

Carrick Wind Farm Grid Connection

Consultation Feedback Report

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Table of Contents

1.	Introduction5
2.	SPEN's Approach to Routeing and Siting7
3.	Route Consultation Process10
4.	Overview of Consultation Feedback13
Арре	endix A – Siting and Consultation Document (Sweco, 2024)14
Арре	endix B – Consultee Responses15



Glossary

EIA	Environmental Impact Assessment
km	Kilometre
kV	Kilovolt
OHL	Overhead line
SPEN	Scottish Power Energy Networks
SPT	Scottish Power Transmission Plc

1. Introduction

Document Purpose

Scottish Power Energy Networks (SPEN) is proposing to construct a new 275kV collector substation (Carrick Substation), providing a connection into the transmission network for two onshore wind farms: the proposed Carrick Wind Farm (centred on national grid reference (NGR) NX 3719 9838); and Knockcronal Wind Farm (approximate centre point NGR NX 3826 9939). It is proposed to divert the existing 275kV overhead line (OHL) and construct four new towers to connect ('turn in') the new substation to the existing route between towers YY088 and YY092 (known as the "YY route") and remove three of the towers and associated conductors of the existing OHL. These grid connection works require consent under Section 37 of the Electricity Act 1989 (as amended).

The proposed Carrick Wind Farm and Carrick Substation are located within Carrick Forest, a commercial forestry area within Galloway Forest Park, approximately 7.5km south of Straiton (the nearest settlement to the site) in South Ayrshire. The commercial forest is owned and managed by Forestry and Land Scotland. The wind farm is currently at the consenting stage.

This Report on Consultation includes a summary of the Round One consultation activities undertaken to engage with local communities, as well as responses recorded during this consultation event. The consultation period ran for 30 days from Wednesday 9th October to Friday 8th November 2024. The consultation included engagement with a number of statutory parties as well as a virtual consultation. This round of consultation related to the process of siting the realigned OHL and towers.

The new substation will be subject to a separate planning application and consultation in due course, and planning permission will be sought under the Town and Country Planning (Scotland) Act 1997 (as amended). This Report on Consultation should be read in conjunction with the Siting and Consultation Document (SCD) (attached as **Appendix A**), which sets out the approach to routeing and siting, and the findings of the options appraisal work undertaken. A subsequent round of consultation may take place at future project stages to engage the community on the detailed route alignment, if required.

Project Background and Need

Scottish Power Transmission Plc (SPT) is one of three companies in the UK that is required under Section 9 of the Electricity Act 1989 and under the terms of its Electricity Supply Licence "*to develop and maintain an efficient, co-ordinated and economical system of electricity transmission*". To enable this, and acting on behalf of SPT, SPEN is proposing to deviate the existing 275kV Coylton to Auchencrosh circuit (known as the "YY route") into the proposed Carrick 275/33kV substation to connect the Carrick and Knockcronal Wind Farms to the transmission network. The proposal includes the removal of three existing towers from YY route, to be replaced with four new towers and associated OHL conductors to maintain a continuous connection in and out of the proposed substation.

The proposed development is located within the administrative boundary of South Ayrshire Council and covers a length of approximately 1.4km of the existing YY route, approximately 7.5km south of Straiton, South Ayrshire. The section of YY route subject of the proposed development is located within the

southeast portion of the Carrick Wind Farm development boundary.

The stated view of SPEN is that, wherever practical, an OHL approach is preferred over underground cables when planning and designing new grid connections. As a result, SPEN is proposing to provide a connection into the transmission network consisting of:

- Approximately 1km of new single circuit OHL, including four Balfour Beatty bespoke design single circuit towers to 'turn in' the proposed Carrick 275kV substation to the existing YY route.
- Associated ancillary works including accesses and laydown areas.
- Dismantling and removal of approximately 1.4km of OHL circuit on YY route between towers YY088 and YY092, including dismantling and removal of towers YY089, YY090 and YY091.

It should be noted that this information is not confirmation of a final design; however, it was considered appropriate for the purposes of the Round One consultation. As outlined above, a new 275kV Carrick Substation is also required to provide connection into the transmission network for the proposed Carrick and Knockcronal Wind Farms. However, the substation would require separate planning consent and is not the subject of this consultation.

