

Tangy IV Wind Farm Section 36C Variation

Technical Appendix 3.1: Scoping Report



Tangy IV Wind Farm S36C Variation

**Environmental Impact Assessment Scoping
Report**

July 2025



Contents

CONTENTS	1
QUALITY ASSURANCE / CONTROL	4
ABBREVIATIONS	5
TERMINOLOGY	6
1. INTRODUCTION	7
1.1. THE PROJECT	7
1.2. SCOPING REPORT OBJECTIVES	9
1.3. KEY QUESTIONS FOR CONSULTEES	10
1.4. AIMS OF THE SCOPING REPORT	11
2. PROPOSED VARIATION	12
3. APPROACH TO ASSESSMENT	14
3.1. BASELINE	14
3.2. APPROACH TO ASSESSMENT	15
3.3. VARIED DEVELOPMENT PROPOSED EIA SCOPE	15
4. PLANNING POLICY	20
4.1. INTRODUCTION	20
4.2. CLIMATE CHANGE, ENERGY LEGISLATION & POLICY	20
4.3. THE DEVELOPMENT PLAN	24
4.4. SUMMARY	24
5. LANDSCAPE AND VISUAL	25
5.1. INTRODUCTION	25
5.2. CONSENTED DEVELOPMENT EIAR BASELINE	25
5.3. CONSULTATION & EXISTING PLANNING CONDITIONS	28
5.4. PROPOSED VARIED DEVELOPMENT STUDY AREA	29
5.5. ISSUES SCOPED IN / OUT	29
5.6. ASSESSMENT METHODOLOGY	43
5.7. MITIGATION MEASURES	43
5.8. SUMMARY AND CONCLUSIONS	44
5.9. REFERENCES	44
6. ORNITHOLOGY	46
6.1. CONSENTED DEVELOPMENT EIAR BASELINE	46
6.2. CONSULTATION & EXISTING PLANNING CONDITIONS	47
6.3. ISSUES SCOPED IN / OUT	47
6.4. ASSESSMENT METHODOLOGY	48
6.5. MITIGATION MEASURES	49
6.6. SUMMARY AND CONCLUSIONS	49
7. ECOLOGY AND NATURE CONSERVATION	50
7.2. EIAR BASELINE	50
7.3. CONSULTATION SUMMARY & PLANNING CONDITIONS	52

7.4. ECOLOGICAL EFFECTS SCOPED IN.....	53
7.5. ECOLOGICAL EFFECTS SCOPED OUT.....	54
7.6. PROPOSED ASSESSMENT METHODOLOGY.....	55
7.7. MITIGATION MEASURES.....	55
7.8. SUMMARY AND CONCLUSIONS.....	55
8. GEOLOGY, SOILS, PEAT	56
8.1. CONSENTED DEVELOPMENT EIAR BASELINE	56
8.2. CONSULTATION & EXISTING PLANNING CONDITIONS.....	57
8.3. EFFECTS SCOPED IN/OUT	57
8.4. ASSESSMENT METHODOLOGY	58
8.5. MITIGATION MEASURES	58
8.6. SUMMARY AND CONCLUSIONS.....	58
9. SURFACE WATER	59
9.1. CONSENTED DEVELOPMENT EIAR BASELINE	59
9.2. CONSULTATION & EXISTING PLANNING CONDITIONS.....	60
9.3. ISSUES SCOPED IN / OUT.....	60
9.4. MITIGATION MEASURES	60
9.5. SUMMARY AND CONCLUSIONS.....	61
10. CULTURAL HERITAGE.....	62
10.2. CONSULTATION AND EXISTING PLANNING CONDITIONS	63
10.3. ISSUES SCOPED IN / OUT.....	63
10.4. ASSESSMENT METHODOLOGY	66
10.5. MITIGATION MEASURES	69
10.6. SUMMARY AND CONCLUSIONS.....	70
10.7. REFERENCES.....	71
11. NOISE.....	73
11.1. CONSENTED DEVELOPMENT EIAR BASELINE	73
11.2. CONSULTATION & EXISTING PLANNING CONDITIONS.....	73
11.3. THE PROPOSED VARIED DEVELOPMENT.....	74
12. ACCESS, TRAFFIC AND TRANSPORT	75
12.1. CONSENTED DEVELOPMENT EIAR BASELINE	75
12.2. CONSULTATION & EXISTING PLANNING CONDITIONS.....	75
12.3. ISSUES SCOPED IN / OUT.....	76
13. LAND USE, SOCIO-ECONOMICS, AND RECREATION	78
13.1. CONSENTED DEVELOPMENT EIAR BASELINE	78
13.2. CONSULTATION & EXISTING PLANNING CONDITIONS.....	79
13.3. ISSUES SCOPED IN / OUT.....	79
14. SHADOW FLICKER.....	81
14.1. CONSENTED DEVELOPMENT EIAR BASELINE	81
14.2. CONSULTATION & EXISTING PLANNING CONDITIONS.....	81
14.3. ISSUES SCOPED IN / OUT.....	81

15. AVIATION.....	83
15.1. INTRODUCTION.....	83
15.2. LEGISLATION AND POLICY CONTEXT.....	83
15.3. CONSENTED DEVELOPMENT EIAR BASELINE	85
15.4. CONSULTATION & EXISTING PLANNING CONDITIONS.....	85
15.5. ISSUES SCOPED IN / OUT.....	86
15.6. METHODOLOGY	89
15.7. MITIGATION MEASURES	90
15.8. SUMMARY AND CONCLUSIONS.....	92
15.9. REFERENCES.....	93
FIGURES.....	94

Quality Assurance / Control

Prepared By	Checked By	Approved By	Verified By
Andrew Leach (Consents Strategy Manager)	SSER Internal Technical Reviews: Ecology, Environmental, Noise, Engineering, Aviation	Jon Soal (Portfolio Project Manager)	Carolyn Wilson (Head of Consents)
Chapter 5 prepared by ASH Design and Assessment Ltd (ASH).	Sarah Kjellman (Landscape Architect, ASH)	Tatiana White (Director, ASH)	Andrew Curds (Managing Director, ASH)
Chapter 15 prepared by Coleman Aviation	Andrew Leach and Ian Toothill (SSER)	Mike Coleman (Coleman Aviation)	Mike Coleman (Coleman Aviation)

Abbreviations

AIR	Additional Information Report
A&BC	Argyll & Bute Council
CCC	Climate Change Committee
CEMP	Construction Environmental Management Plan
COP21	21st Conference of the Parties
COP29	29th Conference of the Parties
ECU	Energy Consents Unit
EIAR	Environmental Impact Assessment Report
GI	Ground Investigation
HMP	Habitat Management Plan
HES	Historic Environment Scotland
A&BLDP	Argyll and Bute Local Development Plan
MW	Megawatt
NDCs	Nationally Determined Contributions
NS	NatureScot
NPPF4	National Planning Policy Framework 4
OWPS	Onshore Wind Policy Statement
PMP	Peat Management Plan
PWS	Private Water Supply
SEPA	Scottish Environment Protection Agency
SSER	SSE Renewables
S36	Section 36
S36C	Section 36C (Variation Application)
UNFCCC	United Nations Framework Convention on Climate Change
UN	United Nations

Terminology

- **The ‘Consented Development’** - the 16-turbine Tangy IV Wind Farm consent granted by the Scottish Ministers in December 2019.
- **The ‘Varied Development’** - the variations to the Consented Development which will form the **Variation Application**.
- **The ‘Development Site’** - the site of the Consented Development and the same site for the Proposed Varied Development as defined by the red line boundary submitted for the planning application(s).
- **The ‘Applicant’** - the applicant for the Proposed Varied Development is SSE Renewables Ltd; this is the same applicant that sought and was granted the Section 36 consent for the Consented Development.
- **The ‘Consented Development EIA’** - the Tangy IV Wind Farm Environmental Impact Assessment Report that accompanied the Section 36 application for the 16-turbine Consented Development.
- **The ‘Tangy III EIA’** – the Tangy III Wind Farm Environmental Impact Assessment Report that accompanied the Town and Country Planning (Scotland) Act 1997 application in 2014 for a 16-turbine project located on the same site as the Consented Development.

1. Introduction

1.1. The Project

- 1.1.1. Tangy IV Wind Farm, the “Consented Development”, comprises 16 wind turbines with a maximum tip height of 149.9 meters, alongside associated infrastructure, including access tracks, hardstands, cabling and grid connection. The consented capacity of the project is up to 80 megawatts (MW).

Consented Development Reference Information:

- Electronic copies of the Consented Development Environmental Impact Assessment Report (EIAR) are available on the ECU portal (case reference **ECU00000673**) and the SSE Renewables website: <https://www.sserenewables.com/onshore-wind/in-development/tangy-repower/>
 - **Figure 1** of the EIAR shows the site location.
 - **Figure 2** of the EIAR shows the Consented Development site layout.
- 1.1.2. The site is located approximately 9 km north-west of Campbeltown on the Kintyre peninsula in Argyll and Bute, Scotland. The closest villages are Bellochantuy, 2 km north-west of the site, and Kilchenzie, 3 km south of the site. The site is a combination of forestry and agricultural land currently used for commercial forestry, grazing and renewable electricity generation (Tangy Wind Farm). The highest point within the application boundary is Cnocan Gean, north-east of the existing wind farm at a height of 200 m Above Ordnance Datum (AOD). In general, the elevation of the site ranges from about 90 m to 200 m AOD.
- 1.1.3. The Consented Development is a repowering of the existing Tangy Wind Farm, which originally comprised 15 turbines (Tangy I) and which has been operational since 2003. An additional 7 turbines were added in 2007 as part of Tangy II, bringing the total number of operational turbines on site to 22. The existing operational wind farm benefits from an exceptional wind resource and existing infrastructure and there is the opportunity to increase the efficiency of the current wind farm through replacement of the existing turbines.
- 1.1.4. A planning summary of the site is as follows:
- **94/00739/DET** - Tangy I was granted planning permission in February 1997 for 23 turbines with a tip height of 45 metres at Tangy Farm under the Town and Country Planning (Scotland) Act 1997 (“TCPA”). This permission was varied (97/00289/VARCON) in May 1997 to reduce the number of turbines from 23 to 17 and varied a second time (01/01020/VARCON) to increase the tip height of the 17 turbines to 75 meters. Tangy I was constructed and became operational in 2003.

- **04/01291/DET**- Tangy II was granted planning permission for an additional seven turbines with a tip height of 75 meters in August 2005. Tangy II was constructed and became operational in 2007.
 - **14/02969/PP** – Tangy III was granted planning permission in June 2015. This permitted the repower of Tangy I and II and comprised 16 turbines and associated infrastructure. Tangy III’s planning permission was then varied in April 2018 to allow an increase in turbine height from the consented 125 m blade tip height, up to a blade tip height of 130 m (18/01027/PP). Tangy III was not constructed.
 - **ECU00000673** - Tangy IV (the Consented Development) was granted S36 consent in 2019 for 16 turbines, each with a tip height of 149.9 metres, and a total generating capacity of up to 80 megawatts. It was intended to replace Tangy III and repower the original Tangy I and II developments. However, the project will not be constructed, and the Applicant is seeking to vary the consent.
- 1.1.5. Scottish Ministers approved the Consented Development on 20 December 2019, with a condition requiring that development commence within five years of that date¹. To prevent the consent from lapsing, the Applicant undertook enabling works in early November 2024, specifically by constructing several passing places within the red line boundary of the Tangy IV consent. Argyll & Bute Council subsequently confirmed that this work constituted lawful commencement of development under the deemed planning permission. Following this, the Energy Consents Unit (ECU) issued a letter extending the Section 36 element of the consent to December 2028.
- 1.1.6. The Applicant was fully committed to commencing construction of the Consented Development and various documents required to satisfy pre-commencement planning conditions were submitted and approved by Argyll & Bute Council in 2024. However, due to various challenges affecting the onshore wind industry, the project economics were considered unsuitable, and the project was put on hold.
- 1.1.7. After a detailed project feasibility review, the Applicant is now proposing to apply to vary the scheme by increasing the tip height of the turbines and other associated changes to infrastructure. The application will be made to vary the Description of Development provided in Annex 1 of the Section 36 consent.
- 1.1.8. The proposed Varied Development layout is illustrated on **Figure 1: S36C Scoping Report Proposed Varied Development Layout**.
- 1.1.9. The proposed variations to the Consented Development are detailed in Section 2 of this Scoping Report and illustrated on **Figure 1.1: S36C Scoping Report Proposed Varied Development Layout and Consented Layout**.

¹ Condition 1 (Commencement of Development)

- 1.1.10. In addition to seeking a variation to the Annex 1 Description of Development, variations to certain conditions contained in Annex 2 may be requested to reflect the changes to the Description of the Development.
- 1.1.11. The application to vary the Consented Development is to be made under Section 36C of the Electricity Act 1989, and The Electricity Generating Stations (Applications for Variation of Consent) (Scotland) Regulations 2013, together with a direction under Section 57 (2) of the Town and Country Planning (Scotland) Act 1997. The application and proposals will also follow the Energy Consents “Applications for Variation of Section 36 Consents Guidance”².
- 1.1.12. The proposed varied scheme, and the application under Section 36C and Section 57(2), are hereinafter referred to as the “Varied Development” and the “Variation Application” respectively.
- 1.1.13. In accordance with Regulation 3(1)(c) of the 2013 Regulations, the reasons for seeking a variation to the S36 consent are as follows:
- The increase in tip height would substantially increase the energy yield from the Consented Development, thus improving the commercial viability of the project.
 - The relocation and re-orientation of turbines and crane hardstands, along with minor track alignments will aim to reduce earthworks and result in associated environmental benefits.
 - The Varied Development would make an even greater contribution to the achievement of legally binding UK and Scottish Government net-zero targets.

1.2. Scoping Report Objectives

- 1.2.1. The purpose of this Scoping Report is to outline the nature of the Proposed Variation, identify the key environmental topics requiring assessment, and seek feedback from consultees on the approach to the EIAR which will accompany the S36C application.
- 1.2.2. For a variation application relating to an EIA development, the Electricity Works (Environmental Impact Assessment) (Scotland) Amendment Regulations December 2017 require further assessment to consider the impacts of the variation rather than requiring the whole development to be assessed again. In considering the impacts of the variation, in accordance with Regulation 5(4), the EIA Report will consider the results

² “Guidance Note: Applications for variation of section 36 consents guidance”, 20 May 2019, Energy and Climate Change Directorate. Web link accessed January 2025: [Supporting documents - Energy consents: applications for variation of section 36 consents guidance - gov.scot](#)

identified in the 2018 EIAR.

