

# Consultation Summary Document – Substation Site Selection

## Loch Buidhe Substation

August 2023



## Contents

<b>1 Introduction</b>	<b>03</b>
1.1 Project Background and Need	03
1.2 Project Overview	04
1.3 Strategic Considerations	04
1.4 Site Selection Process	05
<b>2. Stage 0: Strategic Options Assessment</b>	<b>05</b>
<b>3. Stage 1: Initial Site Screening</b>	<b>05</b>
<b>4. Stage 2: Detailed Site Selection</b>	<b>07</b>
<b>5. Preferred Site</b>	<b>13</b>
<b>6. Next Steps</b>	<b>13</b>

## Glossary

Term	Definition
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.
Kilovolt (kV)	One thousand volts.
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.
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 Consultation 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 describes the context of and background to the proposed new 400kV substation at Loch Buidhe and sets out the process we followed to identify a series of site options; the options appraisal undertaken; the alternatives considered during the selection of site options site and the identification of a preferred site option for the new substation.

This document invites comments from all interested parties on the substation site selection for a new 400kV substation, and associated infrastructure that is required at Loch Buidhe, Sutherland.

This Document supports the information made available to the public and statutory authorities in February and March 2023 through the consultation booklet, public event banners and the [ArcGIS Storymaps site](#) and has been prepared in order to provide a more detailed description of the process that we've followed to reach the current stage in the project.

We hope that in publishing this document we are facilitating a more standardised format for the public and statutory consultees alike to access the information that was presented on our Storymaps site above, and one which enables a wide range of information about the project to be easily downloaded for review and feedback.

## 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 Electricity System Operator's (ESO) ["Pathway to 2030" Holistic Network Design \(HND\) \(July 2022\)](#), significant increases in renewable generation capacity are required, resulting in significant investment in new transmission network infrastructure.

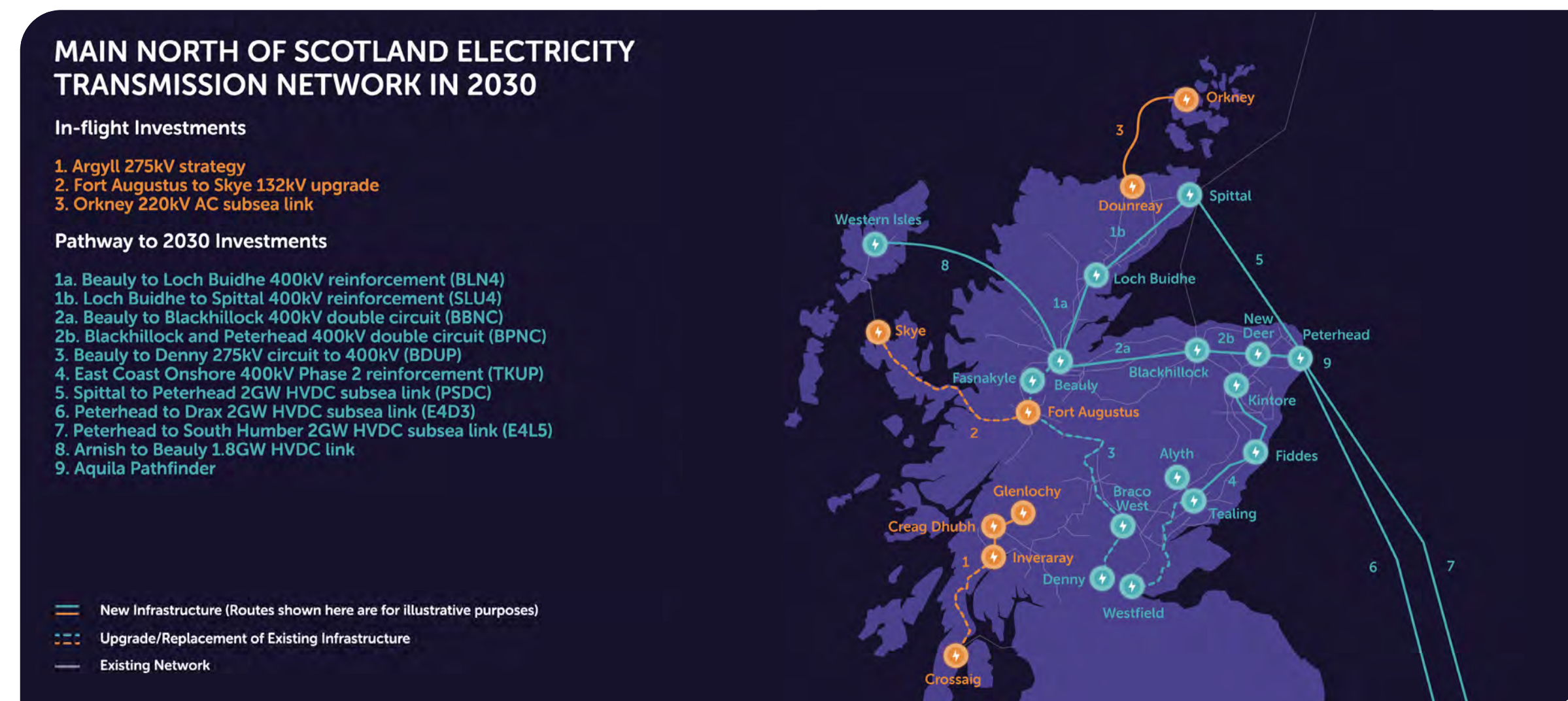
The BESS sets out the UK Government's plans to secure the country's future energy independence by reducing the dependence on, and price exposure to, volatile global wholesale gas markets. This will be achieved by accelerating the deployment of homegrown and affordable low carbon electricity generation, 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 50GW by 2030, up from the previous target of 40GW.

