



Supplementary Environmental Information Report

Breezy Hill Energy Project

Breezy Hill Energy Limited

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Basis of Report

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APPENDICES

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Acronyms and Abbreviations

AIA	Arboricultural Impact Assessment
AWI	Ancient Woodland Inventory
BESS	Battery Energy Storage System
BPM	Best Practicable Means
CEC	City of Edinburgh Council
DNO	Distribution Network Operator
DWPA	Drinking Water Protected Area
EASR	Environment Authorisation (Scotland) Regulations
ECow	Ecological Clerk of Works
EIA	Environmental Impact Assessment
ICP	Independent Connection Provider
IGCC	Indicative Grid Connection Corridor
GPP	Guidance for Pollution Prevention
GSP	Grid Supply Point
HEPS	Historic Environment Policy for Scotland
HGVs	Heavy Goods Vehicles
kV	Kilovolts
LCT	Landscape Character Type
LGVs	Light Good Vehicles
LNCS	Local Nature Conservation Site
LVIA	Landscape and Visual Impact Assessment
NBN	National Biodiversity Network
NCN	National Cycle Network
NPF	National Planning Framework
PEA	Preliminary Ecological Appraisal
RAF	Royal Air Force
RPA	Root Protection Area
SEI	Supplementary Environmental Information
SEPA	Scottish Environmental Protection Agency
SPEN	Scottish Power Energy Networks
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest
UGC	Underground cable
WCA	Wildlife and Countryside Act
WLC	West Lothian Council



1.0 Introduction and Background

1.1 Background

Breezy Hill Energy Limited (hereafter referred to as 'the Applicant'), applied to the Scottish Ministers in May 2025 for Section 36 (S36) consent and deemed planning permission, under the terms of the Electricity Act 1989, for permission to construct and operate Breezy Hill Energy Project (hereafter referred to as the 'Proposed Development'), in East Ayrshire, Scotland, at a site centred at British National Grid (248092, 612583).

The application was supported by an Environmental Impact Assessment (EIA) Report (hereafter referred to as 'the EIA Report') as required by The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (the 'EIA Regulations'). The EIA Report was prepared to assess the environmental impacts of the Proposed Development and accompanied the S36 application submitted in May 2025 (Energy Consents Unit (ECU) Reference: ECU00005060).

A Revised EIA Report was prepared and submitted in November 2025 to reflect changes in the positioning of two Turbines (Turbines 2 and 13) and associated infrastructure in order to minimise the forestry felling required.

1.2 Requirement for Further Information

The Proposed Development will require a grid connection from the onsite substation to the New Cumnock electricity substation, which is expected to comprise an underground cable (UCG) and overhead line (OHL). These works will require consent under Section 37 (S37) of the Electricity Act 1989. The S37 consenting process is entirely separate to the S36 consent currently being sought for the Proposed Development.

The S37 consent application will be made by Scottish Power Energy Networks (SPEN) who are responsible for the transmission and distribution of electricity in the Proposed Development area. The S37 application will be required to assess the grid connection route at that time.

The Revised EIA Report (Chapter 2, Paragraph 2.3.62) stated that the Proposed Development would most likely be connected into the Clawfin collector which will connect into the New Cumnock North Substation. to the south of the site from an on-site substation.

An assessment of the grid connection was not included within the EIA Report or Revised EIA Report, as the detailed design and alignment of the proposed grid connection had not been fully developed or finalised by SPEN. The grid connection was at that point, and remains, the responsibility of the transmission network operator who is responsible for the design, routing, land assembly, assessment of environmental effects (including cumulative/in combination effects) and the separate S37 consent process, including public consultation.

However, having regard to recent case law (Raeshaw Farms Limited v Scottish Ministers, 2026¹) and a request from the ECU (refer to **Appendix 1**), this Supplementary Environmental Information (SEI) report (hereafter referred to as the 'SEI Report') provides a proportionate assessment of the likely significant effects of the Proposed Development together with its grid connection (as currently proposed), having regard to the technical and environmental information currently available.

¹ Raeshaw Farms Limited v Scottish Ministers and Energiekontor UK Ltd [2026] CSIH 10 (Scottish Inner House, Court of Session, 17 February 2026). Available at: <https://www.scotcourts.gov.uk/media/t4eds4lr/2026csih10-raeshaw-farms-limited-against-scottish-ministers-and-another.pdf>



It is noted that the final UGC and OHL route will be fixed at a later date and will be required to comply with SPEN's statutory environmental duties as Transmission Operator (TO) under the Electricity Act 1989.

1.3 Approach to Assessment

The Applicant has completed an Indicative Grid Connection Corridor (IGCC) assessment between the Proposed Development site substation and the New Cumnock Substation.

This SEI report provides an overview of the grid connection identified by the Applicant. Information is provided on the grid connection type and the preferred route option (corridor and route alignment) identified by the Applicant, together with a proportionate assessment of likely significant environmental effects of the grid connection in combination with the Proposed Development, based on information available to date. It is noted that the findings of this assessment could be subject to change depending on the final route; and the final connection alignment will be subject to SPEN's own statutory environmental duties under the Electricity Act 1989 and landowner requirements.

This SEI Report follows the same requirements as the EIA Report and Revised EIA Report (refer to Chapter 4 of the EIA Report). Namely, the SEI Report follows the requirements of the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 and relevant good practice guidance.

This SEI Report has been informed by the same legislative and best practice guidelines of core relevance to the EIA process, as those which informed the EIA Report and Revised EIA Report. Chapter 4 of the EIA Report should be consulted for more detail on relevant legislation, policy and guidelines.

The process undertaken to assess environmental effects as reported in this SEI Report follows the EIA process and assessment of effects outlined in Chapter 4 of the EIA Report. The EIA Report should be consulted for more detail on the process and assessment of effects, including assessment of significance, considered in the EIA Report.

1.4 Assumptions

As noted above, the grid connection route and construction type are not certain but are reasonably assumed based on careful review of the information available from work undertaken at the time of writing this SEI Report.

UK case law makes clear that an EIA must address only those environmental effects that are both likely and have a sufficiently certain causal connection to the proposed development. The Supreme Court in *R (Finch) v Surrey County Council* (2024)² emphasised that effects which are uncertain, remote, or speculative fall outside the scope of what the EIA Regulations require. The Court held that only effects that can be demonstrated to arise as a real and identifiable consequence of the development must be assessed, rejecting any approach that rests on "*speculation or conjecture*."

It should be noted that SPEN operates within a statutory and licence framework under the Electricity Act 1989 that places a duty upon them to develop and maintain an efficient, coordinated and economical system of electricity transmission in addition to having regard to environmental impacts and the mitigation of effects of their assets. In this sense, SPEN is duty bound to weigh the network efficiency and economics of connections alongside the environmental factors. Information is not available to the Applicant at this time to inform of the network efficiency and economic factors of the options considered by SPEN.

² *R (Finch) v Surrey County Council and others* [2024] UKSC 20 (UK Supreme Court, 20 June 2024). Available at: <https://supremecourt.uk/cases/press-summary/uksc-2022-0064>



Based on the information currently available, it is assumed that the Proposed Development's grid connection will be the same or similar to that which is outlined within this SEI Report. Although the grid connection route, details of its design and construction are not currently certain, and are not within the control of the Applicant, this assumption is considered to be reasonable and compliant with EIA Regulations, allowing a proportionate assessment of the likely significant effects of the grid connection in combination with the Proposed Development.

Information is not available to the Applicant at this time to inform of the network efficiency and economic factors of the indicative grid route. Instead, an IGCC has been identified which is considered to represent a reasonably likely grid route for assessment purposes at this stage. The Applicant considers this approach to comply with Regulation 4(2) of the EIA Regulations which requires the EIA to “*identify, describe and assess in an appropriate manner, in light of the circumstances relating to the proposed development, the direct and indirect significant effects of the proposed development*” (emphasis added).

1.5 The Applicant

The Applicant is Breezy Hill Energy Limited, a Scotland-based company owned by Brockwell Energy Limited. Brockwell Energy Limited develops, constructs and operates onshore wind, solar and battery energy storage projects. Its portfolio includes the North Kyle Energy Project directly adjacent the Proposed Development in East Ayrshire, as well as several wind energy and energy-from-waste developments across Scotland.

1.6 Availability of SEI Report

Printed copies of the SEI Report are available by request from:

Brockwell Energy Limited
The Eagle Building, Third Floor
19 Rose Street
Edinburgh
EH2 2PR

Email: breezyhill@brockwellenergy.co.uk

Website: <https://www.brockwellenergy.com/projects/breezy-hill-energy/>

A printed copy of the SEI Report will be available to view during opening hours at:

Dalmellington Community Centre
38 Ayr Road
Dalmellington
East Ayrshire
KA6 7SJ

Electronic copies of the SEI Report, including all figures, appendices and accompanying documents are available to view on the project website: <https://www.brockwellenergy.com/projects/breezy-hill-energy/> and can be accessed at <https://www.energyconsents.scot>.

Hard copies of the full SEI Report can be made available at a charge of £50 per copy.



1.7 Representations to the Application

Any representations to the application should be made directly to the Scottish Government at:

Energy Consents Unit

5 Atlantic Quay
150 Broomielaw
Glasgow
G2 8LU

Online: <http://www.energyconsents.scot/> using the relevant Project Name (Breezy Hill Energy Project) or ECU reference number (ECU00005060).

2.0 Proposed Development and Grid Connection Description

2.1 The Proposed Development

The summary introduction to the Proposed Development site (the 'site') as given in Chapter 1 of the Revised EIA Report remains unchanged.

The Proposed Development site comprises a total area of c.1,012 hectares (ha) and is planned to comprise up to 20 wind turbines with a maximum tip height of 149.9 m and a combined generating capacity of up to 100 MW, together with a 40 MW battery energy storage system (BESS), giving a total potential capacity of 140 MW. The development will also include associated infrastructure

The Proposed Development infrastructure layout remains unchanged from that shown on Figure 1.2a-b of the Revised EIA Report (refer also to **Figure 1** of this SEI Report).

The elements of infrastructure associated with the Proposed Development remain unchanged and are described in detail in Chapter 2 of the Revised EIA Report.

2.2 Grid Connection

It is anticipated that the grid connection will be a 132 kV UGC for the section that transits through the existing North Kyle Wind Farm (ECU00001950). This will become an OHL once the connection is approximately three times the rotor diameter away from the nearest North Kyle wind turbine. It is assumed that the OHL will be carried on up to 18 m tall wood H or trident poles, with 70 to 80 m spans.

As set out in **Figure 1**, the IGCC, identified by the Applicant, extends south from the substation of the Proposed Development in East Ayrshire as an UGC, and travels through North Kyle Wind Farm along the access track, before becoming an OHL approximately three times the length the rotor diameter away from the nearest North Kyle wind turbine. It is assumed that the overhead line will take the grid connection the remainder of the distance within the North Kyle Wind Farm boundary, before crossing over the B741 and connecting via a short stretch of UGC to the New Cumnock substation at NS 52025 08103. The approximate distance of the full grid connection is 7 km, with the separate lengths of the UGC and OHL estimated to be approximately 4.7 km and 2.8 km respectively.

