Scottish & Southern Electricity Networks

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# About the project

The existing 132kV switching station at Quoich Tee contains obsolete equipment that has reached the end of its life and it is no longer possible to obtain spare parts for some of the switchgear. This site forms a critical part of the electrical infrastructure supplying Skye and the Western Isles and a replacement is essential to ensure continuity of supplies and to allow for the connection of renewable generation on the route to net zero.

Following detailed Design and Engineering work a solution has been identified that would allow new equipment to be installed within the existing switching station while still keeping the connection to Skye and the Western Isles operating during the construction period.

This work has removed the need to construct a new switching station within the Glen, although a new access track and turning area will be required at the existing site and other upgrades will be required to ensure the site complies with current Operational and Regulatory standards. The Engineering process has removed the original need to install more equipment within the switching station and will ensure compliance with current technical and legislative requirements within the existing footprint. This compliance is dependent upon the construction of the new access track with turning and laydown area.

Further work will be required in the next Regulatory period following the completion of the new overhead line to Skye and the changes to the site are being designed to accommodate this work without the need to further extend the site in the future.

Upgrading this switching station is essential to ensure continued security of supply and to provide one element of the works necessary to allow the connection of more renewable energy schemes as part of the decarbonisation of our energy supply system. The existing overhead line (OHL) is reaching the end of its operational life and cannot be upgraded to meet current technical standards and will therefore be replaced.

**January 2023**
- Commencement of ecology surveys across multiple alignment options.

**June 2023**
- Commencement of Ornithology Surveys.

**September 2023**
- Alignment consultation.

**December 2023**
- Section 37 and Planning applications submitted.

**December 2024**
- Planning consent and Section 37 consent determination respectively.

**May 2025**
- Construction: commences.

**August 2025**
- Project completion.

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# Our overhead line routeing and design process

## SSEN Transmission has developed and implemented formal guidance for the selection of routes and alignments for its new Overhead Lines (OHL).

The main aim of the guidance is to provide a consistent approach to the selection of new OHL alignments and is underpinned by our statutory obligations to; 'develop and maintain an efficient, coordinated and economical electricity transmission system in its licenced area' and in so doing, to 'have regard to the desirability of preserving the natural beauty, of conserving flora, fauna and geological and physiographical features of special interest and protecting sites, buildings and objects of architectural, historic or archaeological interest; and do what we reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites buildings or objects'. These duties capture the principal objective of the routing process which is to balance technical and cost considerations with environmental considerations, to select an optimal alignment that is economically viable, technically feasible, minimises impacts on important resources or features of the environment and reduces disturbance to those living in it, working in it, visiting it or using it for recreational purposes.

## Key stages

For new OHL projects, the process typically follows four principal stages, each iterative and increasing in detail and resolution, bringing cost, technical and environmental considerations together in a way that seeks the best balance. This staged process leads to the identification of a optimal overhead line alignment that is capable of being granted consent by the Scottish Government under Section 37 of the Electricity Act 1989. The key stages are:

### Stage 1: Strategic options assessment/routeing strategy

The starting point in all OHL projects is to establish the need for the project and to select the optimal strategic option to deliver it. This process will be triggered by the preparation of a number of internal assessments and documents which identify the technology to be used and the point on the existing Transmission network where a connection can be made. The routeing strategy also determines which of the following stages are required.

### Stage 2: Corridor selection

Corridor selection seeks to identify possible corridors which are as short as practicable, which are not constrained by altitude or topography, and which would avoid, where possible, any interaction with man-made infrastructure and features of environmental sensitivity. For Achany, the corridor stage is omitted as the location of the wind farm and point of connection on the network naturally define a corridor.

### Stage 3: Route selection

Route selection seeks to find a route within the corridor that avoids where possible physical, environmental, and amenity constraints, is likely to be acceptable to stakeholders, and is economically viable taking into account factors such as altitude, slope, ground conditions and access. A route may be several kilometers in length and may range from 200m to 1km in width, depending on the scale of the project, the nature and extent of constraints and the character of the area in question. A number of route options are usually identified and assessed, leading to a optimal route being selected.

