voltalia

Cruach Clenamacrie

Further Environmental Information

Department: Development
Project: Cruach Clenamacrie Wind Farm

September 2025

	NAME	FUNCTION	DATE
Elaborated by	GCR, Abseline, AOC, WRc, WSP & ReAMP (Collated by Isla Ferguson (GCR))	Authors/Collator	23rd June 2025
Validated by	Corey Simpson (GCR)	Project Manager	22nd August 2025
Approved by	Luke Major (Voltalia)	Applicant	22nd August 2025

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ACRONYMS

ACRONYM	DEFINITION	ACRONYM	DEFINITION
ABC	Argyll and Bute Council	**MoD**	Ministry of Defence
AKDE	Adaptive Kernal Density Estimation	**NAL**	Noise Assessment Location
BBPP	Breeding Bird Protection Plan	**NHZ**	Natural Heritage Zone
BESS	Battery Energy Storage System	**NIA**	Noise Impact Assessment
CEMP	Construction Environment Management Plan	**NSR**	Noise Sensitive Receptor
ECoW	Ecological Clerk of Works	**oHMP**	Outline Habitat Management Plan
ECU	Energy Consents Unit	**OS**	Ordnance Survey
EIA	Environmental Impact Assessment	**PMP**	Peat Management Plan
EZoI	Ecological Zone of Influence	**PSRA**	Peat Slide Risk Assessment
FAQ	Frequently Asked Questions	**PWS**	Private Water Supply(ies)
FEI	Further Environmental Information	**RVAA**	Residential Visual Amenity Assessment
GET	Golden Eagle Topographical	**SAC**	Special Areas of Conservation
GPG	Good Practice Guidance	**SEPA**	Scottish Environment Protection Agency
GWDTE	Groundwater Dependent Terrestrial Ecosystem(s)	**SQE**	Suitably Qualified Ecologist
IoA	Institute of Acoustics	**SQO**	Suitably Qualified Ornithologist
KDA	Kernal Density Analysis	**SSSI**	Sites of Special Scientific Interest
LCT	Landscape Character Type	**TES**	Trailing Edge Serration
LLA	Local Landscape Area	**VP**	Vantage Point
LVIA	Landscape and Visual Impact Assessment	**ZTV**	Zone of Theoretical Visibility

1 INTRODUCTION

1.1 Background

1.1.1.1 Voltalia UK Ltd (the 'Applicant') submitted an application to the Scottish Ministers under Section 36 of the Electricity Act 1989 (as amended) to construct, operate and decommission the Cruach Clenamacrie Wind Farm project (hereinafter referred to as the 'Proposed Development') in November 2024 (ECU00004841). The Proposed Development is located in Argyll and Bute, approximately 7.0km east of Oban and directly adjacent to Fearnoch Forest. This area will be hereinafter referred to as the 'Site'.

1.1.1.2 The Proposed Development comprises six wind turbines of 200m to tip height with a combined generating capacity of approximately 45MW and a Battery Energy Storage System (BESS) of up to 20MW, giving a total site capacity of 65MW.

1.1.1.3 An Environmental Impact Assessment (EIA) was undertaken for the Proposed Development in accordance with the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (the 'EIA Regulations')[1]. An EIA Report was submitted as part of the application to the Scottish Ministers. The EIA Report will be referred to in this report as the '2024 EIA Report'.

1.2 Structure of the FEI Submission

1.2.1.1 This Further Environmental Information (FEI) Report provides supplementary information, as defined in the EIA Regulations, as requested by consultees such as Scottish Environment Protection Agency (SEPA), Argyll and Bute Council (ABC) and NatureScot. This 2025 FEI Report provides an update to any assessments as necessary, provides clarifications where required and seeks to address concerns raised by consultees during the consultation process. This 2025 FEI Report does not replace the 2024 EIA Report and should be read in conjunction with it.

1.2.1.2 The structure of this FEI submission is as follows:

- FEI Volume 1: 2025 FEI Report
- FEI Volume 2: Figures and Visualisations
- FEI Volume 3: Appendices

1.2.1.3 This 2025 FEI Report contains updates to the following technical chapters of the 2024 EIA Report:

- Landscape and Visual Impact Assessment
- Cultural Heritage and Archaeology
- Noise
- Geology, Hydrogeology, Hydrology and Soils
- Ecology
- Ornithology
- Carbon Balance and Climate Change

[1] Energy Consents Unit - Application ECU00004841 (Accessed 31/07/2025)

1.2.1.4 The following technical chapters of the EIA Report have not been updated as part of this FEI Submission:

- Transport and Access
- Forestry
- Aviation
- Shadow Flicker
- Telecommunications and Infrastructure

1.3 Public Viewing and Representations

1.3.1 Availability of the FEI Submission

1.3.1.1 Digital copies of the FEI Submission will be available at the links below:

- Energy Consents Unit (ECU) Portal: https://www.energyconsents.scot/ApplicationDetails.aspx?cr=ECU00004841
- Cruach Clenamacrie Wind Farm website: https://cruach-clenamacrie.co.uk/

1.3.1.2 Hard copies of the FEI Submission will also be available for inspection, free of charge at the following locations:

Oban Public Library
Albany Street
Oban
PA34 4AL

Opening Times:
Sunday & Monday: Closed
Tuesday & Wednesday: 9:30 am–16:30 pm
Thursday: 9:30 am–18:30 pm
Friday & Saturday: 9:30 am–13:00pm

Connel Village Hall
PA37 5AL

Opening Times:
Monday – Sunday: 10:00am – 19:00pm
Times may vary, please check the online hall diary on the Connel Village Hall website, https://www.connelvillagehall.org.uk/index.asp
Materials will be displayed in the front entrance of the village hall.

1.3.1.3 Hard copies of the 2025 FEI Report can be provided for £150 per hard copy upon request. Electronic copies of the 2025 FEI Report on a USB drive are available for £20 per copy upon request. To request copies of the FEI Report please contact Green Cat Renewables:

Address: Stobo House, Roslin, EH25 9RE
Email: info@greencatrenewables.co.uk
Tel: 0131 541 0060

1.3.2 Representations

1.3.2.1 Representations can be made via email to representations@gov.scot or in writing to Energy Consents Unit, Scottish Government, Atlantic Quay, 150 Broomielaw, Glasgow, G2 8LU.

2 SUMMARY OF CONSULTATION

2.1.1.1 **Table 2.1** provides a summary of the consultation responses received and which of these are being responded to within this FEI Report. Any consultee not listed within **Table 2.1** has not provided a response to the application at the time that this FEI Report was drafted. All responses can be found on the ECU portal[2] or on the ABC portal[3].

TABLE 2.1 - SUMMARY OF CONSULTATION RESPONSES

CONSULTEE	RESPONSE	ACTIONS
Historic Environment Scotland	No Objection	-
NatureScot	No Objection but raised concerns	Response to Ornithological and Ecological concerns can be found in **Chapters 8 and 9** of this FEI Report and associated appendices.
SEPA	Holding Objection	SEPA provided a holding objection to the application in relation to impacts on peat and watercourses. These are detailed further and addressed in **Chapter 7** of this FEI Report.
Transport Scotland	No Objection	-
Scottish Forestry	No Objection	-
MoD Safeguarding	No Objection	-
Highlands and Islands Airport	No Objection	-
Health and Safety Executive	No Objection	-
Joint Radio Commission	No Objection	-

[2] https://www.energyconsents.scot/ApplicationDetails.aspx?cr=ECU00004841
[3] https://publicaccess.argyll-bute.gov.uk/online-applications/applicationDetails.do?activeTab=summary&keyVal=SO2W4SCH0IO00

CONSULTEE	RESPONSE	ACTIONS
NATS	No Objection	-
Oban Airport	No Objection	-
RSPB	No Objection	-
Woodland Trust	No Objection but raised concerns	Clarifications to the response were provided to Woodland Trust via the ECU as a letter. A copy of this can be found in **Appendix 2.1**.
		Community Councils
Connel	Objection	The Applicant has provided a Frequently Asked Questions (FAQ) document directly to Connel Community Council. The document has been issued to the ECU and uploaded to the project website. The FAQ document addresses the concerns raised within the Connel response, as well as those of other community councils and public representations.
Taynuilt	No Objection	-
Oban	No Objection	-
Glenorchy and Innashail	Objection	The Applicant has provided an FAQ document directly to Glenorchy and Innashail Community Council. The document has been issued to the ECU and uploaded to the project website. The FAQ document addresses the concerns raised within the Glenorchy and Innashail response, as well as those of other community councils and public representations.
		Argyll and Bute Council
Flood Risk Management	No Objection	-
Environmental Health Officer/ Mott MacDonald	Further Information Requested	ABC appointed Mott MacDonald to review the Noise chapter of the 2024 EIA Report and provide a consultation response. Mott MacDonald indicated some areas where further information was required, or clarifications sought, which included the provision of a cumulative assessment to include the proposed Corr Chnoc Wind Farm (ECU00006023) and the operational Beinn Ghlas Wind Farm. These points are further outlined and addressed in **Chapter 6** of this FEI Report.
Biodiversity Officer	No Objection	-

CONSULTEE	RESPONSE	ACTIONS
Landscape	Further Information Requested	ABC have not provided their formal consultation response. However, they have requested further information in relation to the cumulative assessment to include the proposed Corr Chnoc Wind Farm (ECU00006023). This is addressed in **Chapter 5** of this FEI Report.
		Other
Ironside Farrar on behalf of the ECU	Further Information Requested	The ECU commissioned Ironside Farrar to technically assess the Peat Slide Risk Assessment submitted as part of the application (2024 EIA Appendix 9.1). Ironside Farrar requested further information and clarification in relation to the Peat Slide Risk Assessment. This is further outlined and addressed in **Chapter 7** of this FEI Report.
Buglife Scotland	Raised Concerns	The Applicant has engaged with Buglife Scotland in order to seek to clarify their concerns. Following a meeting with Buglife Scotland on 5 June 2025, a technical note has been compiled and issued. A copy of this can be found in **Appendix 8.1** and further details can be found in **Chapter 8** of this FEI Report.
Butterfly Conservation	Raised Concerns	The Applicant has engaged with Butterfly Conservation in order to seek to clarify their concerns. Following a meeting with Butterfly Conservation on 9 June 2025, a technical note has been compiled and issued. A copy of this can be found in **Appendix 8.1** and further details can be found in **Chapter 8** of this FEI Report.

3 DESIGN CHANGES AND BASELINE UPDATE

3.1 Design Changes

3.1.1.1 This section details the design changes that have been undertaken as a result of the SEPA response and further consultation undertaken with them. The location of the turbines has not changed, and only those elements that have changed will be detailed and as such, this section should be read in conjunction with Chapter 5 of the 2024 EIA Report for the full project description.

3.1.1.2 **Table 3.1** outlines the changes to each element of the design, which can also be seen illustrated on**:**

- **Figure 3.1** – FEI Layout Change Overview
- **Figure 3.2** – FEI T1 and T2 Design Change
- **Figure 3.3** – FEI T3 and T4 Design Change
- **Figure 3.4** – FEI T5 and T6 Design Change
- **Figure 3.5** – FEI Site Layout Plan
- **Figure 3.7** – Site Layout Overview
- **Figure 3.8a-m** – Site Layout Block Plans
- **Figure 3.10a-m** – Drainage Concept Block Plans

TABLE 3.1 - CHANGES TO PROJECT DESIGN

PROJECT ELEMENT	CHANGE
Access Tracks	The access tracks for **T3, T4, T5** and **T6** have undergone redesign following SEPA consultation in order to minimise impacts on both watercourse buffers and deep peat. The length of the revised access tracks are: 10,384m (2,562m of which are existing) which equates to a < 3% increase to the length stated in the 2024 EIA Report. This would require approximately 37,085m^3 of aggregate.
Turning Heads	Turning head at **T1** moved further north to an area of shallower peat.
	Turning head at **T2** removed as it is not required and thus, minimising potential impacts to peat.
	Turning head at **T5** removed to minimise impacts on watercourse buffers. New track layout removes the requirement for the turning head.
Hardstandings	**T4** – hardstanding for T4 has been reorientated south-west and the laydown area has been removed. These changes were undertaken in order to minimise the infrastructure within the 50m watercourse buffer as far as possible and avoid 'culverting for land gain' while also minimising impact to peat.
	T5 – hardstanding for T5 reorientated slightly west to avoid the deepest areas of peat and provide more distance between the infrastructure and the watercourse.
Watercourse Crossings	**WC1** – this has moved to the west to NM 94205 29893 due to the requirement to reorientate the hardstanding for T4 to minimise impacts on watercourse buffers. Further details are outlined in **Chapter 7** of this 2025 FEI Report.

PROJECT ELEMENT	CHANGE
	WC4 and WC5 – WC5 has been removed and combined with WC4 at NM 95086 30358. The redesign on the track has removed the requirement for this watercourse crossing. Further details are outlined in **Chapter 7** of this 2025 FEI Report.

3.2 Cumulative Baseline

3.2.1.1 **Table 3.2** provides an updated cumulative baseline of wind developments within 25km of the Proposed Development. The requirements for the cumulative assessments will differ between each technical discipline and this is detailed further in each assessment as appropriate. These developments can also be seen illustrated on **Figure 4.1.**

3.2.1.2 This update accounts for the submission of the Corr Chnoc application in January 2025 (ECU00006023) and the Beinn Glas Repower application[4]. Additionally, it also takes into consideration the consenting of Ladyfield (ECU00003291) and the submission of Eredine (ECU00004517) into planning. Additionally, Musdale (ECU00002168) has been removed as it has not progressed beyond scoping since 2021 and is unlikely to progress or progress in the same form as scoped.

3.2.1.3 This cumulative data is correct at of the 19 August 2025 and does not account for any changes made beyond this date.

TABLE 3.2 - UPDATED CUMULATIVE BASELINE

CUMULATIVE DEVELOPMENT	DISTANCE TO CLOSEST TURBINE
Operational	
Barran Caltum	4.1km
Beinn Ghlas	4.3km
Carraig Gheal	8.3km
An Suidhe	21.5km
Consented	
Blarghour Variation	17.1km
Ladyfield	20.3km
In Planning	
Corr Chnoc	2.2km
Beinn Ghlas Repowering[4]	4.2km
An Carr Dubh	18.6km
Eredine	22.7km
Scoping	
Barachander	7.4km

[4] It is understood that the application for this project has been submitted to ABC but not live on the planning portal as of the 1 September 2025. It has been considered in the cumulative assessment but due to the timing of submission, it may still be labelled as scoping in some instances such as visualisations.

3.3 Summary

3.3.1.1 The following chapters provide updates based on the design changes and/or cumulative baseline update outlined in this chapter as relevant for each technical discipline. Each 2025 FEI Report chapter should be read in conjunction with the corresponding EIA Report chapter.

4 LANDSCAPE AND VISUAL IMPACT ASSESSMENT

4.1 Introduction

4.1.1 Background

4.1.1.1 This assessment supplements that provided in **Chapter 6 of the 2024 EIA Report.** At the time of preparing that chapter, the only wind farms at the planning or scoping stage that were sufficiently advanced to be included in the assessment were Ladyfield and An Carr Dubh. Since that time, Ladyfield has been consented and new applications have been made for Eredine, Corr Chnoc and Beinn Ghlas Repowering wind farms.

4.1.1.2 The baseline, methodology, assessment team competence, relevant planning policy, relevant guidance and assessed effects of the Proposed Development remain as set out in **Chapter 6 of the 2024 EIA Report**.

4.1.1.3 The Residential and Visual Amenity Assessment (RVAA) has been updated to take account of Corr Chnoc wind farm in relation to the closest properties and is provided as **Appendix 4.1**.

4.2 Cumulative Assessment

4.2.1 Introduction

4.2.1.1 The assessment is based on the same landscape and visual baseline and receptor groups as **Chapter 6 of the 2024 EIA Report**, and the methodology is the same in terms of forming and expressing judgements. Two types of judgement are provided:

- Additional effects –The effects that would arise from the addition of the Proposed Development to a baseline which includes the cumulative development(s) being considered.
- Combined effects – The effects that would arise from the addition of both the Proposed Development and the cumulative development(s) being considered to the main assessment baseline.

4.2.1.2 Typically, only the additional effects need to be considered, and the cumulative assessment is provided to inform decision-making in the event that one or more of the cumulative developments have been consented prior to the Proposed Development (i.e. the future baseline has changed). The combined effects may be relevant where two or more development applications are determined together, which may arise with the Proposed Development and Corr Chnoc wind farm.

4.2.1.3 Landscape and visual receptors that are considered to receive effects of Small/negligible or Negligible magnitude from the Proposed Development (as set out within **Chapter 6 of the 2024 EIA Report**) are not included in this assessment, as an effect of such low magnitude adds nothing or very little regardless of the effects of other developments. If significant cumulative effects arise on those receptors, they would be as a result of other developments and are not relevant for consideration as part of this application.

4.2.2 Assessment Scenarios

4.2.2.1 All cumulative schemes within the 25km Study Area are illustrated on **Figure 4.1** which replaces Figure 6.8 of the 2024 EIA Report. Operational and consented developments have been included within the landscape and visual baseline within the main assessment provided in **Chapter 6 of the 2024 EIA Report**. As set out above, the consent of Ladyfield wind farm would not alter those findings. Those located within the detailed Study Area include:

- Operational wind farms within approximately 4-10 km: Barran Caltum – two 54m turbines to the west; Beinn Ghlas and Carraig Gheal – larger wind farms to the south; and
- Operational and consented wind farms beyond approximately 17km south-east: Ladyfield, Blarghour Variation and An Suidhe.

4.2.2.2 **Table 4.1** updates Table 6.10 of the 2024 EIA Report and lists wind farms in planning or scoping stages within or close to the Study Area (also illustrated on **Figure 4.1**). Changes from Table 6.10 are shown in italics.

TABLE 4.1 - CUMULATIVE DEVELOPMENT PROPOSALS

NAME	DESCRIPTION	PLANNING STATUS	DISTANCE, DIRECTION
An Carr Dubh	13 turbines, up to 180m	*Planning*	18.5km, SE
Barachander	11 turbines, up to 180m	Scoping	7.3km, SE
Beinn Ghlas Repowering	*7 turbines, up to 149.9m*	*Planning*	*4.2km*, SE
Corr Chnoc	*12 turbines*, up to 200m	*Planning*	*2.2km*, S
Eredine	*22 turbines*, up to 200m	*Planning*	*22.6km*, S
Musdale	26 turbines, up to 200m	Scoping	4.8km, S

4.2.2.3 Argyll and Bute Council have specifically requested consideration of cumulative effects with Corr Chnoc wind farm which is now in planning. Beinn Ghlas Repowering is also considered in this update as it was submitted during the preparation of this report. Note that the submission was after the preparation of the visualisations, so the Beinn Ghlas Repowering is still shown as in scoping (in terms of the colour of the turbines on the wirelines), however the layout shown was consulted on in May and is the same as the planning application layout, as are the turbine heights.

4.2.2.4 As set out at **section 6.9.5 of the 2024 EIA Report**, the consent of Ladyfield is not considered to alter the effects arising from the Proposed Development, and effects would also remain the same in the event of a consent for An Carr Dubh wind farm. Eredine wind farm would be more than 22km to the southeast, beyond An Carr Dubh, and would not be expected to alter the effects arising from the Proposed Development.

4.2.2.5 Musdale wind farm was scoped in 2020-21 and there has been no further update. It is considered that this project is unlikely to proceed, or proceed with the same design as scoped, and it is not considered further and, as such, it is not illustrated on **Figure 4.1** or the updated visualisations provided.

4.2.2.6 The developer website for Barachander also indicates a reduced layout of 9 turbines, however, this layout is not yet published and the scoping layout is shown on figures and visualisations for this update. A detailed assessment is not provided given that the layout for Barachander is not known at present.

4.2.2.7 The scenarios considered within this cumulative assessment are:

- Scenario 1 – The Proposed Development with operational and consented development – as described in Section 6.8 of the 2024 EIA Report;
- Scenario 2C – The Proposed Development with Corr Chnoc wind farm;
- Scenario 2B – The Proposed Development with Beinn Ghlas Repowering, and
- Scenario 3 - The Proposed Development with Corr Chnoc and Beinn Ghlas Repowering.

4.2.3 Cumulative ZTV Studies

4.2.3.1 Figure 6.9 of the 2024 EIA Report provides a cumulative ZTV for the Proposed Development and the operational and consented wind farms and is described in Section 6.8.2.1.1 of the 2024 EIA Report. The pattern of visibility of the operational and consented wind farms would not be markedly altered by consents for Ladyfield and Eredine wind farms as can be seen by comparing Figures 6.9 and 6.10 of the 2024 EIA Report.

4.2.3.2 **Figure 4.2** provides a cumulative ZTV study for the Proposed Development with Corr Chnoc and Beinn Ghlas Repowering. This illustrates combined visibility of both the Proposed Development and Corr Chnoc within the two wind farm sites; from lower lying areas within 5km to the west and south of the two sites as illustrated by **viewpoints 2, 3, 4, 10 and 11**; from coastal areas 5-10km to the north between Connel and Tralee as illustrated by **viewpoint 5**, and more distant facing slopes to the north and northeast. Combined visibility with Beinn Ghlas Repowering would arise along the north shores of Loch Etive, including at **viewpoints 6 and 7** where all three wind farms would be visible, though Corr Chnoc would be less prominent than the other two. Other areas where both Beinn Ghlas Repowering and the Proposed Development would be visible, sometimes with Corr Chnoc in addition, are lower lying areas located between the Beinn Ghlas site and Taynuilt as illustrated by **viewpoints 1 and 8**. All three wind farms would also be seen from areas of higher ground, as shown by **viewpoints 9 and 16**.

4.2.4 Cumulative Viewpoint Analysis

4.2.4.1 The scale of effect at viewpoints arising from adding the Proposed Development to a baseline including the relevant cumulative developments for each scenario is set out in **Table 4.2** below. Only viewpoints where the effects of the Proposed Development are greater than Negligible or Small/Negligible and Corr Chnoc and/or Beinn Ghlas Repowering wind farms would be visible are considered for the reasons set out in **Section 4.2.1** above. Entries in the table are made only where effects would differ from Scenario 1.

TABLE 4.2 - CUMULATIVE SCALE OF CHANGE AT VIEWPOINTS

NO.	VIEWPOINT	SCENARIO 1	SCENARIO 2C	SCENARIO 2B	SCENARIO 3
1	Barguillean	Large/medium			
2	Glen Lonan	Medium	Medium/small (Additional) Large/medium (Combined)		As 2C
3	Barranrioch	Large/medium	Medium/small (Additional) Large (Combined)		As 2C
4	Ardchonnel	Medium	Medium/small (Additional) Large/medium (Combined)		As 2C
5	A828 Connel Bridge	Medium			
6	Achnacree Bay	Medium			
7	B845 Inveresragan	Medium			
8	Taynuilt	Medium/small		Small (Additional)	Small (Additional)
9	Barran an Fhraoich Viewpoint	Medium	Small (Additional) Large (Combined)		As 2C
10	Loch Nell	Medium	Small (Additional) Large/medium (Combined)		As 2C
11	Knipoch Viewpoint	Small	Negligible (Additional) Medium (Combined)		As 2C
12	Balliemore - Kerrera	Small	Medium/small (Combined)		As 2C
13	Dunstaffnage Castle	Medium/small			

4.2.5 Scenario 2C – with Corr Chnoc

Landscape Character

4.2.5.1 As shown by **Figure 4.2** and **Table 4.2** above, cumulative effects arising from the Proposed Development and Corr Chnoc would differ from effects for the Proposed Development in areas located nearby to the west, southwest and south of the Proposed Development, potentially affecting the following character types:

7a Craggy Upland with Settled Glens (includes the Site)

4.2.5.2 A description of the baseline character and sensitivity of this Landscape Character Type (LCT) and an assessment of effects arising from the Proposed Development is provided at 6.8.2.2.1 of the 2024 EIA Report. The LCT is identified as having High/medium sensitivity.

Viewpoints 1, 2, 3, 4, 9, and 10 are located in this LCT. One of the Corr Chnoc turbines would be within this LCT, with the remainder sited in part of an adjacent LCT which is enveloped by this LCT to the north, west and south.

4.2.5.3 In the context of a consent for Corr Chnoc wind farm, additional effects arising from the Proposed Development would consist of Large scale changes to character within approximately 1km of the Site, where the area of open moorland contained by forestry would become a wind farm. To the south and east in Glen Lonan, glimpsed views of the turbines above the skyline from more open parts of the glen (such as from **Viewpoint 2**) would be seen in addition to similar views of Corr Chnoc turbines on the other side of the glen, giving rise to Small scale effects on character. In more distant areas to the east, there would be limited visibility of Corr Chnoc wind farm and effects would be unchanged from Scenario 1; Medium/small scale changes within up to 4km, decreasing to Small scale to 6km and Negligible beyond. To the west and southwest of the Site, there would be notable areas of combined visibility of both wind farms from lower lying areas including Loch Nell as illustrated by **Viewpoints 3, 4 and 10**. In these areas the additional effects arising from the Proposed Development would be Small scale to the west of the Site, reducing to Negligible scale south of Barranrioch in the context of the closer turbines at Corr Chnoc. Considered together, Large scale changes to character would arise for a Localised extent of the LCT and Medium/small to Small scale changes would arise across a Wide extent of the LCT, giving rise to impacts of Medium magnitude. Taking account of the High/medium sensitivity of the LCT, additional effects of the Proposed Development would be **Major/moderate, Adverse and significant**.

