

**Site Selection Consultation Document – Beauly –  
Denny 2<sup>nd</sup> Circuit Upgrade  
Proposed Fasnakyle 400kV Substation**

**January 2024 Update**



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## Glossary

Term	Definition
Alternating Current (AC)	Type of electrical current in which the direction of flow of electrons switches back and forth at regular intervals or cycles.
Area of Search (Study Area)	A broad geographical area within which possible sites might be capable of identification within approximately 5km of the required connectivity point; usually determined by geographical features such as coastlines or hill/mountain ranges, or designation boundaries, such as National Park boundaries.
Consultation	The dynamic process of dialogue between individuals or groups, based on a genuine exchange of views and, normally, with the objective of influencing decisions, policies or programmes of action.
Distribution Network Operator (DNO)	A licensed company that owns and operates the network of cables, transformers and towers that provide electricity.
Gigawatt (GW)	A unit of electrical power equal to one billion watts.
High Voltage Direct Current (HVDC)	HVDC is an effective way to transmit electricity and is primarily transmitted in this form by overhead lines or underground cables.
Holistic Network Design (HND)	Detailed report identifying the electricity network needs to enable connection of 23GW of offshore wind, including the needs associated with the offshore and onshore transmission network, facilitating the UK government offshore wind target of 50 GW by 2030.
Kilovolt (kV)	A unit of electrical power equal to one thousand volts.
Kilowatt	A unit of electrical power equal to one thousand watts.
Local Development Plan (LDP)	LDP's are usually prepared by the Local Planning Authority and set out the proposals for future development and use of land in their area.
Megawatt (MW)	A unit of electrical power equal to one million watts.
National Planning Framework 4 (NPF4)	The national spatial strategy for Scotland. It sets out the spatial principles, regional priorities, national developments and national planning policy. It replaces NPF3 and Scottish Planning Policy.
Preferred Site	The Option that is the preferred choice, following Stage 2 – Detailed Site Selection based on environmental, engineering and cost perspectives and post consultation.
Overhead line (OHL)	An electric line installed above ground, usually supported by lattice steel structures or poles.
Stakeholders	Organisations and individuals who can affect or are affected by SSEN Transmission works.
Substation	A node on the network to allow safe control of the electricity network. This could include convergence of multiple circuits, transformation of voltage or other functions to maintain and operate the electricity network.
The National Grid	The electricity transmission network in Great Britain.
Volts	The international unit of electric potential and electromotive force.
Watts	The unit of measurement for the rate at which electrical energy is transferred or used.
Works	Constructing new transmission infrastructure such as substations, overhead lines, underground cables, major refurbishment of these, the dismantling and removal of any parts of the system; and associated works, which may include formation of access tracks, bridge and road improvements, tree cutting, drainage etc.

# 1 Introduction

This document has been prepared by Scottish and Southern Electricity Networks Transmission (SSEN Transmission). SSEN Transmission, operating under licence held by Scottish Hydro Electric Transmission plc, owns, operates and develops the high voltage electricity transmission system in the north of Scotland and remote islands. This document invites comments from all interested parties on the Preferred Site.

This updated document provides further information requested during initial consultation on the site selection process and assessments undertaken for a proposed new 400 kilovolt (kV) substation (hereafter referred to as the 'Proposed Development') required in the Fasnakyle area, near Cannich. This version updates the information made available in September 2023 and provides assessment of additional site options. This updated Consultation Document, along with project details, is available online at the project website:

[Beauly Denny 400kV Upgrade - SSEN Transmission \(ssen-transmission.co.uk\)](https://ssen-transmission.co.uk)

An ArcGIS Storymaps [website](#) has also been prepared in order to provide summary information of the process followed to reach the current stage in the project.

## 1.1 Project Background and Need

As a result of the Scottish and UK Governments' Net Zero climate change targets, together with requirements set out in the British Energy Security Strategy (BESS) (April 2022) and subsequently in National Grid's, the Electricity System Operator (ESO), "Pathway to 2030" Holistic Network Design (HND) (July 2022), significant increases in renewable generation capacity are required across the UK, resulting in significant investment in new transmission network infrastructure to transport this energy and reinforce the network.

The BESS sets out the UK Government's plans to secure the country's future energy independence by reducing the dependence on, and price exposure to, volatile global wholesale gas markets. This will be achieved by accelerating the deployment of homegrown and affordable low carbon electricity generation, together with accelerating the enabling electricity network infrastructure required to connect and transport this power. The BESS included an increased ambition for offshore wind generation of 50 gigawatt (GW) by 2030, up from the previous target of 40 GW.

To enable the connection of that 50 GW of offshore wind by the 2030 target date, the National Grid (the ESO), working in collaboration with the three Great Britain Transmission Owners, developed what is known as the 'Holistic Network Design' (the HND). This sets out the onshore and electricity transmission infrastructure required across Great Britain to deliver this UK Government target, including projects in SSEN Transmission's Licence Area across the north of Scotland.

The Central Highlands is home to some of Scotland's best onshore wind resources and the existing electricity transmission network in the region is at full capacity, meaning the planned new renewable energy generation required by BESS cannot connect without significant network reinforcement.

As part of the wider UK network reinforcements detailed in the BESS and HND, Scottish Hydro Electric Transmission plc (SHE Transmission) is proposing to upgrade the existing Beauly-Denny 275 kV circuit to 400 kV to mirror the ratings of the existing 400 kV circuit which runs along the route. This upgrade can make use of the existing overhead line (OHL) infrastructure but requires alterations/additions to the associated substations along the route, namely at Beauly, Fasnakyle, Fort Augustus, Tummel/Errochty/Kinardochy and Braco West. Whilst the project will be considered as one (with common timescales programmed) there are 5 distinct sites requiring works, each with differing scopes, requirements, and therefore consenting types and timescales. See **Figure 1**, below.

In December 2022, the energy regulator, Ofgem, approved the need for these projects as part of its Accelerated Strategic Transmission Investment (ASTI) framework decision.

These projects, alongside several other major network upgrades planned in the north of Scotland, are therefore part of a Great Britain wide programme of works that are required to meet UK and Scottish Government energy targets; there is a clear expectation from Government and the energy regulatory, Ofgem, that these projects will be delivered by 2030. More specifically, these projects are needed to deliver Government 2030 renewable targets set out in the BESS.

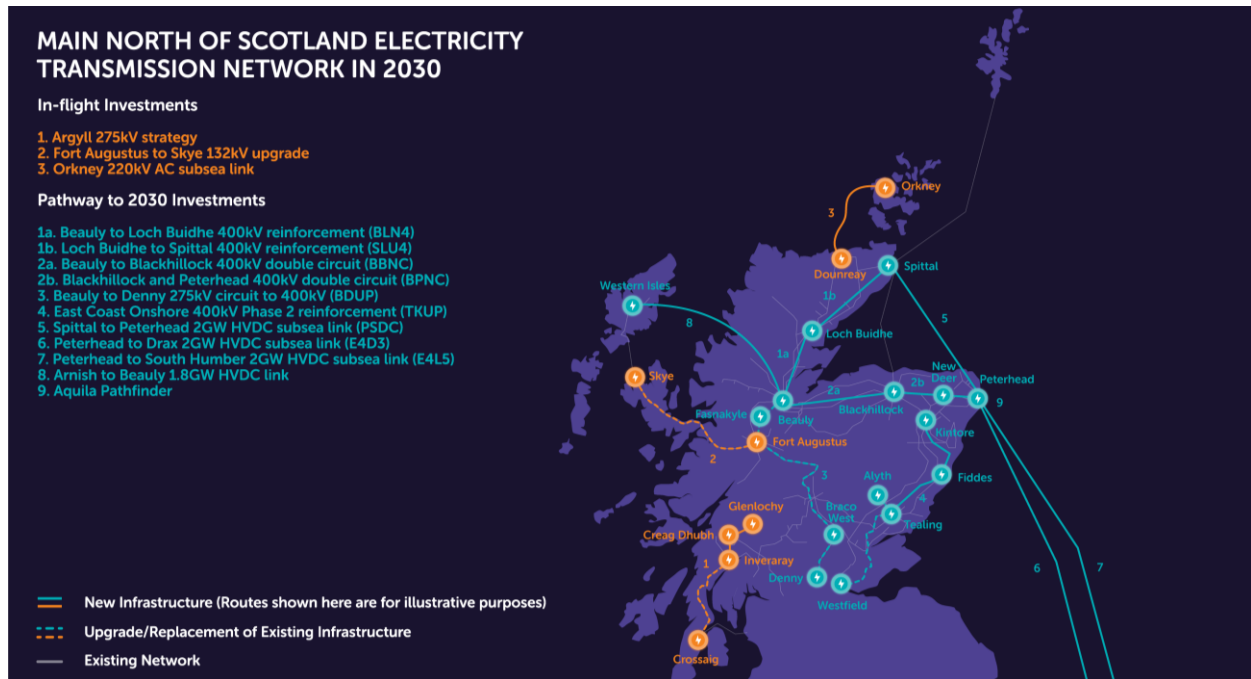


Figure 1 Proposed New and Upgraded/Replacement Infrastructure as part of the Pathway to 2030

## 1.2 Project Overview

SSEN Transmission is proposing to upgrade the existing Beauly-Denny 275kV circuit to 400kV to mirror the ratings of the existing 400kV circuit which runs along the route. The upgrading will make use of existing OHL infrastructure but requires alterations/additions to several associated substations, including at Fasnakyle.

SSEN Transmission is proposing a new substation site as there is insufficient space on the existing site at Fasnakyle to accommodate the additional equipment associated with the upgrading. The new substation site is required to be in proximity of the existing Fasnakyle power station substation to enable a new connection between the two. Whether this will be via OHL or underground cable (UGC) has not yet been fully determined, however there is likely to be a requirement for existing cables to be diverted.

## 1.3 Strategic Considerations

Implementing the proposed development of a new substation in proximity to the existing Fasnakyle Substation to house the equipment required to enable the large-scale upgrade will comprise the following:

- 400kV transformers and a new 400kV double busbar.
- Current indicative platform size for an AIS solution, of approximately 402m x 293m. These sizes are taken to comprise a working 'worst case scenario' for site selection at this stage. Earthworks will be required in developing the platform.
- Overhead line tie ins from the new substation to the existing Beauly – Denny overhead line.

- Upgrade existing or provide new access tracks, temporary construction compounds and construction layout areas to facilitate the development.

## 1.4 Connections Considerations

In addition to the Beaully Denny upgrading a new substation is also required in this location to facilitate generation connections in the greater Fasnakyle/Guisachan/Dundreggan area. This new infrastructure can be combined with the new 400kV substation in a single site.

Due to the geographic features and high prevalence of environmentally sensitive areas in the vicinity of the Fasnakyle 275kV Substation, new generation connections are likely to be very challenging to route into this location, so alternative substation site options were investigated as outlined in Section 2.

In order to most easily achieve the objective of upgrading the Beaully-Denny 275kV circuit, a substation location close to the overhead line is preferred to minimise the amount of new overhead lines and this was also factored into the site options assessed.

**Figure 9** shows some proposed and potential connections from power generation projects in the Fasnakyle area. These projects are in various stages of development.



Figure 9 Proposed and potential Generation Connections into Fasnakyle

## 1.5 Site Selection Process

The site selection process has followed formal internal guidance to enable a consistent and rigorous selection of alignments and sites for new substations, switching stations and converter stations. The site selection process has three key stages, each increasing in detail and definition. Technical, environmental, and cost considerations are brought together in a way which seeks the best balance in accordance with SSEN’s Transmission Network Operator’s Licence and the Electricity Act 1989. This staged process leads to the identification of a finalised proposed substation site, which will be taken forward for planning. An overview of the Substation Site Selection Process is provided in **Figure 2**.

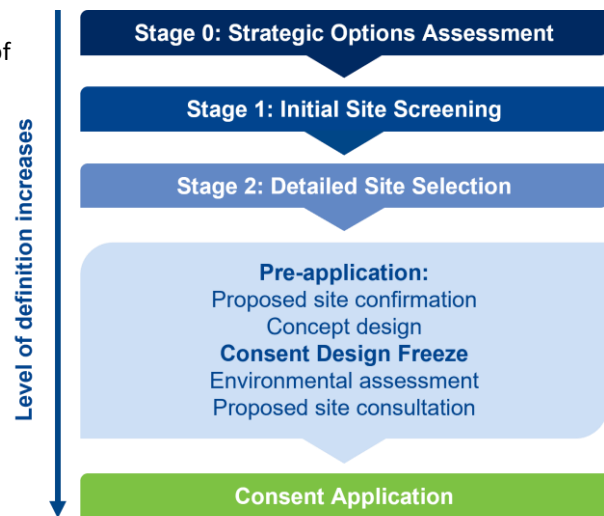


Figure 2 Overview of the Optioneering Process

**Pre-Site Selection Activities:** The starting point in all substation site selection projects is to establish the need for the project and to select potential engineering options that can deliver this need. This process will be triggered by the preparation of several internal assessments and documents.

**Stage 1: Initial Site Screening:** This stage seeks to identify technically feasible, economically viable and environmentally acceptable site options within a defined area. The search area may vary depending on terrain, other infrastructure, designated areas and features and connection options. The aim is to identify several potential sites which are initially assessed for suitability and to identify which of the identified sites can be shortlisted for further assessment.