It is anticipated that the footprint of the works required to construct the grid connection would be carefully managed within a defined corridor, therefore disturbance of sensitive features would be avoided or minimised as far as possible. This assessment considers a corridor (the IGCC) of 100 m on either side of the proposed underground cable. Appropriate setbacks from the railway line will be maintained.



3.0 Potential Cumulative Schemes

3.1 Cumulative Scheme Summary

The cumulative schemes that are considered potentially relevant to this assessment are shown in **Table 3.1**. These are discussed, as relevant, within the technical sections of this report.

Table 3.1: Potential Cumulative Schemes

Name	Proximity	Description	Status
North Kyle Wind Farm	0 km (surrounding the corridor) and adjacent to the eastern boundary of the Proposed Development	49 wind turbines with a 220.5 MW capacity. The majority of the IGCC travels through the North Kyle site along the access track as an UGC.	Operational
South Kyle Wind Farm	~ 2 km south of New Cumnock substation and ~ 8 km south-east the Proposed Development	50 wind turbines with a 240 MW installed capacity.	Operational
Dersalloch Wind Farm	~ 7 km south-west of the Proposed Development	23 wind turbines with a 69 MW capacity.	Operational
Enoch Hill Wind Farm	~ 3 km east of New Cumnock Substation	15 wind turbines with a 70 MW capacity.	In construction

4.0 Assessment of Likelihood of Significant Environmental Effects

4.1 Introduction and Assumptions

This assessment sets out the pertinent environmental considerations insofar as they can be identified at this stage, acknowledging that a full assessment of environmental impacts will be undertaken by SPEN when the design is finalised, and presented as part of the grid connection S37 application, which will be subject to its own consultation and determination process.

For the purposes of this assessment, it is assumed that SPEN will deliver the grid connection, and that it will do so in its capacity as an electricity licence holder and therefore in accordance with its statutory environmental duties under the Electricity Act 1989. Schedule 9 of the Act requires licence holders to have regard to the desirability of preserving natural beauty, conserving flora, fauna and features of special interest, and protecting cultural heritage. It also requires them to take all reasonable steps to mitigate any adverse environmental effects arising from their proposals. These duties apply to both the design and execution of works, including the installation of overhead or underground electric lines and all associated infrastructure. In practice, this is reflected through established Schedule 9 compliance



processes and the integration of environmental mitigation measures directly into project design and construction ('embedded mitigation'). On this basis, it is reasonable to assume that SPEN would apply recognised best practice construction methods and incorporate appropriate environmental safeguards throughout the delivery of the grid connection.

For decommissioning, all effects are expected to be no greater than those arising during construction. Although not specified by SPEN at this stage, it is assumed that, in accordance with standard practice, the localised sections of UGC would be made safe and left in situ, resulting in limited disturbance during decommissioning.

The following sections provide an assessment of the likely significant effects arising from the construction and operation of the grid connection itself, in combination and cumulatively with the Proposed Development.

4.2 Landscape and Visual

4.2.1 Baseline

For the purpose of providing a high-level assessment of the potential effects of the Breezy Hill Grid Connection, a 1 km study area has been selected. Given that the majority of the grid connection would be underground (approximately 4.7 km) and that the overhead line section of the route (approximately 2.8 km) is assumed to be up to 18 m high with the overhead cable supported on H-section or single trident woodpoles, it is considered that a 1 km study area is a proportionate extent within which potential significant landscape and visual effects may occur.

The Breezy Hill Grid Connection would connect from the proposed Breezy Hill Wind Farm Substation via a combination of an UGC, generally following existing forestry tracks, and OHL from a point to the south-east of the southern-most North Kyle wind turbine into the existing New Cumnock Substation to the east of the B741. The Indicative Grid Connection and Landscape Constraints are illustrated on **Figure 2a** and **2b**.

The landscape of the 1 km study area comprises open, undulating hills with extensive areas of former opencast mineral workings and flooded ponds. Landcover is a combination of areas of open, rough grassland and commercial forestry plantation connected by forestry tracks.

The majority of the 1 km study area is located within Landscape Character Type (LCT) 17a Foothills with Forest & Opencast Mining, as defined in the East Ayrshire Landscape Wind Capacity Study (2024). This describes the LCT as "*an expansive upland plateau with a generally simple landform of gently rounded hills and shallow mossy basins*". It goes on to describe the LCT as having "*occasional more pronounced hills on the south-western edge and include Benquhat Hill which is prominent in views from the upper Doon Valley*", which lies to the immediate west of the study area.

The summary also notes that "*landcover is dominated by extensive coniferous forestry and with some grass moorland and moss although excavations, large spoil heaps and lagoons from former and current mine workings are clearly evident on the outer fringes of this plateau and these give this landscape a fragmented and degraded character. These uplands are very sparsely settled and their interior is not readily visible from public roads and settlement in the surrounding area.*"

Towards its south-eastern end, the 1 km study area extends across a small proportion of LCT 20c Southern Uplands & Forestry. This area is characterised as an upland area of forested rounded hills.

The character of both these LCTs is strongly influenced by a combination of the operational North Kyle Wind Farm and existing electricity infrastructure comprising an overhead line with steel lattice pylons that passes through the existing North Kyle Wind Farm and connects into New Cumnock Substation, located to the east of the B741.



In terms of landscape designations, the Doon Valley Sensitive Landscape Area (SLA) overlaps the southern edge of the 1 km study area between Benbraniachan and Benbeoch. No other landscape designations are present within the 1 km study area.

The B741 connecting Dalmellington to the south-west of the 1 km study area and New Cumnock to the north-east of the study area, passes through the south-eastern part of the study area.

There are no residential properties located within the 1 km study area apart from Clawfin that is located to the south of the B741 near Clawfin Bridge.

4.2.2 Assessment of Likelihood of Construction/Installation Effects

Construction/installation of the UGC section of the grid connection between the proposed Breezy Hill Wind Farm Substation and the end of the UGC to the south-east of the southern-most North Kyle wind turbine would cause some temporary disturbance. However, given the small footprint of construction works associated with the UGC, the short-term duration of landscape and visual impacts resulting from the presence of construction machinery, construction traffic and activities, it is considered that there is no potential for significant effects to the landscape character of LCT 17a.

Construction/installation of the OHL section of the grid connection from a point to the south-east of the southern-most North Kyle wind turbine and the existing New Cumnock Substation would cause some temporary disturbance. However, given the type of OHL (woodpole H or single trident pole) and its modest height (up to 18 m), the small footprint of construction works associated with the installation of wooden poles and an overhead line, the short-term duration of landscape and visual impacts resulting from the presence of construction machinery, construction traffic and activities, together with the screening provided by adjacent forestry, it is considered there is no potential for significant effects to the landscape character of either LCT 17a or LCT 20c that the connection would cross into for a short distance as it approaches New Cumnock Substation.

In relation to effects on the Doon Valley SLA that overlaps the southern edge of the 1 km study area, the Indicative Grid Connection has been routed to avoid direct impacts on the SLA. Construction/installation of the UGC section of the grid connection between the proposed Breezy Hill Wind Farm Substation and the end of the UGC to the south-east of the southern-most North Kyle wind turbine would cause some temporary disturbance. However, given the small footprint of construction works associated with the UGC, the short-term duration of landscape and visual impacts resulting from the presence of construction machinery, construction traffic and activities, it is considered that there is no potential for indirect significant effects on the SLA.

Construction/installation of the OHL section of the grid connection from a point to the south-east of the southern-most North Kyle wind turbine and the existing New Cumnock Substation would cause some temporary disturbance. However, given the type of OHL (woodpole H or single trident pole) and its modest height (up to 18 m), the small footprint of construction works associated with the installation of wooden poles and an overhead line, the short-term duration of landscape and visual impacts resulting from the presence of construction machinery, construction traffic and activities, together with the screening provided by adjacent forestry, it is considered there is no potential for significant effects on the SLA.

In terms of visual effects, the construction/installation of the UGC section of the grid connection between the proposed Breezy Hill Wind Farm Substation and the end of the UGC to the south-east of the southern-most North Kyle wind turbine would cause some temporary disturbance. However, given the small footprint of construction works associated with the UGC, the short-term duration of visual impacts resulting from the presence of construction machinery, construction traffic and activities that would take place against a visual baseline that is strongly



influenced by the operational North Kyle Wind Farm and existing electricity infrastructure, it is considered that there is no potential for significant visual effects occur.

Road users travelling along the B741 would experience glimpsed views of construction of the OHL section of the grid connection for a short section of the road to the north-east of Clawfin and as the overhead line crosses the road as it approaches New Cumnock Substation. However, existing views over this section of the road are influenced by the presence of an existing overhead line on steel lattice pylons that crosses the road at this location and connects into New Cumnock Substation and the operational North Kyle wind turbines. Views would also be limited by the extent of adjacent forestry plantation that would provide partial screening of views.

Given the small footprint of construction works associated with the OHL, the short-term duration of visual impacts resulting from the presence of construction machinery, construction traffic and activities that would take place against the baseline visual context that is strongly influenced by the existing North Kyle Wind Farm and existing electricity infrastructure, it is considered that there is no potential for road users to experience significant visual effects.

Due to the residential property of Clawfin being located over 1.3 km to the south-west of the point where the OHL crosses the B741 and the level of intervening screening provided by areas of the forestry plantation, it is considered that there is no potential for residents to experience significant visual effects during either construction of the UGC or OHL.

During construction, standard good practice including limiting the width of the working corridor, minimising vegetation removal, and ensuring prompt reinstatement of disturbed ground would help to reduce the short-term visual intrusion associated with the construction of the wind farm grid connection.

The contribution of the additional landscape and visual effects associated with the grid connection construction are not likely to be such that there would be the potential for combined significant effects, when considered together with the Proposed Development construction.

4.2.3 Landscape Restoration, Mitigation and Enhancement

Disturbed ground would be reinstated to original condition. In the case of any trees requiring to be felled, these would not be reinstated beneath the OHL. There are no proposed enhancement works for the grid connection route.

4.2.4 Assessment of Likelihood of Operational Effects

The approximate 4.7 km UGC section of the grid connection, that would generally follow existing forestry tracks, would be largely imperceptible in the landscape during operation, as the ground would have been reinstated to baseline conditions and is not anticipated to give rise to the potential for any significant landscape or visual effects.

Referring to **Figure 6.1.1**, the approximate 2.8 km OHL section of the grid connection would be theoretically visible from a small part of the north-eastern edge of the Doon Valley SLA to the south-east of Benbeoch. It would be seen as a small additional feature in a part of the SLA where the landscape has been disturbed by past mining activities. As such, it is not anticipated to give rise to the potential for any significant indirect effects to the SLA.

The approximate 2.8 km OHL section of the grid connection would be perceptible in a small part of the landscape and would also be perceived by road users travelling along the B741. However, it would be located within an area that is strongly influenced by the presence of the operational North Kyle Wind Farm and existing electricity infrastructure. It would be seen as a small additional feature compared with the scale of the adjacent North Kyle wind turbines and given the short length of route, it would not have a material impact upon the two LCTs it is located within and it is not anticipated to give rise to the potential for any significant landscape and visual effects.



4.2.5 Potential for In-Combination or Cumulative Effects

There are no in-combination operational effects anticipated between the proposed Breezy Hill Wind Farm and the approximate 4.7 km UGC section of the grid connection due to it being underground.