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

Caithness and the surrounding area are home to some of Scotland's best wind resources and the existing electricity transmission network is at full capacity, meaning the planned new renewable energy generation required by BESS can't connect without significant network reinforcement.

As part of the wider UK network reinforcements detailed in the BESS and HND, reinforcements required in SSEN Transmission's Licence Area include proposed new 400 kV links between

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

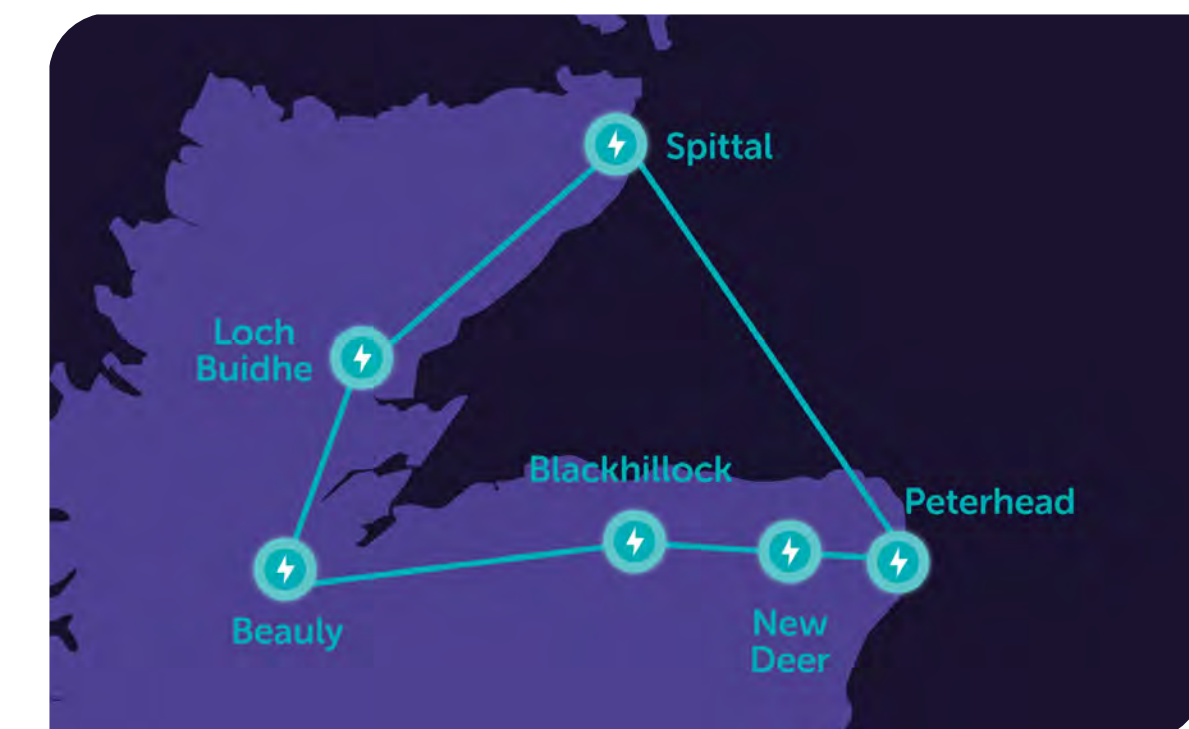


Spittal and Beaulieu, and between Peterhead and Beaulieu to transmit electricity generated by renewables in the north / east of Scotland to areas of demand on the wider GB transmission network, as well as reinforcing the network in Scotland. In addition, new subsea links between Spittal and Peterhead, and from Peterhead to the north of England are required.

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 GB-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 2: Locations of required new 400 kV Substations between Spittal, Beaulieu and Peterhead areas



## 1.2 Project Overview

In order to support the wider connection of both onshore and offshore renewables promoted as part of the UK's commitment to delivering green energy targets and the transition to a low carbon energy network, SSEN Transmission is required to construct a new 400 kV substation in close proximity to the existing 275/132kV Loch Buidhe substation.