### Stage 4: Alignment selection

Alignment selection seeks to identify an alignment within the optimal route and to define the access strategy which will be adopted in terms of, for example, the nature and extent of temporary and/or permanent access tracks and possible road improvements. It will be influenced by local constraints, such as individual properties, their aspect, and amenity; groundsuitability; habitats; and cultural heritage features and setting. There may be more than one distinct alignment option through the optimal route. It is more likely, however, that variants to sections of an alignment may arise where there are different ways to avoid a constraint.

### What happens next?

The outcome of the OHL alignment selection process is an optimal alignment which will be taken forward for formal environmental assessment and then consent application.

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# Alignment selection consultation

## SSEN Transmission is consulting on the selection of an optimal alignment.

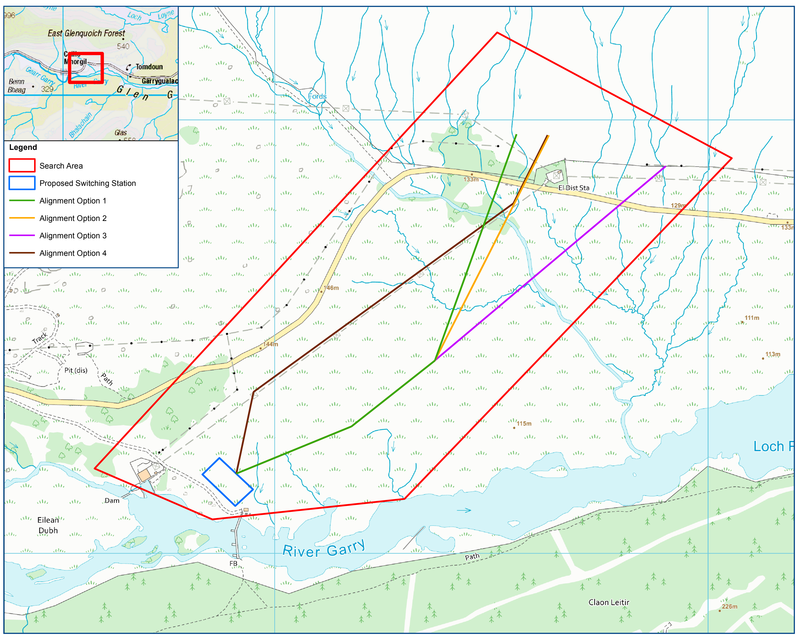
Overhead lines and underground cables are subject to a detailed alignment selection process. This ensures that the least constrained alignment is selected and provides a balance between meeting technical engineering requirements, causes the least impact on the environment and is economically viable.

The process is iterative and will include consideration of stakeholder feedback and concerns so that they can be addressed, or further data collection and appraisal is undertaken to better define the nature and extent of potential constraints and their materiality.

Consultation with statutory consultees was undertaken in July 2023. Further to that Consultation, a fifth alignment variant has been assessed and is presented here as the optimal alignment. The consultation document provides the detailed justification for the alignments presented in Figure 1.

Initial alignment options considered are shown in Figure 1.

## Figure 1 alignment options

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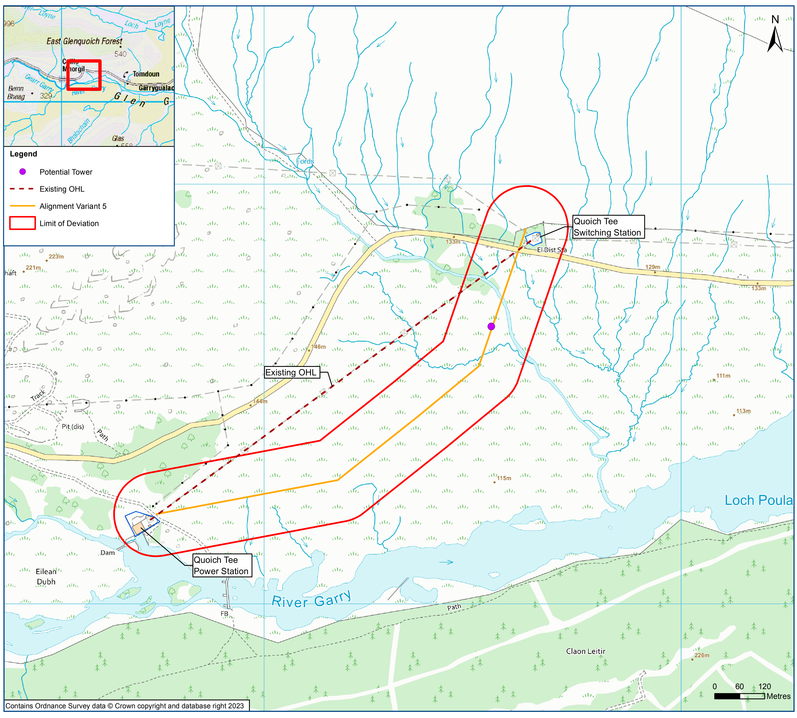
# Optimal alignment and environmental constraints