4.2.5.4 The combined effects of both wind farms would consist of Large scale changes to character within approximately 1km of the Site and within 1km of the Corr Chnoc turbines. In Glen Lonan, views of one or both wind farms above the skyline from more open parts of the glen would also give rise to Large scale changes to character, such that Large scale effects would arise across an Intermediate extent of the LCT. Across much of the LCT, as illustrated by **Figure 4.2**, one or both of the two wind farms would be seen at a distance of 5km or closer, giving rise to a wide extent of Medium/small changes to character. Taking account of these changes across the LCT the impact would be of Large magnitude and effects would be **Major/moderate, Adverse and significant**.

7c North Loch Awe Craggy Upland (1.7km, S)

4.2.5.5 A description of the baseline character and sensitivity of this LCT and an assessment of effects arising from the Proposed Development is provided at paragraphs 2-6 of Appendix 6.3 of the 2024 EIA Report. The LCT is identified as having Medum/low sensitivity. The majority (11 out of 12) of the Corr Chnoc turbines are located within the northwestern part of this LCT.

4.2.5.6 In the context of a consent for Corr Chnoc wind farm, large scale turbines would be present in the closest part of the LCT to the Proposed Development. This coincides with the main area of visibility arising from the Proposed Development and, viewed from within or immediately adjacent to the Corr Chnoc wind farm, the additional change to character resulting from visibility of the Proposed Development to the north of Glen Lonan would be Negligible scale. In the area to the east, between Corr Chnoc and Beinn Ghlas, these two wind farms would be the dominant landscape features and the additional change arising from more distant views of the Proposed Development would also be Negligible scale. In more distant areas of visibility 7.5-10km to the south, the Proposed Development would always be seen directly through/beyond Corr Chnoc or beyond and just to one side. In this area, additional changes arising from the Proposed Development would again be Negligible given the distance, proximity of Carraig Gheal just to the south and Corr Chnoc in the intervening views to the north. Considered together, Negligible scale changes to character would arise across a Localised extent of the LCT, giving rise to Negligible magnitude impacts. Taking

account of the Medium/low sensitivity of the LCT, the additional effects of the Proposed Development would be **Minimal, Neutral and not significant**.

4.2.5.7 The combined cumulative effects arising would be very similar to those from Corr Chnoc in the absence of the Proposed Development, and the EIA Report accompanying that application should be referred to in relation to this LCT.

7b Craggy Coasts and Islands (5.6km, SW)

4.2.5.8 A description of the baseline character and sensitivity of this LCT and an assessment of effects arising from the Proposed Development is provided at paragraphs 17-20 of Appendix 6.3 of the 2024 EIA Report. The LCT is identified as having High sensitivity. **Viewpoints 11-13** are located within this LCT.

4.2.5.9 As illustrated by **Figure 4.2**, Corr Chnoc would be visible from the majority of the areas of this LCT where the Proposed Development would be visible. The majority of this visibility occurs from more elevated areas to the west and southwest, with very little potential visibility of either wind farm in the northern part of the LCT. The one exception to this is at Dunstaffnage Bay and Eilean Mor where only the Proposed Development would be visible (**Viewpoint 13**) or would be the closer and more prominent of the two schemes. In this very limited area at the northern tip of the LCT, cumulative effects would be no different to those of the Proposed Development alone.

4.2.5.10 In areas to the southwest, as illustrated by **Viewpoint 11**, Corr Chnoc would be seen as the closest and most prominent of the two proposals and, in the context of a consent for this, the additional changes to character arising from the Proposed Development would be Negligible. In parts of the LCT to the west, the degree of visibility and relative prominence of the two proposals would vary depending on location, as illustrated by **Viewpoints 12 and 9** (which sits on the boundary of the LCT). In the more distant areas, including Kerrera and the hills southwest of Oban, the addition of the Proposed Development in the context of a consented Corr Chnoc would result in a slightly reduced change than for the Proposed Development alone. Taken together, changes arising from the addition of the Proposed Development to a baseline including Corr Chnoc would be Small scale (tending towards Small/negligible in more distant areas on Kerrera) over a Limited extent of the LCT to the west of Oban and would give rise to a Small/negligible magnitude of impact. Considering the High sensitivity of the LCT, the additional effects of the Proposed Development would be **Minor, Adverse and not significant**.

4.2.5.11 The combined effects of both wind farms would consist of a more notable presence of wind farms seen on the hills to the east although, as illustrated by **Figure 4.2**, overall visibility of the two schemes would be intermittent and confined to a few more elevated areas. Changes to views within the LCT would give rise to Medium and Small scale changes to character over a Localised extent of the LCT, giving rise to a Medium/small magnitude of impact and combined effects which would be **Moderate, Adverse and not significant**.

Visual Receptors

4.2.5.12 As shown by **Figure 4.2** and **Table 4.2** above, cumulative visual effects arising from the Proposed Development and Corr Chnoc would differ from effects for the Proposed Development for the following visual receptor groups located to the west, southwest and south of the Proposed Development:

Glen Lonan (0.8km, SW)

4.2.5.13 A description of the baseline views and an assessment of effects arising from the Proposed Development is provided at 6.8.2.3.1 of the 2024 EIA Report. People living in, visiting and travelling through the glen are identified as having High/medium sensitivity.

4.2.5.14 As shown by **Figure 4.2** and **Viewpoint 2**, there would be views of the turbines of both wind farms from some parts of the glen, with Corr Chnoc typically appearing a little closer above the skyline than the Proposed Development where both are seen. There would also be short stretches of the road with no visibility of either wind farm or visibility of just one of the two developments due to screening by woodland and/or terrain as illustrated by **Viewpoint 1**, due to screening by woodland and/or terrain.

4.2.5.15 The scale of change to views if the Proposed Development is added to a baseline including Corr Chnoc would range from Large/medium in areas where only the Proposed Development is seen, to Medium/small, where there are open views of both wind farms, affecting a Wide extent of the Glen and giving rise to impacts of Medium magnitude. Additional effects of the Proposed Development would be **Major/moderate, Adverse and significant**.

4.2.5.16 The combined scale of change to views for both wind farms would be Large/medium where both or either wind farm is seen, affecting a Wide extent of the Glen and giving rise to impacts of Large/medium magnitude. Combined effects would be **Major, Adverse and significant**.

Area between woodlands east of Oban and Fearnoch Forest (1.5km, W)

4.2.5.17 A description of the baseline views and an assessment of effects arising from the Proposed Development is provided at 6.8.2.3.2 of the 2024 EIA Report. People living in, visiting and travelling through this area are identified as having High/medium sensitivity.

4.2.5.18 As shown by **Figure 4.2** and **Viewpoints 3 and 4**, both wind farms would often be seen together in areas to the west of the Site, forming separate clusters seen on the skyline and the addition of the Proposed Development to a scenario including Corr Chnoc would give rise to Medium/small changes to views. Taking account of localised screening of views by vegetation not included in the ZTV study, an Intermediate extent of the public views would be affected giving rise to impacts of Medium/small magnitude. Additional effects of the Proposed Development would be **Moderate, Adverse and not significant**.

4.2.5.19 The combined scale of change to views for both wind farms would be Large to Large/medium where both or either wind farm is seen, affecting an Intermediate extent of the receptor group and giving rise to impacts of Large/medium magnitude. Combined effects would be **Major/moderate, Adverse and significant**.

Kerrera and the area between Oban and Loch Feochan (5km, SW)

4.2.5.20 A description of the baseline views and an assessment of effects arising from the Proposed Development is provided at paragraphs 29-30 of Appendix 6.3 of the 2024 EIA Report. People living in, visiting and travelling through this area are identified as having High/medium sensitivity.

4.2.5.21 As shown by **Figure 4.2, Viewpoints 10 and 12** and nearby **Viewpoint 11**, visibility of the Proposed Development would be very limited from the local roads and small settlements as these are located within lower lying areas in the glens and around the coast with the main exception being looking north-east across Loch Nell (Viewpoint 10), from the core path along the ridgeline of Druim Mòr and from core paths, local roads and dispersed settlement on the southeast facing slopes towards the northern end of Kerrera. Visibility of the Corr Chnoc turbines would be more widespread particularly around Kilmore and along the A816, and the Corr Chnoc turbines would be seen closer than the Proposed Development in views from this area. In this context , the addition of the Proposed Development would give rise to Small scale

changes to views for a Limited extent of the receptor group. The magnitude of impact would be Negligible and additional effects of the Proposed Development would be **Minimal, Neutral and not significant**.

4.2.5.22 The combined effects of both wind farms would be Medium scale around Loch Feochan and areas to the southwest of the Site and Medium/small scale on Kerrera. Together, these effects would arise within a Localised extent of the receptor group giving rise to impacts of Medium/small magnitude. Effects would be **Moderate, Adverse and not significant**.

Pulpit Hill, Oban (7.9km, SW)

4.2.5.23 A description of the baseline views and an assessment of effects arising from the Proposed Development is provided at paragraphs 55-56 of Appendix 6.3 of the 2024 EIA Report. People visiting this viewpoint are identified as having High sensitivity.

4.2.5.24 As shown by illustrative view F in Appendix 6.2 of the 2024 EIA Report, trees close to the viewpoint would largely obscure views towards Corr Chnoc wind farm and effects would be the same as for the Proposed Development alone.

Knipoch Viewpoint (Viewpoint 11 – 10km, SW)

4.2.5.25 A description of the baseline views and an assessment of effects arising from the Proposed Development is provided at paragraphs 57-58 of Appendix 6.3 of the 2024 EIA Report. People visiting this viewpoint are identified as having High sensitivity.

4.2.5.26 As shown by **Viewpoint 11**, both wind farms would be visible set among hills seen beyond the head of the loch, with the Proposed Development being noticeably more distant and appearing as a more recessive feature compared to the turbines at Corr Chnoc.

4.2.5.27 Effects arising from the addition of the Proposed Development to Corr Chnoc would be Negligible scale. The magnitude of impact would be Negligible and effects would be **Minimal, Neutral and not significant**.

4.2.5.28 The combined cumulative effects arising would be very similar to those from Corr Chnoc in the absence of the Proposed Development and the EIA Report accompanying that application should be referred to effects at this viewpoint.

Designated Landscapes

North West Argyll (Coast) Local Landscape Area (LLA) (6.5km, SW)

4.2.5.29 A description of the baseline views and an assessment of effects arising from the Proposed Development is provided at paragraphs 68-70 of Appendix 6.3 of the 2024 EIA Report. The 'scenic value' of the LLA is judged to be of High/medium sensitivity.

4.2.5.30 As shown by **Figure 4.2**, from higher ground in the LLA, the two wind farms would typically be seen together as shown by **Viewpoints 11 and 12**. Close to the coast on Kerrera, the Proposed Development would often by visible without Corr Chnoc wind farm, and south of Kilmore around the north and northeast shores of Loch Feochan, Corr Chnoc would be visible without the Proposed Development.

4.2.5.31 In the northern part of the LLA, the more visible and closer of the two developments would be the Proposed Development, as shown by **Viewpoint 12**, and additional effects would remain as for the Proposed Development alone. Around Loch Feochan and other areas of the LLA to

the southwest of the Site, Corr Chnoc would be the closer and more visible, and effects arising from the addition of the Proposed Development would be Negligible scale. Small scale changes to scenic value would arise within a Localised extent of the LLA and would give rise to impacts of Small/negligible magnitude. Effects would be **Minor, Adverse and not significant**.

4.2.5.32 The combined effects of both wind farms would be Medium scale around Loch Feochan and areas to the southwest of the Site and Medium/small scale on Kerrera. Together these effects would arise within an Intermediate extent of the LLA giving rise to impacts of Medium/small magnitude. Effects would be **Moderate, Adverse and not significant**.

Night-Time

4.2.5.33 **Figure 4.3** provides a cumulative ZTV of the visible aviation lights on the Proposed Development and those on Corr Chnoc. It shows that there would be combined visibility of the lights on both wind farms in areas to the west and southwest, extending across low hills close to the two wind farms and breaking up notably beyond 5km from the Proposed Development. There would also be combined visibility from parts of the northern shore of Loch Etive and intermittently from the more elevated upland areas beyond this and to the northeast. Distant, combined views would also occur across the waterways in westerly directions and from the facing shores on Mull, the Morvern Peninsula and Lismore. The ZTV also illustrates that lights of the Proposed Development would be more widely visible than those of Corr Chnoc across areas within 5km to the north and east, while those on Corr Chnoc would be more widely visible across the upland areas to the south, between it and Carraig Ghael wind farm.

4.2.5.34 As shown by **Viewpoints 5 to 7**, the Corr Chnoc turbines would be seen mostly behind the skyline from most of the north shore of Loch Etive with only one of the lights likely to be visible, and low on the skyline beyond settlement lights from Connel and Connel Bridge. There would be no visibility of the Corr Chnoc lights from the coastal roads and areas of dispersed settlement between Ardachy and Bonawe, as illustrated by **Figure 4.3.** In this context, the effects of adding the Proposed Development to a night-time baseline including Corr Chnoc would remain the same as for the Proposed Development alone.

4.2.5.35 As shown by **Figure 4.3** cumulative visual effects at night arising from the Proposed Development and Corr Chnoc would differ from effects for the Proposed Development for the following visual receptor groups located to the west, southwest and south of the Proposed Development. For all of the receptor groups, a description of the baseline at night and an assessment of effects on night-time views is provided at section 6.8.2.5.6 of the 2024 EIA Report. Unless stated otherwise the visual receptors being considered are local residents travelling to or from, or out walking in the evenings/mornings near their homes and would have a High susceptibility and High/medium sensitivity to changes to views of Community value.

Glen Lonan (0.8km, SW)

4.2.5.36 As shown by **Figure 4.3**, there would be relatively little combined visibility of the lights on both wind farms from within Glen Lonan with generally only the lights of one or other scheme visible. Areas of combined visibility would in small areas in the vicinity of **Viewpoint 2**, and around Duntanachan and Glenamachrie. In these areas, the addition of the Proposed Development in the context of a consented Corr Chnoc would result in additional red lights seen to the northern side of the glen, mirroring those on Corr Chnoc seen on the southern skyline. It would also increase the extent of the local road from which aviation lights would be seen. The lights would not be an entirely new feature within the glen but would add to the number and extent of lights seen against the dark night sky. The addition of the Proposed

Development would result in Large scale changes to night-time views in those areas where Corr Chnoc lights are not already visible, reducing to Medium and Medium/small scale where they would be seen in conjunction. These changes would occur across an Intermediate extent of the receptor group and give rise to a Medium magnitude of impact and the additional effects of the Proposed Development would be **Moderate, Adverse and not significant**.

4.2.5.37 The combined scale of change to views for both wind farms would be Large where both or either wind farm is seen, affecting a Wide extent of the receptor group and giving rise to impacts of Large magnitude. Combined effects would be **Major/moderate, Adverse and significant**.

Area between woodlands east of Oban and Fearnoch Forest (1.5km, W)

4.2.5.38 As shown by **Figure 4.3** and **Viewpoints 3 and 4**, lights on both wind farms would often be seen together in areas to the west of the Site, forming separate clusters seen on the skyline. The addition of the Proposed Development to a scenario including Corr Chnoc would give rise to Small changes to views in the south of this area where Corr Chnoc is closer and fewer of the lights on the Proposed Development are seen as shown by **Viewpoint 3**; and Medium/small scale changes to views further north as illustrated by **Viewpoint 4**. Together, these changes would affect a Wide extent of the receptor group, giving rise to a Small magnitude of impact and the additional effects of the Proposed Development would be **Moderate, Adverse and not significant**.

4.2.5.39 The combined scale of change to views for both wind farms would be Large where both or either wind farm is seen, affecting a Wide extent of the receptor group and giving rise to impacts of Large magnitude. Combined effects would be **Major/moderate, Adverse and significant**.

Kerrera and area between Oban and Loch Feochan (5km, SW)

4.2.5.40 There would be a very limited extent of open views of the lights on the Proposed Development in this area – mostly for drivers passing **Viewpoint 10** at Loch Nell and local residents and road users near **Viewpoint 12** on the eastern side of Kerrera. From Kerrera, lights in Oban and on both wind farms would be seen, and in this context, the addition of the Proposed Development would give rise to Negligible scale changes to views. At Loch Nell, one light on Corr Chnoc would be seen nearby, with 3-4 lights on the Proposed Development giving rise to Medium/small scale additional changes. The magnitude of impact would be Negligible across most of this area, increasing to Small for road users on the local road past Loch Nell. Additional effects of the Proposed Development would be **Minor at Loch Nell, reducing to Minimal elsewhere in this area and would be Adverse and not significant**.

4.2.5.41 The combined effects of both wind farms would give rise to Small scale changes to views from Kerrera, affecting Limited extent of the receptor group, and Large/medium scale changes to views from the minor road past Loch Nell, local roads near Kilmore and A816 along Loch Feochan, affecting a Localised Extent of the receptor group. Considered together these changes to views would give rise to a Medium magnitude of impact and effects would be **Moderate, Adverse and not significant**.

4.2.6 Scenario 2B – with Beinn Ghlas Repowering

4.2.6.1 As shown by **Figure 4.2** and **Table 4.2** above, the additional visual effects arising from the Proposed Development would not be markedly different in the context of a consent for Beinn Ghlas Repowering. The only change would be a slight reduction to the effects of the Proposed Development around Taynuilt, Brochroy and Fearnoch, where the magnitude of impact would be Small, but effects would remain **Moderate, Adverse and not significant**. These limited

differences are largely as a result of the repowering scheme replacing an existing wind farm, and for the same reason, the effects on landscape character and designated areas would remain the same as for Scenario 1.

4.2.6.2 The Beinn Ghlas Repowering turbines would not require aviation lighting, and cumulative effects at night would also remain the same as for the Proposed Development alone.

4.2.7 Scenario 3 – with Beinn Ghlas Repowering

4.2.7.1 Given the limited cumulative effects with Beinn Ghlas Repowering as set out above, the cumulative effects in Scenario 3 would be the same as for Scenario 2C.

4.3 Summary

4.3.1 Cumulative effects

4.3.1.1 Effects with operational and consented wind farms are considered in the main LVIA provided as **Chapter 6 of the 2024 EIA Report**. The only wind farms in planning within the 25km Study Area at the time of preparing the EIA Report were Ladyfield and An Carr Dubh wind farms, both beyond 18km to the south-east of the Site. As reported in the 2024 EIA Report, there would be limited combined visibility of the Proposed Development and these two wind farms and cumulative effects with those wind farms would be the same as for the Proposed Development alone, and taking account of this, the assessment has not been updated now that Ladyfield wind farm is consented.

4.3.1.2 This 2025 FEI assessment considers the cumulative effects arising from the Proposed Development with Corr Chnoc wind farm and Beinn Ghlas Repowering.

4.3.1.3 Cumulative effects arising from the Proposed Development and Corr Chnoc would be focused primarily within Glen Lonan between the two sites and in the lower lying areas to the west and southwest, extending to Loch Feochan and Kererra. In areas to the north and east, more limited visibility of the Corr Chnoc turbines would result in effects remaining the same as for the Proposed Development alone.

4.3.1.4 Significant effects would arise as a result of the addition of the Proposed Development to a baseline including Corr Chnoc for the following receptors:

- LCT 7a Craggy Upland with Settled Glens – the host character type for the Proposed Development;
- Visual Receptors in Glen Lonan, and
- Visual receptors in the area between the woodlands east of Oban and Fearnoch Forest.

4.3.1.5 Significant combined effects from both wind farms would arise for the same receptors. There would also be significant combined effects at night due to views of aviation lights along the skyline for visual receptors in Glen Lonan and the area between the woodlands east of Oban and Fearnoch Forest. It is possible that in this scenario there would also be significant effects arising within 7c North Loch Awe Craggy Upland as the Corr Chnoc site is located within this LCT, however these would be as a result of Corr Chnoc within this LCT and would not be contributed to by the Proposed Development.

4.3.1.6 There would be limited cumulative effects arising as a result of the combination of the Proposed Development and Beinn Ghlas Repowering – mostly as a result of Beinn Ghlas Repowering replacing an existing wind farm, but also due to the limited visibility of Beinn Ghlas Repowering in the areas where the effects of the Proposed Development would

primarily arise – to the north and west of the Site. The only change to effects would be a very limited reduction in the scale of changes to views in Taynuilt and nearby areas as a result of adding the Proposed Development to a baseline including Beinn Ghlas Repowering.

4.3.2 Assessment summary tables

4.3.2.1 Only effects arising with Corr Chnoc wind farm are included in the summary table. Significant effects are shown in **bold**.

4.3.2.2 Where the combined cumulative effects would arise entirely or almost entirely from Corr Chnoc wind farm, these are left blank and the EIA Report accompanying that application should be referred to.

TABLE 4.3 - CUMULATIVE ASSESSMENT SUMMARY

RECEPTOR	SCENARIO 1	SCENARIO 2C (ADDITIONAL EFFECTS)	SCENARIO 2C (COMBINED EFFECTS)
7a Craggy Upland with Settled Glens High/medium sensitivity	**Large/medium magnitude, Major/moderate and Adverse**	**Medium magnitude, Major/moderate and Adverse**	**Large magnitude, Major/moderate and Adverse**
7c North Loch Awe Craggy Upland Medium/low sensitivity	Medium/small magnitude, Moderate/minor and Adverse	Negligible magnitude, Minimal and Neutral	
7b Craggy Coasts and Islands High sensitivity	Small magnitude, Moderate and Adverse	Small/negligible magnitude, Minor and Adverse	Medium/small magnitude, Moderate and Adverse
Glen Lonan **High/medium sensitivity**	**Medium magnitude, Major/moderate and Adverse**	**Medium magnitude, Major/moderate and Adverse**	**Large magnitude, Major and Adverse**
Area between woodlands east of Oban and Fearnoch Forest **High/medium sensitivity**	**Large/medium magnitude, Major/moderate and Adverse**	Medium/small magnitude, Moderate and Adverse	**Large/medium magnitude, Major/moderate and Adverse**
Kerrera and area between Oban and Loch Feochan High/medium sensitivity	Medium/small magnitude, Moderate and Adverse (NE of A816) Small magnitude, Moderate/minor and Adverse (SW of A816)	Negligible magnitude, Minimal and Neutral	Medium/small magnitude, Moderate and Adverse
Pulpit Hill High sensitivity	Medium/small magnitude, Moderate and Adverse	Same as for the Proposed Development alone.	Same as for the Proposed Development alone.
Knipoch Viewpoint High sensitivity	Small magnitude, Moderate and Adverse	Negligible magnitude, Minimal and Neutral	

RECEPTOR	SCENARIO 1	SCENARIO 2C (ADDITIONAL EFFECTS)	SCENARIO 2C (COMBINED EFFECTS)
North West Argyll LLA High/medium sensitivity	Small magnitude, Moderate and Adverse	Small/negligible magnitude, Minor and Adverse	Medium/small magnitude, Moderate and Adverse
Night time effects			
Glen Lonan **High/medium sensitivity**	**Large/medium magnitude, Major/moderate, Adverse**	Medium magnitude, Moderate, Adverse	**Large magnitude, Major/moderate, Adverse**
Area between woodlands east of Oban and Fearnoch Forest **High/medium sensitivity**	**Large magnitude, Major/moderate, Adverse**	Small magnitude, Moderate, Adverse	**Large magnitude, Major/moderate, Adverse**
Kerrera and the area between Oban and Loch Feochan High/medium sensitivity	Local Road at Loch Nell - Small magnitude, Minor and Adverse	Local Road at Loch Nell - Small magnitude, Minor and Adverse	Medium magnitude, Moderate and Adverse

5 CULTURAL HERITAGE AND ARCHAEOLOGY

5.1 Introduction

5.1.1.1 This chapter compares the likely significant effects on archaeological features and heritage assets resulting from the construction, operation, and decommissioning of the Proposed Development following revisions to access tracks near turbines T3, T4, T5 and T6. The cumulative baseline has also been updated following consultation with Argyll and Bute Council.

5.1.1.2 The specific objectives of the chapter are to:

- Compare and update (if necessary) assessment methodology and significance criteria used in completing the impact assessment;
- Compare and describe the potential effects, including direct, settings and cumulative effects; and
- Compare and describe the mitigation measures that will be implemented to address likely significant effects.

5.1.1.3 This assessment has been carried out in accordance with the standards of professional conduct outlined in the Chartered Institute for Archaeologists (CIfA) Code of Conduct and Professional Conduct, as well as the CIfA Standard and guidance for commissioning work on, or providing consultancy advice on, archaeology and the historic environment; desk- based assessment; and other relevant guidance.

The following assessment should be read in conjunction with **Figures 5.1 to 5.30** and the **LVIA Viewpoints** produced for this FEI Report.

