

Proposed Garvary Wind Farm Connection

Project Need and Overview

Why is the project required

As the licenced transmission network operator for the north of Scotland, we have a responsibility under Section 9 of the Electricity Act 1989 to support fair competition in electricity generation and supply. This includes ensuring that all new sources of power generation and electricity demand can connect to the transmission network on a non-discriminatory basis.

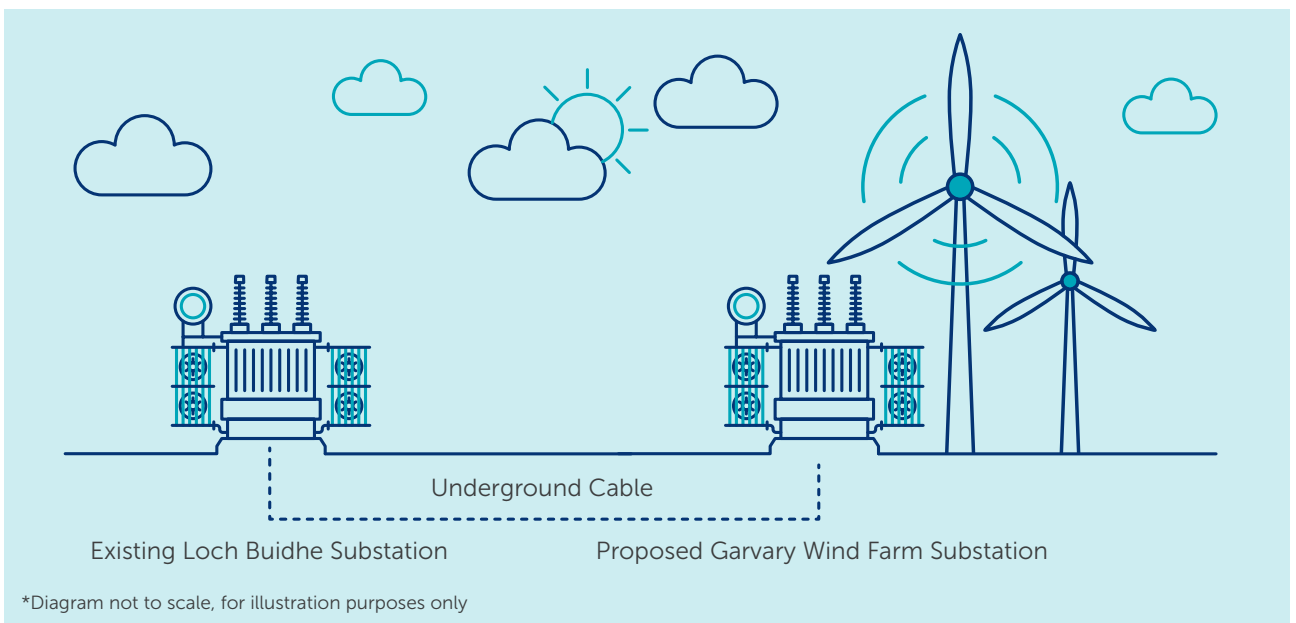
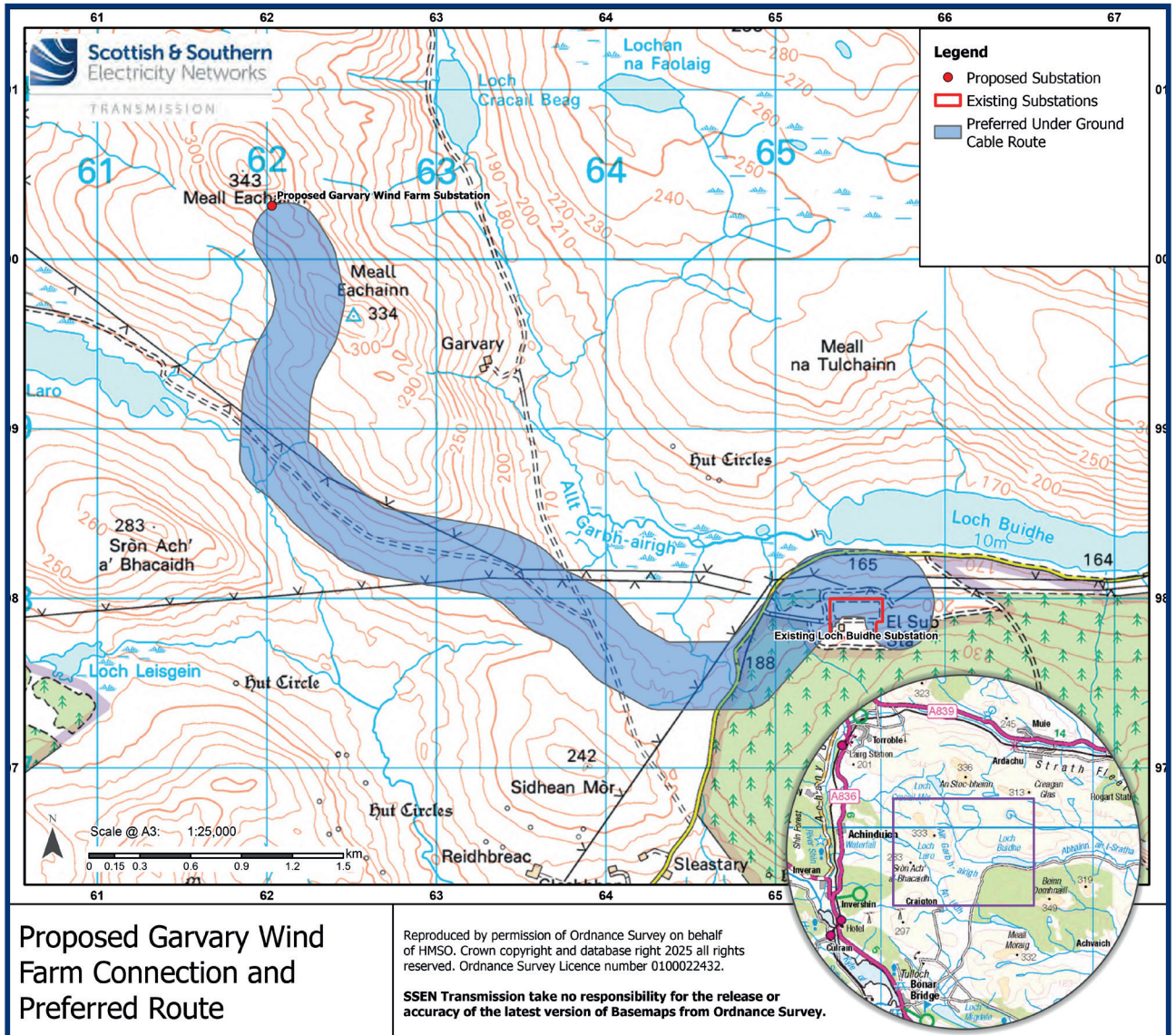
If approved, the proposed Garvary Wind Farm will need to be connected to the transmission network, enabling its renewable energy to be efficiently delivered to homes and businesses across the UK.