1.2.3. The objectives of this Scoping Report are therefore to:

- Define the Varied Development being considered (**Chapter 0**).
- Describe the approach to the EIA in relation to the Proposed Varied Development and outline which features and impacts are to be scoped in or out of the EIA (**Chapter 3**).

1.2.4. Describe the predicted environmental effects of the Varied Development (Chapters 5-15), including the following information:

- a) **Consented Development EIAR Baseline**
Summary of the predicted level of impacts in the 2018 EIAR.
- b) **Consultation & Existing Planning Conditions**
Summary of the consultation outcomes for the Consented Development application. Where relevant, this section also discusses how the planning conditions for the Consented Development have been addressed to date or will be taken into account for Varied Development.
- c) **Issues scoped in / out**
Summary (presented in table or text format) of the issues proposed to be scoped into and out of the Varied Development EIA, including description of the anticipated potential effects, rationale for scoping in or out of the assessment, and where relevant a commentary on the changes to potential significant environmental effects resulting from the Proposed Varied Development (compared with the Consented Development).
- d) **Assessment Methodology**
Description of the proposed methodologies that will be used to assess potential changes to impacts compared to the Consented Development.
- e) **Mitigation Measures**
Approach to the identification of the mitigation measures that will be taken into account for the assessment of the residual effects.
- f) **Summary and Conclusions**
- g) **References (as required)** - list of references used to compile the scoping chapter.

1.3. Key Questions for Consultees

1.3.1. For each of the predicted effects associated with the Varied Development, responses to the following key questions are put to Consultees:

- Are Consultees content with the proposed baseline?
- Are Consultees content with the proposed approach to the evaluation and impact assessment methods?
- Can Consultees provide details of any recent records or projects within or in the vicinity of the site, which may not yet be in the public domain and which may be pertinent to the assessment of impacts relating to the Proposed Varied Development?
- Are Consultees content with the effects that are proposed to be scoped out of the assessment?

1.4. Aims of the Scoping Report

1.4.1. The aims of the scoping exercise are to:

- Confirm with Scottish Ministers that the proposed changes to the consented scheme are of a nature and scale that a S36C is the appropriate application route.
- Seek agreement from Scottish Ministers and consultees on the likely significant effects associated with the proposed development and confirm that all likely significant effects have been correctly included in the proposed scope of the EIAR ('scoped in').
- Seek agreement where non-significant effects have been excluded ('scoped out').
- Invite comment on the proposed approach to baseline data collection, prediction of environmental effects and the assessment of significance.
- Obtain a scoping opinion which ensures that the future EIA report is effective, proportionate and minimises the burden of information provision where it is appropriate and possible to do so.

1.4.2. Unless consultees specifically request otherwise, all scoping responses and any other pre-application consultation will be collated and presented as a Technical Appendix to the EIAR.

2. Proposed Variation

- 2.1.1. The Development Site boundary of the Consented Development and the Varied Development are identical. There are some movements to turbine locations and associated realignment of tracks and hardstands to accommodate these movements and the larger turbines.
- 2.1.2. The design has been developed with a clear focus on minimising environmental impacts. Where possible, refinements have been made to reduce the extent of new land take and avoid sensitive environmental features. This includes, for example, realigning, repositioning, and reducing the length of several sections of access track to avoid areas of deeper peat and reduce disturbance to sensitive habitats. The design modifications build on the mitigation principles established under the Consented Development and will continue to guide the design process through to design freeze.
- 2.1.3. The proposed Varied Development layout is illustrated on **Figure 1: S36C Scoping Report Proposed Varied Development Layout**.
- 2.1.4. The proposed changes to the Consented Development are summarised in **Table 1** below and presented on **Figure 1.1: S36C Scoping Report Proposed Varied Development Layout and Consented layout**.

Table 1: S36C Proposed Variations

S36 Consent (Annex 1 Description of Development)	S36C Proposed Variations
16 turbines each with a maximum blade tip height of up to 149.9m	16 turbines each with a maximum blade tip height of up to 200m. While the overall layout of the scheme is not substantially changed, due to the increase in tip height and resultant change to wake zones and increased safety buffer for topple distance, some turbines have necessarily been repositioned. Turbine lighting will now also be required to ensure the project complies with guidance from the Civil Aviation Authority.
Hardstanding area at each turbine base with an approximate area of 1800m ² .	The size of the hardstands has increased to reflect the proposed candidate turbine model. Some hardstands have also been repositioned /reorientated to improve and reduce earthworks requirements and in response to turbine repositioning. Updated land take will be presented in the EIAR for the Proposed Variation Application.
Three permanent meteorological	No change to number of masts required however new

S36 Consent (Annex 1 Description of Development)	S36C Proposed Variations
masts and associated hardstand areas	locations are proposed. See Figure 1 for details
Up to two site substations	One site substation. This will be repositioned towards the northwest of the site to reduce environmental impacts and enable a more efficient grid access route.
One operations control building with parking and welfare facilities	No change.
A total of 11km of onsite access tracks with associated watercourse crossings	11.97km of onsite access track with the inclusion of three turning heads. Updated land take will be presented in the EIAR for the Proposed Variation Application.
Onsite underground cabling	No change
Temporary construction compound and laydown areas	No change
Temporary meteorological masts	No change
Temporary telecoms infrastructure	No change
Forest removal and subsequent replanting	No change to forestry removal however subsequent replanting plans and compensatory planting proposals will be presented in the Proposed Varied Development EIAR to account for larger hardstands and updated bat buffer-related forestry set back distances.
Dismantling of existing turbines and associated reinstatement	No change
Up to four borrow pits	No change

3. Approach to Assessment

3.1. Baseline

- 3.1.1. The variations to the Consented Development relate to an increased rotor diameter and tip height of turbines, with resultant repositioning of some turbine locations, and required increases in hardstand sizes. The general arrangement of the site layout remains as close as possible to the consented layout and construction methodology and mitigation will remain as previously reported. While this will be reviewed as part of the comparative assessment, it is anticipated that the predicted levels of construction and decommissioning impacts will not change from those reported in the Consented Development's EIAR.
- 3.1.2. Comparative assessments will be undertaken as required to demonstrate no change to the significance of previously reported predicted effects during construction and decommissioning. The EIA will focus primarily on any change to the significant effects likely to arise during the operation of the Varied Development. These are:
- **Landscape and Visual Impact:** Assessing potential changes in landscape and visual impact due to increased turbine height.
 - **Aviation:** Evaluating any new implications for aviation safety and turbine lighting because of the increased tip height
 - **Ecology and Ornithology:** Reviewing potential changes in collision risk and habitat impact from larger turbines and larger hard stands.
 - **Noise and Shadow Flicker:** Assessing whether taller turbines introduce any new noise or shadow flicker effects.
 - **Cultural Heritage:** Considering any additional visibility of turbines from heritage assets.
- 3.1.3. Existing survey data will be utilised for all topics 'scoped in' to the EIA Report as it is considered that all previous survey data collected remains valid. Baseline conditions will therefore be assumed to be as per the 2018 EIAR. This will allow a comparison of effects for the topics 'scoped in' to the EIA Report between the Consented and Varied Developments.
- 3.1.4. Where turbines or tracks have been repositioned or realigned, any survey data gaps will be considered accordingly and updated surveys completed as required to inform the updated assessment. Use of and validity of existing data is explained further under each individual topic in this report.
- 3.1.5. The cumulative baseline scenario would be reviewed for each topic and updated where necessary.

3.2. Approach to Assessment

- 3.2.1. The Consented Development was subject to a rigorous design process that aimed to reduce potential effects on the environment as far as practicable. The layout revisions developed through the iterative EIA process considered potential effects on sensitive habitats, peat, protected species, noise receptors, cultural heritage features as well as potential landscape and visual effects before a final layout was determined. As such, many potentially significant environmental effects were avoided through the design process.
- 3.2.2. All sensitive receptors have been reviewed for all proposed variations and the EIA Report will provide an assessment of the effects of the Varied Development and for topics 'scoped in', a comparative assessment between the Consented Development and the Varied Development will be undertaken. The comparative assessment would consider the potential for any material change between the findings of the 2018 EIAR and the assessment of the Varied Development.
- 3.2.3. In line with standard practice, for the purpose of the EIA, other wind farm developments which are not already part of the baseline and are operational or subject to a full and validated planning application will be included in the consideration of potential cumulative effects (subject to a cut-off point to allow assessments to be undertaken).
- 3.2.4. To further prevent, reduce or offset potential effects, the mitigation measures specified within the 2018 EIAR will be reviewed in light of the Varied Development, but it is assumed that these will remain largely in their current form for inclusion within the EIA for the Varied Development.

3.3. Varied Development Proposed EIA Scope

- 3.3.1. **Table 2** lists each chapter of the Consented Development's EIAR and opinion and justification on whether the topic will be scoped in or out of the S36C Variation Application.

Table 2: Proposed EIA structure and S36C Scoping Justification

EIAR Chapter	Incl. in EIAR / Scoped In	Scoped Out
Chapter 1: Introduction	Describes the planning history of the Consented Development and context of the S36C Varied Development application.	-
Chapter 2: Environmental Impact Assessment	Describes comparative EIA methodology.	-
Chapter 3:	Updates renewable energy policy	-

Renewable Energy Policy Context	context.	
Chapter 4: Site Selection and Alternatives	Describes the Proposed Varied Development, including details on design iterations and changes to infrastructure compared to the Consented Development.	-
Chapter 5: Description of Development	Describes the updated description of development.	-
Chapter 6: Planning Policy Context	Updates planning policy context.	-
Chapter 7: Scoping and Consultation	Updates scoping responses received.	-
Chapter 8: Landscape and Visual	Landscape character and visual amenity assessment. A comparative EIA will be undertaken to assess changes in operational LVIA impacts as a result of increased tip height and changes to aviation lighting requirements. The assessment will include the effects on landscape character and visual amenity for the operational phase of the Proposed Varied Development. A CLVIA will also be undertaken to include any updates to the cumulative baseline assessed in 2018.	As set out in Chapter 5, and summarised in Table 8.1 of this scoping report, assessment of the potential for changes to receptors where a material change is deemed unlikely will be scoped out.
Chapter 9: Ornithology	Change to turbine geometry requires updated collision risk model. This is proposed to be completed for all identified IOFs. Evaluation of lighting effects on ornithology Comparative assessment will also be scoped in to confirm no other	Disturbance, displacement and habitat loss effects on ornithological receptors during construction, operation and decommissioning. Any bird species previously scoped out / not on the list of IOFs.

	change. Potential requirement for updated bird survey data is being discussed separately with NaureScot.	
Chapter 10: Ecology and Nature Conservation	Comparative Habitat Loss Calculations and updated ecological impact assessment. Walkover surveys to identify bat roosting features and potential badger setts. Collision risk and barotrauma assessment for bats and potential for impacts on badgers during construction and operation of Proposed Varied Development.	Assessment of potential construction or operational impacts on remaining protected species identified previously (otter, palmate newt, and common lizard) Construction and operational impacts on Tangy Loch SSSI
Chapter 11: Geology, Soils and Peat	Comparative EIA required to confirm aggregate requirements and whether changes to size of hardstands and track re-alignments will alter the calculations and potential impacts associated with excavation and reuse of peat. Ground conditions and geotechnical constraints will also be reviewed to inform any necessary updates to previously agreed mitigations such as the CEMP and PMP.	Impacts on geological designations and contaminated land assessment. Previously no residual effects or impacts predicted, therefore no change expected, and further assessment will be scoped out.
Chapter 12: Surface Water	A comparative review of the proposed changes and updated figures for private water supplies.	Potential effects on aquifers, surface waters, and water dependant habitats such as GWDTEs.
Chapter 13: Cultural Heritage	Direct and indirect effects on known non-designated cultural heritage sites or features within the Development Site boundary, as well as effects on unknown, buried archaeology. Effects on the settings of heritage assets within 10 km of the outermost turbines, resulting from intervisibility between the assets and the Varied Development, based on detailed analysis of ZTV	Effects on the settings of heritage assets beyond 10 km of the Varied Development will be scoped out, with the exception of those considered to have sensitive settings that are revealed through analysis of the ZTV and/or consultations with statutory consultees. Effects on the settings of Category C Listed Buildings beyond 5 km of the Development Site. Effects on the settings of Listed

	mapping. Cumulative effects on the settings of heritage assets with other existing or proposed developments.	Buildings within towns and villages, or characterised by otherwise localised settings.
Chapter 14: Noise	An updated assessment of operational noise effects. This will include reanalysis of baseline noise levels and updated noise limits, based on the reanalysed baseline noise levels. Any relevant changes to the cumulative scenario will also be accounted for in the updated assessment.	Assessment of construction or decommissioning noise effects.
Chapter 15: Access Traffic and Transport	Updated assessment of delivery route required due to size and no. of turbine component deliveries.	Assessment of impact from construction traffic (although a screening assessment will be undertaken to support the view that any increased traffic will not result in significant impacts).
Chapter 16: Land Use, Socio-Economics and Recreation	-	Scoped out as changes to the scheme will not result in any new adverse changes to previous impact assessment.
Chapter 17: Shadow Flicker	Updated shadow flicker assessment to identify any additionally affect receptors within an increased study area of 1,500m.	-
Chapter 18: Aviation	Revised radar, aviation safety and lighting assessment required due to increase in tip height and requirement for visible lighting scheme.	-

3.3.2. The following EIAR chapter structure is proposed for those topics ‘scoped in’ to the EIA:

- a) Introduction.
- b) Scope of assessment.
- c) Consultations.
- d) Assessment methodology.
- e) Baseline.
- f) Summary of effects predicted for Consented Development & mitigation measures.
- g) Revised assessment of effects for Varied Development.
- h) Revised mitigation measures for Varied Development.
- i) Comparison of Varied Development effects with effects of Consented Development.
- j) Conclusion.

