

# The Beaully Cluster Asset Replacement Projects

Comprising new substations at Deanie,  
Culligran, Aigas and Kilmorack

June 2022



The consultation  
events will be taking  
place on:

**Wednesday 22nd June**  
3pm-7pm  
Kilmorack Hall

**Thursday 23rd June**  
3.30pm-7pm  
Cannich Village Hall

.....  
**Virtual Consultation Event**  
Tuesday 28th June  
5pm-7pm,  
with live chat function



**Scottish & Southern**  
Electricity Networks

TRANSMISSION

# Who we are

We are Scottish and Southern Electricity Networks Transmission (SSEN Transmission), operating under licence as Scottish Hydro Electric Transmission Plc (SHE Transmission) for the transmission of electricity in the north of Scotland.



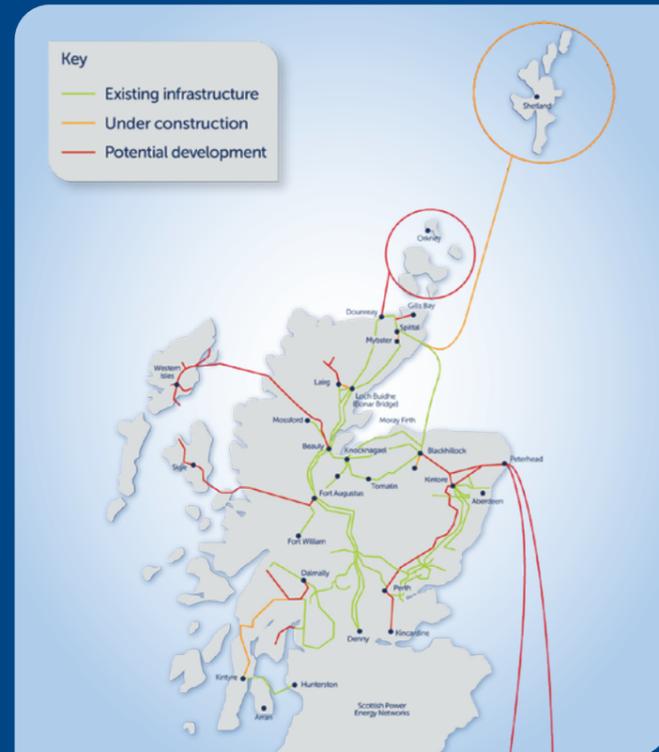
## What is the difference between transmission and distribution?

Electricity transmission is the transportation of electricity from generating plants to where it is required at centres of demand. The electricity transmission network, or grid, transports electricity at very high voltages through overhead lines, underground cables and subsea cables.

Our transmission network connects large scale generation, primarily renewables, to central and southern Scotland and the rest of Great Britain. It also helps secure supply by providing reliable connection to the wider network of generation plans.

The electricity distribution network is connected into the transmission network but the voltage is lowered by transformers at electricity substations, and the power is then distributed to homes and businesses through overhead lines or underground cables.

## Overview of transmission projects



In total we maintain about 5,000km of overhead lines and underground cables – easily enough to stretch across the Atlantic from John O’Groats all the way to Boston in the USA.

Our network crosses some of the UK’s most challenging terrain – including circuits that are buried under the seabed, or 750m above sea level and up to 250km long.

The landscape and environment that contribute to the challenges we face also give the area a rich resource for renewable energy generation. There is a high demand to connect from new wind, hydro and marine generators which rely on Scottish and Southern Electricity Networks to provide a physical link between the new sources of power and electricity users. Scottish and Southern Electricity Networks is delivering a major programme of investment to ensure that the network is ready to meet the needs of our customers in the future.

## Our responsibilities

We have a licence for the transmission of electricity in the north of Scotland and we are closely regulated by the energy regulator Ofgem.

Our licence stipulates that we must develop and maintain an efficient, co-ordinated and economical system of electricity transmission.

# Project need and overview

## Project need

The required project need is being driven by operational requirements and asset condition assessments of the affected existing substations serving the power stations. Owing to similar project programmes for each of the substations, they have been progressed together under the same site selection process. The proposed asset replacement project has been collectively termed “The Beaully Cluster”, which is the construction of separate but linked substations at Deanie, Culligran, Kilmorack and Aigas.

The project is required to upgrade the four existing substation assets from Deanie to Kilmorack Power Stations, which converts the 11 kilovolt (kV) output to 132kV for export to the Transmission network. These assets are coming to the end of their operational life and need replacing. The consequent deterioration in their condition poses a risk to failure, meaning the power station would no longer be able to generate renewable energy risking reliability of supply to customers.

All four substations were built in the 1960’s connecting hydroelectric generation to the transmission network. The existing transformers were built when engineering design standards and requirements were very different. Modern transformers are quieter and more efficient but also require more space around them for cooling and safe access for maintenance. This, together with a need to keep each of the generation assets connected to the network, meaning, new substation sites need to be identified and located outwith each of the existing substation compounds.

Each substation will consist of an offline construction of a new 132/11 kilovolt (kV) single transformer substation (alongside investigating the opportunity for a combined site for Kilmorack and Aigas); accommodating new transformers and associated plant (as near as possible to existing) connecting the current hydro power stations.

Following the construction of the new substations, existing substation structures and equipment shall be decommissioned and removed. The development will also include any upgrade of existing or new access tracks, temporary site compounds and construction laydown areas (where required). Initial design plans showing the substation electrical layout and technology choices will be further developed as part of the Detailed Site Selection Process, which will be the next step in the process.

## Project overview

- The following elements are anticipated requirements for each of the four new substations:
  - Design and construction of a new offline substation compound with 132/11kV transformer. These will be separate but linked substations, with indicative platform sizes of 50 x 95 metres.
  - A new 132kV circuit breaker and earth switch.
  - Control building housing 11kV switch gear and control protection equipment.
  - Landscaping and biodiversity requirements.
  - Permanent access to the sites.
  - Upgrade of existing/new access tracks and temporary site compounds and construction laydown areas where required.