The new 400 kV substation is required because the current 275kV network is at capacity and no further renewable energy can be connected without significant reinforcement of the north of Scotland electricity transmission network. This new substation will connect the existing transmission network to the proposed new 400kV OHL at Loch Buidhe, allowing existing and proposed renewable generators to transmit electricity to areas of demand on the GB transmission network.



## 1.3 Strategic Considerations

The project will see the construction of a new 400 kV substation. The works will comprise of:

- Construction of a new outdoor, AIS, 400 kV substation complete with 400 kV double busbar arrangement.
- Installation of new super grid transformers (SGT).
- A new substation control building.
- Installation of underground cables to connect the new 400 kV substation to the existing 275kV substation.
- New 400 kV overhead line connections and potential underground cable connections to the 400 kV substation.
- Space provision to allow for connection of future renewable energy generation projects.

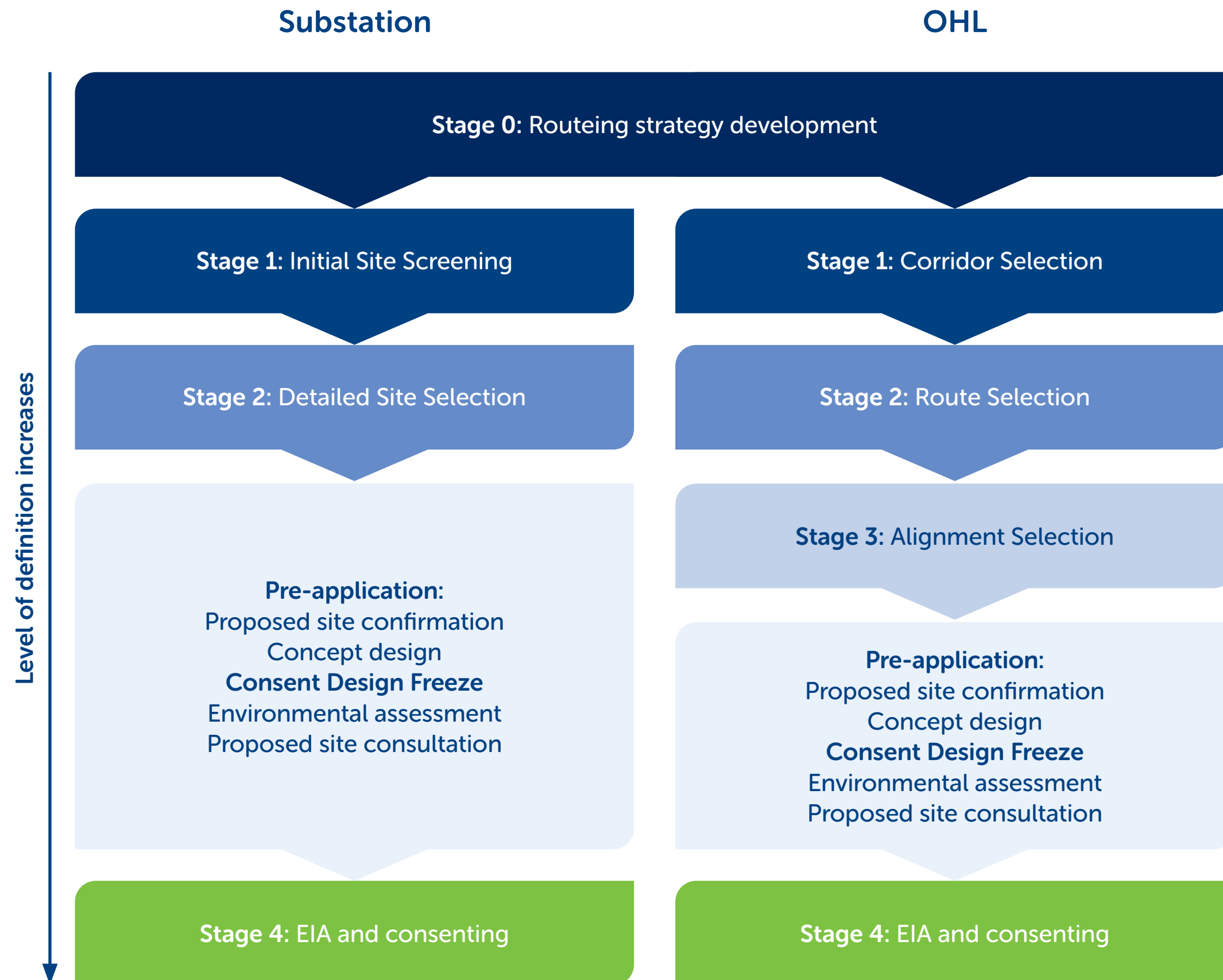
This substation is required in line with the delivery of the 400 kV Spittal – Beaully overhead line (OHL) Project. The project is located approximately 9.5 km northeast of Bonar Bridge and will connect to the 400 kV lines proposed for the Spittal – Beaully Overhead Line reinforcement. The existing 275 kV AIS substation at Loch Buidhe is shown below.