5.2 Legislation, Policy and Guidance

5.2.1.1 There has been no change or update to national or local legislation, policy and guidance since that reported in Chapter 7, of the 2024 EIA Report.

5.2.1.2 The Chartered Institute of Archaeologists (CIfA) Regulations for Professional Conduct[5] was revised in 2024, however there are no material changes.

5.3 Methodology

5.3.1.1 There have been no material changes to the methodology compared to that reported in Chapter 7 or the 2024 EIA Report.

5.3.1.2 The methodology referenced in this assessment is detailed in Chapter 7 of the 2024 EIA Report and will not be repeated here.

[5] Chartered Institute of Archaeologists (CIfA). (2019; revised 2021 & 2024). Regulations for professional conduct.

5.4 Baseline

5.4.1.1 There is no change to the baseline compared to that reported in Chapter 7 of the 2024 EIA Report.

5.5 Likely Significant Effects

5.5.1 Construction

5.5.1.1 There are no additional heritage assets recorded on the Site compared to those reported in Chapter 7 of the 2024 EIA Report.

5.5.1.2 There is a minor change to the direct physical impact of the Proposed Development on known heritage assets due to the alteration of proposed tracks within the Site (**Figure 5.1**). One of the possible shooting butts (Asset 142), identified within the Site, was anticipated to be removed by the Proposed Development however, the alteration to the proposed tracks indicates that the asset would now be avoided by design.

5.5.1.3 **Table 5.1** below details the importance, and thus sensitivity, of the known heritage assets within the Site and also notes the predicted magnitude of impact and effect significance.

TABLE 5.1 - HERITAGE ASSETS WITHIN THE SITE

ASSET NUMBER	ASSET NAME	DESIGNATION	IMPORTANCE	IMPACT MAGNITUDE	EFFECT SIGNIFICANCE
139	Stone Wall	Non-designated Heritage Asset	Negligible	Low	Negligible
140	Mound	Non-designated Heritage Asset	Negligible	Negligible	Negligible
141	Field Boundary Bank	Non-designated Heritage Asset	Negligible	Low	Negligible
142	Possible Shooting Butt	Non-designated Heritage Asset	Negligible	None	None
143	Possible Shooting Butt	Non-designated Heritage Asset	Negligible	None	None
144	Possible Shooting Butt	Non-designated Heritage Asset	Negligible	None	None
145	Stone Wall	Non-designated Heritage Asset	Negligible	None	None
146	Stone Wall	Non-designated Heritage Asset	Negligible	Low	Negligible

5.5.1.4 Whilst **Figure 5.1** appears to show the access track running through Assets 143 and 144, this is due to the scaling of **Figure 5.1** and these assets are avoided by the access track.

5.5.2 Operation

5.5.2.1 The changes to the Proposed Development, namely changes to ground level access tracks, would have no impact on the settings of designated heritage assets within 10km of the Site.

5.5.2.2 There are no changes to the likely significant operational effects reported in Chapter 7 of the 2024 EIA Report.

5.6 Cumulative Assessment

5.6.1 Construction

5.6.1.1 There are no changes reported to the construction cumulative assessment as assessed in Chapter 7 of the 2024 EIA Report.

5.6.2 Operation

5.6.2.1 The operational cumulative assessment for Chapter 7 of the 2024 EIA Report was based on 10 cumulative developments. An additional two cumulative developments have been added to the cumulative assessment list. Cumulative Developments are located in **Figure 4.1**. The cumulative assessment list is detailed in **Table 5.2.**

TABLE 5.2 – CUMULATIVE DEVELOPMENTS TO BE CONSIDERED

OPERATIONAL DEVELOPMENTS	CONSENTED DEVELOPMENTS	IN PLANNING DEVELOPMENTS	IN SCOPING DEVELOPMENTS
Barran Caltum	Blarghour Variation	Eredine	Barachander
Carraig Gheal;	Ladyfield	An Carr Dubh	
An Suidhe		Corr Chnoc	
Beinn Ghlas		Beinn Ghlas Repowering	

5.6.2.2 Only heritage assets assessed within the Cumulative Assessment section of Chapter 7 of the 2024 EIA Report are considered in this assessment. These heritage assets are located in **Figure 5.2**. Certain assets have been grouped together as per the assessment in Chapter 7 of the 2024 EIA Report.

Dunstaffnage Castle (Asset 74)

5.6.2.3 The relative sensitivity of the Dunstaffnage Castle (Asset 74) is judged to be High. The impact magnitude of the Proposed Development alone was considered to be Low and therefore the resulting level of effect is Minor and not significant in EIA terms.

5.6.2.4 The setting of the Castle relates to its strategic defensive location on the edge of the coastal realm and the active medieval landscape. Four cumulative developments (the operational Beinn Ghlas and Carraig Gheal and the in planning Corr Chnoc; and Beinn Ghlas Repowering) identified for this assessment are theoretically visible in the same arc of view as the Proposed Development (**Figures 5.25 and 5.26**). However, in reality, due to the dominance of

commercial forestry and the distance to the cumulative developments, it is likely that only blade tips would be visible, and they are unlikely to be readily appreciable and as such are unlikely to increase the number of turbines visible from the Castle (**LVIA Viewpoint 13**). The cumulative developments would not be visible in the views from the Castle towards the coast, although they may be distantly visible on approach to the Castle from the sea (**Figure 5.26**). Whilst visible, they would be beyond the elements of setting which provide significance for the Castle. As stated in Chapter 7 of the 2024 EIA Report, the effect would arise from the Proposed Development alone, and there is considered to be no cumulative effect.

Prehistoric ritual and funerary assets within Glen Lonan

5.6.2.5 The relative sensitivity of the prehistoric ritual and funerary assets (Assets 4, 5, 30, 31, 36, 55, 86, 87 & 105) within Glen Lonan is judged to be High. The impact magnitude of the Proposed Development alone was considered to be Low, and therefore the resulting level of effect is Minor and not significant in EIA terms. The cumulative impact in Chapter 7 of the 2024 EIA Report was considered to be None.

5.6.2.6 The setting of these assets relates to their location within Glen Lonan and their inter-relationship with each other. The cumulative developments in scoping, in planning, consented and/or operational identified for this assessment are not located within Glen Lonan and would therefore only be visible beyond the key elements of setting which enables an appreciation, understanding and experience of the ritual and funerary assets within the Glen setting.

5.6.2.7 The visualisations (**Figure 5.7 & LVIA Viewpoint 1**) prepared for this assessment indicate visibility of the in planning Beinn Ghlas Repowering cumulative development from within Glen Lonan looking east. **Figure 5.7** is from the western end of Glen Lonan from Glenamachrie, standing stone 100m E of (Asset 30), looking east and indicates that at least one turbine hub and two turbine blades would be theoretically visible from that asset, backdropping views towards other prehistoric ritual and funerary assets as highlighted on **Figure 5.7**. The turbines would be visible beyond the ridgeline to the east and thus beyond the extent of Glen Lonan. It is likely that in other views along Glen Lonan looking east, Beinn Ghlas Repowering may be visible (**LVIA Viewpoint 1**), although the view of the turbines is likely to be discontinuous and would change throughout the Glen. For example, from Clachadow, cairn 320m N of (Asset 55- **Figure 5.15**) no cumulative developments are anticipated to be visible when looking eastward along Glen Lonan.

5.6.2.8 It is also acknowledged that the turbines' blades and hubs of the in Planning Corr Chnoc may be visible beyond the southern ridgeline of the Glen (example **Figures 5.11 & 5.17; LVIA Viewpoint 2**). The visibility of the in Planning Corr Chnoc is unlikely to be continuous and would likely change depending on location within the valley and be different for different monuments.

5.6.2.9 Whilst largely located beyond the extent of Glen Loan the addition of the Proposed Development to theoretical cumulative scenario would be considered to be an alteration to the baseline setting of the individual and group of assets, with turbines in view in three separate directions, which in effect would line the edge of the landscape which contributes to the significance of those assets. The cultural significance of the assets would remain legible within Glen Lonan and thus the cumulative scenario would not affect the ability to understand, appreciate and experience the contribution that setting makes to the asset's overall significance. The cumulative impact is considered to be Low. The resulting level of cumulative impact would be Minor and not significant in EIA terms. This impact is different to that reported in Chapter 7 in the 2024 EIA Report, which, as per the above, was predicted to be no cumulative impact.

5.6.2.10 It must be noted that the cumulative scenario includes one in scoping and in planning developments which are subject to change during the iterative design process.

Iron Age defensive and settlement assets within Glen Lonan

5.6.2.11 The relative sensitivity of the Iron Age defensive and settlement assets (Assets 35, 57, 58 & 60) within Glen Lonan is judged to be High. The impact magnitude of the Proposed Development alone was considered to be Low and therefore the resulting level of effect is Minor and not significant in EIA terms. The cumulative impact in Chapter 7 for the 2024 EIA Report was considered to be None.

5.6.2.12 The setting of these defensive and settlement assets relates to their location within Glen Lonan and their inter-relationship with each other. The cumulative developments in scoping, in planning, consented and/or operational identified for this assessment are largely not located within Glen Lonan and would therefore only be visible beyond the setting, which enables an appreciation, understanding and experience of the defensive and settlement assets within the Glen setting.

5.6.2.13 The in planning Corr Chnoc is anticipated to be visible beyond the southern ridgeline of the Glen from Barguillean Farm, dun 250m SSW of (Asset 58), with one turbine extending into Glen Lonan (**Figure 5.17**). **Figure 5.17** shows that whilst visible, the Iron Age defensive and settlement assets within Glen Lonan occupy the low lying areas of the Glen and thus their inter-relationship and topographic setting would remain appreciable and understandable in the landscape. Indeed, **Figure 5.11** highlights the location of Clachadow, dun 500m NW of (Asset 60) in views looking west along Glen Loan and shows the turbine hub of the in planning Corr Chnoc located beyond the southern ridgeline of the Glen. **LVIA Viewpoint 2**, also from within Glen Lonan, indicates that Corr Chnoc would be visible to the south.

5.6.2.14 **Figure 5.7**, from a standing stone (Asset 30) exemplifies the east facing view from within the Glen, which includes Iron Age defensive and settlement remains (Assets 57 & 60 are highlighted) and illustrates that in distant views there may be some visibility of the in planning Bein Ghlas Repowering cumulative development from within the Glen. **LVIA Viewpoint 1** also shows the presence of the turbines in views looking eastward along the Glen. Though, as the visualisations show, the turbines would be visible beyond the Glen and a further ridgeline.

5.6.2.15 The cumulative developments would increase the arc of view around the Glen edge where turbines are anticipated to be present. It is considered that the cumulative impact would be an alteration to the baseline setting, which does not affect the ability to understand, appreciate and experience the contribution setting makes to the group of assets' significance. The magnitude of impact is considered to be Low. The resulting cumulative impact would be Minor and not significant in EIA terms. This impact is different to that reported in Chapter 7 in the 2024 EIA Report , which, as per the above, was predicted to be no cumulative impact.

5.6.2.16 It must be considered that the cumulative scenario includes in scoping and in planning developments which are subject to change during the iterative design process.

Prehistoric assets around Loch Nell

5.6.2.17 The relative sensitivity of the prehistoric assets (Assets 13, 64 & 66) around Loch Nell is judged to be High. The impact magnitude of the Proposed Development alone was considered to be Low and therefore the resulting level of effect is Minor and not significant in EIA terms. No cumulative impact was anticipated in the 2024 EIA Report.

5.6.2.18 The visualisations (**Figure 5.24**) prepared for this assessment do not indicate any visibility of any of the cumulative developments in the same view as the Proposed Development,

although based on **LVIA Viewpoint 10**, the in planning Corr Chnoc is likely to be visible to the east on the ridge of high ground on the eastern side of Loch Nell. Whilst the turbines may be visible, they are located beyond the elements of landscape which provides significance to the assets and the cumulative development baseline would not affect the ability to understand, appreciate and experience the contribution setting makes to the group of assets' significance. It is not considered that the theoretical cumulative scenario would result in a greater effect than that already assessed for the Proposed Development on its own and thus a Minor level cumulative effect, which is not significant in EIA terms, is predicted. This is different to the conclusions of Chapter 7 of the 2024 EIA Report, which, as per the above, was predicted to be no cumulative impact.

Moss of Achnacree

5.6.2.19 The relative sensitivity of the prehistoric ritual and funerary assets (Assets 25-29, 44-46, 49-52, 60 &, 62) within the Moss of Achnearee is judged to be High. The impact magnitude of the Proposed Development alone was considered to be Low and therefore the resulting level of effect is Minor and not significant in EIA terms. No cumulative impact was anticipated in the 2024 EIA Report.

5.6.2.20 The operational Beinn Ghlas and the in planning Beinn Ghlas Repowering and the in planning Corr Chnoc would theoretically be visible from the north (**Figure 5.22**) and south (**Figure 5.10**) of the Moss, with the in scoping Barachander and the consented Ladyfield also theoretically visible from the north (**Figure 5.22**) behind the Proposed Development. Whilst cumulative developments may be theoretically visible, due to the distance and Fearnoch Forest they are unlikely to be readily perceptible and as the cumulative developments would be located beyond the setting of the Moss no cumulative effects are anticipated. This impact is the same as that assessed within Chapter 7 of the 2024 EIA Report.

Dun Neil, dun 100m NE of Dun-neil (Asset 6)

5.6.2.21 The relative sensitivity of Dun Neil, dun (Asset 6) is judged to be High. The impact magnitude of the Proposed Development alone was considered to be Negligible and therefore the resulting level of effect is Minor and not significant in EIA terms. The theoretical cumulative scenario was considered to not result in a greater effect than that already assessed for the Proposed Development in Chapter 7 of the 2024 EIA Report and thus be Negligible and not significant.

5.6.2.22 The setting of the dun relates to the valley setting around Strontrollier and Loch Nell and the prehistoric activity evidenced therein. The majority of cumulative developments identified for this assessment are not located within this landscape. The in planning Corr Chnoc extends to the high ground to the south-east of Loch Nell (**LVIA Viewpoint 10**) and would likely be theoretically visible from the dun. However, the dun's setting within the valley would be unchanged and thus the turbines would be visible beyond the setting, which enables an understanding, appreciation and experience of the dun and its setting. It is not considered that the theoretical cumulative scenario would result in a greater effect than that already assessed for the Proposed Development on its own. The cumulative effect would therefore, at worst, be Negligible and not significant in EIA terms. This impact is the same as that assessed within Chapter 7 in the 2024 EIA Report.

Cologin, fort 650m NE of (Asset 11)

5.6.2.23 There is no anticipated change to the cumulative baseline. The cumulative effect assessed in Chapter 7 of the 2024 EIA Report was considered to be Negligible and not significant in EIA terms. No change to the cumulative effect is anticipated.

Ariogan, cairn 400m NNE of (Asset 12) and Ariogan, cairn 950m W of (Asset 14)

5.6.2.24 There is no anticipated change to the cumulative baseline. The cumulative effect assessed in Chapter 7 of the 2024 EIA Report was, considered to be Negligible and not significant in EIA terms. No change to the cumulative effect is anticipated.

Gallanach Beg, dun 30m N of (Asset 16)

5.6.2.25 There is no anticipated change to the cumulative baseline. The cumulative effect assessed in Chapter 7 of the 2024 EIA Report was, considered to be Negligible and not significant in EIA terms. No change to the cumulative effect is anticipated.

Taynuilt, standing stone 800m E of (Asset 19)

5.6.2.26 There is no anticipated change to the cumulative baseline. The cumulative effect assessed in Chapter 7 of the 2024 EIA Report was considered to be Negligible and not significant in EIA terms. No change to the cumulative effect is anticipated.

Dun Leigh, dun 200m ENE of Balure (Asset 20)

5.6.2.27 There is no anticipated change to the cumulative baseline. The cumulative effect assessed in Chapter 7 of the 2024 EIA Report was considered to be Negligible and not significant in EIA terms. No change to the cumulative effect is anticipated.

Dun Mhuirageul, dun SE of Taynuilt (Asset 21)

5.6.2.28 There is no anticipated change to the cumulative baseline. The cumulative effect assessed in Chapter 7 of the 2024 EIA Report was considered to be Negligible and not significant in EIA terms. No change to the cumulative effect is anticipated.

Dun Creagach, fort SW of Connel (Asset 23)

5.6.2.29 There is no anticipated change to the cumulative baseline. The cumulative effect assessed in Chapter 7 of the 2024 EIA Report was, considered to be Negligible and not significant in EIA terms. No change to the cumulative effect is anticipated.

Dun Creagach, dun 145m NW of Auchnacloich (Asset 24)

5.6.2.30 There is no anticipated change to the cumulative baseline. The cumulative effect assessed in Chapter 7 of the 2024 EIA Report was considered to be Negligible and not significant in EIA terms. No change to the cumulative effect is anticipated.

Eilean Mor, fort, Dunstaffnage (Asset 37)

5.6.2.31 There is no anticipated change to the cumulative baseline. The cumulative effect assessed in Chapter 7 of the 2024 EIA Report was, considered to be Negligible and not significant in EIA terms. No change to the cumulative effect is anticipated.

Dunach, dun 600m ENE of (Asset 39)

5.6.2.32 There is no anticipated change to the cumulative baseline. The cumulative effect assessed in Chapter 7 of the 2024 EIA Report was considered to be Negligible and not significant in EIA terms. No change to the cumulative effect is anticipated.

Dun Chathach, dun 630m E of Auchnacloich Railway Station (Asset 54)

5.6.2.33 There is no anticipated change to the cumulative baseline. The cumulative effect assessed in Chapter 7 of the 2024 EIA Report was, considered to be Negligible and not significant in EIA terms. No change to the cumulative effect is anticipated.

Cladh na h'Annaid, burial ground 280m SE of Corachie Farm (Asset 61)

5.6.2.34 The relative sensitivity of Cladh na h'Annaid, burial ground 280m SE of Corachie Farm (Asset 61) is judged to be Medium. The impact magnitude of the Proposed Development alone was considered to be Low and therefore the resulting level of effect is Minor and not significant in EIA terms. No cumulative impact was anticipated in Chapter 7 of the 2024 EIA Report.

5.6.2.35 The burial ground's setting relates to its topographic location and the downward sloping land to the north-west. The in planning Corr Chnoc is anticipated to be visible to the south-west of the burial ground, beyond a ridgeline. The cumulative development would be theoretically visible as a separate development from the Proposed Development and would extend the arc of view in which turbines are visible (**Figure 5.21**). Whilst additional turbines would be visible, it is not anticipated to alter the way in which the burial ground is understood in the landscape. The cumulative effect, at worst, would be Negligible and not significant in EIA terms. This is different to the conclusions of the 2024 EIA Report, which, as per the above, was considered to be no cumulative impact.

Dun Mor, motte 380m WNW of Balure Cottage (Asset 63)

5.6.2.36 There is no anticipated change to the cumulative baseline. The cumulative effect assessed in Chapter 7 of the 2024 EIA Report was considered to be Negligible and not significant in EIA terms. No change to the cumulative effect is anticipated.

Ledaig House, cairn 20m SE of (Asset 67)

5.6.2.37 There is no anticipated change to the cumulative baseline. The cumulative effect assessed in Chapter 7 of the 2024 EIA Report was judged to be none. No change to the cumulative effect is anticipated.

Dun Mac Sniachan, forts and dun, Benderloch (Asset 72)

5.6.2.38 There is no anticipated change to the cumulative baseline. The cumulative effect assessed in Chapter 7 of the 2024 EIA Report was, considered to be Negligible and not significant in EIA terms. No change to the cumulative effect is anticipated.

Tom an Iasgaire, fort (Asset 76)

5.6.2.39 There is no anticipated change to the cumulative baseline. The cumulative effect assessed in Chapter 7 of the 2024 EIA Report was considered to be Negligible and not significant in EIA terms. No change to the cumulative effect is anticipated.

5.6.3 Conclusions

5.6.3.1 This assessment has been undertaken due to proposed alterations to the access tracks within the Proposed Development and the addition of cumulative developments to the cumulative baseline requested by Argyll and Bute Council.

5.6.3.2 There are eight known non-designated heritage assets within the Site. The importance of those assets has been judged to be negligible. Chapter 7 of the 2024 EIA Report identified that there would be a High impact magnitude on one shooting butt (Asset 142). The revised access tracks now avoids the shooting butt (Asset 142) and as such no impact is anticipated. As such, no significant direct physical effects on known heritage assets would occur. The proposed alterations to the access tracks would result in the removal a previously predicted non-significant effect. Neither the 2024 EIA Report nor the 2025 FEI assessment have identified the potential for significant direct physical effects upon known heritage assets and as such, overall, the conclusion of the 2024 EIA Report remain valid in this respect.

5.6.3.3 There are no changes to the likely significant effects of the operation of the Proposed Development compared to those reported in Chapter 7 of the 2024 EIA Report.

5.6.3.4 Following consultation with Argyll and Bute Council, further cumulative developments have been scoped into the cumulative baseline compared to that assessed in Chapter 7 of the 2024 EIA Report. As per the methodology for cumulative assessment detailed in Chapter 7 of the 2024 EIA Report, the effects of these cumulative developments on the settings of designated heritage, where Minor or above effects were identified, has been undertaken as part of this assessment. Chapter 7 of the 2024 EIA Report concluded that the cumulative effect would result in no greater effect than the Proposed Development on its own. This conclusion is largely unchanged, except in four cases.

5.6.3.5 The inclusion of Corr Chnoc and Bein Ghlas Repowering in planning developments into the cumulative baseline represents a scenario, which is likely to change during the iterative design processes of those projects. Both developments, as currently proposed, would be visible from within Glen Lonan, although visibility would be discontinuous throughout the Glen. The cumulative impact magnitude on two groups of assets; Prehistoric ritual and funerary assets within Glen Lonan; and Iron Age defensive and settlement assets within Glen Lonan, is considered to be Low. The resulting level of cumulative effect would be **Minor and not significant** in EIA terms.

5.6.3.6 Corr Chnoc is anticipated to be visible from the group of assets identified as Prehistoric assets around Loch Nell. This is different to the assessment made in Chapter 7 of the 2024 EIA Report, where no cumulative developments were anticipated to be visible. However, the theoretical cumulative scenario is not anticipated to result in a greater effect than that already assessed for the Proposed Development on its own, and thus a **Minor** level cumulative effect is anticipated.

5.6.3.7 Corr Chnoc is also anticipated to be visible from the Cladh na h'Annaid, burial ground (Asset 61). This is different to the assessment made in Chapter 7 of the 2024 EIA Report, where no cumulative developments were anticipated to be visible. The theoretical cumulative scenario at worst would result in a **Negligible** effect, which would **not be significant** in EIA terms.

6 NOISE

6.1 Introduction

6.1.1.1 Text The following chapter has been prepared in addendum to the 2024 EIA Report Chapter 8: Noise (ECU Reference: ECU00004841) submitted in support of the Proposed Development in November 2024. This report will reference the findings of the original Noise Impact Assessment (NIA) that should be read in conjunction with the updated findings presented in this study.

6.1.2 Background

6.1.2.1 A cumulative noise assessment has been requested by ABC to assess potential operational noise impacts due to the neighbouring Beinn Ghlas Wind Farm Repowering (ECU00004540) and Corr Chnoc Wind Farm (ECU00006023 & 25/00036/S36), both currently in planning.

6.1.2.2 During scoping for the Proposed Development, it was concluded that a cumulative assessment would be scoped out of the 2024 EIA Report, as it was determined that cumulative noise impacts from the operational Beinn Ghlas Wind Farm (97/00719/DET) would not produce significant levels at identified noise sensitive receptors within the Study Area of the Proposed Development. Additionally, insufficient information regarding the proposed Corr Chnoc Wind Farm was known during the 2024 EIA Report, due to the development being at scoping and an application had yet to be made for the project at the time of initial assessments.

6.1.2.3 Since the submission of the original NIA in November 2024, both the proposed Corr Chnoc Wind Farm and Beinn Ghlas Repower are now in planning. A review of project information in planning has identified that cumulative impacts are anticipated to occur at identified receptors and therefore, a cumulative assessment has been undertaken within this study.

6.1.3 Scope

6.1.3.1 The following report will assess the potential cumulative noise impacts from the proposed Corr Chnoc Wind Farm and Beinn Ghlas Wind Farm Repower. Operational noise immissions for the Proposed Development reported in the 2024 EIA Report Chapter 8: Noise, will be assessed against derived cumulative ETSU-R-97 noise limits, which reference the latest baseline survey information gathered in the area.

6.1.3.2 It should be noted that the candidate machine and turbine locations remain unchanged, the details of which are outlined in the 2024 EIA Report Chapter 5: Project Description.

6.2 Previous Findings

6.2.1.1 A noise modelling exercise was undertaken to assess potential impacts at the nearest noise sensitive receptors relative to the Proposed Development.

6.2.1.2 Predicted immissions from the Proposed Development (inclusive of topographic screening and +2dB uncertainty) were found to be below 35dB(A) at all assessment locations, with a maximum predicted level of 34dB(A) at the nearest receptor, NAL5 (Glenamachrie).

6.2.1.3 The result of the operational noise impact assessment demonstrated that a 35dB(A) constraint for the Proposed Development could be met and was therefore considered appropriate to protect the amenity of the nearest receptors.