There is the potential for in-combination and cumulative operational effects between the proposed Breezy Hill Wind Farm, North Kyle Wind Farm and the approximate 2.8 km OHL section of the grid connection as illustrated by the ZTV on **Figure 6.1.2**. This would be limited to an approximate 1 km section of B741 in the vicinity of New Cumnock Substation.

This would be experienced as a fleeting, glimpsed view by those travelling along the road. However, given the low height of the OHL section (assumed up to 18 m) compared to the height of the proposed Breezy Hill wind turbines and the operational North Kyle wind turbines (149.9 m to blade tip) it is considered that it would be existing and proposed wind turbines that would contribute the majority of the effect and that the OHL section of the grid connection would not have the potential to introduce a significant cumulative effect.

4.3 Ecology

4.3.1 Baseline

4.3.1.1 Designated Sites

Doon Valley Wetlands Site of Specific Scientific Interest (SSSI) is the only statutory designated site containing habitat related, or botanical, qualifying features within 5 km of the Site (noting that the Benbeoch SSSI near the Site is designated for geological interest). The designation of Doon Valley Wetlands SSSI merges the former Dalmellington Moss and Bogton Loch SSSIs, extending them to take in the wider floodplain fen habitat of the area, covering more than a square mile. The site is designated for flood-plain fen, open water transition fen and raised bog.

There are 12 Local Nature Conservation Sites (LNCS) within 5 km of the route, that are designated (wholly or partially) for habitat related, or botanical, interests. The available summary details^{3,4} of these LNCS are presented in **Table 4.1** and shown on **Figure 3**.

There is no ancient woodland (as present on the Ancient Woodland Inventory⁵) along the route, but there are several areas of ancient woodland within 5 km. The closest stand to the route is located approximately 0.7 km south of the route (**Figure 3**).

Table 4.1: LNCS within 5 km of the Site

LNCS	Distance from Site	Description
Benbeoch / Pennyvennie Glen	0.2 km	Botanically rich grassland and woodland with rare plants. Mostly open grassland habitat. Botanical interest lies in the vegetated ledges, scree and boulders of Benbeoch Craig which is surrounded by acidic grassland. Pennyvennie Glen contains

³ East Ayrshire Council (2024). Local Nature Conservation Sites: Draft Non-statutory Planning Guidance, <https://www.east-ayrshire.gov.uk/Resources/PDF/P/planning-nspg-local-nature-conservation-sites.pdf>.

⁴ Scottish Government (2026). Local Nature Conservation Sites – Scotland, <https://www.data.gov.uk/dataset/c3460656-74ab-435a-8f77-9a528e24beb1/local-nature-conservation-sites-scotland>.

⁵ Available on Scotland's Environment Map: <https://www.environment.gov.scot/maps/scotlands-environment-map/> [Accessed: June 2026]



LNCS	Distance from Site	Description
		semi-natural gorge woodland of upland character of birch, alder and ash with good shrub and ground layers.
Cumnock Burn / Pennyvenie Burn	0.7 km	The grasslands in the west of the site, south of the B741 are a mosaic of improved, poor semi-improved and marshy grasslands, some of which contain scattered scrub or broadleaf trees. Much of the land in this area is grazed by sheep therefore species indicative of improvement are widespread. Tree species present in these grasslands include beech, oak, silver birch and horse chestnut, however large areas of rhododendron are also present.
Martyrs' Moss	1.4 km	This site comprises an area of upland habitats including bog, heathland and commercial forestry. Areas of scrub are to the north and east boundary, and Black Water runs along the north boundary. Beoch Lane burn runs along the south and east of the site. A minor road and farm are to the south of the site
Benquhat Hill	1.6 km	Botanically rich grassland with rare plants, birds and butterflies. Dunaskin Glen is a steep-sided gorge with scattered scrubby woodland of upland character, rich ground flora and species-rich ledges and flushes. Benquhat Hill is a good example of upland grassland with rock outcrops supporting a good variety of mosses, lichens and uncommon ferns.
Doon Valley Wetlands	3.2 km	A range of mire and fen communities covering a sizeable area along the River Doon between Waterside and Bellsbank. Includes Bogton Loch SSSI (standing water, fen carr and flush habitats) and Dalmellington Moss SSSI (raised mire, swamp and tall herb fen).
Dalmellington Town Common	3.3 km	This site comprises grasslands and two small sections of scrub woodland in the north-west and south-east. There is a small watercourse within the south-east, and a minor road through the centre.
Rankinston Scrub, Water of Coyle	3.8 km	This site comprises agricultural fields, and scrub (hawthorn, blackthorn, gorse, willow) with scattered broadleaf woodland and Water of Coyle from the south to north. A disused railway also crosses the site.
Craigengillan / Ness Glen Woodland	4 km	A variety of woodland types including semi-natural.
Dunaskin Ironworks	4.3 km	This site is predominantly a broadleaf semi-natural woodland comprised of mature and semi-mature silver birch, hawthorn, ash, sycamore, willow and beech trees. Scattered through the south-east of the site are areas of bare ground, scrub and ephemeral / short perennial which are remnants of the ironworks activities within the site. Species gradually colonising these areas include bird's-foot trefoil, clover, willow, wild strawberry, wood rush, dandelion, red campion, daisy, rosebay willowherb, all of which are moving in from the surrounding woodland.
Auchenroy / Glenmount Uplands	4.4 km	Part of an extensive site with variable habitat interest including large tracts of <i>Molinia</i> grassland, but also substantial areas of blanket bog with good representation of dry acid grassland.
Belston Loch	4.6 km	This site comprises of an area of wetland habitat, with scrub and trees to the west and grassland surrounding the loch. Taiglum Burn runs into the loch and small buildings are present to the



LNCS	Distance from Site	Description
		north. Loch with surrounding swamp, willow carr and marshy habitat types.
Bow Burn	5 km	Semi-natural birch/alder woodland along steep banks of the burn. Some mature oak and pine. The wood is open to grazing which has impoverished the ground flora and prevented regeneration although there remains a good shrub layer.

4.3.1.2 Habitats

Adjacent Developments

Habitat surveys undertaken for the North Kyle Wind Farm⁶ in 2018 identified that the site was predominantly comprised of coniferous plantation woodland (covering 42.65% of the Site), recently felled coniferous woodland (15.46 % of the Site), spoil (10.96 % of the Site and mine (10.4 % of the Site). Other main habitats distributed across the Site included marshy grassland (5.84 %), bare ground (3.86%), blanket bog (3.46 %), wet modified bog (2.4 %) and unimproved acid grassland (1.55 %).

Blanket bog and wet modified bog habitats were made up of NVC communities M2, M3, M18, M19, M20, and M25 (specifically community level and the M25a sub-community). A relatively small number of areas of M18 blanket bog were recorded, which generally represent the best examples of blanket mire vegetation within the study area. The largest and highest quality area of M18 was recorded in the southwest study area, west of Greengate Rig. A high concentration of small, isolated and fragmentary stands of M19 blanket bog were recorded in the southwest of the Site, in the vicinity of Headmark Moss. It should be noted that the proposed IGCC area largely overlaps with the area surveyed in 2018, with the greatest extent of overlap occurring in the southern section of the Site.

NVC surveys were also undertaken at the adjacent Breezy Hill Wind Farm⁷, with the earliest surveys carried out in October 2017 and the most recent in March 2025. A similar range of habitats were recorded, including extensive coniferous plantation woodland and clear fell. There were also smaller isolated patches of degraded blanket bog, including M3, M18 and M19 NVC communities and wet modified bog, comprising M20 and M25a⁸.

4.3.1.3 Protected Species

Adjacent Developments

Surveys carried out between 2020 - 2024 for Breezy Hill Wind Farm⁸ recorded presence of the following protected species: badger (*Meles meles*), otter (*Lutra lutra*), pine marten (*Martes martes*), red squirrel, water vole (*Arvicola amphibius*) and bats (soprano pipistrelle (*Pipistrellus pygmaeus*), common pipistrelle (*Pipistrellus pipistrellus*), Nyctalus spp., Myotis spp., Daubenton's (*Myotis daubentonii*) and Natterer's (*Myotis nattereri*)).

Protected features included four badger setts (one main sett, one subsidiary sett, one annex or subsidiary sett and one outlier badger sett) and several features with the potential for use by hibernating reptiles.

⁶ Brockwell Energy (2019). North Kyle Energy Project :Environmental Impact Assessment Report, Volume 2: Main Report

⁷ MacArthur Green (2025). Breezy Hill Energy Project: NVC & Habitat Survey Report.

⁸ MacArthur Green (2025). Breezy Hill Energy Project: Protected Species Survey Report



Surveys carried out between 2017 - 2023 for North Kyle Wind Farm⁹ recorded the following protected species: badger, otter, pine marten, red squirrel, water vole, and bats (soprano pipistrelle, common pipistrelle, Nathusius' pipistrelle (*Pipistrellus nathusii*), Leisler's (*Nyctalus leisleri*), noctule (*Nyctalus noctula*), Daubenton's, Natterer's, whiskered (*Myotis mystacinus*), Brandt's (*Myotis brandti*), and brown long-eared (*Plecotus auritus*)

Protected features included numerous badger setts, two potential pine marten dens, potential otter resting sites, a number of potential water vole burrows, and several features with the potential for use by hibernating reptiles.

Online search

A search of the National Biodiversity Network (NBN) Atlas Scotland¹⁰ confirmed the following protected or notable species were recorded between 2011-2026 within 5 km of the IGCC¹¹: adder (*Vipera berus*)¹², common lizard (*Zootoca vivipara*)¹³, common toad (*Bufo bufo*)¹², otter¹⁴, palmate newt (*Lissotriton helveticus*)¹¹, red squirrel (*Sciurus vulgaris*)¹⁵, soprano pipistrelle¹⁴.

The NBN Atlas Scotland search also returned records of the invasive non-native species: grey squirrel (*Sciurus carolinensis*), Himalayan balsam (*Impatiens glandulifera*) and rhododendron (*Rhododendron ponticum*).

4.3.1.4 Summary for IGCC

The IGCC does not pass through or run adjacent to any national or international statutory designated sites, with the nearest SSSI, Doon Valley Wetlands SSSI, approximately 3.5 km south-west. The nearest LNCS, Benbeoch / Pennyvennie Glen, is approximately 0.2 km south, with nearest ancient woodland 0.7 km south at Pennyvennie Glen.

For the majority of the route, the IGCC follows the North Kyle wind farm access track. Habitats within a 500 m corridor of the route comprise conifer plantation and scattered conifer trees (46%), recently felled coniferous woodland (14%), unimproved acid grassland (10%), unimproved neutral grassland (4%), marshy grassland (3%), tall ruderal (3%) and acid dry dwarf shrub (2%) (**Figures 3.1-6**). Other habitats recorded cover less than 1% of the 500 m corridor, including blanket bog (9.8 ha / 0.21%) and wet modified bog (7.8 ha / 0.13%). Areas that have not been covered in previous surveys totalled 16%; from aerial imagery/OS maps these look to comprise similar habitats, with large areas of conifer plantation, marshy grassland and some bog habitats.

Habitats within the IGCC have the potential to be used by protected species including badger, otter, pine marten, red squirrel, water vole, reptiles and numerous bat species. No protected features have been recorded within a 500 m corridor of the IGCC route; pine marten scat and features to support hibernating reptiles were recorded (**Figure 3.7**).