The currently proposed substation footprint is based on an indicative scenario maximum area footprint of 550 metres by 550 metres utilising outdoor AIS. An AIS substation is constructed with switchgear which relies on open air components, which can require large clearance areas for operation and safety.

The closer we can establish the new 400 kV substation to the existing 275kV substation the less excavation and cabling will be required to connect the two sites minimising the disruption of the existing environment.

## 1.4 Site Selection Process

We follow formal internal guidance to enable us to consistently and rigorously select sites for new substations, switching stations and converter stations. Each process has a number of key stages, each increasing in detail and definition and bringing technical, environmental and cost considerations together in a way which seeks the best balance in accordance with our Transmission Network Operator's Licence and the Electricity Act 1989.



## 2. Stage 0: Strategic Options Assessment

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

- Proximity to the existing 275 kV substation to minimise the amount of new overhead lines or cabling required to connect to the network.
- Large enough to accommodate the proposed substation footprint, together with associated landscaping, contractor compounds, access and new connection routes.
- Capacity for future connections.

In areas which do not contain environmental designations and minimise impacts on local environmental receptors. Enables connection. 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.

## 3. Stage 1: Initial Site Screening

Stage 1 of the SSEN Transmission Site Selection process requires a long list of feasible site options to be identified. The first step of this process was to undertake a multi-criteria analysis (MCA) using publicly available GIS datasets to provide a high-level environmental constraints map within the 10 km area of search. In addition, the site selection exercise undertaken in 2011 for the existing Loch Buidhe Substation was reviewed to ascertain if this could yield potential site options, and/or provide further background data of the area and site characteristics.

Using the data from the MCA, and assessing the 2011 site selection process, only five initial site options could be identified due to the size of the potential substation, and the challenging and remote nature of the terrain.

Assessment of the five options was undertaken against the key requirements and using the Red, Amber, Green (RAG) matrix in our Site Selection Guidance. This resulted in two of the feasible options being discounted from further assessment based on access constraints, land use impacts and environmental sensitivities. Table 7.1 shows the location of each option and the reasons why that option was not taken forward to Stage 2.



**Table 3.1 Initial Site Screening of the five substation options**

**Option 1**

**Environment**

- Potential for visual screening with forest plantation surrounding the site.
- Outwith Strath Carnaig and Strath Fleet Moors SPA/SSSI.

**Engineering**

- Relatively level site.
- The existing track is steep and may require assessment and upgrades.
- Access to site from the A386 from an existing forest track.