6.2.1.4 During scoping, a review of third-party developments in the area identified no cumulative turbines which would merit the assessment of cumulative noise impacts and therefore, no cumulative assessment was undertaken at that time.

6.2.1.5 It was therefore concluded that operational noise impacts would not be significant at the nearest surrounding receptors.

6.3 Policy and Guidance

6.3.1.1 The relevant policy and guidance that have been taken into account as part of the assessment of operational noise are outlined in Section 8.3 of 2024 EIA Report Chapter 8: Noise.

6.4 Consultation

6.4.1.1 A peer review of the original NIA submitted in 2024 was commissioned by ABC, undertaken by Mott MacDonald Ltd and Alistair Somerville Associates. An overview of the points raised and the response to each is outlined in **Table 6.1.**

TABLE 6.1 - SUMMARY OF CONSULTATION

CONSULTEE	RESPONSE	ACTION
Mott Macdonald Ltd & Alistair Somerville Associated (on behalf of Argyll and Bute Council)	The consideration of cumulative operational noise impacts concludes that there are no risks, but the basis of this is not presented. Our review of cumulative impacts with the existing Bein Ghlas wind farm (operational) and Corr Chnoc wind farm (in planning) shows that there is potential for the 35 dB LA90 limit to be exceeded.	Corr Chnoc will be included within the cumulative assessment. The proposed Beinn Ghlas Wind Farm Repower has also been included in the cumulative assessment, given the operational Beinn Ghlas Wind Farm is likely to be decommissioned by the time the Proposed Development is constructed. Additionally, should the Proposed Development demonstrate compliance with the larger-scale proposed Repower development, it would be appropriate to assume it would also feasibly comply with the operational Beinn Ghlas Wind Farm.
	Noise emission data for the turbines assumes the benefit of trailing edge serrations, but this is not specifically mentioned in the project description. This can provide benefits of up to ~3dB in the turbine sound power level and therefore results in a potentially significant under-estimation of noise impacts.	This is provided as part of this addendum under Mitigation.

CONSULTEE	RESPONSE	ACTION
	The consideration of topographical screening is based on the visibility of the turbine, whereas it should be the top of the turbine rotor. Given that the closest separation distance between receptors and turbines is ~1,330m, this is not considered to be a significant issue.	Screening has only been applied where the top of the turbine rotor is not visible.
	Confirmation is sought that there are no derelict properties with residential planning status in the study area	No derelict properties with residential planning status were identified in the Study Area.
	Confirmation is sought that the correction of predicted L_{Aeq} values to give LA90 values by subtracting 2 dB	L_{A90} values were derived by subtracting 2dB from the predicted L_{Aeq} values. This is stated in 2024 EIA Report Chapter 8: Noise Section 8.5.2.3 'Propagation Model'.

6.5 Methodology

6.5.1.1 The assessment methodology for undertaking the operational noise assessment has been defined in the 2024 EIA Chapter 8: Noise, Section 8.5.2. Details of where the methodology has been updated for the undertaking of a cumulative assessment are given below.

6.5.2 Operational Noise

6.5.2.1 The assessment of operational noise impacts arising from the Proposed Development takes the form of an ETSU-R-97 assessment following the IoA Good Practice Guide.

Noise Sensitive Receptors (NSRs)

6.5.2.2 The Study Area adopted for the identification of NSRs was the 35dB(A) noise contour as calculated from the Proposed Development. Where no NSRs were present within the 35dB(A) contour, the nearest properties covering all directions from the Proposed Development were considered for the assessment.

6.5.2.3 Where NSRs were located adjacent to each other or readily formed a grouping, a single Noise Assessment Location (NAL) was selected representing the closest of the adjacent receptors to the Proposed Development. NALs were positioned at NSRs, 15m from a dwelling façade in the direction of the nearest proposed turbine location, or as far in that direction as the curtilage would allow.

6.5.2.4 This approach follows the ETSU-R-97 principle of assessing nearest receptors; focusing on the highest impacts allows for a more concise assessment.

Noise Limits

6.5.2.5 The ETSU-R-97 guidelines recommend that turbine noise should be limited to an absolute lower limit between 35 and 40 dB(A) [LA90,10min] for quiet daytime periods and 43 dB(A) for

night-time periods (defined below in **Table** 6.2), or 5dB(A) above the background noise levels, whichever the greater.[6]

TABLE 6.2 - ETSU-R-97 ASSESSMENT PERIODS

ASSESSMENT PERIOD	TIME	DAY
Quiet Daytime	18:00 – 23:00	Monday to Friday
	13:00 – 23:00	Saturdays
	07:00 – 23:00	Sundays
Night-time	23:00 – 07:00	Everyday

6.5.2.6 For a project whose immission levels are not expected to exceed 35dB(A) at the closest Noise Sensitive Receptors (NSRs), a simplified approach may be taken that allows the project to be approved with a single fixed 35dB(A) noise limit or 45dB(A) where a resident has financial involvement; applicable at all times and for v_{10} wind speeds up to 10m/s.

6.5.2.7 Where noise levels from the Proposed Development exceed 35dB(A), an ETSU-R-97 noise assessment should be undertaken that references noise limits derived from measured background noise levels. Such ETSU-R-97 limits will also be required where cumulative turbine noise exceeds applicable lower fixed limits.

6.5.2.8 In the original 2024 NIA, a simplified 35dB(A) ETSU-R-97 noise limit was adopted as initial turbine predictions were <35dB(A) at all assessment locations. As there is potential for this limit to be exceeded in the context of cumulative noise because of the addition of Corr Chnoc wind farm, noise limits will be derived based on 35dB(A) or background +5dB(A) for quiet daytime hours and 43dB(A) or background +5dB(A) for night-time assessment hours, as outlined in ETSU-R-97 and paragraph 8.5.2.2 of the EIAR.

Cumulative Assessment Methodology

6.5.2.9 When considering cumulative impact from two or more developments at a given property, the IoA Good Practice Guide states:

6.5.2.10 'If the proposed wind farm produces noise levels within 10dB of any existing wind farm/s at the same location, then a cumulative noise impact assessment is necessary.'[7]

6.5.2.11 Noise immissions from all wind projects, inclusive of the Proposed Development, deemed to lie within the cumulative search area, should be limited to a level that does not exceed the limits set out in ETSU-R-97.

6.5.2.12 For the existing ETSU-R-97 limits to be exceeded, the Proposed Development levels would need to be within 10dB of those ETSU-R-97 limits. Therefore, project immissions are compared with the cumulative ETSU-R-97 limits to test for level differences of less than 10dB.

6 The Department of Trade and Industry, 1996, p 61. ETSU-R-97: The Assessment and Rating of Noise from Wind Farms. [Online] Available at: https://assets.publishing.service.gov.uk/media/5a798b42ed915d07d35b655a/ETSU_Full_copy__Searchable_.pdf [Accessed July 2025]

7 Institute of Acoustics, 2014, p23. A good practice guide to the application of ETSU-R-97 for the assessment and rating of wind turbine noise.

For locations where predicted levels are within 10dB of cumulative ETSU-R-97 limits, a detailed cumulative assessment has been carried out.

6.6 Baseline Conditions

6.6.1 Cumulative Study Area

6.6.1.1 An initial Study Area was defined in 2024 EIA Report Chapter 8: Noise, Figure 8.1, submitted in November 2024, which enclosed an area predicted to receive an L_{A90} turbine noise immission in excess of 35dB(A) from the Proposed Development, given for a wind speed of 10m/s. As shown in both Figure 8.1 and Table 8.10 within 2024 EIA Report Chapter 8: Noise, it was identified that no noise sensitive receptors were found to lie within 35dB(A) of the Proposed Development.

6.6.1.2 Provided both Corr Chnoc and the Beinn Ghlas Wind Farm Repower are now in planning, both have been included in the assessment to determine the potential for cumulative impacts at identified noise assessment locations. As such, both developments have now been considered within the context of a cumulative assessment.

6.6.1.3 The details of each development are provided in **Table 6.3**.

TABLE 6.3 - DETAILS OF CUMULATIVE DEVELOPMENTS CONSIDERED IN ASSESSMENT

DEVELOPMENT	STATUS	COUNCIL	APP REF.	TIP HEIGHT (M)	NO. OF TURBINES
Corr Chnoc	In Planning	ABC	ECU00006023 / 25/00036/S36	200	12
Beinn Ghlas Repower	In Planning	ABC	ECU00004540	149.9	7

6.6.1.4 **Figure 6.1** shows a revised Study Area, identifying NALs which have the potential to be cumulatively impacted by the Proposed Development along with both Corr Chnoc and Beinn Ghlas Wind Farm Repower. Blue contours enclose an area predicted to receive a cumulative L_{A90} noise level in excess of 35dB(A) from the Proposed Development, Corr Chnoc Wind Farm and Beinn Ghlas Wind Farm.

6.6.1.5 **Table 6.4** lists the names, noise assessment locations, GPS coordinates and minimum distance to the Proposed Development for each cumulative Noise Sensitive Receptor (NSR).

TABLE 6.4 - DETAILS OF CUMULATIVE NOISE ASSESSMENT LOCATIONS

LOCATION	NSR	EASTING	NORTHING	NAL	EASTING	NORTHING	DISTANCE TO SITE (M)
Dorran Cottage	NSR4	192341	728561	NAL4	192342	728581	1360
Glenamachrie	NSR5	192310	728738	NAL5	192307	728756	1330
Kilbride Bungalow	NSR7	191621	724453	NAL7	191630	724470	5080

6.6.1.6 Of the initial assessment locations identified in 2024 EIA Report Chapter 8: Noise, receptors NSR4 & NSR5 have been identified to potentially exceed a simplified 35dB(A) noise limit, when considering cumulative noise immissions from the Proposed Development, Corr Chnoc and Beinn Ghlas Repowering. One additional receptor, NAL7 (Kilbride Bungalow), is found within the Study Area. The previously identified receptors NAL1, NAL2, NAL3 and NAL6 were not assessed to receive cumulative immission levels in excess of 35dB(A) and have been scoped out of the cumulative assessment.

6.6.1.7 Indicative results of the cumulative 35dB(A) contour also indicate that cumulative impacts as a result of the proposed Beinn Ghlas Repowering project, would not be experienced at any of the identified receptors within the cumulative Study Area, with all receptors predicted to experience immissions below 35d(A) from the development. As such, the proposed Beinn Ghlas Wind Farm Repowering has been **scoped out** of the following cumulative assessment.

Cumulative Developments

Corr Chnoc Wind Farm (ECU00006023 & 25/00036/S36)

6.6.1.8 Corr Chnoc Wind Farm, currently in planning, would comprise of up to 12 turbines at a maximum tip height of 200m. From publicly available information on the ECU online portal, the Vestas V162 at a hub height of 119m with a maximum rated power output of 7.2MW (mode 0), is the proposed candidate machine for the project.

6.6.1.9 Cumulative and subsequent apportioned ETSU-R-97 noise limits for the project were proposed, derived from baseline noise measurements carried out at four locations, two of which, Clachadubh and Dorran Cottage, are considered representative of NAL3 and NAL5 within the Study Area of the Proposed Development. Noise limits have been determined on this basis of 35dB(A) or background +5dB(A) and 43dB(A) or background +5dB(A), whichever is greater, for daytime and night-time periods, respectively.

6.6.1.10 Noise limits, sourced from Corr Chnoc Wind Farm EIA Report Chapter 14: Noise[8], are provided in **Table 6.5**.

TABLE 6.5 - APPORTIONED NOISE LIMITS APPLICABLE TO CORR CHNOC WIND FARM

RECEPTOR	STANDARDISED V10 WIND SPEED (M/S)								
	4	5	6	7	8	9	10	11	12
Daytime									
Akaroa	37.9	38.3	38.6	39.0	39.6	40.3	41.3	42.6	44.3
Clachadubh	36.9	38.1	39.5	41.0	42.6	44.4	46.3	48.4	50.7
Dorran Cottage	37.7	38.4	39.1	40.0	40.9	42.0	43.4	45.0	46.8
Kilbride Bungalow	37.5	37.9	38.8	40.0	41.4	43.2	45.1	47.3	49.5
Night-time									
Akaroa	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	44.7
Clachadubh	43.0	43.0	43.0	43.0	43.0	44.2	46.6	49.3	52.3
Dorran Cottage	43.0	43.0	43.0	43.0	43.0	43.0	43.8	45.9	48.4
Kilbride Bungalow	43.0	43.0	43.0	43.0	43.0	43.0	44.9	47.2	49.6

8 Corr Chnoc Wind Farm EIA Report Volume 1 – Chapter 15: Noise. Available at: https://corrchnocwindfarm.co.uk/. (Accessed 03/07/2025).

6.6.2 Baseline Survey

Proposed Development Baseline Survey

6.6.2.1 A background survey was conducted for the Proposed Development, in consultation with ABC, between 04 December and 22 December 2023 at two locations chosen as being representative of the NSRs within the assessment Study Area.

6.6.2.2 Wind data was collected at concurrent 10m intervals using a LiDAR capable of measuring wind speed and direction up to 200m above ground level. Hub height wind speed data were standardised to 10m wind speeds and correlated with noise level data using regression analysis with 'best fit' polynomial trends of up to fourth order. Once extraneous or atypical data had been removed, these trend lines then formed the basis of the ETSU-R-97 limits against which immission levels from the Proposed Development were assessed.

6.6.2.3 **Table 6.6** details the two locations where measurements of background sound levels were conducted.

TABLE 6.6 - BASELINE SURVEY LOCATIONS

LOCATION	EASTING	NORTHING
Kilvaree	192062	731560
Glenamachrie	192287	728749

6.6.2.4 A review of the measured data at Glenamachrie identified that a nearby watercourse had affected the data collected at this location. The watercourse noise had been masked by nearby active construction works at the time of deployment. Though it was suspected that the water course noise was typical for the time of year, the opportunity to verify this via further measurements had passed. However, given that the Proposed Development complied with a simplified 35dB(A) noise limit, reference to background noise measurements was subsequently not required or included in the 2024 NIA. The final project layout was also sufficiently distant from Kilvaree to eliminate the requirement for background data at this location. Therefore, data from the December 2023 survey was not presented.

Corr Chnoc Baseline Survey

6.6.2.5 Given the suspected limitations of the baseline data collected during the background survey for the Proposed Development, background noise measurements provided in Corr Chnoc EIA Report Volume 1 Chapter 14: Noise[9] have been considered.

6.6.2.6 As reported in Corr Chnoc EIA Report Volume 1 Chapter 14: Noise, baseline noise measurements were carried out between 19 September and 30 October 2023[10]. The survey was conducted in accordance with the method specified in ETSU-R-97 and the IoA GPG. A review of survey record sheets and calibration certificates for both noise and wind monitoring equipment used in the survey is provided in Corr Chnoc EIA Report Volume 4 Technical Appendix 14.2[11].

9 Corr Chnoc Wind Farm EIA Report Volume 1 Chapter 14 Noise. Available at: https://corrchnocwindfarm.co.uk/. (Accessed 31/07/2025).

10 Corr Chnoc Wind Farm EIA Report Volume 1 Chapter 14, p14-14.

11 Corr Chnoc Wind Farm EIA Report Volume 4 Technical Appendix 14.2 Available at: https://corrchnocwindfarm.co.uk/. (Accessed 03/07/2025).

6.6.2.7 **Table 6.7** details the three relevant locations where background sound levels were measured during the baseline noise survey in support of Corr Chnoc Wind Farm.

TABLE 6.7 - BASELINE SURVEY DETAILS CONDUCTED IN SUPPORT OF CORR CHNOC WIND FARM

LOCATION	EASTING	NORTHING
Dorran Cottage	192326	728596
Kilbride Bungalow	191621	724453

6.6.2.8 It has been considered that baseline levels measured during the baseline survey in support of Corr Chnoc Wind Farm have been conducted with best practice and are considered representative of typical background noise levels for each assessment location. This has additionally been endorsed by the peer review undertaken by Mott MacDonald Ltd and Alistair Somerville Associates.[12].

6.6.2.9 As such, reported baseline levels will be used within this assessment. This provides consistency in noise limit criteria between the cumulative impact assessments present for Corr Chnoc Wind Farm and the Proposed Development.

Noise Limits

6.6.2.10 **Table 6.8** lists the NALs and the location of the background noise measurement assigned to each, based on proximity.

TABLE 6.8 - ALLOCATION OF NOISE LIMIT PROFILES

NAL	LOCATION	LIMIT PROFILE
NAL4	Dorran Cottage	Dorran Cottage
NAL5	Glenamachrie	Dorran Cottage
NAL7	Kilbride Bungalow	Kilbride Bungalow

6.6.2.11 Total cumulative noise limits provided in Corr Chnoc EIA Report Volume 1 Chapter 14: Noise[13] are listed in **Table 6.9.**

TABLE 6.9 - CUMULATIVE ETSU-R-97 NOISE LIMITS

NAL	LOCATION	STANDARDISED V10 WIND SPEED (M/S)								
		4	5	6	7	8	9	10	11	12
Daytime										
NAL4	Dorran Cottage	37.1	37.8	38.4	39.1	40.0	40.9	42.1	43.4	45.0
NAL5	Glenamachrie	37.1	37.8	38.4	39.1	40.0	40.9	42.1	43.4	45.0
NAL7	Kilbride Bungalow	37.5	37.5	38.0	38.8	40.0	41.5	43.2	45.1	47.3
Night-time										
NAL4	Dorran Cottage	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.8	45.9
NAL5	Glenamachrie	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.8	45.9

12 Mott MacDonald Ltd. (2025). Corr Chnoc Wind Farm Review of evidence – Noise. Document Reference: 100114653-001 | 4 | A.

13 Corr Chnoc Wind Farm EIA Report Volume 1 Chapter 14, p14-21.

NAL	LOCATION	STANDARDISED V10 WIND SPEED (M/S)								
		4	5	6	7	8	9	10	11	12
NAL7	Kilbride Bungalow	43.0	43.0	43.0	43.0	43.0	43.0	43.0	44.9	47.2

Sound Power Levels

Proposed Development

6.6.2.12 The proposed candidate model for the Proposed Development at this stage remains the Vestas V162 with an output of 7.2MW (Mode 0) with a hub height of 119m. The turbine rotors would be fitted with Trailing Edge Serration (TES), a technology that reduces noise emissions. These reductions are reflected in the sound power values obtained from the manufacturer's sound power report.[14] Dated 2022-05-18, as given in 2024 EIA Report Chapter 8: Noise, Table 8.7 within the original NIA.

Corr Chnoc Wind Farm

6.6.2.13 A review of the Corr Chnoc EIA Report Volume 1 Chapter 14: Noise revealed that the Vestas V162 7.2MW (Mode 0) at a hub height of 119m, has also been selected as the candidate model for the project.

6.7 Proposed Development

6.7.1 Topographic Adjustments

6.7.1.1 As reported in the original NIA within 2024 EIA Report Chapter 8: Noise, topographic screening profiles were found between receptor locations and the Proposed Development. As such, feature adjustments have been made to predictions. For additional clarity, adjustments to account for these features are shown in **Table 6.10**.

TABLE 6.10 - APPLICABLE ADJUSTMENTS FOR SCREENING (PROPOSED DEVELOPMENT)

LOCATION	SCREENING (LA90)					
	T1	T2	T3	T4	T5	T6
NAL4	0	0	-2	-2	-2	-2
NAL5	0	0	-2	-2	-2	-2
NAL7	-2	-2	-2	-2	-2	-2

Predicted Proposed Development Immission Levels

TABLE 6.11 - BASELINE PROPOSED DEVELOPMENT IMMISSION LEVELS

NAL	LOCATION	STANDARDISED V10 WIND SPEED (M/S)								
		4	5	6	7	8	9	10	11	12
NAL4	Dorran Cottage	22.9	27.5	31.7	32.8	32.9	33.2	33.5	33.6	33.6

14 EnVentus, 2022. Third octave noise emission V162-7.2MW 50/60Hz, Doc no: 0116-1715_02.

NAL	LOCATION	STANDARDISED V10 WIND SPEED (M/S)								
		4	5	6	7	8	9	10	11	12
NAL5	Glenamachrie	23.4	28.0	32.2	33.3	33.4	33.7	34.0	34.1	34.1
NAL7	Kilbride Bungalow	7.9	12.5	16.8	17.9	18.0	18.2	18.4	18.5	18.5

6.7.1.2 The baseline results of the Proposed Development indicate that NAL7 (Kilbride Bungalow), immission levels are comfortably more than 10 dB below the total noise limits for these locations. Therefore, NAL7 has been scoped out of further detailed cumulative calculations due to **no significant cumulative impact.**

6.8 Cumulative Assessment

6.8.1 Topographic Adjustments

Corr Chnoc Wind Farm

6.8.1.1 Further investigation identified topographic screening profiles between receptor locations and Corr Chnoc Wind Farm turbines. Adjustments to account for these features are shown in **Table 6.12**.

TABLE 6.12 - APPLICABLE ADJUSTMENTS FOR SCREENING (CORR CHNOC WIND FARM)

LOCATION	SCREENING (LA90)											
	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	T11	T12
NAL4	0	0	0	0	0	0	-2	-2	-2	-2	-2	-2
NAL5	0	0	0	0	0	0	0	0	0	-2	-2	-2

Predicted Baseline Immission Levels

6.8.1.2 **Table 6.13** shows baseline cumulative immission levels applicable for both daytime and night-time periods, assuming simultaneous downwind propagation from all turbines.

TABLE 6.13 - BASELINE CUMULATIVE IMMISSION LEVELS

NAL	LOCATION	STANDARDISED V10 WIND SPEED (M/S)								
		4	5	6	7	8	9	10	11	12
NAL4	Dorran Cottage	23.8	28.4	32.6	33.7	33.8	34.1	34.4	34.5	34.5
NAL5	Glenamachrie	23.2	27.8	32.1	33.1	33.3	33.5	33.8	33.9	33.9

6.8.1.3 **Table 6.14** shows total cumulative immission levels (inclusive of the Proposed Development).

TABLE 6.14 - TOTAL CUMULATIVE IMMISSION LEVELS

NAL	LOCATION	STANDARDISED V10 WIND SPEED (M/S)								
		4	5	6	7	8	9	10	11	12
NAL4	Dorran Cottage	26.4	31.0	35.2	36.2	36.4	36.7	37.0	37.1	37.1
NAL5	Glenamachrie	26.3	30.9	35.2	36.2	36.3	36.6	36.9	37.0	37.0

Summary

6.8.1.4 A maximum predicted cumulative noise immission of 37.1dB(A) is shown to occur at NAL4 (Dorran Cottage) for windspeeds greater than 10 m/s. Baseline levels at this location are predicted to be 33.9dB(A), inclusive of topographic corrections. Introducing the Proposed Development would increase immission levels by 2.6dB(A). This level change would result in a low or negligible level of impact; and therefore, **not significant**, as the minimum perceptible change in the context of environmental noise is typically 3dB(A), as noted in Planning Advice Note 1/2011 (PAN1/2011).

6.8.2 Assessment of Compliance

6.8.2.1 **Table 6.15** demonstrates the level of exceedance with the proposed cumulative ETSU-R-97 limits, derived from the baseline survey conducted in support of Corr Chnoc Wind Farm (shown in **Table 6.9**) for daytime and night-time periods.

TABLE 6.15 - EXCEEDANCE OF CUMULATIVE ETSU-R-97 LIMITS

NAL	LOCATION	STANDARDISED V10 WIND SPEED (M/S)								
		4	5	6	7	8	9	10	11	12
Daytime										
NAL4	Dorran Cottage	-10.7	-6.8	-3.2	-2.9	-3.6	-4.2	-5.1	-6.3	-7.9
NAL5	Glenamachrie	-10.8	-6.9	-3.2	-2.9	-3.7	-4.3	-5.2	-6.4	-8.0
Night-time										
NAL4	Dorran Cottage	-16.6	-12.0	-7.8	-6.8	-6.6	-6.3	-6.0	-6.7	-8.8
NAL5	Glenamachrie	-16.7	-12.1	-7.8	-6.8	-6.7	-6.4	-6.1	-6.8	-8.9

Summary

6.8.2.2 All assessment locations are shown to comply with the proposed cumulative ETSU-R-97 noise limits by a minimum margin of 2.9dB at NAL4 for a wind speed of 7 m/s, during daytime periods. Given a minimum night-time compliance margin of >5dB, it is assessed that night hours cumulative immission levels would not exceed background levels, indicative of a low or negligible impact; and therefore, **not significant**.

6.8.2.3 Should both the Proposed Development and the proposed Corr Chnoc Wind Farm gain consent, suggested apportioned noise limits for the Proposed Development are provided in **Appendix 6.1**.

6.9 Mitigation

6.9.1.1 The assessment of operational immission levels from the Proposed Development assumed that the turbines would operate in their standard mode of operation using rotor blades fitted with trailing edge serration. The results demonstrated that the proposed turbines would be able to meet cumulative ETSU-R-97 noise limits when considering immissions from the proposed Corr Chnoc and the proposed Beinn Ghlas Wind Farm Repowering. Therefore, operational noise assessments demonstrate that no further mitigation is required beyond TES for the Proposed Development turbines.