**Stage 2 Detailed Site Selection:** This stage seeks to identify a preferred substation site, which avoids where possible physical, environmental and amenity constraints, is likely to be acceptable to stakeholders and is economically viable, taking into account engineering and connection requirements.

## 2 Stage 0: Strategic options assessment

A strategic options assessment has been undertaken by SSEN Transmission. The outcome of this strategic options assessment identified the following key requirements for the new sites:

- Proximity to the existing Fasnakyle substation site in order to tie back into it. This was set nominally at 5 km for an effective Search Area;
- Large enough to accommodate the estimated size of development outlined in section 1.3;
- In areas which do not contain environmental designations and minimise impacts on local environmental receptors; and
- Additional capacity for future connections addressing the potential need for UGC.

The outcome of the strategic options assessment informed the identification of sites to take forward as part of the Stage 1: Initial Site Screening Stage.

### 2.1 Stage 1: Initial Site Screening

At this stage, fourteen options were identified as part of site selection, all within a 2.5km search window either side of the Beaully-Denny overhead line running north along the line to Corrimony and south to Dundreggan. These sites were assessed for suitability via Multi Criteria Analysis (MCA), Geographic Information System (GIS), site walkovers, desk studies and field reconnaissance.

Early Red, Amber, Green (RAG) matrix scoring was undertaken for each of the options. The Red, Amber, Green (RAG) matrix is shown as **Figure 3** below. High level environmental considerations of the options are listed on the following two pages.

Performance	Comparative Appraisal
Most preferred	Low potential for the development to be constrained.
↓	Intermediate potential for the development to be constrained.
Least preferred	High potential for the development to be constrained.

Figure 3 Overview of the RAG Matrix ratings



**Option 1**

- Option 1 is located approximately 1.5 km from natural heritage designations: Glen Affric SSSI, Strathglass Complex SAC, Glen Affric to Strathconon SPA, and Glen Affric National Nature Reserve.
- Option 1 is located approximately 30 m from Ancient Woodland Inventory Areas.
- River Glass runs both to the northwest and south / southwest of Option 1 and is rated Good overall by the Water Framework Directive (WFD).
- Scheduled Monuments exist within approximately 1.35 km and 2.45 km.
- Option 1 is situated on Landscape Character Type 'Farmed Strath – Inverness', characterised by; open farmed valley floors and a central meandering river contained within steep, mainly forested, and wooded slopes.
- Residential settlements exist within approximately 500 m.
- Highland Council Core Path IN95.11 exists within 1 km.
- Planning proposal 23/01025/SCRE and 17/00062/SCRE exist within the boundaries of Option 1 with several other proposals existing within close proximity.

**Option 2**

- Option 2 is located approximately 2 km from natural heritage designations: Glen Affric SSSI, Strathglass Complex SAC, Glen Affric to Strathconon SPA, and Glen Affric National Nature Reserve.
- Ancient Woodland Inventory Areas are within approximately 30 m.
- The River Glass is directly adjacent to the northwest of Option 2 (Good Overall WFD status).
- Scheduled Monuments exist within approximately 1 km and 2.75 km.
- Option 2 is situated on Landscape Character Type 'Farmed Strath – Inverness', characterised by; open farmed valley floors and a central meandering river contained within steep, mainly forested, and wooded slopes.
- A residential settlement exists within Option 2, with the next closest settlement situated approximately 600 m to the northeast.
- Highland Council Core Path IN05.11 exists within approximately 1 km.
- Planning proposal 16/05754/OHL exists within the boundaries of Option 2 with several other proposals existing within close proximity.

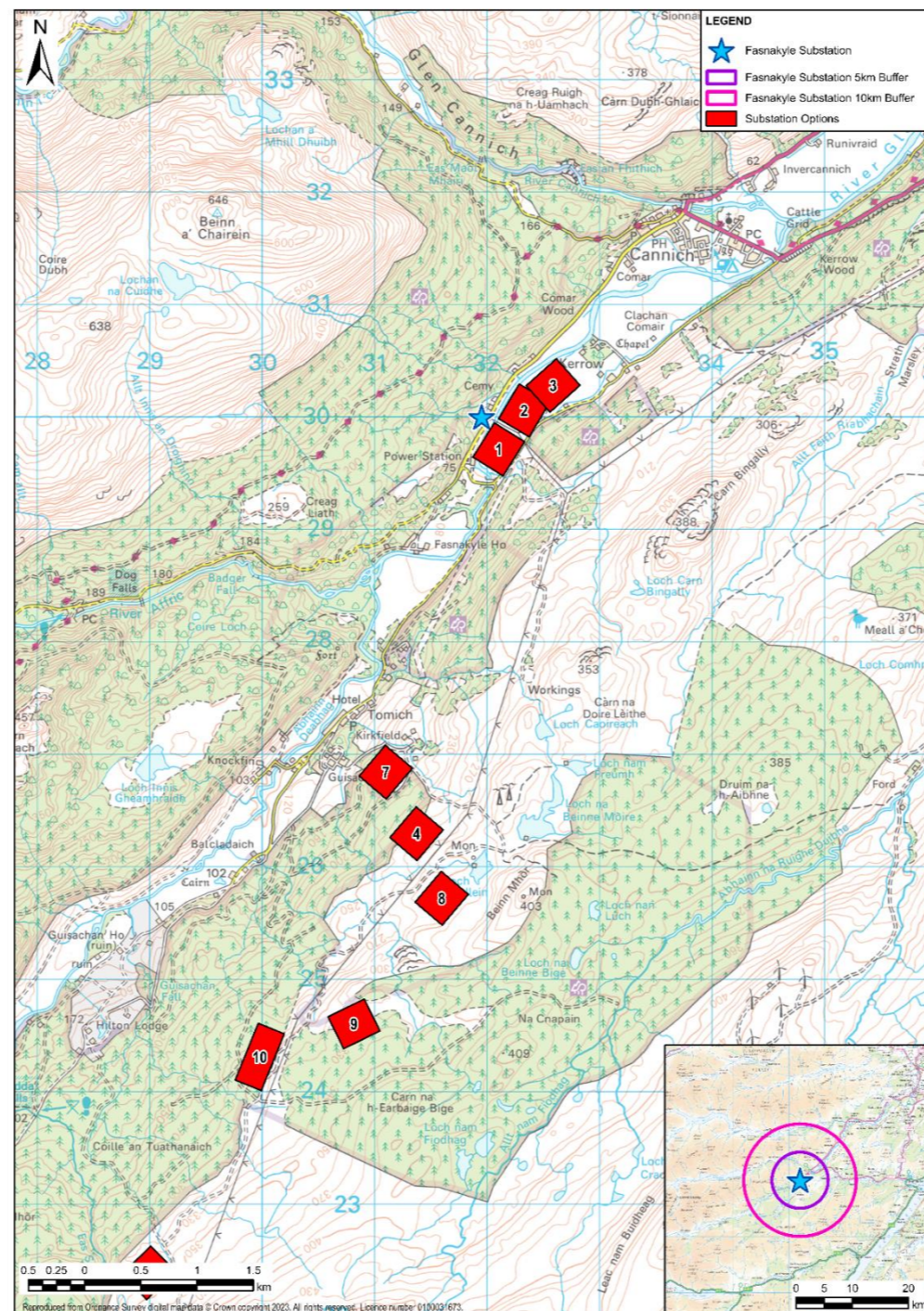


Figure 4 Locations of options for the initial site screening

**Option 3**

- Option 3 is located close to natural heritage sites: approximately 2.4 km from Glen Affric SSSI and Strathglass Complex SAC, and approximately 2 km from Glen Affric to Strathconon and Glen Affric National Nature Reserve.
- Ancient Woodland Inventory Areas are located within approximately 50 m.
- The River Glass is directly adjacent to the northwest of site (Overall Good WFD status).
- Scheduled Monuments exist within approximately 700 m and 3 km of Option 3.
- Option 3 is situated on Landscape Character Type 'Farmed Strath – Inverness', characterised by; open farmed valley floors and a central meandering river contained within steep, mainly forested, and wooded slopes.
- A residential settlement exists within Option 3, and within approximately 300 m of Option 3.
- Highland Council Core Path IN05.11 exists within approximately 1 km.
- Planning proposal 16/05754/OHL exists within the boundaries of Option 3 with several other proposals existing within close proximity.

**Option 4**

- Option 4 is located approximately 1.5 km from natural heritage designations: Glen Affric SSSI, Strathglass Complex SAC, Glen Affric to Strathconon SPA, and Glen Affric National Nature Reserve.
- Ancient Woodland Inventory Areas exist within approximately 500 m.
- Scheduled Monuments exist within approximately 2.4 km and 4.8 km.
- Sites and Monument Record Entries exist approximately 35 m and 500 m from Option 4.
- Tomich Village Conservation Area, and associated Listed Buildings, are located approximately 1 km from Option 4.
- Situated on Landscape Character Type 'Farmed Strath – Inverness', characterised by; open farmed valley floors and a central meandering river contained within steep, mainly forested, and wooded slopes.
- Residential and tourism properties are within approximately 1 km of Option 4.
- Highland Council Core Paths IN05.02 and IN05.03 are located approximately 200 m and 900 m from Option 4 respectively.
- Approximately 1.2 ha of Native Woodland exists within the boundaries of Option 4.
- Several planning proposals exist within proximity of Option 4, with proposal 19/05046/SCOP existing approximately 500 m east and southeast.

**Option 5**

- An Area of Ancient Woodland is within the west of the option, and other areas of Ancient Woodland exist in close proximity.
- Option 5 is within approximately 30 m of River Enrick (Moderate Overall WFD status)
- Option 5 is situated on Landscape Character Type ‘Farmed Strath – Inverness’, characterised by; open farmed valley floors and a central meandering river contained within steep, mainly forested, and wooded slopes.
- Residential settlements exist within close proximity to Option 5, the closest being approximately 200 m east of the option at its nearest point.
- Planning proposal 19/01680/FUL is located approximately 50 m north of Option 5.

**Option 6**

- River Enrick passes through Option 6 (Moderate Overall WFD status).
- Millness: Cairnfield, a Sites and Monuments Record Entry, is located within approximately 30 m of Option 6.
- Option 6 is situated on Landscape Character Type ‘Farmed Strath – Inverness’, characterised by; open farmed valley floors and a central meandering river contained within steep, mainly forested, and wooded slopes.
- Residential, farm and recreational settlements are located within approximately 500 m of Option 6 at their nearest point.
- A new section of forestry trail (Affric Kintail Way) is routed through the southern corner of Option 6.
- Planning proposal 19/01680/FUL exists within Option 6.

**Option 7**

- Glen Affric SSSI, Strathglass Complex SAC and Glen Affric National Nature Reserve are each located within 1 km of Option 7.
- An Area of Ancient Woodland is situated within Option 7, other Areas of Ancient Woodland exist within close proximity.
- An unnamed watercourse is located within approximately 30 m of Option 7.
- Kirkfield: Township, a Sites and Monuments Record Entry is located adjacent to the north of Option 7.
- Tomich village Conservation Area is located approximately 300 m west of Option 7 at its closest point.
- Category B and C Listed Buildings are located within 500 m of Option 7.
- Local Landscape Area: Stathcanon, Monar and Mullardoch is located approximately 2 km from Option 7.
- Option 7 is situated on Landscape Character Type ‘Farmed Strath – Inverness’, characterised by; open farmed valley floors and a central meandering river contained within steep, mainly forested, and wooded slopes.
- Residential and tourism properties are located within approximately 100 m of Option 7.
- Highland Council Core Path IN05.02 is directly adjacent to the north of Option 7.
- An area of long-established woodland is situated within Option 7.
- Planning proposal 23/01383/PNO borders Option 7 to the north.