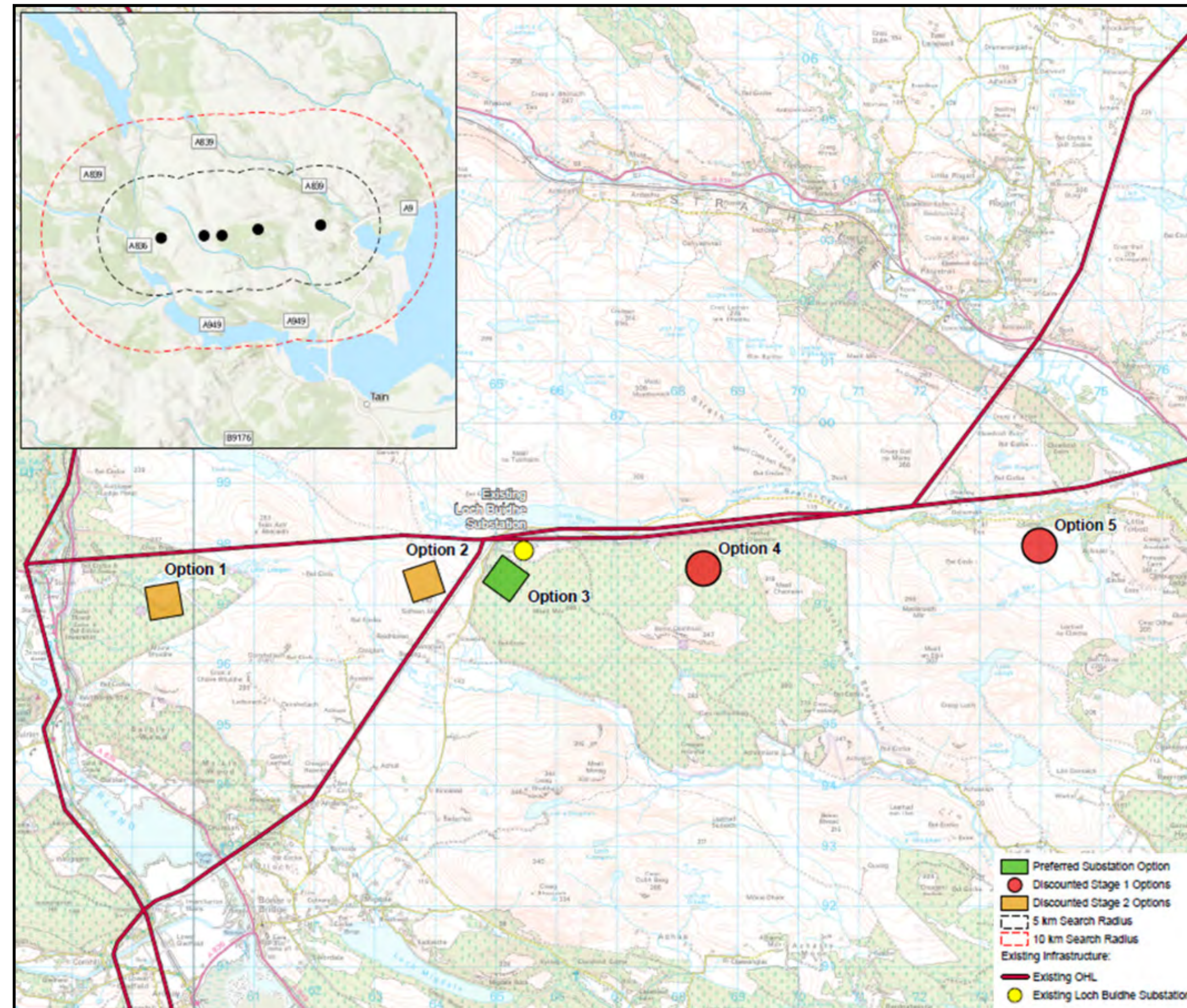
**Option 2**

**Environment**

- Outwith Strath Carnaig and Strath Fleet Moors SPA/SSSI.

**Engineering**

- Relatively level site.
- Access to site from existing track upgraded for the existing substation.



**Option 3**

**Environment**

- More favourable from a landscape and visual perspective as adjacent to the existing substation.
- Although within the Strath Carnaig and Strath Fleet Moors SPA/SSSI outwith the preferred habitat for Hen Harrier (qualifying feature of the SPA/SSSI).

**Engineering**

- Immediately adjacent to the existing Loch Buidhe Substation and with direct access from the road which was upgraded for the existing substation.
- Of all the options, this would give the shortest connection (c.600 m) between the proposed 400 kV substation and the existing 275 kV substation.

**Option 4**

- Poor access to site, which would require upgrade of c.4 km of the public road.
- Likely to have an impact on plantation forestry.

**Option 5**

- Access track would require upgrade.
- Located within Strath Carnaig and Strath Fleet Moors SPA/SSSI on peatland habitat which has potential to support hen harrier (qualifying feature of the SPA/SSSI).

**Sites Taken to Stage 2 Assessment**

Options 1, 2 and 3 were taken forward to Stage 2 based on access constraints, land use impacts and environmental sensitivities.

## 4. Stage 2: Detailed Site Selection

This stage seeks to identify an initial preferred substation site from shortlisted options, which minimises where practicable physical, environmental and amenity constraints, is likely to be acceptable to stakeholders and is viable (taking into account engineering and cost requirements). The connections into new and existing assets forms a crucial part of this assessment to reduce the need for additional new infrastructure.

Following the completion of the Stage 1 initial screening process, a total of three sites were identified and taken forward to Stage 2.

- Option 1 is located 6 km to the south-west of the existing substation within an area of peatland, coniferous woodland and heathlands.
- Option 2 is located 1.5 km to the south-west of the existing substation within an area of peat.
- Option 3 is located immediately to the south-west of the existing substation within an area of woodland and open ground.

The appraisal of these potential site options has involved systematic consideration against the following topic areas:

### Environment and Communities

- **Natural Heritage** – Designations; Protected species, Habitats, Ornithology, Hydrology and geology;
- **Cultural Heritage** – Designations, Cultural heritage assets;
- **People** – Proximity to dwellings;
- **Landscape** – Designations, Character and Visual; and
- **Land Use** – Agriculture, Forestry and Recreation.

### Engineering

- **Infrastructure crossings** – Major crossings and Road crossings;
- **Environmental Design** – Elevation, Atmospheric pollution, Contamination and Flooding;
- **Ground Conditions** – Terrain and Peat;
- **Construction/Maintenance** – Access Road and Angle Tower; and
- **Proximity** – Clearance, Windfarms, Communication masts, Urban environments and Metallic pipelines.

### Economic

- **Capital** – Construction, Diversions, Public Road Improvements, Tree Felling, Land Assembly, Consent Mitigations; and
- **Operational** – Inspections and Maintenance.