⁹ MacArthur Green (2019). North Kyle Energy Project: Protected Species Survey Report

¹⁰ NBN Atlas Scotland (2026). Online. Available at: <https://nbnatlas.org/> [Accessed: June 2026].

¹¹ Licence details are found at <https://creativecommons.org/licenses/by/4.0/> (CC-BY) and <https://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/> (OGL) [Accessed June 2026].

¹² Licence Creative Commons with Attribution 4.0 (CC-BY). Recorder: Amphibian and Reptile Conservation, and Biological Records Centre.

¹³ Licence CC-BY. Recorder: Amphibian and Reptile Conservation, and Biological Records Centre, and Scottish Wildlife Trust.

¹⁴ Licence Open Government Licence (OGL). Recorder: Scottish Natural Heritage.

¹⁵ Licence CC-BY. Recorder: Scottish Wildlife Trust



4.3.2 Assessment of Likelihood of Construction/Installation Effects

Given the scope of works and the distance of the IGCC to the Doon Valley Wetlands SSSI, there is no potential for significant effects on this site or its qualifying interests as a result of the construction/installation of the UGC/OHL.

The closest stand of ancient woodland is Pennyvenie Glen, approximately 0.6 km south of the IGCC (**Figure 3**). Given the distance from works and adherence to standard/best practice mitigation, including measures for pollution prevention, no significant effects on ancient woodland are anticipated.

There is potential for direct and indirect effects on protected species due to the construction of the IGCC, such as loss of life; loss of key habitat; displacement from key habitat; general disturbance; population fragmentation; degradation of key habitat. Works would be undertaken in accordance with industry good practice construction measures, guidance and legislation. Pre-construction surveys would be carried out to consider the potential for direct encroachment on protected species features and important habitats, and a suitably qualified Ecological Clerk of Works (ECoW) would be appointed to advise on ecological matters. With this standard mitigation in place, the location of the works (which primarily follows alongside the existing North Kyle access track so is already disturbed ground) and the temporary nature of the works, no significant effects on protected species are expected.

The most tangible effect during construction of the IGCC would be direct habitat loss due to the construction of infrastructure including tower foundations, associated tower construction compound areas and excavation for the UGC. Over time there may also be some potential indirect habitat losses or modifications to wetland habitats due to drainage effects. Tower construction compounds would be restored at the end of construction and trenches excavated for installing UGC would be backfilled and habitat reinstated where feasible. Tower foundations would be buried and soil/habitat reinstated above the buried foundations, so that only the four leg supports at each would be remaining above ground and result in permanent loss of habitat.

The footprint of the construction/excavation works would be restricted in extent to minimise disturbance of habitats and undertaken in accordance with relevant best practice construction techniques. Areas of habitats with conservation interest along the route, including blanket bog and wet modified bog, would be avoided where possible through micro-siting.

Given the habitats present and the largely temporary nature of the works, with appropriate standard mitigation in place, it is not considered that there is potential for significant effects on habitats as a result of the construction of the IGCC.

4.3.3 Assessment of Likelihood of Operational Effects

No significant operational effects on ecology are predicted. Effects may occur during routine maintenance activities throughout the period of operation, however, it is assumed that mitigation measures will be applied as required, and so unlikely to lead to significant operational effects.

4.3.4 Potential for In-Combination or Cumulative Effects

No significant in-combination or cumulative effects on ecology are anticipated on the basis that all necessary mitigation measures would be implemented.



4.4 Ornithology

4.4.1 Baseline

4.4.1.1 Designated Sites

There are no statutory designations within the Site, however the Indicative Grid Connection Corridor (IGCC) is within 20 km of one SPA and three SSSIs, as listed below:

- Muirkirk and North Lowther Uplands SPA (underpinned by Muirkirk Uplands SSSI), approximately 14.5 km from the IGCC and designated for breeding golden plover, hen harrier, merlin, peregrine falcon and short-eared owl; non-breeding hen harrier; and a breeding bird assemblage (SSSI only).
- Bogton Loch SSSI, approximately 4.5 km from the IGCC and designated for a breeding bird assemblage.
- Merrick Kells SSSI, approximately 16.6 km from the IGCC and designated for a breeding bird assemblage.

The foraging ranges of the qualifying features listed as breeding on the Muirkirk and North Lowther Uplands SPA range from between 2 km to 11 km (SNH 2016¹⁶). On the basis of distance, there is considered to be no potential connectivity with the IGCC and the SPA is therefore scoped out of the assessment due to a lack of likely significant effects. For similar reasons Merrick Kells SSSI can also be scoped out of the EIA assessment.

4.4.1.2 Adjacent Developments

Baseline ornithology surveys for North Kyle Wind Farm (2016 to 2018) and Breezy Hill Wind Farm (2020 to 2024) provide a robust understanding of the species present in the area around the IGCC, as summarised below.

Black Grouse

Black grouse were identified to be lekking at six lek sites with a maximum of two males recorded at any one lek (**Table 4.2**, North Kyle EIAR Figure 8.1.29 and Breezy Hill EIAR Figure 7.7).

Table 4.2: Black grouse lek activity

Lek	2017	2018	2020	2021	2024	Within 750 m of the Indicative Grid Connection
1	1 male	1 male	Not surveyed	Not surveyed	Not surveyed	No
2	No grouse	1 male, 1 female	No grouse	No grouse	No grouse	Yes
3	No grouse	1 male	2 males	0 males	0 males	Yes
4	No grouse	1 male	1 male	0 males	0 males	No
5	No grouse	1 male	Not surveyed	Not surveyed	Not surveyed	No
6	No grouse	No grouse	1 male	0 males	0 males	Yes

¹⁶ Scottish Natural Heritage (2016). Assessing connectivity with Special Protection Areas (SPAs). Version 3. Available at: <https://www.nature.scot/doc/assessing-connectivity-special-protection-areas>



Schedule 1 Raptors and Owls

Peregrine falcon, goshawk, barn owl and osprey are all known to be breeding in the area (Table 4.3, North Kyle EIAR Confidential Figure 8.2.1 and Breezy Hill EIAR Confidential Figure 7.2.1).

Hen harrier, merlin, hobby, golden eagle, red kite and short-eared owl were infrequently recorded with no evidence of breeding or roosting.

Table 4.3: Schedule 1 raptor and owl breeding activity

Nest	Species	Activity summary	Within 750 m of the Indicative Grid Connection
BO_1	Barn owl	2017 and 2018: unconfirmed breeding within a nest box 2020, 2021 and 2024: not checked location outwith Breezy Hill survey area	No
BO_2	Barn owl	2017 and 2018: unconfirmed breeding within a nest box 2020, 2021 and 2024: not checked location outwith Breezy Hill survey area	No
PE_1	Peregrine falcon	2017 and 2018: possible roosting location for non-breeding birds. 2020, 2021 and 2024: no evidence of ongoing use for roosting (or breeding)	Not relevant – no breeding activity
PE_2	Peregrine falcon	2017: territory occupied. 2018: breeding confirmed 2020: no evidence of breeding 2021: territory occupied Location indicated by raptor study group to be a known territory.	Yes
PE_3	Peregrine falcon	2017: breeding probable 2018: breeding confirmed 2020, 2021 and 2024: not checked location outwith Breezy Hill survey area	No
PE_4	Peregrine falcon	2017: breeding confirmed 2018: quarry face no longer present – was dug out as part of ongoing opencast works in consultation with licenced ornithologist.	No
GI_1	Goshawk	2017: no activity 2018: confirmed breeding	No
GI_1.1	Goshawk	2020 and 2021: no activity 2024: potential breeding activity This is considered to be an alternative nesting location to GI_1 within the same territory.	No
GI_2	Goshawk	2017: no activity 2018: potential breeding 2020, 2021 and 2024: no evidence of breeding.	No
OP_1	Osprey	2024: confirmed breeding.	No



Nest	Species	Activity summary	Within 750 m of the Indicative Grid Connection
		Nest platform was installed following a successful nest establishing in 2023 (this nest was removed as part of ongoing construction).	

Waders

Baseline surveys identified breeding activity for three target wader species: curlew, lapwing and ringed plover. Curlew and lapwing breeding activity was only recorded outwith both developments with activity focussed in the open lowland habitats (North Kyle EIAR Figure 8.1.25) surrounding the developments (and therefore well over 500 m from the IGCC). Ringed plover breeding activity was consistently recorded within both development areas, with activity concentrated around the various waterbodies/bare ground areas associated with the former opencast mine and breeding activity recorded within 500 m of the IGCC (North Kyle EIAR Figure 8.1.25, Breezy Hill EIAR Figure 7.12).

Wintering golden plover were identified to be utilising areas of scrub/bare ground associated with the recently or unrestored surface mine workings (North Kyle EIAR Figure 8.1.26/27, Breezy Hill EIAR Figure 7.12), however no activity is within 500 m of the IGCC.

Dotterel, redshank, ruff and woodcock were infrequently recorded with no evidence of breeding.

Gulls and Wildfowl

Whooper swan, greylag goose and pink-footed goose were infrequently recorded but the development areas (and wider habitat in which they are located) were not considered to form core foraging or roosting areas for these species, nor was the area identified to be situated on a core migratory flight path.

Black-headed, common, herring, lesser black-backed and great black-backed gulls were noted to be present across the baseline survey periods. Activity was strongly associated with the various waterbodies (predominately old mine voids/settlement ponds from the opencast workings), with the waterbody at Gibson's Hill supporting a breeding colony of black-headed, common and herring gull on the islands present on the waterbody.

4.4.2 Environmental Measures Embedded into the Assessment

As detailed in the Breezy Hill EIA Chapter 7: Ornithology (paragraphs 7.7.4 to 7.7.7), the following measures were embedded into the wind farm assessment, and it is assumed that these measures would also be extended to the construction phase of the IGCC.

- ECoW: to ensure all reasonable precautions are taken to comply with environmental legislation relating to safeguarding breeding birds, prior to construction of Breezy Hill Wind Farm the Applicant will appoint a suitably qualified ECoW who will advise the Applicant and the Contractor on all ornithological matters (with the assistance of a suitably qualified/licenced ornithologist if required). The ECoW will be required to be present on Site during the construction period and will carry out monitoring of works and briefings with regards to any ornithological sensitivities on the Site to the relevant staff within the Contractor and subcontractors.
- Bird Disturbance Management Plan (BDMP): the (BDMP) will be implemented during construction of the IGCC and will form part of the CEMP. The BDMP will detail measures to ensure legal compliance and safeguard breeding birds known to be in the area and will include species-specific guidance, such as works exclusion buffers and



temporal restrictions if appropriate. This will include avoiding disturbance to lekking black grouse if required. The BDMP shall include pre-construction surveys and good practice measures during construction. Pre-construction surveys will be undertaken to check for any new breeding bird activity in the vicinity of the construction works. The ECoW will oversee the implementation of the above measures.

4.4.3 Assessment of Likelihood of Construction/Installation Effects

Impact: breeding, foraging, roosting or lekking birds may be displaced from the IGCC during construction, either by disturbance or direct habitat loss.

4.4.3.1 Black Grouse

Black grouse lek activity was identified at three locations within 750 m of the IGCC (**Table 4.2**), and therefore potentially within the disturbance range advised by Goodship & Furness (2022¹⁷). No, or negligible, loss of suitable black grouse lekking, foraging or nesting habitat is predicted.