Existing external transformer arrangement needing to be replaced (at Deanie & Culligran)



Existing internal transformers needing to be replaced (at Aigas & Kilmorack)

## Other upcoming projects in the surrounding area;

### Glen Strathfarrar VISTA

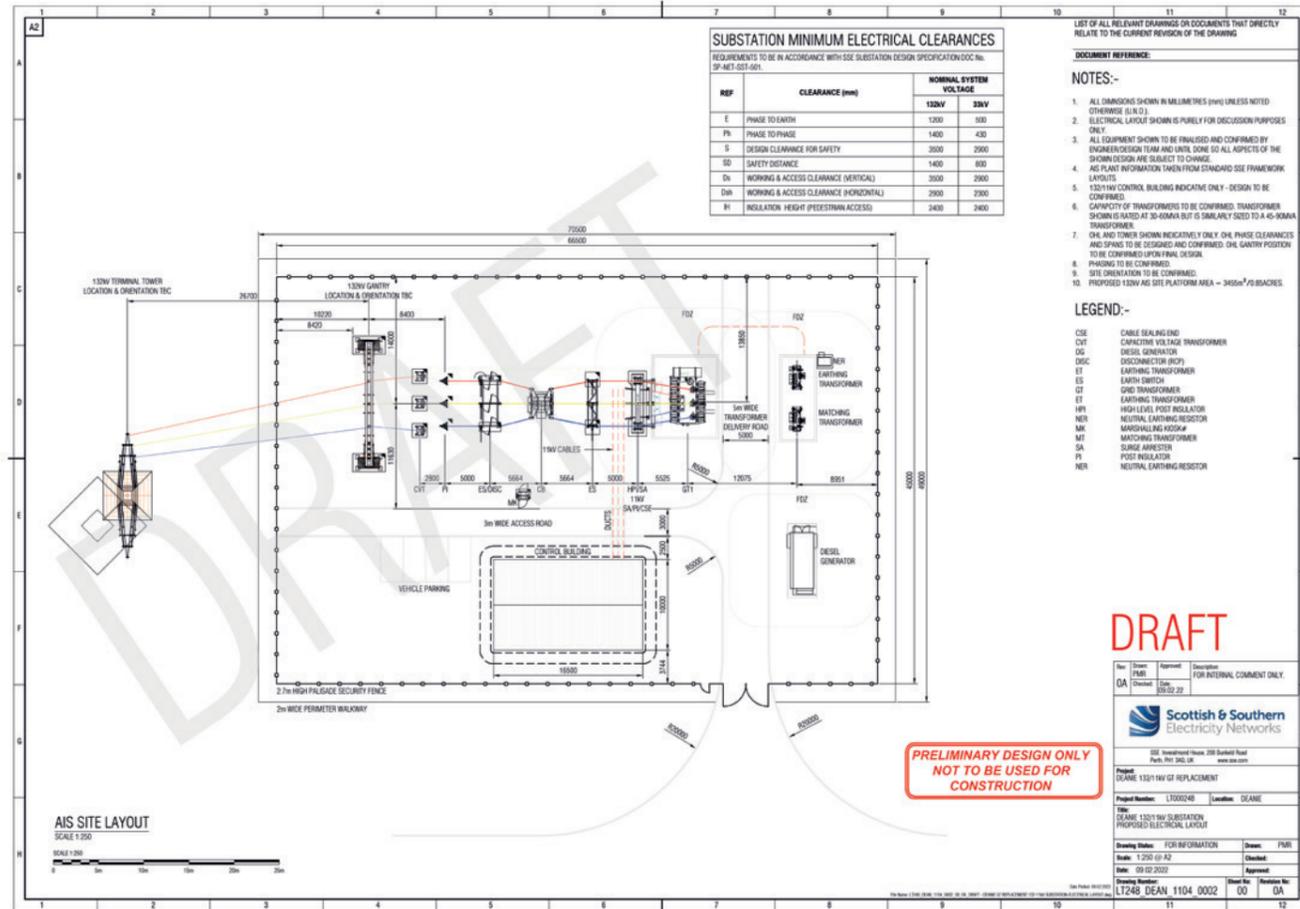
Approximately 3.5km of overhead line (OHL) will be removed and replaced with underground cable in Glen Strathfarrar. This project will aim to reduce the quantity of overhead line infrastructure in Glen Strathfarrar National Scenic Area.

### Beaully to Deanie OHL reconductoring

Required OHL reconductoring along the existing line which is identified as beyond its designed lifespan. The works will terminate at the agreed starting point for Glen Strathfarrar VISTA project.

In the interest of transparency, we are presenting this cluster of works as a whole to ensure all local community members are aware of the full extent of the proposals and are invited to comment on the development of each. The neighbouring VISTA and OHL projects will have separate consultation events.

# Indicative substation layout



# Substation site selection process

## Overview of site selection process

SSEN Transmission has developed and implemented a formal process for the selection of sites for new substations of 132kV and above. The main aim of the process is to provide a consistent approach to the selection of new substation sites, underpinned by our statutory obligations to:

'Develop and maintain an efficient, coordinated and economical electricity transmission system in its licenced area' and in so doing, to 'have regard to the desirability of preserving the natural beauty, of conserving flora, fauna and geological and physiographical features of special interest and protecting sites, buildings and objects of architectural, historic or archaeological interest; and do what we reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites buildings or objects' (Electricity Act 1989, Section 9 (2) a and b).

Our site selection process ensures the design, consenting, construction and operation of a substation is done in a manner that is technically feasible and financially viable whilst causing, on balance, the least disturbance during construction and operation to the environment and the people who live, work and use it for recreation.

**The Beaulay Cluster projects are currently at Stage 1: Initial Site Screening.**

For most new substation projects following pre-site selection activities, the approach follows two principal stages, each iterative and increasing in detail and resolution, bringing cost, technical and environmental considerations together in a way which seeks the best balance at both stages. This staged process leads to the identification of a proposed substation site, which will be taken forward for planning.

## The key site selection stages are:

**Pre-site selection activities**  
The starting point in all substation site selection projects is to establish the need for the project and to select the preferred engineering option to deliver it. 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 can be initially assessed for suitability.

**Stage 2: Detailed site selection**  
This stage seeks to identify a preferred substation site, which avoids physical, environmental and amenity constraints where possible, is likely to be acceptable to stakeholders, and is economically viable; taking into account engineering and connection requirements.  
  
This stage will be reported in a combined Substation Site Selection Report. Following public and stakeholder consultation, the Report will be updated to include any feedback and modifications made and confirm the proposed substation sites to take forward for planning permission.

## The Planning Application Process

The outcome of each substation site selection process will culminate in seeking Consent under the Town and Country Planning (Scotland) Act. Each application will identify:

- The site boundary (the Planning Red Site 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 (SuDS pond) and electrical features, such as transformers.
- Any required landscape planting proposals (both in situ and remote to the proposed site) will also be identified and detailed as part of each planning submission.

In some cases, the application will be subject to Environmental Impact Assessment (EIA) under the Town and 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 will be carried out to support the application.

Further public and stakeholder consultation is anticipated later this year, presenting our refined and preferred site options for feedback, prior to planning application submissions.

Where overhead line elements are required, a similar application will be made to the Scottish Ministers, under Section 37 of the Electricity Act 1989. This will specifically cover the overhead line, not the main substation works.

## Project Timeline



# Engineering and economic considerations

Our Transmission Operators licence requires us to provide best value for customers and GB consumers. As a natural monopoly, SSEN Transmission are closely regulated by the GB energy regulator Office of Gas and Electricity Markets (Ofgem), who determine how much revenue we are allowed to earn for constructing, maintaining and renovating our transmission network.

These costs are shared between all those using the transmission system, including generation developers and electricity consumers. We therefore work to strict price controls which means the following engineering and economic considerations form a key part of our site selection process:

## Construction

The costs and practicalities associated with constructing new platforms can vary considerably with location, depending on ground conditions, topography and underlying geology.