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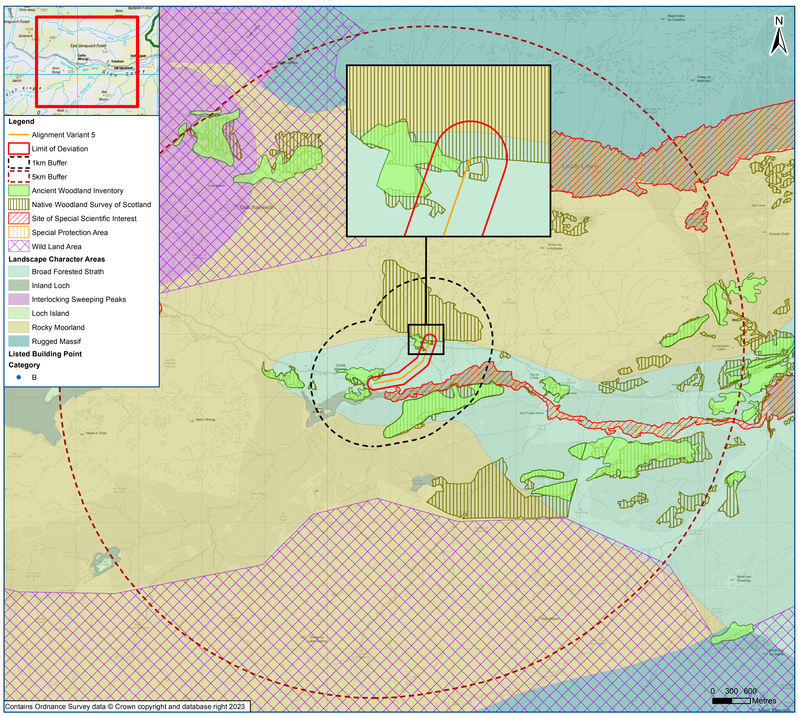
# Optimal alignment and environmental constraints

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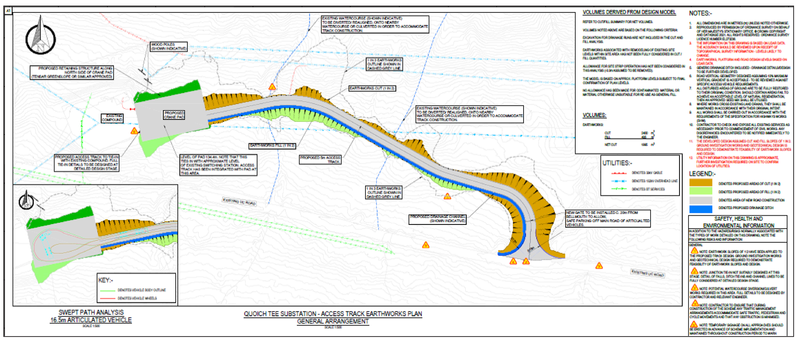
# New access road

**In order to access the existing switching station safely, a new access road is required. The existing access to the switching station does not provide safe measures for offloading material and turning of vehicles.**

The new road will be permanent and approximately 240m in length designed to meet the required gradients for vehicles and deliveries. The road will require a new bellmouth connecting to the current C1144. The design also includes a construction crane pad approximately 30m by 20m.

The crane pad is required in order to remove the existing overhead line tower within the switching station. Some of this crane pad will be temporary to facilitate the construction works and thereafter sections of this will be removed to accommodate turning of light good vehicles.

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