Black grouse is considered to be of medium-high sensitivity due to its unfavourable conservation status at a national and NHZ level. The BDMP would include provisions to avoid disturbance to lekking black grouse, should pre-construction checks confirm their presence within potential disturbance range (i.e. up to 750 m). This may involve restrictions to vehicular movements or personnel within two hours of dawn during the core lekking period of March to May but the exact timing of restrictions and/or extent of any disturbance-free zone, within which any construction activity that is considered to be potentially disturbing, would be determined by the ECoW.

4.4.3.2 Schedule 1 Raptors and Owls

In general, the IGCC mainly comprises commercial conifer plantation habitat which is of low suitability to most target raptor/owl species. The IGCC is subject to ongoing operational forestry activities (felling and restocking), and therefore species that are present are, to some degree, accustomed to the presence of human activity.

Of the breeding activity detailed in **Table 4.3**, only activity relating to breeding peregrine falcon (PE_2) is within 750 m of the IGCC, which are afforded additional protection from disturbance to breeding being Schedule 1 species, and are considered to be of medium sensitivity, based on their generally favourable conservation status, nationally, and likely within the Natural Heritage Zone (NHZ).

An established peregrine falcon territory is known to be located approximately 550 m from the IGCC. Whilst this section of the IGCC is directly adjacent to the existing tracks associated with the operational North Kyle Energy Project, construction of the IGCC would result in temporarily increased activity compared to the future baseline situation. This nest site would be covered as part of the BDMP to ensure that any breeding would continue undisturbed, and again it is anticipated that information would be gained from pre-construction surveys to understand what, if any, restrictions may be required to avoid disturbance. Loss of suitable habitat within the IGCC for foraging is considered to be negligible, as commercial forestry is likely to be suboptimal for prey species, at least away from forest edges.

4.4.3.3 Waders

Ringed plover were the only target wader species that was recorded breeding within 500 m of the IGCC. Ringed plover is considered by Goodship & Furness (2022¹⁷) to have a high

¹⁷ Goodship, N.M. and Furness, R.W. (MacArthur Green) Disturbance Distances Review: An updated literature review of disturbance distances of selected bird species. NatureScot Research Report 1283.



sensitivity to disturbance, and they recommend a disturbance buffer of 100-200 m. Baseline information suggests that up to four pairs of ringed plover may be found within that disturbance range of the IGCC. Although not a Schedule 1 species, the ECoW would aim to minimise disturbance risks to breeding birds where possible (e.g., via toolbox talks or information signs telling personnel to avoid unnecessary access in that area) and avoid any direct destruction of eggs or chicks. No direct loss of suitable habitat for nesting or foraging ringed plover is anticipated.

4.4.3.4 Gulls

Gulls were not included as any of the 65 bird species that were selected by NatureScot to be part of the Goodship & Furness (2022¹⁷) review of disturbance distances. This is likely to be a reflection of their general tolerance of humans and low susceptibility to disturbance. Despite this, it is possible that in future years gulls may again nest on or adjacent to the Gibson's Hill waterbody, and it would be the case that the ECoW would determine whether any measures are required as part of the BDMP to avoid destruction to nests, eggs or young, and minimise disturbance where possible. No direct loss of suitable habitat for nesting or foraging gulls is anticipated.

4.4.3.5 Bogton Loch SSSI

In their scoping response to Breezy Hill Wind Farm, NatureScot indicated their opinion that there may be the potential for connectivity between the Breezy Hill Wind Farm and Bogton Loch SSSI with regards to breeding black-headed gull. Considering the IGCC is located within a similar distance, consideration of potential effects to the ornithological features of the SSSI as a result of the construction of IGCC is considered here.

Bogton Loch SSSI includes a designation for a 'breeding bird assemblage' (noted to be of 'favourable maintained' condition in June 2009). The SSSI citation notes that there is "*sporadically, a small colony of black-headed gulls*" as part of the breeding bird assemblage."

Black-headed gulls were identified to be breeding on the islands within Gibson's Hill waterbody in 2018 but in more recent years (2020, 2021 and 2024) were only noted to be present in the area.

Furness *et al.* (2013¹⁸) rated black-headed gull as being of low sensitivity to disturbance (albeit in the marine environment, although the species are likely to exhibit similar behavioural characteristics on land). The Gibson's Hill waterbody is located to the west of the IGCC (300 m at its closest point) with clear flight paths between the waterbody and the Bogton Loch SSSI.

As a result, it is not considered that the presence of the IGCC would prevent black-headed gulls (whether or not associated with the Bogton Loch SSSI) from using the waterbody and as such the effects on the sporadic black-headed gull breeding population and overall breeding bird assemblage associated with Bogton Loch SSSI are considered to be negligible and **Not Significant**.

4.4.3.6 Conclusions

Due to the largely unsuitable habitat within the IGCC, direct loss of habitat is considered to be of negligible, short-term magnitude for all Important Ornithological Features (IOFs).

Although it is possible that some IOFs identified above may attempt to breed or lek within potential disturbance distances of construction activities associated with the IGCC, the embedded mitigation measures associated with the BDMP would mean that disturbance

¹⁸ Furness, R. W., Wade, H. M., & Masden, E. A. (2013). Assessing vulnerability of marine bird populations to offshore wind farms. *Journal of Environmental Management*, 119, 56–66.



would be minimised to a level for all IOFs that could be considered of negligible, short-term magnitude within the context of their respective NHZ populations.

As such, it can be reasonably concluded that a negligible and **Not Significant** effect due to construction activities would result for all IOFs.

4.4.4 Assessment of Likelihood of Operational Effects

Impact: birds may be subject to displacement from, or reduced access to, breeding or foraging habitats due to the presence of the overhead line, thereby impacting on breeding success, productivity or survival rates.

The IGCC is proposed to be approximately 60% buried cable and 40% overhead line (**Figure 1**), with the section crossing through Breezy Hill and North Kyle Wind Farms all buried cable. As such, there is considered to be no potential impacts to breeding or foraging birds in proximity to the buried cable section and only the overhead line section is considered further with regards to operational effects. The overhead line section is proposed to be a wooden pole style power line which is likely to be under 10 m in height (minimum height is 5.2/5.8 m¹⁹)

Breeding activity relating to peregrine falcon, ringed plover and black grouse is located within 750 m of the proposed overhead line section. The presence of the overhead line is not considered to result in any habitat loss due to displacement given the overall small area it will occupy, however there is a small risk of birds potentially colliding with the overhead line (especially black grouse, who are known to be poor fliers/are known to collide with deer fences). The overhead line section is not considered to be located in a high flight area (it is not situated between known leks or between breeding and foraging areas), however to minimise the potential for collisions/disturbance, it is proposed that the overhead line section will be designed/constructed in line with the mitigation provided by NatureScot (2025²⁰) which will include but not be limited to:

- Installing line markers (as appropriate) to reduce collisions;
- Undertake maintenance activities outwith the breeding season (broadly between mid-March and August); and
- Using bird friendly designs to minimise electrocution risk.

Considering the above, it can be reasonably concluded that a negligible and **Not Significant** effect due to the operational phase of the grid connection would result for all IOFs.

4.4.5 Potential for In-Combination or Cumulative Effects

Based on the lack of, or negligible effects predicted during all phases on IOFs, it can be reasonably concluded that the IGCC would not make a material contribution to cumulative effects caused by wind farms on their NHZ 19 populations, and as such no cumulative assessment is required.

¹⁹ <https://www.ssen.co.uk/globalassets/power-cuts/safety-docs/overhead-lines/avoiding-danger-from-overhead-power-lines.pdf>

²⁰ NatureScot (2025). Guidance – Assessment and mitigation of impacts of power lines and guyed meteorological masts on birds. Available at: <https://www.nature.scot/doc/guidance-assessment-and-mitigation-impacts-power-lines-and-guyed-meteorological-masts-birds#line-marking>



4.5 Cultural Heritage and Archaeology

4.5.1 Baseline

The IGCC corridor comprises a 500 m buffer around the proposed UGC and overhead line (OHL). The archaeology within this 500 m buffer has been assessed to determine the archaeological potential within the IGCC. For the assets which may be impacted by changes within their setting, a 2 km study area has been implemented (**Figure 5**).

Within the IGCC, there are no World Heritage Sites, Conservation Areas, Scheduled Monuments, Listed Buildings or associated structures, Inventory Battlefields, or Inventory Gardens and Designed Landscapes. There are 16 non-designated heritage assets recorded within the IGCC, primarily concentrated in the south-eastern section. These cultural heritage assets range from the prehistoric and post-medieval periods and include a variety of multi-period land-use along the IGCC, primarily related to agricultural practices and industry.

One prehistoric cairn (**SLR111**) is situated within an area of commercial forestry, to the northeast of the southern extent of the proposed OHL and to the south of the B741. The kerbed cairn is 11 m in diameter and 0.5 m in height. Excavations in 1937²¹ identified at least three cists, a beaker, fragments of three cinerary urns and a ring-marked stone. Forestry and ploughing have displaced the cairn, and there is no record of the asset on historic mapping.

The limited prehistoric activity recorded within the IGCC suggests that there was little to no activity taking place within the upland landscape. The evidence of the burial cairn to the southeast of the IGCC is located within the valley, along a natural route, with no evidence of settlement or occupation within the upland landscape.

Knockreach farmstead (**SLR61**) is located c.0.3 km west of the northern section of the proposed UGC. The post-medieval farmstead was not discernible on historic mapping and has been removed with the quarrying and forestry activity in the area. The earliest evidence of the settlement is on Roy's military survey (1747-55)²², which refers to the site as Knockbetch. Aside from the farmstead's name, there is no record of an enclosure or structure on the 1st edition OS map. It is possible that the farmstead was established in the medieval period and reduced to an extent that no upstanding remains were visible by the time the area was surveyed for Roy's map.

The remains of a post-medieval mining railway line (**SLR70**) are located to the north of the Black Burn, at the section of the OHL where the route deviates towards the east. The railway is associated with the coal quarrying activity to the northeast of the IGCC. There is no record of the railway on historic mapping, but the remains of the tracks are discernible on aerial imagery. To the southwest of the railway tracks are the remains of Benbain coal mine (**SLR118**) and a roofed structure (**SLR119**) likely associated with the mining activity. The coal mine (**SLR118**) and structure (**SLR119**) are recorded on the 1st edition OS Map²³, and later OS mapping in the late 19th and early 20th centuries²⁴. Today, the structure and remains of the coal mine have been removed by ongoing industrial activity.

To the immediate southeast of the kerbed cairn (**SLR111**) are the remains of Knockenlee Burn farmstead (**SLR28**). Recorded on the 1st edition OS Map²⁵ as a ruin, comprising a central

²¹ McLeod, A. G. (1938). 'Excavation of two Bronze Age burial sites in Ayrshire', *PSAS* 72: pp. 235 – 247.

