 and June 2019 regarding the proposed overhead line connections for both the Stranoch and Chirmorie wind farms. The programme of consultation was designed to engage with statutory and non-statutory organisations and the local community, in order to invite feedback on the rationale for and approach to the selection of the preferred route of the 132 kV OHL. Consultees were also invited to provide feedback on any specific issues that may have been overlooked, and on the consideration given to environmental constraints.

In total, 18 consultation responses were received during the March-April 2017 consultation period, with a further four consultation responses received during the June-July 2017 consultation period. A total of 23 consultation responses were received during the May-June 2019 consultation period. These included both written correspondence and completion of feedback forms at consultation events. Responses covered a range of topics, with a number raising specific issues in relation to the preferred OHL route.

Common themes emerging from responses related to strategic planning of SP Energy Networks projects, potential visual impact of the OHL and proximity of the preferred route to existing properties and businesses. Comments were also received on methods for advertising consultation events and other potential environmental impacts of the OHL.

In addition, this report also identifies where issues raised in the consultation responses are to be addressed by the scope of the Environmental Appraisal (EA).

1. INTRODUCTION

SP Energy Networks proposes to construct a new 132 kilovolt (kV) overhead line (OHL) to connect the consented Stranoch wind farm and the consented Chirmorie wind farm to the existing Mark Hill substation, approximately 4 km north of Barrhill (Figure 4.1.1).

The OHL will be supported on wood poles of a typical height of 12.1 m, and an anticipated average span length of 100 m.

A route selection study for the OHL was completed in order to identify a proposed OHL route (Figures 4.1.2 and 4.1.3). The route selection study followed a systematic process and professional judgement to consider constraints to routeing and the study resulted in the selection of a proposed route which is technically feasible and economically viable and which would, on balance, cause least disturbance to people and the environment.

The route selection study was completed in three main stages:

- An initial route selection study was completed in 2017, which identified a preferred route for the proposed Stranoch wind farm grid connection only. This was followed by a programme of consultation carried out between March and April 2017.
- On the basis of feedback received during the first consultation period, SP Energy Networks made the decision to consider the proposed Chirmorie wind farm grid connection in parallel with Stranoch grid connection, although Chirmorie wind farm was not yet consented at the time. Approximately 1.5 km of additional route was identified to combine the two connections and a second programme of consultation was carried out between June and July 2017.
- Based on consultation and feedback received in 2017, some further route selection work was undertaken to examine alternative route options through Arecleoch Forest. In addition, the location of the proposed Stranoch substation was confirmed in summer 2018 as being further north than originally planned. A revised preferred route was identified in 2019 and a programme of consultation was carried out between May and June 2019.

A Routeing Strategy Consultation Document was produced for the initial consultation period, as well as a consultation booklet, and further consultation booklets were produced for each of the subsequent consultation periods. In each case public exhibitions were used to engage with statutory and non-statutory organisations and local communities. Feedback was invited on the rationale for and approach to the selection of the preferred route. Consultees were also invited to provide feedback on any specific issues that may have been overlooked, and on the consideration given to environmental constraints.

This Report on Consultation documents the responses received; identifies issues for further consideration as part of the scheme design, and documents changes proposed from the preferred OHL route presented for consultation as a result of the consultation responses received during each consultation period.

The remainder of this Report on Consultation is structured as follows:

- Section 2 gives a summary of the project background and description;
- Section 3 sets out the consultation process, including methods of consultation, public exhibitions and the list of statutory and non-statutory consultees;
- Section 4 provides a description of the information and main views obtained during the consultation process;
- Section 5 sets out the response to consultation comments from the project team;

- Section 6 provides a summary of the consultation process and outlines the next steps in the consenting process;
- Annex A provides figures;
- Annex B provides details of the statutory consultees who were consulted;
- Annex C contains copies of the posters which were displayed to advertise the public exhibitions;
- Annex D provides copies of the letters that were issued to householders and stakeholder organisations to provide notification of the consultation period;
- Annex E provides copies of the exhibition display materials;
- Annex F contains the information booklets that were produced for distribution at each of the public exhibitions; and
- Annex G contains a copy of the feedback forms.

2. PROPOSED DEVELOPMENT

2.1 Project Background

SP Energy Networks is part of the ScottishPower Group of companies. SP Energy Networks owns three regulated electricity network businesses in the UK; SPT, SPD and SPM. These businesses are 'asset-owner companies' holding the regulated assets and Electricity Transmission and Distribution Licenses of ScottishPower.

Scottish Power Transmission Plc (SPT) is one of these regulated businesses. SPT is the transmission license holder in southern and central Scotland and has a duty under Section 9 of the Electricity Act 1989 to develop and maintain an efficient, coordinated and economical system of electricity transmission and to facilitate competition in the generation and supply of electricity. The company also has obligations to offer non-discriminatory terms for connection to the transmission system, both for new generation and for new sources of electricity demand.

SPT is responsible for the delivery of the transmission network on behalf of SP Energy Networks. Under Section 37 of the Electricity Act 1989, SP Energy Networks is required to seek consent from the Scottish Ministers for the construction of any non-exempted OHL operating at a voltage greater than 20 kilovolts (kV).

SP Energy Networks has received a grid connection request from National Grid Electricity Transmission (NGET) to connect the consented Stranoch wind farm. The consented wind farm comprises up to 24 turbines and has a potential installed capacity of up to 72 MW. Stranoch wind farm was consented by the Scottish Ministers in July 2016 and SP Energy Networks is obliged to provide a connection for the wind farm which lies within the area covered by their license. SP Energy Networks has also received a grid connection request from NGET to connect the proposed Chirmorie wind farm, which comprises 21 turbines and has a potential installed capacity of up to 80 MW. The proposed Chirmorie wind farm was consented by the Scottish Ministers in July 2018. SP Energy Networks is proposing to provide a consolidated grid connection solution for the consented Chirmorie wind farm in parallel with the consented Stranoch wind farm in order to deliver efficiency.

2.2 Project Description

The proposed development will connect the named wind farms to the Mark Hill collector substation as follows:

- a new substation on the Stranoch wind farm site, which is consented as part of the Stranoch wind farm development; and
- a new substation on the Chirmorie wind farm site, which is consented as part of the Chirmorie wind farm development.

The proposed OHL would be constructed using approximately 181 wood pole structures, plus two gantries within the wind farm substations using only double 'trident' wood pole structures. Each pole is topped by galvanised steelwork cross-arm and insulators (likely to be grey plastic). The steel cross arm and insulators would carry a single three-phase circuit (three metal alloy conductors) in a flat formation (i.e. all at the same height). There is also fibre optic cable required: from Mark Hill substation to pole 119 and pole 119 to Chirmorie wind farm substation. The photograph below shows a typical wood pole structure.



Photo 1: Typical H-Pole Structure

The standard wood pole height is expected to be in the region of 12 m although this would vary to accommodate changes in topography and where the line crosses roads and watercourses. The highest pole height is anticipated to be 15.1m above ground level. The spacing between poles would vary depending on topography and land usage. The height and distance between poles will be determined later in the design process; however, span length would be approximately 100 m.

Overhead line construction typically follows a standard sequence of events as follows:

- prepare access to the pole locations;
- install pole foundations, where necessary;
- erect wood poles;
- string conductors; and
- reinstate pole sites and remove temporary accesses.

For wood pole line construction, the poles are erected using normal agricultural machinery such as an excavator with a lifting arm. A tracked excavator and low ground-pressure vehicles, (e.g. tractor, argocat, quad bikes) are used to deliver, assemble and erect each wood pole structure at each location. The erection of the wood poles requires an excavation to allow the pole brace block and/or steel foundation braces to be positioned in place. A typical pole excavation is 3 m² x 2 m deep. The excavated material is then sorted into appropriate layers and used for backfilling. It would be rare for concrete to be used in the foundations of wood poles. This would normally only be used where ground conditions are particularly unstable. The excavator(s) then hoists the assembled structure into position and once the structure has been braced in position the trench is backfilled.

Prior to stringing the conductors, roads and railways that are to be crossed by the power line have to be protected by building a scaffold tunnel through which vehicles/trains can pass. Other obstacles such as existing power lines have to be either switched off, deviated or protected using 'live line' scaffolds.

In all cases, every effort is made to cause the least disturbance to landowners and local residents during construction, and ground disturbance during construction of the new line is reinstated.

3. THE CONSULTATION PROCESS

3.1 Overview

In accordance with established methodology for route selection currently employed by SP Energy Networks a process of consultation on the preferred route for a new OHL has been implemented.

SP Energy Networks is committed to consulting with statutory and non-statutory bodies throughout the development process, not only as a statutory duty within the planning system, but as a measure to involve and gain feedback from as broad a range of consultees and stakeholders as possible.

3.2 Methods of consultation

A range of consultation methods were used by SP Energy Networks to consult on the preferred route. The approaches used included:

- i. Routeing Strategy Consultation Document;
- ii. Project website;
- iii. Public exhibitions;
- iv. Information booklet;
- v. Feedback form;
- vi. Posters displayed on community notice boards, in local shops and post offices and provided to local community councils to display.
- vii. Letters sent to known landowners, Community Councils and residents in the Barrhill area;
- viii. Press advert.

3.2.1 Routeing Strategy Consultation Document

A Routeing Strategy Consultation Document¹, describing the route selection process and the location of the preferred route, was produced and distributed in February 2017, providing interested stakeholders with the information required to engage and comment on the project at an early stage. The Routeing Strategy Consultation Document was issued in hard copy to statutory consultation bodies and by email to relevant landowners.

The Routeing Strategy Consultation Document was placed on deposit at the following locations:

- Barrhill Village Shop;
- Barrhill Village Hall; and
- New Luce Village Hall.

3.2.2 Consultation Booklet

A consultation information booklet was produced to summarise the route selection process completed in advance of each consultation period. The booklet was available to all attendees of each public exhibition. The information booklet provided a summary of the information that was presented on the consultation display panels and included a copy of the feedback form.

Copies of the information booklet available at each public exhibition are included in Annex C.

¹ SP Energy Networks (2017) Stranoch wind farm to Mark Hill substation 132 kV OHL Routeing Strategy Consultation Document, February 2017

3.2.3 Project Website

The Routeing Strategy Consultation Document, consultation booklets and project maps were available to download from the project website:

https://www.spenergynetworks.co.uk/pages/stranoch_windfarm.aspx.

The website is specifically designed to allow for online consultation by including a dedicated area for registering views and feedback. The website address was included on all project-related materials distributed during the consultation periods.

The website will continue to be regularly updated to reflect the latest stage of the consultation and development process.

3.2.4 Public Exhibitions

Public consultation exhibitions were held in March and April 2017 at the following locations:

- Barrhill Memorial Hall, Barrhill – 1st and 2nd March 2017; and
- Memorial Hall, New Luce – 5th April 2017.

The second public consultation exhibition was held in relation to the proposed Chirmorie grid connection in July 2017 at the following location:

- Barrhill Memorial Hall, Barrhill – 4th July 2017.

The third public consultation exhibition was held in May 2019 at the following location:

- Barrhill Memorial Hall, Barrhill – 1st May 2019.

All of the public exhibitions in Barrhill were advertised in the local press in the week preceding each exhibition. In addition, posters advertising each exhibition were displayed on community notice boards and other prominent locations in Girvan, Pinwherry, Barrhill and New Luce. Copies of the posters advertising the public exhibitions are contained in Annex D.

In addition, letters about the project and public exhibitions held were posted to residents, landowners and stakeholders. Copies of the letters can be found in Annex E.

In each case, the public exhibitions provided a forum to share information about the routeing strategy and the preferred route. Attendees were invited to consider information that was presented in a series of exhibition display panels; these are reproduced in Annex F. The display panels detailed:

- the background and need for the project;
- the design principles and methodology followed in the routeing process;
- a map of the study area showing the key environmental sensitivities considered during the routeing process;
- a map showing the alternative route options that were identified for comparative analysis, and a map showing the location of the preferred route; and
- questions for consideration and next stages.



Photo 2: Public exhibition in Barrhill, March 2017



Photo 3: Public exhibition in Barrhill, March 2017

Table 3.1 below presents the number of visitors to the exhibitions.

| Table 3.1 Details of Public Exhibition Attendance | | |
|---|----------------------------|--------------------|
| Venue | Date | Number of Visitors |
| Barrhill Memorial Hall | 1 st March 2017 | 15 |
| Barrhill Memorial Hall | 2 nd March 2017 | 13 |
| New Luce Memorial Hall | 5 th April 2017 | 6 |
| Barrhill Memorial Hall | 4 th July 2017 | 13 |
| Barrhill Memorial Hall | 1 st May 2019 | 24 |

3.2.5 Feedback Forms

A series of questions were asked within the Consultation Document and Information Booklets, seeking comments on the project rationale, the approach to selection of the preferred route and whether any factors or environmental features had been overlooked. These questions were replicated on a feedback form, which was distributed at each of the public exhibitions listed above.

This form enabled people to comment on the route options and areas of sensitivity in relation to the preferred route. The feedback form also provided a section to give feedback on the overall project and the consultation process itself. The feedback form was also available online and could be requested via email, letter or phone call.

SP Energy Networks also accepted written submissions via letters and emails from people who attended the exhibitions and others who had heard about the Projects. All feedback has been identified and addressed through this report.

Copies of the feedback forms are included in Annex G.

3.2.6 Advertising and Other Promotion

Advertising ran across relevant regional print media in advance of the consultation period. Adverts were placed in:

- Carrick Gazette, on 8th February 2017;
- Carrick Gazette, on 21st June 2017; and
- Carrick Gazette, on 24th April 2019.

4. CONSULTATION RESPONSES AND KEY ISSUES

4.1 Overview

In total, 18 consultation responses were received during the March – April 2017 consultation period. Three were from statutory consultees, three from non-statutory consultees, and 12 from landowners and the general public. Responses were received in the form of completed feedback forms and as letters/emails.

A further four consultation responses were received during the June-July 2017 consultation period, all from statutory consultees and received as email responses.

In total, 23 consultation responses were received during the May-June 2019 consultation period. Five were from non-statutory consultees, and 18 from landowners and the general public. Responses were received both in the form of completed feedback forms and as letters/emails.

All consultation responses received during the consultation periods have been collated and summarised into a consultation register. This register remains an active document and will be updated on receipt of any further consultation comments.

4.2 Matters emerging from consultation feedback

The comments and queries received have been reviewed by consultation question. In order to organise the consultation responses to allow efficient and effective responses to be provided by SP Energy Networks, an initial framework has been created by grouping comments and queries raised into various themes, as described below:

- Consultation events: comments on the consultation events, including advertising and information displayed.
- Project rationale: comments and queries regarding the strategy for the project, including the two connection points.
- Engineering, design and construction: comments about the viability of different technology options and infrastructure.
- Preferred route: comments expressing agreement with preferred route, or identifying specific locational issues associated with the preferred route.
- Environment: all comments about the natural environment, including designated sites such as scheduled monuments.
- Socio-economics: comments about potential impacts on local economic activity and other socio-economic factors, including tourism.

Table 4.1 below indicates the number of responses that were received under each theme category.

| Table 4.1 Analysis of Consultation Responses | | |
|---|-------------------------------------|-------------------------|
| Theme | Response categories | No. of responses |
| Consultation events | Methods used for advertising | 9 |
| | Information provided at exhibitions | 9 |
| Project rationale | Strategic planning | 7 |
| | Connection points | 2 |
| Engineering, design and construction | Undergrounding | 23 |
| | Upgrading of existing lines | 2 |

| Table 4.1 Analysis of Consultation Responses | | |
|---|--|-------------------------|
| Theme | Response categories | No. of responses |
| Environment | Landscape | 8 |
| | Visual amenity | 15 |
| | Cultural heritage | 4 |
| | Ecology, incl ornithology | 4 |
| | Forestry | 3 |
| | Hydrology and peatland | 2 |
| Socio-economics | Tourism and recreation | 9 |
| | Impact on local businesses and economy | 4 |

- 4.2.1 Section 5 of this report provides a more detailed analysis of the comments made by respondents and sets out the SP Energy Networks project team response on each issue. Section 5 does not set out each respondent's comments separately, rather it provides a summary of the points that have been raised under each theme listed in Table 4.1; therefore, where several respondents raised matters within the same category, these are summarised in one place.

5. PROJECT RESPONSES TO CONSULTATIONS

5.1 Introduction

This section considers the themes and queries raised by statutory and non-statutory consultees, local communities and individuals according to the categories listed in Table 4.1. This section summarises the feedback received in relation to those themes and gives SP Energy Networks' response according to each theme. The SP Energy Networks project team has taken into account all of the feedback that has been received during the consultation period. Responses received after the conclusion of the consultation period are also included in this report.

5.2 Consultation Events

Table 5.1 below describes the types of comments that were received in relation to the consultation events, and recommendations for future consultation. The table also includes the relevant response from SP Energy Networks.

| Table 5.1: Comments Received – Consultation Events | | |
|---|---|--|
| Topic | Comments Received | SP Energy Networks Response |
| Advertising | <p>A number of comments and recommendations were received in relation to advertising the consultation events. The following suggestions were made:</p> <ul style="list-style-type: none"> • Advertise earlier; • Issue leaflet to all residents. | <p>Details of the methods used to advertise the consultation events are described in Section 3 of this report.</p> <p>The project is at an early stage of development, and the methods used were considered sufficiently comprehensive at this stage. Nevertheless, SP Energy Networks will consider these comments in planning future consultation.</p> |
| Information provided at exhibitions | <p>The following feedback was received:</p> <ul style="list-style-type: none"> • Well laid out – maps, information and plenty of staff to talk to about it; • Some of the display boards were difficult to read, being too low down; • People very helpful; • Generally impressed with the display and information that was available; • Have more knowledgeable consultants in fewer numbers; • Maps of location of the OHL should be larger scale as exact route not clear. | <p>SP Energy Networks will consider this feedback in planning future consultation on the project.</p> |

5.3 Project Rationale

Table 5.2 describes the comments that were received in relation to project rationale, including project strategy and connection points. The table also includes the relevant response from SP Energy Networks.

| Table 5.2: Comments Received – Project Rationale | | |
|---|--|--|
| Topic | Comments Received | SP Energy Networks Response |
| Strategic planning | <p>Comments were received regarding the following issues:</p> <ul style="list-style-type: none"> the potential requirement to accommodate further connection of wind farm capacity in this area; ensuring a joined up approach to all prospective wind farm development rather than taking forward each connection application separately; ensuring that the underground cable connection for Kilgallioch could have been installed with the capacity to handle additional proposed wind farm connections; and concern that further wind farm expansions in the vicinity of Barrhill would need to connect to Mark Hill substation, and so additional overhead lines would be added in coming years. | <p>In this case, SP Energy Networks has identified a combined grid connection solution for the consented Chirmorie and Stranoch wind farms.</p> <p>Due to the lengthy environmental assessment process and contractually binding connection dates involved, it is often difficult to align wind farm connections for consolidation purposes. Efforts are made to do this through developer forum meetings to allow SP Energy Networks to understand forthcoming developments but these are attended by developers on a voluntary basis and therefore cannot always provide an absolute picture of future generation. The timing of connection requests also influences whether developments can be consolidated.</p> <p>License obligations compel SP Energy Networks to offer the most cost effective solution at the outset of a connection request. This requirement constrains the ability to build in any significant extra capacity. The connection of renewable energy developments to the network is at the connecting party and GB consumers' cost, depending on the asset. SP Energy Networks is not licensed by Ofgem to build infrastructure (GB Consumer funded) assets which will cost more (for a larger capacity) where there is no identified need to do so. For this reason, it is usually not possible to obtain funding to allow for additional capacity to be incorporated into a new connection.</p> |
| Connection points | <p>Comments were received in relation to:</p> <ul style="list-style-type: none"> the siting of the Stranoch substation. The comment made in 2017 (from New Luce Community Council) does not specify the specific nature of the issue; however, it is assumed that this relates to its location at the southern end of the Stranoch wind farm site, furthest from where it will connect into Mark Hill substation. | <p>The Stranoch wind farm developer is responsible for the location of the wind farm substation, which is consented as part of the wind farm development.</p> <p>In 2017, SP Energy Networks had been advised that the substation would be constructed in the location shown within the Routeing Strategy Consultation Document, on the western side of the railway line. The Stranoch wind farm developer subsequently chose to apply for an amendment to</p> |

| Table 5.2: Comments Received – Project Rationale | | |
|---|--------------------------|---|
| Topic | Comments Received | SP Energy Networks Response |
| | | the wind farm consent to allow a change to the substation location. |