This means considering access and delivery routes, space for laydown and construction compounds, alongside consideration of future use. The topography and underlying ground conditions dictate how much material must be removed and moved to create a level site with a suitable base. Importing and exporting large quantities of aggregates and spoil is expensive and is not environmentally desirable due to impacts associated with transport. We can also use topography to our advantage, using existing ridges, mounds and slopes to provide screening for the site. This can reduce the amount of additional hard and soft landscaping required.

## Connections

Each new substation requires to be connected to both the affected existing power station and 132kV overhead lines, so proximity to both of these is desirable.

The further away from these points of connection the identified site is, the greater the engineering challenges and cost as more infrastructure is required to be installed. Underground cables, whilst less visually intrusive, are more expensive than equivalent overhead lines.

By minimising the 11kV cable route lengths, we are able to make more efficient use of the renewable energy that is generated at each Hydro Power Station.

Given the fixed location of the power stations, reducing any new overhead infrastructure is a key consideration.

## Forestry and biodiversity

The cost and environmental impacts of felling trees and any compensatory planting must be factored into the assessment.

SSEN Transmission are committed to a No Net Loss of forestry and biodiversity on projects. Choosing a site with more tree felling or in more ecologically rich habitats will incur greater costs, both to remove the trees and then provide compensatory planting and habitat creation/enhancements.

## Operations

Our sites will be operational for a long time and will require ongoing maintenance and repairs by our Operations Team.

They need to be able to access the site easily and safely in all weathers. More exposed sites will likely need more maintenance during their life. In addition, where we have created or enhanced local habitats, we take on the responsibility for long term maintenance of landscaping to ensure it is successful.

Any potential impacts to the operation of the existing network and security of supply for our customers (both demand and generation) must be carefully considered and minimised where possible.

## Technology

The plant and equipment used in the construction and connection of each substation will vary in cost.

Site location can drive the use of alternative technologies, driven by factors such as wind speed, altitude, proximity to coast etc. The available footprint may also dictate the use of alternative technologies in order to fit the required plant and equipment, which can come at a price. Some plant and equipment may also require to be housed indoors at an additional cost. The choices between cable and overhead line in connecting the site with the wider network will also affect the cost of the project.



Indicative new transformer arrangement

# Environmental considerations

Due to the location of the projects, there are a number of key environmental considerations. Deanie and Culligran are both located within or close to the Glen Strathfarrar National Scenic Area and Glen Affric to Strathconon Special Protection Area (SPA). They are also located close to the Central Highlands Wild Land Area and Glen Strathfarrar Site of Special Scientific Interest (SSSI).

Strathglass Special Area of Conservation (SAC) is located to the south of Deanie. Kilmorack is located in close proximity to four Category B listed Buildings and one Category C Listed Building. The main areas of assessment during site selection are outlined below. It should be noted that any potential impacts which concern the population have been considered under the umbrella of the 'Environmental considerations'. These include potential impacts on visual amenity, noise, proximity to dwellings, recreational receptors and flood risk.

## Landscape and visual

The appearance of the substations within the landscape and how/where they will be seen is being carefully considered.

Site selection will be substantially guided by effects on this nationally valued landscape, with particular consideration of:

- Deanie and Culligran projects in relation to the National Scenic Area and Wild Land Areas.
- The importance of Glen Strathfarrar Road Core Path, Public Rights of Way and other recreational access routes in the sensitive landscape.
- Landscape character, visual amenity and heritage assets (including several listed buildings).

Mitigation would likely include using the existing landform features and the creation of sympathetic hard and soft landscape, with the natural landform offering opportunities for screening views of the proposed developments from key visual receptors.

## Hydrology and geology

The following hydrological aspects are being considered as part of the site selection process for each of the substations:

- Private water supplies.
- Groundwater dependent terrestrial ecosystem (GWDTE's).
- Potential for flood risk.
- If any designated sites are hydrologically linked to the site.

An appropriate site drainage plan for both the construction and operational phases will be developed to ensure no adverse impacts on the surrounding water environment.

## Ecology and ornithology

Several ecology surveys and assessments have been carried out covering:

- Habitats, including biodiversity.
- Protected species, including suitability for badger, otter, bat, red squirrel and pine marten.
- Breeding bird surveys are in the process of being undertaken.

Depending on the site options chosen, there may be a requirement for some tree felling at the Culligran, Aigas and Kilmorack sites.

## Cultural heritage

The site options at Kilmorack have the potential for setting impacts on Category B and C listed buildings.

There is also the potential for impacts on known and unknown archaeological remains. Setting impacts will be considered as part of the substation site selection as well as detailed design development. Mitigation measures may include screening for visual intrusion.

## Land use, access and recreation

No long-distance routes are within the sites under consideration. Core Paths and Public rights of way are present within both the Deanie and Culligran site options.