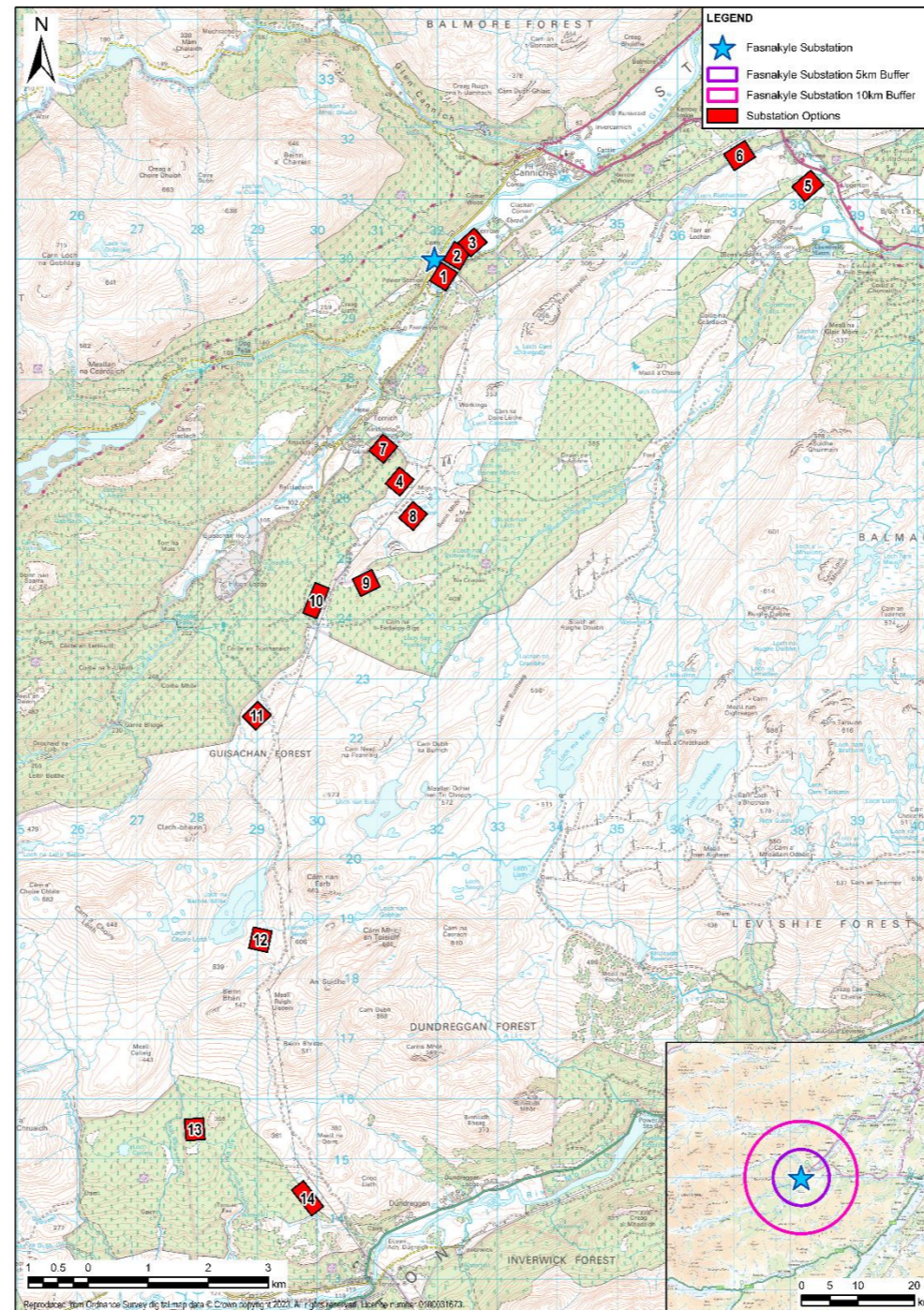


Figure 5 Locations of options for the initial site screening

**Option 8**

- Two unnamed watercourses flow within approximately 50 m of Option 8.
- Beinn Mhor, a Sites and Monuments Record Entry, is location approximately 300 m from Option 8.
- Option 8 is situated on Landscape Character Type ‘Farmed Strath – Inverness’, characterised by; open farmed valley floors and a central meandering river contained within steep, mainly forested, and wooded slopes.
- Residential and tourism properties are located with approximately 1.1 km of Option 8.
- Highland Council Core Paths exist within close proximity of Option 8, the nearest being approximately 500 m from Option 8 at its nearest point.
- Ancient Woodland Inventory Areas are located approximately 500 m at its closest point.

**Option 9**

- Option 9 is located approximately 2.3 km from Tomich village.
- Option 9 is located in proximity of natural heritage designations: approximately 1.5 km from Glen Affric NNR, and 3km from Glen Affric SSSI, Strathglass Complex SAC, and Glen Affric to Strathconon SPA.
- Ancient Woodland Inventory Areas are located approximately 500 m at its closest point.
- A Scheduled Monument exists approximately 3.8 km from Option 9.
- Option 9 is located on Landscape Character Type ‘Rocky Moorland Plateau – Inverness’, characterised by; gently rolling, open, undulating moorland plateaux, with distinct edges.
- Highland Council Core Path IN05.03 is located approximately 200 m from Option 9.
- Planning proposal 19/05046/SCOP exists within the boundaries of Option 9 with several other proposals existing within proximity.

### Option 10

- Option 10 is located approximately 2.2 km from Tomich village.
- Option 10 is located in proximity of natural heritage designations: approximately 450 m from Glen Affric NNR, and 2 km from Glen Affric SSSI, Strathglass Complex SAC, and Glen Affric to Strathconon SPA.
- Ancient Woodland Inventory Areas exist approximately 350 m at its closest point.
- A Scheduled Monument exists approximately 3.8 km from Option 10.
- An unnamed water course is located approximately 35 m from Option 10.
- Option 10 is located on Landscape Character Type 'Farmed Strath – Inverness', characterised by; open farmed valley floors and a central meandering river contained within steep, mainly forested, and wooded slopes and 'Rocky Moorland Plateau – Inverness', characterised by; gently rolling, open, undulating moorland plateaux, with distinct edges.
- Highland Council Core Path IN05.03 exists within Option 10. An unnamed path also exists within Option 10.
- Desk-based reviews indicate that approximately 6 ha of Native Woodland exists within Option 10. However, site visits have indicated that the majority of this has been felled.
- Several planning proposals exist within proximity of Option 10, with the boundary of proposal 19/05046/SCOP existing adjacent to the Option.

### Option 11

- Option 11 is located approximately 4.5 km from Tomich village.
- Option 11 is located in proximity to natural heritage designations: approximately 300 m from Glen Affric NNR, approximately 3km from Glen Affric to Strathconon SPA, and approximately 4 km from Glen Affric SSSI and Strathglass Complex SAC.
- Ancient Woodland Inventory Areas exist approximately 350 m from Option 11.
- Unnamed watercourses exist within Option 11.
- Option 11 is located on Landscape Character Type 'Farmed Strath – Inverness', characterised by; open farmed valley floors and a central meandering river contained within steep, mainly forested, and wooded slopes and 'Rocky Moorland Plateau – Inverness', characterised by; gently rolling, open, undulating moorland plateaux, with distinct edges.
- Highland Council Core Path IN05.03 exists directly adjacent to Option 11.
- Several planning proposals exist within proximity of Option 11.

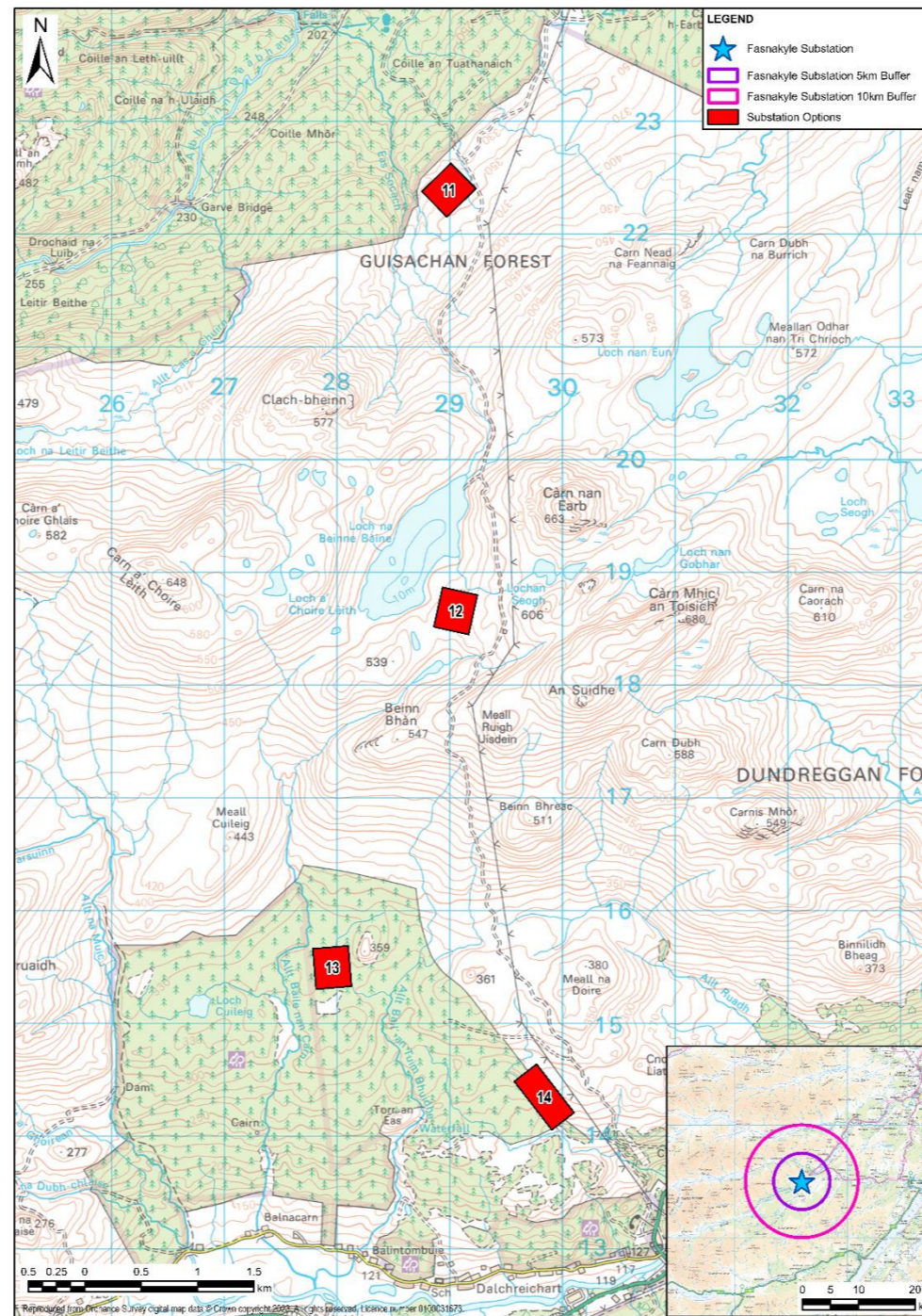


Figure 6 Locations of options for the initial site screening

### Option 12

- Option 12 is located approximately 8 km from Tomich village.
- Option 12 is in proximity to natural heritage designations: approximately 3 km from Glen Affric NNR, approximately 4.5 km from Glen Affric SSSI and Glen Affric to Strathconon SAC, and approximately 5 km from Glen Affric to Strathconon SPA.
- Ancient Woodland Inventory Areas exist approximately 3 km at its closest point.
- Option 12 is located on Landscape Character Type 'Rocky Moorland Plateau – Inverness', characterised by; gently rolling, open, undulating moorland plateaux, with distinct edges.
- Highland Council Core Path IN05.03 exists approximately 500 m from Option 12.
- Option 12 is within Dundreggan Forest Plan, the area of which is conducting rewilding projects.
- Two planning proposals exist within 5 km of Option 12.

### Option 13

- An unnamed watercourse flows through Option 13.
- Wild Land Area: 24. Central Highlands is located 1.2km north of Option 13.
- Option 13 is situated on Landscape Character Type 'Rocky Moorland Plateau – Inverness', characterised by; two areas of high rocky plateau, which form a simple moorland backdrop to the adjacent lower straths and glens. Extensive conifer forests occur in the north-east of this Landscape Character Type.
- Highland Council Core Path IN05.03 is located approximately 1.3 km east of Option 13.
- Option 13 is within Dundreggan Forest Plan, the area of which is conducting rewilding projects.
- Planning proposal 20/04561/SCOP and 13/04269/SCOP encompass Option 13.

### Option 14

- An unnamed watercourse flows through Option 14.
- Option 14 is situated on Landscape Character Type 'Wooded Glen – Inverness', characterised by; wooded and farmed glens to the west of Loch Ness.
- There are a number of settlements within 1.5 km of Option 14.
- Highland Council Core Path IN05.03 is located approximately 220 m east of Option 14.
- Option 14 is within Dundreggan Forest Plan, the area of which is conducting rewilding projects.
- There are areas of Native Woodland and Nearly Native Woodland within Option 14.
- Planning proposal 20/04561/SCOP borders Option 14.

## 2.2 Stage 1 Comparative Assessment

### 2.2.1 Environmental

**Natural Heritage:** Options 5 and 7 were the least preferred options in terms of International, European and National natural heritage designations, due to Ancient Woodland Inventory Areas existing within the options. These were therefore both rated red. Options 6, 8, 13, and 14 were the most preferred as each were more than 500m for natural heritage designations. Each of the options rated green for regional designations. All options were rated amber for Drinking Water Protection Areas and aquifers. Many of the options are in proximity to surface waters, with Options 1, 2, 3, 5, 6, 7, 11, 13, and 14 being within at least 30 m and therefore being rated red, and Options 8 and 10 being within approximately 35m and therefore being rated amber.

**Cultural Heritage:** Options 1-3, 5 and 7 were least preferred in terms of cultural heritage designations, due to their proximity to one or more Scheduled Monument. Each of the other options were rated green due to being unlikely to compromise the designating features. Option 7 exists directly adjacent to a Sites and Monuments Record Entry, making it the least preferred option in this instance, with Options 4, 6 and 8 also being in relative proximity to Sites and Monuments Record Entries. Options 4 and 7 are also the least preferred options with regard to Cultural Heritage Assets when considering the options' proximity to Listed Buildings and Conservation Areas, and therefore were rated amber. Each of the other options were rated green due to being unlikely to compromise the integrity of Tomich village Conservation Area or the setting of any Listed Buildings.