Structure of the Report

The remaining chapters of this report are structured as follows:

- Chapter 2 describes the overall SPEN approach to routeing and siting of the overhead line realignment;
- Chapter 3 includes details on the consultation process; and
- Chapter 4 provides an overview of the consultation feedback to date.

2. SPEN's Approach to Routeing and Siting

Chapter 2 provides an overview of the siting considerations for the proposed development – further details can be found in Section 1.6 of the SCD (**Appendix A**).

Overview of Routeing Process

In 2020, SPEN published an updated version of their 'Approach to Routeing and Environmental Impact Assessment'¹ guidance, which describes their general approach to routeing new electricity transmission infrastructure.

The basic premise of the approach set out by SPEN is that the main effect of an OHL is visual and that the degree of visual impact can be reduced by careful routeing; for example, by using topography and trees to provide screening and/or background to the OHL and by routeing the OHL at a distance from settlements and roads. In addition, OHL routeing takes into account other environmental and technical considerations and will avoid, wherever possible, the most sensitive and valued natural and man-made features.

Routeing and Siting Objective

The objective of the routeing and siting process for the proposed development was to identify a technically feasible and economically viable route for the realigned 275kV overhead line, supported on steel towers, along the YY route between existing towers YY088 and YY092, to turn into the proposed 275kV Carrick Substation. This route should, on balance, cause least disturbance to the environment and the people who live, work and enjoy recreation within it.

Established Practice for Overhead Line Routeing

Routeing and siting considerations take account of the guidance contained in 'the Holford Rules'. It is generally accepted across the electricity industry that the guidelines developed by the late Lord Holford in 1959 for routeing OHLs should continue to be considered as the basis for routeing high voltage OHLs.

The Holford Rules are broadly hierarchical with Rules 1 and 2 placing considerable emphasis on avoiding areas of the highest or high amenity value.

- Rule 1 advises that routes should avoid major areas of the highest amenity value where possible, and
- Rule 2 advises that routes should avoid smaller areas of high amenity value by deviation.

The Holford Rules do not identify what constitutes "major areas" or "smaller areas" but indicate that consideration should also be given to the spatial extent of areas of highest/high amenity or environmental value. The Holford Rules also consider landform, topography, and vegetation in order to reduce landscape and visual effects, and these rules have been interpreted and applied to this siting study, where appropriate.

¹<u>https://www.spenergynetworks.co.uk/userfiles/file/SPEN_Approach_to_Routeing_Document_2nd_version.pdf</u> Prepared For: SP Energy Networks

Routeing Considerations

OHLs are linear elements in the landscape. They are likely to affect, to varying degrees, visual and other environmental aspects of the area through which they run. This part of the process predominantly comprises information gathering and consideration of the potential for effects.

The initial stage is to determine a study area and gather baseline information within this area through desk-based studies, site visits, and consultations in order to identify potential constraints to, and opportunities for routeing.

To define a route that meets the requirements of the Electricity Act 1989, a balance must be struck between three sets of considerations:

- Economic;
- Technical; and
- Environmental.

In compliance with Schedule 9 of the Electricity Act 1989 the routeing objective requires the proposed connection to be economical. It is understood that this is interpreted by SPEN as meaning that as far as possible, and all other things being equal, the connections should be as direct as possible and the route should avoid areas where technical difficulty, such as altitude, slope angle, existing infrastructure and large water bodies, or compensatory schemes would render the connection uneconomical. The technical considerations mentioned above are not considered as being absolute constraints but are a guide to routeing.

Study Area Considerations

The grid connection is located within the northern extent of Galloway Forest, owned by Forestry and Land Scotland, approximately 7.5km south of Straiton and 20km east of Girvan, in South Ayrshire. It is a public forest park, predominantly used for recreational activities, including hiking, mountain biking and fishing, and is made up of a mixture of conifer and mixed deciduous broadleaved woodlands. Approximately half of the study area consists of conifer plantation woodland, ranging from mature and semi-mature to young/newly planted woodlands, dominated by Sitka spruce. Local tourist attractions within the wider area include Galloway Forest Park, Galloway and Southern Ayrshire UNESCO Biosphere, Merrick Wild Land Area, and the Galloway Dark Sky Park.