Golden Eagle



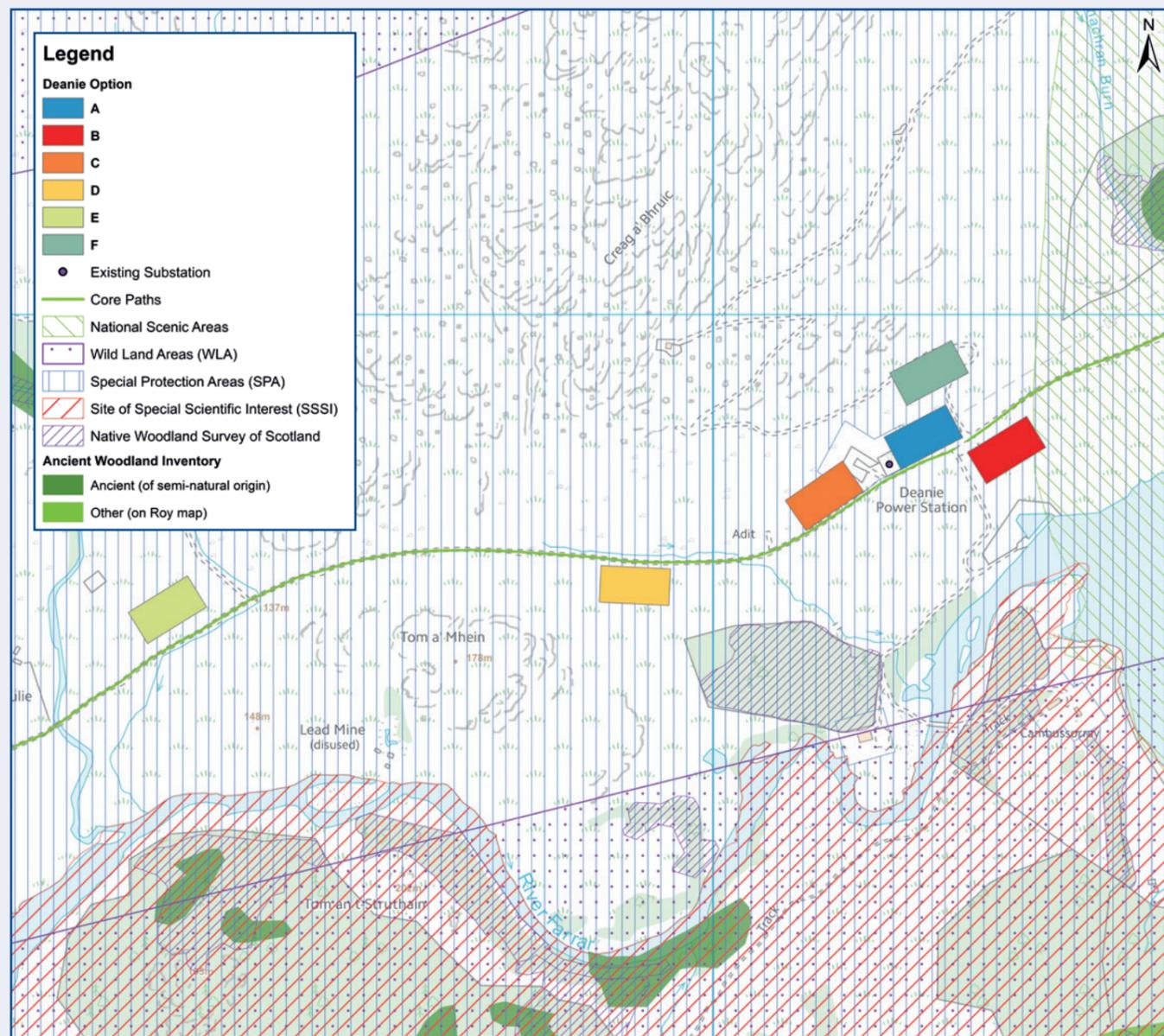
Red squirrel

# Beaully Cluster site selection search area and options

## Deanie Substation site options

The search area for Deanie is relatively small due to the requirement to be within 1km of the existing Deanie Hydro Electric Power Station. The area is defined by the following:

- Located north-west of Loch Beannacharan.
- Steep terrain profiles to the west and north of the existing Deanie Hydro Electric Power Station.
- There is an area of woodland to the south as well as the River Farrar (tributary of River Beaully), although the site itself is not within any areas of woodland.
- Glen Strathfarrar Road is adjacent to site location.



### Engineering summary

Site options A, B, C and F are located within close proximity to existing 11kV and 132kV connection points from the existing Deanie Hydro Electric Power Station. Minimising the overall length of the 11kV cable connection is considered a fundamental technical objective of the site assessment. However, in some instances the proximity to existing Power Station infrastructure can present an additional challenge to these site options. Site option A would also require significant outage requirements as part of the construction of the project which would reduce the output from the renewable energy source. The steep ground topography associated with Site option C and F could lead to a more challenging construction.

Site options D and E have space available for laydown and construction areas and are relatively flat sites with good earthwork potential. Site option D offers potential screening opportunities from existing trees. However, Site option D and E would require longer lengths of 11kV cabling which would lead to increased customer losses.

Based on the initial technical assessment that has been undertaken, Site option B and option D should be considered the preferred options from an engineering perspective to take forward for more detailed investigation.

### Environmental summary

All site options have similar environmental constraints in terms of being located within the Glen Affric to Strathconon Special Protection Area (SPA), in close proximity (approximately 150 m north) of the Glen Strathfarrar Site of Special Scientific Interest (SSSI) and Strathglass Special Area of Conservation (SAC). No site options are likely to result in significant woodland loss. None of the sites under consideration have any designated sites or known cultural heritage assets within 3km.

Glen Strathfarrar Road (Reference IN26.01) Core Path passes the majority of the site options, with none of the options likely to adversely impact the core path.

Due to the sensitivities associated with the substation sites being located within the Glen Strathfarrar National Scenic Area, site option D would be the preferred site when considering the landscape and visual sensitivities.

Site option A is considered to be the second preferred option to be investigated further at the detailed design stage from an environmental perspective, as this option is directly next to the existing substation, thereby keeping the infrastructure in the same location.

### Summary

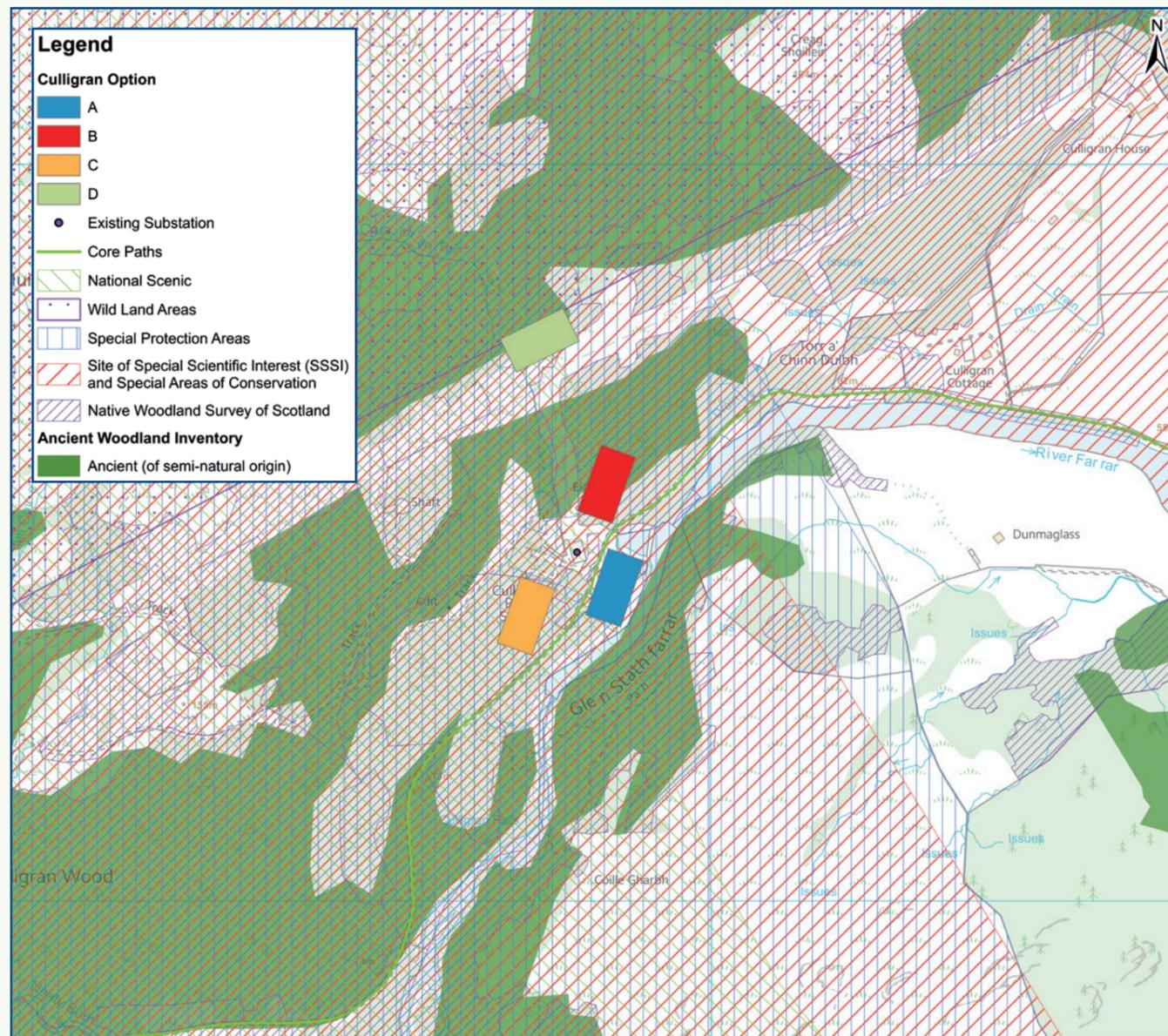
On balance, when considering the engineering, environmental and cost criteria together, the preferred sites to be taken forward to the Stage 2: Detailed site selection process would be site options A, B and D.