5.4 Engineering, Design and Construction

Table 5.3 describes the comments that were received in relation to engineering, design and construction, including undergrounding and the upgrading of existing connections. The table also includes the relevant response from SP Energy Networks.

| Table 5.3: Comments Received – Engineering, Design & Construction | | |
|--|--|--|
| Topic | Comments Received | SP Energy Networks Response |
| Undergrounding | <p>Comments were received in relation to:</p> <ul style="list-style-type: none"> undergrounding of the connection near the holiday parks to protect the future of the parks and the local area; undergrounding of the connection to ensure no further contribution to the existing perceived wirescape; undergrounding of the connection where it crosses the Duisk valley (approximately 1 km either side of the B7027). | <p>The UK Government and the Electricity Industry, including SP Energy Networks, constantly review their positions on the routeing of major electrical infrastructure projects. The evidence available, including economic, technical and environmental factors, and specifically statutory duties and licence obligations, will support an overhead line approach in most cases.</p> <p>In this case, no technical or environmental reason has been identified for the connection to be made by underground cable; however, the project is subject to ongoing consultation, review and refinement.</p> |
| Upgrading of existing lines | <p>Comments were received in relation to:</p> <ul style="list-style-type: none"> the possibility of connecting into the substation on Arecleoch Windfarm and using the existing OHL to carry the electricity to Markhill. Upgrading the existing OHL from Arecleoch wind farm to carry the power from Stranoch, Glen App and potentially Chirmorie and the Arecleoch extension windfarms; any spare capacity in the existing 275 kV OHL, the Killgalloch wind farm cable connection and the Arecleoch wind farm connection. | <p>As mentioned above, wind farm connections are at the GB consumer's cost as well as the developer's cost. Therefore, SP Energy Networks cannot justify building infrastructure which will cost more (for a larger capacity) where there is no identified need to do so. For this reason, it is usually not possible to obtain funding to allow for additional capacity to be incorporated into a new connection.</p> <p>In this case, the Arecleoch and Kilgallioch wind farm grid connections do not have sufficient capacity to allow the Stranoch and/or Chirmorie connections to be accommodated. However, SP Energy Networks has committed to identifying a combined grid connection solution for the proposed Chirmorie and Stranoch wind farms.</p> |

5.5 Environment

5.5.1 As demonstrated by the range of topics listed in Table 4.1, numerous comments were received in relation to environmental factors associated with the preferred route. Table 5.4 describes environmental topics that were raised, which are broken down by environmental topic. Relevant responses from SP Energy Networks are also provided. Consultation responses relating to specific environmental issues were also reviewed to ensure they receive appropriate consideration when defining and delivering the scope of the EIA.

| Table 5.4 Comments Received - Environment | | |
|--|---|---|
| Topic | Comments Received | SP Energy Networks Response |
| Landscape | <p>Concerns were raised regarding potential impacts on landscape and scenery at the following locations:</p> <ul style="list-style-type: none"> • Duisk valley; • South Ayrshire Scenic Area | <p>Detailed landscape surveys and assessment have been undertaken as part of the detailed design and environmental appraisal process.</p> <p>Further consultation with statutory authorities will be undertaken, to ensure that potential impacts on landscape are understood and controlled or mitigated.</p> |
| Visual amenity | <p>Concerns were raised regarding potential visual impacts at the following locations:</p> <ul style="list-style-type: none"> • A714; • B7027; • Residential properties in Barrhill; • Local businesses (incl. Barrhill Holiday Park and Queensland Holiday Park). | <p>The methodology defined within SP Energy Networks' <i>Major Electrical Infrastructure Projects – Approach to Routeing and Environmental Impact Assessment</i> document² was applied to the routeing process to ensure that all potential environmental impacts of the project were understood and avoided or mitigated where possible. In the case of visual impacts, such mitigation includes the careful routeing and siting of proposed infrastructure and the use of landform and/or existing screening features to reduce visibility.</p> <p>Detailed visual amenity surveys and assessment have been undertaken as part of the detailed design and environmental appraisal process.</p> <p>Undergrounding of specific spans of existing low voltage distribution overhead lines is likely where the proposed overhead line would cross these.</p> |
| Cultural heritage | <p>Historic Environment Scotland (HES) identified a number of scheduled monuments, and one category A listed building, in the vicinity of the preferred route, including Cairn Kenny scheduled monument and Kildonan house Category A Listed Building. There is the potential for impacts upon their settings, which should be considered in the ongoing design and</p> | <p>The constraint mapping undertaken identified a number of cultural heritage features within the study area and consideration was given to these during the routeing process.</p> <p>Detailed cultural heritage walkover surveys and assessment were subsequently undertaken as part of the</p> |

² Available at: https://www.spenergynetworks.co.uk/userfiles/file/SPEN_Approach_to_Routeing_FINAL_20150527.pdf, accessed 08.12.2020

| Table 5.4 Comments Received - Environment | | |
|--|--|---|
| Topic | Comments Received | SP Energy Networks Response |
| | <p>EIA processes. HES also confirmed that the short section connecting the Chirmorie wind farm to the Stranoch grid connection OHL would be unlikely to give rise to significant impacts on cultural heritage assets.</p> <p>South Ayrshire Council recognises that part of the route is rich in archaeological and heritage features and advised that SP Energy Networks should seek advice from the West of Scotland Archaeology Service (WoSAS) in the preparation of the EIA. SAC also cautioned that, in relation to the Chirmorie wind farm connection, particular care should be undertaken to minimise impact on any unrecorded archaeology that may exist on the site (within peat below ground level).</p> | <p>detailed design and environmental appraisal process.</p> <p>Further consultation with statutory authorities will be undertaken, to ensure that potential impacts on cultural heritage are understood and controlled or mitigated.</p> |
| Ornithology and Ecology | <p>The following feedback was received:</p> <ul style="list-style-type: none"> the natural environment that the works will disturb must be considered e.g. hen harrier's ranges; South Ayrshire Council identified that the preferred route passes through open ground which supports a number of regional and nationally important species habitats close to the preferred route. Appropriate mitigation measures would be needed to safeguard those species during the construction phase of the line. | <p>Ecological habitat and protected species surveys as well as ornithology survey work have been completed as part of the environmental appraisal process. Consultation with statutory authorities has also been undertaken, to ensure that potential impacts on ecology and ornithology can be understood and controlled.</p> <p>Ornithology surveys were undertaken in areas which lie within the foraging range of a designated Special Protection Area (SPA), as defined by SNH. The purpose of these surveys was to gain a greater understanding of bird movements from the SPAs and within the area of the preferred route.</p> |
| Forestry | <p>South Ayrshire Council stated that appropriate mitigation measures consistent with national and regional forestry policy should be reflected within the EIA to compensate for the losses to woodlands as a result of the work.</p> <p>SEPA stated that large scale felling should be avoided and requested a more detailed description of any felling event due to take place.</p> <p>Forestry Commission Scotland stated that further route options should be considered, in terms of crossing the existing Arecleoch wind farm, in order to minimise the potential amount of tree felling that would be required within Arecleoch Forest.</p> | <p>Detailed forestry survey and appraisal has been undertaken as part of the detailed design and environmental appraisal process. Further consultation with landowners and statutory authorities will be undertaken, to ensure that potential impacts on forestry and woodland are understood and controlled or mitigated.</p> <p>Following the 2017 consultation period, further routeing work was completed in order to consider further alternative routes through Arecleoch Forest. A new preferred route was defined, as consulted on in May 2019.</p> |

| Table 5.4 Comments Received - Environment | | |
|--|---|--|
| Topic | Comments Received | SP Energy Networks Response |
| Hydrology and peatland | <p>SEPA raised the following points:</p> <ul style="list-style-type: none"> • Developments should be designed to avoid engineering activities in the water environment, including burns, rivers, lochs, wetlands, groundwater and reservoirs. It is strongly recommended that the proposed pole locations are microsituated away from the vicinity watercourses to minimise the potential impact/disturbance on the banks and bed of watercourses. Buffer strips to watercourses should also be adopted to protect the riparian zone. • Where wetlands or peatland systems are present, the submission should demonstrate how the layout and design of the proposal will avoid impact on such areas. The route of any roads, tracks or trenches required for the overhead line within 100m of groundwater dependent terrestrial ecosystems (GWDTE) should be reconsidered. Similarly, the locations of borrow pits or foundations within 250m of such ecosystems should be reconsidered. Where avoidance is impossible, SEPA requires details of how impacts upon those habitats would be minimised and mitigated. • Where the proposed infrastructure will impact upon peatlands, a detailed map of peat depths should be submitted. Disruption to peatland, and the volume of excavated peat, should be minimised. Where surplus peat will be generated, a Peat Management Plan for the site should be prepared, setting out the principles of how the surplus peat will be reused or disposed of. • The applicant should consider all aspects of site work that might impact upon the environment, potential pollution risks associated with the proposals and identify the principles of preventative measures and mitigation. • Roads, foundations and other construction works can disrupt groundwater flow and impact on groundwater abstractions; an assessment of the impact of the proposals on groundwater abstractions should be included within the submission. | <p>The routing strategy took account of hydrology and peatland constraints, including surface water bodies and appropriate buffer distances, and nationally important carbon rich soil and peatland.</p> <p>Detailed hydrology surveys and assessment of potential effects on hydrology, including watercourses, water supplies and groundwater, has been undertaken as part of the detailed design and environmental appraisal process. In addition, further ecology surveys identified any areas of GWDTE and peatland habitat such that the design of the development has been able to avoid such habitat where possible.</p> <p>Further discussion will be held with landowners during development of the project, to locate any previously unidentified private water supplies.</p> <p>Further consultation with statutory authorities will be undertaken, to ensure that potential impacts on hydrology and peatland are understood and controlled or mitigated.</p> |

5.6 Socio-Economics

Table 5.5 describes the comments that were received in relation to socio-economics, as well as the relevant response from SP Energy Networks.

| Table 5.5: Comments Received – Socio-economics | | |
|---|--|--|
| Topic | Comments Received | SP Energy Networks Response |
| Tourism | <p>The following sensitive tourism and recreation features were identified within consultation feedback received:</p> <ul style="list-style-type: none"> • Barrhill holiday park; • Queensland holiday park. | <p>Detailed assessment of potential impacts on tourism and recreation has been undertaken as part of the detailed design and environmental appraisal process. This has been completed as part of the landscape and visual amenity appraisal, which includes viewpoints overlooking the village of Barrhill and from local roads.</p> |
| Local businesses and economy | <p>In addition, to the above local tourism businesses, the following points were raised:</p> <ul style="list-style-type: none"> • The holiday parks provide an income to shops, pubs etc in the local area; • The visual impact on the holiday parks would lead to a severe detriment to these businesses. | |

6. SUMMARY AND NEXT STEPS

6.1 Summary

SP Energy Networks welcomes the level of engagement by respondents during the consultation on the preferred route for the proposed Stranoch and Chirmorie wind farms grid connections project.

A period of community consultation on the preferred route was completed during March and April 2017 and was designed to engage with statutory and non-statutory organisations and local communities, in order to invite feedback on the rationale for and approach to the selection of the preferred route for the project. A total of 18 consultation responses were received during this consultation period and a further four consultation responses were received during the June-July consultation period.

The preferred route was amended in response to feedback received, as well as in response to a change in the location of the proposed Stranoch substation. A further period of community consultation was completed on the basis of a revised preferred route, during May and June 2019. A total of 23 consultation responses were received during this consultation period.

All comments have been carefully considered by the project team. A response has been provided in this report to explain how SP Energy Networks has taken into account the points and queries that were raised. The feedback received, along with further assessment and technical work has been used to confirm the location of the proposed route and to inform the location of the indicative alignment for the OHL, as well as to inform the scope of the environmental appraisal.

6.2 Next Steps

In June 2019, the Scottish Government Energy Consents Unit screened the project as a non-EIA development. Therefore, an Environmental Impact Assessment (EIA) in accordance with the requirements of the *Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017* is not required to accompany the consent application. Instead, a supporting Environmental Appraisal (EA) has been prepared to describe the main elements of the project and provide an appraisal of the proposed development in the context of relevant policies which address matters of environmental protection and nature conservation. The EA will inform the content of a Construction Environmental Management Plan (CEMP) to deliver a framework for implementation of mitigation of potential environmental impacts during the construction stage.

During the EA process, the local Community Council requested that a community meeting be set up to allow SP Energy Networks to explain the routeing history. A community meeting was held on 30th October 2019 and visualisations prepared as part of the EA were presented at the meeting. In addition, SP Energy Networks has sought to work closely with stakeholders, communities and landowners to discuss and explain its decisions during the environmental appraisal process.

The general public will have the opportunity to comment on the applications for consent directly to the Scottish Government. Full instructions on how to comment and the timescales for doing so will be advertised in the local press when the applications for Section 37 consent and deemed planning permission are submitted.

Information will also be posted on the project website at:

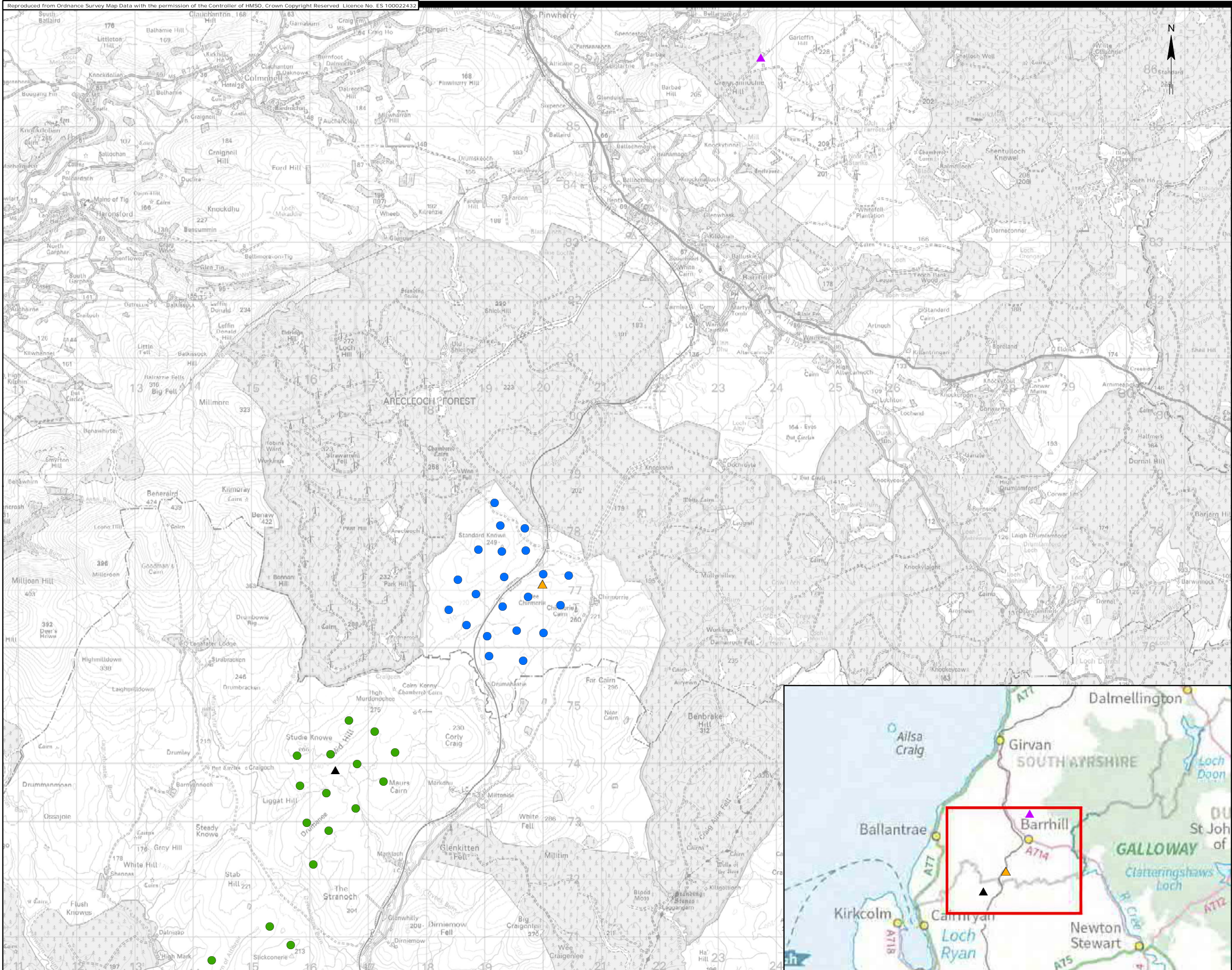
https://www.spenergynetworks.co.uk/pages/stranoch_windfarm.aspx

ANNEX A: FIGURES

Figure 4.1.1: Project Location

Figure 4.1.2: Preferred OHL Route 2017

Figure 4.1.3: Preferred OHL Route 2019



- Legend
- Mark Hill Substation
 - Consented Chirmorie Substation
 - Consented Stranoch Substation
 - Consented Chirmorie Turbine
 - Consented Stranoch Turbine

Figure 4.1.1:
Project Location

Project No. UK1222885

Site Stranoch and
Chirmorie Wind Farms
Grid Connections

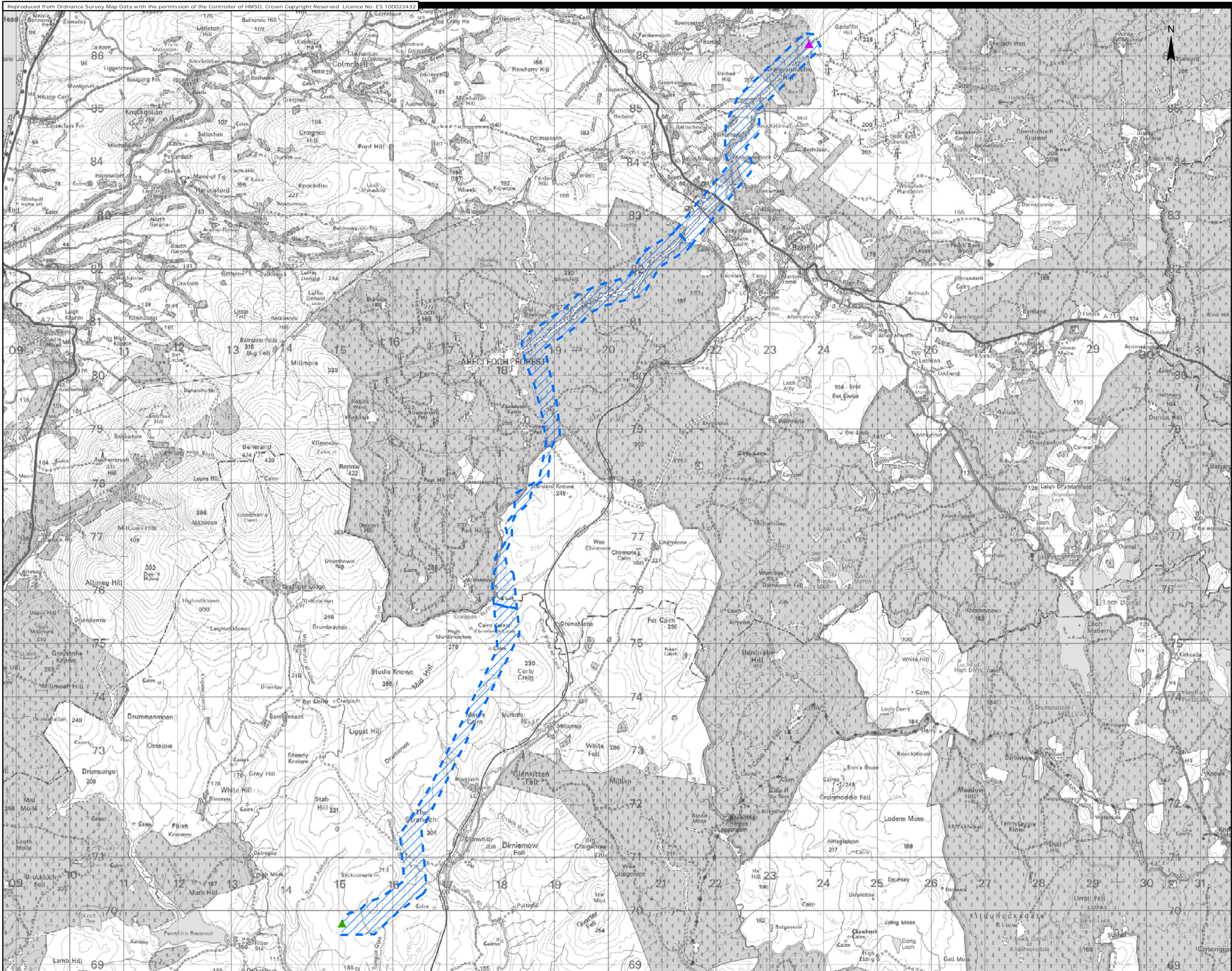
Client SP Energy Networks

Date December 2020

Scale 1:60,000 @ A3

Issue 1 Drawn by AC





Legend

- Mark Hill Substation
- Proposed Stranoch Substation 2017
- Preferred Route 2017