6.10 Conclusion

6.10.1.1 A cumulative assessment was conducted considering predicted noise levels from both the proposed Corr Chnoc Wind Farm and the proposed Beinn Ghlas Wind Farm Repowering, along with those from the Proposed Development. Initial predictions concluded that cumulative impacts would not be experienced due to the proposed Beinn Ghlas Wind Farm Repowering, and therefore these were scoped out of the cumulative assessment.

6.10.1.2 Total cumulative immissions were shown to comply with the proposed cumulative ETSU-R-97 noise limits for daytime and night-time periods, respectively, at all assessment locations. Therefore, the cumulative noise impact is predicted to be **not significant** in EIA terms.

6.10.1.3 Should both the Proposed Development and Corr Chnoc Wind Farm gain consent, suggested apportioned noise limits are provided in **Appendix 6.1**.

7 GEOLOGY, HYDROGEOLOGY, HYDROLOGY AND SOILS

7.1 Introduction

7.1.1.1 This Chapter of the FEI Report assesses the potential impacts on geology, hydrogeology, hydrology and soils from the revisions to the Proposed Development layout. This Chapter should be read in conjunction with the 2024 EIA Report Chapter 9: Geology, Hydrogeology, Hydrology and Soils.

7.2 Scope and Methodology

7.2.1.1 The existing baseline conditions and potential risks associated with the Proposed Development are unchanged. The mitigation, management and monitoring measures discussed in the 2024 EIA Report **Chapter 9**, as well as the accompanying Technical Appendices, remain valid and should be applied to the findings of the FEI.

7.2.1.2 The assessment methodology used in the 2024 EIA Report is detailed in EIA Report **Chapter 9** and is used for the assessment of effects in this Chapter.

7.3 Post-Submission Consultation

7.3.1.1 Post-submission consultation responses with relevance to geology, hydrogeology, hydrology and peat were received from Ironside Farrar, who completed a Stage 1 Checking Report for the Peat Slide Risk Assessment for the Proposed Development, and from the Scottish Environment Protection Agency (SEPA).

7.3.1.2 These comments are discussed and addressed in detail in **sections 7.6** and **7.8** below.

7.4 Field Surveys

7.4.1.1 Field surveys carried out to inform the 2024 EIA Report are detailed in the 2024 EIA Report Chapter 9.

7.4.1.2 Further field surveys, were necessary, were undertaken to provide updated information for the revised layout. This included assessment of the following:

- peat depth and condition;
- a watercourse crossing between T5 and the substation;
- gradients and prevailing ground conditions; and
- the locations of all the components of the Proposed Development's revised infrastructure layout.

7.5 Peat

7.5.1.1 Several phases of peat depth surveys were undertaken between February 2022 and June 2024, which included a total of 1,740 individual peat depth records.

7.5.1.2 An additional peat depth survey was undertaken in May 2025 to inform revision of the Proposed Development layout for this FEI Report, where a further 544 individual peat depths were recorded. Peat probing was undertaken to ensure that the density of peat data across

the Site is in line with the latest available guidance from the Scottish Government[15] which requires:

- 50m intervals along the centreline of proposed new access tracks, and at 10m perpendicular offsets to both sides from the centreline; and
- 10-20m resolution grid sampling at turbine locations, and at all other infrastructure locations.

7.5.1.3 Across all surveys, a combined 2,284 individual probing locations were recorded. The following provides a summary of the results from the combined peat surveys:

- peat was present at approximately 26% of the probe locations, with approximately 14% of the probe locations being peat less than 1m deep;
- the maximum peat depth recorded from all probes was 7.53m;
- the average probe depth was approximately 0.51m; and
- the average peat depth (probes greater than 0.5m) was approximately 1.24m.

7.5.1.4 An overview map of the peat depth distribution within the Application Boundary is provided in updated Figure 9.1.6a from the 2024 EIA Report, which has been updated with the new peat data, with detailed maps being provided in updated Figures 9.1.6b-t. These figures can be found in **Appendix 7.1.**

7.6 Peat Slide Risk Assessment

7.6.1.1 Appendix 9.1: Peat Slide Risk Assessment (PSRA) provided with the 2024 EIA Report submission has been updated to account for the additional peat depth data and revised infrastructure layout provided within this 2025 FEI Report.

7.6.1.2 The details of the analysis, including explanation of the assessment method and input parameters, are all provided in Appendix 9.1 of the 2024 EIA Report.

7.6.2 Response to Ironside Farrar

7.6.2.1 In their Stage 1 Checking Report[16] for the submitted PSRA, Ironside Farrar requested information for a number of points raised in their report. The following sections provide responses specific to each point raised.

Consideration of Artificial Drainage

7.6.2.2 'It is noted that no artificial drainage is shown on the map or discussed in the PLHRA (Desk study or walkovers/surveys) although Figure 10.5.5 in the wider EIAR identifies fairly extensive historical drainage on the site in the vicinity of T4 and T3. Could this be reviewed, mapping updated if required and the implications of the drainage, known as being a potential factor in peat slides, considered.'

7.6.2.3 Drains were noted throughout the Site during the peat surveys and hydrological walkover, but no signs of failure associated with or relating to the drainage were found in any location. There was also no evidence of localised slumping or cracking, which could indicate the potential for future peat slides. A further review of the artificial drainage channels within the

[15] Scottish Government, Scottish Natural Heritage, SEPA (2017). Peatland survey. Guidance on developments on peatland. Available at: https://www.gov.scot/publications/peatland-survey-guidance/, accessed July 2025.
[16] Ironside Farrar (2025). Peat Landslide Hazard Risk Assessment: Cruach Clenamacrie Windfarm Stage 1 Checking Report.

Site has concluded that they do not have any influence on stability in this area and have therefore not been considered further.

Peat Survey Coverage

7.6.2.4 *'Published guidance requires 100m x 100m grid Phase 1 probing over the whole of the site area, probing on a 10m grid at all areas of proposed infrastructure (proposed turbine base or other infrastructure including borrow pits and proposed temporary storage sites), and for tracks 10-50m centres with 10m offsets. Key omissions are predominantly in the Phase 2 probing and include:*

- *Lack of probing at all Turbines T1-T6, based on Figures, it appears that approximately 20-25% of the recommended probing has been undertaken at these locations.*
- *Site infrastructure east of T5, approximately 10-20% of the recommended probing completed.*
- *Car parks in proximity to T5, approximately 10-20% of the recommended probing completed.*
- *2km of N/S running main access track – no offset probing completed – probes are staggered left and right of centreline.'*

7.6.2.5 Additional peat surveying has been undertaken within the Application Boundary to ensure that there is appropriate coverage across the Proposed Development. An updated overview of peat depth mapping is provided in Figure 9.1.6a from the 2024 EIA submission, with updated Figures 9.1.6b-t providing more detailed peat depth mapping across the Site. Additional peat depths have been collected for all proposed infrastructure and to cover all areas where the infrastructure layout has changed since the EIA Report was submitted. Peat data could not be collected at one location adjacent to the access track into the main Site due to steep slopes with dangerous access. Several data points within the centre of borrow pit BP1 were also inaccessible due to steep slopes and rock faces. These have been marked as 'No Access' points on Figure 9.1.6a.

Use of Undrained Analysis Equation

7.6.2.6 *'Please provide reasoning behind the use of the undrained analysis equation over drained analysis equation and whether this is representative of the site scenario i.e. loaded or unloaded conditions. If the peat is to be loaded this can have a significant impact on FoS and therefore a loading check should be conducted, or justification provided on why this is not deemed necessary.'*

7.6.2.7 Drained analysis is appropriate to soil analysis in situations where pore water can drain from the soil easily and in an unrestricted manner. Undrained analysis is appropriate to soil analysis where pore water is unable to drain out of the soil, such that the rate of loading on the soil is much quicker than the rate at which the pore water is able to drain from the soil.

7.6.2.8 For coarse-grained materials, such as gravels or sands, drained parameters are the most suitable under almost all conditions as the materials have high porosity and high permeability, and pore water is able to drain quickly from the sediment mass. For fine-grained materials, such as clays or peat, although the materials have high porosity and consequently a high water content, they have a very low permeability and are generally classed as impermeable or almost impermeable. This means that they are best modelled using undrained analysis as this is much more typical of the likely settings in which these materials will be encountered.

7.6.2.9 For designed slopes, it is considered to be best practice to calculate short-term stability using undrained analysis and long-term stability using drained analysis, as this takes into account consolidation over time from constructed embankments or similar engineered slopes. Similarly, in locations which have previously undergone landslide, a form of drained analysis

is usually the most applicable method as previous failure can leave a situation closer to drained conditions than undrained in addition to the presence of an existing failure plane or weakness[17].

7.6.2.10 It is questionable whether drained conditions are applicable to peats. Some laboratory testing of peat samples indicates that, under drained conditions, the point of failure is not reached in accordance with the definition of failure in the tests used[18].

7.6.2.11 The situation assessed for Proposed Development relates to natural and induced instability in natural peat slopes where there is no record and no apparent history of previous landslide. The method used incorporates sufficient precaution, through use of a minimum estimate for shear strength, that additional assessment using the drained analysis equation is not considered necessary, particularly given the debate over the applicability of drained analysis to peats.

Re-Evaluation of Consequence Assessment

7.6.2.12 'There is an SSSI (shown on Figure 9.7) that extends along the full length of the northern boundary plus some areas of SAC that do not appear to have been considered. This area should have been scored as Very High consequence as per scoring in 6.15 but the area within the buffer shown on Figure 9.1.9 is generally scored Low, other than water courses. This appears a significant omission given T1, T3 and T5 plus associated access tracks appear to be upslope of the SSS/SAC and peat is present. The consequence assessment requires re-evaluation in this area.'

7.6.2.13 The consequence assessment has been re-evaluated to include both the Site of Special Scientific Interest (SSSI) and Special Area of Conservation (SAC) along the northern boundary, plus an area of SAC/SSSI east of the Site access. As per the scoring provided in paragraph 6.17 of Appendix 9.1, areas of SSSI have been assigned a High consequence, while SAC has been assigned a Very High consequence. The consequence assessment has also been updated to consider changes made to the Proposed Development layout, such as the adjusted location of turbines T4 and T5 and the access tracks to T3, T4, T5 and T6. Figure 9.1.9 from the 2024 EIA submission has been updated to show a map of the new consequence ratings.

Consideration of Slide Runout in the Consequence Assessment

7.6.2.14 'Whilst it is noted that runout of considered for the moderate or higher risk locations (tables in Section 7), it should be considered in the assessment of consequence so that the risk assessment is suitably robust.'

7.6.2.15 It is not considered relevant or informative to modify the consequence rating of downslope cells on the basis of an upslope failure, as this is likely to over-state the consequence of a failure on lower-sensitivity receptors. For any areas where an identified Moderate or High risk location has the potential to interact with other High or Moderate risk areas downslope, this would be considered within the Detailed Assessment of the PSRA and would require mitigation or management as appropriate for the location.

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[17] Stark, T.D., Choi, H., & McCone, S. (2005). Drained shear strength parameters for analysis of landslides. Journal of Geotechnical and Geoenvironmental Engineering 131:575-588.
[18] Long, M. (2004). Review of peat strength, peat characterisation and constitutive modelling of peat with reference to landslides. Department of Civil Engineering, University College Dublin.

7.6.2.16 It is considered sufficient that the slide runout has been included in the Detailed Assessment stage in Appendix 9.1 of the 2024 EIA Report and explained in relation to each highlighted risk areas within this part of the assessment.

Omission of 'Fixed Link' Receptor from the Risk Assessment

7.6.2.17 'Figure 5.2 of the EIAR shows a "Fixed Link" in the southwest corner that appears to be in proximity to some of the Moderate Risk areas (Area 2 and potentially Area 1) that is not identified as a receptor. It is not clear what this comprises and whether it requires to be included in the risk assessment, please could this be clarified.'

7.6.2.18 The 'Fixed Link' is a wireless telecoms feature which is not a material piece of infrastructure, although it has acted as a constraint on the placement of wind turbines for the Proposed Development. As it does not include any physical infrastructure within or near the Site, it cannot be affected by an event such as a peat landslide and therefore has not been included as a potential receptor in the PSRA.

Re-Evaluation of Risk Assessment

7.6.2.19 'Given that the area of SSSI/SAC on the northern boundary does not appear to have been correctly scored in the consequence assessment, it appears likely that the risk assessment in this area is also incorrect. If the consequence level is elevated by three levels (as would be consistent with the scoring in 6.15) from Low to Very High, on the face of it, the risks in this whole area and adjacent cells would be raised substantially. This would elevate significant areas of the site into a potential high-risk rating. The Risk Section therefore requires to be reassessed.'

7.6.2.20 Based on the consequence scoring criteria set out in paragraph 6.17 of Appendix 9.1 of the 2024 EIA Report the SSSI would be assigned a consequence of High and the SAC would be assigned a consequence of Very High. The risk assessment has been updated to account for the changes to the consequence ratings. The results of the updated risk assessment are addressed fully in **section 7.6** of this Chapter.

Further Assessment of Borrow Pit Areas

7.6.2.21 'In Section 6.21 of the PLHRA, it is recognised that shock waves from blasting have the potential to travel through the bedrock and could, potentially, be associated with triggering instability in peat areas at some distance from the borrow pit sites. Measures to mitigate this risk have been discussed and include: siting borrow pit areas within minimal or no peat, supervision from a qualified and experienced blast engineer and using the smallest practicable amounts of explosives. A qualified ECoW would monitor for potential signs of instability within a 500m radius. It is noted that previous blasting in the area has not resulted in any previous reported peat instability.

7.6.2.22 It is unclear how this would be managed in practice given the area immediately north of the proposed borrow pit northeast of T5 is outwith the redline boundary and the BP is upslope of a water course and forestry. Whilst many of the probes across the Borrow Pit area show no peat, there are recorded peat depths of 1.26m and 1.38m at the north edge of the search area. Figure 5.2 shows the whole area to be Class 1 Peat although there is probing north of this (edge of site/RLB) to confirm what the actual position and risks could be downslope.

7.6.2.23 Further assessment should be completed in this area to understand the risks. Ideally this would include further probing downslope and to the north, but if this is not possible due to the site limits, an assessment could be undertaken, potentially putting deep peat into the assessment as a conservative approach. It is also considered that this area should be subject to detailed

review, detailed mitigation (as per Section 7.0) and highlight on the Risk Assessment plan to make sure the issue is clearly identified to the construction phase team. The northern of the two borrow pits should also be checked.'

7.6.2.24 Additional peat data was collected to the north, south and west of borrow pit BP1 during May 2025. The results of the survey show that the majority of BP1 has no peat within it except for a small area along the north and north-western margin. A pocket of peat less than 1m deep is also present approximately 15m south of BP1, which deepens to 1.5m at approximately 30m distance. The centre of BP1 is inaccessible due to steep slopes and rock faces and therefore no peat data has been collected for this area. However, the presence of bedrock at the surface in this area makes it unlikely that peat is present at the centre of BP1.

7.6.2.25 Although NatureScot's Carbon and Peatland mapping identifies the area around BP1 as Class 1 peatland, this is not the case on the ground and has not been so at least since conifer trees were first planted there several decades ago. NatureScot recognises that the Carbon and Peatland mapping is broad-brush and requires ground-truthing to establish the conditions prevailing in such situations where the mapping has not been updated in line with changing land uses.

7.6.2.26 The area immediately around BP1 has recently been clear-felled. These operations involve considerable ground disturbance and tracking by heavy plant. Despite a detailed survey of the area, no signs of recent or developing instability were observed within the BP1 footprint or accessible surroundings. While peat has been mapped in proximity to the north and north-western margin of the borrow pit, all the soils in this area have undergone very considerable and extensive disruption and reworking as part of the forestry planting and subsequent harvesting and are no longer classifiable as 'peat' by the established definitions in use in Scotland. However, as a worst-case scenario these areas with soil depths greater than 0.5m have still been treated as though they are pristine peat deposits in order to provide a robust assessment.

7.6.2.27 In terms of instability monitoring, all accessible areas around BP1, including along the existing access track to the north-east of the borrow pit, would be monitored by the ECoW. Any potential concerns would be raised with Forestry and Land Scotland and, if deemed necessary, visits within their land holding would be undertaken to verify whether any ground instabilities have arisen.

7.6.2.28 The northern of the two borrow pits (BP2) was also reviewed but was found to have sufficient density of peat points across the borrow pit area. Adjacent points associated with the access track indicate that there is no peat surrounding BP2. One small pocket of peat less than 1m deep is present within the centre of the borrow pit.

7.6.3 Revised Detailed Assessment and Mitigation

7.6.3.1 Following the revision to the proposed infrastructure layout, the PSRA was revisited to include the additional peat depth probing data and to take account of the revisions to the infrastructure locations, as well as to include the areas of SSSI and SAC as discussed above.

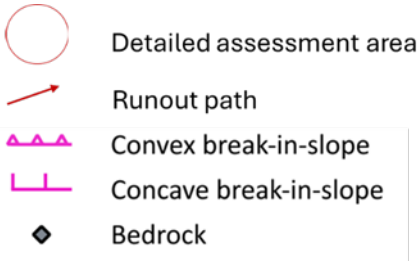
7.6.3.2 Figures 9.1.8-9.1.10 from the 2024 EIA submission have been updated to show the revised Likelihood Rating, Consequence Rating and Risk Ranking. These can be found in **Appendix 7.1.**

7.6.3.3 The revised assessment has identified a total of 11 cells as having a High or Moderate risk of peat landslide. The cells form a series of clusters, most of which were assessed in greater detail in the previously submitted Appendix 9.1 of the 2024 EIA Report. One new cell has been identified associated with the revised layout. This is Area 8 which will be assessed in detail below.

7.6.3.4 As with the original PSRA, each new Detailed Assessment area is accompanied by a map of the cells and their immediate surroundings. The grid cells in each map are 50m x 50m, to give an indication of scale. Green cells have Negligible risk; yellow cells have Low risk; orange cells have Moderate risk; red cells have High risk. Blank cells have no peat as defined in the Scottish Government Guidelines[19].

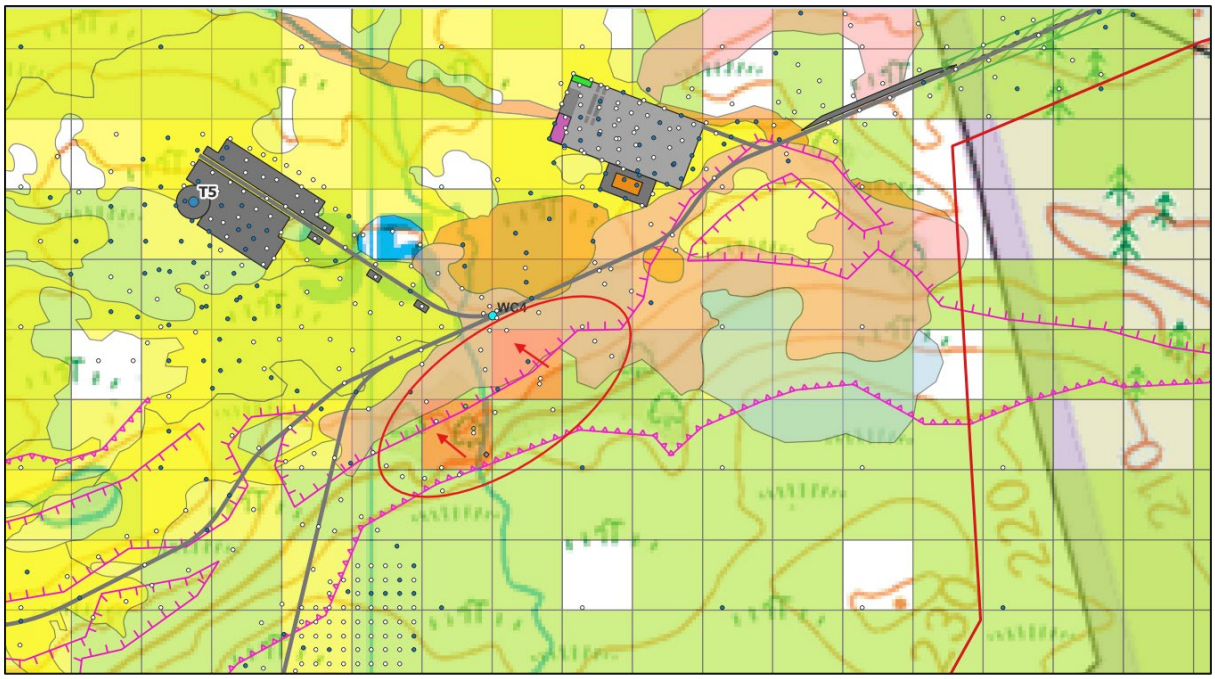
7.6.3.5 The points on the maps show the calculated Likelihood rating for all locations with directly measured peat depth, where white is no peat; blue is negligible; green is unlikely; yellow is likely; orange is probable; and red is almost certain.

7.6.3.6 Other symbols used on the maps are described below:



[19] Scottish Government (2017). Peat Landslide Hazard and Risk Assessments: Best Practice Guide for Proposed Electricity Generation Developments. Available at: Supporting documents - Proposed electricity generation developments: peat landslide hazard best practice guide - gov.scot, accessed July 2025.

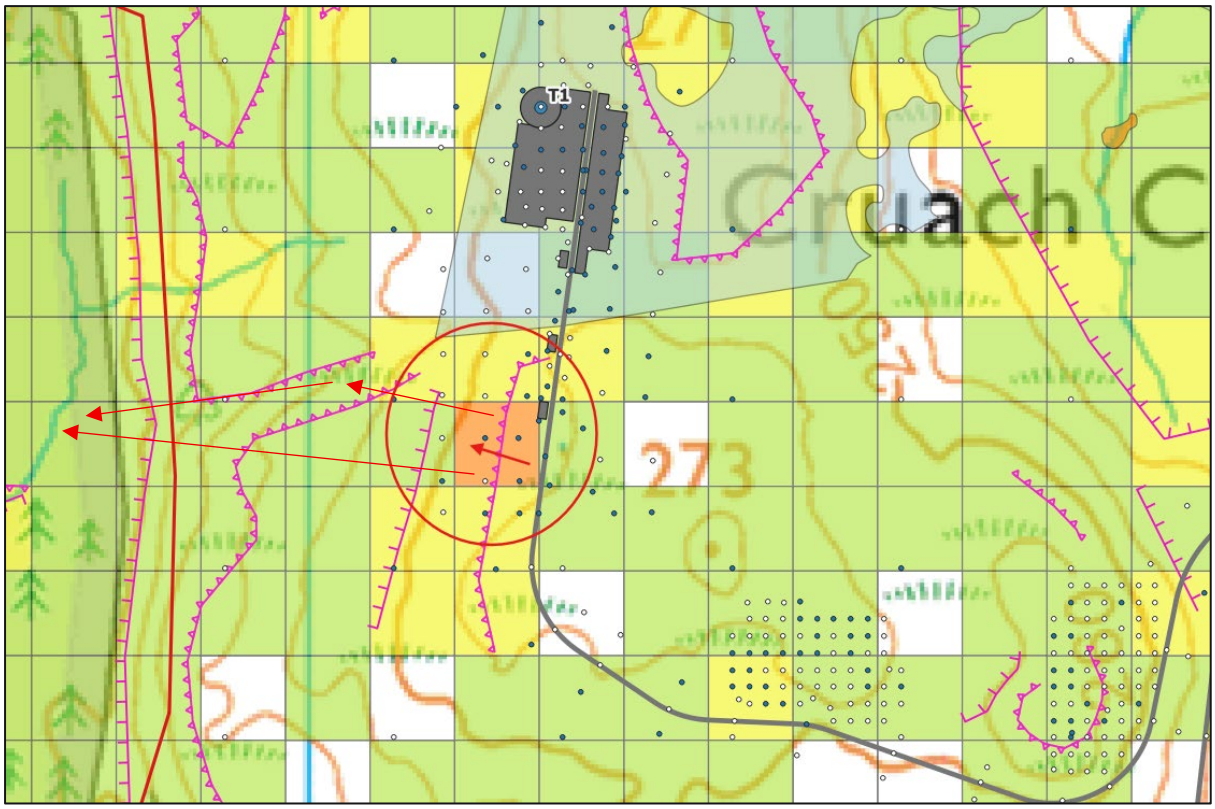
Detailed Assessment Area 6



MAP 1 – DETAILED ASSESSMENT AREA 6

7.6.3.7 Area 6 was assessed in detail in Appendix 9.1 of the 2024 EIA Report and contained one Moderate risk cell and one High risk cell. The new risk assessment shows that the High risk cell is now Moderate risk (**Map 1**). This is due to the presence of bedrock within this cell which was not taken into consideration during the previous iteration of the risk assessment. The presence of bedrock reduces the likelihood of peat slide in this cell which in turn reduces the overall risk. All other aspects of the assessment of Area 6 in Appendix 9.1 of the 2024 EIA Report remain the same, and the revised risk ranking in this area remains Low.