4. Planning Policy

4.1. Introduction

- 4.1.1. The EIAR accompanying the Proposed Varied Application will include a Chapter which will identify the relevant International and UK energy and planning legislation and associated net zero targets and emissions reduction targets. The Chapter will also include relevant guidance, policy and material considerations relating to the Proposed Varied Development. A separate standalone Planning Statement will provide an assessment of the Proposed Varied Development's compliance with this legislation and policy.
- 4.1.2. The relevant planning policy, renewable energy and electricity targets and emissions reduction which would be secured by the Proposed Varied Development both in terms of the Scottish targets and the UK targets will be described in the EIA Report.
- 4.1.3. The EIAR Planning Policy Chapter will therefore include:-
- a description of the fundamental and most relevant UK, Scottish Government and International Climate Change and Energy legislation and policies.
 - a description of the Development Plan Policy Framework. It is important to note that for an application under the Electricity Act, the duty outlined in Section 25 of the Planning Act (to determine the application in accordance with the development plan unless material considerations suggest otherwise) does not apply. However, the development plan remains a material consideration.
- 4.1.4. The standalone Planning Statement will provide a full and robust assessment of the Varied Development's compliance with the referenced legislation and policies, and will demonstrate that the substantial increase to the energy yield from the Consented Development will make an even greater contribution to the achievement of legally binding UK and Scottish Government net-zero targets, thereby further enhancing the needs case as outlined in various national planning policy and guidance documents.

4.2. Climate Change, Energy Legislation & Policy

- 4.2.1. The EIAR Planning Policy Chapter would reference only the most salient pieces of legislation and policies and plans relevant to the climate change, energy legislation and planning policy and would therefore not be an exhaustive list.

4.2.2. The most relevant UK and Scottish Government Legislation, Policy statements and guidance on Climate Change and Energy are referenced within Table 3 below.

Table 3: Legislation & Policy

UK Legislation	Key Points
Climate Change Act 2008	The Legislation set legally binding targets for reducing greenhouse gas emissions. Emission Reduction Targets were aimed at reducing emissions by 80% by 2050 compared to 1990 levels. The Committee on Climate Change established.
The Climate Change Act 2008 (2050 Target Amendment) Order 2019	The 2008 Act was updated by the 2019 Amendment to increase the previous target of 80% reduction to net-zero by 2050.
Energy Act 2023	Support for UK commitment to Net Zero transition including acceleration of clean energy technology such as Carbon Capture and Hydrogen production.
Scottish Legislation	Key Points
The Climate Change (Scotland) Act 2009	Followed on from The Climate Change 2008 Act. Statutory targets for 80% reduction in Green House Gas (GHG) emissions by 2050 (compared to 1990 levels). The Scottish Committee on Climate Change was established and annual targets to be set to ensure consistent progress.
Climate Change (Emissions Reduction Targets) (Scotland) Act (2019)	The Act committed Scotland to achieving net zero greenhouse gas emissions by 2045, making it one of the most ambitious targets globally as well as interim targets including 75% reduction in emissions by 2030. Annual reporting introduced and emphasis on “Just Transition”.
Climate Change (Emissions Reduction Targets) (Scotland) Act (2024)	The Act abandons the interim emissions reduction targets due to acknowledgement of 75% reduction by 2030 as “being out of reach”. The system was replaced by five year carbon budgets which set the total of allowable GHGs for specific period up to achieving net zero by 2045

UK Energy Policy	Key Points
Climate Change Committee (CCC) - Progress in Reducing Emissions – 2024 Progress Report to Parliament (published July 2024)	The report provided a review of the UK's progress in reducing GHG. Overall the report showed mixed progress in different sectors and certain gaps in government policies. The report also stated that the UK was at risk of missing up and coming carbon budgets unless urgent action was taken to accelerate emissions reductions.
"Clean Power 2030 Action Plan; A new era of clean electricity", UK Government, Dec 2024	The plan outlines the UK's strategy to transition to a clean electricity system by 2030. In summary, it aims to do this via reduction of reliance on fossil fuels, by speeding up the adoption of clean, homegrown energy sources, supporting clean energy projects, and supporting infrastructure development to build and reform the electricity network.
Scottish Energy Policy	Key Points
Onshore Wind Policy Statement (OWPS), Scottish Government, Dec 2022.	OWPS sets out the goals of achieving 20GW of onshore wind capacity by 2030. The statement clearly sets out that onshore wind will be a critical technology to help deliver the 2030 (now abandoned) and 2045 climate change targets. The OWPS states (in paragraph 3.6.2) that '<i>stronger weight</i>' is now to be given to the contribution of a development to the climate emergency in the planning balance, as well as community benefits. Critically, the OWPS does not just want developers to deliver onshore wind energy in isolation. Proposals need to maximise the economic, social and environmental benefits too, to help the just transition to a net zero society.
CCC – Progress in Reducing Emissions – 2023	The 2023 Report to the Scottish Parliament was published in March 2024. One of the key messages of the report is that Scotland missed the 2021 annual target of a 51.1% reduction in GHG emissions which is the eighth target Scotland has missed within the last 12 years. Secondly, the report noted that the acceleration required in emissions reduction to

	meet the 2030 target is 'now beyond what is credible'. The report also noted that 'current overall policies and plans in Scotland fall far short of what is needed' to achieve the legal emissions reduction targets.
Draft Energy & Just Transition Plan (2023)	Focuses on ensuring a fair and equitable shift to net zero economy and sets out the vision for this sustainable and equitable energy transition. Aims to increase renewable electricity generation capacity by 20GW by 2030, nearly doubling the current levels.
Report to Parliament (to Scotland 2024)	Outlines the Scottish Government's priorities and legislative plans for the year. Two of the 4 key priorities were Growing the Economy and Tackling the Climate Emergency
Serving Scotland – Programme for Government 2024-2025	

- 4.2.3. The most relevant International Legislation and policy statements on Climate Change and Energy are referenced within Table 4 below.

Table 4: International Legislation and Policy - United Nations

United Nations	Key Points
The Paris Agreement 2015	The Paris Agreement is a legally binding international UN treaty on climate change, adopted in 2015 during the UN Climate Change Conference (COP21) in Paris. The Paris Agreement sets out the ambition of holding the increase of global average temperature to "well below 2°C" and pursuing efforts to limit temperature increase to 1.5°C. The agreement requires that all 195 parties of the UN prepare, communicate and maintain Nationally Determined Contributions (NDCs) which outline what they intend to achieve and must be updated every 5 years.
United Nations (UN) Emissions Gap Report 2024 – No more hot air ... please!	The report highlights the need for increased climate action. Report warns that current policies and NDCs insufficient and that the world is potentially on track for a temperature rise of 2.6 to 3.1 degrees Celsius by the end of the century. Emission Reduction Targets to be aligned with the Paris Agreement's 1.5°C goal, and global emissions must be reduced by 42%

	by 2030 and 57% by 2035. The Nations must implement ambitious Nationally Determined Contributions (NDCs) and deliver rapid emissions cuts through renewable energy, energy efficiency, and reforestation
COP 29 - The 29th United Nations Framework Convention on Climate Change (UNFCCC) conference of the parties (COP29) – Baku – November 2024	COP 29 reinforced the urgency of global collaboration to address the climate crisis.

4.3. The Development Plan

- 4.3.1. As stated in paragraph 4.1.3, unlike planning applications determined under Section 25 of the Planning Act, the Development Plan does not have primacy under a Section 36C application. However, the Development Plan will still be a material consideration. The EIAR Energy and Planning Policy Chapter and the accompanying Planning Statement will describe the Development Plan Framework and reference the relevant policies as stated below. The accompanying Planning Statement will provide a full analysis of NPF4 and its impact since publication in 2023 and assess how the Varied Development complies with the policies and guidance contained within Development Plan.
- 4.3.2. The Statutory Development Plan relating to the propose comprises the following:-
- **National Planning Framework 4 (NPF4) 2023.** The key NPF4 policy directly related to Renewable Energy is Policy 11. Other key policies include 1,3,4,5,6,7,13,14,20,22, 23,25, 26 & 29.
 - **The Argyll and Bute LDP (adopted 28 February 2024).** The new LDP replaces the Argyll and Bute LDP of 2015 and its Supplementary Guidance (March 2016) and Supplementary Guidance 2 (December 2016).
- 4.3.3. The Chief Planner's letter dated 8 February 2023 states that where an LDP has been adopted following the publication of NPF4, it will carry greater weight in the planning balance. This point will be addressed in the Planning Statement that accompanies the S36C application, particularly in relation to any policy conflicts that may arise between Argyll and Bute's new LDP and NPF4.

4.4. Summary

- 4.4.1. As described above, the EIAR accompanying the Proposed Varied Application will include a chapter which will identify the relevant energy and planning legislation and policy and material considerations relating to the Proposed Varied Development. A separate standalone Planning Statement will provide an assessment of the Proposed Varied Development's compliance with this legislation and policies.

5. Landscape and Visual

5.1. Introduction

- 5.1.1. The following chapter presents the proposed approach to the assessment of potential effects of the Varied Development on landscape and visual receptors, the Landscape and Visual Impact Assessment (LVIA).
- 5.1.2. A landscape and visual impact assessment (LVIA) was previously undertaken for the Consented Development by ASH design + Assessment Ltd (ASH), the findings of which are discussed below.
- 5.1.3. The LVIA for the Varied Development will consider the potential for material changes to the effects identified for the Consented Development, assessing a layout consisting of 16 turbines with a maximum tip height of 200m as described in the Chapter 2: Proposed Variation

5.2. Consented Development EIAR Baseline

- 5.2.1. The scope of the LVIA undertaken as part of the 2018 EIAR for a 16 turbine layout with a maximum tip height of 149.9m was agreed with both NatureScot and the Argyll and Bute Council (A&BC).
- 5.2.2. The following sections summarise the findings of the LVIA presented in the 2018 EIAR.

Landscape Character

- 5.2.3. The 2018 EIAR assessment of potential landscape effects considered Landscape Character Types (LCTs) identified within the Landscape Assessment of Argyll and the Firth of Clyde (1996), within an 11km Detailed Study Area. The landscape character assessment concluded that the majority of landscape effects associated with the Consented Development would not be significant. Potential significant effects were identified for two of the five LCTs within the 11 km detailed study area which were included in the assessment: Bay Farmland and Upland Forest-Moor Mosaic. It was concluded that the Consented Development would be noticeable and locally intrusive, rather than a dominating feature, as such these effects were considered moderate. They would be limited to an area of around 8km from the Consented Development and would be mostly within 6km. No significant effects on LCTs were identified beyond this distance.

Designated and Protected Landscapes

- 5.2.4. The 2018 assessment of potential landscape effects also considered designated and protected landscapes, including National Scenic Areas (NSAs), and Areas of Panoramic Quality (APQs) within the 40km Wider Study Area. The following designated and protected landscapes were included within the assessment:

- North Arran NSA;
- East Kintyre Coast APQ;
- Mull of Kintyre APQ; and
- West Kintyre Coast APQ.

5.2.5. No significant effects were identified for any of the designations included within the assessment. A number of other designated and protected landscapes within the study area were scoped out of the assessment as significant effects were considered unlikely.

Visual Amenity

5.2.6. The assessment of potential visual effects considered views from visual receptors at 27 representative viewpoints (VPs), in settlements and on transport and recreational routes within the 40km study area, and on core paths within the detailed study area. Some significant visual effects were identified to the visual amenity from 16 of the 27 viewpoints, at 3 of the 10 settlements and 4 of the 17 routes included in the assessment during operation.

5.2.7. Significant visual effects were identified in the settlements of Machrihanish, Drumlemble and Glenbarr, but these were considered unlikely to affect receptors in properties or outdoor receptors not already affected by the existing Tangy I and II Wind Farm developments. Similarly, for receptors on the A83, including Core Path C304; and B843 and Core Path C085, the stretches of road potentially affected by the Consented Development would be similar to those affected by the existing Tangy I and II Wind Farm development. For receptors on other routes for which significant visual effects were identified, the Consented Development would introduce areas of new or notably increased visibility.

Table 5.1: Summary of Significant Visual Effects Identified in the 2018 EIAR

Receptor Type	Receptor	Effect Identified
Viewpoints (VPs):	VP1 A83 at Glenbarr Burial Ground;	Moderate-Major
	VP2 Glenbarr War Memorial;	Moderate
	VP3 Barr Glen;	Moderate
	VP6 Machrihanish (Little Scone)	Moderate
	VP7 Stewarton;	Moderate
	VP8 Southend Road;	Moderate
	VP10 Beinn Ghuilean;	Moderate
	VP11 High Peniver;	Moderate-Major
	VP12 Bord a Dubh (Kintyre Way)	Moderate

	VP13 A' Cruach (Kintyre Way)	Moderate
	VP15 Ballywilline (Kintyre Way)	Moderate
	VP17 Breakachy;	Moderate-Major
	VP19 Drumlemble;	Moderate
	VP24 Sea near Machrihanish	Moderate
	VP25 Ranachan Hill; and	Moderate-Major
	VP27 Machrihanish Dunes	Moderate
Settlements	Drumlemble;	Moderate
	Glenbarr; and	Moderate
	Machrihanish.	Moderate
Routes	A83, including Core Path C304;	Moderate
	B843 and Core Path C085;	Moderate
	Kintyre Way: Carradale to Campbeltown and Section of Core Path C088; and	Moderate
	Core Path C086.	Moderate

Cumulative Landscape and Visual Effects

5.2.8. A CLVIA was included in the 2018 EIAR assessment, following best practice guidance at the time. It considered the addition of 2018 EIAR Layout to a baseline scenario which included all operational and consented wind development projects within 60 km of the Consented Development and those either at application or appeal stage within the planning process at the time of submission. This assessment concluded that there would be no significant cumulative effects to designated landscapes. Potential significant cumulative effects were identified for two LCTs: Rocky Mosaic and Upland Forest-Moor Mosaic, at 5 of the 11 viewpoints and on 1 of the 11 routes included in the cumulative assessment.