# Beaully Cluster site selection search area and options

## Culligran Substation site options

The search area for Culligran is relatively small due to the requirement to be within 1km of the existing Culligran Power Station. The area is defined by the following:

- Site is surrounded by areas of woodland.
- Steep terrain profiles to the north and west of the site options.
- North of the River Farrar (tributary of River Beaully).
- Glen Strathfarrar Road is adjacent to site location.



### Engineering summary

**Site options A and B** are both located close to existing 11kV and 132kV connection points from the existing Culligran Power Station. **Site option A** would have the best access for the construction and transformer delivery. **Site option B and option C** are likely to provide good suitability for earthworks. However, these options are located in close proximity to underground SSE Generation Assets. **Site option A** is space constrained and therefore has insufficient space for a standard site compound as well as having risks associated with earthworks and drainage. **Site option B** would impact on (ancient) woodland and is located on challenging steep topography for the construction of the substation.

**Site options C and D** both offer the potential for site screening as a result of existing woodland. **Site option D** could also remove some existing tee-off towers and overhead line spans currently connecting to the existing substation compound; however this would require additional work to facilitate the new overhead line arrangement. Both these site options would have access challenges for the construction and substation operation. During site construction activities **site option C** could present some minor construction disruption to the existing power station, although this would be programmed to be coordinated with the customer. **Site option D** would require significant outages for reconfiguration of the overhead line and these construction activities would reduce the output of the renewable energy resource. **Site option D** would also require a longer 11kV cable connection which would lead to increased losses for the customer.

Based on the initial technical assessment that has been undertaken, **Site option B and option C** should be considered the preferred options from an engineering perspective to take forward for more detailed investigation.

### Environmental summary

All site options have similar environmental constraints in terms of being located within the Glen Affric to Strathconon Special Protection Area (SPA), Glen Strathfarrar National Scenic Area (NSA) Glen Strathfarrar Site of Special Scientific Interest (SSSI) and Strathglass Special Area of Conservation (SAC).

**Site option A** is located adjacent to the River Farrar and therefore performs worst in terms of hydrology, whereas **site options B, C and D** are preferred in terms of hydrology due to relative location further from the river.

**Site option B** is located within an area of Ancient Woodland Inventory and therefore performs worst in terms of Natural Heritage. **Site option D** is located in a woodland clearing and therefore performs best in terms of least woodland loss. However, this site option performs poorly in terms of landscape and visual impact.

**Site option C** would be the optimal site option for the Environment on the basis that it is in a clearing of woodland (or within lower quality woodland) which allows the site option to be screened as the sites are all within the Glen Strathfarrar National Scenic Area. **Site option A and B** perform similarly in terms of environmental preference for the second site option to be taken forward to detailed site selection.

**Site option A** would perform worst for hydrology due to the location adjacent to the river and **site option B** performs worst for natural heritage and woodland impacts due it this option being located within ancient woodland.

### Summary

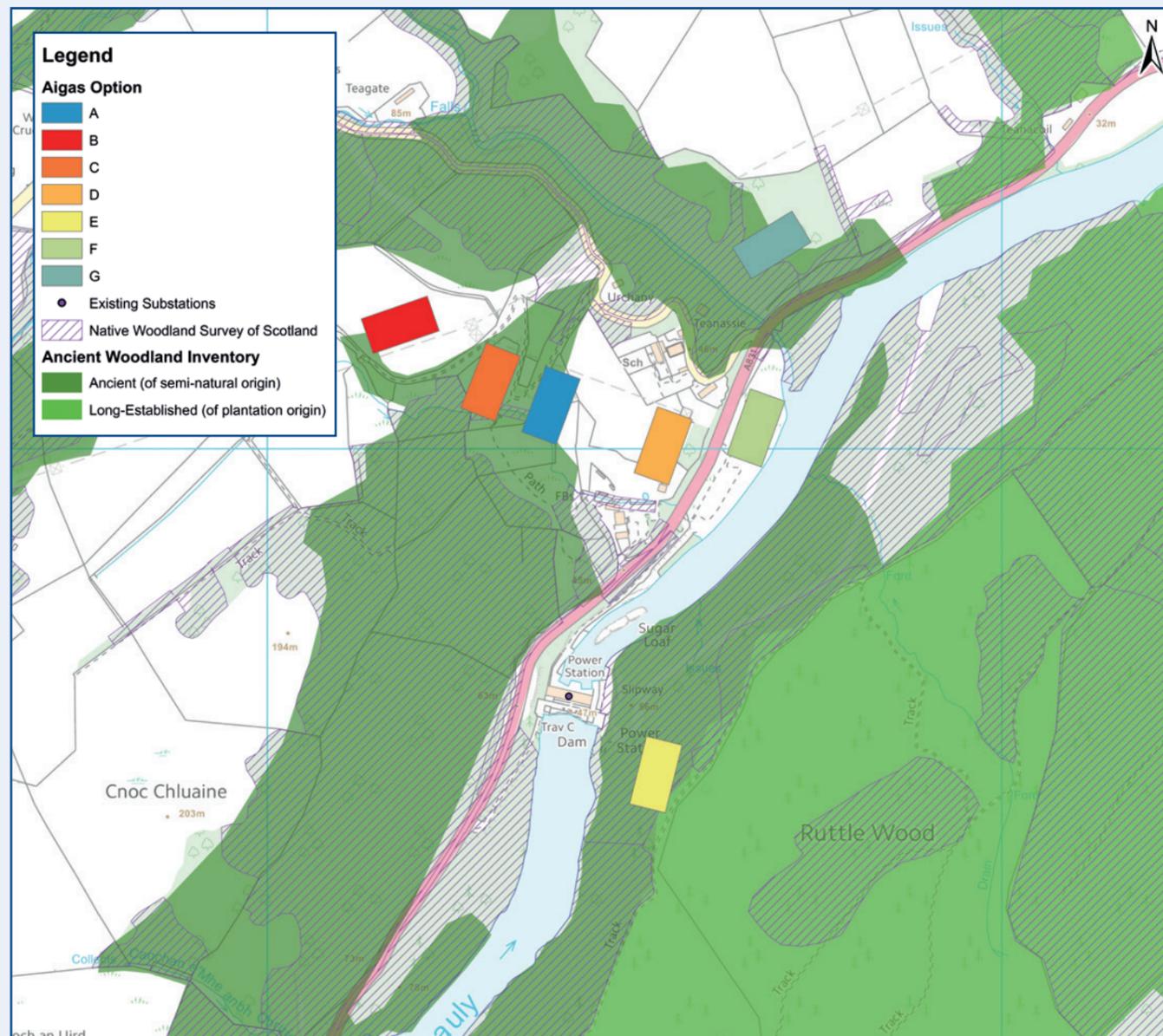
On balance, when considering the engineering, environmental and cost criteria, the preferred sites to be taken forward to the **Stage 2: Detailed site selection** process would be site options A, B and C.