Figure 4.1.2:
Preferred OHL Route
(2017)

Project No. UK1222885

Site Stranoch and
Chirmorie Wind Farms
Grid Connections

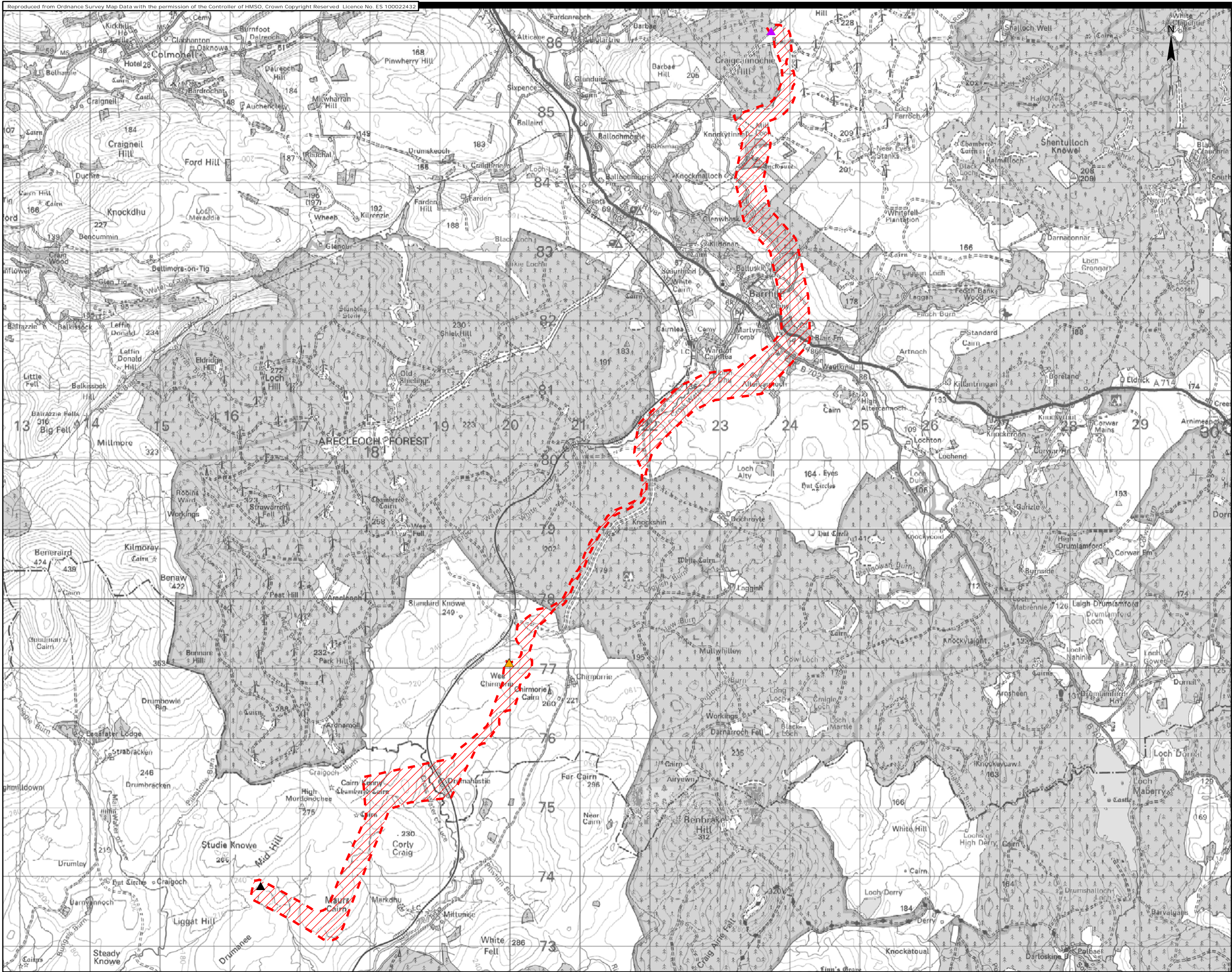
Client SP Energy Networks

Date October 2019

Scale 1:65,000 @ A3

Issue 1 Drawn by CM





- Legend
- ▲ Mark Hill Substation
 - ▲ Proposed Chirmorie Substation
 - ▲ Proposed Stranoch Substation
 - Preferred Route

| | | | |
|-------------|--|----------|----|
| Title | Figure 4.1.3: Preferred OHL Route (2019) | | |
| Project No. | UK1222885 | | |
| Site | Stranoch and Chirmorie Wind Farms Grid Connections | | |
| Client | SP Energy Networks | | |
| Date | October 2019 | | |
| Scale | 1:50,000 | @ A3 | |
| Issue | 1 | Drawn by | AC |



ANNEX B: LIST OF STAKEHOLDERS

Annex B: List of Stakeholders

| Organisation | Relevant Contact |
|--|--------------------------------------|
| Statutory Stakeholders | |
| Scottish Government Energy Consents Unit | Consents and Policy Manager |
| South Ayrshire Council | Planning Officer |
| Dumfries & Galloway Council | Planning Officer |
| NatureScot (formerly Scottish Natural Heritage) | West Dumfries Area Officer |
| Scottish Environment Protection Agency | Senior Planning Officer – South West |
| Historic Environment Scotland | Senior Heritage Management Officer |
| Non-Statutory Stakeholders | |
| Association of Salmon Fishery Boards | |
| Barrhill Community Council | |
| British Trust for Ornithology | |
| BT | |
| Civil Aviation Authority | |
| Defence Infrastructure Organisation | |
| Forestry Enterprise Scotland | |
| Health and Safety Executive | |
| John Muir Trust | |
| Marine Scotland | |
| Mountaineering Scotland | |
| National Farmers Union | |
| National Trust for Scotland | |
| National Air Traffic Services | |
| Network Rail | |
| New Luce Community Council | |
| OFCOM | |
| OFWAT | |
| Pinwherry and Pinmore Community Council | |
| Ramblers Association Scotland | |
| Royal Society for the Protection of Birds (RSPB) | |

| Organisation | Relevant Contact |
|--|------------------|
| Royal Air Force | |
| Scotia Gas Networks | |
| Scottish Badgers | |
| Scottish Rights of Way and Access Society (ScotWays) | |
| Scottish Water | |
| Scottish Wildlife Trust | |
| The Coal Authority | |
| The Crown Estate | |
| The Woodland Trust | |
| Transport Scotland | |
| Visit Scotland | |
| Ward Councillors, Ward 8 Girvan and South Carrick | |
| West of Scotland Archaeology Service | |

ANNEX C: INFORMATION BOOKLETS



PUBLIC CONSULTATION EVENTS
Wednesday 1 March 2017 and
Thursday 2 March 2017
Barrhill Memorial Hall, Barrhill, Girvan
14:00 - 19:30

Stranoch Wind Farm Grid Connection

Members of the public, landowners and other interested parties are invited by SP Energy Networks (SPEN) to attend their consultation events regarding proposals for a new overhead transmission line to connect the consented Stranoch wind farm with the grid network at the existing Mark Hill substation, north of Barrhill.

SP Transmission (SPT) the transmission license holder is a subsidiary of SP Energy Networks responsible for the transmission of electricity in central and southern Scotland. SPT has received a Grid Connection Application from the developers of the Stranoch wind farm.

The project is currently in the early stages of development and the project team would like to consult with landowners, members of the public and other interested parties regarding the preferred route.

The SP Energy Networks project team will host the open-doors events where members of the community can drop in to receive information and discuss the proposals, which are currently at an early stage of development.

For more information and to provide your views, please come along to one of the consultation events. Further information is available via our project website:

www.spenergynetworks.co.uk/pages/community_consultation

If you are unable to attend the events and would like information on the project, please contact:

SPEN Community Relations - phone number – 07516461129 or email communityrelations@spenergynetworks.com



PUBLIC CONSULTATION EVENT
Wednesday 5 April 2017
Memorial Hall, Main Street, New Luce
14:00 - 19:30

Stranoch Wind Farm Grid Connection

Members of the public, landowners and other interested parties are invited by SP Energy Networks (SPEN) to attend their consultation event regarding proposals for a new overhead transmission line to connect the consented Stranoch wind farm with the grid network at the existing Mark Hill substation, north of Barrhill.

SP Transmission (SPT) the transmission license holder is a subsidiary of SP Energy Networks responsible for the transmission of electricity in central and southern Scotland. SPT has received a Grid Connection Application from the developers of the Stranoch wind farm.

The project is currently in the early stages of development and the project team would like to consult with landowners, members of the public and other interested parties regarding the preferred route.

The SP Energy Networks project team will host the open-doors event where members of the community can drop in to receive information and discuss the proposals, which are currently at an early stage of development.

For more information and to provide your views, please come along to the consultation event. Further information is available via our project website:

www.spenergynetworks.co.uk/pages/community_consultation

If you are unable to attend the events and would like information on the project, please contact:

SPEN Community Relations - phone number – 07516461129 or email communityrelations@spenergynetworks.com



PUBLIC CONSULTATION

Chirmorie Wind Farm Grid Connection

SP Energy Networks is proposing the construction of a new 132 kV wood pole overhead line within South Ayrshire. The proposed development is required to connect the proposed Chirmorie Windfarm to the electricity transmission network. It is proposed that Chirmorie wind farm grid connection will be approximately 1.5 km in length, to combine with the preferred route for the Stranoch wind farm grid connection to the east of Arecleoch wind farm.

During this consultation stage we are seeking views on the current preferred route. The Routeing Consultation Document provides details of the proposal and hard copies will be made available at Suzanne Stores, 32 Main Street, Barrhill and Barrhill Memorial Hall from Tuesday 20th June. A copy of this document will also be provided to South Ayrshire Council.

A Public Consultation Event is scheduled to take place on **Tuesday 4th July 2017 in Barrhill Memorial Hall, 2pm-6.30pm**. The SP Energy Networks project team will host the open-doors event where members of the community can drop in to receive information and discuss the proposals, which are currently at an early stage of development. Display stands will be provided.

The proposed route for the connection will take into account views expressed during this consultation stage and we encourage the local community to make comment.

Should you have any further enquiries or comments, please contact us at ChirmorieOHLConnection@spenergynetworks.co.uk or by writing to: Chirmorie Windfarm Grid Connection, Land and Planning, SP Energy Networks, Ochil House, 10 Technology Avenue, Hamilton International Technology Park, Blantyre, G72 0HT.

Your comments are requested by **31st July 2017**.



PUBLIC CONSULTATION

Stranoch and Chirmorie Wind Farms Grid Connections

SP Energy Networks (SPEN) proposes to construct a new 132 kilovolt (kV) overhead line (OHL) to connect both the consented Stranoch wind farm and the consented Chirmorie wind farm to the electricity network at Mark Hill substation, located approximately 4 km north of the village of Barrhill, in South Ayrshire.

During this consultation stage we are seeking views on the current preferred route. Hard copies of the information leaflet will be made available at Suzanne Stores, 32 Main Street, Barrhill and Barrhill Memorial Hall from Wednesday 1st May 2019.

A Public Consultation Event is scheduled to take place on **Wednesday 1st May 2019 in Barrhill Memorial Hall, 2pm-6.30pm**. The SP Energy Networks project team will host the open-doors event where members of the community can drop in to receive information and discuss the proposals, which are currently at an early stage of development. Display stands will be provided.

The proposed route for the connection will take into account views expressed during this consultation stage and we encourage the local community to make comment.

Should you have any further enquiries or comments, please contact us at StranochOHLConnection@spenergynetworks.co.uk or by writing to: Stranoch Windfarm Grid Connection, Land and Planning, SP Energy Networks, Ochil House, 10 Technology Avenue, Hamilton International Technology Park, Blantyre, G72 0HT.

Your comments are requested by **28th June 2019**.

ANNEX D: CONSULTATION EVENT ADVERTS



SP Energy Networks
Ochil House
10 Technology Avenue
Hamilton International Technology Park
Blantyre
G72 0HT

StranochOHLConnection@spenergynetworks.co.uk

Date: 14 February 2017

Dear Householder,

SP Energy Networks - Consultation on Preferred Route for Stranoch Wind Farm Grid Connection

We are contacting you to provide information on two upcoming public consultation events that will be held in your local area on 1st and 2nd March 2017.

SP Energy Networks (SPEN) proposes to construct a new 132 kilovolt (kV) overhead line (OHL) to connect the proposed Stranoch wind farm to the existing Mark Hill substation, approximately 4 km north of Barrhill. The OHL will be supported on wood poles of a typical height of 15 m, and an anticipated average span length of 100 m. The objective of SPEN's routeing strategy is to identify a technically feasible and economically viable OHL route, between specified points, which causes the least disturbance to people and the environment.

We will be holding two consultation events in order to present our proposals and obtain feedback from the local community. The events will take place on:

Wednesday 1 March 2017 and Thursday 2 March 2017

Barrhill Memorial Hall, Barrhill, Girvan

14:00 - 19:30

The events will be an open door format, and we warmly invite members of the public to attend at any point. We will have display boards and members of the project team will be available to answer questions and receive comments.

Additional information regarding the project is available via our project website –

www.spenergynetworks.co.uk/pages/community_consultation

Yours sincerely,

SPEN Community Relations



SP Energy Networks
Ochil House
10 Technology Avenue
Hamilton International Technology Park
Blantyre
G72 0HT

StranochOHLConnection@spenergynetworks.co.uk

Date: 14 February 2017

Dear [insert stakeholder],

SP Energy Networks - Consultation on Preferred Route for Stranoch Wind Farm Grid Connection

We are contacting you to provide information on two upcoming public consultation events that will be held in your local area on 1st and 2nd March 2017.

SP Energy Networks (SPEN) proposes to construct a new 132 kilovolt (kV) overhead line (OHL) to connect the proposed Stranoch wind farm to the existing Mark Hill substation, approximately 4 km north of Barrhill. The OHL will be supported on wood poles of a typical height of 15 m, and an anticipated average span length of 100 m. The objective of SPEN's routeing strategy is to identify a technically feasible and economically viable OHL route, between specified points, which causes the least disturbance to people and the environment.

We will be holding two consultation events in order to present our proposals and obtain feedback from the local community. The events will take place on:

Wednesday 1 March 2017 and Thursday 2 March 2017

Barrhill Memorial Hall, Barrhill, Girvan

14:00 - 19:30

The events will be an open door format, and we warmly invite you to attend at any point. We will have display boards and members of the project team will be available to answer questions and receive comments.

We also enclose a copy of the Routeing Strategy Consultation Document which describes the routeing process.

Additional information regarding the project is available via our project website –

www.spenergynetworks.co.uk/pages/community_consultation

Yours sincerely,

SPEN Community Relations



SP Energy Networks
Ochil House
10 Technology Avenue
Hamilton International Technology Park
Blantyre
G72 0HT

StranochOHLConnection@spenergynetworks.co.uk

Date: 27 February 2017

Dear Mr Thomson,

SP Energy Networks - Consultation on Preferred Route for Stranoch Wind Farm Grid Connection

We are contacting you to provide information on two upcoming public consultation events that will be held in your local area on 1st and 2nd March 2017.

SP Energy Networks (SPEN) proposes to construct a new 132 kilovolt (kV) overhead line (OHL) to connect the proposed Stranoch wind farm to the existing Mark Hill substation, approximately 4 km north of Barrhill. The OHL will be supported on wood poles of a typical height of 15 m, and an anticipated average span length of 100 m. The objective of SPEN's routeing strategy is to identify a technically feasible and economically viable OHL route, between specified points, which causes the least disturbance to people and the environment.

We will be holding two consultation events in order to present our proposals and obtain feedback from the local community. The events will take place on:

Wednesday 1 March 2017 and Thursday 2 March 2017

Barrhill Memorial Hall, Barrhill, Girvan

14:00 - 19:30

The events will be an open door format, and we warmly invite you to attend at any point. We will have display boards and members of the project team will be available to answer questions and receive comments.

We enclose a copy of Figure 4.4 from the Routeing Strategy Consultation Document which shows the location of the Preferred Route. A hard copy of the Routeing Strategy Consultation Document will be available to view at Suzanne Stores, Barrhill, from Wednesday 1 March.

Additional information regarding the project is available via our project website –

www.spenergynetworks.co.uk/pages/community_consultation

Yours sincerely,

SPEN Community Relations



SP Energy Networks
Ochil House
10 Technology Avenue
Hamilton International Technology Park
Blantyre
G72 0HT

StranochOHLConnection@spenergynetworks.co.uk

Date: 1 April 2019

Dear Householder,

SP Energy Networks - Consultation on Preferred Route for Stranoch and Chirmorie Wind Farms Grid Connections

We are contacting you to provide information on an upcoming public consultation event that will be held in your local area on 1st May 2019.

SP Energy Networks (SPEN) proposes to construct a new 132 kilovolt (kV) overhead line (OHL) to connect both the consented Stranoch wind farm and the consented Chirmorie wind farm to the electricity network at Mark Hill substation, located approximately 4 km north of the village of Barrhill, in South Ayrshire. The OHL will be supported on single and double 'trident' wood poles of a typical height of 15 m, and an anticipated average span length of 100 m. The objective of SPEN's routeing strategy is to identify a technically feasible and economically viable OHL route, between specified points, which causes the least disturbance to people and the environment.

We will be holding a consultation event in order to present our proposals and obtain feedback from the local community. The event will take place on:

Wednesday 1 May 2019

Barrhill Memorial Hall, Barrhill, Girvan

14:00 - 18:30

The event will be an open door format, and we warmly invite members of the public to attend at any point. We will have display boards and members of the project team will be available to answer questions and receive comments.

Additional information regarding the project is available via our project website –

www.spenergynetworks.co.uk/pages/community_consultation

Hard copies of the information leaflet will be available at Suzanne Stores, Barrhill, from Wednesday 1st May.

Written feedback on the Preferred Route is requested by 28th June 2019.

Yours sincerely,

SPEN Community Relations



SP Energy Networks
Ochil House
10 Technology Avenue
Hamilton International Technology Park
Blantyre
G72 0HT

StranochOHLConnection@spenergynetworks.co.uk

Date: 17 April 2019

Dear [insert stakeholder],

SP Energy Networks - Consultation on Preferred Route for Stranoch and Chirmorie Wind Farms Grid Connections

We are contacting you to provide information on an upcoming public consultation event that will be held in your local area on 1st May 2019.

SP Energy Networks (SPEN) proposes to construct a new 132 kilovolt (kV) overhead line (OHL) to connect both the consented Stranoch wind farm and the consented Chirmorie wind farm to the national transmission grid at Mark Hill substation, located approximately 4 km north of the village of Barrhill, in South Ayrshire. The OHL will be supported on single and double 'trident' wood poles of a typical height of 15 m, and an anticipated average span length of 100 m. The objective of SPEN's routeing strategy is to identify a technically feasible and economically viable OHL route, between specified points, which causes the least disturbance to people and the environment.