5.2.9. A summary of the significant cumulative effects identified for individual visual receptors is outlined below:

Table 5.2: Summary of Significant Cumulative Visual Effects Identified in the 2018 EIAR

Receptor Type	Receptor	Effect Identified
Viewpoints (VPs):	VP2 Glenbarr War Memorial	Moderate (significant)

	VP6 Machrihanish (Little Scone)	Moderate (significant)
	VP8 Southend Road	Moderate (significant)
	VP12 Bord a Dubh (Kintyre Way)	Moderate (significant)
	VP25 Ranachan Hill	Moderate (significant)
Routes	B843 and Core Path C085	Moderate (significant)

5.3. Consultation & Existing Planning Conditions

- 5.3.1. At the time of the 2018 EIAR, the Consented Development was situated within a Group 3 area within the Argyll and Bute Spatial Framework for onshore wind energy developments. These areas were defined as sites that would be acceptable for wind farms subject to detailed consideration against identified policy criteria. This formed part of the 2015 Argyll and Bute Local Development Plan, which has now been replaced by the Argyll and Bute Local Development Plan 2 which was adopted in February 2024.
- 5.3.2. NatureScot expressed some concern over the proximity to the coast and scale of turbines proposed and offered advice in terms of mitigating landscape and visual impacts, mainly in the form of reducing turbine height and scale and removing/re-siting turbines away from the west coast. However, they did not object to the Consented Development.
- 5.3.3. A&BC³ considered that, *“the existing wind farm is a well-established part of the local landscape and not an unusual site in this part of Kintyre. It is also a positive that the proposed turbines are being moved away from the coast [compared to the Tangy I and Tangy II Wind Farms] which helps to compensate for the increase in height.”* They concluded that the proposal would not result in significant landscape effects in the Upland forest Moor Mosaic or the Bay Farmland LCTs, although they considered there to be some potential to *“worsen the already accepted impact in the Rocky Mosaic LCT [accepted by approval of Tangy III]. This impact is evident from VP 1 [A83 at Glenbarr Burial Ground] where turbines are visible above the raised beach scarp.”*
- 5.3.4. Scottish Ministers agreed with the conclusions of the A&BC, and having considered the LVIA provided as part of the 2018 EIAR, were satisfied that the landscape and visual impacts of the Consented Development would not be ‘unacceptably greater’ than those already approved by the A&BC in response to Tangy III, and therefore no further design mitigation was requested.

³ The Scottish Government, Energy Consents Unit (2019). Decision Letter for Tangy IV Wind Farm. Available at: <https://www.energyconsents.scot/ApplicationDetails.aspx?cr=ECU00000673&T=6>

5.4. Proposed Varied Development Study Area

- 5.4.1. A wider study area of 40km was used for the 2018 EIAR. This was considered to be the maximum distance within which any significant landscape or visual effects may be experienced for the Consented Development. A smaller study area of 11km (the detailed study area) was defined following initial review and site appraisal for a more targeted and fine-grained assessment of landscape character and visual effects. However, due to their heightened sensitivity and value, all nationally important or designated landscapes, such as National Scenic Areas, located within the overall 40 km study area were considered within the assessment.
- 5.4.2. It is anticipated that any significant effects for the Varied Development would still occur within the 40km study area, as the initial ZTV which has been run for the Varied Development indicates a limited increase in the extent of theoretical visibility compared to the Consented Development. It is therefore proposed that the same wider study area is used for the Varied Development to allow for consistent comparison. However, it is proposed that the detailed study area is expanded to 20km to account for any potential increased influence of the larger scale turbines.

5.5. Issues Scoped In / Out

Landscape Assessment

- 5.5.1. The preliminary comparative ZTV (see **Figure 5.1-5.3**) indicates a small increase in theoretical visibility for the Varied Development across the study area as a whole in comparison with the Consented Development. There are however some localised areas which show an increased extent of theoretical visibility. The number of turbine hubs and tips visible would also likely increase within some of the areas where both developments are theoretically visible, as shown on **Figures 5.5a-5.9c**.
- 5.5.2. The 1996 Landscape Assessment of Argyll and the Firth of Clyde⁴ which the LCTs included in the 2018 EIAR were based on has now been replaced by the 2019 National Landscape Character Assessment issued by NatureScot⁵. These areas correspond to the areas covered by the 1996 Landscape Assessment of Argyll and Bute, although some of the names and descriptions have been updated.
- 5.5.3. This assessment will assess the LCTs included within the 2018 assessment, focusing on any LCTs where significant effects were previously identified or where there is potential for effects to increase to significant levels. It will, however, use the updated names and descriptions from the more recent NatureScot LCT dataset. Table 5.3 below

⁴ Scottish Natural Heritage (2019). SNH National Landscape Character Assessment. Available at: <https://www.nature.scot/professional-advice/landscape/landscape-character-assessment/scottish-landscape-character-types-map-and-descriptions>. Accessed: May 2025

⁵ Scottish Natural Heritage (2019). SNH National Landscape Character Assessment. Available at: <https://www.nature.scot/professional-advice/landscape/landscape-character-assessment/scottish-landscape-character-types-map-and-descriptions>. Accessed: May 2025

includes the LCT numbers and names included within the NatureScot 2019 dataset as they correspond to the names used within the 1996 dataset. As it is proposed to increase the detailed study area from 11km to 20km a number of new LCTs will be included in this assessment. For LCTs which were not included within the scope of the 2018 EIAR a retrospective assessment of the Consented Development will be undertaken to allow for comparison between the Consented and Varied Developments.

- 5.5.4. This will include assessment of the direct effect of potential physical changes to the landscape and experiential character of the Varied Development site and surrounding areas. The LVIA will include an update on any changes to the baseline context compared to the 2018 EIAR.

Table 5.3: LCTs to be included within assessment

1996 Argyl and Bute Landscape Assessment LCT	Effect identified in 2018 EIAR	Inclusion in assessment	Reasoning
Bay Farmland	Moderate (significant)	Yes	It is proposed that this LCT is included within the assessment as significant effects were previously identified.
Low Coastal Hills	Minor (not significant)	Yes	It is proposed that this LCT is included within the assessment. While there is a relatively minor increase in the extent of theoretical visibility, the larger scale turbines are likely to become more prominent.
Rocky Mosaic	Localised Minor-Moderate (not significant) effect, elsewhere Minor.	Yes	It is proposed that this LCT is included within the assessment as locally Minor-Moderate effects were previously identified.
Sand Dunes and Machair	Minor (not significant)	Yes	It is proposed that this LCT is included within the assessment.
Upland Forest-Moor Mosaic	Moderate (significant) within 6km of Consented	Yes	It is proposed that this LCT is included within the assessment as

	Development, Minor (not significant) beyond		significant effects were previously identified.
Not included in 2018 EIAR	Scoped out of assessment (outside 11km)	No	It is proposed that this LCT is scoped out of the assessment due to lack of ZTV coverage.
Hidden Glens	Scoped out of Assessment	No	It is proposed that this LCT is scoped out of the assessment due to lack of ZTV coverage.
Not included in 2018 EIAR	Scoped out of assessment (outside 11km)	No	It is proposed that this LCT is scoped out of the assessment due to lack of ZTV coverage.
Not included in 2018 EIAR	Scoped out of assessment (outside 11km)	Yes	It is proposed that this LCT is included within the assessment due to relatively extensive ZTV coverage.
Not included in 2018 EIAR	Scoped out of assessment (outside 11km)	Yes	While visibility is relatively limited within this LCT overall, there is some ZTV coverage around Rhunahaorine point. It is therefore proposed that this LCT is included within the assessment

5.5.5. No significant effects on designated and protected landscapes were identified within the 2018 EIAR. Table 5.4 below sets out which designated and protected landscapes are proposed to be scoped in and out of the LVIA for the Varied Development and the reasoning behind this.

5.5.6. The assessment of potential effects on the North Arran NSA is proposed to focus on the VP which is located within the NSA (VP23), with the addition of one or more locations which would be selected following site visits to confirm the most appropriate locations.

This would consider latest guidance on SLQ assessments published by NatureScot.⁶ Further consultation will be undertaken with NatureScot with regards to the Special Qualities to be included within the assessment.

Table 5.4: Designated and protected landscapes to be included within assessment

Designated / Protected Landscape	Effect identified in 2018 EIAR	Inclusion in assessment	Reasoning
North Arran NSA	Negligible (not significant)	Yes	The effect on this NSA was assessed as being Negligible within the 2018 LVIA. It is therefore considered unlikely that there would be significant effects within this designation for the Proposed Development. However, the initial ZTV which has been run for the Proposed Development indicates some additional visibility within the western part of this NSA. The assessment of the NSA will consider the latest guidance on SLQ assessments published by NatureScot, and the scope of this assessment will be agreed with NatureScot.
WLA 03: North Arran	Scoped Out	Yes	This WLA was previously scoped out of the 2018 EIAR as it was considered unlikely there would be a significant impact on perceptions of wildness. It was also considered that the assessment of the NSA which covers a similar, but larger area would reflect any potential impacts on wildness. However, due to the taller height of the turbines and the subsequent requirement for turbine lighting it is proposed that this WLA is included within the assessment of the Varied Development.
East Kintyre Coast APQ	Negligible (not significant)	No	The effect on this APQ was assessed as being Negligible within the 2018 LVIA. The initial ZTV which has been run shows similar levels of visibility for the Varied Development. It is therefore considered unlikely that there would be significant effects within this designation for the Varied Development.

⁶ NatureScot (2025). Special Landscape Qualities – Guidance on assessing effects. Available at: <https://www.nature.scot/doc/special-landscape-qualities-guidance-assessing-effects#special-landscape-qualities-slqs> Accessed: April 2025

Mull of Kintyre APQ	Minor (not significant)	Yes	The 2018 LVIA identified a Minor (not significant) effect for this designation, as the Consented Development would be intervisible with small parts of this APQ, potentially increasing the prominence of wind turbines along parts of the northern boundary. The initial ZTV for the Varied Development indicates limited additional theoretical coverage within this designation.
West Kintyre Coast APQ	Minor-moderate (not significant)	Yes	A Minor-Moderate effect was identified within this designation in the 2018 LVIA due to intervisibility with the Consented Development resulting in a range of isolated visual effects within the APQ. However, these were considered unlikely to lead to a significant effect on the integrity and value of the APQ overall. The initial ZTV which has been run for the Varied Development indicates that levels of ZTV coverage would be similar to the Consented Development.

Visual Assessment

- 5.5.7. The visual assessment will consider the potential for effects on visual amenity within the study area. The visual assessment for the 2018 EIAR included a series of 27 VPs which were selected in consultation with NatureScot and A&BC. It is proposed to include 14 out of these 27 VPs within the visual assessment for the Varied Development. This includes VPs where initial ZTVs and wirelines indicate potential for effects to significantly increase in comparison with the Consented Development.
- 5.5.8. The list of VPs proposed to be used in the assessment of the Varied Development is detailed in Table 5.4 below and illustrated on **Figure 5.1**.

Table 5.4: Proposed Viewpoint List

VP	Name	Effect rating during operation in 2018 LVIA	Inclusion in assessment	Reasoning
VP1	A83 at Glenbarr Burial Ground	Moderate-Major (significant)	Yes	Representative of views from the A83 road in the APQ and illustrative of views from burial ground.

VP2	Glenbarr War Memorial	Moderate (significant)	Yes	Representative of views from northern Glenbarr settlement and illustrating views from receptors visiting this memorial or travelling along the A83, to the north of the site.
VP3	Barr Glen	Moderate (Significant)	No	This VP was included in the 2018 EIAR to represent views from the public road and scattered properties in the western part of Glenbarr (but is not representative of views from Glenbarr settlement). It is proposed that this VP is excluded given its proximity to VP2, which is considered representative of worst-case views from Glenbarr.
VP4	Islay Ferry Route	Negligible (not significant)	No	This VP was included in the 2018 EIAR to represent views from a point on the ferry route between Kennacraig and Port Ellen (Islay). However, it is proposed that this VP is scoped out of the assessment due to the low potential for significant effects on VP5 – Gigha (South Pier) is considered representative of worst-case views from the north-west off the coast.
VP5	Gigha (South Pier)	Minor-Moderate (not significant)	Yes	Illustrative of distant open views from the southern coast of Gigha, on the South Pier, to the north of the Varied Development (but not representative of views from Ardminish).
VP6	Machrihanish (Little Scone)	Moderate (significant)	Yes	Representative of views from Machrihanish settlement, taken from a coastal location by Little Scone and the B843,

				to the south-west of the Varied Development.
VP7	Stewarton	Moderate (significant)	No	Included in the 2018 EIAR to illustrate views from Stewarton settlement, at the junction between the B842 and B843 roads, to the south of the Varied Development. It is proposed that this VP is excluded due to its similarity to views from VP8 and VP9, which are considered to be representative of worst case views from the south-east.
VP8	Southend Road	Moderate (significant)	Yes	Representative of elevated views from the B842 approaching Stewarton, including some nearby scattered properties with similar views, to the south of the Varied Development.
VP9	Campbeltown (Ralston Road)	Minor-Moderate (not significant)	Yes	Illustrative of open views from south-western periphery of Campbeltown, to the south-east of the Varied Development (but is not representative of views from most of Campbeltown, as theoretical visibility is limited to the southern part of this settlement).
VP10	Beinn Ghulean	Moderate (significant)	Yes	Illustrative of elevated views from a hillside seating area south of Campbeltown and south-east of the Varied Development.
VP11	High Peninver	Moderate-Major (significant)	No	This VP was included in the 2018 EIAR to illustrate views from a rural glen and local road to the east of the Consented Development. However it is proposed that this VP is

				excluded from the assessment due to its proximity to VP 21, which is also illustrative of views from within the East Kintyre (Coast) APQ.
VP12	Bord a Dubh (Kintyre Way)	Moderate (significant)	Yes	Illustrative of views from an elevated point north-east of the Varied Development on the Kintyre Way near Bord a Dubh, which includes views of Lussa Loch (on the Carradale Campbeltown section of the route).
VP13	A' Cruach (Kintyre Way)	Moderate (significant)	No	This VP was included in the 2018 EIAR to illustrate views from an elevated point north-east of the Consented Development on the Kintyre Way near A'Chruach (on the Carradale to Campbeltown section of the route), within coniferous plantation. It is proposed that this VP is scoped out of the assessment due to its proximity to VP12 which is considered to represent worst case views from this section of the Kintyre Way to the north-east of the Varied Development.
VP14	Allt a Choire	Minor-Moderate (not significant)	No	This VP was included in the 2018 EIAR to illustrate a glimpsed view from an elevated point east of the Consented Development within coniferous forest plantation on a forestry track. It is proposed that this VP is scoped out of the assessment due to its proximity to VP 18 which is considered to be potentially more sensitive.

VP15	Ballywilline (Kintyre Way)	Moderate (significant)	No	This VP was included in the 2018 EIAR to illustrate views from a local road and the Kintyre Way to the south-east of the Consented Development, including views from properties at Calliburn with similar views. However, it is proposed that this VP is scoped out of the assessment due to its similarity to VP 18, which is also located along this road, and is more illustrative of close range views along the Kintyre Way to the south-east of the development
VP16	Kilbrannan Sound	Minor (not significant)	No	This VP was included in the 2018 EIAR to illustrate views from a point on the ferry route between Ardrossan and Campbeltown, an important transport route for residents and tourists, to the south-east of the proposed development. However, it is proposed that this VP is scoped out of the assessment due to the low potential for significant effects.
VP17	Breakachy	Major Moderate-Major (significant)	Yes	Representative of close-range elevated views from the south-west of the Varied Development.
VP18	Skeroblingarry (Kintyre Way)	Minor (not significant)	No	Representative of views from a section of public road and the Kintyre Way near Skeroblin Cruach, to the south-east of the Varied Development.
VP19	Drumlemble	Moderate (significant)	Yes	Representative of views from northern periphery of Drumlemble settlement on the A83 road, to the south of the Varied Development.