Detailed Assessment Area 8



MAP 2 – DETAILED ASSESSMENT AREA 8

7.6.3.8 One cell located adjacent to the western side of the access track to turbine T1 has been assigned Moderate risk (**Map 2**). The assigned risk level relates to elevated likelihood and consequence ratings for this cell.

7.6.3.1 Calculated likelihood for the cell is Likely, reflecting the presence of deep peat within the cell, steep slopes and a convex break-in-slope. Peat depth records for the cell are variable and range from 0.5m to 1.95m. The likelihood rating uses the maximum peat depth for the cell of 1.95m. In the original PSRA this cell had a maximum peat depth of 0.8m, and the increase in peat depth to 1.95m has led to calculated likelihood increasing from Unlikely to Likely. The cell has an average slope of 13.20°.

7.6.3.2 The consequence of a peat slide in this cell is assessed as High, due to the presence of an auxiliary crane pad in the north-eastern corner of the cell.

Potential Runout From Any Failure

7.6.3.3 Any failure in this or adjacent cells would travel west towards the western edge of the Application Boundary, as indicated by the red arrows shown on **Map 2**. Runout would be likely to terminate on the flat ground outwith the Application Boundary beside an unnamed watercourse. It is possible that debris could reach the watercourse which could affect the integrity of the watercourse channel, may cause temporary damming of the watercourse and could cause a reduction in water quality downstream. The mapped forestry in this area has been clear-felled and damage to standing trees is unlikely.

7.6.3.4 The access track to T1 and the auxiliary crane pad could both be impacted by failure at this location. Peat depth mapping indicates the presence of peat upslope of the cell, and it is possible that this could also be destabilised in the event of a failure. However, the upslope cells lie on the summit of a hill and have a much-reduced slope which would help to protect against failure. Areas of deepest peat within the cell are located in the north-east, coincident with the shallower slopes. It should also be noted that the calculated Likelihood for the peat depth records within this area are all Negligible or No peat.

Revised Risk Ranking and Mitigation

7.6.3.5 Closer inspection of the highlighted cell indicates that the steeper slopes and areas of deep peat are not coincident, with the steeper slopes being associated with areas of shallower or no peat. The majority of the access track to T1 and the auxiliary crane pad are located in cells with Negligible or Low risk of peat slide. Only a very small portion of the infrastructure sits within the Moderate risk cell, and this within an area with reduced slope compared to the rest of the cell. It is therefore considered that the assessment does not accurately reflect the risk status at this location.

7.6.3.6 Work is proposed within the highlighted cell. It is recommended that micrositing of the access track and auxiliary crane pad to the north-east is considered to maximise the separation from the highlighted risk area. All construction works in this area would be under the supervision of the Environmental Clerk of Works (ECoW) at all times. Any suggested micrositing would be at the discretion of the ECoW and principal contractor and would only be implemented if it is appropriate in relation to other environmental and engineering constraints. Micrositing should not take place if it would result in infrastructure being placed within deeper peat than the original layout.

7.6.3.7 Having considered the Moderate risk cell in detail, and providing the above mitigation is adhered to, the revised risk ranking is considered to be Low.

Additional Changes to the Risk Ranking

7.6.3.8 There are several changes to the risk ranking due to the revised assessment which do not warrant a full detailed assessment, but which shall be highlighted here for clarity.

7.6.3.9 Along the northern edge of the Study Area there are now multiple cells marked as Low risk which were previously recorded as Negligible risk. This is because the SSSI and SAC in this area have now been taken into consideration, leading to an increase consequence rating and therefore an overall increase in the risk ranking. As per the explanation provided in Appendix 9.1 of the 2024 EIA Report, the SSSI has been assigned a High consequence, while the SAC has been assigned a Very High consequence.

7.6.3.10 Similarly, to the east of borrow pit BP2, there is a group of cells previously recorded as Negligible which are now identified as Low risk. This is due to the presence of a SAC in this area which has now been taken into consideration in the risk assessment.

7.6.3.11 Finally, a group of cells to the north of T3 are recorded as having no peat and therefore no risk of peat slide. Previously these cells were identified as Negligible risk. This difference between the two assessments is due to the additional peat data that was collected at T3 to ensure sufficient coverage of the infrastructure in line with current guidance. This has led to a greater concentration of peat depths less than 0.5m in this area, which in turn has influenced the peat depth interpolation, resulting in a greater number of cells being recorded as having no peat than in the previous assessment.

Mitigation

7.6.3.12 Mitigation measures to assist in avoidance of peat instability have been provided in Appendix 9.1 of the 2024 EIA Report. No additional mitigation measures have been identified through this revised assessment.

7.6.4 Conclusions

7.6.4.1 A detailed assessment of peat slide risk has been carried out for the Proposed Development. All proposed new and upgraded infrastructure has been covered by the assessment.

7.6.4.2 The assessment found that the majority of the Study Area has a Negligible or Low risk of peat landslide.

7.6.4.3 Peat slide within the Study Area has been reassessed in order to take into account changes to the Proposed Development layout, additional peat depth data, and to ensure that all SSSI and SAC areas within the Study Area have been included in the assessment.

7.6.4.4 The risk ranking across the majority of the Study Area has remained unchanged. Detailed assessment Area 6 was found to have a reduced peat slide risk due to additional peat depth data and additional mapped bedrock indicating less peat present in the area. One new detailed assessment area, Area 8, has been identified, and a detailed assessment is provided in this 2025 FEI Report.

7.6.4.5 For all areas, the peat landslide hazard can be controlled by the use of good construction practice and micrositing. Revised risk rankings taking into account location-specific details and mitigation measures are Negligible or Low across the Site.

7.6.4.6 Having regard to the recommended mitigation measures, the risk of peat landslide as a result of the Proposed Development is **Not Significant**.

7.7 Peat Management Plan

7.7.1.1 The aim of the revised layout has been to avoid areas of peat where possible, and to minimise incursion into peat where it has not been possible to avoid it all together.

7.7.1.2 The excavation volumes have been calculated using the same assumptions with regard to excavation widths and depths of access tracks and infrastructure as stated in Appendix 9.2: Outline Peat Management Plan of the 2024 EIA Report. Similarly, definitions of acrotelmic and catotelmic peat remain consistent.

7.7.1.3 The following tables set out the estimated volumes of peat that will need to be excavated in order to allow construction of the revised Proposed Development to proceed. The calculations are provided per 'infrastructure element' as totals for each element type and as an overall total. Each set of calculations provides subdivision into 'acrotelm' and 'catotelm'.

7.7.2 Peat Excavation Volumes

7.7.2.1 **Table 7.1** provides peat volumes that require excavation in order to allow construction of the access track network and associated drainage.

TABLE 7.1 - PEAT EXCAVATION VOLUMES FOR ACCESS TRACKS

INFRASTRUCTURE ELEMENT	ACROTELM (M^3)	CATOTELM (M^3)	TOTAL (M^3)
Existing access track from A85 to main Site	586	419	1,005
New access track from A85 to main Site	846	1,007	1,853
New access track within the main Site	11,545	13,276	24,821
Total	12,977	14,702	27,679

7.7.2.2 **Table 7.2** provides peat volumes that require excavation in order to allow construction of the turbine foundations, hardstanding areas and crane pads, plus associated drainage.

TABLE 7.2– PEAT EXCAVATION VOLUMES FOR TURBINES, HARDSTANDINGS, CRANE PADS AND ASSOCIATED DRAINAGE

INFRASTRUCTURE ELEMENT	ACROTELM (M^3)	CATOTELM (M^3)	TOTAL (M^3)
T1 hardstanding	1,310	1,722	3,032
T2 hardstanding	883	243	1,126
T3 hardstanding	275	242	517
T4 hardstanding	614	1,042	1,656
T5 hardstanding	807	425	1,232
T6 hardstanding	916	759	1,675
Total	4,805	4,433	9,238

7.7.2.3 **Table 7.3** provides peat volumes that require excavation in order to allow construction of additional infrastructure, such as construction compounds and borrow pits, plus associated drainage.

TABLE 7.3 – PEAT EXCAVATION VOLUMES FOR OTHER INFRASTRUCTURE ELEMENTS

INFRASTRUCTURE ELEMENT	ACROTELM (M^3)	CATOTELM (M^3)	TOTAL (M^3)
Compound and substation area	1,054	1,431	2,485
Borrow pit 1	464	491	955

INFRASTRUCTURE ELEMENT	ACROTELM (M^3)	CATOTELM (M^3)	TOTAL (M^3)
Borrow pit 2	269	108	377
Total	1,787	2,030	3,817

7.7.2.4 A summary of the estimated total peat volumes is provided in **Table 7.4**.

TABLE 7.4 – SUMMARY OF ESTIMATED PEAT EXCAVATION VOLUMES FOR THE REVISED LAYOUT

INFRASTRUCTURE ELEMENT	ACROTELM (M^3)	CATOTELM (M^3)	TOTAL (M^3)
Access tracks	12,977	14,702	27,679
Turbines and hardstandings	4,805	4,433	9,238
Other infrastructure elements	1,787	2,030	3,817
Total	19,569	21,165	40,734

7.7.2.5 The revised layout is estimated to require a similar amount of peat to be excavated compared to the original layout. The total estimated peat excavation volumes are compared for each layout in **Table 7.5.**

TABLE 7.5 – TOTAL PEAT EXCAVATION VOLUMES TO COMPARE THE LAYOUT OPTIONS

LAYOUT OPTION	ACROTELM (M^3)	CATOTELM (M^3)	TOTAL (M^3)
Original Layout	16,678	21,375	37,983
Revised Layout	19,569	21,165	40,734
Difference	+2,891(17% increase)	-210 (1% decrease)	+2,751 (7% increase)

7.7.2.6 The increase in overall peat volume is the result of additional peat probing around proposed infrastructure elements rather than as a result of changes to infrastructure locations.

7.7.3 Peat Reuse Volumes

7.7.3.1 Calculations have been made to determine where excavated peat can usefully be reused within the Proposed Development, for the purposes of reinstatement and restoration. Estimated volumes for reuse are provided in **Table 7.6**, subdivided by different reinstatement and restoration methods that are appropriate for the Proposed Development.

TABLE 7.6 - ESTIMATED PEAT VOLUMES FOR DIFFERENT REUSE OPTIONS FOR THE REVISED LAYOUT

REUSE OPTION	ACROTELM (M^3)	CATOTELM (M^3)	TOTAL (M^3)
New access track	18,200	4,500	22,700
Construction compound & substation	400	100	500
Turbine hardstandings	4,000	1,000	5,000
Borrow pit 1	1,100	2,700	3,800
Peatland restoration	0	12,900	12,900
Total	23,700	21,200	44,900

7.7.3.2 All the figures in **Table 7.6** have been rounded down to the nearest 100m^3 to make allowance for the uncertainties present within the figures.

7.7.3.3 As the reuse options for acrotelm are greater than the expected excavation options, it is expected that the majority of the excavated acrotelmic peat would be used for dressing-off edges and reinstatement of tracks and infrastructure, except for areas where it is considered essential for peat restoration.

7.7.3.4 Approximately 13% of the excavated catotelmic peat would be used for the restoration of borrow pit BP1, with acrotelm providing a surface layer. It is proposed that the northern and western parts of the borrow pit would be restored with a depth of peat up to 1m deep. The aim of restoration would be to expand the area of peat which sits along the north-western margin of the borrow pit and to help this area to return to active peatland status. Due to the topography and peat depths across the borrow pit, it is not considered suitable to restore the south-eastern half of the borrow pit.

7.8 Response to SEPA

7.8.1.1 SEPA have raised a number of concerns regarding the 2024 EIA Report, which are relevant to geology, hydrogeology, hydrology and soils. The following sections provide responses specific to each point raised.

7.8.2 Encroachment in Watercourse Buffers

7.8.2.1 'Several turbine locations and their associated hard standings appear to be encroaching into the 50m watercourse buffer…we request the applicant modifies the proposal in these locations to ensure and/or illustrates turbine locations have no deep excavations (greater than 1m) impinging on the 50m watercourse buffers.'

7.8.2.2 Several amendments have been made to the proposed layout in order to reduce the amount of infrastructure located within the 50m watercourse buffers.

7.8.2.3 Turbine T5 has been rotated clockwise, entirely removing the hardstanding from the buffer and also reducing the amount of track within the buffer.

7.8.2.4 T4 has been rotated anticlockwise, and the temporary blade storage area has been removed, such that only a small section of track and hardstanding infringe upon the edges of the watercourse buffer. It has not been possible to move this hardstanding further south to remove it completely from the watercourse buffer due to other environmental and engineering constraints; however, no excavations greater than 1m deep would be required within the 50m watercourse buffer.

7.8.2.5 Several areas of access track have also been realigned, resulting in significantly less track being sited within watercourse buffers. The track to T3 has been relocated westwards, reducing the length of track within the buffer by approximately 330m in this area.

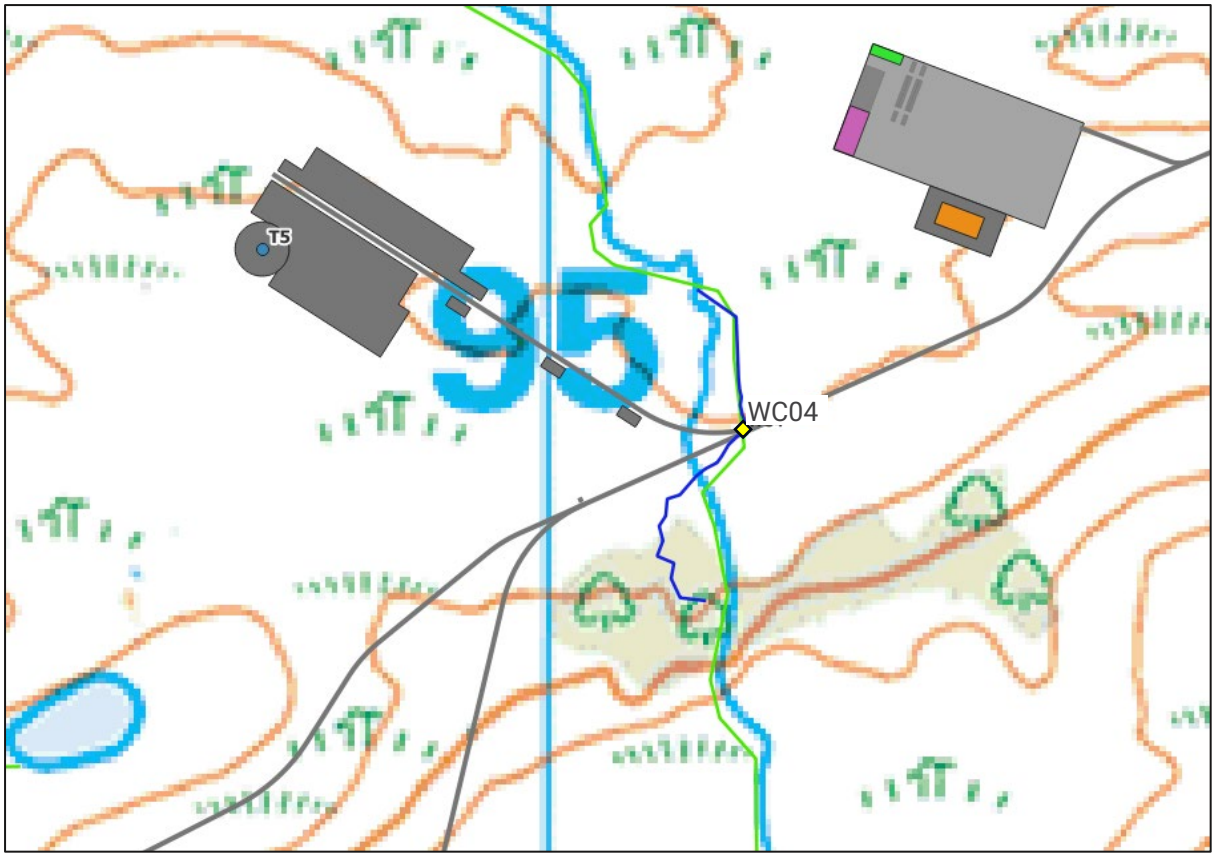
7.8.2.6 Realignment of the access tracks to T5 and T6 has reduced the length of track situated within watercourse buffers by approximately 150m. Additionally, the realignment of the track has reduced the number of watercourse crossings required. Watercourse crossings WC4 and WC5 are now combined in a single crossing, WC4, which is located at NM 95086 30358.

7.8.2.7 It should be noted that the Ordnance Survey (OS) 1:25,000 mapping in this area is inaccurate and indicates that either two crossings would be required, or one very large crossing, as the mapping suggests that the watercourse is located at the junction between the main track line and the track to T5. During the Site survey in May 2025, this watercourse was mapped in detail and found to be located further east than OS mapping suggests. The true watercourse channel aligns more closely with the surface water layer mapped in the OS VectorMap District data.[20]

7.8.2.8 Due to the realignment of the access track to T4, watercourse crossing WC01 has moved westwards and upstream of the original crossing and is now located at NM 94205 29893. It is still planned that this would be a bottomless arch or box culvert as described in the 2024 EIA Report Appendix 9.4: Drainage Impact and Watercourse Crossing Assessment.

7.8.2.9 One section of access track leading to T1 and T2 remains located within the 50m watercourse buffer. It has not been possible to relocate this section as a result of environmental and engineering constraints in this area. This section would not require any excavations deeper than 1m and remains at all times 20m or more from the watercourse channel. Additional mitigation would be established in this area to ensure that the watercourse channel is protected from sediment release or pollution incidents. These are expected to include additional lengths of silt fencing and temporary cut-off drains or bunds to capture mobilised sediment or localised spills. Should micrositing be possible during construction, consideration would be given to moving it north in order to maximise the separation from the watercourse channel.

[20] Ordnance Survey (2025). OS VectorMap District. Available at: https://www.ordnancesurvey.co.uk/products/os-vectormap-district#get, accessed July 2025.



MAP 3 – ALIGNMENT OF WATERCOURSE CHANNEL NEAR WC04. DARK BLUE LINE SHOWS THE TRUE CHANNEL ALIGNMENT AT WC04 COMPARED WITH OS VECTOR MAP DATA (GREEN LINE) AND OS BASE MAPPING (MID-BLUE LINE)

Figures 9.4.1a-b from the 2024 EIA Report submission have been updated to show the new locations of the watercourse crossings, watercourses and watercourse buffers.

7.8.3 Culverting for Land Gain

7.8.3.1 *'Turbine 4 hardstandings appear to include culverting for land gain which is contrary to SEPA policy. It is noted the location of turbine and hardstanding are different on Figure 9.1.6e to that shown on Figure 5.7k. We object to T4 in its current location until it can be demonstrated no culverting for land gain will be required to enable this turbine at this location. In addition, it is unclear what earthworks will be necessary to enable the T3 access road and hardstandings. We object to these elements until further information is submitted to illustrate earthworks will not encroach within 15m of the adjacent watercourse.'*

7.8.3.2 The amendments to the layout of T4 have required the relocation of WC1 upstream and have moved the turbine hardstanding almost completely outwith the watercourse buffer. The revised design does not include culverting for land gain.

7.8.3.3 The access track to T3 has been realigned to the south-west and is now located outwith the watercourse buffer. No excavation earthworks would be required within 15m of the adjacent watercourse channel.

7.8.3.4 An updated layout plan is provided in **Figure 3.5** with an engineering drawing provided in **Block Plan 11 (Figure 3.8k)**. It should be noted that further investigation of the figures accompanying the 2024 EIA Report submission showed that there was no discrepancy between Figure 9.1.6e and Figure 5.7k from the 2024 EIA Submission. The perceived

dissimilarity was due to the fact that the planning drawings are not oriented to north, unlike the majority of the figures, which are north aligned.

7.8.4 Condition of Future Consent

7.8.4.1 *'We request a condition is attached to any future consent that secures the following:*

- *No excavations greater than 1m shall take place within 50m of a watercourse.*
- *No earthworks or storage of materials including peat shall take place within 15m of a watercourse apart from those associated with an approved watercourse crossing.'*

7.8.4.2 The Applicant notes these suggested conditions and has no objection to these or similarly worded conditions attached to a future consent.

7.8.5 Watercourse Crossings

7.8.5.1 *'In order to comply with NPF4 Policy 22, we request a condition ensuring the design and implementation of any new or upgraded watercourse crossing is designed to convey the 1 in 200 year including climate change flows and will be a clear span structure unless otherwise agreed with the Planning Authority in consultation with SEPA. Crossings are to be designed in line with SEPA's Good Practice Guidance on watercourse crossings, WAT-SG-25, and WAT-PS-06-02 Culverting of Watercourses.*

7.8.5.2 *The attached Appendix 2 requests a number of modifications to the infrastructure layout, including relocation of access tracks which may reduce the number of watercourse crossings which would support the mitigation hierarchy of avoidance as the first principle.'*

7.8.5.3 The Applicant notes this suggested condition and has no objection to this, or a similarly worded condition attached to a future consent. Detailed design for all watercourse crossings would be provided post-consent.

7.8.5.4 The revised alignment of the access track to T5 and T6 has reduced the total number of proposed watercourse crossings by one.

7.8.6 Minimisation of Disturbance of Peat

7.8.6.1 *'We are disappointed to note from Figure 9.9 that the design iterations appear to have led to at least 4 of turbines and their associated infrastructure being located on deeper peat. Whilst we recognise that other site constraints also have to be considered, we wish to see greater consideration of peat given to the siting of a number of turbines as detailed in the attached Appendix 2 of this response.'*

7.8.6.2 Where design iterations have located infrastructure into areas of peat, this has been due to balancing other environmental and engineering considerations, including avoidance of watercourse buffers, ornithological and ecological constraints and areas with steep slopes, and has not been due to a lack of care or consideration of the peatland resource.

7.8.6.3 Appendix 2 of SEPA's response requests consideration of a number of design changes as follows:

- *Relocation of T1 eastwards to minimise impacts on peat:* this has not been possible due to other design constraints. However, the turning head has been moved further north to an area of shallower peat. Additionally, following ground investigation and post-consent environmental

data updates, T1 would be considered for micrositing to minimise incursion into areas of peat as far as possible.

- *Relocation of the access track to T3, taking it off the main track further west just before the access track to T4:* while other design constraints including peat have not made this exact relocation possible the track to T3 has been moved south and west, reducing impacts on peat and watercourses in this area.
- *Relocation/modification of T4 required to reduce impacts on peat and watercourses:* the turbine hardstanding has been reduced in size and rotated resulting in reduced impacts to peat and watercourses in this area.
- *Relocation/modification of T5 required to prevent encroachment on watercourse buffer:* T5 has been rotated clockwise as far as is possible from an engineering perspective, removing the hardstanding and auxiliary crane pads from the buffer entirely and reducing the amount of access track within the buffer. The turning head has also been removed as it no longer required due to realignment of track in this area.
- *Micrositing to the south-east should be considered to move T6 off deeper peat:* this has not been possible due to other design constraints. The larger area of peat near T6 has been completely avoided. If possible, following ground investigation and post-consent environmental data updates, T6 would be considered for micrositing to minimise incursion into areas of peat as far as possible.
- *Substation to be moved off deeper peat:* this has not been possible due to other design constraints. If possible, following ground investigation and post-consent environmental data updates, the substation would be considered for micrositing to minimise incursion into areas of peat as far as possible.
- *Peat stockpile areas should be moved closer to areas where most peat is to be excavated*: two additional peat and soil stockpile areas have been selected adjacent to T1 and T4 at NM 93192 29848 and NM 94295 29740, respectively. Figure 9.2.1 from the 2024 EIA Report submission has been updated to show the revised peat stockpile areas.
- The turning head at T2 has also been removed, which will reduce impacts to peat in this area.

7.8.6.4 SEPA also note that 'the Figures showing Peat Depth (Figures 9.1.6a-f) are difficult to assess due to blocking out of information with peat depth numbers which have a white background. It is also difficult to know which spot depth relates to which circle in the denser probed areas. In addition, the colours used to differential between different peat depths, in particular, the different colours of green are too similar to distinguish the depths of the individual probes. We request the use of other colours apart from green for depths deeper than 1m in future submissions by this consultant. We also require any future plans to be at a larger scale.'

7.8.6.5 The peat depth figures have now been updated to address these concerns and are available as Figures 9.1.6a-t. Where it is still difficult to read individual peat depths, these figures have been sub-divided and more detailed maps provided. For example, Figure 9.1.6b1 shows turbine T1 and the surrounding area but some of the peat depths across the T1 hardstanding are still difficult to read. Figure 9.1.6b2 provides an additional figure of T1 which is large enough so that all the peat depths across the hardstanding can be read.

7.8.7 Use of Floating Track

*7.8.7.1 SEPA have also raised concerns that floating track is only being proposed at one location along the access track into the main Site, despite floating track being proposed as a mitigation measure in **Chapter 9** of the EIA Report.*

7.8.7.2 Efforts have been made to incorporate floating track into the design to minimise impacts on deeper peat. However, due to engineering constraints, it has not been possible to utilise floating track except for along the access track section already highlighted in the EIA Report. This is primarily due to the topography of the Site, which consists of a series of undulating hills, creating many steep slopes and variable peat depths, with deeper peat being present in

the hollows and generally giving way to shallower peat on the hill slopes and hilltops. This means that in many areas, deep peat rapidly gives way to shallow or no peat.