We will be holding a public consultation event in order to present our proposals and obtain feedback from the local community. The event will take place on:

Wednesday 1 May 2019

Barrhill Memorial Hall, Barrhill, Girvan

14:00 - 18:30

The event will be an open door format, and we warmly invite you to attend at any point. We will have display boards and members of the project team will be available to answer questions and receive comments.

We enclose a copy of Figure 1 showing the location of the Preferred Route. Hard copies of the information leaflet will be available at Suzanne Stores, Barrhill, from Wednesday 1st May.

Additional information regarding the project is available via our project website –

www.spenergynetworks.co.uk/pages/community_consultation

Yours sincerely,

SPEN Community Relations



SP Energy Networks
Ochil House
10 Technology Avenue
Hamilton International Technology Park
Blantyre
G72 0HT

StranochOHLConnection@spenergynetworks.co.uk

Date: 1 April 2019

Dear Mr Thomson,

SP Energy Networks - Consultation on Preferred Route for Stranoch and Chirmorie Wind Farms Grid Connections

We are contacting you to provide information on an upcoming public consultation event that will be held in your local area on 1st May 2019.

SP Energy Networks (SPEN) proposes to construct a new 132 kilovolt (kV) overhead line (OHL) to connect both the consented Stranoch wind farm and the consented Chirmorie wind farm to the national transmission grid at Mark Hill substation, located approximately 4 km north of the village of Barrhill, in South Ayrshire. The OHL will be supported on single and double 'trident' wood poles of a typical height of 15 m, and an anticipated average span length of 100 m. The objective of SPEN's routeing strategy is to identify a technically feasible and economically viable OHL route, between specified points, which causes the least disturbance to people and the environment.

We will be holding a public consultation event in order to present our proposals and obtain feedback from the local community. The events will take place on:

Wednesday 1 May 2019

Barrhill Memorial Hall, Barrhill, Girvan

14:00 - 18:30

The event will be an open door format, and we warmly invite you to attend at any point. We will have display boards and members of the project team will be available to answer questions and receive comments.

We enclose a copy of Figure 1 showing the location of the Preferred Route. Hard copies of the information leaflet will be available at Suzanne Stores, Barrhill, from Wednesday 1st May.

Additional information regarding the project is available via our project website –

www.spenergynetworks.co.uk/pages/community_consultation

Written feedback on the Preferred Route is requested by 28th June 2019.

Yours sincerely,

SPEN Community Relations

ANNEX E: CONSULTATION EVENT LETTERS



Welcome

Welcome to this public exhibition regarding our proposals to construct a new 132 kilovolt (kV) overhead line (OHL) supported by wood poles to connect the proposed Stranoch wind farm to the existing Mark Hill substation, approximately 4 km north of Barrhill.

This exhibition provides information on:

- the design principles that are used to identify a route for a new overhead line;
- how a Preferred Route has been identified;
- where the Preferred Route is located; and
- what feedback we would like at this stage.

Who we are

SP Transmission Plc (SPT) is the transmission license holder in central and southern Scotland.

Under the Electricity Act 1989, SPT has the following responsibilities:

- to develop and maintain an efficient, coordinated and economical system of electricity transmission;
- to facilitate competition in the generation and supply of electricity; and
- to offer non-discriminatory terms for connection to the transmission system, both for new generation and for new sources of electricity demand.

SP Energy Networks is responsible for the operation and maintenance of the transmission network on behalf of SPT.

Under Section 37 of the Electricity Act 1989, SP Energy Networks is required to seek consent from the Scottish Ministers for the construction of any non-exempted overhead line operating at a voltage greater than 20 kilovolts (kV). Electricity networks like this provide a physical link between electricity generators and electricity users.

Throughout the life of our projects, we aim to work positively with local communities and keep people informed about what we are doing. This is particularly important when we are developing a proposal and want to understand what local people think about our plans.

*Please take your time in visiting the exhibition and reading the displays.
If you have any questions, please feel free to ask a member of the design team, who can be identified by their name badges.*

Questions

As you walk around this exhibition, and examine the display, please consider the following questions:

- *Do you have any comments regarding the rationale for the project?*
- *Do you have any comments regarding the approach to selection of the preferred route?*
- *Are there any factors, or environmental features, that you consider may have been overlooked during the routing process?*
- *Do you have any other comments about the preferred route for the overhead line?*



PLEASE COME THIS WAY



What's the Need?

SP Transmission has received a Grid Connection Application from the developers of the proposed Stranoch wind farm. Stranoch wind farm was consented by the Scottish Ministers in July 2016.

The proposed grid connection will comprise an overhead line which will run from a substation on the Stranoch wind farm site to the existing Mark Hill wind farm substation, approximately 4 km north of Barrhill.

The map below shows the location of the proposed Stranoch wind farm and the existing Mark Hill and Arecleoch wind farms. It also shows the location of the proposed Stranoch wind farm substation and the existing Mark Hill substation.



The photograph below shows a typical wood pole structure. Wood poles would typically be 15 m in height and would have an average span length of 100 m.



Routing Guidance

The Holford Rules are used to guide the routing process. These rules were first established in 1959 by Sir William Holford and to continue to inform transmission line routing in the UK

Rule 1:

At the outset, plan the general route so that it avoids altogether, if possible, the major areas of highest amenity value or international and national designation

Rule 2:

Ensure that the route also avoids smaller areas of high amenity value or scientific interest, by deviation; provided that this can be done without using too many angle towers to change direction.



Map of study area showing location of preferred route in relation to larger areas of constraint

Rule 3:

Where possible, choose the most direct line, with no sharp changes of direction



Typical wood pole overhead line

Rule 4:

Select tree and hill backgrounds in preference to sky background



View of existing wood pole overhead line south of Coalburn, South Lanarkshire

Rule 5:

Select open valleys with woods, where the apparent height of the towers will be reduced and the views of the line will be broken by trees



View of existing wood pole overhead line, within valley at Chirmorie, south of Barrhill

Rule 6:

In country which is flat and sparsely planted, keep the higher voltage lines as far as possible independent of smaller lines and other masts so as to avoid a concentration or 'wirescape'



View of existing 275kV pylon line from A714, west of Barrhill, looking southwards

Rule 7:

Approach urban areas through industrial zones where they exist and, if this is not possible, consider undergrounding any lower voltage lines

The routing process establishes a Routing Strategy, which is described within a Routing Strategy Consultation Document. It is an iterative process which identifies and tests route options and responds to consultation feedback, from both statutory consultation bodies and from local communities.

```

graph TD
    RO[ROUTING OBJECTIVE] --> ELP[ESTABLISHED PRACTICE FOR LINE ROUTING]
    ELP --> TEER[TECHNICAL AND ENVIRONMENTAL ROUTING CONSIDERATIONS]
    ELP --> CPE[CONSIDERATION OF POTENTIAL EFFECTS]
    TEER --> C[CONSULTATIONS]
    TEER --> CS[CONSTRAINTS]
    TEER --> O[OPPORTUNITIES]
    CS --> RS[ROUTING STRATEGY]
    O --> RS
    CPE --> SV[SEE VISITS]
    SV --> RS
    RS --> BSR[RECONSIDER STRATEGY TO PRIORITIZE ROUTING CONSIDERATIONS FOR CONSIDERATION OF UNRESOLVED ISSUES IF NO SUITABLE ROUTE CAN BE FORMED]
    RS --> DRO[DEVELOPMENT OF ROUTE OPTIONS]
    DRO --> ARO[APPRAISAL OF ROUTE OPTIONS]
    ARO --> SPO[SELECTION OF PREFERRED ROUTE]
    SPO --> MRO[IDENTIFICATION OF PROPOSED ROUTE]
    MRO --> SRO[SELECTION OF RESPONDED ROUTE]
    SRO --> EIA[ENVIRONMENTAL IMPACT ASSESSMENT]
    EIA --> ARA[APPLICATION FOR ROUTE ALIGNMENT]
    BSR --> C2[CONSULTATIONS]
    C2 --> DRO
    C2 --> ARO
    C2 --> SPO
    C2 --> MRO
    C2 --> SRO
    C2 --> EIA
    C2 --> ARA
  
```

The flowchart illustrates the proposed routing methodology for the proposed road project. It begins with the **ROUTING OBJECTIVE**, which leads to **ESTABLISHED PRACTICE FOR LINE ROUTING**. This step branches into **TECHNICAL AND ENVIRONMENTAL ROUTING CONSIDERATIONS** and **CONSIDERATION OF POTENTIAL EFFECTS**. The technical and environmental considerations involve **CONSULTATIONS** and lead to identifying **CONSTRAINTS** and **OPPORTUNITIES**, which then inform the **ROUTING STRATEGY**. The consideration of potential effects involves **SEE VISITS** and also informs the **ROUTING STRATEGY**. The **ROUTING STRATEGY** leads to the **DEVELOPMENT OF ROUTE OPTIONS**, which are then **APPRAISAL OF ROUTE OPTIONS**, leading to the **SELECTION OF PREFERRED ROUTE**. This is followed by the **IDENTIFICATION OF PROPOSED ROUTE**, **SELECTION OF RESPONDED ROUTE**, **ENVIRONMENTAL IMPACT ASSESSMENT**, and finally the **APPLICATION FOR ROUTE ALIGNMENT**. A feedback loop exists from the **ROUTING STRATEGY** to **RECONSIDER STRATEGY TO PRIORITIZE ROUTING CONSIDERATIONS FOR CONSIDERATION OF UNRESOLVED ISSUES IF NO SUITABLE ROUTE CAN BE FORMED**, which then leads back to **CONSULTATIONS** and informs all subsequent steps from **DEVELOPMENT OF ROUTE OPTIONS** to **APPLICATION FOR ROUTE ALIGNMENT**.

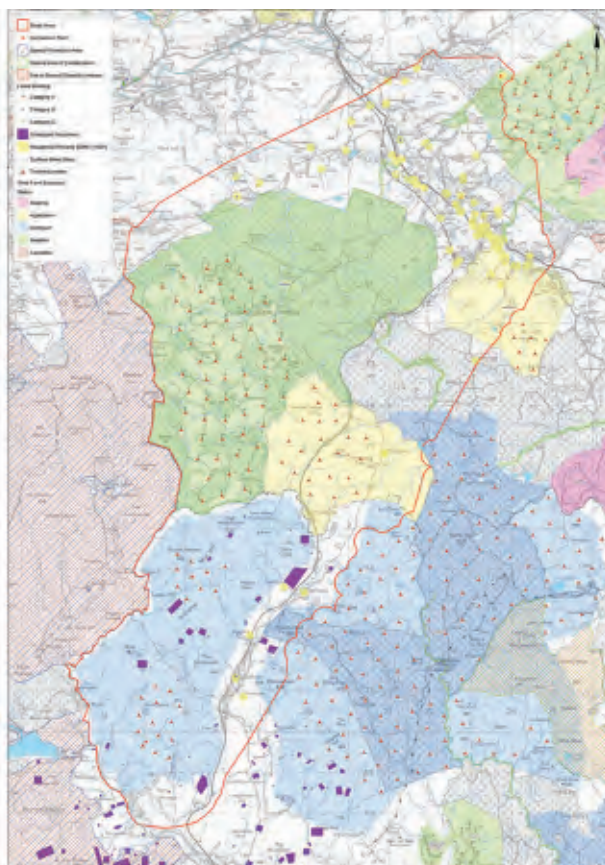
Following this consultation exhibition, the preferred route may be modified and a proposed route will be adopted.

Technical and Environmental Routeing Considerations

The initial study area was defined as the area between the existing Mark Hill wind farm to the north and the proposed Stranoch substation to the south. The main environmental and technical constraints in the area between these two points are:

- various proposed and existing wind farm developments;
- the Glen App and Galloway Moors Special Protection Area (SPA) and Site of Special Scientific Interest (SSSI);
- water bodies, including the Duisk River;
- cultural heritage features, particularly scheduled monuments in the vicinity of The Stranoch hill;
- Arecleoch Forest commercial plantation forestry area;
- the Kilmarnock railway line; and
- residential dwellings in and around Barrhill.

The map below shows the location of the study area and key environmental and technical constraints.



Route Options and Preferred Route

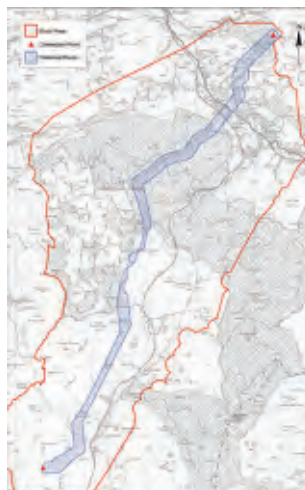
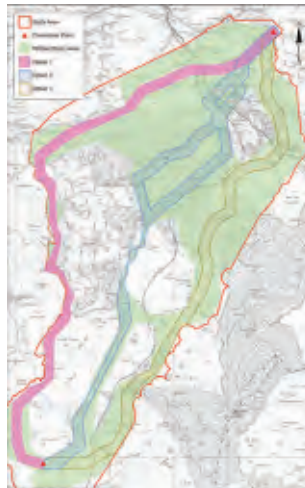
Three possible route options were identified through analysis of the environmental and technical constraints within the study area. This approach focussed on avoiding or minimising interaction with the key environmental and socio-economic constraints.

The three route options are identified on the map to the right.

The three route options were analysed and compared, and a Preferred Route was identified, on the following basis:

- The Preferred Route would have a lesser impact in terms of visual amenity and landscape impacts;
- The Preferred Route lies at a distance from the eastern boundary of the Glen App and Galloway Moors SPA;
- The Preferred Route would have a lesser impact on cultural heritage features in the southern part of the study area.

The Preferred Route is shown on the map to the right.





THANK YOU

Thank you for taking the time to find out about our proposals for the Stranoch wind farm grid connection OHL. Your comments are valuable to us in the next steps of this project.

Please take a feedback form. You can complete it today, or you can post it back to us at the address provided.

Feedback forms and all the information from today's event are also available to download from the project website at www.spenergynetworks.co.uk/pages/community_consultation

Information can also be posted out to you by our Community Liaison Manager upon request.

A Routeing Strategy Consultation Document on the preferred route was published in March 2017. An electronic copy of this can be found on line at www.spenergynetworks.co.uk/pages/community_consultation

Please provide comments to us by **30th April 2017**.

What Happens Next?

Following this consultation, it is possible that some changes to the Preferred Route will be suggested as a result of the emergence of new information. The suggested changes would be evaluated and, if necessary, subjected to additional consultation.

Once we have received all comments on the Preferred Route for the proposed Stranoch wind farm grid connection, we will confirm the location of the Proposed Route.

The Proposed Route will then be taken forward for further assessment and consultation as part of the Environmental Impact Assessment (EIA) process. The EIA will be submitted to the Scottish Government as part of an application for section 37 consent under the Electricity Act 1989. The application will be developed for submission in late 2017.



Welcome

Welcome to this public exhibition regarding our proposals to construct a new 132 kilovolt (kV) overhead line (OHL) supported by wood poles to connect the proposed Chirmorie wind farm to the existing Mark Hill substation, approximately 4 km north of Barrhill. It is proposed that Chirmorie wind farm grid connection would combine with the preferred route for the Stranoch wind farm grid connection, which was the subject of public consultation in March-April 2017.

This exhibition provides information on:

- the design principles that are used to identify a route for a new overhead line;
- how a Preferred Route has been identified;
- where the Preferred Route is located; and
- what feedback we would like at this stage.

Who we are

SP Energy Networks (SPEN) is part of the Scottish Power group and owns and operates the network of cables, overhead power lines and substations transporting electricity to customers in central and southern Scotland.

Under Section 37 of the Electricity Act 1989, SP Energy Networks is required to seek consent from the Scottish Ministers for the construction of any non-exempted overhead line operating at a voltage greater than 20 kilovolts (kV). Electricity networks like this provide a physical link between electricity generators and electricity users.

Throughout the life of our projects, we aim to work positively with local communities and keep people informed about what we are doing. This is particularly important when we are developing a proposal and want to understand what local people think about our plans.

Please take your time in visiting the exhibition and reading the displays. If you have any questions, please feel free to ask a member of the design team, who can be identified by their name badges.

Questions

As you walk around this exhibition, and examine the display, please consider the following questions:

- *Do you have any comments regarding the rationale for the project?*
- *Do you have any comments regarding the approach to selection of the preferred route?*
- *Are there any factors, or environmental features, that you consider may have been overlooked during the routeing process?*
- *Do you have any other comments about the preferred route?*



PLEASE COME THIS WAY

What's the Need?

SP Transmission has received a Grid Connection Application from the developers of the proposed Chirmorie wind farm. Chirmorie wind farm is not yet consented; however, during the public consultation for Stranoch wind farm grid connection in March-April 2017, consultee feedback requested that these projects should be progressed simultaneously, where possible. Therefore, SP Energy Networks has completed a route selection exercise to identify a preferred route to connect the proposed Chirmorie wind farm with the preferred route for the Stranoch wind farm grid connection. This would ensure the development of a coordinated and economical system of electricity transmission, with minimization of new transmission infrastructure.



The proposed grid connection will comprise an overhead line of approximately 1.5 km in length, which will run from a new substation on the proposed Chirmorie wind farm site to a point located immediately east of the existing Arecleoch wind farm, on the preferred route for the proposed Stranoch wind farm grid connection.

The map above shows the location of the proposed Chirmorie wind farm substation and the existing Mark Hill wind farm substation.

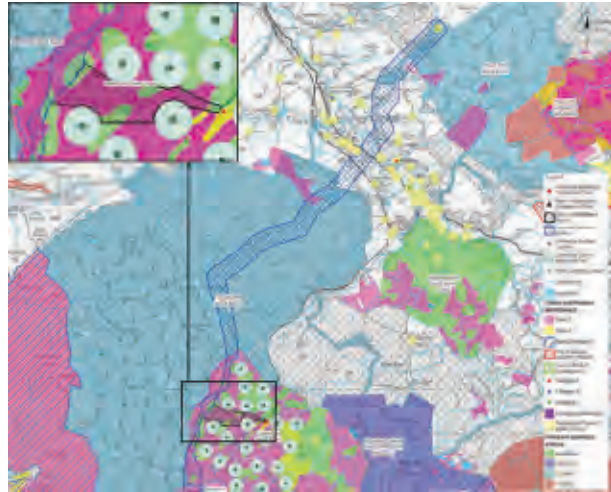
The photographs below show typical wood pole structures. Wood poles would typically be 15 m in height and would have an average span length of 100 m.



Technical and Environmental Routing Considerations and Preferred Route

The study area comprised the western section of the proposed Chirmorie wind farm site, which represents the area between the proposed Chirmorie substation and preferred route for the Stranoch wind farm grid connection.

The map below shows the location of the preferred route and the key environmental and technical constraints.



The main environmental and technical constraints in the area between these two points are:

- areas of carbon-rich soil, deep peat and priority peatland habitat;
- water bodies, including a tributary of Laggish Burn; and
- buffer distance from wind turbines, to avoid technical issues (turbulence, etc).

THANK YOU

Thank you for taking the time to find out about our proposals for the Chirmorie wind farm grid connection OHL. Your comments are valuable to us in the next steps of this project.

Please take a feedback form. You can complete it today, or you can post it back to us at the address provided.

Feedback forms and all the information from today's event are also available to download from the project website at www.spenergynetworks.co.uk/pages/community_consultation.

Information can also be posted out to you by our Community Liaison Manager upon request.

A Routeing Consultation Document on the preferred route was published in June 2017. An electronic copy of this can be found on line at www.spenergynetworks.co.uk/pages/community_consultation.