VP20	Rhunahaorine Point (Kintyre Way)	Negligible (not significant)	No	This VP was included in the 2018 EIAR to represent distant views from a beach on the west Kintyre coast to the north of the Consented Development on the Kintyre Way. However, it is proposed that this VP is scoped out of the assessment as there is low potential for significant effects due to distance to the Varied Development.
VP21	B842 North of Peninver	Minor (not significant)	Yes	Illustrative of views from a short section of the coastal B842 road to the east of the Varied Development and views from some scattered properties to the north of Peninver settlement.
VP22	Campbeltown Airport	Minor (not significant)	No	This VP was included in the 2018 EIAR to illustrate views from a transport hub arrival/departure point to the south of the Consented Development. However, it is proposed that this VP is scoped out of the assessment due to the low potential for significant effects.
VP23	Beinn Bharrain	Negligible-Minor (not significant)	No	Illustrative of elevated views from a mountain summit on Arran, to the north-east of the Varied Development, within the North Arran NSA and WLA 03: North Arran.
VP24	Sea near Machrihanish	Moderate (significant)	No	This VP was included in the 2018 EIAR to illustrate views from water-users in Machrihanish Bay, to the south-west of the Varied Development. However, it is proposed that this VP is scoped out due to similarities

				with VP6 - Machrihanish (Little Scone), which is considered to be representative of views from this area.
VP25	Ranachan Hill	Major / Moderate-Major (significant)	No	This VP was included in the 2018 EIAR to illustrate elevated views from a nearby high point to the south of the Consented Development. However, it is proposed that this VP is scoped out of the assessment as VP17 is considered representative of close range elevated views from the south.
VP26	Westport Beach	Negligible (not significant)	No	This VP was included within the 2018 EIAR to illustrate worst-case views from the north-eastern end of Westport Beach (but not representative of views from most of the beach). Due to the limited visibility of the Varied Development and low potential for significant effects it is proposed that this VP is scoped out of the assessment. VP17 is considered representative of worst case, close range views to the south-west of the Varied Development.
VP27	Machrihanish Dunes	Moderate (significant)	Yes	Representative of distant views from Machrihanish Dunes golf course, taken from near clubhouse.

5.5.9. In addition to the VP based assessment, a more targeted assessment of potential visual receptors was undertaken for the 2018 EIAR, considering views from settlements as well as routes including A and B roads, ferry routes, long distance recreational routes, e.g. National Cycle Route and Kintyre Way within the 40km study area, and views from routes such as core paths within the detailed study area.

5.5.10. The assessment of the potential effects of the Varied Development on settlement and

route receptors will focus on those where impacts of Minor-Moderate or higher were identified for the Consented Development, as this is considered to capture any potential visual receptors which may experience an increased significant effect on visual amenity as a result of the Varied Development.

5.5.11. Some significant effects were identified in the 2018 EIAR to receptors including:

- Drumlemble;
- Glenbarr;
- Machrihanish;
- A83;
- Core Path C304;
- B843 and Core Path C085;
- Kintyre Way: Carradale to Campbeltown and Section of Core Path C088; and
- Core Path C086.

5.5.12. Some minor-moderate impacts were also identified for the following settlements and route receptors:

- Campbeltown;
- RAF Machrihanish;
- Stewarton;
- B842, including Core Path C084 and part of NCR7
- Kintyre Way: Southend to Machrihanish and Section of Core Path C090;
- Core Path C089;
- Core Paths C087, C447 & C448; and
- Core Path C083.

5.5.13. Outside of this, most effects identified within the visual assessment ranged between Negligible and Minor. Core Path C091, which was outside of the original study area, will

be included within the assessment of the Varied Development. A retrospective assessment will be undertaken for this route for the Consented Development to allow for comparison of potential effects.

Visualisations

- 5.5.14. The visual assessment will be supported by a series of photomontages and wireframes from the 11 VP locations noted in Table 5.4. Visualisations from each of the selected VPs will be prepared in accordance with best practice guidance⁷.

Night-time Assessment

- 5.5.15. Following consultation with NatureScot (SNH at the time), A&BC and ECU, an assessment of visible turbine lighting effects was scoped out of the 2018 assessment as the potential for significant effects was considered very unlikely on the basis that the lighting would be similar to that present within the existing operational site. However, due to the increased height of the Varied Development turbines, further consultation with Civil Aviation Authority (CAA) will be undertaken by the Applicant to establish the requirements for turbine lighting.
- 5.5.16. An assessment of the impacts of visible aviation lighting on landscape and visual receptors will be carried out in line with best practice guidance⁸ for the Varied Development. Night-time visualisations were previously prepared for Viewpoint 2: Glenbarr War Memorial and for Viewpoint 6: Machrihanish, and it is proposed that updated night-time visualisations are produced for these viewpoints, along with an updated ZTVs illustrating the theoretical visibility of the proposed lighting.

Cumulative Assessment

- 5.5.17. In line with NatureScot's guidance⁹ the assessment of cumulative effects of the Varied Development will consider other wind farms within a 60km radius including those which are operational, consented and those for which an application has been submitted but which are yet to be determined.
- 5.5.18. The LVIA for the Varied Development will include an update to the cumulative baseline assessed in 2018, including any changes in the status of the other wind farm developments within the study area. Table 5.5 below includes the updated list of cumulative sites within 60km. This is based on the Argyll and Bute Council Interactive

⁷ Scottish Natural Heritage (2017a). Visual Representation of Wind Farms, Guidance, Version 2.2, February 2017.

⁸ NatureScot (2024). Guidance on Aviation Lighting Impact Assessment. Available at: Guidance on Aviation Lighting Impact Assessment | NatureScot. Accessed June 2025

⁹ NatureScot (2021). Guidance – Assessing the cumulative landscape and visual impact of onshore energy developments. Available at: <https://www.nature.scot/doc/guidance-assessing-cumulative-landscape-and-visual-impact-onshore-wind-energy-developments>. Accessed: June 2025

Renewables Map¹⁰, as well as information available on the Energy Consents Unit (ECU) web portal and the respective planning portals of Argyll and Bute Council, North Ayrshire Council (NAC) and South Ayrshire Council (SAC). We ask A&BC, to advise of any wind developments in the area which are not included in the list below and which would need to be considered as part of the CLVIA. It is proposed that a final refined list for inclusion in the detailed cumulative assessment would be consulted on further with A&BC.

Table 5.5: Changes to the Cumulative Baseline since 2018 assessment

Site Name	
Operational/Under Construction Sites	
Allt Dearg	Freasdail
Ardrossan	Gigha
Ardrossan Extension	Gigha Extension
Auchadaduie	Glenegadale
Beinn an Tuirc (Phase 1)	Gartnagrenach
Beinn an Tuirc (Phase 2)	Hunterston
Beinn An Tuirc (Phase 3)	Luing
Blary Hill	Sorbie Farm
Cour	Srondoire
Deucheran Hill	
Consented Sites	
Altaveedan	Eascairt
Airigh	High Constellation
Armoy	Rowan
Clachaig Glen	
Application / Appeal Sites	

¹⁰ Argyll and Bute Council. Interactive Renewables Map. Available at: <https://argyll-bute.maps.arcgis.com/apps/webappviewer/index.html?id=fa5f97acc434ab7a1af1d280eb04568>. Accessed: June 2025

Breackerie	Killean
Cnoc Buidhe	West Torrisdale
Crosbie	Ardeer

5.6. Assessment Methodology

- 5.6.1. The LVIA for the Varied Development will be undertaken in accordance with best practice guidance, Guidelines for Landscape and Visual Impact Assessment (Third Edition)¹¹ ('GLVIA3'). This will separately address the potential effects of the Varied Development on the landscape resource and visual receptors within the agreed study area.
- 5.6.2. A ZTV will be used to inform the LVIA. For reference, the preliminary ZTV has been included in this Scoping Report (see Figure 5.1) This is based on the 16 turbine Varied Development layout, with turbines up to 200m to tip.
- 5.6.3. The LVIA will focus on those landscape and visual receptors where potential changes in effects would be most likely to result in additional or increased significant effects compared with those identified for the Consented Development. It will evaluate the sensitivity to change, magnitude and significance of effect for these receptors during operation of the Varied Development and will assume the implementation of any mitigation measures proposed. A retrospective assessment will be undertaken for receptors which were not included in the 2018 EIAR, which now fall within the expanded detailed study area, to allow for comparison between the Consented Development and Varied Development.
- 5.6.4. Potential effects will be presented as ratings of Negligible, Minor, Moderate and Major, taking into account sensitivity and magnitude ratings and on the basis of professional judgement. Where appropriate, interim ratings will be allocated (e.g. Minor to Moderate or Moderate to Major). Effects identified as being at a level of Moderate or greater are considered significant in accordance with the EIA Regulations.

5.7. Mitigation Measures

- 5.7.1. An iterative design process was undertaken for the Consented Development to reduce potential significant effects on the landscape and visual resource where possible. The Consented Development layout was shaped by landscape and visual considerations from an early stage, including site analysis, comparison of turbine scale and geometry, identification of potentially sensitive landscape and visual receptors and the review of local and national guidance documents at the time. Consultation was undertaken to discuss landscape and visual matters with A&BC and NatureScot (formerly SNH), and

¹¹ The Landscape Institute and Institute for Environmental Management and Assessment. (2013) *Guidelines for Landscape and Visual Impact Assessment (Third Edition)*

comments from consultees were considered in developing the layout design.

- 5.7.2. Further mitigation will be considered for the Varied Development where possible in light of the height increase. The potential for mitigation measures relating to visible aviation lighting will be explored in consultation with the CAA.

5.8. Summary and Conclusions

- 5.8.1. The LVIA for the Varied Development will separately address the potential effects on the landscape resource and visual receptors within the agreed study area, focusing on those landscape and visual receptors for which significant effects were previously identified for the Consented Development, or where there is considered to be potential for effects to increase to significant levels. This includes receptors for which a rating of Minor-Moderate was previously identified. The initial ZTV which has been run for the Varied Development does not indicate a substantial increase in the extent of theoretical visibility, although due to their increased height the turbines would appear more prominent within some areas.
- 5.8.2. For consistency it is proposed that the wider study area of 40km used for the 2018 EIAR is used for the assessment of the Varied Development. The detailed study area has been expanded to 20km to account for any potential increased influence of the larger scale turbines. These are considered to be the distances within which significant landscape or visual effects may be experienced.
- 5.8.3. The landscape assessment will focus on potential effects to LCTs within the detailed study area, where there is theoretical visibility of the Proposed Development. It will also consider potential effects to the West Kintyre Coast APQ, the Mull of Kintyre APQ, North Arran NSA and North Arran WLA.
- 5.8.4. Upon reviewing the findings of the 2018 EIAR 14 viewpoints have been identified for inclusion in the assessment of the Varied Development, for which visualisations will be prepared in accordance with best practice guidance to meet NatureScot standards. Due to the increased height of the turbines which will necessitate visible aviation lighting, an assessment of the associated effects on landscape and visual receptors will be carried out. This will be supported by night-time visualisations from two VPs; Glenbarr War Memorial (VP2) and Machrihanish (VP6).
- 5.8.5. A CLVIA will be included within the assessment, which will include any updates to the cumulative baseline assessed in 2018.

5.9. References

- 5.9.1. Landscape Institute and Institute of Environmental Management and Assessment (2013). Guidelines for Landscape and Visual Impact Assessment, 3rd edition.
- 5.9.2. NatureScot (2020 revised 2023). Assessing impacts on Wild Land Areas – technical

guidance. Available at: [Assessing impacts on Wild Land Areas - technical guidance | NatureScot](#). Accessed April 2025

- 5.9.3. NatureScot (2021). Guidance – Assessing the cumulative landscape and visual impact of onshore energy developments. Available at: <https://www.nature.scot/doc/guidance-assessing-cumulative-landscape-and-visual-impact-onshore-wind-energy-developments>. Accessed: April 2025
- 5.9.4. NatureScot (2024). Guidance on Aviation Lighting Impact Assessment. Available at: [Guidance on Aviation Lighting Impact Assessment | NatureScot](#). Accessed April 2025
- 5.9.5. NatureScot (2025). Special Landscape Qualities – Guidance on assessing effects. Available at: <https://www.nature.scot/doc/special-landscape-qualities-guidance-assessing-effects#special-landscape-qualities-slqs> Accessed: April 2025
- 5.9.6. Scottish Natural Heritage (2019). SNH National Landscape Character Assessment. Available at: <https://www.nature.scot/professional-advice/landscape/landscape-character-assessment/scottish-landscape-character-types-map-and-descriptions>. Accessed: March 2025
- 5.9.7. Scottish Natural Heritage (2010). The special qualities of the National Scenic Areas. Scottish Natural Heritage Commissioned Report No. 374. (iBids and Project no 648)
- 5.9.8. Scottish Natural Heritage (2017a). Visual Representation of Wind Farms, Guidance, Version 2.2, February 2017.
- 5.9.9. Wind turbine locations in planning applications in Argyll and Bute Council Area. Available at: <https://map-highland.opendata.arcgis.com/wind-turbines>. Accessed: May 2025

6. Ornithology

6.1. Consented Development EIAR Baseline

6.1.1. There are no statutory nature conservation designations with an ornithological interest within the Site. There are two Special Protection Area (SPAs) with 20 km:

- The Kintyre Goose Roosts SPA which is underpinned by Kintyre Goose Roosts Ramsar, Tangy Loch SSSI, Kintyre Goose Lochs SSSI and Rhunahaorine Point SSSI. It is designated for Greenland white-fronted goose and comprises a series of hill lochs (Loch Garasdale, Loch an Fhraoich, Loch Lussa, Tangy Loch & Black Loch) and an area of grassland and heath at Rhunahaorine Point on the Kintyre peninsula.
- The Arran Moors SPA which is underpinned by Arran Moors SSSI. This is designated for its hen harrier and breeding bird assemblage.

6.1.2. Tables 9.6 and 9.7 of the Consented Development's EIAR detail the designated sites located within 20km of the Proposed Development Site that have ornithological interests, with locations shown on Figure 9.1.