A red, amber, green (RAG) rating has been applied to each topic area within each section, indicating potential impacts. This rating is based on a four-point scale as follows:

Performance	Comparative Appraisal	
<p>Most Preferred</p> <p>Least Preferred</p>	No Impact	Negligible, or no potential effects
	Lower Impact / Technical Requirements	Potentially minor effects or technical challenges, with little or no requirement for mitigation
	Moderate Impact / Technical Requirements	Potentially moderate effects or technical challenges subsequent to appropriate mitigation
	Higher Impact / Technical Requirements	Potentially major effects or technical challenges which may be difficult to mitigate

Table 4.0 RAG Table

Option	RAG Impact Rating – Environmental														RAG Impact Rating – Engineering																			
	Natural Heritage				Cultural Heritage		Landscape		Land Use			Planning		Access and Connectivity				Footprint Requirements		Hazards		Ground Conditions		Environmental Conditions										
	Designations	Protected Species	Habitats	Ornithology	Geology, Hydrology and Hydrogeology	Designations	Cultural Heritage Assets	Designations	Character	Visual	Agriculture	Forestry	Recreation	Planning	Connection Access	Operation and Maintenance	Existing Circuits / Networks	Future Development Possibilities	Interface with SSEN Distribution and Generation	DNO Connection	Technology	Adjacent Land Use	Space Availability	Unique Hazards	Existing Utilities and Installations	Topography	Geology	Elevation	Salt Pollution	Flooding	Carbon Footprint	SF6	Contaminated Land	Noise
1	L	L	H	L	L	H	H	L	M	M	L	M	M	M	M	M	L	M	L	L	L	H	L	M	L	M	H	H	L	M	H	L	L	L
2	M	L	H	M	M	L	M	L	M	L	L	L	L	H	L	L	L	M	L	L	L	H	L	L	L	M	H	H	L	M	H	L	L	M
3	H	L	L	H	M	L	L	L	M	L	L	M	L	L	L	M	L	L	L	L	L	M	L	L	L	M	M	H	L	M	M	L	L	L



Table 4.1 Engineering Comparison of Shortlisted Options

		Option 1	Option 2	Option 3
<b>Access and Connectivity</b>	Construction Access	Existing forestry track in place. No new access would be provided from the A836. The existing track would require to be assessed/upgraded for both construction/permanent access. The A836 would require a Transport Assessment for the Abnormal Indivisible Load (AIL) delivery route with possible public road improvement works required.	Existing access to Loch Buidhe substation. The site would utilise the previous public road improvement works which were undertaken as part of the previous LT00025 project to deliver the existing Loch Buidhe substation, which was constructed in 2017.. The existing track to the west of Lochbuie Rd was previously widened as part of the LT000061 Dalchork-Loch Buidhe OHL project. Approximately 300m of additional track would be required to connect to the substation site location.	Existing access to Loch Buidhe substation. The site would utilise the previous public road improvement works which were undertaken as part of the previous project to deliver the existing Loch Buidhe substation, which was constructed in 2017.
	Operation and Maintenance	Steep access track. Maintenance access would be via a steep incline potentially leading to issues with access for the HV test rigs.	Existing access track. Maintenance access is via an existing access track that can accommodate the test rigs.	Existing access track. Maintenance access is via an existing access track that can accommodate the test rigs.
	Existing Circuits/Networks	2 x 132kV double circuit OHL to be undergrounded Site will require the undergrounding of 132kV circuits DLB1/2 & LS1/2.	2 x 132kV double circuit OHL to be undergrounded Site will require the undergrounding of 132kV circuits DLB1/2 & LS1/2.	1 x 275kV double circuit OHL to be undergrounded 1 x 132kV double circuit OHL to be undergrounded Site 3 will require the undergrounding of 275kV circuits FYL1/2 and 132kV circuits LM1 & LD2
	Future Development Possibilities	Extension possible to the East of the site. The area surrounding Site 1 is constrained by various inland rivers located North, South and West of the site. Future expansion would be possible to the East of the site.	Extension possible to the West of the site. The area surrounding Site 2 is constrained by Allt Clais na Faire River to the North of the site and the existing access track to the East of the site. The existing 275 kV Loch Buidhe – Fyrish overhead is located to the South of the site. Future expansion is possible to the West of the site.	Extension possible to the East and South of the site. The area surrounding Site 3 is constrained by various inland rivers to the North of the site in addition to the existing operational substation. Loch Buidhe road is also located to the West of the site. Future expansion would however be possible to the East and South of the site.
	Interface with SSEN Distribution and Generation	No anticipated interface.	No anticipated interface.	No anticipated interface.
	DNO Connection	DNO connection not required.	DNO connection not required.	DNO connection not required.
<b>Footprint Requirements</b>	Technology	Worst case footprint of 550m x 550m.	Worst case footprint of 550m x 550m.	Worst case footprint of 550m x 550m.
	Adjacent Land Use	Site has sufficient space – however further Class 1/Class 2 peat excavations/disposal required.	Site has sufficient space – however further Class 1/Class 2 peat excavations/disposal required.	Site has sufficient space – however further Class 5 peat excavations/disposal required.
	Space Availability	Standard substation configurations can be accommodated.	Standard substation configurations can be accommodated.	Standard substation configurations can be accommodated.
<b>Hazards</b>	Unie Hazards	Near to wake zone of Garvary wind farm.	Outwith wake zone of Garvary wind farm.	Distant from Garvary wind farm.
	Existing Utilities and Installations	Nothing apparent but will need to be confirmed.	Nothing apparent but will need to be confirmed.	Nothing apparent but will need to be confirmed.