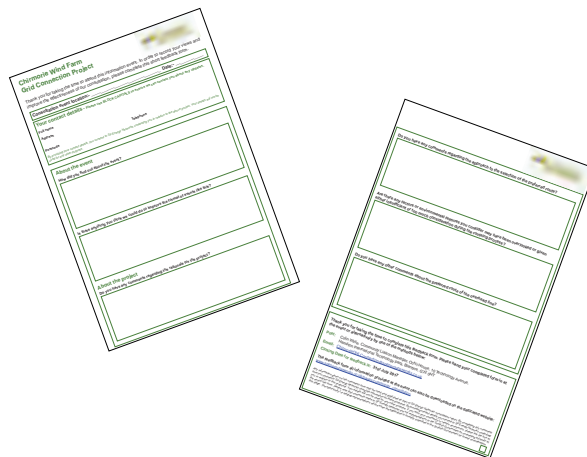
Please provide comments to us by **31st July 2017**.

What Happens Next?

Following this consultation, it is possible that some changes to the Preferred Route will be suggested as a result of the emergence of new information. The suggested changes would be evaluated and, if necessary, subjected to additional consultation.

Once we have received all comments on the Preferred Route for the proposed Chirmorie wind farm grid connection, we will confirm the location of the Proposed Route.

The Proposed Route will then be taken forward for further assessment and consultation as part of the Environmental Impact Assessment (EIA) process. The EIA will be submitted to the Scottish Government as part of an application for section 37 consent under the Electricity Act 1989. The application will be developed for submission in 2018.



Welcome

Welcome to this public exhibition regarding our proposals to construct a new 132 kilovolt (kV) overhead line (OHL) to connect both the consented Stranoch wind farm and the consented Chirmorie wind farm to the electricity network at Mark Hill substation, located approximately 4 km north of the village of Barrhill, in South Ayrshire. The OHL will be supported on single and double 'trident' wood poles.

This exhibition provides information on:

- the design principles that are used to identify a route for a new overhead line;
- how a Preferred Route has been identified;
- where the Preferred Route is located; and
- what feedback we would like at this stage.

Who we are

SP Energy Networks (SPEN) is part of the Scottish Power group and owns and operates the network of cables, overhead power lines and substations transporting electricity to customers in central and southern Scotland.

Under Section 37 of the Electricity Act 1989, SP Energy Networks is required to seek consent from the Scottish Ministers for the construction of any non-exempted overhead line operating at a voltage greater than 20 kilovolts (kV). Electricity networks like this provide a physical link between electricity generators and electricity users.

Throughout the life of our projects, we aim to work positively with local communities and keep people informed about what we are doing. This is particularly important when we are developing a proposal and want to understand what local people think about our plans.

Please take your time in visiting the exhibition and reading the displays. If you have any questions, please feel free to ask a member of the design team, who can be identified by their name badges.

Questions

As you walk around this exhibition, and examine the display, please consider the following questions:

- Do you have any comments regarding the rationale for the project?
- Do you have any comments regarding the approach to selection of the preferred route?
- Are there any factors, or environmental features, that you consider may have been overlooked during the routeing process?
- Do you have any other comments about the preferred route?



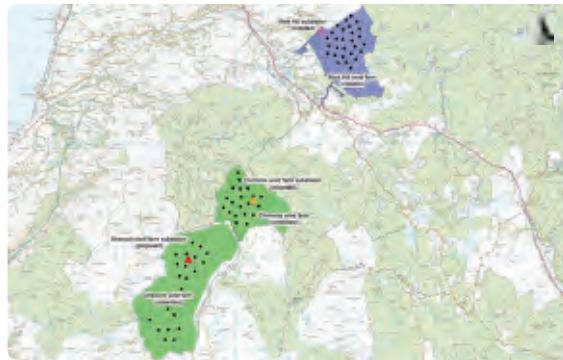
PLEASE COME THIS WAY

What's the Need?

SP Transmission has received Grid Connection Applications from the developers of both Stranoch wind farm and Chirmorie wind farm. Stranoch wind farm was consented by the Scottish Ministers in July 2016 and Chirmorie wind farm was consented in March 2018.

The proposed grid connections will comprise an overhead line which will run from a substation on the Stranoch wind farm site, via a substation on the Chirmorie wind farm site, to the existing Mark Hill wind farm substation, approximately 4 km north of Barrhill.

The map below shows the location of the consented Stranoch wind farm, the consented Chirmorie wind farm and the existing Mark Hill wind farm. It also shows the location of the proposed Stranoch wind farm substation, the proposed Chirmorie wind farm substation and the existing Mark Hill substation.



The photographs below show typical wood pole structures. Wood poles would typically be 15 m in height and would have an average span length of 100 m.



Routeing Guidance

The Holford Rules are used to guide the routeing process. These rules were first established in 1959 by Sir William Holford and to continue to inform transmission line routeing in the UK.

Rule 1:

At the outset, plan the general route so that it avoids altogether, if possible, the major areas of highest amenity value or international and national designation.

Rule 2:

Ensure that the route also avoids smaller areas of high amenity value or scientific interest, by deviation; provided that this can be done without using too many angle towers to change direction.



Map of study area showing location of preferred route in relation to larger areas of constraint

Rule 3:

Where possible, choose the most direct line, with no sharp changes of direction.



Typical wood pole overhead line

Rule 4:

Select tree and hill backgrounds in preference to sky background.



View of existing wood pole overhead line south of Coalburn, South Lanarkshire

Rule 5:

Select open valleys with woods, where the apparent height of the towers will be reduced and the views of the line will be broken by trees.



View of existing wood pole overhead line, within valley at Chirmonie, south of Barrhill

Rule 6:

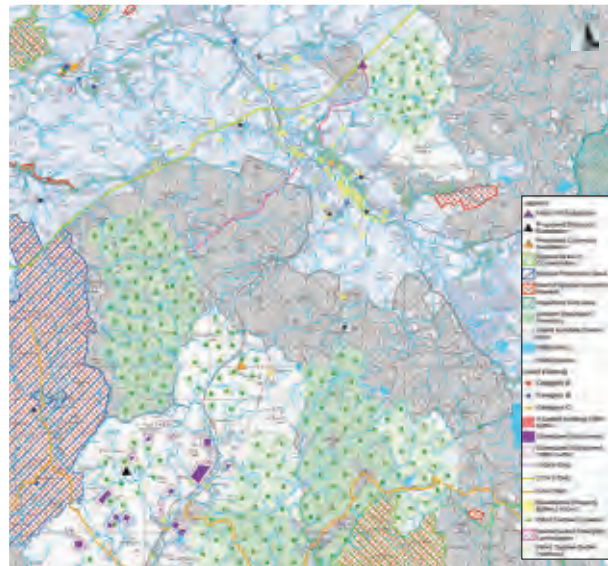
In country which is flat and sparsely planted, keep the higher voltage lines as far as possible independent of smaller lines and other masts so as to avoid a concentration or 'wirescape'.



View of existing 275kV pylon line from A714, west of Barrhill, looking southwards

Rule 7:

Approach urban areas through industrial zones where they exist and, if this is not possible, consider undergrounding any lower voltage lines.



Route Options and Preferred Route

In 2017, a Preferred Route was identified and public consultation on the location of the Preferred Route was undertaken. Stakeholder feedback was received and further analysis of the 2017 Preferred Route was subsequently undertaken.

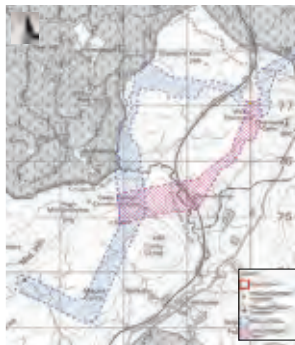
Three alternative route options were identified and compared, as shown on the map to the right.



The further analysis identified a new Preferred Route on the following basis:

- The new Preferred Route would have a reduced impact on commercial plantation forestry within Arecleoch Forest;
- The new Preferred Route would lie at a distance from the eastern boundary of the Glen App and Galloway Moors SPA.

A second round of further analysis was undertaken to examine an alternative to the new Preferred Route where it crosses the Chirmorie wind farm site, as shown on the map to the right.

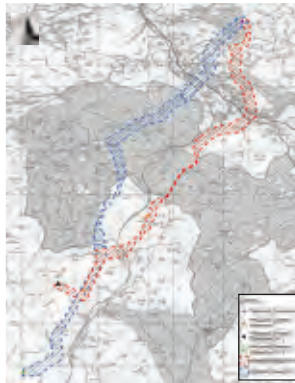


The second round of further analysis identified a Preferred Route on the following basis:

- The Preferred Route represents the shortest distance from the new Stranoch wind farm substation, via the Chirmorie wind farm substation, to the Mark Hill substation.

The map to the right shows the new Preferred Route and compares this with the Preferred Route identified in 2017.

Within the Preferred Route, an alignment for the OHL will be identified. A 60m-wide wayleave corridor around the OHL alignment would be agreed with landowners.



Preferred Route



THANK YOU

Thank you for taking the time to find out about our proposals for the Stranoch and Chirmorie wind farms grid connections OHL. Your comments are valuable to us in the next steps of this project.

Please take a feedback form. You can complete it today, or you can post it back to us at the address provided.

Feedback forms and all the information from today's event are also available to download from the project website at www.spenergynetworks.co.uk/pages/community_consultation.

Information can also be posted out to you by our Community Liaison Manager upon request.

Hard copies of the information leaflet will be available at Suzanne Stores, Barrhill, from Wednesday 1st May 2019.

Please provide comments to us by **28th June 2019**.



ANNEX F: EXHIBITION BOARDS



Stranoch Wind Farm

Grid Connection

Welcome

Welcome to this public exhibition regarding our proposals to construct a new 132 kilovolt (kV) overhead line (OHL) supported by wood poles to connect the proposed Stranoch wind farm to the existing Mark Hill substation, approximately 4 km north of Barrhill.

This exhibition provides information on:

- The design principles that are used to identify a route for a new overhead line;
- How a Preferred Route has been identified;
- Where the Preferred Route is located; and
- What feedback we would like at this stage.

Who we are

SP Energy Networks (SPEN) is part of the Scottish Power group and owns and operates the network of cables, overhead power lines and substations transporting electricity to customers in central and southern Scotland.

SP Transmission plc (SPT) is a regulated electricity network business owned by SPEN, with the following responsibilities under the Electricity Act 1989:

- To develop and maintain an efficient, coordinated and economical system of electricity transmission;
- To facilitate competition in the generation and supply of electricity; and
- To offer non-discriminatory terms for connection to the transmission system, both for new generation and for new sources of electricity demand.

Under Section 37 of the Electricity Act 1989, SP Energy Networks is required to seek consent from the Scottish Ministers for the construction of any non-exempted overhead line operating at a voltage greater than 20 kilovolts (kV). Electricity networks like this provide a physical link between electricity generators and electricity users.

Throughout the life of our projects, we aim to work positively with local communities and keep people informed about what we are doing. This is particularly important when we are developing a proposal and want to understand what local people think about our plans.

Please take your time in visiting the exhibition and reading the displays.

If you have any questions, please feel free to ask a member of the design team, who can be identified by their name badges.

Questions

As you walk around this exhibition, and examine the display, please consider the following questions:

- Do you have any comments regarding the rationale for the project?
- Do you have any comments regarding the approach to selection of the preferred route?
- Are there any factors, or environmental features, that you consider may have been overlooked during the routeing process?
- Do you have any other comments about the preferred route?

The Need

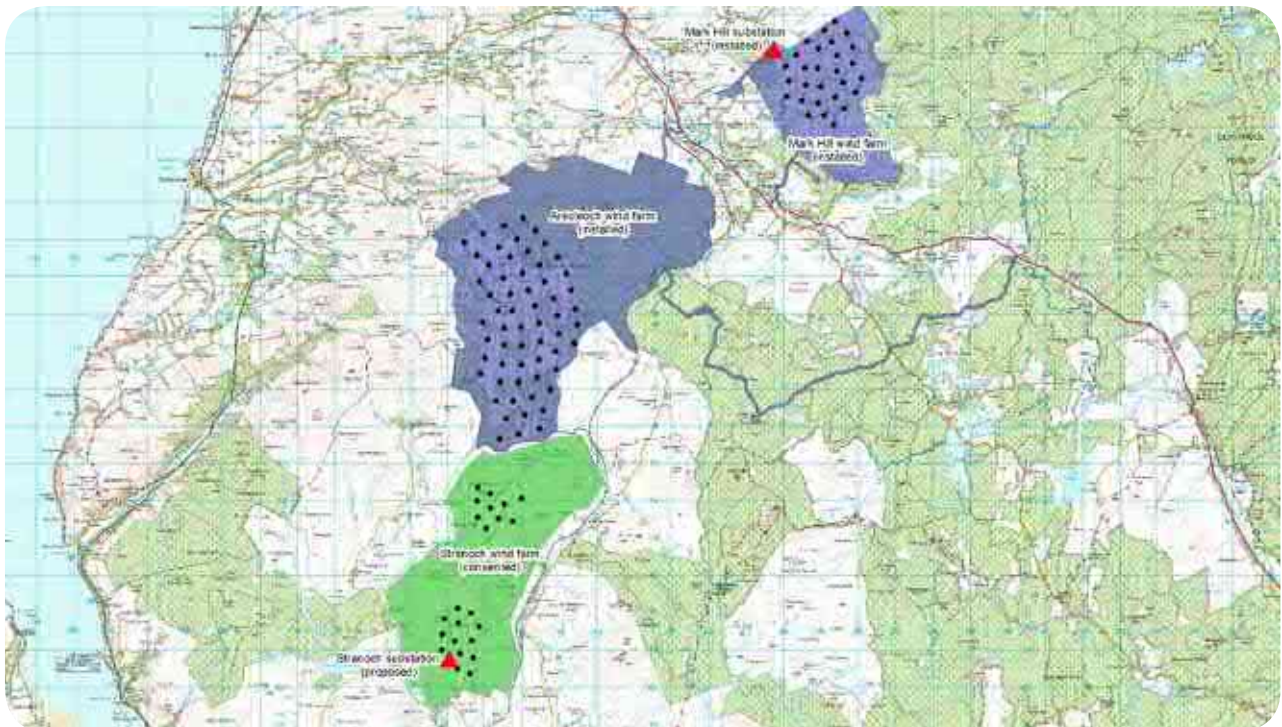
What's the Need?

SP Transmission has received a Grid Connection Application from the developers of the proposed Stranoch wind farm. Stranoch wind farm was consented by the Scottish Ministers in July 2016.

The proposed grid connection will comprise an overhead line which will run from a substation on the Stranoch wind farm site to the existing Mark Hill wind farm substation, approximately 4 km north of Barrhill.

The map below shows the location of the proposed Stranoch wind farm and the existing Mark Hill and Arecleoch wind farms. It also shows the location of the proposed Stranoch wind farm substation and the existing Mark Hill substation.

The photograph below shows a typical wood pole structure. Wood poles would typically be 15 m in height and would have an average span length of 100 m.



Routing Guidance

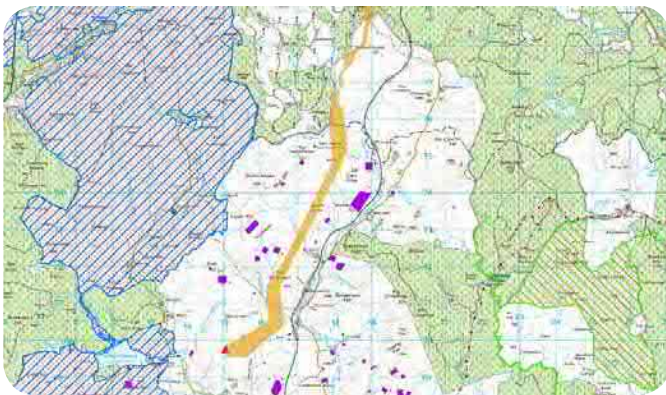
The Holford Rules are used to guide the routing process. These rules were first established in 1959 by Sir William Holford and to continue to inform transmission line routing in the UK

Rule 1:

At the outset, plan the general route so that it avoids altogether, if possible, the major areas of highest amenity value or international and national designation

Rule 2:

Ensure that the route also avoids smaller areas of high amenity value or scientific interest, by deviation; provided that this can be done without using too many angle towers to change direction.



Map of study area showing location of preferred route in relation to larger areas of constraint



Rule 3:

Where possible, choose the most direct line, with no sharp changes of direction

Typical wood pole overhead line

Rule 4:

Select tree and hill backgrounds in preference to sky background



View of existing wood pole overhead line south of Coalburn, South Lanarkshire

Rule 5:

Select open valleys with woods, where the apparent height of the towers will be reduced and the views of the line will be broken by trees



View of existing wood pole overhead line, within valley at Chirmorie, south of Barrhill

Rule 6:

In country which is flat and sparsely planted, keep the higher voltage lines as far as possible independent of smaller lines and other masts so as to avoid a concentration or 'wirescape'



View of existing 275kV pylon line from A714, west of Barrhill, looking southwards

Rule 7:

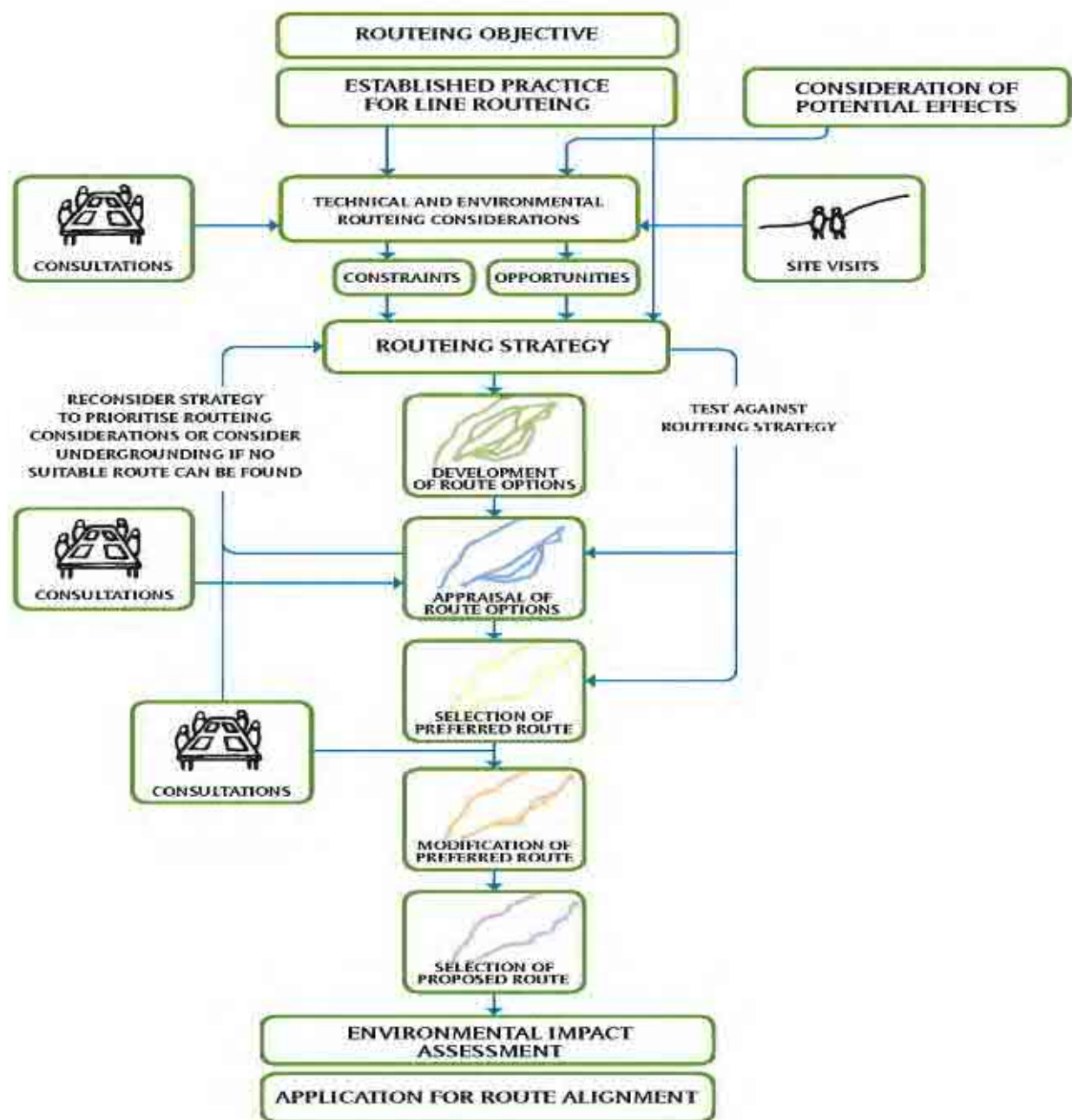
Approach urban areas through industrial zones where they exist and, if this is not possible, consider undergrounding any lower voltage lines

Routeing Strategy Methodology

The purpose of the routeing process is to allow consideration of all technical and environmental sensitivities within the study area and identify the linear area with potential to cause least disturbance to the environment and to the people who live, work, visit and recreate within it.