6.1.3. Ornithological surveys were undertaken to understand the existing bird species assemblage and flight activity, on and around the site. In addition to the baseline surveys undertaken for Tangy III (April 2012 to March 2014), further surveys were undertaken between September 2016 and November 2017 to support the application for the Consented Development.

6.1.4. Baseline surveys recorded a range of target species including barnacle goose, black grouse, common sandpiper, Greenland white-fronted goose, greylag goose, hen harrier, herring gull, merlin, osprey, oystercatcher, peregrine falcon, red-throated diver, short-eared owl, snipe, whooper swan and woodcock. Refer to Appendix 9.1 of the Consented Development EIAR for full details.

6.1.5. Each of these species was considered as part of the assessment however, based on the agreed assessment methodology, Greenland white-fronted goose was the only Important Ornithological Feature (IOF) identified at risk of potential significant effects that was taken forward into the Environmental Impact Assessment.

6.1.6. The EIAR for the Consented Development concluded that no significant effects were predicted at any stage of the project. During the construction phase, no significant impacts were anticipated from the displacement or disruption of breeding, wintering, or foraging birds. Similarly, the operational phase was not expected to result in significant effects from collision risks or displacement of nesting and foraging birds. The decommissioning phase was also predicted to have no significant effects. Additionally, the EIAR found no significant cumulative or in-combination effects.

- 6.1.7. Although no significant effects were predicted, given the conservation status of the Greenland white fronted goose population, mitigation measures were proposed in the EIAR for the winter period to ensure all reasonable measures are taken to minimise disturbance to commuting flights or roosting birds in the area. This included agreeing a schedule of construction work which has the potential to disturb the Greenland white fronted goose population with Argyll and Bute Council in consultation with NatureScot.

6.2. Consultation & Existing Planning Conditions.

- 6.2.1. A&BC did not object to the Consented Development's S36 application and recommended a condition be attached to prevent disturbance to Greenland white-fronted goose.
- 6.2.2. NatureScot also did not object to the Consented Development and stated the Consented Development "will not adversely affect the integrity" of the Kintyre Goose Roosts SPA. NatureScot also provided advice regarding the requirements for the Habitats Regulation Appraisal.
- 6.2.3. Similarly, the RSPB did not object to the application and, like the planning authority, recommended that suitable conditions be applied to prevent disturbance to Greenland white-fronted goose.
- 6.2.4. These recommendations translated into Condition 23 (Construction and Decommissioning Hours within 1km of Tangy Loch) which limits activity around the hours of dawn and dusk during the goose roosting season. The Applicant is proposing that this limitation also forms part of the mitigation for the Proposed Varied Development.

6.3. Issues scoped in / out

- 6.3.1. Due to the changes proposed to turbine geometry, it is proposed that updated collision risk modelling is **scoped in** for all IOFs.
- 6.3.2. The Consented Development's EIAR did not include an evaluation of lighting effects on ornithology, as no visible lighting was required for the Consented Development. However, the proposed increase in turbine height for the Varied Development is likely to necessitate aviation lighting in accordance with Civil Aviation Authority guidance. Following review of NatureScot's pre-application guidance for onshore wind farms¹², the Applicant considers that an evaluation of lighting effects on ornithology is **scoped in**. This is due to the site's proximity to the Kintyre Goose Roosts SPA meaning it meets Criteria Two of Annex 2 in NatureScot's guidance.
- 6.3.3. Assessment of displacement and disturbance impacts from construction activities will be **scoped out**. This is because: no previously significant impacts were predicted; the

¹² [General pre-application and scoping advice for onshore wind farms.pdf](#), NatureScot, Sept 2020.

proposed layout is not changing significantly; construction activities will not change significantly from the methodology presented and assessed as part of the Consented Development application; and the Applicant is committed to delivering added safeguards through implementation of approved mitigation.

6.4. Assessment Methodology

- 6.4.1. In line with guidance provided by NatureScot¹³ regarding changes to turbine tip heights (extract provided below in italics), it is proposed that updated collision risk modelling will use the existing baseline flight activity gathered between April 2012 to March 2014 and between September 2016 and November 2017 (as presented in Chapter 9 of the Consented Development's EIAR).
- 6.4.2. The assessment will also provide a review of any potential changes to the cumulative collision risk assessment (to that provided in the original assessment).

“Proposals to alter turbine dimensions

For section 36C proposals to alter (i.e. typically increase) turbine dimensions there are two key issues to consider – birds and landscape.

For birds, in the majority of cases where the number and location of turbines are not changing, all that will be needed is a re-working of the collision risk model, rather than new survey work. Revised collision risk calculations should be presented in the EIA report and, where appropriate, in combination with other wind farm developments. Seek specialist bird advice if there are any complications such as when existing flight data only includes flights between the upper and lower limits of the previously proposed risk window, or flight data has been collected in a way that lumps it together above and below the previously proposed risk window, or if there are changes to the number and location of turbines.

- 6.4.3. The updated Collision Risk Model will follow NatureScot's¹⁴ updated guidance on using an updated collision risk model to assess bird collision risk at onshore wind farms and will include a review / inclusion of any potential updates to published collision avoidance rates.
- 6.4.4. There is no detailed methodology available to assess possible effects of lighting on birds. As per NatureScot guidance, if the desk study suggests that high numbers of sensitive species are likely to be present when the lights are switched on, potential mitigation measures below will be explored in tandem with the landscape and visual assessment

¹³ [Guidance on dealing with proposals for the variation of section 36 wind farm consents | NatureScot](#), 2025 (last updated: 01/01/2024).

¹⁴ [Guidance on using an updated collision risk model to assess bird collision risk at onshore wind farms | NatureScot](#)

to reduce potential effects on ornithology.¹⁵

- 6.4.5. The potential requirement to update bird survey data for the proposed S36C variation application is being considered separately through ongoing discussions with NatureScot.

6.5. Mitigation Measures

- 6.5.1. The Applicant remains committed to all mitigation measures set out in the Consented Development's EIAR, despite the assessment identifying no significant effects. These measures would include limiting activity around dawn and dusk during the goose roosting season.

6.6. Summary and Conclusions

- 6.6.1. Chapter 9 of the Consented Development's EIAR assessed construction disturbance, displacement and collision risk and concluded that no significant effects were predicted and, following subsequent consultation, mitigations have been agreed to further prevent disturbance to Greenland white-fronted goose.
- 6.6.2. Due to changes proposed to turbine geometry (height and associated rotor diameter changes), the Proposed Varied Development may alter collision risk modelling and therefore the predicted impacts on key IOFs will be reviewed. An evaluation of lighting effects will also be completed.

¹⁵ Page 13, [General pre-application and scoping advice for onshore wind farms.pdf](#), NatureScot, Sept 2020.

7. Ecology and Nature Conservation

- 7.1.1. Chapter 10 of the Consented Development's EIA Report provides an Ecological Impact Assessment (EclA) and considers the potential impacts and their resulting effects on ecological features, such as designated nature conservation sites, habitats and protected species in line with best practice guidance.

7.2. EIAR Baseline

Designations

- 7.2.1. There are no statutory ecological designations present in the ecological study area. The following sites are located within 10 km of the nearest proposed turbine as shown on Figure 10.1: Designated Sites.

- Tangy Loch SSSI boundary is located less than 100 m to the south east of the closest turbine (although the loch itself is approximately 500 m to the south east of the nearest turbine) and is an important oligotrophic loch supporting slender naiad (*Najas flexilis*), a nationally rare aquatic plant.
- Woodland listed on the semi-natural woodland inventory (SNWI) is a non-statutory designated site and is located in the north of the ecological study area. However, this area of woodland is no longer semi-natural and has been replaced by coniferous plantation. No areas of ancient woodland occur in the ecological study area.
- Machrihanish Dunes SSSI is located over 2 km from the nearest turbine to the south-west of the proposed development and is important for its sand dunes. Due to its distance from the proposed development and the main A83 road acting as a barrier, this site was not considered further in the previous assessment and will also not be considered further for the Varied Development assessment.

Habitats

- 7.2.2. A full suite of ecology surveys were completed in the summer of 2013 for the 2014 EIAR, with an updated survey undertaken for the Consented Development application in January 2018 to confirm conditions had not changed.
- 7.2.3. The habitats in the ecological study area were found to be dominated by coniferous plantation, marshy grassland, improved grassland and wet modified bog. Two areas in the east comprise recently felled forest. The forest fire breaks consist of areas of wet and dry heath as well as marshy grassland and wet modified bog. Figure 10.2: Phase 1 Habitat Survey of the Consented Development's EIAR provides further detail.
- 7.2.4. No habitats of greater than local value were identified on site. Examples of peatland habitats that may be considered to have greater ecological value (such as M15, M16 and M19) are degraded and modified by afforestation and grazing. Potential Groundwater

Dependent Terrestrial Ecosystems (GWDTE), such as M23 *Juncus effuses/acutiflorus*-*Galium paulstre* and M15 *Trichophorum cespitosum*-*Erica tetralix* wet heath, were also identified. However, the EIAR stated these habitats were found to have been similarly altered or are only present because of previous development for Tangy I and Tangy II wind farms.

Protected species

7.2.5. Protected species surveys were undertaken in 2013 with a refresh completed in 2018. The surveys identified¹⁶:

- Three otter spraints on the Allt nan Creamh
- Two outlier badger setts: one with three active entrances, the other with a single active entrance approximately 50m to the south of the active sett
- Four bat species comprising common pipistrelle, soprano pipistrelle, Leisler's bat and Daubenton's bat. Overall bat activity within the site boundary was low, with the highest abundance recorded outwith the site boundary along the broadleaved woodland to the south and by Tangy Loch. Only two passes of Leisler's bat were recorded (one probable and one confirmed), with the remaining activity dominated by common species at low and medium risk of effects from wind farms at a population level.
- Possible pine marten scat in the coniferous plantation to the south of the Allt nan Creamh
- Four sightings of common lizard *Zootoca vivipara*, three within the coniferous plantation in the centre of the proposed development and one in the open habitat around the existing wind turbines in the south of the proposed development
- Palmate newt *Lissotriton helvetica* in pond 3
- Brown trout in Tangy Burn.
- Freshwater invertebrate assemblage showing good water quality at all six sites.

Conclusions of the Consented Development's EclA

7.2.6. While the Site includes areas of ecological interest, such as modified peatland, potential GWDTE, and proximity to designated sites, the layout and design of the Consented Development was informed by ecological constraints, with turbine locations and access

¹⁶ All records were from 2013 except for the potential pine marten scat identified in 2018.

routes selected to avoid the most sensitive habitats where possible.

- 7.2.7. The pre-mitigation assessment concluded that effects on habitats were not significant. Similarly, the EclA concluded that effects on protected species would not be significant, subject to the application of standard mitigation and good practice measures. These included pre-construction checks, sensitive timing of works, and adherence to species protection protocols during construction.
- 7.2.8. However, the EclA identified that, in the absence of mitigation, there was potential for significant adverse effects on Tangy Loch SSSI during both construction and operation. Following the implementation of mitigation, however, the residual effects on the SSSI were assessed as not significant.
- 7.2.9. The proposed mitigations included the implementation of a Construction Environmental Management Plan (CEMP) and a Habitat Management Plan (HMP), setting out measures to minimise ecological disturbance and deliver targeted habitat restoration and enhancement. With these measures in place, the residual ecological effects of the Consented Development were assessed as not significant.

7.3. Consultation Summary & Planning Conditions

- 7.3.1. NatureScot did not object to the Consented Development but noted it has hydrological connectivity with the Tangy Loch SSSI. It stated the development could progress with appropriate mitigation measures conditioned to implement the site-specific Watercourse and Aquatic Habitat Pollution Prevention Measures detailed in the EIAR as well as the implementation of a site-specific CEMP.
- 7.3.2. NatureScot also made a number of further recommendations including that proposals for forestry replanting be updated to avoid the locations of known badger setts and that detailed habitat and peat depth surveys be undertaken with a view to locating infrastructure where it will have least impact on deep peat and priority peatland habitat.
- 7.3.3. A&BC raised no concerns but recommended that Scottish Ministers attach conditions to secure mitigations including the CEMP, updated HMP, and appropriate mitigation to protect Tangy Loch SSSI from water quality impacts.
- 7.3.4. All ecological mitigation measures described in the Consented Development EIAR, and developed further through consultation during the Section 36 application process, have been secured through the following planning conditions:
- Condition 12 (CEMP) which included the Species Protection Plan to minimise risk of pollution and to protected mammals during construction.
 - Condition 13 (PMP) required a detailed PMP to address all areas to be disturbed by construction to ensure the conservation of peat resources and the protection of Tangy Loch SSSI

- Condition 20 (Water Quality and Fish Monitoring Programme) which required monitoring to begin 12 months prior to construction commencing and to finish 12 months after completion with the aim of ensure compliance with all mitigations proposed in the EIAR.
- Condition 21 (Habitat Management Plan) to secure the restoration of peatland.
- Condition 24 (Ecological Clerk of Works) to monitor ecological and hydrological commitments provided in the EIAR.
- Condition 26 (ECoW Works) required pre-construction surveys to establish presence/absence of otter, water vole, badger, and other protected mammal species.

7.3.5. Updated protected species surveys were completed in 2023 as part of the suite of pre-construction checks used to inform the project's CEMP and Species Protection Plans. The updates found:

- A new badger sett in the south-east of the Site;
- Four structures suitable to support roosting bats and several trees that contained potential roost features;
- No otter resting places within the Site, however the report stated otter are known to be using the small water courses that run throughout and they will use these for foraging and commuting purposes;
- habitat of suitability to support red squirrel and pine marten however no resting places were identified within the Site;
- No evidence of water vole, however suitable habitat was found to be present.

7.3.6. A&BC, in consultation with the relevant consultees, has reviewed and approved the documents submitted to discharge each of these conditions. All documents will be reviewed to determine their applicability considering the Varied Development assessment.

7.4. Ecological Effects Scoped In

7.4.1. The proposed variations would result in larger rotor diameter swept areas and changes to land take due to the realignment of certain access track sections and an increase in the size, and in some cases the orientation, of turbine hardstands to accommodate the proposed increase in turbine height.