The development site is accessed along Carrick Forest Drive, via the C46W public road from the east. The C46W/Carrick Forest Drive junction is currently used to provide access to the area for timber extraction and other land management uses. This junction is proposed to be upgraded as part of the proposed Carrick Wind Farm development.

One core path crosses the C46W road, between the C46W/Carrick Forest Drive access and another access along the C46W to the north. National Cycle Network (NCN) Route 7 follows the C46W road in this location; however, the public road does not have any dedicated cycling or pedestrian facilities in this area.

There are two main watercourses within the study area; the River Stinchar and Tairlaw Burn. The River Stinchar runs roughly from east to west and crosses Carrick Forest Drive via a small bridge. Tairlaw

Internal Use

Burn consists of two tributaries within the study area, which join just north of Carrick Forest Drive, before flowing north roughly parallel with the C46W road. One of these tributaries flows under Carrick Forest Drive via a culvert. There are also several smaller drainage channels throughout the conifer plantation, most of which are still water. The study area is also within a drinking water protection zone and Girvan Bathing Water Catchment. There are three lochs which either overlap or are at the edge of the study area, comprising Linfern Loch to the west, and Loch Bradan and Loch Skelloch to the east and south-east, respectively.

The grid connection is located at the northern edge of the Carrick Hills within an area of forested foothills, between the Water of Girvan and Stinchar Valleys. The landscape is characterised by a large-scale landform, comprising of steep-sided valleys and gently rounded hills. Merrick Wild Land Area lies approximately 3km to the south of the grid connection boundary at its closest extent, and within the wider area there are a number of operational wind farms (including Dersalloch and Hadyard Hill wind farms) and proposed wind farms (including Carrick, Knockcronal, Carrick and Craiginmoddie wind farms).

The grid connection does not fall within any national landscape designation but is identified as being located within the South Ayrshire Scenic Area, the Galloway National Forest Park, and Galloway and Southern Ayrshire Biosphere Reserve. The grid connection is located within the 'Foothills - Ayrshire' landscape character type (LCT) 76 (determined by NatureScot). The eastern section of the grid connection boundary also falls within the edge of the 'High Carrick Hills' South Ayrshire Local Landscape Area (LLA) and 'The Stinchar Valley' LLA lies approximately 1km to the west of the grid connection at its closest extent.

The 'Foothills - Ayrshire' LCT 76 description defines this area as having a fragmented topography featuring incised valleys nestled between rounded ridges with occasional, plateaus that rise to modest summits. Areas of dense dark green coniferous forest blanket many of the rounded peaks, extending down to the lower slopes. The small scale Tairlaw Burn tributary is located immediately to the south of the grid connection forming a small landscape feature on the edge of the woodland. While the presence of large-scale coniferous forests highlights human impact on the landscape, the enclosed nature of these forests, lack of settlement, and the restricted views contribute to a sense of remoteness and isolation. Existing high voltage pylons and overhead lines feature within this landscape area.

Visual receptors located within the area are limited to users of core paths, local paths, forest paths and users of the unclassified road (Carrick Forest Drive). The closest Core Path SA49 is located within woodland at a considerable distance (750m) to the south of the grid connection and is visually enclosed by woodland. The closest Local Path 75 is located at some distance to the east of the grid connection, within woodland surrounding Loch Bradan. A forestry path is located to the south grid connection at a distance of approximately 120m with close range views of the immediately adjacent existing pylons. The topography combined with commercial forestry plantation of mainly coniferous woodland results in the area being visually enclosed. Visual receptors likely to experience views of the grid connection already experience views of the existing overhead pylons. The existing woodland surrounding the forest path and Carrick Forest Drive would result in momentary glimpses of the proposed grid connection.

The existing environmental considerations in the study area are shown on Figures D.1 to D.4 in Appendix D of the SCD, and Photos 3-1 and 3-2 in Chapter 3 of the SCD illustrate the typical characteristics of the study area. The SCD is included in **Appendix A** of this Report.