		Option 1	Option 2	Option 3
Ground Conditions	Topography	Site has moderate variations in topography. The site has a maximum height difference of approximately 30 metres.	Site has moderate variations in topography. The site has a maximum height difference of approximately 30 metres.	Site has moderate variations in topography. The site has a maximum height difference of approximately 30 metres.
	Geology	Large area of Class 1/Class 5 carbon and peatland.	Large area of Class 2/Class 5 carbon and peatland. Site 2 has a large area of Class 2 carbon and peatland. A peat probing investigation was undertaken as part of the 2011 site selection for the existing substation and revealed that peaty soils are evident throughout the site with some areas greater than 4 metres in depth but averaging 1.5 metres.	Entire site recorded as Class 5 carbon and peatland. A peat probing investigation was undertaken as part of the 2011 site selection for the existing site selection and indicated depths averaging 1.3 metre with localised pockets of up to 3.5m below ground level.
Environmental Conditions	Elevation	172m AOD	211m AOD	215m AOD
	Salt Pollution	>16,000m	>16,000m	>16,000m
	Flooding	Close proximity to numerous inland rivers. There are no watercourses identified on Ordnance Survey mapping within the site, however it is in close proximity to watercourses named Allt na Ciste Duibhe to the North of the site and Henmans Burn to the South. The SEPA flood maps were reviewed and indicated that there was a medium likelihood of surface water flooding at very localised areas.	Close proximity to numerous inland rivers. There are no watercourses identified on Ordnance Survey mapping within the site, however it is in close proximity to watercourses named Allt Clais na Faire to the North of the site and Alltan Dubh to the East. The SEPA flood maps did not indicate any flooding on the site.	Close proximity to numerous inland rivers and with Loch Buidhe located to the north, sitting at a lower level in the landscape. There is an unnamed watercourse within close proximity to the north of the site which discharges into Allt Garbh-airigh. Alltan Dubh is also present to the West of the site. The SEPA flood maps were reviewed and indicated that there was a medium likelihood of surface water flooding at very localised areas.
	Carbon Footprint	Removal of Class 1 blanket bog peat.	Removal of Class 2 blanket bog peat.	Removal of localised pockets of Class 5 peat.
	SF6	AIS equipment utilised.	AIS equipment utilised.	AIS equipment utilised.
	Contaminated Land	No information available at present - will need to be confirmed.	No information available at present - will need to be confirmed.	No information available at present - will need to be confirmed.
	Noise	Various properties adjacent to the A836 (>1 km from site). There are various residential properties located adjacent to the A836. The closest being approximately 1.5 km from the site. The site is also shielded by a coniferous plantation which would act as an acoustic barrier.	Various residential properties located on Lochbuie Road (< 1km from site). There are various residential properties located on Lochbuie Road. The closest being approximately 650 m from the site. The site is as it stands is open moorland with no natural acoustic barriers.	Various residential properties located on Lochbuie Road (>1 km from site). There are various residential properties located on Lochbuie Road. However, the closest property is approx. 1 km from the proposed site. The coniferous plantation would also act as an acoustic barrier.