²² Roy, W. (1747-1755). Kirkcudbrightshire, Ayrshire, Lanarkshire (Lowlands), Survey Strip 4/5d. Available at: <https://maps.nls.uk/view/217499578>

²³ Ordnance Survey (1850-57). Ayrshire, Sheet XLVII. Available at: <https://maps.nls.uk/view/74425834>

²⁴ Ordnance Survey (1897). Ayrshire, Sheet XLVII.NW. Available at: <https://maps.nls.uk/view/75496086> and Ordnance Survey (1910). Ayrshire, Sheet XLVII.NW. Available at: <https://maps.nls.uk/view/75496083>

²⁵ Ordnance Survey (1850-57). Ayrshire, Sheet XLVII. Available at: <https://maps.nls.uk/view/74425834>



unroofed square structure and two enclosures to the northwest and southwest. The primary structure is visible on aerial imagery and is primarily located outside the IGCC with the southwestern section within the IGCC.

There are a further nine assets recorded within the IGCC which are not defined by a period, but their character suggests that they are post-medieval in date. This includes six sheepfolds²⁶, which are distributed across the IGCC. Recorded on the 1st edition OS map, the sheepfolds contribute to the pastoral practices which took place in the upland landscape during the post-medieval period.

Furthermore, a fodder store (**SLR64**) is recorded on the 1st edition OS map²⁷ in the eastern part of the IGCC. The storage enclosure has been destroyed by subsequent quarrying activity. The remaining assets can be associated with industrial activity, including two quarry pits (**SLR66** and **SLR117**).

There is one undated mound (**SLR52**) recorded within the IGCC. The mound (**SLR52**) was identified during a walkover survey in 2009 and is likely associated with the quarrying works to the east. The planning application for Burnhead Wind Farm, which includes the EIA chapter related to cultural heritage, is no longer available for viewing on the East Ayrshire planning portal. Accordingly, there is no available description of the mound. Due to its proximity to the quarried areas, it is likely associated with mining activity. However, this should be confirmed with further investigation.

The baseline suggests that the land within the IGCC has been relatively inactive prior to the post-medieval period. Subsequent activity within the IGCC is associated with post-medieval upland agricultural grazing and industrial quarrying, which have been ongoing. Due to considerable changes in the landscape from modern infrastructure associated with the North Kyle Energy Project (ECU00001950) and quarrying, any archaeological remains which would have been present within their footprint will have been removed or damaged from groundworks. However, in relation to the North Kyle Energy Project, any assets which were present within the construction footprint will have been preserved by record as part of a mitigation strategy.

4.5.2 Assessment of Likelihood of Construction/ Installation Effects

Within the c.7 km IGCC, there are no designated cultural heritage assets or non-designated assets that are likely to be considered of high cultural significance.

A 50 m limit of deviation (LoD) has been utilised from the centre line of the proposed route which would account for micro-siting of the UGC and the poles for the OHL. This LoD is based on professional judgement and from considering previous similar projects. The LoD has been used to determine which heritage assets have the potential to have adverse effects from the direct physical impacts.

Throughout the IGCC, there is potential for subsurface archaeological remains, most likely related to post-medieval agricultural and industrial activities, including sheepfolds and quarries. The evidence of prehistoric funerary remains to the southeast of the IGCC suggests there may be potential for further activity and/or settlement in the upland landscape to the north.

Whilst these remains could be subject to direct physical impacts as a result of construction works, the resulting effects are unlikely to be considered significant in EIA terms.

²⁶ SLR27, SLR62, SLR67, SLR69, SLR73 and SLR113

²⁷ Ordnance Survey (1910). Ayrshire, Sheet XLVII.NW. Available at: <https://maps.nls.uk/view/75496083>



4.5.3 Assessment of Likelihood of Operational Effects

Should an UGC be utilised, the grid connection route will be largely imperceptible in the landscape during operation. As a result, an UGC is not anticipated to give rise to the potential for any significant indirect effects in cultural heritage assets.

With the introduction of the OHL, there is the potential for significant effects to arise to the setting of assets where setting contributes to their cultural significance. Whilst this is a landscape that, at its baseline, possesses existing energy infrastructure, including 49 operational turbines and existing transmission infrastructure, the OHL may be introduced at a closer proximity to the above assets than the existing infrastructure within the landscape.

For the purposes of this assessment, a 2 km study area has been defined to consider the potential impact of the proposed OHL on the setting of cultural heritage assets in proximity to the IGCC. There are no Scheduled Monuments or Listed Buildings within this study area that are considered likely to be affected by the proposed development.

Any visibility of OHL poles would not materially alter the existing setting baseline, which is already influenced by the presence of the operational North Kyle Energy Project (see cumulative effects assessment). As such, the introduction of the proposed timber poles and OHL is not anticipated to give rise to significant effects on the setting of cultural heritage assets within the study area.

This conclusion is supported by the characteristics of the proposed infrastructure, notably that the poles would be wooden and no greater than 18 m in height, allowing them to be effectively assimilated within the existing landscape context.

4.5.4 Potential for In-Combination or Cumulative Effects

The EIA Cultural Heritage Chapter 5, for the North Kyle Energy Project, concluded that the proposal could result in adverse direct and setting effects on cultural heritage assets. The report notably concluded that Dumfries House (**LB14413**) and Garden and Designed Landscape (**GDL00149**) were predicted to incur moderately significant cumulative effects, which are considered significant in EIA terms.

The combined effects of the construction/operation of the UGC and OHL, with the effects reported in the EIA, have the potential to give rise to a significant effect on the compounded impacts on Dumfries House (**LB14413**) and GDL (**GDL00149**). A detailed assessment should be undertaken at a detailed design stage (by SPEN in relation to the S37 application for the grid connection) to ensure that the proposed IGCC would not give rise to additional significant effects.

4.5.5 Limitations of Assessment

The following assessment has been undertaken on a desk-based basis and acknowledges the limitations associated with a lack of a completed walkover survey. However, due to the extent of survey and construction activity that has been carried out within the northern and central portions of the IGCC, namely the surveying and construction of the North Kyle Energy Project, it is considered that an adequate level of survey has been achieved for the majority of the proposed grid connection, for the purposes of a proportionate assessment of likely significant effects.

The HER provided by the West of Scotland Archaeology Service (WoSAS), was entirely point data, which is limited in offering the extent and scale of assets within the IGCC. Therefore, it is possible that those close to the LoD could extend into the route. Regardless, avoidance would still be possible as it is unlikely that they would extend across the entire width of the LoD.



Furthermore, the mound (**SLR52**) associated with the field survey completed for Burnhead Wind Farm included limited information on the asset. As such, this asset could not be assessed in detail and further investigation may be warranted as part of the detailed design and S37 application process for the grid connection.

In addition, a comprehensive review of the available historic mapping and HER within the IGCC has provided a robust evidence base for assessing the archaeological potential of the proposed route.

4.6 Hydrology, Hydrogeology and Geology

4.6.1 Baseline

The IGCC is shown by BGS mapping to be underlain by igneous intrusion rocks of the Western Midland Valley Westphalian to Early Permian Sills and sedimentary rocks of the Scottish Lower and Middle Coal Formations. The bedrock is shown to be overlain by peat and glacial till superficial deposits.

Peatland classification mapping indicates that the majority of the IGCC is located within Class 5 peatland areas. Approximately 300 m of the centre of the IGCC is shown intersect areas of Class 1 peatland which is considered to represent priority peatland habitats, whilst areas within the northern and southern extent of the IGCC is shown to be within Class 4 or mineral soil areas which are not considered to represent peatland habitats. Though much of the IGCC is likely to be laid alongside existing tracks, or through mining disturbed areas (where peat is absent), survey data collected as part of the North Kyle Energy Project does identify deep peat in places alongside existing tracks.

The northern extent of the IGCC is located within the River Ayr surface water catchment whilst the majority of the southern extent of the IGCC is located within the River Doon surface water catchment. Approximately 450 m of the southern extent of the IGCC is located within the River Nith surface water catchment. None of the catchments which drain the IGCC have been designated as Drinking Water Protected Areas (DWPAs) and no geological or water dependent designated sites are noted adjacent or are crossed by the IGCC.

Benbeoch SSSI and Geological Conservation Review (GCR) site is located approximately 230 m southwest of the IGCC, however the IGCC will not cross the SSSI or GCR site.

OS mapping indicates that underground cable section of the IGCC will cross three smaller tributaries of the Burnock Water (which is a tributary of the River Ayr). SEPA flood mapping indicates that IGCC will not intersect any large areas of flooding and flooding near the IGCC is limited to the existing watercourse channels or shallow (<0.3 m) overland flow paths.

The private water supply confirmed as part of the Breezy Hill EIA Report indicates that there are no private water supplies within 250 m of the IGCC. In addition, SEPA database indicates that there are no licenced abstractions are also recorded within proximity of the IGCC.

4.6.2 Assessment of Likelihood of Construction/Installation Effects

Without mitigation, during construction and installation of the IGCC there is a potential adverse effect on peat and carbon rich soils. Peat disturbance will be confined to the linear construction corridor, and the IGCC route will be designed and mitigated to ensure impacts on peat are limited in accordance with the requirements of NPF4. The cable route is expected to follow the proposed access track for the North Kyle Wind Farm, which will minimise peat disturbance. Considering the design of the IGCC route and with the implementation of industry standard good practice measures which are required to safeguard peat deposits the potential effects are unlikely to be significant.

Without mitigation, during construction there is potential adverse effect on downstream surface water and groundwater receptors from pollution from fuel, oil or other hazardous substances,



increased sediment load to nearby water environment and effect on existing surface water or shallow groundwater flows.

However, it is reasonable to assume that works will be undertaken in accordance with industry standard mitigation measures to ensure that best practice construction techniques and procedures are implemented to minimise potential effects on the water environment.

Expected mitigation measures include the following. The cable would be installed progressively to reduce amount of stock piled material at one time. Arisings from the trench during construction would be temporarily stored so that potential for erosion and sedimentation is limited. This would include storing any material away from watercourses and implementing mitigation measures, such as silt fences, where required. Water would be prevented as far as possible from entering excavations and an emergency spill management plan will be developed for the proposed works. Industry standard measures, such as the use of SuDS, will be implemented to ensure that existing surface water and shallow subsurface water flows are maintained. Additional, site-specific mitigation would be implemented where sensitive receptors are identified along the route.

Where the underground cable will cross watercourses, the watercourse crossings will be regulated by the Environment Authorisation (Scotland) Regulations (EASR) and installed with good practice as required by SEPA, to ensure that no impacts occur during construction. It is expected that OHL section of the IGCC will be designed so that any towers are placed at a sufficient distance from any watercourses and areas of flooding in accordance with SEPA's requirements.

The application of industry standard practice as set out above will reduce effects to ensure that no significant geological, hydrological, hydrogeological and peat effects would occur as a result of the IGCC.

4.6.3 Assessment of Likelihood of Operational Effects

The soils disturbed during construction will be placed in the UGC trench following installation of the cable. No change to ground conditions or surface topography will occur, and therefore no change to geology (including soils), hydrogeology and hydrology as a result of the cable during operation.

4.6.4 Potential for In-Combination or Cumulative Effects

The combined installation of the IGCC with the construction of the Proposed Development are not likely to give rise to the potential for significant in-combination effects on geology, peat, hydrology and hydrogeology.

Similarly, cumulative effects with other development projects are not likely subject to standard mitigation measures being implemented.

4.7 Traffic and Transport

4.7.1 Baseline

The route of the IGCC would pass through the proposed Breezy Hill Energy Project Site and the operational North Kyle Energy Project Site before crossing over the B741 road to reach New Cumnock Substation. The only interaction between the IGCC and the public road network would be where it crosses the B741.