**Landscape and Visual:** With the exception of Options 7 and 13, each of the options are 2 km or more from Landscape and Visual Designations. Options 7 and 13 were rated amber in this instance due to their proximity to Local Landscape Areas and Wild Land Areas respectively. Each of the options are rated amber for their Landscape Character Type due to the potential to compromise their characteristic elements. A number of the options, Options 1, 2, 3, 5 and 7, are within close proximity to residential properties and Core Paths, making them the least preferred in terms of visual impacts than the remainder of the options which were otherwise rated amber.

**Land Use:** Each of the options rated equally in terms of National Scale Land Capability for Agriculture, and all of the options are located in the Highlands and Islands Conservancy (Scottish Forestry). Options 12, 13 and - 14 were recently confirmed as being within Forest Plans and are therefore rated amber.

Options 7, 8, 10, 11, and 14 are in close proximity to, or overlap, Core Paths and have therefore been rated amber. Option 6 has been rated red as it directly overlaps a new section of the Affric Kintail way, making it the least preferred option in this instance. Options 1-11 are not in proximity to any commercial highland sports or activities. Options 12 - 14 are located within a rewilding scheme both therefore being rated amber.

**Policy and Planning:** Each of the options have been rated equally in terms of policy and planning proposals.

### **Stage 1 Environmental Comparative Assessment Summary**

From an environmental perspective, appraisal and comparison of the Stage 1 options resulted in Options 4, 9, and 10 being those preferred for progression to Stage 2.

Options 1-3, 5-7, 11, 13, and 14 were rated red on respect to their close proximity or otherwise direct interaction with surface watercourses. Each of the sites were rated red for the presence of Annex I habitats. Option 8 is also in close proximity to two unnamed watercourses. Option 7 was also the least favourable in terms of cultural heritage, being directly adjacent to an SMR entry. Options 1-3, 5 and 7 were rated red in terms of their potential visual impact for residents or users of Core Paths. Options 12-14 are within the

Dundreggan Forest Plan which is conducting an ongoing rewilding scheme resulting in these options being the least preferred in this instance. Options 7, 12 and 13 also risk increased visibility from Glen Affric National Scenic Area.

### 2.2.2 Engineering

**Connectivity (existing circuits):** All identified options are within 1km of the Beauly-Denny Overhead Line. Options 5, 13 and 14 are the furthest from the line and would require the most additional infrastructure to tie in. Options 1, 2, 3, 4, 8, 10 and 11 are all adjacent to the Beauly-Denny line, with Options 1, 2 and 3 having shorter circuits back to the existing Fasnakyle substation. Options 6, 7, 9 and 12 are all a short distance from the Beauly-Denny line and would require minor additional infrastructure to tie in.

**Connectivity (future development):** Options 1, 2, 3, 4, 5, 8, 10 and 12 are all highly constrained by a combination of topography and existing infrastructure making them difficult to bring in further connections (for example generation sites). Options 6, 7, 9 and 11 have moderate physical constraints and Options 13 and 14 are mostly free of physical constraints.

**Footprint requirements:** Options 1, 2 and 3 are highly constrained on all sides and would require non-standard design to fit. Option 12 is very elevated, so would likely need to be build indoors. All other Options are impacted by a combination of physical constraints or elevation and may require indoor solutions or non-standard designs. The same constraints apply to the provision of temporary and permanent ancillary infrastructure (such as a construction compound or SUDS pond, respectively).

**Ground Conditions:** Options 1, 2, 3, 4 and 10 have no evidence of peat. All other assessed options are expected to encounter peat to some degree. Further analysis (i.e., peat probing) is required to ascertain the full extent of peat presence. Options 1, 2 and 3 are flat. All other options vary from ~5% gradient to ~15% gradient, with Options 4 and 7 being the steepest.

**Environmental Conditions:** Options 1, 2, 3, 4, 5, 7 and 12 are outwith 1000 year flood risk areas. Options 9, 10, 13 and 14 are all subject to limited 10 year flood risk. Options 6, 8 and 11 are all at high risk of flooding due to their proximity to watercourses and river flooding. A risk of noise is expected to require mitigation with the exception of at Options 11 and 12, which are both a substantial distance from any known residential property. Options 1, 2 and 3 are at relatively low elevation with all other options above 200 metres, which requires consideration in the substation design.

**Construction/maintenance Access:** Options 1, 2, 3, 5 and 6 are all close to a public road. All other options are some distance from a public road and along steep and winding access tracks. Operations and maintenance access to these options would be difficult, particularly in winter conditions. Construction traffic would be challenging at any time and transformer delivery would be extremely difficult. The public roads off the A831 are narrow, so multiple additional passing places or other reinforcement would be required to make these passable during construction. Options 5 and 6 are accessed directly off the A831 so are less constrained in this aspect.

**Customer access during construction:** Tomich village (and to a lesser extent Cannich) is on the route of any public road access taken beyond the A831. Larger vehicles would occupy the entire road, meaning local residents would be delayed whilst construction vehicles passed through. Options 5 and 6 are the only two which inherently negate this risk.

### **Stage 1 Engineering Comparative Assessment Summary**

The on-balance engineering considerations favour Options 4, 9 and 10.

Options 1, 2, 3 and 7 are all space constrained and in close proximity to residential dwellings or listed buildings. Options 5, 13 and 14 are relatively distant from the OHL so would have a more challenging tie-in compared to other options. Options 11, 12, 13 and 14 are a significant distance from existing Fasnakyle substation, making the interconnection to fulfil generation connection obligations at that substation more difficult to achieve. Options 6, 8 and 12 are all in close proximity to watercourses or bodies of water, making flood management more difficult. Options 4 and 7 are around 15% gradient across the site, so would have substantial earthworks to achieve. Elevation across all Options apart from 1, 2 and 3 is sufficient to possibly warrant an indoor solution, with Option 12 being particularly elevated. Access to Options 4, 7, 8, 9, 10 and 11 are expected to be challenging due to a combination of track gradient, length and the use of narrow single-track public roads, especially those running through the village of Tomich. Options 1, 2 and 3 have shorter lengths of public road, though still single track and Options 12, 13 and 14 could be accessed from the south, obviating the public road risk, but the track from that side is still very steep at points. No option is free of engineering constraints, however on balance Options 4, 9 and 10 offer the fewest overall.

### **Stage 1 Combined Comparative Assessment Summary**

Therefore, as the outcome of the Environmental and Engineering comparative assessments align on the Options to progress, Options 4, 9 and 10 have been taken forward to Stage 2. Further details of the Stage 2 process can be found in Section 3.

## 2.3 Additional Sites for Consideration

Feedback received from local residents during the consultation phase of the site selection process, as well as further assessments highlighting the constraints surrounding access to those sites progressed to Stage 2, prompted further review of areas to the northeast of the Study Area. This initially identified two new sites (Sites 15 and 16). Both sites seek to mitigate the constraints highlighted within the Stage 1 assessment of Sites 5 and 6. Both sites remain at the early stage of assessment, however from initial studies, the topography of Site 16 would require substantial amounts of civil earthworks to make the site viable option to the extent that it will not be taken forward for further assessment. Site 15 is due to undergo environmental walkover surveys and ground investigation works in the coming weeks and months to better inform the site selection.

Stage 1 Screening for Sites 15 and 16 is detailed below:

### Option 15

- An area of Ancient Woodland borders Option 15 to the west. Other areas of Ancient Woodland exist within 400m of Option 15.
- RSPB Corrimony Nature Reserve is located ~730m south of Option 15.
- An unnamed watercourse is located ~30m south of Option 15.
- There are several Listed Buildings located in proximity to Option 15, the nearest being ~750m from Option 15.
- Option 15 is located on Landscape Character Types 'Farmed Strath – Inverness' and 'Wooded Glen – Inverness' which are characterised by; mainly open farmed valley floors and a central meandering river contained within steep, mainly forested, and wooded slopes; and wooded and farmed glens to the west of Loch Ness, respectively.
- The Affric Kintail Way is located ~240m from Option 15.
- Residential, farm and recreation settlements are located ~1km from Option 15.
- Dark Deer Croft, an equestrian business, is located ~750m from Option 15.
- Planning proposals 23/03311/S36 and 19/01680/FUL are within 500m and 300m of Option 15, respectively.

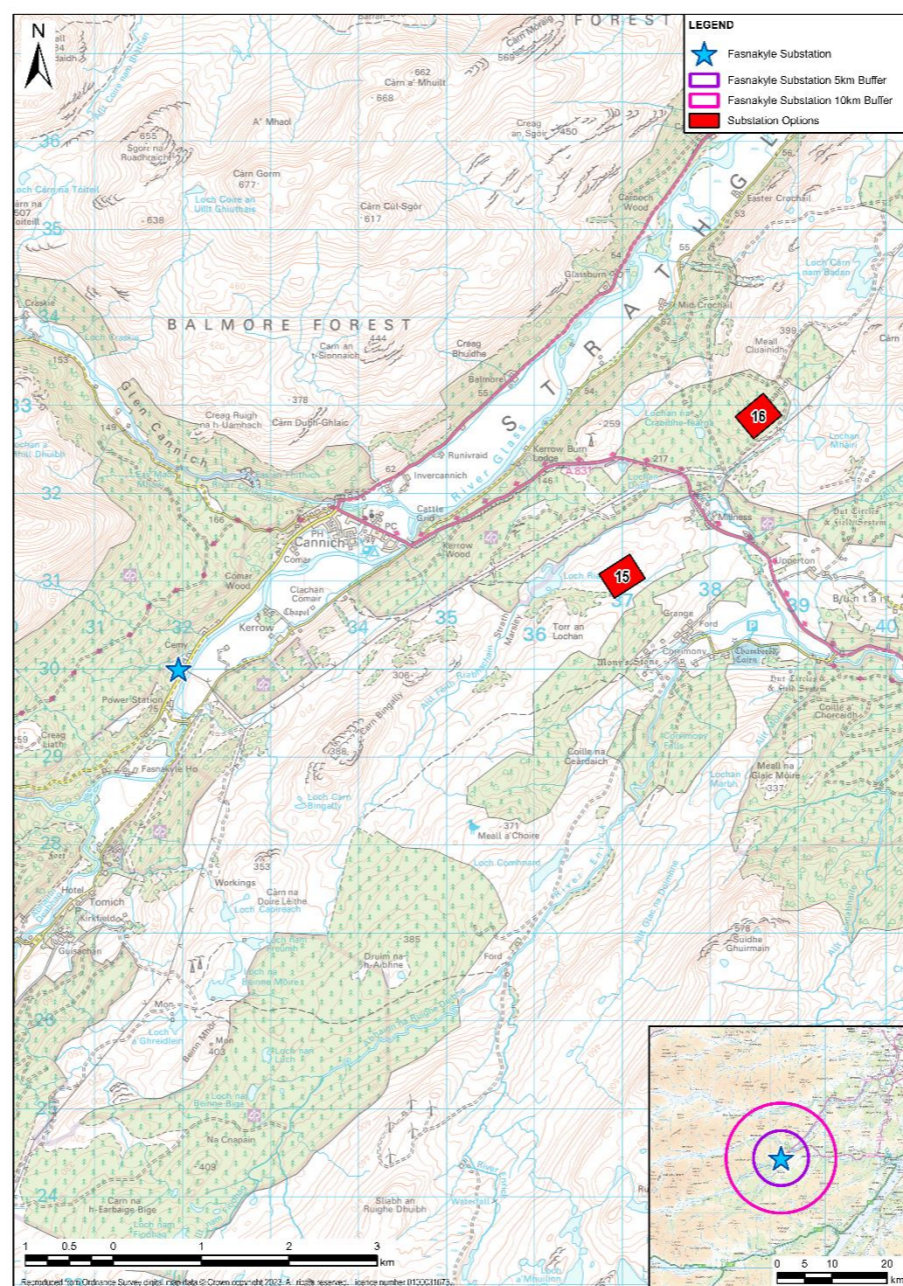


Figure 7 Additional Sites for Consideration

### Option 16

- Option 16 is situated on Landscape Character Type 'Rocky Moorland Plateau – Inverness', characterised by; two areas of high rocky plateau, which form a simple moorland backdrop to the adjacent lower straths and glens. Extensive conifer forests occur in the north-east of this Landscape Character Type.
- Residential, farm and recreational settlements are located ~1km from Option 16.
- There is a mixture of felled, young trees, and conifer throughout Option 16, with ~1.8ha of Native Woodland within Option 16.
- The Affric Kintail Way is located ~550m from Option 16.
- Dark Deer Croft, an equestrian business, is located ~750m from Option 16.

## 2.4 Stage 1 Comparative Assessment Revisited

Options 15 and 16 are being compared both against each other and the original fourteen Options using the same methodology as was used in Section 2.2.

### 2.4.1 Environmental

**Natural Heritage:** Option 15 is least preferred in terms of international, European or national designations due to its proximity to areas of Ancient Woodland, with the closest area bordering the option, resulting in Option 15 being rated amber. Option 15 was also rated amber for regional designations due to its close proximity to RSPB Corrimony Nature Reserve. Both Options 15 and 16 were rated amber for Drinking Water Protected Areas and Aquifers. Option 15 is located within approximately 30m from a surface watercourse making it the least preferred in this instance.