# Beaulay Cluster site selection search area and options

## Aigas Substation site options

The search area for Aigas is relatively small due to the technical constraint requirements to be within 1km of the existing Aigas Dam. The area is defined by the following:

- Located adjacent to the River Beaulay.
- Aigas Dam is located to the south.
- East of the site is a large area of ancient woodland, west of the site is sparse woodland and agricultural land Teanassie Primary School and residential properties site immediately to the north.



### Engineering summary

All site options except site option F have space available for laydown and construction areas. Site options D, E and F are located in close proximity to 11kV and 132kV connection points which allows the best use of existing infrastructure.

Site options A, B, C and G would require an increased length of 11kV cable which would result in more energy losses for the customer.

Major road improvements would be required to access site options A, B, C, E and F. Steep ground conditions are present at site options A, C and E which would cause challenges during the construction of the substation platforms. Site option D is located closest to residential dwellings and Teanassie Primary School.

Site option E would require tree clearance and a connection to the south of the River Beaulay which would be technically complex and potentially unfeasible. Site option F is closest to the River Beaulay and therefore could have flood risk implications as well as there being insufficient space for a standard substation site layout.

A replacement overhead line 'Tee' connection would likely be required to facilitate a new substation location at site option G, which would require additional works and increase the overall construction footprint of this site.

Based on the initial technical assessment that has been undertaken, site option F and option G should be considered the preferred options from an engineering perspective to take forward for more detailed investigation.

### Environmental summary

Site options A, B, C, E and G are located either wholly or partially within areas of ancient woodland and therefore perform worst in terms of Natural Heritage.

Site options D and F are preferred in terms of Natural Heritage.

Site option F is located adjacent to the River Beaulay and therefore performs worst in terms of hydrology. However, this site option performs best in terms of landscape and visual as the site has the potential to be screened. Site option D is located closest to the primary school.

On balance, site option F is the optimal site for the Environment. The second preferred site option would be site option G, even though this site is located on registered ancient woodland. The woodland has been cleared and therefore is characterised as an agricultural field.

### Summary

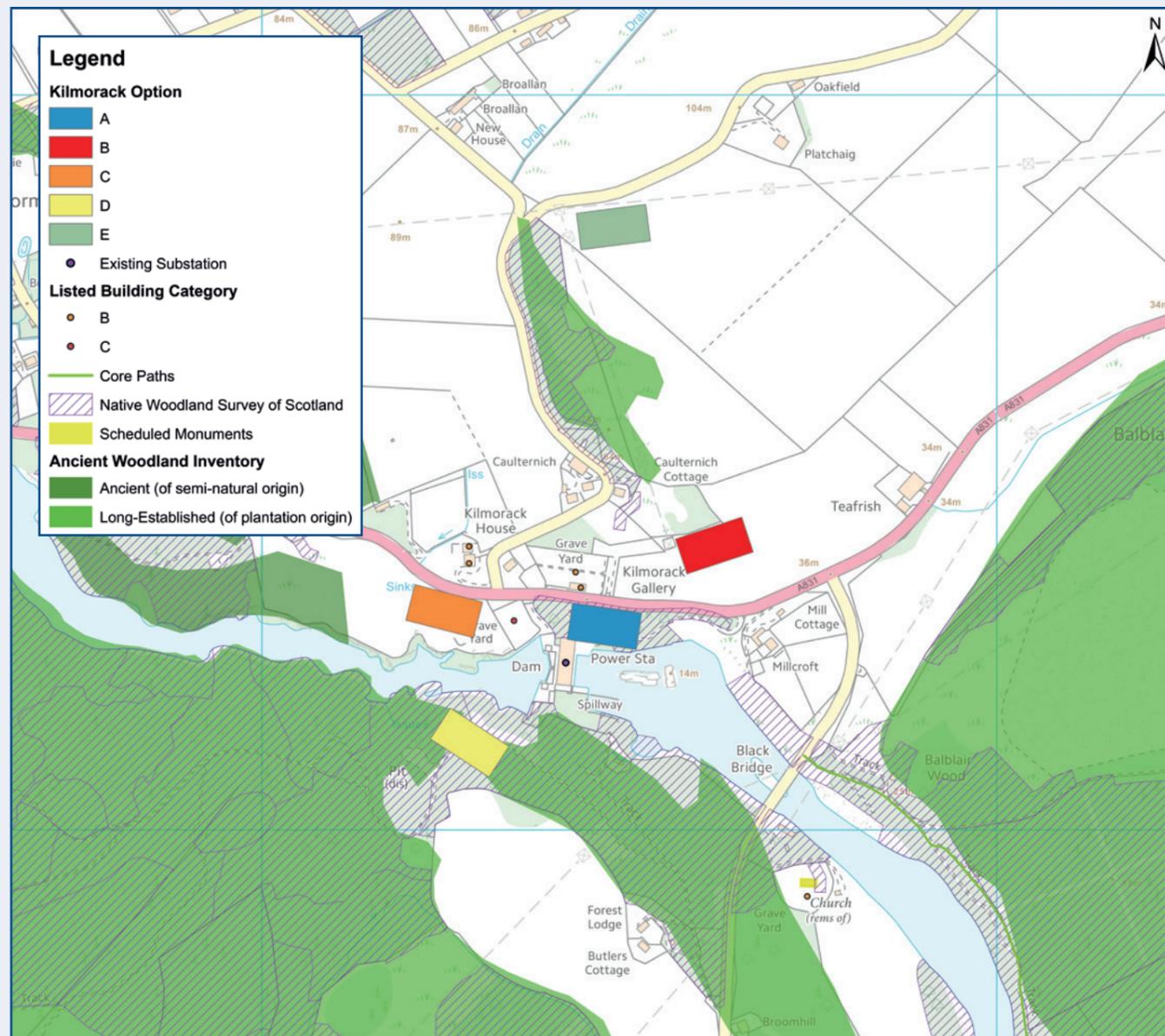
On balance, when considering the engineering, environmental and cost criteria, the preferred sites to be taken forward to the Stage 2: Detailed site selection process would be site options F and G.