The B741 is a single carriageway road with one lane in each direction and subject to a 60 mph speed limit (although a lower limit applies to some vehicle types) along most of its length. It connects the A713 at Dalmellington to the southwest with the A76 at New Cumnock to the northeast over a distance of around 17 km.



The B741 passes through a predominantly rural area, although its northern and southern extents are within the built-up areas of New Cumnock and Dalmellington respectively. Some homes, farms, fields and other developments take direct access to it. There are no footways along the B741 in the vicinity of where it is crossed by the IGCC.

The B741 and A713 are managed by Ayrshire Roads Alliance (ARA) while the A76 is managed by Transport Scotland (TS).

Data contained in the Revised Environmental Impact Assessment (EIA) Report of November 2025 submitted with the consent application for the Breezy Hill Energy Project showed the following average daily traffic flows on the A713, B741 and A76:

- The A713 northwest of Dalmellington: 3,925 vehicles, of which 103 were Heavy Goods Vehicles (HGVs);
- The B741 east of Dalmellington: 915 vehicles, of which 33 were HGVs; and
- The A76 in New Cumnock: 3,781 vehicles, of which 755 were HGVs.

There are two existing accesses to the North Kyle Energy Project Site on the northern side of the B741 and an existing access to New Cumnock substation on the southern side. Each of these form priority junctions with the B741 and have been used by construction vehicles involved in the construction of each project.

There are no Core Paths nor sections of the National Cycle Network (NCN) that would be affected by the IGCC.

4.7.2 Assessment of Likelihood of Construction/ Installation Effects

Construction of the IGCC would generate vehicle movements on the public road network arising from staff travelling to and from their work sites as well as the delivery and removal of plant, components, materials and supplies. These activities would lead to additional cars, vans, Light Goods Vehicles (LGVs) and HGVs on the road network.

The construction of the IGCC would be accessed mainly from existing tracks forming part of the operational North Kyle Energy Project, a short section of track forming part of the proposed Breezy Hill Energy Project and the existing access track to New Cumnock Substation. These access tracks would be accessed from the existing accesses to the B741 referred to above and no new accesses onto the B741 would be required.

The number of vehicle movements using any one access to the IGCC would vary, but a typical working day would likely see something in the order of five to ten vehicle visits (so 10 to 20 vehicle movements, accounting for arrivals and departures). That number of vehicle movements would represent around a 2% increase against the existing baseline traffic flows on the B741 and so would be unlikely to be noticeable to other users of the public road network in the vicinity of the IGCC.

Further vehicle movements would likely be generated at the start and end of the works as a temporary construction compound would be established and then removed and items such as storage containers, welfare cabins and site offices are delivered and then removed (although it may be possible that part of the compound for the proposed Breezy Hill Energy Project could be used). There would be further movements throughout construction as items such as plant, materials (such as sand and cables) and consumables (such as fuel for plant) are delivered – although again it is possible that some of these vehicle movements could be combined with movements to the Breezy Hill Energy Project.

All vehicles involved in the construction of the IGCC would comply with the dimensions in The Road Vehicles (Construction and Use) Regulations 1986 and no Abnormal Indivisible Load Vehicles would be required.



The IGCC would only interact with the public road network where it crosses over the B741. As the IGCC would be an overhead line at that point, there would be no need for any intrusive works on the B741. Some temporary restrictions may be required when the cables are installed over the B741 and where, for example, any works are required (such as the installation of poles) in the vicinity of the B741. These works may cause some short-duration delays to other road users if traffic management measures are required. Any such measures would be localised and of short duration and would be subject to appropriate permissions from and requirements of ARA.

The Revised EIA Report of November 2025 submitted with the consent application for the Breezy Hill Energy Project included a summary of measures that would be included in a Construction Traffic Management Plan (CTMP). It would be reasonable for that CTMP to include the management of traffic related to the IGCC works.

Given the foregoing, no potential significant effects on the transport network are considered likely from the construction of the IGCC.

4.7.3 Assessment of Likelihood of Operational Effects

During operation there would be only the occasional maintenance or inspection vehicle movement so no potential significant effects on the transport network are considered likely from the operation of the IGCC.

4.7.4 Potential for In-Combination or Cumulative Effects

The Revised EIA Report submitted with the consent application for the Breezy Hill Energy Project estimated an 18-month long construction period for that project. Vehicle movements generated by the construction of that project were estimated to peak at 322 movements (i.e. the sum of arrivals and departures) per working day during the busiest month (month eight) of construction. Vehicle movements during the final eight months of construction of that project were estimated to be no higher than 88 per working day.

Construction of the IGCC would likely overlap with that of the Breezy Hill Energy Project but could only begin once construction of that project was sufficiently far advanced. It is reasonable to assume that the IGCC would therefore be constructed towards the end of the construction of the Breezy Hill Energy Project. At that time, the combined number of daily vehicle movements arising from both projects would be lower than the peak number arising from the construction of the Breezy Hill Energy Project alone.

The EIA Report for the Breezy Hill Energy Project concluded that its transport effects would be minor and not significant, based on the vehicle movements during the busiest month of construction and implementation of a CTMP. Since, based on the above assumption, the combined daily vehicle movements arising from both projects would be lower than the peak number of the Breezy Hill Energy Project alone, the in-combination transport effects of both would also be lower and therefore not significant.

4.8 Other Issues

4.8.1 Noise

4.8.1.1 Introduction

Noise effects from the construction of the grid connection are assessed with reference to BS 5228-1:2009+A1:2014, *Code of practice for noise and vibration control on construction and open sites - Noise*, but detailed assessment is scoped out due to the separation distances between noise-sensitive receptors and the route. Construction noise will arise from the cable trenching and erection of the poles for the underground and overhead sections of the route



respectively. There would also be some noise generated by associated works and construction traffic.

Audible noise during the operation of the grid route would only occur for the overhead section of the route and is related to that generated by wind around the line, and with a possibility for corona discharge noise. These effects are discussed but scoped out of detailed assessment.

4.8.1.2 Construction Noise Assessment

The relevant construction noise limits for long term construction (i.e. with a duration of over one month) were presented at Table 12.4. of the Revised EIA Report, which set a weekday daytime and Saturday morning noise limit of 65 dB LAeq. This noise limit has been used to define a minimum separation distance whereby construction noise can be scoped out.

The Revised EIA Report concluded construction noise levels at a distance of 750 m would be significantly below the daytime construction noise limit, and the type of construction methods used for the grid connection construction are unlikely to be noisier than the construction methods assessed in the AI. It is therefore appropriate to scope out construction noise from detailed assessment, where the separation distance between construction activities and noise-sensitive receptors is greater than 750 m. In practice construction noise levels would only approach the daytime construction limit at much closer distances (e.g. at 100 to 200 m). If percussive piling techniques are used to install the poles along the overhead section this noise could be audible at noise-sensitive receptors although is not considered to be significant at 750 m, as it would only result in short-term effects, and average construction noise levels would remain within the limit discussed above.

The nearest noise sensitive receptor (Clawfin at British Nation Grid reference location 250605, 607352) is more than 750 m distant and therefore it can be concluded that there will be no significant construction noise effects.

4.8.1.3 Operational Noise Assessment

Noise during the operational phase of the development may arise through wind passing over the line, conductors, insulators, or other line components, or through corona discharge at the conductors or fittings.

Corona discharge noise is principally associated with higher-voltage grid infrastructure. The National Grid has an *Operational Audible Noise Policy for Overhead Lines* (PS(T)134, Issue 2, June 2021) which sets out noise criteria and assessment methods for 275 and 400 kV overhead lines, however this guidance does not apply to the lower voltage lines proposed here. Corona discharge occurs where local electric field strength at a surface exceeds the corona inception level, an effect which is exacerbated by defects/damage to the surface, raindrops, dew or other condensation/moisture build-up, insects, dirt/debris contamination, or other irregularities. Such noise, where it occurs, is typically generated at the towers around the isolators, rather than along the route between towers or pylons.

For 132 kV and lower voltage lines, audible noise from corona discharge generally occurs infrequently, and at a relatively low level. Where audible, corona discharge noise is typically characterised as a crackle under dry conditions and as a hum under wet conditions. The highest noise levels are generally associated with rainfall or other conditions causing water droplets to collect on the conductor surface. In any case, potentially significant noise from corona discharge is only considered to occur within about 50 m of a high voltage cable, although can be audible at larger distances, and therefore such noise is scoped out and not significant at all noise-sensitive receptors.

Wind-induced noise from the overhead line conductors and fittings would only occur under higher wind speed and specific direction conditions and would coincide with elevated local wind-induced background noise. Similar to corona discharge noise, no potentially significant



effects are likely where the separation distance is greater than 50 m. Therefore, as the nearest noise-sensitive receptor is more than 750 m distant, operational and wind-induced noise effects from the overhead section of the grid connection will be not significant.

4.8.1.4 Comparison with the EIA and Conclusions

The EIA and AI concluded that no significant noise effects would arise from the construction, operation, and decommissioning of the Proposed Development.

The construction of the grid connection would represent an extension of the construction activities associated with the construction of the Proposed Development. Noise from the grid connection construction would affect noise-sensitive receptors in a similar manner to on-site construction, albeit that the duration would be relatively short. As discussed in the EIA and AI detailed construction noise assessment has been scoped out where the separation distance between noise-sensitive receptors and construction activities are more than 750 m.

Noise during the construction phase of the development will be managed via the CEMP which will cover noise associated with the construction of the on-site infrastructure as well as the grid connection.

No significant cumulative construction effects are predicted, and the same construction noise limits and mitigation applies to all construction associated with the Proposed Development. None of the grid connection construction will give rise to significant levels of noise in combination with on-site construction assessed in the EIA and AI.

During the operational phase of the development no significant noise effects are predicted from the operation of the wind turbines and on-site infrastructure with noise from the grid connection.

The overarching significance of the Proposed Development including the grid connection is not significant in EIA terms as the relevant noise limits are met.

4.8.2 Arboriculture

There will be no loss of woodland or impacts upon trees designated on the Ancient Woodland Inventory (AWI) from construction of the UGC or OHL. As part of the application process for the grid route, the route will be expected to follow the least environmentally constrained path and therefore no felling is anticipated. Where the UGC or OHL runs close to areas of AWI or other woodland, it is expected that an ECoW would ensure that an appropriate buffer between the tree root protection zone and the construction area is maintained.

4.8.3 Recreation

The only interaction between the IGCC and the public road network is the B741, of which there are no footways in the vicinity. The IGCC mainly follows the North Kyle Wind Farm access track, with no Core Paths or section of the NCN being affected, therefore no significant effects are expected.

5.0 Conclusion

This Indicative Grid Connection Corridor Assessment sets out the key environmental considerations relating to the potential underground cable and overhead line grid connection for the Proposed Development.

Whilst the final connection route and technology would be confirmed in due course, this assessment has considered a realistic route corridor for a 132 kV grid connection to ensure that the potential for significant environmental effects is appropriately considered proportionate to the information available at this stage.



The parameters used to assess the likelihood of significant environmental effects include:

- UGC and OHL connection methods;
- a defined IGCC (see **Figure 1**);
- assessment of the construction/installation and operational phases; and
- the potential for in-combination and cumulative effects.