Internal Use

3. Consultation Process

Whilst there are no formal pre-application requirements for consultation, SPEN has undertaken early engagement, in line with best practice as promoted by the Scottish Government's Energy Consents Unit (ECU). The main objective of the consultation process is to ensure that all parties with an interest in the grid connection have access to accurate and up-to-date information, and are given an opportunity in which to shape and inform SPEN's proposals at the pre-application stage. This consultation process is intended to identify key issues, so they can be assessed, recorded and presented to decision-makers as part of the planning application process. SPEN has also embraced Scottish Government Planning Advice Note 3/2010 on Community Engagement. This guidance describes engagement as:

"...giving people a genuine opportunity to have a say on a development plan or proposal which affects them; listening to what they say and reaching a decision in an open and transparent way taking account of all views expressed."

SPEN proposes to carry out up to two rounds of consultation, if required, with stakeholders and the public prior to submitting any future application for consent. The responses received from this consultation will be considered and inform future design and assessment stages of the grid connection. Following submission of the application for Section 37 consent, the ECU will, on behalf of Scottish Ministers, carry out further statutory consultation with the public and stakeholders, including South Ayrshire Council.

This chapter describes the various groups of stakeholders relevant to the Carrick Wind Farm Grid Connection project that SPEN consulted during its pre-application consultation.

Stakeholder Consultation

All consultees were sent information about the project, including the Siting and Consultation Document, and when and how to view the online virtual exhibition, and how to make comments to SPEN. Consultees were asked for their views on:

- The preferred route and siting considerations.
- Any other issues, suggestions or feedback the consultees would like SPEN to consider.

Consultees were also informed that comments at this stage are informal comments to SPEN and are made to allow SPEN to determine whether changes to the preferred route and siting locations are necessary. An opportunity to comment formally to the Scottish Government ECU will follow at a later stage in the process following submission of the application for Section 37 consent.

Forestry and Land Scotland was also consulted as connection works would be undertaken on their land and they are the sole landowner.

Local Planning Authority and Statutory Consultees

Statutory consultees contacted as part of the proposed development are listed below:

- ECU;
- Historic Environment Scotland (HES);
- NatureScot;

- Scottish Environment Protection Agency (SEPA);
- Scottish Forestry;
- South Ayrshire Council (as the relevant Local Planning Authority); and
- Transport Scotland.

Non-Statutory Consultees

The following non-statutory consultees were sent information about the project:

- British Telecom (BT);
- Forestry and Land Scotland;
- Galloway and South Ayrshire Biosphere;
- Glasgow Airport;
- Glasgow Prestwick Airport;
- Joint Radio Company;
- Royal Society for the Protection of Birds (RSPB) Scotland;
- Scottish Rights of Way and Access Society (ScotWays);
- Scottish Water;
- Scottish Wildlife Trust (SWT); and
- West of Scotland Archaeology Service (WoSAS).

Community Councils

Two community councils were contacted in the vicinity of the proposed development:

- Barr Community Council; and
- Crosshill, Straiton and Kirkmichael Community Council.

Online Public Consultation

A public consultation was held as a virtual event owing to the remote and localised nature of the proposed development. Details of the scheme and a number of documents including the Siting and Consultation Document were included on a dedicated website:

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

A virtual consultation event was held for 30 days from Wednesday 9th October 2024 to Friday 8th November 2024. Prior to the online event, SPEN sent a letter to households within 2km of the preferred route option notifying them of the development and inviting them to comment. The virtual event was advertised in the Ayr Advertiser published on 8th October 2024 and on Ayr Advertiser's online platform (see Image 1).

Members of the public were invited to make comments by 8th November 2024 via email or post.

Image 1. Extract from Ayr Advertiser, published on 8th October 2024 showing the SPEN advert (centre of page)



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Carter Jonas

12

4. Overview of Consultation Feedback

This chapter provides a summary of responses received from the stakeholders. In total there were 80 visits to the webpage between October 2024 and November 2024. No comments from the public have been received at this stage. Feedback was received from eight consultees who SPEN will continue to engage with, as required, during future project stages.

A full summary of the consultation comments received is set out at **Appendix B**.

Summary of Consultation Responses Received to Date

To date, the feedback from the consultation process has been largely supportive of the proposed development.

Of the eight comments received, the following key elements have been raised which will be reviewed further by the project team.