Table 4.2 Environmental Comparison of Overall Options

		Option 1	Option 2	Option 3
<b>Natural Heritage</b>	Designations	Unlikely to compromise the conservation status of a site or its designating features	Strath Carnaig and Strath Fleet Moors SPA and SSSI are adjacent to the option.	Within Strath Carnaig and Strath Fleet Moors SPA and SSSI.
	Protected Species	Unlikely to compromise the conservation status or essential suitable habitat.	Unlikely to compromise the conservation status or essential suitable habitat.	Unlikely to compromise the conservation status or essential suitable habitat.
	Habitats	Likely to compromise Annex 1 habitat with high potential for ground water dependent terrestrial ecosystems.	Likely to compromise Annex 1 habitat with high potential for ground water dependent terrestrial ecosystems.	Unlikely to compromise the conservation status or essential suitable habitat.
	Ornithology	Unlikely to compromise the conservation status of Schedule 1 bird species or their habitats.	May compromise the conservation status of Schedule 1 bird species or their habitats.	Likely compromise the conservation status of Schedule 1 bird species or their habitats. Precautionary rating due to location with SPA and SSSI.
	Hydrology/ Geology	Unlikely to result in water flow pathway(s) to surface and groundwaters.	May compromise quality and or quantity of surface or groundwaters of local importance, during construction only.	May compromise quality and or quantity of surface or groundwaters of local importance, during construction only.
<b>Cultural Heritage</b>	Designations	Likely to compromise the designating features or setting of scheduled monuments.	Unlikely to compromise designating features or setting of designated sites.	Unlikely to compromise designating features or setting of designated sites.
	Cultural Heritage Assets	Likely to compromise the setting of an A listed building or directly disturb a B/C listed building.	Potential to impact setting of a category B listed building.	Unlikely to compromise designating features or setting.
<b>Landscape</b>	Designations	Unlikely to compromise the special qualities of a designated landscape.	Unlikely to compromise the special qualities of a designated landscape.	Unlikely to compromise the special qualities of a designated landscape.
	Character	May compromise characteristic elements of the landscape character.	May compromise characteristic elements of the landscape character.	May compromise characteristic elements of the landscape character.
	Visual	Has the potential to compromise the view or visual amenity from Invershin, John O' Groats NCN Route 1 and core paths in Invershin.	Unlikely to compromise the view or visual amenity from settlements or individual properties.	Unlikely to compromise the view or visual amenity from settlements or individual properties.
<b>Land Use</b>	Agriculture	Impacts agricultural land classification 4 and below.	Impacts agricultural land classification 4 and below.	Impacts agricultural land classification 4 and below.
	Forestry	Interaction with forestry operations may compromise the commercial returns from the forestry.	Avoids interaction with areas of commercial forestry.	Interaction with forestry operations may compromise the commercial returns from the forestry.
	Recreation	Potential to compromise the recreational amenity of John O' Groats NCN Route 1 and core paths in Invershin. As such, an amber RAG rating has been applied.	Unlikely to compromise the recreational amenity of core paths.	Unlikely to compromise the recreational amenity of core paths.
<b>Planning</b>	Policy	May be contrary to national, regional or local planning policy due to potential for impact on habitats and designations.	May be contrary to national, regional or local planning policy due to potential for impact on habitats and designations.	May be contrary to national, regional or local planning policy due to potential for impact on habitats and designations.
	Proposals	May be inconsistent with other third party proposals known to the planning system.	Likely to be inconsistent with other third party proposals known to the planning system including Garvary Wind Farm.	May be inconsistent with other third party proposals known to the planning system.

**Table 4.3 Cost Comparison of Overall Options**

Capital Costs	RAG	Site Comparison Notes
Option 1		Circa 6km Farthest from the existing 275 kV Substation. This will require a longer cable route back to the existing 275 kV Loch Buidhe Substation and more civil works to achieve a flat substation base.
Option 2		Closer to the existing 275 kV Substation at circa 1.5 km however this area is mainly composed of deep peat which poses difficulties with constructing a substation base and would have the heaviest impact on the environment in comparison to sites 1 and 3
Option 3		The closest of the 3 sites to the existing Loch Buidhe 275 kV substation and the current preferred location. This site will also require some levelling and felling of trees commercial woodland however this felling has already begun under FLSFSL normal schedule.

## 5. Preferred Site

Option 3 is considered the environmentally and technically preferred option.

Clustering development adjacent to the existing substation limits the potential for landscape and visual impact in the wider area. In addition, habitat is of lower value and the site is further from the proposed Gavary wind farm.

Although within the Strath Carnaig and Strath Fleet Moors SPA and SSSI, historical bird surveys suggest this area is not heavily favoured by nesting hen harrier due to the closed canopy location so this may not present a significant constraint. Bird surveys will be undertaken and a Habitat Regulations Appraisal undertaken to assess this risk.

Option 3 would require the shortest connection to the existing substation and can make use of the access road for the existing Loch Buidhe substation.



## 6. Next Steps

Following conclusion of the internal substation options assessment, SSEN Transmission has undertaken consultation with statutory and non-statutory stakeholders and held a series of public exhibitions for the substation options under consideration.

The responses received from the public exhibitions, statutory consultees and other key stakeholders will inform further work to address concerns and constraints identified, together with potential alternative substation options.

Once we have collated and reviewed all feedback from communities and other stakeholders in response to our consultation on the substation, we will produce a 'Report on Consultation' which will document the themes of consultation responses received and the decisions made in light of these responses.

The Report on Consultation will be made available to the public through the project website and issued directly to statutory and non-statutory stakeholders.

At this point, we anticipate that consultation on the proposed substation option will take place towards the end of 2023 and be undertaken through public events and meetings with statutory and non-statutory stakeholders.