The routeing process establishes a Routeing Strategy, which is described within a Routeing Strategy Consultation Document. It is an iterative process which identifies and tests route options and responds to consultation feedback, from both statutory consultation bodies and from local communities.

The routeing process is shown below.



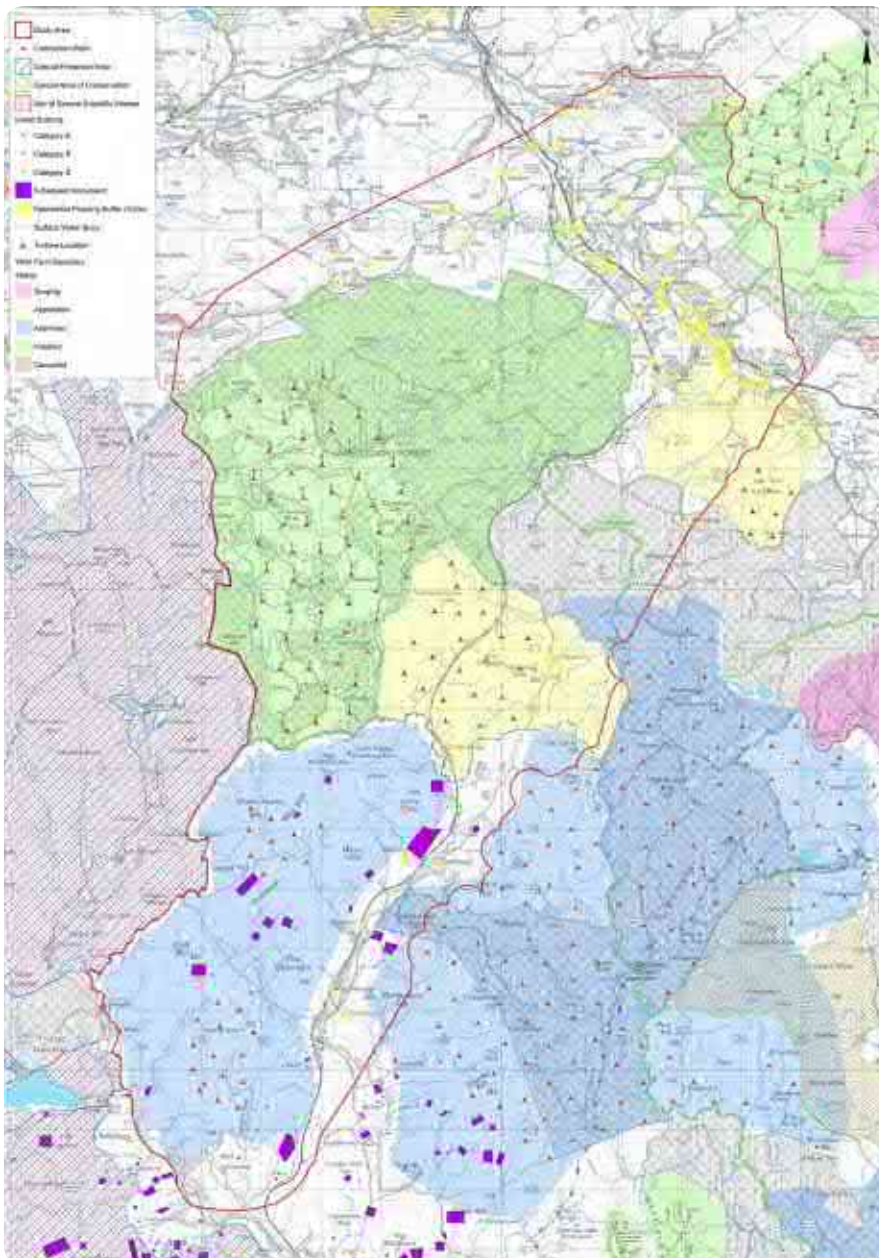
Following this consultation exhibition, the preferred route may be modified and a proposed route will be adopted.

Technical and Environmental Routeing Considerations

The initial study area was defined as the area between the existing Mark Hill wind farm to the north and the proposed Stranoch substation to the south. The main environmental and technical constraints in the area between these two points are:

- Various proposed and existing wind farm developments;
- The Glen App and Galloway Moors Special Protection Area (SPA) and Site of Special Scientific Interest (SSSI);
- Water bodies, including the Duisk River;
- Cultural heritage features, particularly scheduled monuments in the vicinity of The Stranoch hill;
- Arecleoch Forest commercial plantation forestry area;
- The Kilmarnock railway line; and
- Residential dwellings in and around Barrhill.

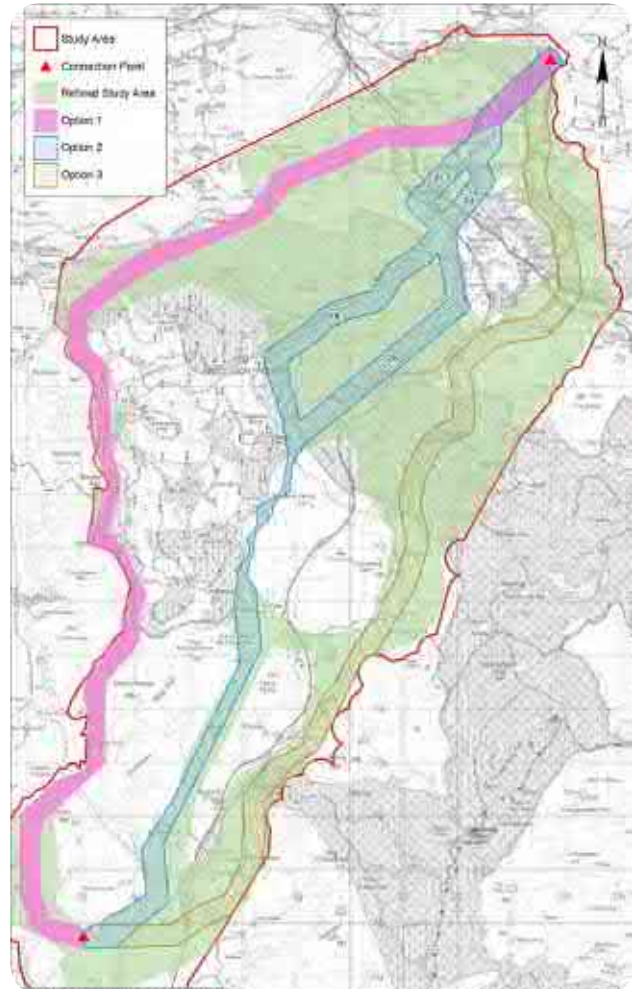
The map below shows the location of the study area and key environmental and technical constraints.



Route Options and Preferred Route

Three possible route options were identified through analysis of the environmental and technical constraints within the study area. This approach focussed on avoiding or minimising interaction with the key environmental and socio-economic constraints.

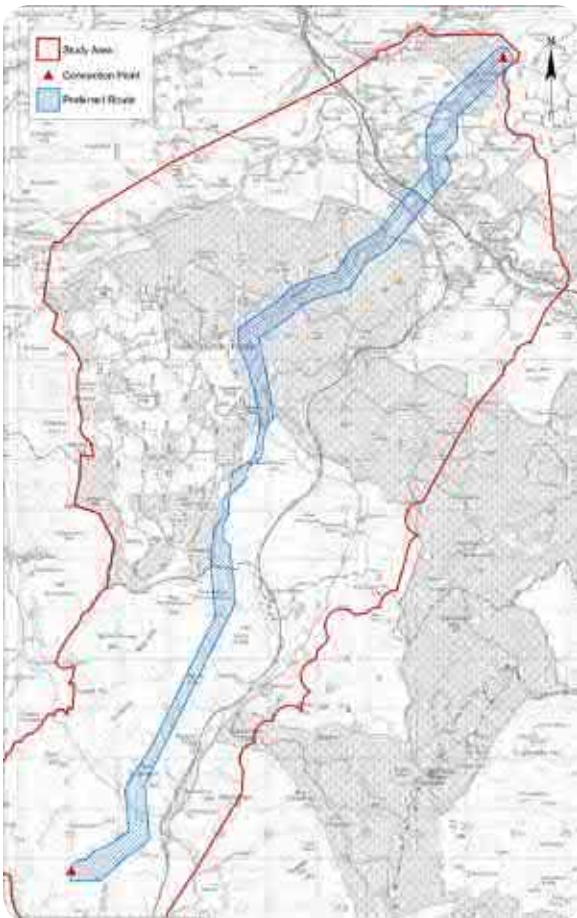
The three route options are identified on the map to the right.



The three route options were analysed and compared, and a Preferred Route was identified, on the following basis:

- The Preferred Route would have a lesser impact in terms of visual amenity and landscape impacts;
- The Preferred Route lies at a distance from the eastern boundary of the Glen App and Galloway Moors SPA;
- The Preferred Route would have a lesser impact on cultural heritage features in the southern part of the study area.

The Preferred Route is shown on the map to the left.





What Happens Now?

Thank you

Thank you for taking the time to find out about our proposals for the Stranoch wind farm grid connection OHL. Your comments are valuable to us in the next steps of this project.

Please take a feedback form. You can complete it today, or you can post it back to us at the address provided.

Feedback forms and all the information from today's event are also available to download from the project website at www.spenergynetworks.co.uk/pages/community_consultation

Information can also be posted out to you by our Community Liaison Manager upon request.

A Routeing Strategy Consultation Document on the preferred route was published in March 2017. An electronic copy of this can be found on line at www.spenergynetworks.co.uk/pages/community_consultation

Please provide comments to us by **30th April 2017**.

What Happens Next?

Following this consultation, it is possible that some changes to the Preferred Route will be suggested as a result of the emergence of new information. The suggested changes would be evaluated and, if necessary, subjected to additional consultation.

Once we have received all comments on the Preferred Route for the proposed Stranoch wind farm grid connection, we will confirm the location of the Proposed Route.

The Proposed Route will then be taken forward for further assessment and consultation as part of the Environmental Impact Assessment (EIA) process. The EIA will be submitted to the Scottish Government as part of an application for section 37 consent under the Electricity Act 1989. The application will be developed for submission in late 2017.

Stranoch Wind Farm Grid Connection Project



Thank you for taking the time to attend this information event. In order to record your views and improve the effectiveness of our consultation, please complete this short feedback form.

Consultation event location:- _____ **Date:-** _____

Your contact details - Please use **BLOCK CAPITALS** to ensure we can contact you about any updates.

Full name

Address

Postcode

Telephone

By providing your contact details, you consent to SP Energy Networks contacting you in relation to the above project. Your details will not be used for any other purpose.

About the event

How did you find out about the event?

Is there anything you think we could do to improve the format of events like this?

About the project

Do you have any comments regarding the rationale for the project?



Do you have any comments regarding the approach to the selection of the preferred route?

Are there any factors or environmental features you consider may have been overlooked or given either insufficient or too much consideration during the routeing process?

Do you have any other comments about the preferred route of the overhead line?

Thank you for taking the time to complete this feedback form. Please hand your completed form in at the event or alternatively by one of the methods below:

Post: Colin Wylie, Community Liaison Manager, Ochil House, 10 Technology Avenue,
Hamilton International Technology Park, Blantyre, G72 0HT

Email: StranochOHLConnection@spenergynetworks.co.uk

Closing Date for feedback is: 30th April 2017

The feedback form all information provided at the event can also be downloaded on the dedicated website:
www.spenergynetworks.co.uk/pages/community_consultation

Any information given on this comments form may be used and published as part of SP Energy Networks consultation report. By completing this comments form you consent to SP Energy Networks using this information for these purposes. By providing contact details you consent to SP Energy Networks contacting you in relation to this proposal. Your details will not be used for any other purpose. If you wish your comments to remain anonymous, please tick the box at the end of this form. Please note that comments made to SP Energy Networks are not representations to the Scottish Government as consenting authority at this stage. The opportunity for lodging representations will be when the application is formally submitted to the Scottish Government for formal consideration.

☐

Chirmorie Wind Farm Grid Connection

Welcome

Welcome to this public exhibition regarding our proposals to construct a new 132 kilovolt (kV) overhead line (OHL) supported by wood poles to connect the proposed Chirmorie wind farm to the existing Mark Hill substation, approximately 4 km north of Barrhill. It is proposed that Chirmorie wind farm grid connection would combine with the preferred route for the Stranoch wind farm grid connection, which was the subject of public consultation in March-April 2017.

This exhibition provides information on:

- The design principles that are used to identify a route for a new overhead line;
- How a Preferred Route has been identified;
- Where the Preferred Route is located; and
- What feedback we would like at this stage.

Who we are

SP Energy Networks (SPEN) is part of the Scottish Power group and owns and operates the network of cables, overhead power lines and substations transporting electricity in central and southern Scotland.

SP Transmission plc (SPT) is a regulated electricity network business owned by SPEN, with the following responsibilities under the Electricity Act 1989:

- To develop and maintain an efficient, coordinated and economical system of electricity transmission;
- To facilitate competition in the generation and supply of electricity; and
- To offer non-discriminatory terms for connection to the transmission system, both for new generation and for new sources of electricity demand.

Under Section 37 of the Electricity Act 1989, SP Energy Networks is required to seek consent from the Scottish Ministers for the construction of any non-exempted overhead line operating at a voltage greater than 20 kilovolts (kV). Electricity networks like this provide a physical link between electricity generators and electricity users.

Throughout the life of our projects, we aim to work positively with local communities and keep people informed about what we are doing. This is particularly important when we are developing a proposal and want to understand what local people think about our plans.

Please take your time in visiting the exhibition and reading the displays.

If you have any questions, please feel free to ask a member of the design team, who can be identified by their name badges.

Questions

As you walk around this exhibition, and examine the display, please consider the following questions:

- Do you have any comments regarding the rationale for the project?
- Do you have any comments regarding the approach to selection of the preferred route?
- Are there any factors, or environmental features, that you consider may have been overlooked during the routing process?
- Do you have any other comments about the preferred route?

The Need

What's the Need?

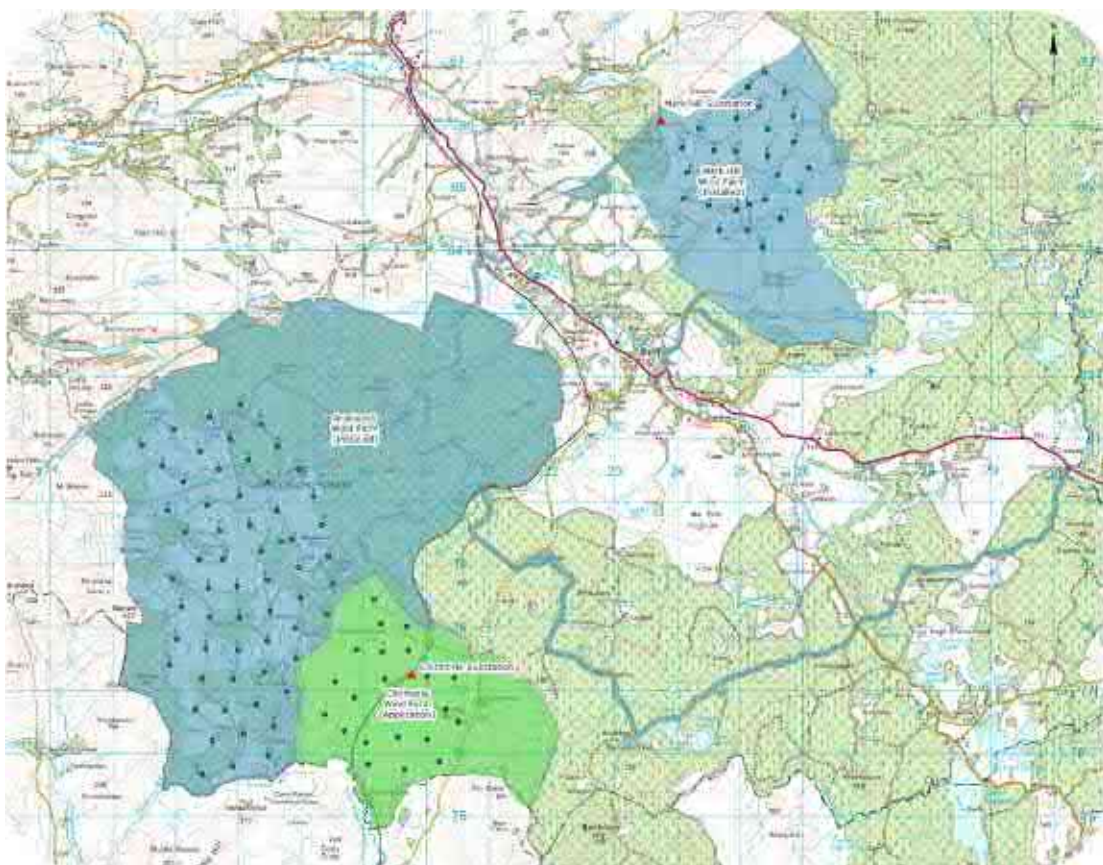
SP Transmission has received a Grid Connection Application from the developers of the proposed Chirmorie wind farm. Chirmorie wind farm is not yet consented; however, during the public consultation for Stranoch wind farm grid connection in March-April 2017, consultee feedback requested that these projects should be progressed simultaneously, where possible. Therefore, SP Energy Networks has completed a route selection exercise to identify a preferred route to connect the proposed Chirmorie wind farm with the preferred route for the Stranoch wind farm grid connection. This would ensure the development of a coordinated and economical system of electricity transmission, with minimization of new transmission infrastructure.

The proposed grid connection will comprise an overhead line which will run from a new substation on the proposed Chirmorie wind farm site to a point located immediately east of the existing Arecleoch wind farm, on the preferred route for the proposed Stranoch wind farm grid connection.

The photograph below shows a typical wood pole structure. Wood poles would typically be 15 m in height and would have an average span length of 100 m.



The map below shows the location of the proposed Chirmorie wind farm substation and the existing Mark Hill wind farm substation.



Routeing Guidance

The Holford Rules are used to guide the routeing process. These rules were first established in 1959 by Sir William Holford and to continue to inform transmission line routeing in the UK

Rule 1:

At the outset, plan the general route so that it avoids altogether, if possible, the major areas of highest amenity value or international and national designation

Rule 2:

Ensure that the route also avoids smaller areas of high amenity value or scientific interest, by deviation; provided that this can be done without using too many angle towers to change direction.