7.4.2. Such changes have the potential to impact habitats and therefore an updated assessment to evaluate the potential effects of any changes in land take (whether increased or decreased) on peatland habitats and potential GWDTEs within the site

boundary will be **scoped in**. Updated habitat loss calculations for the Proposed Varied Development vs the Consented Development will be provided and the impact assessment updated accordingly following the standard CIEEM (2024) guidance for Ecological Impact Assessment.¹⁷

- 7.4.3. This assessment will be informed by: updated NVC survey data collected in 2024 to inform the revised HMP; and updated peat depth and peatland condition surveys, also completed in 2024 to inform the HMP and Peat Management Plan (PMP). Where the proposed design variations extend beyond the areas recently surveyed, further data will be collected and included within the updated ecological assessment.
- 7.4.4. Regarding protected species, updated walkover surveys to identify bat roosting features and badger setts will be **scoped in** and undertaken within the red line boundary to identify any new evidence of activity. These surveys will inform an updated baseline for the Proposed Varied Development EIA.
- 7.4.5. The potential for increased collision risk and barotrauma to bats associated with the larger rotor swept area will be **scoped in** and assessed in the Proposed Varied Development EIA, drawing on updated layout and turbine specifications. Turbine setback distances from woodland edges and watercourses will be reviewed against current guidance, and any required minor adjustments to layout or mitigation will be incorporated into the design to ensure compliance with NatureScot guidance¹⁸.
- 7.4.6. An assessment of the potential for impacts on badgers during construction and operation of the Proposed Varied Development will also be **scoped in**.

7.5. Ecological Effects Scoped Out

- 7.5.1. It is not anticipated that the variation would give rise to new or materially different effects on any other species identified within the 2013, 2018, or 2023 surveys. As such, an assessment of potential construction or operational impacts on those species, which include otter, palmate newt, and common lizard, are proposed to be **scoped out**. However standard mitigation and good practice measures would remain in place.
- 7.5.2. The construction and operational impacts of the Proposed Varied Development on Tangy Loch SSSI are anticipated to be no different from those associated with the Consented Development. Existing targeted mitigation measures will continue to be implemented to protect the SSSI and therefore it is considered appropriate to **scope out** further assessment of potential impacts on Tangy Loch SSSI.

¹⁷ [Guidelines for Ecological Impact Assessment \(EclA\) | CIEEM](#)

¹⁸ [Bats and onshore wind turbines - survey, assessment and mitigation | NatureScot](#)

7.6. Proposed Assessment Methodology

- 7.6.1. The impact assessment will be updated for the effects to be scoped in and will follow the standard CIEEM (2024) guidance for Ecological Impact Assessment.

7.7. Mitigation Measures

- 7.7.1. All ecological mitigations presented in the Consented Development's EIAR and in the subsequent documents submitted to satisfy planning conditions will be reviewed to determine their applicability.

7.8. Summary and Conclusions

- 7.8.1. Without mitigation, the Consented Development EIAR found potential for significant adverse effects on Tangy Loch SSSI during both construction and operation. However, with targeted mitigation implemented, residual effects on the SSSI were assessed as not significant.
- 7.8.2. The proposed variation includes taller turbines, larger rotor diameters and minor changes to land take due to access track realignments and enlarged turbine hardstands. These changes have the potential to affect habitats, and an updated assessment of habitat loss will therefore be **scoped in** to the Proposed Varied Development's EIA, informed by 2024 NVC, peat depth, and peat condition surveys, with further data collected where necessary.
- 7.8.3. Updated walkover surveys will also be undertaken to inform the baseline for bats and badgers. The EIA will assess potential increased collision risk and barotrauma to bats, with turbine setbacks reviewed in line with current NatureScot guidance. The layout has been designed to avoid a known badger sett identified in 2023, but potential impacts on badgers during construction and operation will be assessed, and mitigation proposed as required.

8. Geology, Soils, Peat

8.1. Consented Development EIAR Baseline

- 8.1.1. The assessment of potential effects on Geology, Soils, and Peat is contained within Chapter 11 of the Consented Development's EIAR.
- 8.1.2. There are no recorded geological designations within the Site or within 100 m of the boundary of the Consented Development. Although located outside of the boundary, the Tangy Burn watercourse, which is partially sourced within the development, flows through the Bellochauty and Tangy Gorges Geological Conservation Review Site. This is a tripartite site SSSI for quaternary geology and geomorphology, and the closest components are situated approximately 700 m south-west and 2.3 km north-west of the site boundary.
- 8.1.3. A combined peat and ground condition survey was carried out between September 2013 and June 2014 to support the Tangy III ES (2014). In March 2018, additional peat probing was undertaken to finalise the location of the temporary construction compound and access to turbines T8 and T10 to support the Tangy IV application (Consented Development).
- 8.1.4. The peat probing surveys identified that most of the proposed development site has peat less than 1.5 m deep. Localised areas with peat deeper than 1.5 m are mainly found in upland areas and in small pockets with shallow groundwater. The southern part of the site, which consists of improved grazing land, is mostly free of peat except for minor patches near wet flushes. The average peat depth across the site is 0.55 m, with the deepest recorded peat being about 3.6 m in a pocket on the north-eastern boundary. The mapped distribution of peat deposits across the study area is based on the interpolation of peat depth data collected during all phases of field survey, illustrated in Appendix 11.1 of the Consented Development EIAR.
- 8.1.5. The peat stability baseline was assessed based on the site walkover survey, supported by terrain mapping and desk study review of the geological setting (2018 EIAR Figures 11.2 & 11.3). Following this process, it was concluded there were no signs of active peat slide instability.
- 8.1.6. Published hydrogeological maps indicate that the site is mainly underlain by low-productivity, fracture-flow aquifers and generally impermeable bedrock with little shallow groundwater. Around Tangy Loch, there are some concealed aquifers with limited groundwater potential. Overall, groundwater flows are limited and occur mainly through fractures, suggesting that conditions suitable for supporting GWDTEs are minimal and confined to isolated areas.
- 8.1.7. The Consented Development's assessment considered a range of potential impacts, including harm to geological sites, groundwater quality, human and ecological health, peat loss, chemical attack on buried concrete, and infrastructure damage. Mitigation

measures, such as detailed ground investigations and best practice construction methods, were recommended through pre-construction investigations and the production of the CEMP.

- 8.1.8. With these measures in place, residual impacts from the Consented Development were expected to be low or negligible and therefore not significant under the EIA Regulations.

8.2. Consultation & Existing Planning Conditions

- 8.2.1. Neither SEPA nor A&BC raised any issues in relation to Geology, Soils, Peat. SEPA confirmed that the proposed Peat Management Plan (PMP) appeared to be sufficient and noted the PMP shows a small amount of spare capacity for reuse.

- 8.2.2. Two pre-commencement planning conditions were attached to secure mitigation and the Applicant submitted document to satisfy these conditions in 2024:

- Condition 12 (CEMP) required, per Clause J, the provision of a Geotechnical Risk Register with details of updated peat landslide mitigation measures, following SIW (Site Investigatory Works), to demonstrably reduce hazard rankings associated with all infrastructure.
- Condition 13 (PMP) required a detailed Peat Management Plan which would address all areas to be disturbed by construction to ensure the conservation of peat resources and the protection of Tangy Loch SSSI.

- 8.2.3. A&BC, in consultation with SEPA, has reviewed and approved all documents submitted to satisfy each of these conditions. All documents will be reviewed to determine their applicability considering the Varied Development assessment.

8.3. Effects Scoped In/Out

- 8.3.1. With mitigation measures in place, impacts on Geology, Soils, and Peat associated with the Consented Development were assessed as low or negligible.

- 8.3.2. While the proposed variations are anticipated to result in some change to peat excavation due to larger turbine foundations and hardstandings, design refinement has sought to keep disturbance to a minimum. Access tracks have been realigned and repositioned to avoid known areas of deeper peat, particularly around the middle of the site between turbines 14, 15, 16 and the associated spur roads and access tracks to those locations. Tracks have also been optimised towards turbines 11 and 12 to further minimise disturbance. Please see **Figure 1.1: S36C Scoping Report Proposed Varied Development Layout and Consented layout** for a comparison of these changes.

- 8.3.3. It is therefore proposed that detailed assessment of the proposed variations on geology, soils, and peat be **scoped out**, subject to the following targeted updates.

- 8.3.4. As described in Sections 7.2, 7.3, and 7.4, the project benefits from a comprehensive baseline of habitat and peat survey data collected during the Tangy III and Tangy IV assessments, supplemented by recent updates in response to planning conditions. Where the proposed design variations extend beyond previously surveyed areas, additional site-specific peat data will be gathered and used to inform the updated ecological assessment proposed for Chapter 7: Ecology and Nature Conservation.
- 8.3.5. The Applicant will draw on this baseline and any new data to update and adapt the mitigation measures secured through the Consented Development. This will include preparation of an updated PMP to reflect the anticipated change in peat excavation associated with the revised layout. Notably, the PMP submitted with the Consented Development application identified a small surplus of capacity for peat reuse. This existing capacity is expected to accommodate some of the additional peat volumes, thereby helping to minimise any further environmental impact arising from the Proposed Varied Development.
- 8.3.6. Ground conditions and geotechnical constraints will also be reviewed to inform any necessary updates to the CEMP and the Geotechnical Risk Register. Therefore, it is proposed that an updated PMP and CEMP is **scoped in** and will be submitted alongside the S36C application.

8.4. Assessment methodology

- 8.4.1. An updated PMP will be provided to demonstrate any comparative changes between the peat volume calculations presented for the Consented Development vs the Varied Development. This will be based on extensive existing peat depth data, supplemented, where required, with additional peat probing to be undertaken at locations where insufficient data exists.

8.5. Mitigation Measures

- 8.5.1. The Applicant would adhere to all mitigation previously agreed for the Consented Development and would request similar conditions to those attached to the S36 to be applied to any new S36C consent. This would ensure all residual effects on peat, peat stability, soil and underlying geology would still be negligible and remain not significant.

8.6. Summary and Conclusions

- 8.6.1. With the implementation of appropriate mitigation measures, all residual effects on peat, peat stability, soil and underlying geology would be negligible, i.e. not significant in terms of the EIA Regulations. This is expected to remain the same for the Varied Development, and therefore these effects will be scoped out.
- 8.6.2. Changes to peat volume calculations as a result of the increase in hardstand and turbine foundations and re-positioned infrastructure will be assessed via an updated PMP.

9. Surface Water

9.1. Consented Development EIAR Baseline

- 9.1.1. The assessment of potential effects on surface water quality, fisheries and recreation, flood risk, public water supplies and private water supplies is contained within Chapter 12 of the Consented Development's EIAR. This assessment was made with reference to the assessment provided in Chapter 12 of the Tangy III ES (2014).
- 9.1.2. Chapter 12 of Tangy III's EIAR (2014) found the site to be situated primarily within mature commercial forestry plantation and that it straddles the catchments of the Allt nan Creamh, Allt na Ceardaich, Allt a' Ghoirtein and Tangy Burn. The hydrological regime was deemed to have been altered because of historic and current land use, with the flow within forestry drainage channels likely to be seasonally dependent. It found the site was not at risk of flooding due to its elevation and distance from significant surface watercourses.
- 9.1.3. It found that the principal source of potential impacts during construction (which included the decommissioning of Tangy I and II) and operation would be changes to water quality from leakages and spillages, sediment entrained runoff, an increase in runoff from new/expanded hardstandings and tracks, and modification of surface and groundwater drainage and flows.
- 9.1.4. Tangy III's ES concluded that, following the application of suitable mitigation (such as provision of a site-specific CEMP) there would be no significant effects for all identified features.
- 9.1.5. The Consented Development's assessment also included a review of any changes in policy, legislation and guidance and baseline conditions made since Tangy III's EIAR, along with consideration of the significance of effects for the Consented Development.
- 9.1.6. This assessment concluded that, except for PWS source locations within 250 m of the consented development, there would be no potential for significant effects. A subsequent assessment found one PWS source location within the 250m groundwater protection buffer. This PWS ("PWS 2") was subject to further assessment to consider the potential impacts associated with Borrow Pit C.
- 9.1.7. Based on conceptual site modelling, it was concluded that depending on the hydrogeological connection between PWS2 and Borrow Pit C, there is the potential for either 'no effect' or 'adverse effects' on the quality and quantity of supply and that there could be the potential for effects of high magnitude.
- 9.1.8. In order to mitigate the potential for significant effects, the applicant proposed to agree contingency plans that would ensure security of supply to the two properties in the unlikely event that there is a significant effect on the quality or quantity of supply. Security of supply would be provided using either temporary or permanent replacement of

groundwater supply.

- 9.1.9. Following the application of these proposed mitigation measures, alongside the original mitigation measures proposed in Tangy III's EIAR, the Consented Development's effect on the supply of water to the residential receptors was considered not significant.

9.2. Consultation & Existing Planning Conditions

- 9.2.1. A&BC raised no objection to the S36 application subject to a condition being imposed to secure a method statement which detailed all mitigation measures to secure the quality, quantity and continuity of private water supplies.
- 9.2.2. SEPA initially objected to the application on the grounds there was a lack of information about of private water supplies and sought further information on the potential impacts of access track construction on PWS 7, 8, 9 and 11. SEPA raised no objection to the proposal on flood risk grounds.
- 9.2.3. SEPA's objection regarding PWS was withdrawn in December 2018 following confirmation that no excavations or modifications would take place at existing roads which intersect the 100m and 250m buffer around private water supplies 7, 8, 9 and 11.
- 9.2.4. Scottish Water did not object to the S36 application.
- 9.2.5. Conditions imposed through the S36 consent in relation surface water include requirement to provide a Construction Environmental Management Plan (CEMP) and Water Quality and Fish Monitoring Plan (WQFMP).
- 9.2.6. Documents to satisfy these conditions were approved in 2024 by A&BC and SEPA and it is expected that all control and mitigation measures proposed therein will translate to the Varied Development.

9.3. Issues scoped in / out

- 9.3.1. As all infrastructure changes proposed for the Varied Development are situated out with watercourse buffers, and there is no change to construction methodology or embedded mitigation, it is proposed that effects on surface water receptors are **scoped out**.
- 9.3.2. The Varied Development's EIAR will however provide a comparative review of the changes and include updated figures including detail on private water supplies.

9.4. Mitigation Measures

- 9.4.1. All previously applied buffers surrounding watercourses and waterbodies have been applied for the proposed Varied layout. All embedded mitigation, as set out in the EIAR for the Consented Development, Tangy III, and presented in documents submitted to

satisfy pre-commencement planning conditions will be implemented for the Varied Development.

9.5. Summary and Conclusions

- 9.5.1. Following the implementation of mitigation measures no significant impacts were identified for surface water for the Consented Development. This is expected to remain unchanged for the Varied Development and therefore the assessment of effects will be scoped out. The Varied Development EIAR will contain a chapter reflecting this and provide evidence in the form of updated figures as required to support this.