We have obligations to offer non-discriminatory terms for connection to the transmission system, both for new generation and for new sources of electricity demand.

The proposed Garvary Wind Farm, if consented, is required to connect into the transmission network.

To facilitate this, we are proposing to construct a new underground cable from the proposed substation at the wind farm to the existing Loch Buidhe 275/132kV substation. Under our Network Operator's Licence this connection should be efficient, coordinated and economic, whilst having the least possible impact on the environment.

The proposed 132kV underground cable (UGC) will be approximately 6km in total. In order to facilitate the construction, temporary access tracks will be required.



 @ssencommunity

 @ssetransmission

ssen-transmission.co.uk/projects/project-map/garvary-wind-farm-connection/

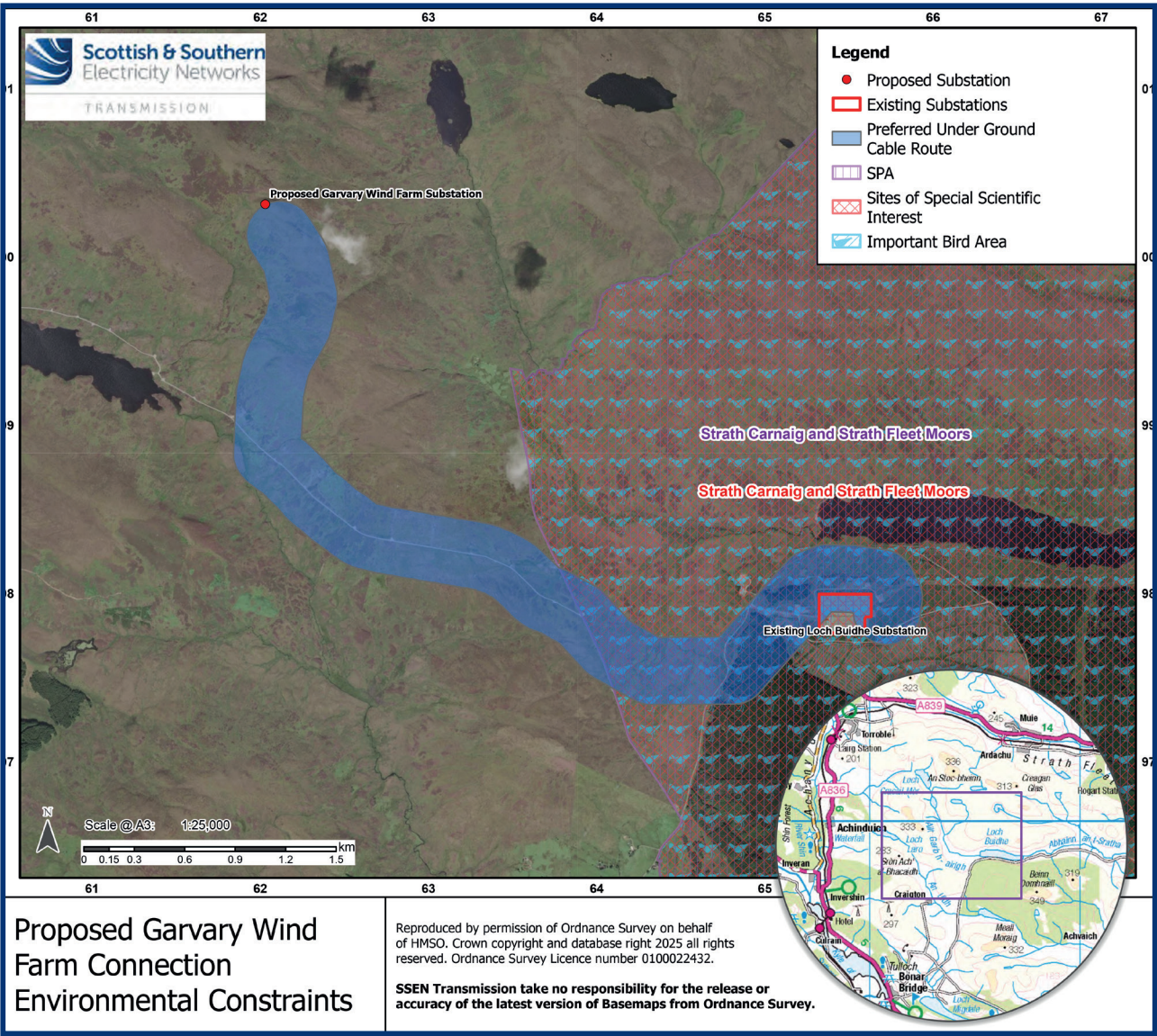


Proposed Garvary Wind Farm Connection

Consents and Environmental Biodiversity Net Gain

Following the mitigation hierarchy approach, our sector leading environmental commitments mean that when developing routing and siting options for our overhead lines, underground cables and substations our projects will avoid, mitigate and restore any environmental impacts wherever possible. Our environmental teams are embedded in project development to consider and consult upon the most suitable route location from the very start of the optioneering phase, using well established data sets and additional detailed survey work.