Map of study area showing location of preferred route in relation to larger areas of constraints

Rule 3:

Where possible, choose the most direct line, with no sharp changes of direction

Typical wood pole OHL



Rule 4:

Select tree and hill backgrounds in preference to sky background



View of existing wood pole overhead line south of Coalburn, South Lanarkshire

Rule 5:

Select open valleys with woods, where the apparent height of the towers will be reduced and the views of the line will be broken by trees



View of existing wood pole overhead line, within valley at Churmorie, south of Barrhill

Rule 6:

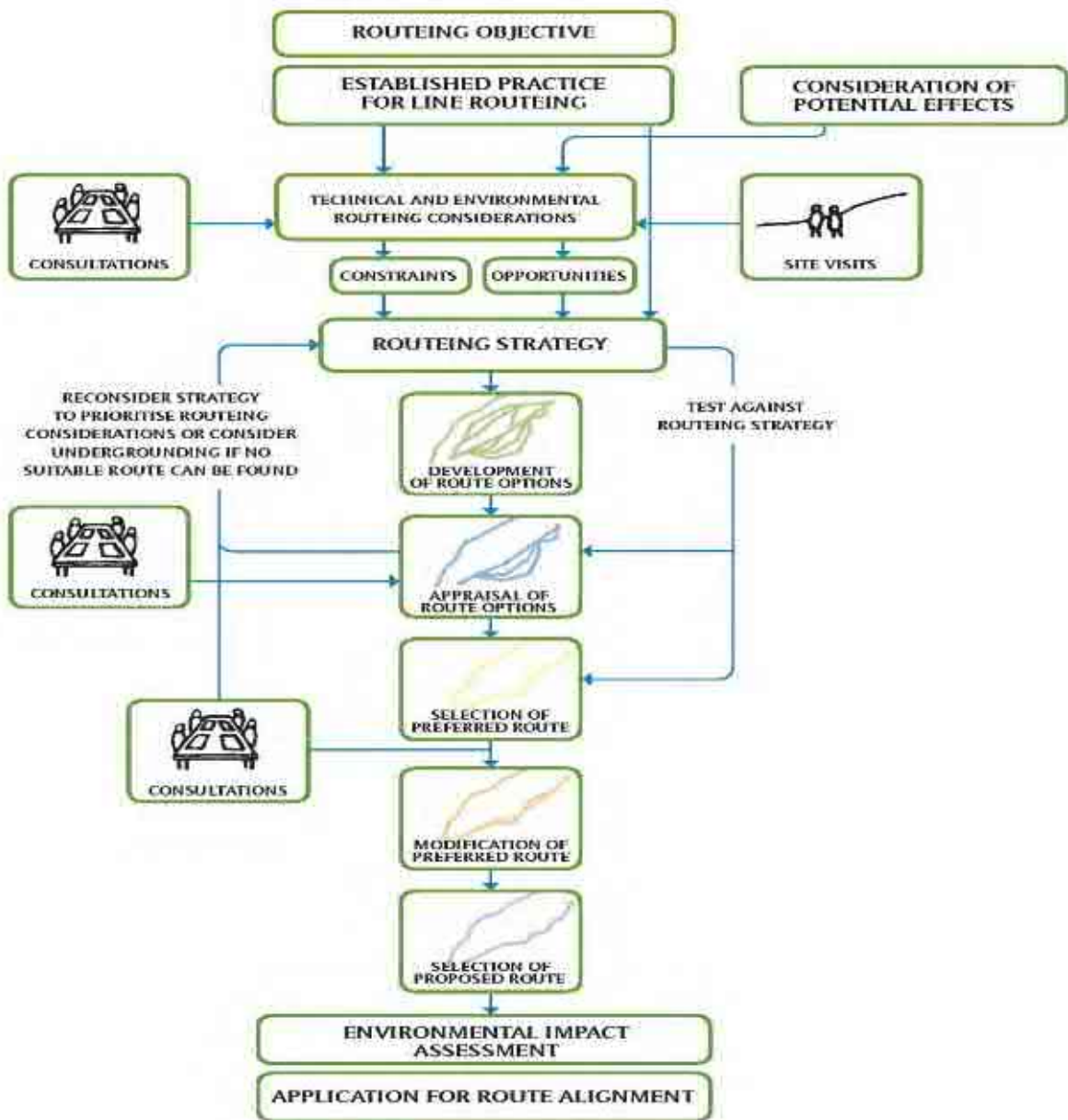
In country which is flat and sparsely planted, keep the higher voltage lines as far as possible independent of smaller lines and other masts so as to avoid a concentration or 'wirescape'



View of existing 275 kV pylon line from A714, west of Barrhill, looking southwards

Rule 7:

Approach urban areas through industrial zones where they exist and, if this is not possible, consider undergrounding any lower voltage lines



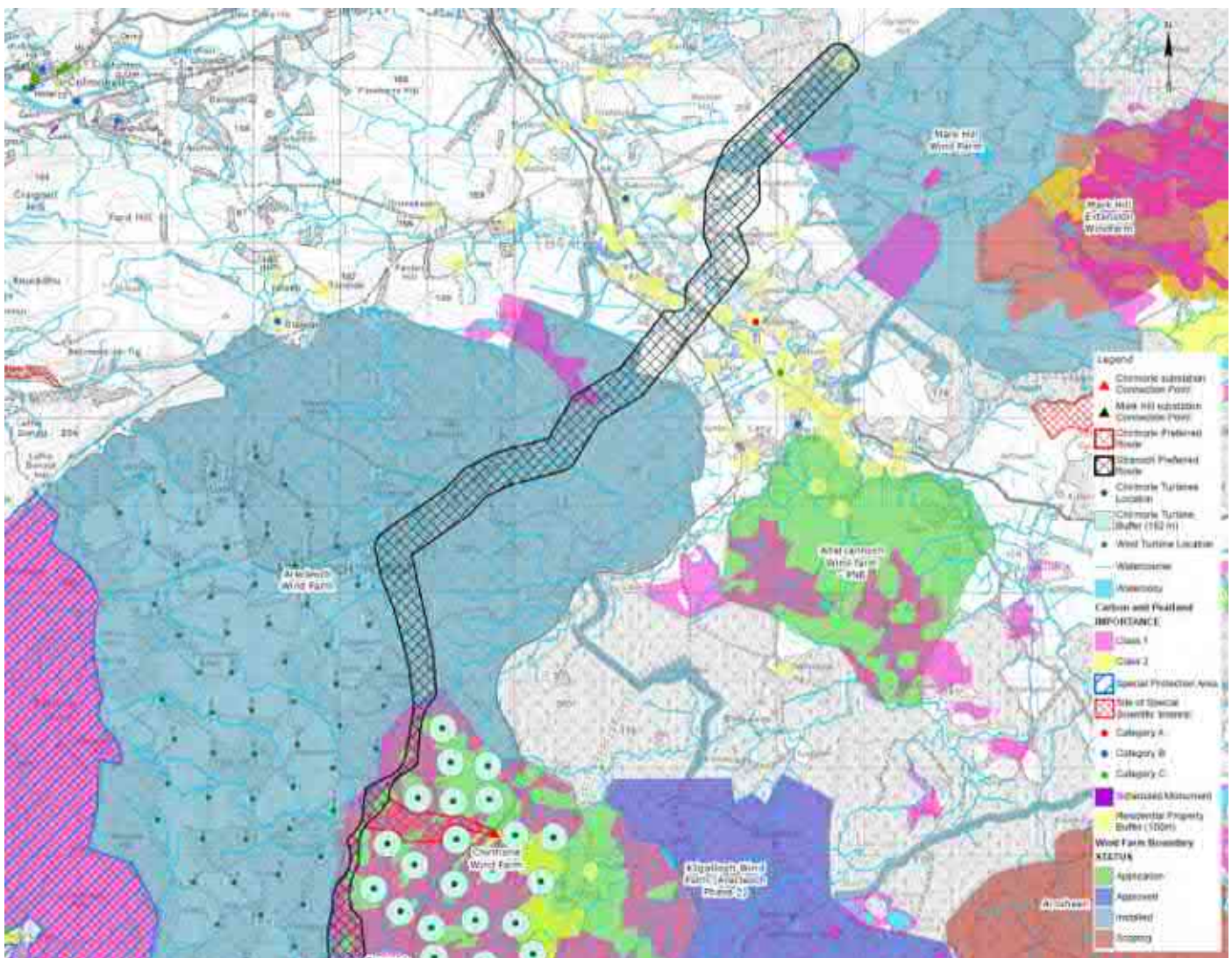
Technical and Environmental Routeing Considerations

The study area comprised the western section of the proposed Chirmorie wind farm site, which represents the area between the proposed Chirmorie substation and preferred route for the Stranoch wind farm grid connection.

The main environmental and technical constraints in the area between these two points are:

- Areas of carbon-rich soil, deep peat and priority peatland habitat;
- Water bodies, including a tributary of Laggish Burn; and
- Buffer distance from wind turbines, to avoid technical issues (turbulence, etc).

The map below shows the location of the preferred route and the key environmental and technical constraints.





What Happens Now?

Thank you

Thank you for taking the time to find out about our proposal for the Chirmorie wind farm grid connection OHL. Your comments are valuable to us in the next steps of this project.

We are holding a Consultation Event on **Tuesday 4th July**, from 2pm-6.30pm in Barrhill Memorial Hall, and would invite you to attend the event. You can drop in to receive further information from members of the project team and to discuss the proposals detailed within this booklet.

Please complete the feedback form included at the end of this booklet. You can complete it at the consultation event on Tuesday 4th July, or you can post it back to us to the address provided.

Feedback forms and project information are also available to download from the project website at www.spennergynetworks.co.uk/pages/community_consultation

Please provide comments to us by **31st July 2017**.

What Happens Next?

Following this consultation, it is possible that some changes to the Preferred Route will be suggested as a result of the emergence of new information. The suggested changes would be evaluated and, if necessary, subjected to additional consultation.

Once we have received all comments on the Preferred Route for the proposed Chirmorie wind farm grid connection, we will confirm the location of the Proposed Route.

The Proposed Route will then be taken forward for further assessment and consultation as part of the Environmental Impact Assessment (EIA) process. One combined EIA will be undertaken to consider both the Chirmorie and Stranoch wind farm grid connection proposals together. The EIA will be submitted to the Scottish Government as part of an application for section 37 consent under the Electricity Act 1989. The application will be developed for submission in early 2018.

Chirmorie Wind Farm Grid Connection Project



Thank you for taking the time to attend this information event. In order to record your views and improve the effectiveness of our consultation, please complete this short feedback form.

Consultation event location:- _____ **Date:-** _____

Your contact details - Please use BLOCK CAPITALS to ensure we can contact you about any updates.

Full name

Address

Postcode

Telephone

By providing your contact details, you consent to SP Energy Networks contacting you in relation to the above project. Your details will not be used for any other purpose.

About the event

How did you find out about the event?

Is there anything you think we could do to improve the format of events like this?

About the project

Do you have any comments regarding the rationale for the project?



Do you have any comments regarding the approach to the selection of the preferred route?

Are there any factors or environmental features you consider may have been overlooked or given either insufficient or too much consideration during the routeing process?

Do you have any other comments about the preferred route of the overhead line?

Thank you for taking the time to complete this feedback form. Please hand your completed form in at the event or alternatively by one of the methods below:

Post: Colin Wylie, Community Liaison Manager, Ochil House, 10 Technology Avenue,
Hamilton International Technology Park, Blantyre, G72 0HT

Email: ChirmorieOHLConnection@spenergynetworks.co.uk

Closing Date for feedback is: 31st July 2017

The feedback form all information provided at the event can also be downloaded on the dedicated website:
www.spenergynetworks.co.uk/pages/community_consultation

Any information given on this comments form may be used and published as part of SP Energy Networks consultation report. By completing this comments form you consent to SP Energy Networks using this information for these purposes. By providing contact details you consent to SP Energy Networks contacting you in relation to this proposal. Your details will not be used for any other purpose. If you wish your comments to remain anonymous, please tick the box at





A photograph of a high-voltage electricity pylon in a grassy field. The pylon is made of metal and has several insulators and wires attached to it. In the background, there are rolling hills under a blue sky with some clouds. The text "Stranoch and Chirmorie Wind Farms Grid Connections" is overlaid on the bottom left of the image.

Stranoch and Chirmorie Wind Farms Grid Connections

Welcome

Welcome to this public exhibition regarding our proposals to construct a new 132 kilovolt (kV) overhead line (OHL) to connect both the consented Stranoch wind farm and the consented Chirmorie wind farm to the electricity network at Mark Hill substation, located approximately 4 km north of the village of Barrhill, in South Ayrshire. The OHL will be supported on single and double 'trident' wood poles.

This exhibition provides information on:

- The design principles that are used to identify a route for a new overhead line;
- How a Preferred Route has been identified;
- Where the Preferred Route is located; and
- What feedback we would like at this stage.

Who we are

SP Energy Networks (SPEN) is part of the Scottish Power group and owns and operates the network of cables, overhead power lines and substations transporting electricity in central and southern Scotland.

SP Transmission plc (SPT) is a regulated electricity network business owned by SPEN, with the following responsibilities under the Electricity Act 1989:

- To develop and maintain an efficient, coordinated and economical system of electricity transmission;
- To facilitate competition in the generation and supply of electricity; and
- To offer non-discriminatory terms for connection to the transmission system, both for new generation and for new sources of electricity demand.

Under Section 37 of the Electricity Act 1989, SP Energy Networks is required to seek consent from the Scottish Ministers for the construction of any non-exempted overhead line operating at a voltage greater than 20 kilovolts (kV). Electricity networks like this provide a physical link between electricity generators and electricity users.

Throughout the life of our projects, we aim to work positively with local communities and keep people informed about what we are doing. This is particularly important when we are developing a proposal and want to understand what local people think about our plans.

Please take your time in visiting the exhibition and reading the displays.

If you have any questions, please feel free to ask a member of the design team, who can be identified by their name badges.

Questions

As you walk around this exhibition, and examine the display, please consider the following questions:

- Do you have any comments regarding the rationale for the project?
- Do you have any comments regarding the approach to selection of the preferred route?
- Are there any factors, or environmental features, that you consider may have been overlooked during the routing process?
- Do you have any other comments about the preferred route?

The Need

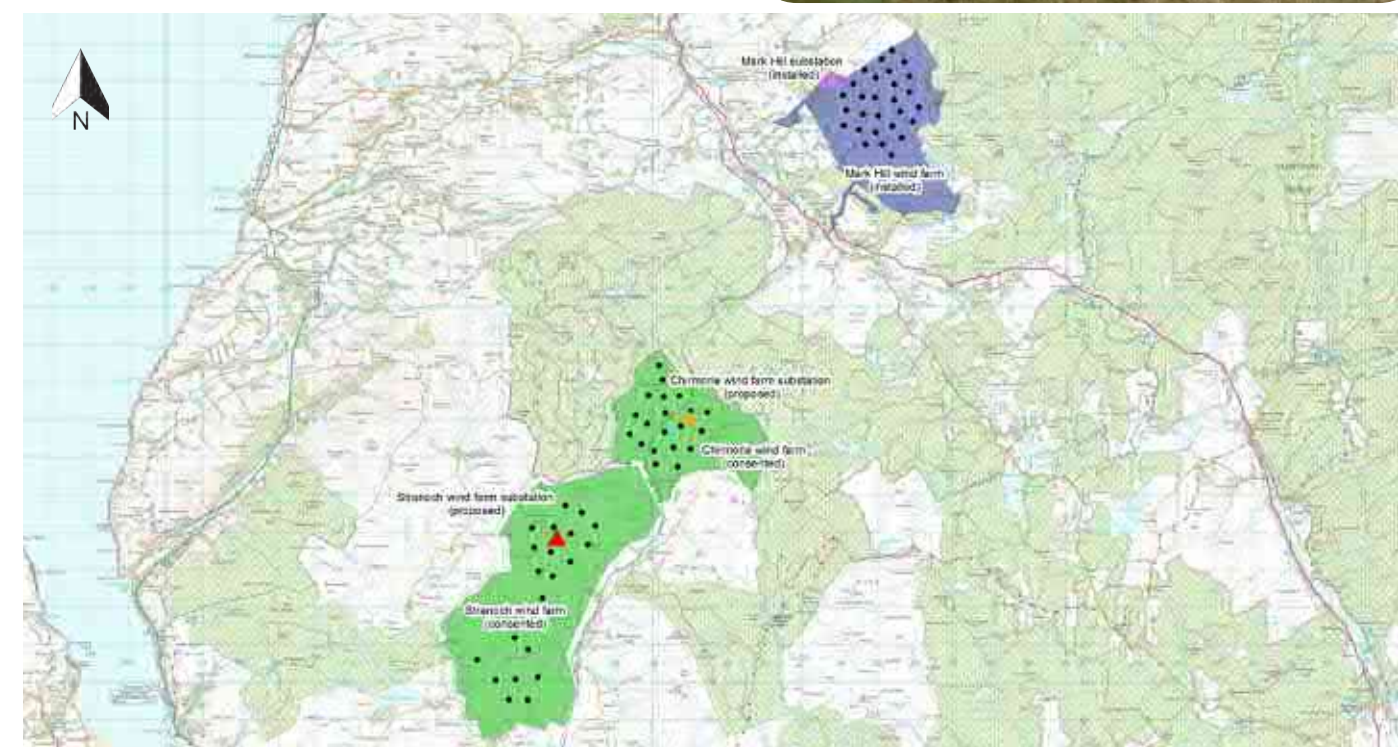
What's the Need?

SP Transmission has received Grid Connection Applications from the developers of both Stranoch wind farm and Chirmorie wind farm. Stranoch wind farm was consented by the Scottish Ministers in July 2016 and Chirmorie wind farm was consented in March 2018.

The proposed grid connections will comprise an overhead line which will run from a substation on the Stranoch wind farm site, via a substation on the Chirmorie wind farm site, to the existing Mark Hill wind farm substation, approximately 4 km north of Barrhill.

The map below shows the location of the consented Stranoch wind farm, the consented Chirmorie wind farm and the existing Mark Hill wind farm. It also shows the location of the proposed Stranoch wind farm substation, the proposed Chirmorie wind farm substation and the existing Mark Hill substation.

The photographs below shows a typical wood pole structure. Wood poles would typically be 15 m in height and would have an average span length of 100 m.



Routeing Guidance

The Holford Rules are used to guide the routeing process. These rules were first established in 1959 by Sir William Holford and to continue to inform transmission line routeing in the UK

Rule 1:
At the outset, plan the general route so that it avoids altogether, if possible, the major areas of highest amenity value or international and national designation

Rule 2:
Ensure that the route also avoids smaller areas of high amenity value or scientific interest, by deviation; provided that this can be done without using too many angle towers to change direction.



Map of study area showing location of preferred route in relation to larger areas of constraints

Rule 3:
Where possible, choose the most direct line, with no sharp changes of direction

Typical wood pole OHL



Rule 5:
Select open valleys with woods, where the apparent height of the towers will be reduced and the views of the line will be broken by trees



View of existing wood pole overhead line, within valley at Chirmorie, south of Barrhill

Rule 6:
In country which is flat and sparsely planted, keep the higher voltage lines as far as possible independent of smaller lines and other masts so as to avoid a concentration or 'wirescape'



View of existing 275 kV pylon line from A714, west of Barrhill, looking southwards

Rule 7:
Approach urban areas through industrial zones where they exist and, if this is not possible, consider undergrounding any lower voltage lines

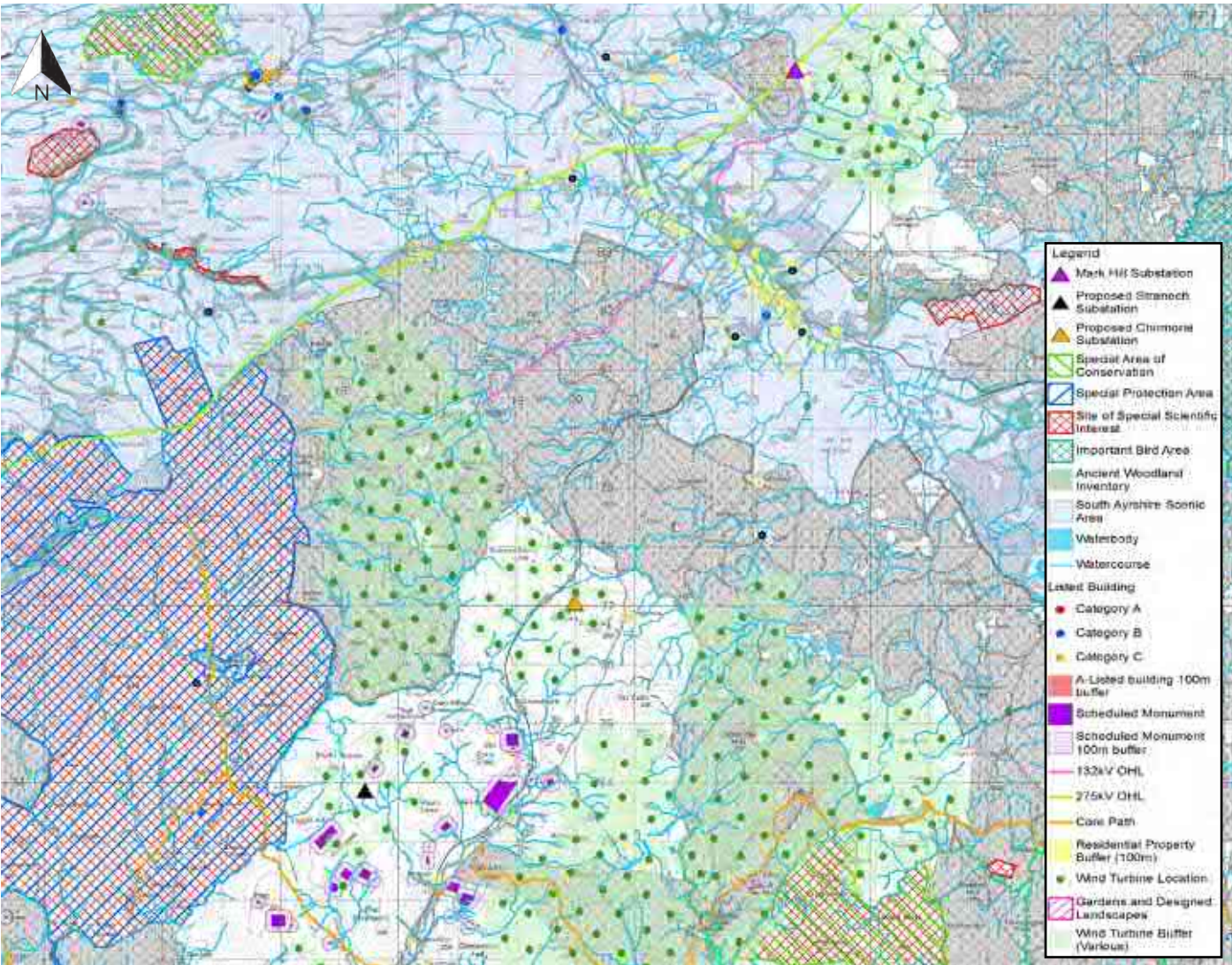
Technical and Environmental Routeing Considerations

The initial study area was defined as the area between the existing Mark Hill wind farm to the north and the proposed Stranoch substation to the south. In May 2018, the developer of Stranoch wind farm confirmed an alternative location for the Stranoch wind farm substation. This alternative location would reduce the length of the required grid connection to connect to Mark Hill substation. Therefore the study area was reduced in size.