**Cultural Heritage:** Option 15 was rated amber due to proximity to a Scheduled Monument, while Option 16 was rated green. Both options were rated green for proximity to SMR entries. Option 15 is within 1km of four Listed Buildings, one of which is Category A, and was therefore rated amber due to the potential for setting impacts. Option 16 is therefore preferred in terms of Listed Buildings.

**Landscape and Visual:** Both options were rated equally for landscape and visual impacts.

**Land Use:** In respect to National Land Capability, both options were rated green due to being located on land not deemed to be prime agricultural land. Neither option is identified as being located with a commercial forest plan. The Native Woodland Survey of Scotland indicates there is approximately 1.8ha of native woodland within Option 16. Due to this, and Areas of Ancient Woodland bordering Option 15, both options have been rated amber. Both options are located in proximity to the Affric Kintail Way and have therefore been rated amber for visual impacts. Additionally, both options are located in proximity to Dark Deer Croft, an equestrian business, and have been rated amber in this instance.

**Policy and Planning:** Both options have been rated equally in terms of policy and planning proposals.

#### Stage 1 Comparative Assessment Updated Summary

When comparing Options 15 and 16 with the fourteen original options, both options offer opportunities for being taken forward to Stage 2. It is important to note Option 15 is located within approximately 30m of a surface watercourse and in close proximity to an A Listed Building. Nevertheless, Options 15 and 16 are preferred over several of the original options for visual impacts, being at least approximately 1km from residential properties. Additionally, neither of these options directly interact with Core Paths, landscape designations or forest plans.

### 2.4.2 Engineering

**Connectivity (existing circuits):** Options 15 and 16 are both within 1km of the Beaulay-Denny line, with Site 16 being immediately adjacent and requiring less additional infrastructure to tie in. Site 15 will require a more complex temporary solution to establish the tie in.

**Connectivity (future development):** Option 15 is constrained by a patch of Ancient Woodland Inventory to the south, but is otherwise unconstrained for connecting future development. Option 16 is highly constrained by topography on one side and by its adjacency to the Beaulay-Denny Overhead line.

**Footprint requirements:** Option 15 is not heavily constrained by topography so is likely to be able to accommodate a standard design. Option 16 is constrained and may require a non-standard design to minimise the platform size. Both Option 15 and 16 are somewhat elevated and may require indoor solutions.

**Ground Conditions:** Peat may be present in both sites, with further investigation required to ascertain the exact quantity and locations. Option 15 is relative flat (around 6% gradient), whereas Option 16 is very steep (around 15% gradient).

**Environmental Conditions:** Option 15 shows no indication of flood risk. Option 16 shows small areas of 10 year surface flooding. Both options are close to residential properties and will require noise mitigation. Option 15 is around 230 metres elevation and Option 16 is around 290 metres.

**Construction/maintenance Access:** Both sites are accessed directly off the A831, with a 1km or shorter access track in both cases. Alongside Options 5 and 6, these offer the best access opportunities for construction traffic, transformer delivery and ongoing operations and maintenance.

**Customer access during construction:** By accessing directly off the A831, restrictions on residents of the area are likely to be minimised as passing should be possible down the entire route, barring the very widest vehicles (e.g., the transformer delivery vehicles), which will be few in number so will have limited impact upon residents.

#### Stage 1 Comparative Assessment Updated Summary

Comparing Options 15 and 16 against the fourteen previous options, Option 16 does not offer any substantive benefits, due to its elevation, gradient, flood risk and physical constraints. It does have an advantage in access over all but Options 5, 6 and 15, however due to its other shortcomings it is not preferred to those. Option 15, however, offers significant advantages in gradient, flood risk and physical constraints, making it a better overall choice than 5, 6 or 16 whilst retaining the access advantages of these Options.

Therefore, due to the engineering advantages of Option 15, it has been added to the three Options previously taken forward to Stage 2. Stage 2 will include four Options: 4, 9, 10 and, latterly, 15.



### 3 Stage 2: Detailed Site Selection

Further appraisal and comparison of the shortlisted options resulted in Options 4, 9, and 10 being taken forward to Stage 2, with Site 15 also subsequently taken forward as described in Section 3.1 below. Further details of the Stage 2 process can be found on the following pages.

#### Option 4

- There are no natural heritage designations within 1km of Option 4, except for Ancient Woodland Inventory Areas approximately 500m at its closest point. Limited potential to support European Protected Species (EPS) or UK Biodiversity Action Plan Species (UK BAP), though Annex 1 habitats (wet heath and blanket bog) are present. Option 4 has the potential to support black grouse for lekking and potentially nesting.
- There is an unnamed watercourse within approximately 60m of Option 4.
- Option 4 is the closest to any cultural heritage designations, with Scheduled Monuments situated approximately 2.5km and 4.8km at its closest point. Additionally, there are two Sites and Monuments Record Entries in proximity to Option 4, at approximately 35m and 500m. There may be some intervisibility with these heritage features and therefore some impact on their setting.
- Tomich Village Conservation Area is located approximately 1km from Option 4 which will likely result in some intervisibility and potential setting impact.
- Approximately 1.2ha of Native Woodland exists within the boundaries of Option 4
- Several planning proposals exist within proximity of Option 4, with proposal 19/05046/SCOP existing approximately 500m east and southeast.

#### Option 9

- There are no natural heritage designations within 1km of Option 9, except for Ancient Woodland Inventory Areas, with the closest being 500m at its closest point. Limited potential to support EPS or UK BAP species, though Annex 1 habitats (wet heath and pristine blanket bog) are present. Option 9 is unlikely to support any Annex 1, Schedule 1 or Birds of Conservation Concern.
- Of the three options, Option 9 is the furthest from any watercourse, with the nearest being approximately 200m from Option 9.
- Option 9 is close to cultural heritage designations, with a Scheduled Monument situated approximately 3.8km northwest. Few Sites and Monuments Record Entries exist within close proximity, indicating low potential for presence of unidentified archaeological/cultural heritage features.
- There is no identified woodland or commercial forestry in Option 9.
- Planning proposal 19/05046/SCOP exists within the boundaries of Option 9 with several other proposals existing within proximity.

#### Option 10

- Option 10 is approximately 450m from Glen Affric NNR and approximately 350m from Ancient Woodland Inventory Areas at its closest point.
- Option 10 has some potential to support EPS or UK BAP species. It contains Annex 1 habitats (wet heath, degraded blanket bog and dry heath). Option 10 has limited potential to support Annex 1, Schedule 1 or Birds of Conservation Concern.
- There is a surface watercourse approximately 35m to the south of Option 10.
- There is a Scheduled Monument within 3.8km of Option 10. Few Sites and Monuments Record Entries exist within close proximity, indicating low potential for presence of unidentified archaeological/cultural heritage features.
- Approximately 6ha of Native Woodland exists within the boundaries of Option 10, though site visits indicate that the majority of this has been recently felled.
- Highland Council Core Path IN05.03 exists within the southeast of Option 10, though a reasonable route diversion of the Core Path could be possible.
- Several planning proposals exist within proximity of Option 10, with the boundary of proposal 19/05046/SCOP existing adjacent to the Option.

#### Option 15

- An area of Ancient Woodland borders Option 15 to the west. Other areas of Ancient Woodland exist within 400m of Option 15.
- Option 15 has limited potential to support EPS or UK BAP species. Annex 1 habitats (blanket bog and upland wet heathland) are present. Option 15 has potential to support Schedule 1 birds, and black grouse may occur.
- RSPB Corrimony Nature Reserve is located approximately 730m south of Option 15.
- An unnamed watercourse is located approximately 30m south of Option 15.
- There are several Listed Buildings (Category A, B and C) located in proximity to Option 15, the nearest being ~750m from Option 15.
- Option 15 is located on Landscape Character Types 'Farmed Strath – Inverness' and 'Wooded Glen – Inverness'.
- The Affric Kintail Way is located ~240m from Option 15.
- Residential, farm and recreation settlements are located ~1km from Option 15, Dark Deer Croft, an equestrian business, is located ~750m from Option 15.

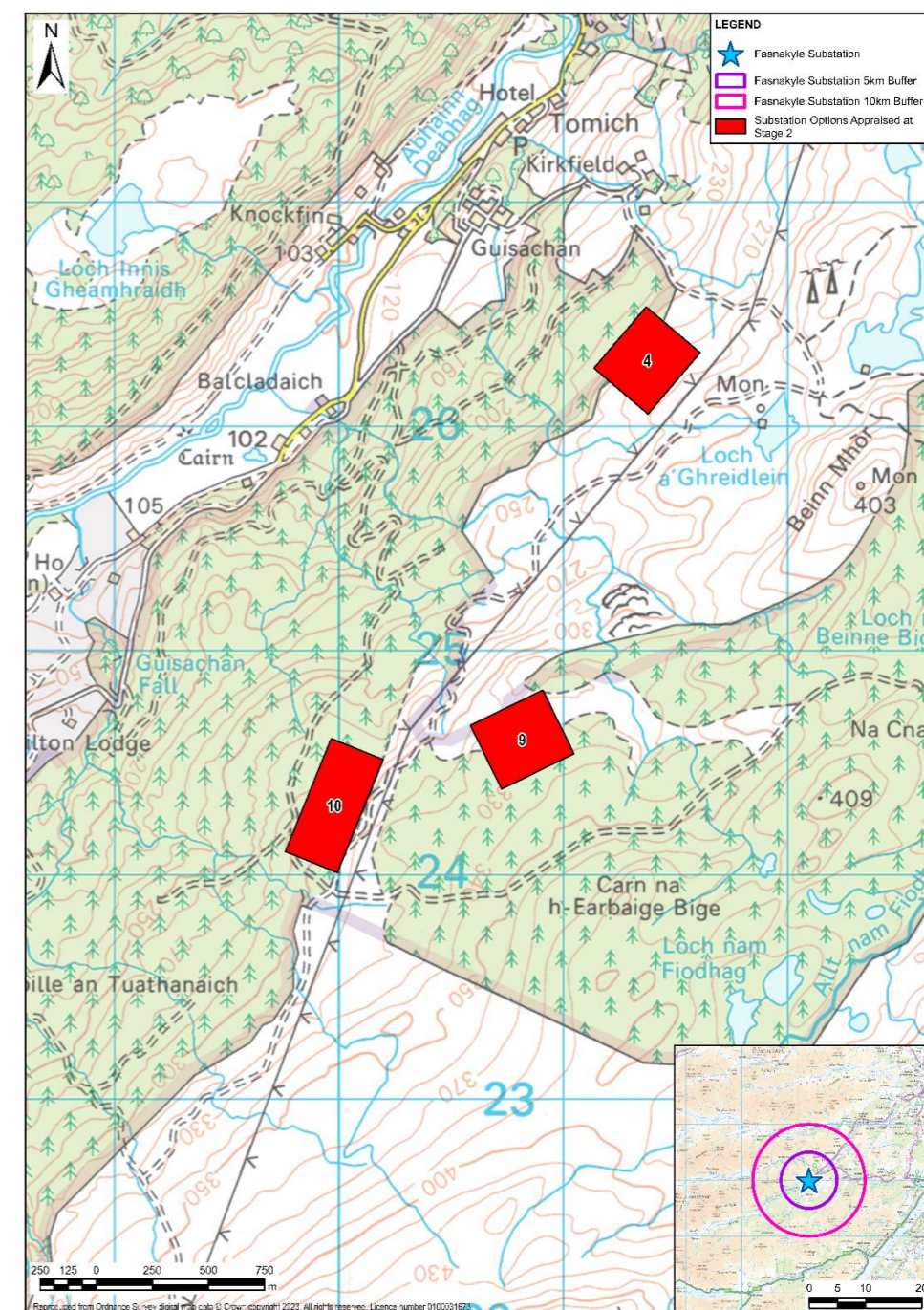


Figure 8 Location of Options for Stage 2 detailed site selection

### 3.1 Summary of RAGs

**Tables 1, 2 and 3** below provides a summary of the key differentiating factors between each of the screened options regarding the key Engineering, Environmental and Cost criteria. **Tables 4, 5 and 6** provide a similar summary for Site 15 independently. Due to the site not having undergone the same level of assessment at this stage as Sites 4, 9 and 10, it is not possible to provide an accurate comparative assessment. However, the same key elements within each discipline are outlined within the separate RAG tables below.