- Ecology the need for further appropriate survey work, particularly in relation to birds.
- Landscape impact the need to address potential cumulative impacts with existing OHL towers and wind turbines in the surrounding area.
- Mitigation biodiversity enhancement and on/off site woodland planting.

Ongoing Consideration of Feedback

SPEN will consider the information that consultees provided in their feedback to inform the future design and assessment stages of the proposed development. Stakeholders and affected parties will be kept up to date (via the project website) as the proposals move forward and there will be further opportunities for people to provide feedback during the statutory consultation stage following the submission of the Section 37 application to the ECU (anticipated later in 2025).

Internal Use

Appendix A – Siting and Consultation Document (Sweco, 2024)

Appendix B – Consultee Responses

Consultee	Comments	SPEN's response
BT	 The conclusion is that the project will not cause interference to BT's current and presently planned radio network. BT requires 100m minimum clearance from any structure to the radio link path. If any changes are proposed to the information supplied, please let us know and we can reassess this for you. 	Acknowledged.
Forestry and Land Scotland	No response.	N/A
Galloway and Southern Ayrshire Biosphere	No response.	N/A
Glasgow Airport	Confirmed the proposed development is outwith their area – no comments.	N/A
Glasgow Prestwich Airport	No response.	N/A
Historic Environment Scotland (HES)	We note that there are no nationally important heritage assets within 5km of the boundary of the proposed grid connection.We have not identified any likely significant effects on our historic environment interests. We therefore have no advice to offer on the scope of assessment.	Acknowledged.
Joint Radio Company (JRC)	 This proposal is *cleared* with respect to radio link infrastructure operated by the local energy networks. JRC analyses proposals for developments on behalf of the UK Fuel & Power Industry. This is to assess their potential to interfere with radio systems operated by utility companies in support of their regulatory operational requirements. In the case of this development, JRC does not foresee any potential problems based on known interference scenarios and the data you have provided. However, if any details of the development change, 	Acknowledged.

Consultee	Comments	SPEN's response
	particularly the position or scale of any structures, it will be necessary to re-evaluate the proposal. Please note that due to the large number of adjacent radio links in this vicinity, which have been taken into account, clearance is given specifically for a location within the declared grid reference (quoted above).	
NatureScot	We agree with the assessment and conclusions of the Breeding Bird Survey Report (Bowland Ecology, September 2024), which indicates that suitable habitat for a wide range of nesting birds is present within the site boundary and that resting, foraging and nesting habitat for birds is present in the habitats adjoining the site. The report also acknowledges the development area is within the RSPB Galloway Forest Park Important Bird Area (IBA) and within 0.23km of Loch Bradan, home to nesting osprey. Given the potential sensitivity of the IBA and nesting osprey there is merit in looking to schedule works, as far as is practicable to be out with the bird breeding season, in these most sensitive areas of the site. We recommend that the ornithology mitigation as detailed in section 4.10 of the Breeding Bird Survey Report, should be implemented. Additionally, we advise that if nesting birds are found, a suitably sized buffer zone should be set up around the nest and no work within this zone should commence until the young have fledged or the nest is no longer in use. The Carbon and Peatland Map on the Scotland's Soils website classifies the soil on the site as predominantly Class 5 which indicates that whilst no peatland habitat is recorded, the site may include soils that are carbon-rich and deep peat in excess of 50cm. Our understanding, looking at the Carbon and Peatland 2016 map, is that there is no peatland habitat (class 1 or 2 soils) present within the proposal area. However, as the map is not a definitive account of where important carbon soils can be found, we would expect that the ecological appraisal supporting the S37 application confirms the situation relating to peat soils and peatland habitat.	 Acknowledged. The following elements have been raised and are being reviewed by the project team. Ecology – the need for further appropriate survey work. These include pre-works surveys for badger, otter, water vole, red squirrel and pine marten. Further breeding bird surveys are required for black grouse (see RSPB comments below) and required more broadly if no works are undertaken on site within 18 months from the survey date (June 2024) or if design changes significantly. Mitigation – biodiversity enhancement and on/off site woodland planting. Any required protected species licences would be sought from NatureScot, and species protection plans would be prepared and followed throughout the duration of the construction works. Further survey work would help refine the final design and provide clarity on scope for mitigation of environmental effects.