Legal requirements and relevant best-practice guidance would also be applied during construction to minimise environmental effects, including adherence to GPP1, GPP5 and GPP6; preparation of a CEMP and works method statements; and implementation of Best Practicable Means (BPM) under applicable pollution and noise control legislation.

This assessment has not identified any likely significant effects arising from the proposed grid connection, nor any likely significant in-combination effects from the grid connection and the Proposed Development.

It is noted that the findings of this assessment could be subject to change depending on the fixed and final grid connection route which would be subject to SPEN's statutory environmental duties as DNO under the Electricity Act 1989. Further detailed assessment would be undertaken at that time, supported by more advanced design information, to ensure that the final grid connection solution is environmentally responsible, technically robust and in alignment with relevant planning and regulatory requirements.

Based on the indicative corridor, assumed construction methods, embedded mitigation and current information available, no likely significant direct, indirect, cumulative or in-combination effects have been identified.



6.0 Appendix 1 – ECU Correspondence



From: [Colin Abernethy](#)
To: [Econsents Admin](#)
Subject: FW: 20260415- Application_AI- Email ECU to Dev seeking grid connection information- Breezy Hill Energy Project
Date: 24 April 2026 07:23:48
Attachments: [image001.png](#)

From: Colin Abernethy
Sent: 15 April 2026 11:58
To: Donnette Briggs <donnette.briggs@slrconsulting.com>
Subject: 20260415- Application_AI- Email ECU to Dev seeking grid connection information- Breezy Hill Energy Project

Hi Donnette,

I hope you're well.

The Court of Session recently issued its decision in Raeshaw Farms Limited v Scottish Ministers and Energiekontor [2026] ([2026csih10-raeshaw-farms-limited-against-scottish-ministers-and-another.pdf](#)).

Scottish Minsters are currently considering the above application and, since this decision may have implications for this application, further clarification is now required. You may have already provided some of this information within your EIA Report however please note we now require you to provide this information in the format below:

Scottish Minsters are currently considering the above application and, since this decision may have implications for this application, further clarification is now required. You may have already provided some of this information within your EIA Report however please note we now require you to provide this information in the format below:

I would be grateful if you could therefore confirm the following:

- what are the implications of the Raeshaw Farms judgment with regards to the above application
- whether the wind farm and its grid connection are considered one project for the purposes of EIA – please note that where an applicant considers that they are not one project, justification will be required outlining how this conclusion has been reached
- where it is considered that that the wind farm and the grid connection are one project, have the significant effects of the project, including the grid connection, been adequately assessed in the EIA report?

- if the significant effects have been adequately assessed, please provide further justification outlining how this conclusion has been reached
- if the significant effects have not been adequately assessed, please advise what further assessments are required and the likely timescales involved in gathering this information
- where it is considered that the wind farm and grid connection are not one project, has any consideration be given to any likely significant cumulative effects of the proposed development and its grid connection?
- are all likely significant effects of the project identifiable at this stage?
 - If the answer to above question is “no”, please provide justification outlining why are the significant effects not identifiable at this stage and how should the Scottish Ministers address that issue in determining the present application?

I would be grateful if you can respond as soon as possible, but no later than 4th May 2026. You may have more than one application with us. We are reviewing cases on a staggered basis, and we will be in touch regarding each one individually.

If you have any queries, please do not hesitate to get in contact.

Kind Regards,
Colin

Colin Abernethy | Case Manager | Energy Consents Unit

The Scottish Government | colin.abernethy@gov.scot

To view our current casework please visit www.energyconsents.scot



1 May 2026

Attention: Colin Abernethy
Energy Consents Unit

BY EMAIL

SLR Project No.: 413.VT2633.0002

ECU Reference No.: ECU00005060

**RE: Breezy Hill Energy Project Grid Connection
Response to ECU's Request for Grid Connection Information**

Dear Colin,

The purpose of this letter is to provide the information you requested in your email dated 15th April 2026. This letter is submitted on behalf of Brockwell Energy Limited, the Applicant for the proposed Breezy Hill Energy Project.

1. What are the implications of the Raeshaw Farms judgement with regards to the above application?

The Raeshaw Farms decision considered a matter of law in connection with the scope of assessment under the relevant environmental impact assessment (EIA) Regulations. In particular, it considered the proper consideration of what constitutes 'the EIA project' for the purposes of the EIA Regulations, and therefore the required scope of assessment.

The Court, in Raeshaw Farms, held that there had been material errors in the Reporter's approach and that he had erred in law because:

- (i) he had failed to consider if, on the facts of that case, the Wull Muir Wind Farm and the grid connection for the wind farm should be considered a single project for the purposes of the Town and Country Planning Environmental Impact Assessment (Scotland) Regulations 2017 ('the EIA Regulations');
- (ii) the Reporter had not provided adequate reasons for his decision; and
- (iii) the Reporter's approach to the planning balance was irrational, in that he had failed to have proper regard to potential disbenefits of the completed development, having taken out of benefits of the completed development.

On the question of whether the wind farm and grid connection constituted a single 'project' for the purposes of the EIA Regulations, the Court found that the Reporter erred in failing to conduct the necessary fact-specific evaluation of the proposal before him. It was incumbent on him to do so before reaching a conclusion on whether the wind farm and grid connection constituted a single 'project' for EIA purposes.

The Court was considering the terms of the Reporter's decision in that case, and its judgment is closely tied to the facts of that case. As the court made clear in its judgment, it is not for the Courts to undertake an evaluation as to whether a wind farm and grid connection constitute a single 'project' for EIA purposes. The identified error in Raeshaw Farms was that the Reporter's decision notice did not illustrate that such an evaluation had been properly carried out. The Court also made it clear that it endorsed the view that it could not be said that the

only permissible way to make a planning application for a wind farm would be to include the grid connection as part of that application.

In the context of electricity infrastructure, the implications of this case are that it is necessary to consider whether the grid connection and the generating station that it will connect to the UK grid are one project for the purposes of EIA. A fact-specific evaluation is required to be undertaken to provide a reasoned justification for the decision reached.

In the case of the application for section 36 consent and deemed planning permission for the Breezy Hill Energy Project ('the generating station') it is therefore necessary for the Scottish Ministers to determine firstly whether the generating station, on the relevant facts, form part of the same project as any connection to the UK grid. The Scottish Ministers then need to consider if they have sufficient information under the EIA Regulations in light of the conclusion reached.

For the reasons set out below, it is considered that the generating station and the grid connection do not constitute a single project for EIA purposes. Any potential impacts of the grid application were not included in the EIA submitted with the application to the ECU.

However, to ensure that the Scottish Ministers have the most up to date information before them when reaching a decision, and recognising that the Scottish Ministers may reach an alternative view, the Applicant intends to submit Supplementary Environmental Information (SEI) (in the form of a Grid Connection Corridor Appraisal (GCCA)) to allow an assessment of potential cumulative effects of the generating station and grid connection.

Once the potential for Likely Significant Effects (LSE) along the Indicative Grid Connection Corridor have been demonstrated (for the likely route and a 100m buffer), consideration will be given to possible in-combination and cumulative effects of the grid connection, the Proposed Development and other likely development in the area. The GCCA will be submitted to the Scottish Ministers, and the Applicant considers that Scottish Ministers could therefore proceed with determining the application on the basis of the SEI (including recommendations presented by East Ayrshire Council).

The Applicant considers this approach to comply with Regulation 4(2) of the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 which requires the environmental impact assessment to *"identify, describe and assess in an appropriate manner, in light of the circumstances relating to the proposed development, the direct and indirect significant effects of the proposed development"* (emphasis added).

2. Whether the wind farm and its grid connection are considered one project for the purposes of EIA

The question of what constitutes the 'project' for EIA purposes is a matter of planning judgment, having regard to the particular facts and circumstances of the particular application for consent. The Courts will afford wide discretion to the decision maker.

The Court in the Raeshaw Farms decision referred to the decision of the English Court of Appeal in *R (Wingfield) v Canterbury City Council* [2020] JLP 154 where the Court set out a non-exhaustive list of factors relevant to the consideration.

Considering these factors in this case:

- **Common ownership** – The generating station and the grid connection would not share common ownership. The grid connection would be constructed and owned by the distribution network operator, which will hold the required licence under the Electricity Act 1989.



- **Simultaneous determination** – The application for the generating station will be determined on a different timescale to that of the grid connection.
- **Functional interdependence** – It is reasonable to assume that the two projects are functionally interdependent in that without a viable grid connection, the generating station would not be able to export electricity to the UK Grid.
- **Stand-alone projects** – it is reasonable to assume that the generating station requires the grid connection to achieve the purpose of exporting electricity to the UK Grid and that the grid connection would not exist without the generating station. The developments are therefore not standalone projects.

Each of these factors is an indicator only as to whether the two developments are in reality a single project. None of the factors are determinative in their own right.

In assessing what constitutes ‘the project’ for EIA purposes, we consider that greater weight should be given to the fact that the grid connection would be developed by a separate party, on a different timescale to the wind farm development. That is a matter for the decision maker.

3. Where it is considered that the wind farm and grid connection are one project, have the significant effects of the project, including the grid connection, been adequately assessed in the EIA Report?

N/A – see response above.

4. Where it is considered that the wind farm and grid connection are not one project, has any consideration been given to any likely significant cumulative effects of the proposed development and its grid connection?

The potential for significant cumulative effects of the proposed grid connection route has not been assessed as part of the submitted Section 36 application for Breezy Hill Energy Project. The Applicant therefore intends to undertake an appraisal of the potential impacts of an assumed grid route, based on an informal indication of the likely point of connection, including consideration of possible cumulative impacts with the generating station and with other likely developments in the area. As noted, the Applicant intends to submit this appraisal as SEI to allow an assessment of potential cumulative effects of the generating station and grid connection. We envisage that this SEI will be submitted to the ECU by around 15 June 2026.

The Applicant notes that the grid route will likely be a buried cable which will run from the Proposed Development’s substation to the assumed point of connection (likely New Cumnock Substation). For much of its length it would most likely be buried alongside the adjacent North Kyle Wind Farm’s access tracks. There may be stretches that are sufficiently distant from the North Kyle Wind Farm turbines to be run as overhead lines, dependent on other design constraints.

The construction considerations of laying underground cable and constructing overhead lines are well-understood. There are currently no obvious environmental constraints or designations along this route. The Applicant’s expectation is therefore that there will be no new significant environmental effects identified. It should be noted, however, that the Transmission Operator is under no obligation to use the assumed grid route and could select an entirely different route and even a different point of connection.



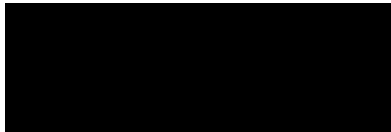
5. Are all likely significant effects of the project identifiable at this stage? If the answer to the above question is “no”, please provide justification outlining why the significant effects are not identifiable at this stage and how should the Scottish Ministers address that issue in determining the present application?

The SEI will provide the necessary information for Scottish Ministers to make a reasoned conclusion on the likely potential cumulative effects of the generating station with the grid connection. It is understood that, upon receipt of the SEI, together with the current EIA Report and East Ayrshire Council's recommendations - that Scottish Ministers will have sufficient information to determine the Section 36 application.

If you require any further information at this stage, please do not hesitate to contact me.

Yours Sincerely,

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