We are committed to delivering 10% Biodiversity Net Gain on all sites gaining consent going forward. This ensures that we don't just restore our natural habitats but actively improve them for the benefit of local communities, wildlife, flora and fauna.



Environmental Assessments

Desk-based assessments using available mapping and Geographic Information Systems (GIS) data together with environmental surveys by specialists have been undertaken to gather baseline information.

This is crucial to enable us to understand the key environmental constraints and sensitivities within the route corridor.

This work has been carried out during 2023 - 2024 and has helped to identify key environmental constraints including, landscape and visual amenity, sensitive habitats, protected species, ornithology, cultural heritage and hydrology and hydrogeology.

Following confirmation of a preferred alignment, which will be informed by the work and assessments carried out to date, further detailed studies and assessment work will be undertaken in 2025 to support the consenting process going forwards.

- Key Environmental Constraints**
- The key environmental constraints identified on the project to date include:
- Strath Carnaig and Strath Fleet Moors Site of Special Scientific Interest (SSSI) and Special Protection Area (SPA) which are designated for breeding hen harrier.
 - Non-designated heritage assets of archaeological and cultural heritage interest within the route corridor.
 - Areas of deep peat (>0.5m) and sensitive peatland habitats including irreplaceable habitat and ground water dependent terrestrial ecosystems (GWDTE).
 - Water vole *Arvicola amphibius* signs and suitable habitat within the proposed development route.

Consenting

The underground cabling (UGC) works fall under Class 40(1) (a) of The Town and Country Planning (General Permitted Development Order) (Scotland) Order 1992 (GPDO) and as such does not require planning permission.

As detailed design progresses, we will confirm with The Highland Council if a planning application is required for any of the temporary or permanent access tracks required to install and maintain the UGC. Where planning permission is required for a new access track the proposal will be subject to The Town and Country Planning (Hierarchy of Developments) (Scotland) Regulations 2009 (The Hierarchy): i.e. is it a 'local' or 'major' category of development. The category of development dictates the requirement for statutory consultation however SSEN Transmission may also chose to do non-statutory consultation at any stage of the project.

If required*, an EIA Screening Opinion will be requested from The Highland Council under The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 (EIA Regulations) to clarify whether the project meets or exceeds certain criteria. If it is deemed to be an EIA Development then any application for consent must be accompanied by a formal EIA Report.

If it is not deemed to be an EIA Development, SSEN Transmission will provide equivalent environmental information through a voluntary Environmental Appraisal (EA) Report.

Additionally, because the works lie within a SSSI and SPA, SSSI consent and a Habitat Regulations Appraisal (HRA) will be required as well as prior notification to The Highland Council.