7.8.7.3 Engineering restrictions advise that floating track is not suitable for construction on slopes with greater than 5% grade (2.86°). This means that much of the Site is unsuitable for floating track as a result of the ground slopes. In addition, the engineering construction requires a transitional length of 70m between floating and non-floating track sections, meaning that the minimum size of peat area required for floating track to be practical is 150m. Therefore, it has unfortunately not been practicable to make more use of floating track throughout the Site.

7.8.8 Peat Re-Use in Borrow Pits

7.8.8.1 'We note from the OPMP that significant proportion of the excavated peat (14%) is proposed to be used in the reinstatement of the borrow pits, however Section 3.25 of Appendix 9.5 Borrow Pit Assessment states only excavated "topsoil, plus rock material unsuitable for use as aggregate or fill". Whilst we do not object to a small proportion of excavated peat being used in the restoration of borrow pits in principle, we have concerns over the amount of catotelmic peat that is proposed to be used in this activity, especially when this type of peat represents a very small proportion of the peat originally excavated from these areas.

7.8.8.2 As no further details have been submitted in relation to the proposed borrow pit restoration, we cannot advise the Scottish Minister on whether the proposed reuse of excavated peat in the borrow pit areas will comply with NPF4 policy 5 in terms of restoring and/or enhancing the site into a functioning peatland system capable of achieving carbon sequestration, or whether the use of peat would constitute waste disposal operations. We therefore request a condition is attached to any future consent which secures the submission of the following at least one month prior to the commencement of development:

- *Full details of the reinstatement for all borrow pits, including cross sections showing proposed maximum peat depth profiles for each category of peat, phasing and final restoration profiles in relation to surrounding land with a clear hydrological justification for the use of catotelmic peat also being given. The target restoration habitat for each borrow pit needs to be specified along with how this will be maintained.'*

7.8.8.3 Peat reuse volumes calculated for the EIA Report anticipated full reinstatement of both borrow pits using a depth of 1m peat across the full area of each borrow pit. After taking SEPA's concerns into consideration, it has been decided that peat would not be reused in the reinstatement of BP2, as there is very little peat at this location and therefore it is unlikely that creation of a functioning peatland ecosystem would be possible.

7.8.8.4 Additional peat data collected within and around BP1 indicate that there is peat up to 1.45m deep around the northern and western margins of the borrow pit. Therefore, reinstatement using peat up to 1m deep is considered to be practical in the northern and western sections of this borrow pit, with the aim being to expand the existing peatland habitat in this area and to improve its quality following clear-felling operations.

7.8.8.5 The Applicant notes the suggested condition and has no objection to this, or a similarly worded condition attached to a future consent.

7.8.9 Micrositing Conditions

7.8.9.1 'We note the applicant's suggestion for a micrositing limit of 50m for all turbines (Planning and Renewable Energy Statement section 2.26). We request this is applied to all built elements of

the application and, unless otherwise confirmed by the determining authority in consultation with SEPA, any proposed micrositing be subject to the following restrictions:

- *No micrositing shall take place within a 50m buffer distance of a waterbody (other than as required for a watercourse crossing and related access track).*
- *Micrositing shall not move infrastructure closer to any waterbody.*
- *No micrositing shall take place within areas of peat of greater depth than the original location of the infrastructure.'*

7.8.9.2 The Applicant notes these suggested conditions and has no objection to these or similarly worded conditions attached to a future consent.

7.9 Effects During Construction and Operation

7.9.1.1 Within **Chapter 9** of the 2024 EIA Report, the impact of construction and operational phase works at the Proposed Development on the following elements were assessed:

- physical changes to overland drainage and surface water flows;
- water contamination from particulates and suspended solids;
- water contamination from fuels, oils or foul drainage;
- changes in or contamination of water supply to vulnerable receptors including Private Water Supplies (PWS), Groundwater Dependent Terrestrial Ecosystems (GWDTE) and designated sites;
- increased flood risk;
- physical removal of bedrock;
- modification to groundwater flow paths;
- soil erosion and compaction; and
- peat instability.

7.9.1.2 The changes to the Proposed Development design highlighted in this 2025 FEI Report have impacted various factors pertaining to geology, hydrogeology, hydrology and peat. These have been discussed in detail in this Chapter. The revised layout has led to a slight increase in the amount of excavated peat but with an overall reduction in the amount of catotelmic peat required to be excavated. One watercourse crossing has been moved to accommodate realignment of access tracks and realignment has also led to a reduction in the total number of watercourse crossings from seven to six.

7.9.1.3 There is no change to the overall peat landslide risk which, after a revised detailed assessment, remains Low or Negligible across the Site.

7.9.1.4 None of the above points have changed the overall impact assessment documented in **Chapter 9** of the 2024 EIA Report, which still stands for the revised layout. Therefore, this 2025 FEI Report finds that **no significant effects** on geology, hydrogeology, hydrology and soils would arise as a result of the Proposed Development.

7.10 Conclusion

7.10.1.1 This Chapter of the 2025 FEI Report provides a revised assessment of the impacts to geology, hydrogeology, hydrology and soils from the revised Proposed Development layout and takes into consideration concerns raised by Ironside Farrar and SEPA. To inform the assessment, additional peat data were collected, which led to updates to the PSRA and Peat Management Plan (PMP).

7.10.1.2 The revised PSRA identified 11 cells with a High or Moderate risk of peat landslide. This is one additional cell, compared with the original assessment. The assessment found that,

provided the recommended mitigation measures are put in place and adhered to as outlined in this report and Appendix 9.1 of the 2024 EIA Report, there would be no significant risk of peat landslide as a result of the Proposed Development.

7.10.1.3 The revised layout has led to a slight increase in the total amount of peat required to be excavated for construction of the Proposed Development, but an overall decrease in the amount of catotelmic peat to be excavated. Greater consideration has been given to the peat reuse within the development, particularly relating to peat reuse within borrow pit reinstatement. Rather than fully reinstating both borrow pits with excavated peat, only the northern and western portion of BP1 would be reinstated with peat as this area is deemed the most likely to produce a functioning peatland ecosystem.

7.10.1.4 The revised layout has reduced the number of watercourse crossings required by one.

7.10.1.5 The Applicant agrees to all conditions of consent outlined in this Chapter and these conditions would be fulfilled, should the Proposed Development be consented.

7.10.1.6 The revised layout has not caused any changes to the assessment of effects detailed in Chapter 9 of the 2024 EIA Report. Therefore, this FEI Chapter finds that there would be **no significant effects** relating to geology, hydrogeology, hydrology and soils as a result of the changes to the Proposed Development design.

8 ECOLOGY

8.1 Introduction

8.1.1.1 This 2025 FEI report provides supplementary information as requested by consultees NatureScot, SEPA, Buglife Scotland and Butterfly Conservation. As a result of consultation responses, a small section of access track has been changed to reduce impacts to peat and watercourse buffers, a watercourse crossing has been removed, one turning head was moved, and two turning heads have been removed to reduce impacts. The changes are described in more detail in Chapter 7.8 of this 2025 FEI Report. This updated design changes some details of the assessment presented in the 2024 EIA Report which are detailed in this 2025 FEI Report. Please note that only important ecological features where changes have been identified are detailed; all other conclusions set out in Chapter 10 of the 2024 EIA Report remain unchanged. Assessment conclusions for important ecological features Loch Etive Woods SAC and Airds Park and Coille Nathais SSSI are not affected, given the nature /scale of the design changes and the distance at which these sites are situated, and these are not discussed further.

8.2 Likely significant effects

8.2.1 Clais Dhearg SSSI

8.2.1.1 The design changes, specifically the removal of one watercourse crossing and changing a small section of the access track to reduce impact on watercourse buffers (Figures 9.4.1a-b from the 2024 EIA Report submission have been updated to show the new locations of the watercourse crossings, watercourses and watercourse buffers), will result in reduced habitat degradation on the adjoining Clais Dhearg SSSI through the existing hydrological links. Despite the overall reduction in the level of impact, the reductions are not considered to be significant enough to change the assessment conclusions for Clais Dhearg SSSI presented in Chapter 10 of the 2024 EIA Report, which are considered to remain valid (not significant without mitigation). None of the other design changes will affect the marsh fritillary habitats within Clais Dearg SSSI, and therefore, the assessment conclusions presented in Chapter 10 of the 2024 EIA Report are considered to remain valid (significant without mitigation, not significant with mitigation).

8.2.2 Habitats

8.2.2.1 Table 10.9 in Chapter 10 of the 2024 EIA Report, detailed losses from habitats within the Proposed Development. The design changes mean that habitat loss has been reduced on the UKHab Classification f1a blanket bog (or under National Vegetation Classification vegetation communities described as M19 and M25) important ecological feature, given that access to turbines T5 and T6 have been merged for a longer section, which reduced the habitat loss. All other design changes lead to minimal changes to the habitat loss quantifications presented in the 2024 EIA Report. Despite the overall reduction in the level of impact, the reductions are not considered to be significant enough to change the assessment conclusions for these habitats presented in Chapter 10 of the 2024 EIA Report, which are considered to remain valid (significant without mitigation and not significant with mitigation for f1a blanket bog, not significant without mitigation for all other habitat types).

8.2.3 Ancient woodland

8.2.3.1 The design changes do not affect woodland habitat and therefore the assessment conclusions presented in Chapter 10 of the 2024 EIA Report are considered to remain valid (not significant without mitigation).

8.2.4 Bats

8.2.4.1 The design changes mean that tree 10 (shown on Figure 10.2.1 Protected Species Survey Results accompanying Chapter 10 of the 2024 EIA Report) with Potential Roost Features (PRFs) is now situated beyond 30 metres (m) from the proposed access route to T6 and it is not likely to be affected by disturbance/displacement from the construction works. Despite the overall reduction in the level of impact, the reductions are not considered to be significant enough to change the assessment conclusions for bats presented in Chapter 10 of the 2024 EIA Report, which are considered to remain valid (significant without mitigation, not significant with mitigation for disturbance/displacement impact and not significant without mitigation for habitat loss).

8.2.5 Fish

8.2.5.1 The design change of removal of one watercourse crossing (WC5), does not affect the assessment conclusions for fish presented in Chapter 10 of the 2024 EIA Report, as this crossing is not situated on the watercourses where Atlantic salmon or brown trout were recorded, and therefore, the conclusions for fish are considered to remain valid (significant without mitigation, not significant with mitigation).

8.2.6 Otter

8.2.6.1 The design change of removal of one watercourse crossing (WC5) does not affect the assessment conclusions for otter presented in Chapter 10 of the 2024 EIA Report, as this crossing is not situated on the watercourses where this species was recorded, and therefore, the conclusions for otter are considered to remain valid (not significant without mitigation).

8.2.7 Red squirrel

8.2.7.1 The design changes do not affect habitat suitable for red squirrel, and therefore, the assessment conclusions presented in Chapter 10 of the 2024 EIA Report are considered to remain valid (not significant without mitigation).

8.2.8 Marsh fritillary

8.2.8.1 The design changes will result in an overall reduction of habitat loss; however, small areas of purple moor grass and rush pastures will still be affected. Despite the overall reduction in the level of impact, the reductions are not considered to be significant enough to change the assessment conclusions for marsh fritillary presented in Chapter 10 of the 2024 EIA Report, which are considered to remain valid (significant without mitigation, not significant with mitigation). Meetings were attended with Butterfly Conservation Trust and Buglife Scotland where specific mitigation measures for marsh fritillary were discussed and agreed. Mitigation measures that will be implemented include pre-construction surveys (for both on-site and at the off-site habitat management units as set out in set out in Section 10.10.1.1 of the 2024 EIA Report), micro-siting of development parcels with presence of an Ecological Clerk of

Works (ECoW), provision of a site-specific Construction Environmental Management Plan (CEMP) (including pollution prevention measures relating to water quality and SSSI features) and adoption of the Outline Habitat Management Plan (oHMP), which includes a combination of measures such as targeted removal of bog myrtle. Further detail on the mitigation and information on ongoing discussions on targeted invertebrate species with Butterfly Conservation Trust and Buglife Scotland is presented in **Appendix 8.1.**

8.2.9 Wood ants

8.2.9.1 The design changes do not affect habitat/areas where wood ants have been found and therefore the assessment conclusions presented in Chapter 10 of the 2024 EIA Report are considered to remain valid (not significant without mitigation for habitat loss/degradation and significant without mitigation, not significant with mitigation for disturbance/mortality impact). Meetings were attended with Butterfly Conservation Trust and Buglife Scotland where specific mitigation measures for wood ants were discussed and agreed. Mitigation measures that will be implemented include targeted pre-construction surveys and retention of a minimum 20m buffer around nests that can be avoided during works as well as translocation of affected nests (set out in Section 10.10.1.6 of the 2024 EIA Report). Further detail on the mitigation and information on ongoing discussions on targeted invertebrate species with Butterfly Conservation Trust and Buglife Scotland is presented in **Appendix 8.1.**

8.3 Cumulative assessment

8.3.1.1 The cumulative assessment set out in Section 10.12 of the 2024 EIA Report already takes into account all the relevant developments (including the closest, the proposed Corr Chnoc) within the EZoI and therefore the assessment conclusions presented in Chapter 10 of the 2024 EIA Report are considered to remain valid.

9 ORNITHOLOGY

9.1.1.1 Section 9 Ornithology should be read in conjunction with Chapter 9 Ornithology of the 2024 EIA Report.

9.2 Consideration of Project Design Changes

9.2.1.1 The design updates outlined in **Chapter 3,** in the context of ornithology, make no material difference to the assessment of effects and proposed avoidance and mitigation measures presented in the 2024 EIA Report.

9.3 Response to NatureScot Comments

9.3.1 Introduction

9.3.1.1 The Energy Consents Unit (ECU) consulted with NatureScot in December 2024 regarding the 2024 EIA Report conclusions and the appropriateness of mitigation measures. In their letter of response to the ECU dated 4 April 2025, NatureScot noted the Proposed Development did not raise matters of national interest. However, NatureScot raised concerns with regard to significant impacts on Schedule 1 bird species and a regionally important black grouse population, which they considered were not to be easily overcome by siting, design or other mitigation.

9.3.1.2 **Table 9.1** summarises NatureScot's concerns and provides additional information in response to those concerns. The additional information provided here has been consolidated from two letters to NatureScot. An initial letter was sent 3 July 2025 dealing with responses to their less complex queries and was followed by a detailed response to queries regarding the assessment of effects on golden eagle and the ornithological cumulative impact assessment sent on the 21 August 2025.

9.3.1.3 **Table 9.1** details NatureScot comments on the Ornithological assessment for the Proposed Development.

TABLE 9.1- NATURESCOT COMMENTS ON THE PROPOSED DEVELOPMENTS ORNITHOLOGICAL ASSESSMENT

REFERENCE	COMMENT	ADDRESSED
NS1	Golden Eagle We have concerns about the Vantage Point (VP) selection and consider the applicant's analysis of impacts on golden eagles may be flawed, particularly in relation to their assessment of territory size and apparent level of lost habitat. In section 11.9.1.2.1 of the Ornithology Chapter of the 2024 EIA Report the Applicant states the territory size is 11,115ha based on a 95% kernel analysis of the tag data; however, we are aware this territory has previously been assessed for a scientific paper as being 5,498ha also on a 95% kernel	Addressed in **Section 9.3.2**

REFERENCE	COMMENT	ADDRESSED
NS 2	Golden Eagle We highlighted potential issues with the survey VP location at the pre-application stage and potential impact on eagle flight activity. The VP lies between the proposed turbine array and the adjacent eagle territories, and golden eagle roost sites were known very close to the VP location (from tag data). The Applicant has rebutted this, however we believe it may have had an impact, as flight activity over the area is lower than may otherwise have been the case.	Addressed in **Section 9.3.2**
NS 3	Black Grouse The black grouse survey data differs from that submitted at the pre-application stage. The ES states there was one regular lek and that Lek B was only temporary, apparently involving the same bird[s] as Lek A, resulting in a smaller overall population on the site. However, this contradicts the information previously given to us which suggested up to 7 males and 2 females, meaning this site holds a regionally important population. The four leks sites are clearly a group and linked, therefore they should all be buffered. However, only the lek site recorded in both years is buffered by 500m. As with hen harrier the proposed measures to buffer lek sites are likely to be extremely difficult to manage depending on use of known sites to date. It is also possible that some lek sites may be abandoned due to close proximity of turbines (T6 & T7). We agree that painting turbine bases may be useful mitigation against collision risk.	Addressed in **Section 9.3.3**
NS 4	Hen Harrier The ES states that all nest sites have been buffered by 300m however, this is incorrect. There are known records of recent hen harrier nests within 300m of one turbine and at just 300m of another.	Addressed in **Section 9.3.4**

REFERENCE	COMMENT	ADDRESSED
NS 5	Hen Harrier Up to two pairs of hen harriers breed on the site and historic records of nesting were supplied by Argyll Raptor Study Group (ARSG), suggesting that this is a regularly used area. Whilst we accept that some harriers have not been displaced at other wind farm sites and can breed within disturbance distance of turbines/infrastructure, this does not mean that all birds will tolerate this. Using a minimum buffer of 300m from nest sites for turbine layout is a risk. It introduces a Wildlife and Countryside Act (WCA) reckless offence risk during construction/operation if hen harriers (a Schedule 1 species) continue to nest in the areas they have been (allowing for any interannual shift in nest sites). In order to mitigate this, the Applicant is proposing that, along with pre-construction surveys, there will be ECoW monitoring and a 750 m buffer will be put around any active nest. Given the size of the site and that more than one pair of harriers could be present it would be hard to implement such a buffer without stopping construction or operational maintenance in the breeding season. Reference is made in the ES to harriers nesting close to turbine locations for the Stornoway wind farm; it should be noted that whilst consented, this wind farm is not yet operational. Furthermore, there was an extensive mitigation plan and method statement included to minimise risks of a reckless offence under the WCA. This level of detail has not been provided in the current Proposal and the small size of the site makes such a plan very difficult to implement given the proximity of turbines to each other.	Addressed in **Section 9.3.4**
NS 6	Hen Harrier Ultimately though, the Applicant acknowledges that there is a very real possibility that a pair could be displaced and that up to two pairs (as found in the baseline) could be lost from the site. Whilst this is unlikely to impact the NHZ population, as Argyll has recently shown a decline in breeding hen harrier numbers (Ref: 2023 National Harrier Survey) this is a concerning trend which will be further exacerbated should hen harriers be displaced from this site as a result of the wind farm development.	Addressed in **Section 9.3.4**

REFERENCE	COMMENT	ADDRESSED
NS 7	Cumulative Assessment for Golden Eagle, Black Grouse and Hen Harrier Their cumulative assessment is very limited for all species. For golden eagle it primarily talks about the impact of other wind farms on the same golden eagle territory, rather than NHZ level risks to the species. These existing wind farms should have been factored into their earlier eagle assessment. Again, some of the figures given here contradict the Ornithology Chapter and the Confidential Appendix.	Addressed in **Section 9.3.5**

9.3.2 Golden Eagle

Territory Analysis

9.3.2.1 NatureScot notes in their response that the figures quoted for potential loss/displacement of golden eagles from the G/LAW121 territory is inconsistent between the 2024 EIA Report and the Ornithological Confidential Appendix. Upon review, we accept that there are inaccuracies in the numbers quoted between the two reports and apologise for these errors. The figures quoted in the 2024 EIA Report and its associated appendices are considered to be superseded by the following further information where applicable.

9.3.2.2 In support of the updated assessment of effects on golden eagle, expert and Golden Eagle Topographical (GET) model author Alan Fielding was commissioned to re-analyse the satellite tag data that had been obtained to inform the assessment of golden eagle habitat loss/displacement in the 2024 EIA Report. The resulting Range Analysis Report is provided in **Appendix 9.1.**

9.3.2.3 Following re-analysis of the satellite tag data, it was confirmed that the 2024 EIA Report had over-estimated the size of the G/LAW1 golden eagle territory. The difference was due to problems associated with autocorrelation of satellite tag fixes occurring close in time during the highest rates of data transmission and the seasonal performance of the solar-powered satellite tags batteries, as explained in the Range Analysis Report. Additionally, the recognised method used to analyse golden eagle range size from satellite tag data, as used in other papers to determine golden eagle range size (Fielding et al, 2024)[22] is an Adaptive Kernel Density Estimation (AKDE) method using a 95% isopleth of the distribution of the satellite tag data to identify the extent of the golden eagle's total home range, as is also explained in the Range Analysis Report. This supersedes the method applied in the 2024 EIA Report[23]. Re-analysis of the satellite tag data following the approach summarised above resulted in the estimation of a total home range size for the G/LAW1 territory of 5,203ha. This

[21] G/LAW1 is the golden eagle territory most relevant to the Site due to its proximity.
[22] Fielding, Alan H., David Anderson, Catherine Barlow, Stuart Benn, Charlotte J. Chandler, Robin Reid, Ruth Tingay, Ewan D. Weston, and D. Philip Whitfield. 2024a. The Characteristics and Variation of the Golden Eagle Aquila chrysaetos Home Range Diversity 16, no. 9: 523. https://doi.org/10.3390/d16090523.
[23] This new approach to analysis only became available towards the end of finalising the 2024 EIA for submission.

corresponds with the home range size referred to in NatureScot's response (5,498ha, referenced in Table 11.1).

9.3.2.4 In addition to the above, tests were also carried out using the AKDE method at 99% and a simple 95% KDA with no data filtering. The results of these tests confirmed that a 99% range size had not mistakenly been used to inform the 2024 EIA Report, and that the differences were more likely to have originated from the absence of data filtering and/or the parameter choices in a kernel estimator, as explained in the Range Analysis Report.

9.3.2.5 NatureScot's response goes on to consider the extent of habitat loss/golden eagle displacement from the G/LAW territory based on a 500m buffer around the proposed turbines ('the golden eagle displacement area'). This is quoted in the 2024 EIA Report as 226ha of suitable GET6+ habitat, habitat assumed likely to be used by eagles, representing 3.89% of available such habitat in the wider territory. NatureScot go on to recommend that this figure could be reduced based on the application of a smaller, 300m buffer for the golden eagle displacement area, as recommended by the authors of the GET model (based on Fielding et al, 2021a[24] and 202125. This is acknowledged in Section 11.9.1.2.1 of the 2024 EIA Report, but the more conservative 500m was considered more precautionary.

9.3.2.6 Following re-analysis of the golden eagle satellite tag data to determine the corrected range size of 5,203ha (as above), and comparing this against suitable Golden Eagle Topographic (GET) 6+ model data in the same way as was applied in the 2024 EIA Report (i.e. using a 500m buffer golden eagle displacement area), the proportion of the G/LAW1 range from which golden eagles would be displaced (hence, essentially lost habitat) is 2.7%. This is a reduction of 1.28% from the 3.89% quoted in the 2024 EIA Report.

9.3.2.7 In terms of applying the smaller 300m buffer around the turbine layout for the golden eagle displacement area as recommended in NatureScot's response, the Range Analysis Report also goes on to explain that rather than using the GET model data as a proxy for available and equally utilised habitat for the range-holding golden eagles, the satellite data itself provides a much more accurate metric upon which an empirical estimate of predicted range loss can be made based on the proportion of tag fixes which occur within the golden eagle displacement area. Using this more reliable approach and still retaining the more conservative 500m buffer for the golden eagle displacement area, the estimated proportional loss of the GLAW/1 golden eagle range from the Proposed Development would be less than 1%.

9.3.2.8 Following the re-analysis of the golden eagle satellite tag data, it is concluded that the Proposed Development would not result in a significant loss of the available G/LAW1 golden eagle range. The re-assessed displacement represents a reduction on that report in the 2024 EIA Report. The conclusions of the 2024 EIA Report remain valid.

[24] Fielding, A.H., Anderson, D., Benn, S., Dennis, R., Geary, M., Weston, E. and Whitfield, P. (2021a). Responses of dispersing GPS-tagged golden eagles (Aquila chrysaetos) to multiple wind farms across Scotland. Ibis (Online Early Article) https://doi.org/10.1111/ibi.12996.

[25] Fielding, A.H., Anderson, D., Benn, S., Dennis, R., Geary, M., Weston, E. and Whitfield, P. (2021b). Non-territorial GPS-tagged golden eagles Aquila chrysaetos at two Scottish windfarms: Avoidance influenced by preferred habitat distribution, wind speed and blade motion status. PLoS ONE 16(8): e0254159. https://doi.org/10.1371/journal.pone.0254159.

Additional Assessment on Roost Sites and Barrier Effects

9.3.2.9 In addition to the above, the Range Analysis Report provides further information on the potential impacts to golden eagles based on the satellite tag data in relation to roost sites and barrier effects.

9.3.2.10 With regards to potential impacts on roost sites, the Range Analysis Report states that the 2024 EIA Report made good use of the satellite tag data in identifying night-time roost sites within the G/LAW1 territory, of which there are at least 100, to identify those located in proximity to the Site.