# Beaulay Cluster site selection search area and options

## Kilmorack Substation site options

The search area for Kilmorack is relatively small due to the requirement to be within 1km of the existing Kilmorack Power Station. The area is defined by the following:

- Kilmorack Gallery and residential properties in close proximity, located north of the existing Kilmorack substation in a primarily flat area.
- A831 road runs adjacent to the existing Kilmorack substation.
- Surrounding area consisting of agricultural land and small areas of woodland to the north and large woodland area to the south.
- River Beaulay is in close proximity.



### Engineering summary

**Site options A and B** are located in close proximity to existing 11kV and 132kV connection points as well as offering potential screening opportunities. **Site options B, C, D and E** have space available for laydown and construction areas. **Site options C and E** are also suitable for earthworks.

**Site option A** has insufficient space for a standard site compound and works laydown area and may not be technically feasible. This site option would also require significant outage requirements due to the interface with the existing 132kV underground cable.

**Site options A, B, C and D** would require road improvements to facilitate improved construction access for substation platform works and transformer delivery.

**Site option B** is located in close proximity to existing SSE generation assets. **Site option C** lies adjacent to a cemetery, which presents a significant technical constraint that is likely to limit feasible 11kV connection routes.

Further to this, **site option C and E** would require additional work to facilitate a new OHL arrangement. **Site option D** is located to the south of the River Beaulay, in an area of steep topography and would require significant woodland clearance.

Based on the initial technical assessment that has been undertaken, **site option B and option C** should be considered the preferred options from an engineering perspective to take forward for more detailed investigation.

### Environmental summary

**Site option D** performs worst in terms of Natural Heritage Designations, hydrology and geology, recreation and woodland and forestry, as this site option is located within the woodland area to the south of the River Beaulay.

**Site option A** performs worst in terms of visual impact due to the visual intrusion to the graveyard. Whereas **site option D and B** perform best in terms of landscape and visual. **Site option E** conflicts with an existing planning application and therefore would not be considered to be an appropriate site option to take forward.

**Site option B** is the preferred site option in terms of environmental topics as this is located within an agricultural field, thereby having limited impacts to Natural Heritage, Cultural Heritage and woodland loss. The existing woodland has the potential to screen the substation from the properties at Caulternich.

On balance, the preferred site options for environment to be taken forward to the Detailed Site Selection stage would be **site options B and C**.

### Summary

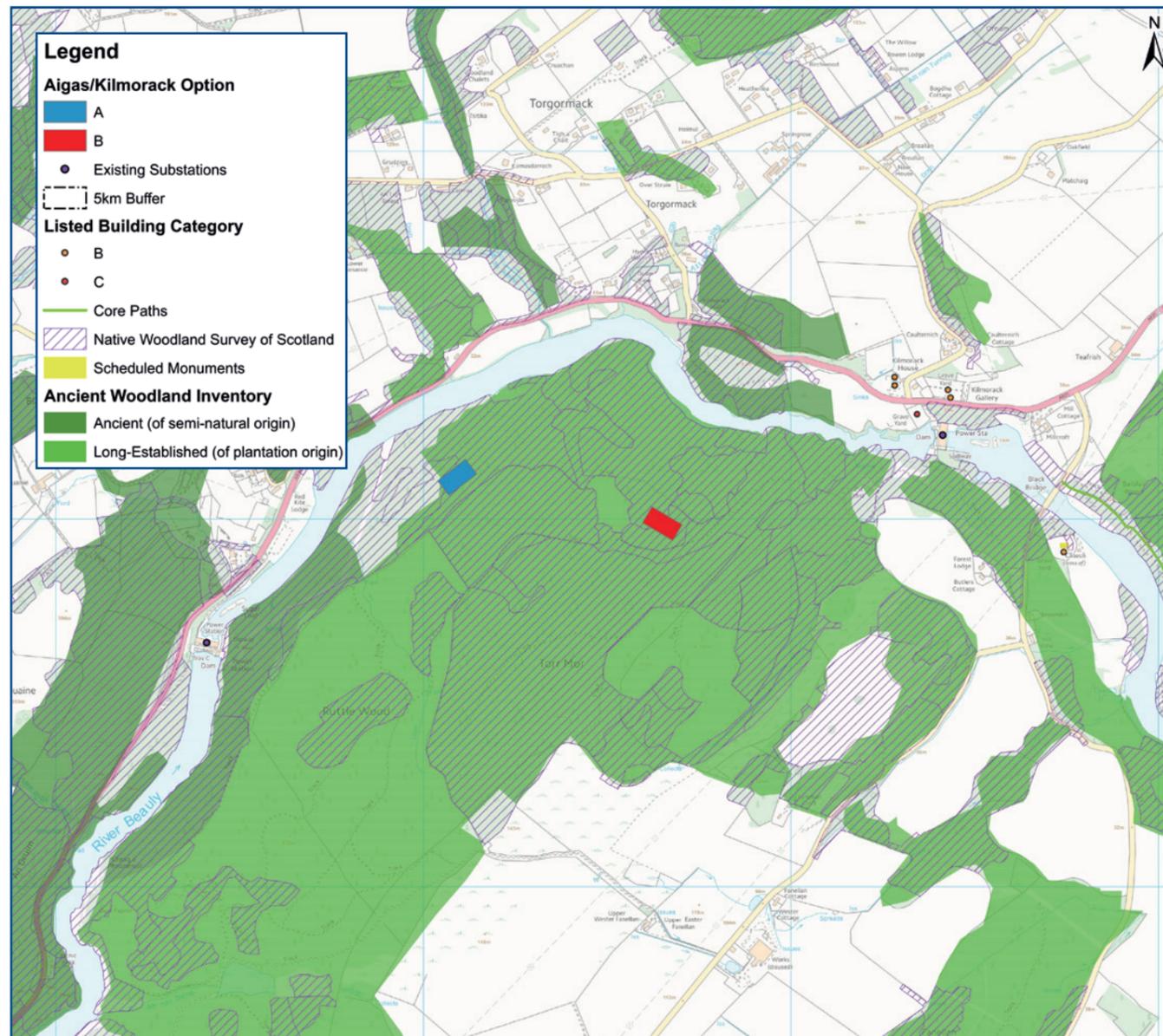
On balance when considering engineering, environmental and cost criteria, the preferred site options to be taken forward to the Stage 2: Detailed site selection stage are **site options B and C**.

# Beaully Cluster site selection search area and options

## Kilmorack and Aigas Combined site options

The search area for Kilmorack and Aigas combined options is 5km, located between the Aigas Dam and Kilmorack Power Station. The area is defined by the following:

- Aigas Dam located to the west.
- Kilmorack Power Station located to the east.
- River Beaully to the north.
- Ancient woodland surrounding the site.
- Torr Mor hill located to the south.



### Engineering summary

During initial project feasibility assessments, the engineering team have considered the option of combining the replacement assets for both Aigas and Kilmorack connections into a single substation platform project.

This approach would have enabled each of the two new Grid Transformers to be located on a single construction site instead of two separate compound areas.