Carrick Wind Farm Grid Connection

Consultee	Comments	SPEN's response
	 Finally, any peatland habitats lost as part of this proposal should be compensated and enhanced in line with our peatland guidance advice. We advise the Applicant provides more detail as to the scope and nature of any proposed biodiversity compensation and enhancement works. Many projects are being supported by a Biodiversity 	
	Enhancement Plan and this mechanism would be suitable here to help communicate the approach taken as part of a future S37 application.	
RSPB	Our data confirms lekking black grouse on open habitat adjacent to this site within 1.5km of proposed works. We note that survey for	Acknowledged – further appropriate survey work relating to black grouse will be undertaken.
	birds was conducted outside the lekking season which would not detect activity of lekking birds. We would therefore recommend survey to confirm status of black grouse within the development footprint in order to inform the appropriate level of mitigation during construction and impact during operation. We would also advise that survey for nesting and foraging activity should be undertaken for this species in order to minimise disturbance during construction activities and operational displacement through loss of habitat.	RSPB would be consulted as part of the formal Section 37 consultation stage.
Scottish Forestry	NPF4 Policy is not noted in scoping.	Acknowledged.
	It is noted that there is no mention of the scale of permanent woodland removal associated with the wayleave and any necessary landscaping which will need to be considered.	Removal of woodland would be considered and confirmed during the detailed design stage. Scottish Forestry would be consulted as part of the formal Section 37 consultation stage.
Scottish Rights of Way and Access Society	No response.	N/A
Scottish Wildlife Trust	No response.	N/A
SEPA	At this stage, SEPA has no site specific advice to provide and simply refer you to the relevant standing advice in our <u>sepa-triage-</u> <u>framework-and-standing-advice.pdf</u> which is equally applicable to Electricity Act applications. Notwithstanding this, it is the applicant's	Acknowledged. SEPA would be consulted as part of the formal Section 37 consultation stage.

Carrick Wind Farm Grid Connection

Consultee	Comments	SPEN's response
	responsibility to meet their obligations and mitigate environmental impacts under Schedule 9 of the Electricity Act 1989.	
South Ayrshire Council (SAC)	 Pre-application comments received 8th January 2025. There is general support for the proposed overhead line diversion under National Planning Framework 4 (NPF4) and the Council's Local Development Plan (LDP2) in terms of supporting renewable energy development. Notwithstanding this general support, the proposals require to be examined in detail to ensure compliance with the wider scope of the development plan. The key issues identified are the potential for one of the towers to be affected by flood risk and the potential requirement for on or off-site compensatory woodland planting. Whilst the site does not appear to be of high value for nature conservation, further studies are required to assess the potential effect on protected species which may be present within or close to the site. The pre-application assessment has identified the need for the application to be supported with the following additional information: 1. Protected species survey information and proposed mitigation required to avoid or compensate for any adverse effects 2. Assessment of the potential effect upon the River Stinchar (Milton to Black Hill) Provisional Wildlife Site 3. Supporting information confirming the extent of landscape and visual impact identified in the initial assessment provided as part of this pre-application enquiry 4. Flood Risk Assessment 5. Requirement for Compensatory Planting under the Scottish Government's Policy on the Control of Woodland Removal 	 Acknowledged. The following elements have been raised and are being reviewed by the project team. Ecology – the need for further appropriate survey work. These include pre-works surveys for badger, otter, water vole, red squirrel and pine marten. Further breeding bird surveys are required for black grouse (see RSPB comments above) and required more broadly if no works are undertaken on site within 18 months from the survey date (June 2024) or if design changes significantly. Landscape impact – the need to address potential cumulative impacts with existing OHL towers and wind turbines in the surrounding area. Flood risk – assessment will be undertaken in the next stage of the project. Mitigation – biodiversity enhancement and on/off site woodland planting. Any required protected species licences would be sought from NatureScot, and species protection plans would be prepared and followed throughout the duration of the construction works. Further survey work would help refine the final design and provide clarity on scope for mitigation of environmental effects.
Transport Scotland	No response.	N/A

Carrick Wind Farm Grid Connection

Consultee	Comments	SPEN's response
West of Scotland Archaeology Service	No response.	N/A