**Table 1 Engineering Comparison of Shortlisted Options**

Engineering Topics		Option 4	Option 9	Option 10
Connectivity - Existing circuits/ network	Distance and feasibility of connecting to the existing circuits / network (400kV)	Adjacent to existing OHL; likely to be OHL termination point	~150m from existing OHL; wrong side of line to connecting circuit; 5km back to existing Fasnakyle; near to junction tower for diversion	Adjacent to existing OHL; 6km back to existing Fasnakyle; near to junction tower for diversion
	Outages for modification to existing circuits	Straight-forward outages to connect	Straight-forward outages to connect	Straight-forward outages to connect
Connectivity - Future development possibilities	Extension of site or other circuits	Constrained on 2 sides, OHL on 3rd	Constrained by OHL on one side, topology on two more	Constrained by OHL on one side, topology on two more and access tracks on the last
Connectivity - Interface with SSE Distribution and Generation	Consideration of Business Separation and whole system requirements (Generation)	No issues	No issues	No issues
	Consideration of Business Separation and whole system requirements (Distribution)	No issues	No issues	No issues
Connectivity - DNO Connection	Proximity of LVAC supplies	Resilient site, 2 off GT ETs	Resilient site, 2 off GT ETs	Resilient site, 2 off GT ETs
Footprint Requirements - Technology	i.e., AIS/GIS or certainty of sizing on non-standard plant and equipment	Likely GIS required as insufficient space for AIS	Likely GIS required as insufficient space for AIS; elevation likely requires indoor solution	Likely GIS required as insufficient space for AIS; elevation likely requires indoor solution
Footprint Requirements - Adjacent Land use	Availability for ancillary infrastructure like welfare compounds, laydown areas (Temporary)	No constraints	No constraints	No constraints
	Availability for ancillary infrastructure like screening and SuDS infrastructure. (Permanent)	No constraints	No constraints	No constraints

Engineering Topics		Option 4	Option 9	Option 10
<b>Footprint Requirements - Space Availability</b>	<b>Non-standard substation configurations to accommodate site specific considerations</b>	modifications to layout may be required	modifications to layout may be required	modifications to layout very likely
<b>Hazards</b>	<b>Unique Hazards</b>	No unique hazards identified	No unique hazards identified	No unique hazards identified
	<b>Existing Utilities</b>	No issues	No issues	No issues
<b>Ground Conditions</b>	<b>Topography</b>	Steep hillside, >15% gradient	c.10% gradient	<10% gradient
	<b>Geology (Superficial Deposits – Peat)</b>	No peat evident from site visit	Potential peat and rock	No peat evident from site visit
	<b>Geology (Site testing to verify properties)</b>	Not yet assessed	Not yet assessed	Not yet assessed
<b>Environmental Conditions</b>	<b>Elevation</b>	c.300m	c.320m	c.300m
	<b>Salt Pollution</b>	30km from coast	30km from coast	30km from coast
	<b>Flooding</b>	Out with 1000yr area	Limited 10 year surface flooding	Limited 10 year surface flooding
	<b>Carbon Footprint</b>	Not yet calculated	Not yet calculated	Not yet calculated
	<b>SF6</b>	SF6 alternative GIS	SF6 alternative GIS likely	SF6 alternative GIS likely
	<b>Contaminated Land</b>	No known or expected contamination	No known or expected contamination	No known or expected contamination
	<b>Noise (proximity to dwellings / residential properties)</b>	Not assessed, assume high	Not assessed, assume high	Not assessed, assume high
<b>Construction Access</b>	<b>Substation Access Road (from public road)</b>	Medium distance along existing track from public road	Long run-in from public road along steep and weaving access track	Long run-in from public road along steep and weaving access track
	<b>Transformer Delivery Route</b>	Minor road, potential for significant improvements required, OHL access track very steep at points	Minor road, potential for significant improvements required, OHL access track very steep at points	Minor road, potential for significant improvements required, OHL access track very steep at points
	<b>Customer access disruption during construction</b>	Minor single track roads, through Tomich, disruption expected	Minor single track roads, through Tomich, disruption expected	Minor single track roads, through Tomich, disruption expected
<b>Operation and Maintenance</b>	<b>Access</b>	>5km along minor public roads and access tracks from A-road	>8km along minor public roads from A road	>8km along minor public roads from A road

**Table 2: Environmental Comparison of Shortlisted Options**

Environmental Comparison of Shortlisted Options		Option 4	Option 9	Option 10
Designations	International European or National Designations (e.g., SAC, SPA, RAMSAR, National Parks, SSSI, Ancient Woodland)	Option 4 is ~1.6km from Glen Affric NNR, and. Additionally, Areas of Ancient Woodland are ~500m from Options 4. Rated amber for its potential to compromise the natural heritage designations due to proximity.	Option 9 is ~1.5km from Glen Affric NNR. Additionally, Areas of Ancient Woodland are ~500m from Option 9. rated amber for its potential to compromise the natural heritage designations due to proximity.	Option 10 is ~450m from Glen Affric NNR. Additionally, Areas of Ancient Woodland are ~350 from Option 10.. rated amber for its potential to compromise the natural heritage designations due to proximity.
	Regional designations (e.g., Local Nature Reserves, Wildlife Sites, RIGS)	Options 4, 9 and 10 have been rated green as no Regional Designations were identified within 5km of any option.		
Natural Heritage	Protected Species	No protected species recorded within Option 4. The site has potential to support protected or notable species, mainly due to the presence of mixed woodland within the site. This habitat has limited potential to support wildcat, pine marten, badger, red squirrel, great crested newt and reptile species.	No protected species recorded within Option 9. The site has limited potential to support protected or notable species. The site offers sub-optimal foraging habitat for badger but unlikely to support setts. The open moorland habitat provides moderate habitat suitability for reptiles.	No protected species recorded within Option 10. The site has the potential to support protected or notable species, mainly due to the presence of mixed woodland within the site. This habitat has limited potential to support wildcat, pine marten, badger, red squirrel, great crested newt and reptile species. There is sub-optimal habitat to support water vole due to the proximity of watercourses.
	Habitats	Annex 1 habitats wet heath and blanket bog in non-degraded condition are partially present within Option 4, mainly to the centre and south.	Annex 1 habitats wet heath and blanket bog are present within Option 9. Pristine blanket bog is abundant to the centre and north of the site, however, towards the south where the area has suffered from former use as coniferous plantation woodland, the blanket bog has degraded into poorer condition (wet modified bog). Degraded blanket bog remains an Annex 1 habitat but is not classified as a priority habitat. Wet heath habitat is interspersed throughout.  Micrositing Option 9 further to the south will aim to avoid any impact on high quality blanket bog.	Annex 1 habitat wet heath dominates Option 10 where it has developed from former coniferous woodland plantation. Degraded blanket bog (wet modified bog) and dry heath, both also Annex 1 habitats, are present in areas to the north, south and west.
	Ornithology	Option 4 has potential to support Annex 1 and Schedule 1 black grouse, with the relatively flat grassland habitats providing potential habitat for lekking and the surrounding vegetation for nesting.	Option 9 is unlikely to support any Annex 1, Schedule 1, or Birds of Conservation Concern species.	Option 10 has limited potential to support Annex 1 and Schedule 1 capercaillie due to the presence of a small area Scots pine woodland.
Hydrology / Geology	SG Drinking Water Protected Areas (Over 10m <sup>3</sup> per day or supplies over 50 people)	Each of the options are within Drinking Water Protected Areas for surface water and groundwater. As such, each of the options have been rated amber for their potential to compromise the quality and / or quantity of surface or ground water which provides public supply.		

Environmental Comparison of Shortlisted Options		Option 4	Option 9	Option 10
	<b>Aquifer providing regional resources e.g., Abstractions for small public or private water supply.</b> <b>Hydrological supply to GWDTE</b>	Each of the options are located on aquifer classification 2C – low productivity aquifer. None of the options are within 1.3km of private water supplies. The options have therefore been rated amber for their potential to compromise the quality and / or quantity of surface or groundwater of regional importance.		
	<b>Surface waters</b>	An unnamed watercourse is located ~60m from Option 4 and the River Abhainn Deabhag (Good Overall WFD status) is located ~1.3km from Option 4. An unnamed watercourse is located ~200m from Option 9. As Options 4 and 9 are >50m from these watercourses, a green rating has been assigned.	An unnamed watercourse is located ~35m from Option 10. As Option 10 is between 30m-50m from this watercourse, an amber rating has been assigned.	
<b>Cultural Heritage</b>	<b>Designations (World Heritage Sites, Scheduled Monuments, Inventory Gardens and Designed Landscapes, Inventory Battlefields)</b>	Option 4 is located ~2.5km and ~4.8km from two Scheduled Monuments. There are no scheduled monuments within 5km of Options 9 and 10 Each of the Options have been rated green as there would likely be no direct interaction with the designating features.		
	<b>Cultural heritage assets: Listed buildings, A, B &amp; C</b> <b>Non-inventory GDL</b> <b>Conservation areas</b>	Tomich Village Conservation Area is located ~1km from Option 4. The Conservation area, and properties in the immediate vicinity contain multiple Category B and C Listed Buildings. Option 4 has been rated amber as it is likely to compromise the integrity of the Conservation Area and may impact the setting of Category B and C Listed Buildings.	Tomich Village Conservation Area is >2km from Options 9 and 10. There are no Listed Buildings within 1km of either option. Options 9 and 10 have been rated green as they are unlikely to compromise the integrity of the Conservation Area and Listed Buildings.	
	<b>Sites &amp; Monument Record (SMR) Entries</b>	Option 4 is located ~35m and ~500m from SMR entries. Option 4 has been rated amber due to its proximity, and therefore potential, to compromise SMR Entries.	Few SMR entries are in close proximity to Option 9. This indicates low potential for presence of unidentified archaeological / cultural heritage features and Option 9 has therefore been rated green. Option 10 is located ~350m from an SMR entry. The lack of SMR entries in close proximity to Option 10 may be taken as an indication of moderate / low potential for the presence of previously unidentified archaeological/cultural heritage features. Option 10 has therefore also been rated green.	
<b>Landscape and visual</b>	<b>Landscape Character as defined in published charter assessments (e.g., NatureScot National Assessments)</b>	Option 4 is located on Landscape Character Type LCT 227 – Farmed Strath – Inverness, which is characterised by; open farmed valley floors and a central meandering river contained within steep, mainly forested, and wooded slopes. Option 9 is located on Landscape Character Type LCT 222 – Rocky Moorland Plateau – Inverness, which is characterised by; gently rolling, open, undulating moorland plateaux, with distinct edges. Option 10 is located across both of these Landscape Character Types. There is no substantial difference between the three options in terms of landscape character. Each option may compromise the characteristic elements of the Landscape Character Types, and as such, each of the options have been rated amber.		
	<b>National or Regional Designations: National Parks, National Scenic</b>	There are a variety of different types of Landscape Designations surrounding the three sites: Central Highlands Wild Land Area, Glen Affric NSA, Ancient Woodland Inventory Areas, and Strathconon, Monar and Mullardoch SLA (Options 9 & 10 only). However, there will be no direct impact to these landscape		

Environmental Comparison of Shortlisted Options		Option 4	Option 9	Option 10
	<b>Areas, Inventory Gardens and Designed Landscape (GDL)</b>	designations though the sites may be visible from within the landscape designations. Potential impacts would be limited to the setting and perceptual qualities, and changes to the relative sense of wildness would be very small across each site. As such, each of the sites have been rated green.		
	<b>Visual Settlements and residential properties, key transportation and recreational routes utilised by tourists and visitors to an area, vantage points and tourist destinations from where views and landscape appreciation is important.</b>	Residential and tourism properties exist within 5km of each of the options, with the nearest being 1km from Option 4. Core Paths are located within close proximity to each of the options and within Option 10. Each of these Core Paths are likely to be impacted to enable access.  The potential for visual change must also be considered for potential obstructed views along walking paths and summits within landscape designations in particular the Glen Affric NSA and Strathconon, Monar and Mullardoch SLA such as Meallan na Ceardaich summit.  Each of the options have been rated amber as they have the potential to compromise important views or visual amenity.		
Land use	<b>Agriculture (National Scale Land Capability for Agriculture)</b>	Option 4 contains Agricultural Land Classifications 5.2 and 6.3. Option 9 contains Agricultural Land Classification 6.3. Option 10 contains Agricultural Land Classifications 5.3 and 6.3.  Each of the three options represent low quality for agricultural production capability, with uses likely only available for pasture and grazing options with limited potential for cultivation. The options therefore would only affect lower quality agricultural land, with the need for further specific assessment of agricultural impacts unlikely. Each of the options have therefore been rated green.		
	<b>Woodland</b>	Approximately 1.2ha of Native Woodland exists within Option 4. The dominant habitat of this woodland being upland birch.  Desk-based reviews indicate that approximately 6ha of Native Woodland exists within Option 10. The dominant habitat of this woodland being native pinewood, upland birch, and Caledonian Forest. However, site visits have indicated that the majority of this has been felled.  Each of the options are located within the Highlands and Islands Conservancy (Scottish Forestry) and as such have been rated amber.		
	<b>Commercial Forestry</b>	There is no identified commercial forestry associated with any of the options and as such, they have each been rated green.		
Recreation	<b>Public Footpaths, National Cycle Routes etc</b>	Highland Council Core Paths exist within 200m of both options.  There are no National Cycle Routes identified within proximity of either option.  As both options avoid interaction with public footpaths and National Cycle Routes, both options have been rated green.		A Highland Council Core Path exists within Option 10. An unnamed path also exists within Option 10.  There are no National Cycle Routes identified within proximity of Option 10.  As Option 10 will interact with these public footpaths and may compromise their recreational use, it has been rated amber.
	<b>Commercial Highland Sports, fishing, stalking</b>	There are no commercial highland sports identified within proximity of any of the options. As each of the options avoids interaction with areas known to be used for commercial highland sports, a green rating has been assigned to each.		
Planning	<b>Policy: National/Regional/Local planning policy within the Local Development Plan</b>	The three options would be considered National Development – Part 2 National Planning Policy, under the Strategic Renewable Electricity Generation and Transmission Infrastructure strategy.  The following classes of development that are captured by the policy are described below:  b) New and/or replacement high voltage electricity lines and interconnectors of 132kv or more; and  c) New and/or upgraded infrastructure directly supporting high voltage electricity lines and interconnectors including converter stations, switching stations and substations.		