 @ssencommunity

 @ssetransmission

ssen-transmission.co.uk/projects/project-map/garvary-wind-farm-connection/



Proposed Garvary Wind Farm Connection

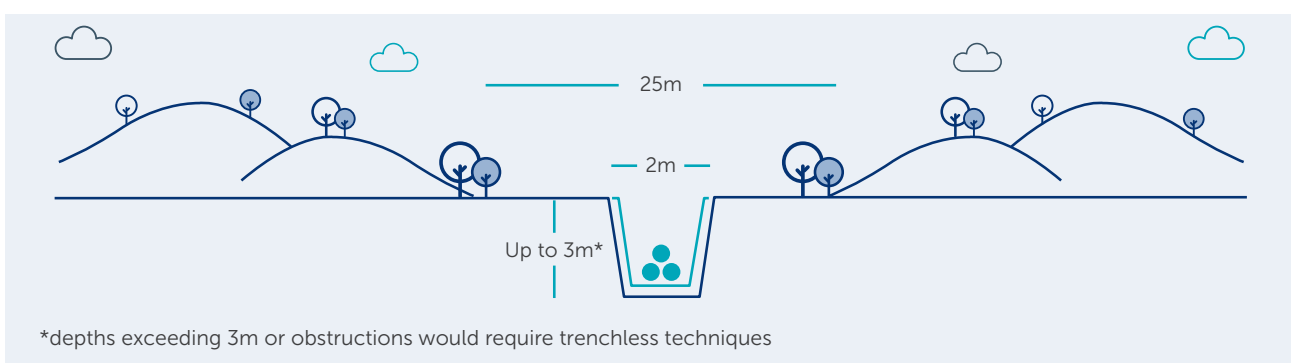
Engineering Considerations

Technology and Construction

A new section of underground cable will be constructed to connect the Garvary Wind Farm into Loch Buidhe substation. Underground cable is the optimal solution for this section primarily due to engineering constraints, including proximity to existing overhead lines and associated Transmission infrastructure in this area.

To meet the circuit requirements, a three-phase 132kV single circuit is required. This means that a total of 3 parallel cables are required to be installed for any underground sections.

For cable installation a trench up to 2m wide would be excavated, typically between 1m and 3m deep. During the construction period, a working corridor of up to 25m wide will be required.



Additional Infrastructure

To facilitate the underground cable circuits, some additional infrastructure is required along the cable route. Cable joint bays are necessary to connect sections of cable together.

These joint bays would be a temporary excavation, however there is some permanent above-ground infrastructure in the form of link pillars which are required to enable future maintenance and safe operation of the circuit.

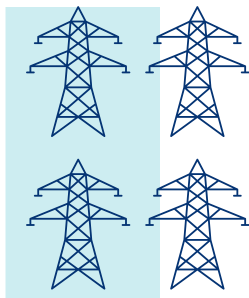
Other Considerations

Peatland is an important habitat and installing underground cables can cause lasting damage. It also poses significant engineering challenges due to the challenging ground conditions.

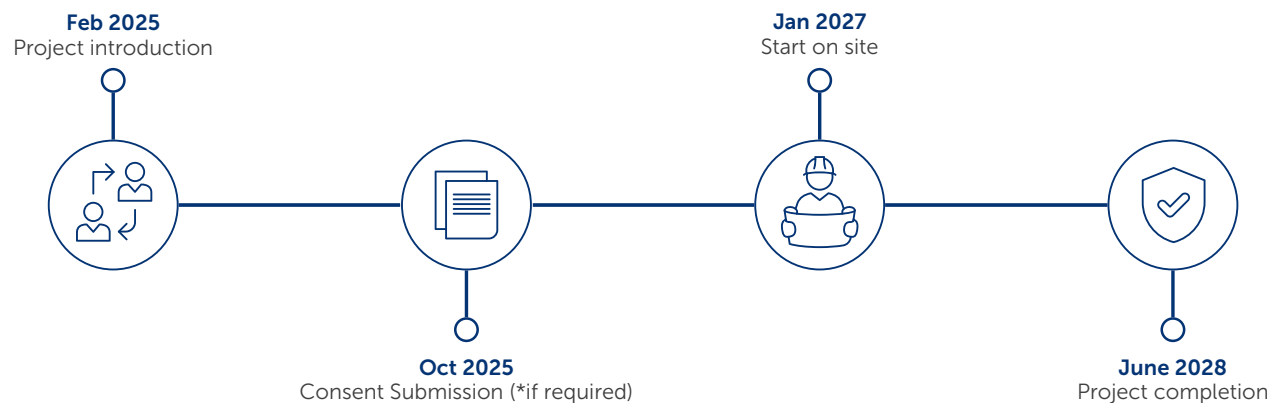
Therefore any underground cable development will seek to avoid areas of peatland where possible, or seek to minimise disruption if unavoidable.

There are other environmental considerations including, but not limited to, impacts of the development on local biodiversity, ground nesting birds and mammals, accidental release of silt or pollutants into local environment and water courses.

Whilst steps will always be taken to mitigate and minimise such risks, these need to be carefully considered and balanced against a range of other factors when considering the development of new electricity transmission infrastructure.



Project Timeline



 @ssencommunity

 @ssetransmission

ssen-transmission.co.uk/projects/project-map/garvary-wind-farm-connection/