9.3.2.11 The determination of separate, discrete roost sites and the determination of their use is the subject of a forthcoming research paper. Either way, it is clear from the satellite tag data that most roost sites are in the wider, core range and that any unlikely dissuasion from roosts close to the Site would be a negligible impact/loss (as noted in the 2024 EIA Report). Nonetheless, it is anticipated that the mitigation measures outlined in the 2024 EIA Report will avoid disturbance of roosting golden eagles from construction and/or operational activities which may otherwise constitute an offence under the Wildlife and Countryside Act, as acknowledged in NatureScot's response. It is also added that the Applicant acknowledges its obligation to ensure compliance with the law protecting wild birds.

9.3.2.12 With regards to barrier effects caused by the Proposed Development on the accessibility of wider parts of the G/LAW1 golden eagles, as the Proposed Development is on the edge of the range and there is no extensive suitable GET 6+ habitat beyond it, no barrier effect impacts are predicted.

VP Location and Potential Effects on Golden Eagle Behaviour

9.3.2.13 Concerns regarding the Vantage Point (VP) location with respect to eagle territories were acknowledged when they were first raised, but WSP, due to confidentiality/land agreements, were unable to consult with NatureScot or Argyll Raptor Study Group to get such data until near the end of the ornithological survey programme when the project was made public, and the VP location was considered to be acceptable from the information available at the time.

9.3.2.14 In recognition of NatureScot's survey guidance regarding VP locational considerations, the selected VP was positioned below the crest of the VP hill, as opposed to being conspicuously on the summit. Additionally, based on information subsequently provided, the VP was located over 2km from the nearest golden eagle or white-tailed eagle nesting or roosting sites, which were not known at the commencement of surveys or suspected from activity observed during the survey programme.

9.3.2.15 We consider that only one golden eagle territory is realistically in range, as demonstrated through heat mapping and satellite tag mapping in the 2024 EIA Report. The land within the golden eagle displacement area, which is located at the northern periphery of the G/LAW1 golden eagles' core range, is used much less frequently than those areas within the central parts of the range associated with Beinn Ghlas and the affiliated higher ground. Indeed, further analysis of the satellite tag data detailed above has found that from a total of 180,384 daytime tag fixes, only 1,481 (0.82%) occurred over the Site. Consequently, it is our opinion that the frequency and distribution of golden eagle flight activity recorded during the surveys correlates with the satellite tag data.

9.3.2.16 Tag data also showed that roosting close to or within the Site was occasional to infrequent. The three regular and frequently used roost sites were all over 2km from the Site and distributed throughout the golden eagles' wider core territory. Of the remaining occasional to infrequently used roost sites/areas, five are located within 1km of the Site, all but one of which

are located over 500m from the development footprint. Notably, there are several roost sites located within 500m of the existing Beinn Ghlas Wind Farm site.

9.3.3 Black Grouse

9.3.3.1 Baseline data provided at the application stage were not subject to detailed interpretation and simply specified all locations at which male black grouse had been recorded lekking and which were >200m apart as per guidance[26]. Following more detailed analysis and interpretation of the raw survey results in consideration of black grouse lek behaviour/dynamics, particularly at low population densities, we consider the conclusion that only one main lek site is reasonable, as presented in the 2024 EIA Report.

9.3.3.2 Lek A is the only location at which lekking males were repeatedly observed both within and between survey years, with two males being recorded there in 2021 and the peak count of three males being recorded in 2022. Three males and a single female were observed at Lek B, but these birds were only observed on a single occasion in 2022, despite multiple visits to that part of the Site during dedicated black grouse surveys in both years. Furthermore, those birds were only observed to fly in and lek for short periods (e.g. 15-20 minutes) before flying away again, to/from the general direction of Lek A. Meanwhile, only single birds were observed at Leks C and D, both on only single occasions in 2021 and 2022, respectively, with the bird at Lek D only lekking at that location for no more than five minutes. Further to this, a male was seen in flight approximately 45 minutes after the observation of the bird at Lek D, flying from the direction of Lek D and continuing westwards. It was considered likely to be the same individual observed at Lek D and would support the theory of opportunistic lekking.

9.3.3.3 The assessment in the 2024 EIA Report concludes that only Lek A was a core lek site, having consistently been attended in both years. Although birds were observed lekking at the other three locations, they were not considered to be traditional/core lek sites and are simply concluded as having been a chance observation of competing males chasing a female (Lek B) and ad-hoc observations of an opportunistic subordinate male (Leks C and D).

9.3.3.4 Whilst it cannot be totally discounted that different birds were involved at Lek A and Lek B, this is considered unlikely considering all the above. Pre-construction black grouse surveys will be undertaken to understand the status of lekking black grouse at this time. Mitigation will be applied after the updated survey results, where appropriate.

9.3.3.5 Regarding the difficulties of managing exclusion zones around leks, the applicant is aware of and has acknowledged these risks for construction and operational activities. We propose that the Breeding Bird Protection Plan (BBPP) in Appendix 11.3 of the 2024 EIA Report is updated to include restrictions on working hours during the core lekking period (March-May inclusive): work in proximity to leks would not commence until at least two hours after sunrise. We note NatureScot's comments that black grouse may be dissuaded from using some of the alternative lek sites. Alternative lek sites are proposed as additional mitigation. The focus of our mitigation will be to maintain the core lek (Lek A). The 500m buffer around the core lek site provides a corridor to other open ground (and woodland beyond), where birds will be able to lek opportunistically.

9.3.3.6 We are pleased that NatureScot acknowledges the potential benefits of painting turbine bases to mitigate collision risk.

[26] Gilbert, G., Gibbons, D. W. & Evans, J. (1998) Bird Monitoring Methods. RSPB, Sandy

9.3.4 Hen Harrier

Buffering Nest Sites

9.3.4.1 NatureScot queried the accuracy of the statement that all nest sites have been buffered by 300m. The scale of the mapping provided with the 2024 EIA Report is likely influencing the appearance of nest sites, apparently at or within 300m of the nearest turbine. Nest sites were mapped on figures accompanying Appendix 11.2: Confidential Ornithological Information at 100m resolution. Zooming in to a scale of 1:5,000 shows that all nest sites were over 300m from the nearest turbine.

Disturbance Mitigation

9.3.4.2 It is proposed that the mitigation is anticipated to be effective if variables in sensitivity to disturbance at different stages of the breeding cycle are considered, i.e. the maximum buffer of 750m is most likely required for early stages, nest building, and incubation. The birds are expected to be more tolerant of activity once they are invested in the provision of young. That said, any relaxation of the buffer from 750m to a shorter distance would only be done following monitoring by a Suitably Qualified Ecologist (SQE).

9.3.4.3 There are also variables in the levels of disturbance that might occur. During operation, many types of work are less likely to cause high levels of disturbance, e.g. routine maintenance/inspections. However, in recognition of the sensitivities, operational activities will be mitigated in a precautionary manner.

9.3.4.4 A programme of post-construction monitoring will be carried out to identify the presence of breeding harriers within the Site and/or 750m buffer, which may be disturbed by operational maintenance activities and is likely to be required annually throughout the Proposed Development's operational lifespan.

9.3.4.5 Works exclusion zones will be established around any active hen harrier nests which are identified during these monitoring surveys. The nesting attempts will be monitored by an Suitably Qualified Ornithologist (SQO), and exclusion zones will only be relaxed if the SQO deems the risk of disturbance to be low and will only be lifted once the young have fledged and/or the nest becomes inactive.

9.3.4.6 It is acknowledged that the E should be a flexible document that allows for variables such as differing nest site locations for hen harrier on an annual basis and differing works activities. The applicant will seek to develop the BBPP in consultation with NatureScot.

Hen Harrier Displacement Effects

9.3.4.7 A worst-case scenario of the loss of two pairs of hen harrier was presented in the 2024 EIA Report. However, it is considered unlikely that there would be no future breeding by hen harrier within or in proximity to the Site. In the first year of breeding surveys (2021), there was one pair of breeding hen harriers that were just out with the Application Boundary with the nearest proposed turbine location approximately 530m away. Suitable breeding habitat will still be present out with the footprint of the Proposed Development infrastructure and beyond the Application Boundary.

9.3.4.8 An estimate of suitable breeding and foraging habitat for hen harrier has been undertaken in the immediate area outwith the Site, extending northwards for approximately 3.8km to Loch Etive. Potential areas south of the Site were excluded due to a lack of connectivity with

breeding habitat within the Site: unsuitable areas of forestry and managed farmland extend for a significant distance south of the Site.

9.3.4.9 The estimate was based on viewing aerial mapping and drawing polygons around areas indicating heather cover and excluding those areas of dense woodland and grazing pasture. The average home range area for breeding male and female hen harriers is 730ha and 360ha, respectively[27]. Approximately 500ha of suitable foraging habitat is estimated north of the Site as far as Loch Etive. Considering the typical distance between alternative nest sites for hen harrier of 1km or less28, 160 ha of suitable nesting habitat is estimated immediately north of the Application Boundary, extending for approximately 900m from the Site.

9.3.5 Cumulative Assessment for Golden Eagle, Black Grouse and Hen Harrier

9.3.5.1 NatureScot propose that the cumulative impact assessment for golden eagle, hen harrier and black grouse is very limited with the golden eagle assessment only focusing on other wind farms within the wider G/LAW1 territory, whilst the assessments for hen harrier and black grouse have not been undertaken to the required Natural Heritage Zone (NHZ) level. The relevant NHZ within which the Proposed Development is situated is NHZ 14: Argyll West and Islands.

9.3.5.2 As stated in the 2024 EIA Report, effects on ornithological receptors arising from activities during the construction phase are generally not considered in a cumulative sense because of the short-term duration of potential impacts and uncertainties in relation to the likelihood of temporal overlap with the construction phases of other developments. They are also much less likely to arise due to the spatial separation of concurrently occurring construction projects. Consequently, consideration of cumulative effects in this response remains limited to effects predicted during the operational phase, where additive effects on regional (NHZ) populations are more likely to coincide to potentially result in significant effects.

9.3.5.3 Regarding operational phase effects, it is noted that NatureScot's response acknowledges that the predicted collision risk to golden eagles (0.02 collisions per year equating to one bird every 66.5 years) 'doesn't significantly add to the cumulative risk at NHZ level'. Additionally, for hen harrier, it's implied that it is the limited cumulative assessment of habitat loss/displacement which requires to be more thoroughly assessed at the NHZ level, not the cumulative effects of collision risk, which was also extremely low at 0.01 collisions per year (one bird every 170 years). Meanwhile, the absence of any black grouse flights upon which collision risk could be modelled, coupled with the species' characteristic low level flight activity, indicates that this species' risk of collision would be extremely low. As such, the cumulative effects of collision risk on all three species have not been reassessed here. It is, however, appreciated that the proposed painting of the turbine bases and the lower parts of turbine towers has been acknowledged as a useful mitigation strategy to reduce the risk of black grouse collisions.

9.3.5.4 The following therefore only provides a reassessment of the cumulative operational effects associated with habitat loss/displacement upon golden eagle, hen harrier and black grouse

[27] Hardey, J., Crick, H., Wernham, C., Riley, H., Etheridge, B. & Thompson, D. (2013). Raptors: a field guide to survey and monitoring (3rd Edition). The Stationery Office, Edinburgh.
[28] NatureScot (2016) Assessing Connectivity with Special Protection Areas (SPAs)

from the Proposed Development in combination with other wind farm developments at the regional NHZ 14 scale, in accordance with NatureScot guidance (2025)[29].

9.3.5.5 For golden eagle, this has simply involved consideration of the Proposed Development's contribution to cumulative effects following re-assessment of the satellite tag data and the reduction in the extent of the G/LAW1 golden eagles' range. For hen harrier and black grouse, this has involved a search for medium to large scale projects (defined as four turbines or more) on the Argyll and Bute Council and Energy Consents Unit Planning Portals[30][31] and Argyll and Bute Council's Renewables Web Map[32] for operational, consented and applied for wind farm developments. Proposed developments which have been refused consent, or which have been withdrawn, have not been included, nor have those which are only at the scoping stage, due to insufficient information concerning the assessment of effects at this stage. The results of this search are presented in **Table 9.2.**

TABLE 9.2 - OTHER WIND FARM PROJECTS IN NHZ14 AND ASSOCIATED OPERATIONAL DISPLACEMENT EFFECTS ON HEN HARRIER AND BLACK GROUSE

WIND FARM	STATUS	ABC / ECU REFERENCE	OPERATIONAL DISPLACEMENT EFFECTS (N/AV = NOT AVAILABLE, N/AS = NOT ASSESSED)	
			HEN HARRIER	BLACK GROUSE
Beinn Ghlas	Operational	97/00719/DET	N/Av	N/Av
Carraig Gheal	Operational	05/00016/ELSE36	N/Av	N/Av
An Suidhe	Operational	05/01711/VARCON	N/Av	N/Av
Clachan Flats	Operational	02/00953/DET	N/As	N/As
A'Chruach,	Operational	11/02520/PP	Negligible adverse effects (foraging only).	'Low magnitude impact' (nesting females only): [negligible adverse effect].
A'Chruach Windfarm Phase 2	Consented	14/02829/PP	N/As	N/As
Cruach Mhor	Operational	01/01553/DET	No adverse effects.	No adverse effects.
Srondoire	Operational	14/00489/PP	N/Av, but referred to elsewhere[33]as having no adverse effects.	N/Av, but referred to elsewhere[14] as potentially causing displacement of two single-male leks.
Allt Dearg	Operational	10/02151/PP	N/Av, but referred to elsewhere [14] as being unlikely to have any adverse effects.	N/Av
Freasdail	Operational	16/02791/PP	N/Av, but referred to elsewhere[14] as being unlikely to have any adverse effects.	N/Av but referred to elsewhere[14] as being unlikely to have any adverse effects.

[29] NatureScot (2025). Assessing the cumulative impacts of onshore wind farms on birds. Available at: https://www.nature.scot/doc/guidance-assessing-cumulative-impacts-onshore-wind-farms-birds.
[30] Argyll and Bute Council Planning Portal website. Available at: https://publicaccess.argyll-bute.gov.uk/online-applications/search.do?action=simple&searchType=Application.
[31]Energy Consents Unit Planning Portal. Available at: https://www.energyconsents.scot/ApplicationSearch.aspx.
[32] Energy Consents Unit Planning Portal. Available at: https://www.energyconsents.scot/ApplicationSearch.aspx.
[33] Corr Chnoc Wind Farm Environmental Impact Assessment Report, Ornithology Chapter. Galileo, 2025. ECU Ref. ECU00006023.

WIND FARM	STATUS	ABC / ECU REFERENCE	OPERATIONAL DISPLACEMENT EFFECTS (N/AV = NOT AVAILABLE, N/AS = NOT ASSESSED)	
			HEN HARRIER	BLACK GROUSE
Cour	Operational	10/00909/PP	No adverse effects.	No adverse effects.
Deucheran Hill	Operational	99/00925/DET	N/As	N/As
Auchadaduie	Operational	11/02525/PP	No adverse effects.	No adverse effects.
Beinn an Tuirc	Operational	98/00597/DET	N/Av, but referred to elsewhere[14] as causing 'no net range loss' [negligible adverse effects].	N/Av
Beinn an Tuirc	Operational	05/01397/DET	N/Av, but referred to elsewhere[14] as causing 'no net habitat loss' [negligible adverse effects].	N/Av, but referred to elsewhere[14] as being unlikely to have any adverse effects.
Beinn an Tuirc 3	Operational	15/03057/PP	Negligible adverse effects.	Potential (albeit unlikely) displacement/loss of a lek sites comprising two males: negligible adverse effect.
Tangy, Kilkenzie	Operational	94/00739/DET	N/Av, but referred to elsewhere[14] as having no adverse effects.	N/Av
Tangy Extension, Kilkenzie	Operational	04/01291/DET	N/Av, but referred to elsewhere[14] as having no adverse effects.	N/Av
Tangy IV (Repowering)*	Consented	18/02014/S36	N/As	N/As
Blary Hill	Operational	14/01978/PP	Negligible adverse effects	Potential displacement/loss of a lek sites comprising 3-5 males: minor adverse effect.
Blarghour	Consented	EC00005267	N/Av (confidential)	N/Av
Glasvaar	Consented	22/01380/PP	Negligible adverse effects. (Assessed as a notified feature of Moine Mhor SSSI/NNR.)	Potential displacement/loss of a lek site(s) comprising up to 8 males: minor adverse effect.
Airigh	Consented	17/02484/S36 / ECU00000471	N/As	Potential displacement/loss of a lek site comprising 6 males: minor adverse effect.
Creag Dhubh	Consented	19/02544/PP	Minor adverse effects (foraging only).	No adverse effects.
Clachaig Glen	Consented	ECU00002103	Minor adverse effect (unspecified / confidential)	Negligible adverse effects (foraging only).

WIND FARM	STATUS	ABC / ECU REFERENCE	OPERATIONAL DISPLACEMENT EFFECTS (N/AV = NOT AVAILABLE, N/AS = NOT ASSESSED)	
			HEN HARRIER	BLACK GROUSE
High Constellation	Consented	ECU00001857	Negligible adverse effects (foraging only).	Potential displacement/loss of two lek sites comprising up to 8 males: minor adverse effect.
Ladyfield	Consented	ECU00003291	N/As	Potential displacement/loss of a lek site comprising 2 males: moderate adverse effect.
Rowan (formerly Kilberry)	Consented	ECU00003230	N/As	N/As
An Carr Dubh	In Planning	ECU00004781	N/As	N/As
Corr Chnoc	In Planning	25/00036/S36 / ECU00006023	Potential displacement of a single pair: minor adverse effect.	Potential displacement/loss of a lek site comprising 3-4 males: minor adverse effect.
Beinn Ghlas Repower	In Planning	TBC[34]	N/Av	N/Av
Eascairt	In Planning	PPA-130-2059	Minor adverse effects (foraging only).	Potential displacement/loss of a small, transitory/ non-traditional lek site (number of males not specified): minor adverse effect.
Killean	In Planning	ECU00004927	Minor adverse effect (foraging only).	Potential displacement/loss of a lek site comprising 2 males: 'Low magnitude impact': [minor adverse effect].
Eredine	In Planning	ECU00004517	Scoped Out	No significant effects.

Hen Harrier

9.3.5.6 In consideration of the cumulative operational displacement effects of the Proposed Development in combination with other wind farms in the wider NHZ (**Table 9.2**), only Corr Chnoc Wind Farm is assessed as having the potential of causing the displacement of a single hen harrier pair. Except for Clachaig Glen Wind Farm, whose displacement effects are unspecified due to the Ornithology Chapter being withheld from public access, all other wind farms which predict displacement effects on hen harrier relate only to reduced availability of foraging habitat, not displacement of breeding territories.

[34] It is understood that the application for this project has been submitted to ABC but not live on the planning portal as of the 1 September 2025.

9.3.5.7 At the regional/NHZ scale, the cumulative displacement of two pairs of hen harriers (one from the Proposed Development and one from Corr Chnoc Wind Farm) would represent 1.6% of the population. However, this assumes that both pairs, should they be displaced, would be unable to relocate to alternative areas of suitable habitat nearby. The 2024 EIA Report concludes that up to two breeding pairs of hen harrier could be displaced from the Site by the presence of the Proposed Development. Based on an NHZ 14 population of 125 pairs (as was used in the 2024 EIA Report, which is taken from SNH (2012)[35] and Wilson et al (2015)[36] and which corresponds with the population figure provided through pre-application consultation with NatureScot[37]), the displacement and potential abandonment of up to two pairs of breeding hen harrier would represent a loss of 1.6% of the NHZ population, assuming both displaced pairs were unable to relocate.

9.3.5.8 However, with the implementation of a more dedicated and stringent deer management regime to improve habitat conditions for the species in the vicinity of the Site, as described in the additional mitigation commitments of the 2024 EIA Report (Section 11.10.2.2), it is anticipated that at least one breeding pair could be maintained. Thus, the Proposed Development may only result in the displacement of a single breeding pair, which would reduce the effect to 0.80% of the NHZ population. The 2024 EIA Report concludes that this would result in a minor adverse residual effect, which is considered to be **not significant** in terms of the EIA Regulations.

9.3.5.9 In consideration of the cumulative operational displacement effects of the Proposed Development in combination with other wind farms in the wider NHZ (**Table 9.2**), only Corr Chnoc Wind Farm is assessed as having the potential of causing the displacement of a single hen harrier pair. With the exception of Clachaig Glen Wind Farm, whose displacement effects are unspecified due to the Ornithology Chapter being withheld from public access, all other wind farms which predict displacement effects on hen harrier relate only to reduced availability of foraging habitat, not displacement of breeding territories.

9.3.5.10 At the regional/NHZ scale, the cumulative displacement of two pairs of hen harriers (one from the Proposed Development and one from Corr Chnoc Wind Farm) would represent 1.6% of the population. However, this assumes that both pairs, should they be displaced, would be unable to relocate to alternative areas of suitable habitat in the nearby or wider surrounding area, which in reality is likely to be feasible. It is therefore unlikely that any displaced birds would actually be lost from the population, and cumulative effects are considered to be no worse than minor adverse and **not significant in terms** of the EIA Regulations.

Black grouse

9.3.5.11 The 2024 EIA Report concludes that whilst the Proposed Development has been designed such that the turbines are located at least 500m from core lek site (which supported up to three males), there remains potential for vehicle movement and general human presence associated with operational maintenance activities within 750m of the lek site to disturb birds whilst they are attending it during the display period of the breeding season. This could result in the disturbance and displacement of the lekking birds and potentially abandonment of the core lek site, although it is unlikely that these birds would be entirely removed from the local breeding population with the birds more likely to relocate to an alternative/new lek site in the nearby surrounding area, as found in studies at other Scottish wind farms by Zwart et al.

[35] SNH (2012). Regional Population Estimates of Selected Scottish Breeding Birds. April 2012.
[36] Wilson, M.W., Austin, G.E., Gillings, S. & Wernham, C.V. (2015). Natural Heritage Zone Bird Population Estimates. SWBSG Commissioned report number SWBSG_1504. pp72.
[37] Argyll and the Outer Hebrides Cumulative Collison Risk Spreadsheet, provided through pre-application consultation with NatureScot.

(2015)[38]. However, with commitment to produce an operational phase breeding bird management protocol involving annual black grouse monitoring surveys and the implementation of temporal works exclusion zones during the black grouse lekking season and times of day, as described in the 2024 EIA Report, such disturbance and displacement are expected to be avoided. Consequently, through the Proposed Development's sensitive design and the breeding bird management protocol, any adverse disturbance effects on black grouse during the operational phase are predicted to be negligible and not significant.

9.3.5.12 On that basis, the Proposed Development is not anticipated to contribute to the cumulative displacement of lekking birds attributed to other existing, consented and proposed wind farms across the wider NHZ, as identified in **Table 9.2** (no cumulative effect).

9.3.5.13 The Proposed Development also has the potential to displace lekking black grouse from suitable habitat within the wind farm site. Whilst more suitable supporting habitat exists to the north of the Site, which is more likely to represent the core habitats used by the local black grouse population, such displacement was still concluded to result in a minor adverse effect.

9.3.5.14 When considered in combination with the predicted displacement effects from other wind farms in the wider NHZ (**Table 9.2**), only A'Chruach and Clachaig Glen were anticipated to result in the potential displacement of nesting and/or foraging birds. However, the effects of this displacement on the associated local sub-populations were concluded to be negligible. Given the likely availability of suitable alternative nesting and foraging habitats to these black grouse sub-populations, the predicted displacement effects from the Proposed Development are not anticipated to sufficiently contribute to displacement effects across the wider region, such that they would give rise to significant cumulative adverse effects (**not significant**).

[38] Zwart, M. C., P. Robson, S. Rankin, M. J. Whittingham, and P. J. K. McGowan (2015). Using environmental impact assessment and post-construction monitoring data to inform wind energy developments. Ecosphere 6(2):26.

10 CARBON BALANCE AND CLIMATE CHANGE

10.1.1.1 This 2025 FEI Report provides supplementary information as requested by consultees such as SEPA and Argyll and Bute Council. As a result of consultation responses, a small section of the access track has been changed to reduce impacts to peat and watercourse buffers. An updated design for access tracks in turn changes the inputs for the carbon calculator, as the length of excavated track has increased by 179m. The inputs for the carbon calculator were updated based on new excavated track lengths however the payback period did not change. Therefore, the updated track design has minimal impact on carbon savings and no impact on the payback period.

10.1.1.2 As such, the conclusions outlined in **Chapter 17** of the **2024 EIA Report** are unchanged and are still supported.

11 PLANNING SUMMARY

11.1.1.1 The Development Plan which is relevant to the consideration of the Application has not changed since the submission of the Application in November 2024. The policy related to renewable energy and onshore wind farm development at the Scottish level have not changed since the submission of the Application in November 2024. The UK Government continue to promote the need for onshore wind as part of the solution to reducing GHG emissions and decarbonising the economy.

11.1.1.2 The revised design and change in cumulative position have changed the overall conclusions of some of the technical environmental assessments as outlined in **Chapters 4 to 10** of this FEI Report. It is submitted that these changes do not mean that the overall conclusions of the PRES, submitted with the Application in November 2024, require to be altered.