Environmental Comparison of Shortlisted Options		Option 4	Option 9	Option 10
		At a high level, there is national and local planning policy support for the principle of all three developments. All three options are located within close proximity to one another therefore the spatial designations and environmental constraints are similar across all options. At this stage and in the absence of detailed assessments and design mitigation, the proposals may conflict with a number of planning policies. As such, each of the options have been rated amber.		
	<b>Proposals: Existing information in the Planning Portal</b>	All options have been assigned an amber rating as there are multiple third party development proposals within proximity of the options. As such, there is a risk of each of the options being inconsistent with other third party proposals known to the planning system.		



**Table 3 Cost Comparison of Shortlisted Options**

Cost Topics	Option 4	Option 9	Option 10
<b>Capital</b>	<p>Land development for Option 4 would be slightly higher than the other Options due to the fact that it's located on a slope and additional civil works would be required.</p> <p>Peat may be present at all options, so the options are equal in this regard.</p> <p>This option is in close proximity to the existing OHL but is closer to the existing Fasnakyle substation so connection costs would be slightly lower for this.</p>	<p>Land development for Option 9 would be slightly lower as it's in a shallower area in comparison to Option 4.</p> <p>Peat may be present at all options, so the options are equal in this regard.</p> <p>This option is in close proximity to the existing OHL but is further away from the existing Fasnakyle substation so connection costs would be slightly higher.</p>	<p>Land development for Option 10 would be slightly lower as it's in a shallower area in comparison to Option 4.</p> <p>Peat may be present at all options, so the options are equal in this regard.</p> <p>This option is in close proximity to the existing OHL but is further away from the existing Fasnakyle substation so connection costs would be slightly higher.</p>
<b>Operational</b>	<p>Like Options 9 and 10, Option 4 would be accessed via one of two forestry tracks, both of which pose challenges. Both tracks pass through the village of Tomich, which has narrow streets not designed for heavy construction traffic. The route to the north is extremely steep and the route to the south has tight switchbacks. Both tracks would require significant alteration and, reinforcement to make them traversable by transformer delivery vehicles.</p>	<p>Like Options 4 and 10, Option 9 would be accessed via one of two forestry tracks, both of which pose challenges. Both tracks pass through the village of Tomich, which has narrow streets not designed for heavy construction traffic. The route to the north is extremely steep and the route to the south has tight switchbacks. Both tracks would require significant alteration and, reinforcement to make them traversable by transformer delivery vehicles.</p>	<p>Like Options 4 and 9, Option 10 would be accessed via one of two forestry tracks, both of which pose challenges. Both tracks pass through the village of Tomich, which has narrow streets not designed for heavy construction traffic. The route to the north is extremely steep and the route to the south has tight switchbacks. Both tracks would require significant alteration and, reinforcement to make them traversable by transformer delivery vehicles.</p>

**Table 4: Site 15 Engineering RAG**

Engineering Topics		Option 15
<b>Connectivity - Existing circuits/ network</b>	<b>Distance and feasibility of connecting to the existing circuits / network (400kV)</b>	~500m from line; additional OHL assets (e.g., towers) likely required; 6km back to existing Fasnakyle; no junction tower nearby for diversion
	<b>Outages for modification to existing circuits</b>	Straight-forward outages to connect
<b>Connectivity - Future development possibilities</b>	<b>Extension of site or other circuits</b>	No topographical constraints, but constrained by ancient woodland to the south
<b>Connectivity - Interface with SSE</b>	<b>Consideration of Business Separation and whole system requirements (Generation)</b>	No issues

<b>Distribution and Generation</b>	<b>Consideration of Business Separation and whole system requirements (Distribution)</b>	No issues
<b>Connectivity - DNO Connection</b>	<b>Proximity of LVAC supplies</b>	Resilient site, 2 off GT ETs
<b>Footprint Requirements - Technology</b>	<b>i.e., AIS/GIS or certainty of sizing on non-standard plant and equipment</b>	AIS likely, elevation unlikely to be a concern for wind speeds, but location is exposed.
<b>Footprint Requirements - Adjacent Land use</b>	<b>Availability for ancillary infrastructure like welfare compounds, laydown areas (Temporary)</b>	No constraints
	<b>Availability for ancillary infrastructure like screening and SuDS infrastructure. (Permanent)</b>	No constraints

**Table 5: Site 15 Environmental RAG**

<b>Environmental Comparison of Shortlisted Options</b>		<b>Option 15</b>
<b>Designations</b>	<b>International European or National Designations (e.g., SAC, SPA RAMSAR, National Parks, SSSI, Ancient Woodland)</b>	An Area of Ancient Woodland borders Option 15. Option 15 has been rated amber for its potential to compromise the natural heritage designation due to proximity.
	<b>Regional designations (e.g., Local Nature Reserves, Wildlife Sites, RIGS)</b>	Option 15 has been rated amber as RSPB Corrimony Nature Reserve is ~730m from the option.
<b>Natural Heritage</b>	<b>Protected Species</b>	No protected species were recorded within Option 15. The site offers moderate habitat for wate vole including potential feeding opportunities and burrowing although the watercourses are small with lower than ideal water depths. The open bog habitat provides moderate habitat suitability for reptiles. The site offers sub-optimal foraging habitat for badger but is unlikely to support setts and offers sub-optimal habitat for otter holts, with watercourses being small with very limited foraging opportunities.
	<b>Habitats</b>	Option 15 is dominated by pristine blanket bog and wet heath, both in good condition. Both habitats are Annex 1 habitats and are listed as a priority on the Scottish Biodiversity List with blanket bog listed the Highland Council's Local Biodiversity Action Plan. A small patch of upland birchwood is beyond the boundary to the south-west, again listed under the Scottish Biodiversity List and as a priority in the Local Biodiversity Action Plan.
	<b>Ornithology</b>	Annex 1 and Schedule 1 black grouse are likely to occur in the vicinity of Option 15 with the site also having the potential to support Schedule 1 greenshank within good quality blanket bog and wet heath habitat.
<b>Hydrology / Geology</b>	<b>SG Drinking Water Protected Areas (Over 10m3 per day or supplies over 50 people)</b>	Option 15 is within a Drinking Water Protected Area for surface water and groundwater. As such, Option 15 has been rated amber for its potential to compromise the quality and / or quantity of surface or ground water which provides public supply.

Environmental Comparison of Shortlisted Options		Option 15
	<p><b>Aquifer providing regional resources e.g., Abstractions for small public or private water supply.</b></p> <p><b>Hydrological supply to GWDTE</b></p>	<p>Option 15 is located on aquifer classification 2C – low productivity aquifer.</p> <p>No private water supplies have been identified within proximity of Option 15.</p> <p>Option 15 has therefore been rated amber for its potential to compromise the quality and / or quantity of surface or groundwater of regional importance.</p>
	<p><b>Surface waters</b></p>	<p>An unnamed watercourse is located ~30m from Option 15.</p> <p>Due to the proximity to this watercourse, Option 15 has been rated red.</p>
Cultural Heritage	<p><b>Designations (World Heritage Sites, Scheduled Monuments, Inventory Gardens and Designed Landscapes, Inventory Battlefields)</b></p>	<p>Option 15 is located ~1.25 and ~4.2km from two Scheduled Monuments.</p> <p>Option 15 has been rated amber as there would likely be no direct interaction with the designating features.</p>
	<p><b>Cultural heritage assets: Listed buildings, A, B &amp; C Non-inventory GDL Conservation areas</b></p>	<p>Option 15 is located ~750m from one A Listed Building, is within ~2.7km from four B Listed Buildings, the nearest being ~750m from Option 15, and is ~1km from one C Listed Building.</p> <p>Option 15 has been rated amber as it may impact the setting of an A Listed Building.</p>
	<p><b>Sites &amp; Monument Record (SMR) Entries</b></p>	<p>Few SMR entries are in close proximity to Option 15. This indicates low potential for presence of unidentified archaeological / cultural heritage features and Option 15 has therefore been rated green.</p>
Landscape and visual	<p><b>Landscape Character as defined in published charter assessments (e.g., NatureScot National Assessments)</b></p>	<p>Option 15 is located across Landscape Character Type LCT 227 – Framed Strath – Inverness, which is characterised by; open farmed valley floors and a central meandering river contained within steep, mainly forested, and wooded slopes and LCT 226 – Wooded Glen – Inverness, characterised by; wooded and farmed glens to the west of Loch Ness.</p> <p>Option 15 may compromise the characteristic elements of the Landscape Character Types, and as such, has been rated amber.</p>
	<p><b>Nation or Regional Designations: National Parks, National Scenic Areas, Inventory Gardens and Designed Landscape (GDL)</b></p>	<p>Option 15 is located ~2.6km from Strathglass Geological Conservation Review Site and ~3.55km from Central Highlands Wild Land Area. However, there will be no direct impact to the landscape designations though Option 15 may be visible from within the landscape designations. Potential impacts would be limited to the setting and perceptual qualities, and changes to the relative sense of wildness would be very small. As such, Option 15 has been rated green.</p>
	<p><b>Visual</b></p> <p><b>Settlements and residential properties, key transportation and recreational routes utilised by tourists and visitors to an area, vantage points and tourist destinations from where views and landscape appreciation is important.</b></p>	<p>Residential and tourism properties exist ~1km from Option 15. Option 15 is ~240m from the Affric Kintail Way. Highland Council Core Paths IN05.02 and IN0.04 are located ~900m and ~2.25km from Option 15.</p> <p>Option 15 has been rated amber due to the potential to compromise important views or visual amenity.</p>
Land use	<p><b>Agriculture (National Scale Land Capability for Agriculture)</b></p>	<p>Option 15 contains Agricultural Land Classification 4.1: 'land capable of producing a narrow range of crops, primarily grassland with short arable breaks for forage crops and cereal'.</p> <p>Option 15 would therefore only affect lower quality agricultural land, with the need for further specific assessment of agricultural impacts unlikely, and has been rated green.</p>

Environmental Comparison of Shortlisted Options		Option 15
	<b>Woodland</b>	Option 15 is located within the Highlands and Islands Conservancy (Scottish Forestry). There are Areas of Ancient Woodland in proximity to Option 15, with the nearest bordering the option, and as such Option 15 has been rated amber.
	<b>Commercial Forestry</b>	There is no identified commercial forestry associated with Option 15 and as such it has been rated green.
<b>Recreation</b>	<b>Public Footpaths, National Cycle Routes etc</b>	The Affric Kintail Way exists within ~240m of Option 15. Highland Council Core Paths exist within proximity to Option 15, the nearest being ~900m from the option. There are no National Cycle Routes identified within proximity of Option 15. As Option 15 may interact with these public footpaths and may compromise their recreational use, it has been rated amber.
	<b>Commercial Highland Sports, fishing, stalking</b>	Option 15 is located ~720m from Dark Deer Croft, an equestrian business and has therefore been rated amber.
<b>Planning</b>	<b>Policy: National/Regional/Local planning policy within the Local Development Plan</b>	As with each of the options, Option 15 would be considered National Development – Part 2 National Planning Policy, under the Strategic Renewable Electricity Generation and Transmission Infrastructure strategy. The following classes of development that are captured by the policy are described below: b) New and/or replacement high voltage electricity lines and interconnectors of 132kv or more; and c) New and/or upgraded infrastructure directly supporting high voltage electricity lines and interconnectors including converter stations, switching stations and substations. At a high level, there is national and local planning policy support for the principle of the development. At this stage and in the absence of detailed assessments and design mitigation, the proposal may conflict with a number of planning policies. As such, Option 15 has been rated amber.
	<b>Proposals: Existing information in the Planning Portal</b>	Option 15 has been assigned an amber rating as there are multiple third party development proposals within proximity of the option. As such, there is a risk of each Option 15 being inconsistent with other third party proposals known to the planning system.

Table 6: Site 15 Cost RAG

Cost Topics	Option 15
<b>Capital</b>	Land development for Option 15 would be slightly lower as it's in a shallower area in comparison to Option 4. Peat may be present at all options, so the options are equal in this regard. This option is further away from the OHL for tie in works and a similar distance to the existing Fasnakyle substation as other options, but the distances are not long enough to significantly impact cost.
<b>Operational</b>	Option 15 would be accessed via the nearby A road which would mean avoiding the village of Tomich. There are existing tracks nearby to the site which would need be upgraded and reinforced to make them traversable for transformer delivery vehicles.

### 3.2 Summary of Comparative Assessment

(Note that Site 15 is assessed separately in Section 3.4, below.)

#### 3.2.1 Environmental

When considering the Stage 2 substation options in isolation, based on the results of the detailed study and comparative analysis, from an environmental perspective Option 9 is the best on balance option. The proximity of the options to each other means the results of the comparative assessment across much of the environmental criteria were similar. However, a best on balance option is still recommended based on the following.