The main environmental and technical constraints in the reduced study area between these two points are:

- various proposed and existing wind farm developments;
- the Glen App and Galloway Moors Special Protection Area (SPA) and Site of Special Scientific Interest (SSSI);
- water bodies, including the Duisk River;
- cultural heritage features, particularly scheduled monuments in the vicinity of The Corly Craig hill;
- Arecleoch Forest commercial plantation forestry area;
- the Kilmarnock railway line; and
- residential dwellings in and around Barrhill.

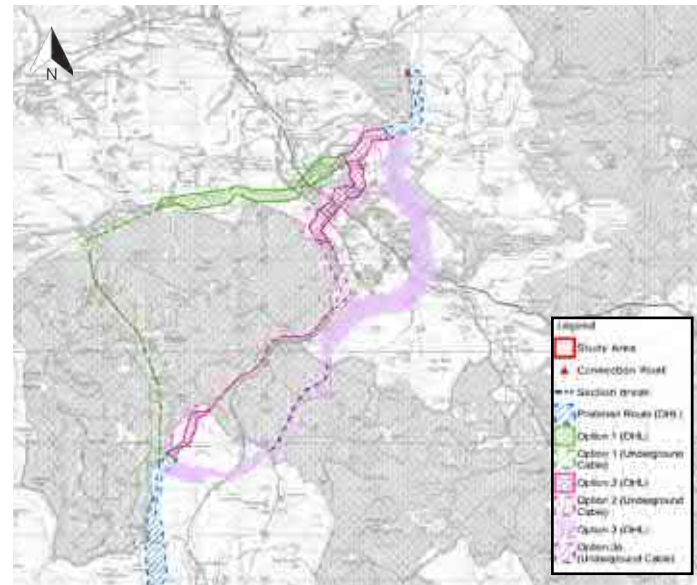
The map below shows the key environmental and technical constraints as well as the revised location of the Stranoch wind farm substation and the location of the Chirmorie wind farm substation.



Route Options and Preferred Route

In 2017, a Preferred Route was identified and public consultation on the location of the Preferred Route was undertaken. Stakeholder feedback was received and further analysis of the 2017 Preferred Route was subsequently undertaken.

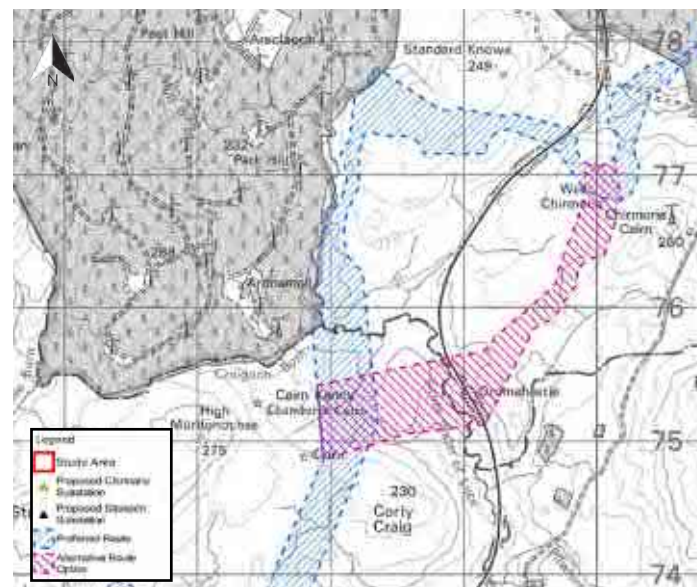
Three alternative route options were identified and compared, as shown on the map to the right



The further analysis identified a new Preferred Route on the following basis:

- The new Preferred Route would have a reduced impact on commercial plantation forestry within Arecleoch Forest;
- The new Preferred Route would lie at a distance from the eastern boundary of the Glen App and Galloway Moors SPA.

A second round of further analysis was undertaken to examine an alternative to the new Preferred Route where it crosses the Chirmorie wind farm site, as shown on the map to the right.

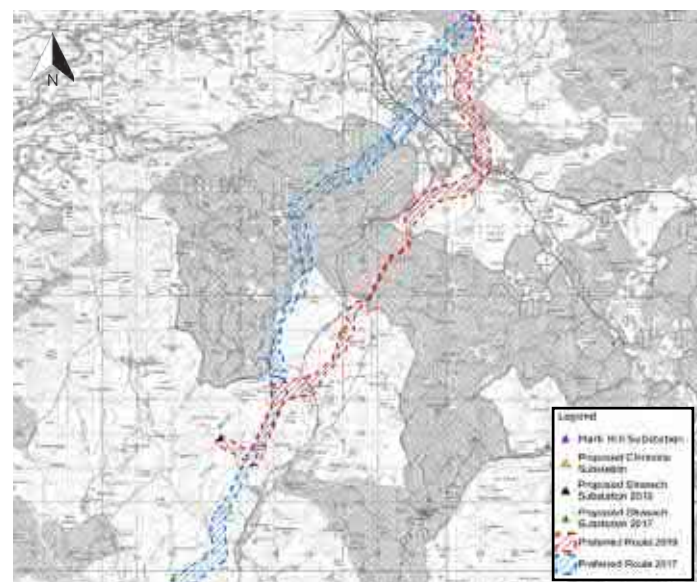


The second round of further analysis identified a Preferred Route on the following basis:

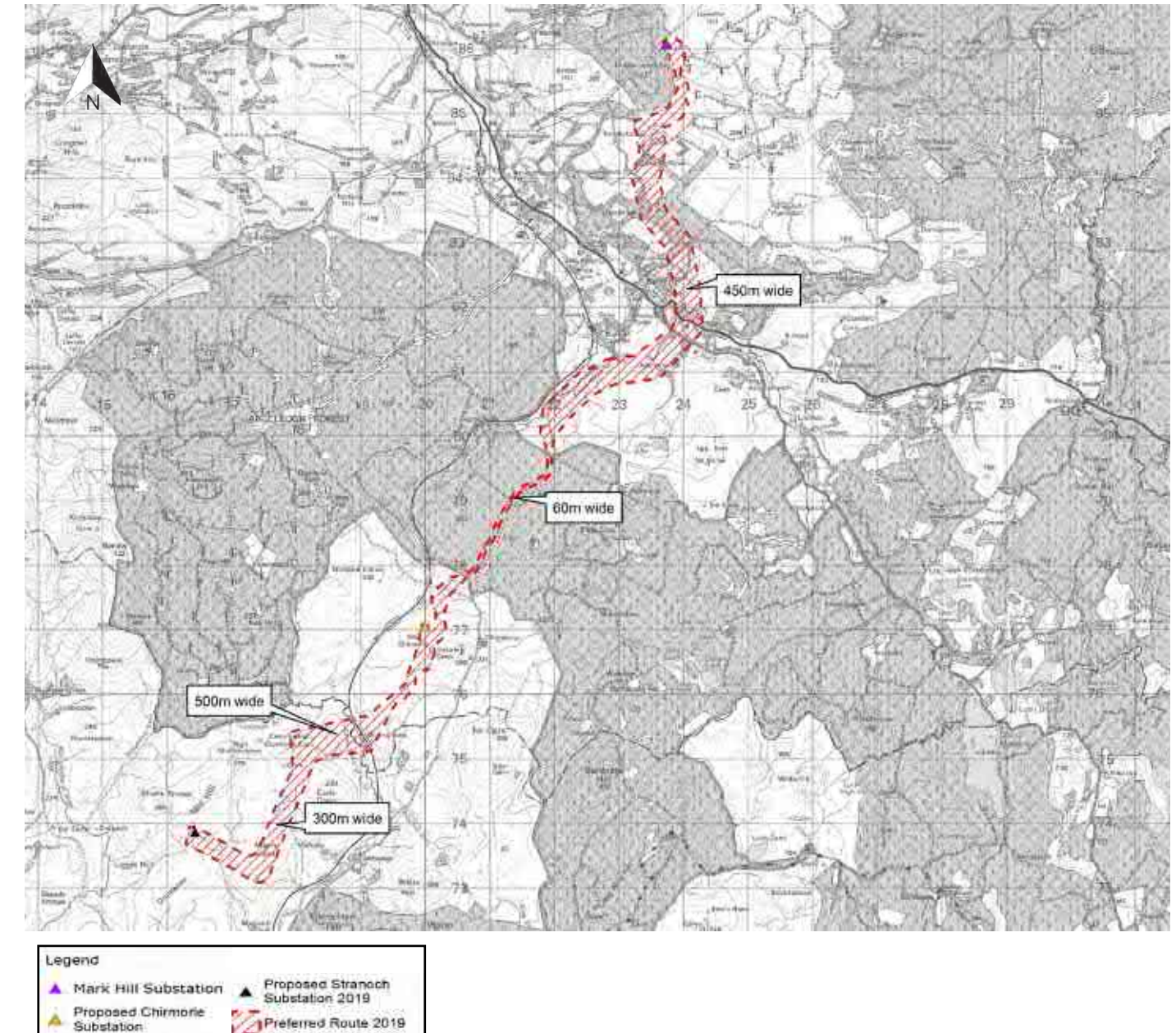
- The Preferred Route represents the shortest distance from the new Stranoch wind farm substation, via the Chirmorie wind farm substation, to the Mark Hill substation.

The map to the right shows the new Preferred Route and compares this with the Preferred Route identified in 2017.

Within the Preferred Route, an alignment for the OHL will be identified. A 60m-wide wayleave corridor around the OHL alignment would be agreed with landowners.



Preferred Route





Thank You

Thank you for taking the time to find out about our proposal for the Stranoch and Chirmorie wind farms grid connections OHL. Your comments are valuable to us in the next steps of this project.

We are holding a Consultation Event on **Wednesday 1st May**, from 2pm-6.30pm in Barrhill Memorial Hall, and would invite you to attend the event. You can drop in to receive further information from members of the project team and to discuss the proposals detailed within this booklet.

Please complete the feedback form included at the end of this booklet. You can complete it at the consultation event on Wednesday 1st May, or you can post it back to us to the address provided.

Feedback forms and project information are also available to download from the project website at www.spenergynetworks.co.uk/pages/community_consultation

Information can also be posted out to you by our Community Liaison Manager upon request.

Hard copies of the information leaflet will be available at Suzanne Stores, Barrhill, from Wednesday 1st May 2019.

Please provide comments to us by **28th June 2019**.

Stranoch and Chirmorie Wind Farms Grid Connections Project



Thank you for taking the time to attend this information event. In order to record your views and improve the effectiveness of our consultation, please complete this short feedback form.

Consultation event location:- _____ **Date:-** _____

Your contact details - Please use BLOCK CAPITALS to ensure we can contact you about any updates.

Full name

Address

Postcode

Telephone

By providing your contact details, you consent to SP Energy Networks contacting you in relation to the above project. Your details will not be used for any other purpose.

About the event

How did you find out about the event?

Is there anything you think we could do to improve the format of events like this?

About the project

Do you have any comments regarding the rationale for the project?



Do you have any comments regarding the approach to the selection of the preferred route?

Are there any factors or environmental features you consider may have been overlooked or given either insufficient or too much consideration during the routing process?

Do you have any other comments about the preferred route of the overhead line?

Thank you for taking the time to complete this feedback form. Please hand your completed form in at the event or alternatively by one of the methods below:

Post: Colin Wylie, Community Liaison Manager, Ochil House, 10 Technology Avenue,
Hamilton International Technology Park, Blantyre, G72 0HT

Email: StranochOHLConnection@spenergynetworks.co.uk

Closing Date for feedback is: 28th June 2019

The feedback form all information provided at the event can also be downloaded on the dedicated website:
www.spenergynetworks.co.uk/pages/community_consultation

Any information given on this comments form may be used and published as part of SP Energy Networks consultation report. By completing this comments form you consent to SP Energy Networks using this information for these purposes. By providing contact details you consent to SP Energy Networks contacting you in relation to this proposal. Your details will not be used for any other purpose. If you wish your comments to remain anonymous, please tick the box at the end of this form. Please note that comments made to SP Energy Networks are not representations to the Scottish Government as consenting authority at this stage. The opportunity for lodging representations will be when the application is formally submitted to the Scottish Government for formal consideration.

☐



ANNEX G: FEEDBACK FORMS

Stranoch Wind Farm Grid Connection Project



Thank you for taking the time to attend this information event. In order to record your views and improve the effectiveness of our consultation, please complete this short feedback form.

Consultation event location:- _____ **Date:-** _____

Your contact details - Please use **BLOCK CAPITALS** to ensure we can contact you about any updates.

Full name

Address

Postcode

Telephone

By providing your contact details, you consent to SP Energy Networks contacting you in relation to the above project. Your details will not be used for any other purpose.

About the event

How did you find out about the event?

Is there anything you think we could do to improve the format of events like this?

About the project

Do you have any comments regarding the rationale for the project?

Do you have any comments regarding the approach to the selection of the preferred route?

Are there any factors or environmental features you consider may have been overlooked or given either insufficient or too much consideration during the routeing process?

Do you have any other comments about the preferred route of the overhead line?

Thank you for taking the time to complete this feedback form. Please hand your completed form in at the event or alternatively by one of the methods below:

Post: Colin Wylie, Community Liaison Manager, Ochil House, 10 Technology Avenue,
Hamilton International Technology Park, Blantyre, G72 0HT

Email: StranochOHLConnection@spenergynetworks.co.uk

Closing Date for feedback is: 30th April 2017

The feedback form all information provided at the event can also be downloaded on the dedicated website:
www.spenergynetworks.co.uk/pages/community_consultation

Any information given on this comments form may be used and published as part of SP Energy Networks consultation report. By completing this comments form you consent to SP Energy Networks using this information for these purposes. By providing contact details you consent to SP Energy Networks contacting you in relation to this proposal. Your details will not be used for any other purpose. If you wish your comments to remain anonymous, please tick the box at the end of this form. Please note that comments made to SP Energy Networks are not representations to the Scottish Government as consenting authority at this stage. The opportunity for lodging representations will be when the application is formally submitted to the Scottish Government for formal consideration.

☐

Chirmorie Wind Farm Grid Connection Project



Thank you for taking the time to attend this information event. In order to record your views and improve the effectiveness of our consultation, please complete this short feedback form.

Consultation event location:- _____ **Date:-** _____

Your contact details - Please use **BLOCK CAPITALS** to ensure we can contact you about any updates.

Full name

Address

Postcode

Telephone

By providing your contact details, you consent to SP Energy Networks contacting you in relation to the above project. Your details will not be used for any other purpose.

About the event

How did you find out about the event?

Is there anything you think we could do to improve the format of events like this?

About the project

Do you have any comments regarding the rationale for the project?

Do you have any comments regarding the approach to the selection of the preferred route?

Are there any factors or environmental features you consider may have been overlooked or given either insufficient or too much consideration during the routeing process?

Do you have any other comments about the preferred route of the overhead line?

Thank you for taking the time to complete this feedback form. Please hand your completed form in at the event or alternatively by one of the methods below:

Post: Colin Wylie, Community Liaison Manager, Ochil House, 10 Technology Avenue,
Hamilton International Technology Park, Blantyre, G72 0HT

Email: ChirmorieOHLConnection@spenergynetworks.co.uk

Closing Date for feedback is: 31st July 2017

The feedback form all information provided at the event can also be downloaded on the dedicated website:
www.spenergynetworks.co.uk/pages/community_consultation

Any information given on this comments form may be used and published as part of SP Energy Networks consultation report. By completing this comments form you consent to SP Energy Networks using this information for these purposes. By providing contact details you consent to SP Energy Networks contacting you in relation to this proposal. Your details will not be used for any other purpose. If you wish your comments to remain anonymous, please tick the box at the end of this form. Please note that comments made to SP Energy Networks are not representations to the Scottish Government as consenting authority at this stage. The opportunity for lodging representations will be when the application is formally submitted to the Scottish Government for formal consideration.

☐

Stranoch and Chirmorie Wind Farms Grid Connections Project



Thank you for taking the time to attend this information event. In order to record your views and improve the effectiveness of our consultation, please complete this short feedback form.

| | |
|--|---------------------|
| Consultation event location:- _____ | Date:- _____ |
|--|---------------------|

| | |
|--|-----------|
| Your contact details - Please use BLOCK CAPITALS to ensure we can contact you about any updates. | |
| Full name | |
| Address | |
| Postcode | Telephone |
| <small><i>By providing your contact details, you consent to SP Energy Networks contacting you in relation to the above project. Your details will not be used for any other purpose.</i></small> | |

| |
|--|
| About the event |
| How did you find out about the event? |
| <div></div> |
| Is there anything you think we could do to improve the format of events like this? |
| <div></div> |
| About the project |
| Do you have any comments regarding the rationale for the project? |
| <div></div> |

Do you have any comments regarding the approach to the selection of the preferred route?

Are there any factors or environmental features you consider may have been overlooked or given either insufficient or too much consideration during the routing process?

Do you have any other comments about the preferred route of the overhead line?

Thank you for taking the time to complete this feedback form. Please hand your completed form in at the event or alternatively by one of the methods below:

Post: Colin Wylie, Community Liaison Manager, Ochil House, 10 Technology Avenue,
Hamilton International Technology Park, Blantyre, G72 0HT

Email: StranochOHLConnection@spenergynetworks.co.uk

Closing Date for feedback is: 28th June 2019

The feedback form all information provided at the event can also be downloaded on the dedicated website:
www.spenergynetworks.co.uk/pages/community_consultation

Any information given on this comments form may be used and published as part of SP Energy Networks consultation report. By completing this comments form you consent to SP Energy Networks using this information for these purposes. By providing contact details you consent to SP Energy Networks contacting you in relation to this proposal. Your details will not be used for any other purpose. If you wish your comments to remain anonymous, please tick the box at the end of this form. Please note that comments made to SP Energy Networks are not representations to the Scottish Government as consenting authority at this stage. The opportunity for lodging representations will be when the application is formally submitted to the Scottish Government for formal consideration.

☐