However, feasibility checks have shown that the distance between each of these Power Station locations means that it would not be possible for a common point to be reached between the Generation sites which could also overcome the limitations of an 11kV cable route with high current losses.

Areas south of the River Beaully were considered in detail to assess the viability of such opportunities. In addition to the high losses which limited effectiveness of the generation output, the team also identified significant technical and environmental issues with the approach of constructing any substation platforms south of the river for both Aigas and Kilmorack connections.

This includes some significant safety concerns with construction of the 11kV route across the existing dams and navigating steep terrain on the opposite side of the River Beaully.

### Environmental summary

Both site options A and B have the same rating for environmental categories. In this instance, neither site has a clear advantage over the other in terms of environmental impact. Both site options are located within ancient woodland and to the south of the River Beaully.

It is recognised that any site option in this location would require extensive woodland loss and a crossing of the River Beaully. Therefore, neither site option is considered to be optimal or worthwhile taking forward in terms of the environment.

### Summary

**Due to the extensive losses as a result of the length of the 11kV required, as well as the extensive woodland losses and other environmental and technical difficulties, it was concluded that a combined Aigas and Kilmorack option should not be taken forward to Stage 2: Detailed site selection.**

# How do I have my say?

We understand and recognise the value of the feedback provided by members of the public during all engagements, consultations and events. Without this valuable feedback, the Project Development team would be unable to progress projects and reach a balanced proposal.

We are keen to receive your views and comments with regards to the following questions;

- Has the requirement for the Asset Replacement projects been clearly explained?
- Based on the information provided do you have a preferred site option for Deanie Substation?
- Based on the information provided do you have a preferred site option for Culligran Substation?
- Based on the information provided do you have a preferred site option for Aigas Substation?
- Based on the information do you have a preferred site option for Kilmorack Substation?
- Are there any additional factors, or environmental features that you consider important and should be brought to the attention of the project team?

## Comments

Your views and comments can be provided to the project team by completing the feedback form within this booklet, via the project website or by writing to our Community Liaison Manager.

We will be seeking feedback from members of the public and Statutory Bodies until **1700 hrs, Thursday 21st July 2022**.

All received feedback will be assessed and the proposed options will be adapted where necessary.

## Community Liaison Manager, Sally Cooper

 sally.cooper@sse.com

 07918 470281

 **Sally Cooper**  
Scottish and Southern  
Electricity Networks,  
10 Henderson Road,  
Inverness, IV1 1SN



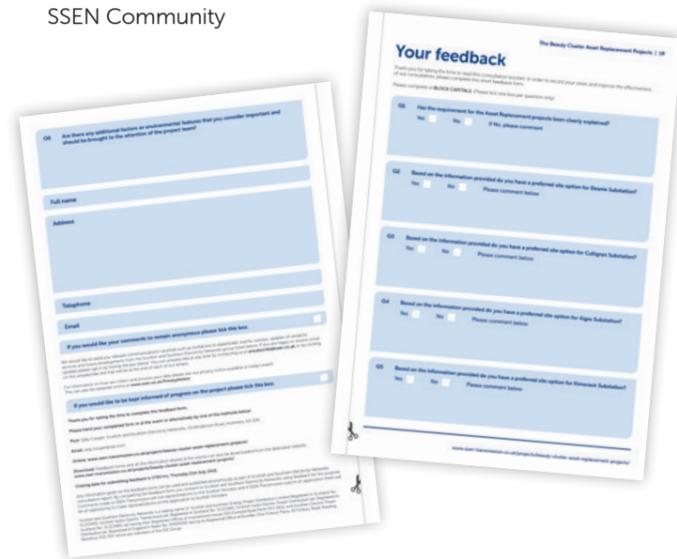
## Additional information

Information will also be made available via the project webpage and social media channels:

**Project website:**  
[www.ssen-transmission.co.uk/projects/beaulay-cluster-asset-replacement-projects/](http://www.ssen-transmission.co.uk/projects/beaulay-cluster-asset-replacement-projects/)

**Follow us on Twitter:**  
@ssetransmission

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SSEN Community



# Your feedback

Thank you for taking the time to read this consultation booklet. In order to record your views and improve the effectiveness of our consultation, please complete this short feedback form.

Please complete in **BLOCK CAPITALS**. (Please tick one box per question only)

**Q1 Has the requirement for the Asset Replacement projects been clearly explained?**

Yes  No  If No, please comment

**Q2 Based on the information provided do you have a preferred site option for Deanie Substation?**

Yes  No  Please comment below

**Q3 Based on the information provided do you have a preferred site option for Culligran Substation?**

Yes  No  Please comment below

**Q4 Based on the information provided do you have a preferred site option for Aigas Substation?**

Yes  No  Please comment below

**Q5 Based on the information provided do you have a preferred site option for Kilmorack Substation?**

Yes  No  Please comment below



**Q6 Are there any additional factors or environmental features that you consider important and should be brought to the attention of the project team?**

**Full name**

**Address**

**Telephone**

**Email**

**If you would like your comments to remain anonymous please tick this box.**

We would like to send you relevant communications via email such as invitations to stakeholder events, surveys, updates on projects, services and future developments from the Scottish and Southern Electricity Networks group listed below. If you are happy to receive email updates please opt in by ticking the box below. You can unsubscribe at any time by contacting us at [unsubscribe@ssen.co.uk](mailto:unsubscribe@ssen.co.uk) or by clicking on the unsubscribe link that will be at the end of each of our emails.

For information on how we collect and process your data please see our privacy notice available at today's event. This can also be obtained online at [www.ssen.co.uk/PrivacyNotice](http://www.ssen.co.uk/PrivacyNotice)

**If you would like to be kept informed of progress on the project please tick this box.**

**Thank you for taking the time to complete this feedback form.**

**Please hand your completed form in at the event or alternatively by one of the methods below:**

**Post:** Sally Cooper, Scottish and Southern Electricity Networks, 10 Henderson Road, Inverness, IV1 1SN

**Email:** [sally.cooper@sse.com](mailto:sally.cooper@sse.com)

**Online:** [www.ssen-transmission.co.uk/projects/beaully-cluster-asset-replacement-projects/](http://www.ssen-transmission.co.uk/projects/beaully-cluster-asset-replacement-projects/)

**Download:** Feedback forms and all the information shared at the events can also be downloaded from the dedicated website; [www.ssen-transmission.co.uk/projects/beaully-cluster-asset-replacement-projects/](http://www.ssen-transmission.co.uk/projects/beaully-cluster-asset-replacement-projects/)

**Closing date for submitting feedback is 1700 hrs, Thursday 21st July 2022.**

Any information given on the feedback form can be used and published anonymously as part of Scottish and Southern Electricity Networks consultation report. By completing the feedback form you consent to Scottish and Southern Electricity Networks using feedback for this purpose. Comments made to SSEN Transmission are not representations to the Scottish Ministers and if SSEN Transmission submit an application there will be an opportunity to make representations on the application to Scottish Ministers.

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