Each of the options have been rated amber for their potential to impact international, European or national natural heritage designations as they are within ~1.6km of Glen Affric NNR. Each of the options have been rated green for their potential to impact regional designations due to being more than 5km from any regional designation. Options 4 and 10 were rated amber for their potential to support protected species, while Option 9 was the most preferred, with habitats being sub-optimal for protected species. Each of the options contain Annex 1 habitats and were therefore rated red as they are likely to compromise the conservation status of these habitats. Though the sites contain Annex 1 habitats, these are unlikely to be GWDTE. A slightly micro-sited version of Option 9 (Option 9a) is also being investigated to order to minimise the impacts on Annex 1 habitats. For Schedule 1 birds, each of the options were rated green, due to being unlikely to compromise the conservation status of Schedule 1 bird species. Options 9 and 10 were the most preferred in terms of Birds of Conservation Concern (BoCC). Option 4 has the potential to support black grouse for lekking and potentially nesting.

Each of the options were rated amber for Drinking Water Protected Areas and aquifers due to being within Drinking Water Protected

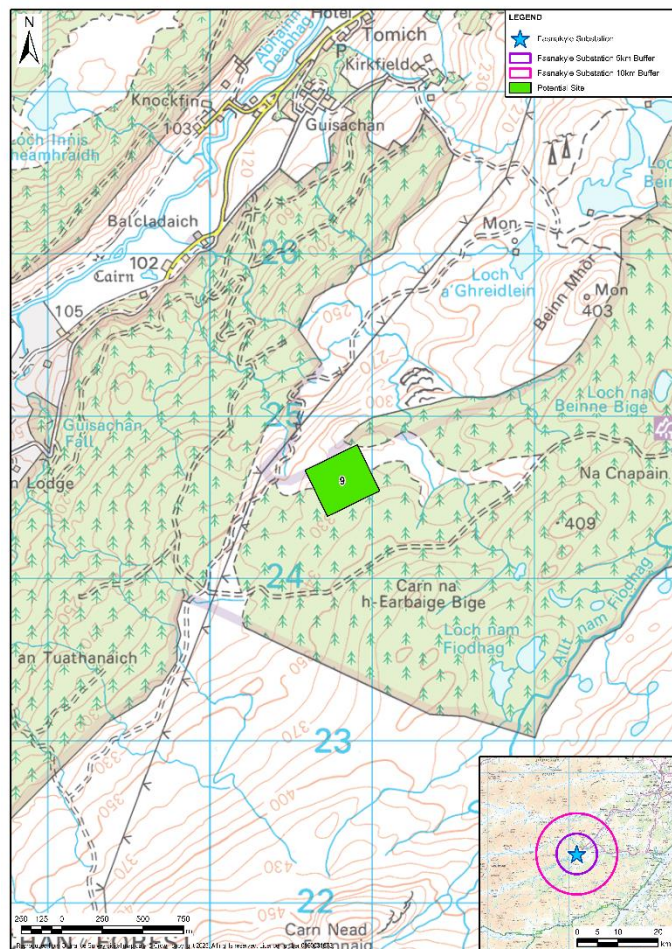


Figure 10 Location of the preferred option - Option 9

Areas for surface and ground water and being located on low productivity aquifers. Option 10 is the most environmentally constrained in terms of surface waters due to an unnamed watercourse being located within approximately 35m of the option, resulting in a limited risk of 10-year surface flooding. Option 9 also poses a limited risk of 10-year surface flooding, however both Options 4 and 9 are located a greater distance (approximately 60m) from a watercourses compared to Option 10..

In terms of cultural heritage designations, each of the options have been rated green due to being unlikely to compromise the features or setting of designations and scheduled monuments. Option 4 is least preferred in terms of proximity to Schedule Monuments Record (SMR) entries, being ~35m from a SMR entry. Options 9 and 10 have both been rated green for SMR entries, due to being at least ~350m from an entry. Though each of the options are located in proximity to Listed Buildings, Option 4 is located approximately 1km from Tomich Village Conservation Area which also contains Category B and C Listed Buildings and as such, has been rated amber.

There is no substantial difference between each of the options in terms of landscape designations (all rated green) or Landscape Character Type (all rated amber). Option 4 may result in greater loss of trees than Options 9 and 10 which have more recently been subject to felling. Each of the options have been rated amber for visual impacts due to being 1km or more from residential properties, though in close proximity to Core Paths, with a Core Path existing within Option 10.

There is no substantial difference between the options in terms of Land Capability for Agriculture, none existing on prime agricultural land, and as such each have been rated green. None of the options have commercial forest plans associated with them, and again, have been rated green. Option 9 is the least environmentally constrained in terms of Native Woodland, with none present within the option boundary. Option 4 contains approximately 1.2 ha of Native Woodland and desk-based review has shown Option 10 to contain approximately 6 ha, however site visits have indicated the majority of this has been felled. Options 4 and 10 are thus deemed less suitable than Option 9.

In respect to recreational constraints, Option 10 is the least favourable due to existing across a Core Path and therefore likely to compromise the recreational use of the path. Options 4 and 9 do not directly interact with any recreational amenity features and have therefore been rated green.

Overall, Option 9 was selected as the best on balance option from an environmental perspective. Option 9 is less constrained by watercourses than the other two options. Option 9 is also the most favourable in terms of proximity to cultural heritage features. Native Woodland located on Options 4 and 10 also mean Option 9 is the least constrained from this perspective. Option 9 also doesn't directly interact with Core Paths, making Option 10 the least preferable in this instance.

### 3.2.2 Engineering

The main risk for these substation locations will be the access, both during construction and delivery of equipment and during ongoing maintenance. The access route is either very steep or very winding, so will require significant improvements to be traversable, particularly for transformer delivery. All three Options taken to Stage 2 are predicted to utilise the same access route, so this risk is fairly neutral between them. Of the three, Site 4 has the shortest length of this access route, though still equally challenging in form.

Option 10 is the most constrained from the perspective of constructability, with access tracks and the existing OHL close by on three sides. A non-standard substation layout would likely be required to be able to construct here. Options 4 and 9 are fairly similar in this regard, but Option 4 is more constrained by the topology, which is around 15% gradient on average across the site, where Option 9 is around 10% gradient.

Where the Options diverge the most is in their relative convenience of connecting generation connections. By situating Option 9 on the south-east side of the Beaully-Denny overhead line, it is more centrally located for connections, which means fewer circuits need to pass beneath the Beaully-Denny line to reach the substation. Note that the circuit connection for Tomchrasky, as shown in Figure 9, would very likely need to pass beneath the Beaully-Denny line in order to be routed further north, as environmental and local wildlife charity operations in that area would very likely preclude it being routed directly north from the Wind Farm location. Situating on this side of the line does present other challenges in terms of the energisation sequence of the

connection, as it is not connection to the same circuit as the existing Fasnakyle substation, but on balance these are outweighed by the benefits for generation connectivity.

Site 4 is closest to the town of Tomich, so is predicted to have the highest risk of noise impact from the substation upon local receptors.

### 3.2.3 Cost

Capital costs such as construction, diversions, felling, public road improvements, etc. and Operational costs including inspections and maintenance were compared for each of the options. While Option 4 had lower costs in terms of connectivity to the existing substation, it had higher civil costs as it is located on a slope. Therefore, all the Options are balanced.

## 3.3 Site 15 Assessment

Due to its inclusion later in the Stage 2 process, at this stage, Option 15 has not undergone the same level of assessment as Options 4, 9 and 10. As such, it is not possible to provide a comparative assessment in more detail than was presented in the Section 2.4 above.

However, the key elements which indicate where this option may be considered more or less favourable for environmental, engineering and cost factors are noted below.

### 3.3.1 Environmental

Option 15 has been rated amber for international, European and national natural heritage designations due to bordering an Area of Ancient Woodland. Options 4, 9 and 10 are not in proximity to any regional natural heritage designations, however, Option 15 is approximately 730m from RSPB Corrimony Nature Reserve resulting in Option 15 being rated amber due to the potential to compromise the conservation status of the reserve. Site 15 has been rated red for habitats due to being dominated by pristine blanket bog and wet heathland, both classified as Annex I habitat under the Habitats Directive with examples of this quality classified as a priority habitat. Blanket bog is identified on the Scottish Biodiversity List (SBL) as high priority habitat for biodiversity conservation and The Highland Council Local Biodiversity Action Plan (LBAP) includes upland and moorland habitats as a priority habitat for local conservation. Option 15 has been rated red for ornithology due to the potential to support a breeding population of Annex 1 and Schedule 1 black grouse and Schedule 1 greenshank within the good quality blanket bog and wet heath habitat. The site offers moderate habitat suitability for both water vole and reptile species, rating as green.

Option 15 is also located within a Drinking Water Protected Area for groundwater, and is located on a low productivity aquifer. It has been rated amber for each of these constraints. Option 15 is the least preferred for surface watercourses, being approximately 30m from the nearest surface watercourse and therefore being rated red.

In addition to Option 4, Option 15 is also located in proximity to a Scheduled Monument, as is therefore rated amber. For SMR entries, as with Option 9 and 10, Option 15 has been rated green due to there being few SMR entries in proximity. Due to being in proximity to Listed Buildings, the nearest being ~750m from Option 15, it has been rated amber due to its potential to disturb the listed buildings.

Option 15 is the only option to be rated amber for landscape designations, due to bordering an Area of Ancient Woodland. As with the other three options, Option 15 is rated amber for landscape character. It is also rated amber for visual impacts due to being ~240m from the Affric to Kintail Way.

As with Options 4, 9 and 10, Option 15 is rated green for Land Capability for Agriculture as it is also not located on prime agricultural land. Option 15 is preferred over Options 9 and 10 with respect to woodland, due to there being no woodland within the option. In terms of recreation, as mentioned, Option 15 is located in proximity to the Affric to Kintail Way, and also Dark Deer Croft, an equestrian business, is located approximately 720m from Option 15. The other options have not been identified as being located in proximity to any businesses.

Option 15, as with the other three options, has been rated amber for planning constraints.

### 3.3.2 Engineering

A shorter access track immediately off the A831 is the primary advantage of this site location. As a shorter access track presents less inherent risk for construction traffic, transformer delivery and ongoing operations and maintenance, Site 15 is preferred by comparison to the other three Stage 2 options. Bypassing the need to enter Cannich or Tomich for any construction traffic or transformer delivery is significant, and reducing the length and steepness of the access from the A road means the winterisation would be a lot more manageable, both during construction and for ongoing operations and maintenance access.

The Site is also somewhat flatter than other options, at around 6% gradient compared to around 10% for Options 9 and 10 and around 15% for Option 4. More detailed topographical information may alter these values slightly, but it is unlikely to result in more than a 4% swing, so it is anticipated that this will be the flattest of the Stage 2 Options and therefore the easiest to establish a platform upon, as well as the easiest to visually screen.

Without a peat depth survey, the exact depth and prevalence of peat are an unknown quantity, however the habitat assessment indicates the likely presence of deep peat over a large extent of the site. A widespread area of deep peat would render the site unviable both from an engineering and environmental perspective.

The tie-in of the Overhead Line has been assessed and will require several additional towers to be constructed, where the other Stage 2 Option tie ins are likely to be achievable with fewer or even no additional towers.

The site of Option 15 is not as well situated for future generation connections as the other Stage 2 sites and would likely require at least one agreed connection to be renegotiated to connect into another substation.

### 3.3.3 Cost

Capital costs such as construction, diversions, felling, public road improvements, etc. and Operational costs including inspections and maintenance are similar to Options 4, 9 and 10. While Option 15 is further away from the existing OHL for tie in works in comparison to Options 4, 9 and 10, its short access route to the nearby A road would negate any significant cost differences.

### 3.3.4 Conclusion

Option 9 is preferred for environmental and engineering factors for the reasons set out in this consultation document and is neutral between options for cost. As such, Option 9 remains the current overall best on balance option as shown on **Figure 10**. Further investigation is still ongoing at Site 15 and the surrounding area to the north-east of the study area. The evaluation of the sites will be concluded and summarised within the Report on Consultation due to be issued in the coming weeks.



## 4 Next Steps

A Report on Consultation will be produced which will document all consultation responses received, additional work undertaken, and the decisions made in light of these.

The outcome of the site selection process will be a development for which a proposed site option will be confirmed and consent under the Town & Country Planning (Scotland) Act 1997 sought. The application will identify:

- The site boundary clearly shown in red (the Planning Red Line Boundary) including any access route (up to the public road including junction improvements).
- The Proposed Development in relation to the site boundary with dimensions of all permanent structures, buildings, perimeter fencing, and any key drainage features e.g., SuDS pond and key electrical features, such as transformers.

The application may be subject to EIA under the Town & Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017. This may result in further alterations to the Proposed Development to reflect outcomes of the EIA consultation process. Should the Proposed Development be deemed non-EIA (due to its scale or number and significance of potential environmental effects), a voluntary Environmental Appraisal would be carried out to support the application.

Where overhead line elements (including tie-ins from proposed development to existing overhead line) are required, a similar application is made to the Scottish Ministers under Section 37 of the Electricity Act 1989.

Statutory pre-application public and stakeholder consultation will be undertaken to present our proposals ahead of submitting a planning application.