10. Cultural Heritage

- 10.1.1. The assessment of effects on cultural heritage was presented in Chapter 13 of the Tangy IV Wind Farm Environment Impact Assessment Report (EIAR) (2018).
- 10.1.2. There are no designated heritage assets (World Heritage Sites; Scheduled Monuments; Inventory Historic Battlefields; Inventory Gardens and Designed Landscapes; and Conservation Areas) in the Development Site.
- 10.1.3. Forty-six non-designated heritage assets were identified within the Development Site. Two heritage assets: Killocrew Cup Markings (NR63SE7) and Tangymoill Cup Marked Stone (NR62NE4) were recorded in the Non-Statutory Register (NSR) maintained by the West of Scotland Archaeology Service (WoSAS) as Category C sites, deemed to be of 'almost certain National Importance'; and further 19 assets (NR63SE6, NR62NE2 and 17 huts comprising NR62NE28) were recorded as Category V sites which are of 'probable National Importance'. The remaining 25 were defined in the WoSAS HER as being 'standard' non-designated heritage assets.
- 10.1.4. These non-designated heritage assets range in date from the prehistoric to the modern period. Assets of probable prehistoric date include cup marked stones, a burnt mound, and a possible cist. Fifteen of the non-designated assets are shielings of likely medieval to post-medieval date. A further five assets were recorded from historic mapping and relate to the sites of structures of likely post-medieval origin which are no longer extant (SSE EIA 2018).
- 10.1.5. No direct significant effects were predicted on known heritage assets within the Development Site during the construction phase of the Consented Development. Following the implementation of outlined mitigation measures, no residual direct effects were predicted on known and unknown heritage assets as a result of the construction of the Consented Development.
- 10.1.6. The 2018 EIAR identified 203 designated heritage assets and NSR assets within 10 km of the Development Site. Of those, 97 were judged to be potentially subject to changes in their settings and/or were located within the Zone of Theoretical Visibility (ZTV). These included:
- Forty-one Scheduled Monuments;
 - Fifty-three NSR assets of potential National Importance; and
 - Three Listed Buildings (one Category A Listed).
- 10.1.7. There are no world Heritage Sites, Inventory Gardens and Designed Landscapes, and Inventory Historic Battlefields within the 10 km of the Development Site boundary.
- 10.1.8. Potential operational effects resulting from impacts to the setting of 97 heritage assets

were assessed in the 2018 EIAR. Moderate operational effects (significant in EIA terms) were identified on two assets: Killocrew Cairn (Site 21- SM 3664) and Tangy Loch Fortified Dwelling (Site 27- SM 3180). No additional cumulative effects were predicted and the residual effects were the same as the predicted operational effect.

10.1.9. The heritage assessment confirmed that no direct impacts would arise within the Development Site, as turbine footprints would be reused. Indirect effects on designated assets were considered only if the assets lay within the finalised Zone of Theoretical Visibility (ZTV); 100 assets outside the ZTV were excluded unless key views warranted inclusion. Decommissioning impacts were scoped out due to their limited nature, though the eventual removal of the wind farm was considered in assessing long-term effects. Non-designated asset settings were only assessed if they lay within the ZTV and were requested at scoping.

10.2. Consultation and Existing Planning Conditions

10.2.1. Following submission of the original application, consultation responses were received from Historic Environment Scotland (HES), Argyll and Bute Council and the Energy Consent Unit (ECU).

10.2.2. In November 2018, Historic Environment Scotland (HES) advised that the setting assessments for Tangy Loch Fortified Dwelling (SM3180) and Killocrew Cairn (SM3664) were inadequate, as they lacked analysis of the monuments' setting integrity. While the effects were considered significant under Environmental Impact Assessment (EIA) regulations, HES concluded they did not justify an objection.

10.2.3. HES considered the proposed mitigation—surveying archaeological features in the site's north, such as shielings, hut circles, and a cup-marked stone—to be irrelevant to the predicted impact on the setting. Instead, they recommended relocating Turbine 5 to reduce visual effects on Tangy Loch, and reconsidering borrow pits near Turbines 4 and 5.

10.2.4. In June 2019, Argyll and Bute Council endorsed these recommendations, advising the Energy Consents Unit to consider relocating Turbine 5 and associated borrow pits. The Council also expected to be consulted on final conditions, including layout, turbine height, and further mitigation.

10.2.5. The ECU Decision Letter (20 December 2019) outlined conditions attached to the planning permission for the Consented Development. In assessing the Determining Issues, it concluded that relocating Turbine 5 was not necessary, as this was unlikely to result in any discernible change to the overall impact on the setting of the Tangy Loch Fortified Dwelling Scheduled Monument.

10.3. Issues scoped in / out

10.3.1. The Development Site boundary remains unchanged. However, the Varied Development includes proposed changes to the layout of infrastructure within the Development Site,

including limited changes to the locations of turbines, tracks, substation location, permanent met mast locations, and hardstanding sizes.

- 10.3.2. The 2018 EIAR found that the Consented Development would not cause direct physical effects on cultural heritage assets within the Development Site. However, due to proposed changes in infrastructure locations, potential direct physical effects on both known and unknown heritage assets in those areas where changes apply will be **scoped in**.
- 10.3.3. The Varied Development will seek to increase turbine tip height from 149.9 m to up to 200 m, which may increase effects on the setting of cultural heritage assets, particularly those located in close proximity to the Development Site.
- 10.3.4. Assessment of the effect of the Varied Development on the setting of Scheduled Monuments and Conservation Areas within 10 km of the Development Site boundary (Figure 10.1) will be **scoped in**.
- 10.3.5. Assessment of the effect of the Varied Development on the setting of Category A and B Listed Buildings with a non-localised setting within 10 km of the Development Site boundary (Figure 10.1) will be **scoped in**.
- 10.3.6. Assessment of the effects of the Varied Development on the settings of listed buildings within towns and villages will be **scoped out**. Their settings are localised within the immediate built environment and are considered unlikely to be sensitive to change resultant from the operation of the Varied Development.
- 10.3.7. Assessment of the effect of the Varied Development on the setting of Category C Listed Buildings beyond 5 km of the Development Site will be **scoped out**, as these assets are unlikely to be affected by changes in the wider landscape. None have been identified by preliminary assessment as having settings that are considered sensitive to change as a result of the operation of the Varied Development.
- 10.3.8. Assessment of the effect of the Varied Development on the setting of World Heritage Sites, Inventory Garden and Designed Landscapes, and Inventory Historic Battlefields will be **scoped out**. There are no assets with those designations within 10 km of the Varied Development.
- 10.3.9. Assessment of the effect of the Varied Development on the settings of designated heritage assets more than 10 km from the Development Site boundary will be **scoped out** unless initial analysis of ZTV or consultation with statutory consultees identifies any as having settings sensitive to changes from the Varied Development.
- 10.3.10. Assessment of the potential for effects upon the settings of non- designated heritage assets will be **scoped out** unless these assets both fell within the ZTV and their assessment is specifically requested by the local planning authority or other consultees at scoping.

10.3.11. Assessment of the cumulative effects on the setting of designated heritage assets during operation of the Varied Development in combination with other developments in the surrounding area will be **scoped in**.

10.3.12. Assessment of effects arising from the decommissioning of the Varied Development will be **scoped out** as any such effects are likely to be the same as those assessed and mitigated at the Construction Phase.

10.3.13. The following visualisations were presented in the 2018 EIAR to inform the setting assessment:

- Tangy Loch Fortified Dwelling (Location 1). Viewpoint Visualisation, Figure 13.3.1.1-13.3.1.4
- Tangy Loch Fortified Dwelling (Location 2). Viewpoint Visualisation, Figure 13.3.2.1-13.3.2.3
- Killocrew Cairn. Viewpoint Visualisation, Figure 13.3.3.1-13.3.3.4
- Killocrew Cairn Cup Marked Stone. Viewpoint Visualisation, Figure 13.3.4.1-13.3.4.3
- Killocrew Fort. Viewpoint Visualisation, Figure 13.3.5.1-13.3.5.3
- Dun Fhinn Dun. Viewpoint Visualisation, Figure 13.3.6.1-13.3.6.2a-b
- Putechantuy Dun. Viewpoint Visualisation, Figure 13.3.7.2a-c – 13.3.7.3
- Bellochantuy Dun. Viewpoint Visualisation, Figure 13.3.8.1-13.3.8.3
- Port a`Chasteil. Viewpoint Visualisation, Figure 13.3.9.1-13.3.9.2a-b
- Port nam Marbh dun. Viewpoint Visualisation, Figure 13.3.10.1-13.3.10.2
- Westport fort. Viewpoint Visualisation, Figure 13.3.11.1-13.3.11.2
- Largiemore fort. Viewpoint Visualisation, Figure 13.3.12.1-13.3.12.3
- Skeroblin Cairn. Viewpoint Visualisation, Figure 13.3.13.1-13.3.13.3
- Ranachan Hill fort. Viewpoint Visualisation, Figure 13.3.14.1-13.3.14.3
- Killocrew cup markings. Viewpoint Visualisation, Figure 13.3.15.1-13.3.15.3

10.3.14. These visualisations will be updated to reflect the increased turbine tip height of the

Varied Development. The requirement for any additional visualisations will be determined in consultation with HES at the post-scoping stage.

10.4. Assessment Methodology

10.4.1. The cultural heritage assessment will be carried out in accordance with the following guidance with reference to relevant legislation and policy:

- SNH and HES Environmental Impact Assessment Handbook (SNH & HES, 2018);
- Standard and Guidance for Historic Environment Desk-Based Assessment, Chartered Institute for Archaeologists (ClfA, 2014, updated 2020);
- Principles of Cultural Heritage Impact Assessment in the UK (IEMA 2020);
- Designation Policy and Selection Guidance (HES, 2019);
- Managing Change in the Historic Environment: Setting (HES, 2016, updated 2020);
- Planning Advice Note 1/2013: Environmental Impact Assessment (PAN 1/2013); and
- Planning Advice Note 2/2011: Planning and Archaeology (PAN 2/2011).

10.4.2. In order to establish whether the increase in tip height (149.5 m to up to 200 m) is likely to result in any effects on the setting of heritage assets within 10 km of the Development Site boundary, the following assessment will be undertaken:

- A review of the blade tip height ZTV for the proposed increase tip height; with heritage assets overlain to establish which assets will now have visibility due to the tip height increase.
- Any heritage assets not previously within the ZTV will be identified and assessed to determine the likely predicted effects on setting.
- Designated assets located beyond 10 km of the Development Site boundary but within the ZTV of one or more proposed turbines will also be appraised to determine whether they would need to be included as part of the setting assessment.

10.4.3. Where necessary and where access permits, site visits to key heritage assets will be conducted. These visits will establish current baseline conditions in areas where the Varied Development differs from the Consented Development, assess the sensitivity of asset settings, and evaluate the predicted effects of the proposed increase in turbine tip height.

10.4.4. The assessment will be carried out in accordance with the guidance set out in the SNH

and HES EIA Handbook (SNH & HES, 2018) and Historic Environment Scotland's guidance document 'Managing Change in the Historic Environment: Setting (HES, 2016). This will ensure the assessment considers the context and setting of the identified heritage assets, as well as the potential change in cultural significance.

10.4.5. The assessment will take into account the value/sensitivity of the heritage assets, their settings, and the magnitudes of the predicted impacts.

Criteria for Assigning Sensitivity to Heritage Assets

10.4.6. Cultural heritage assets are assigned value/importance through the designation process. Designation ensures that sites and places are recognised and protected by law through the planning system and other regulatory processes. The level of protection and how a site or place is managed varies depending on the type of designation and the laws and policies that apply to it (HES, 2019).

10.4.7. Table 10.1 summarises the relative sensitivity of heritage assets (including their settings) based on the guidance set out in the SNH/HES EIA Handbook (version 5, 2018).

Table 10.1: Sensitivity of Heritage Assets

Sensitivity of Asset	Definition / Criteria
High	Assets valued at an international or national level, including: • World Heritage Sites • Scheduled Monuments • Category A Listed Buildings • Inventory Gardens and Designed Landscapes • Inventory Historic Battlefields • Non-designated assets that meet the relevant criteria for designation (including sites recorded in HERs as non-statutory register (NSR) sites of presumed national importance)
Medium	• Assets valued at a regional level, including: • Archaeological sites and areas that have regional value (contributing to the aims of regional research frameworks) • Category B Listed Buildings • Conservation Areas
Low	• Assets valued at a local level, including: • Archaeological sites that have local heritage value • Category C listed buildings • Unlisted historic buildings and townscapes with local (vernacular) characteristics

Negligible	- Assets of little or no intrinsic heritage value, including: - Artefact find-spots (where the artefacts are no longer in situ and where their provenance is uncertain) - Poorly preserved examples of particular types of features (e.g. quarries and gravel pits, dilapidated sheepfolds, etc)
------------	--

Criteria for Assessing the Magnitude of Impact

10.4.8. The magnitude of impact (adverse or beneficial) will be assessed in the categories, high, medium, low, and negligible and described in Table 10.2.

Table 10.2: Magnitude of Impact

Magnitude of Impact	Criteria	
	Adverse	Beneficial
High	Changes to the fabric or setting of a heritage asset resulting in the complete or near complete loss of the asset's cultural significance, such that it may no longer be considered a heritage asset	Preservation of a heritage asset in situ where it would otherwise be completely lost or almost completely lost in the do-nothing scenario.
Medium	Changes to the elements of the fabric or setting of a heritage asset that contribute to its cultural significance such that this quality is substantially altered.	Changes to key elements of a heritage asset's fabric or setting, resulting in its cultural significance being preserved where this would otherwise be lost, or restored.
Low	Changes to the elements of the fabric or setting of a heritage asset that contribute to its cultural significance such that this quality is slightly altered.	Changes that result in elements of a heritage asset's fabric or setting that detract from its cultural significance being removed.
Negligible	Changes to fabric or setting of a heritage asset that leave its cultural significance unchanged	

Significance of Effect

10.4.9. The sensitivity of the asset (Table 10.1) and the magnitude of the predicted impact (Table 10.2) will be used to inform an assessment of the significance of the effect on setting, summarised using the formula set out in the matrix in Table 10.3. The matrix employs a

graduated scale of significance (from negligible to major effects) and where two outcomes are possible through application of the matrix, professional judgement supported by reasoned judgement, will be used to determine the level of significance.

Table 10.3: Significance of Effects

Magnitude of Impact	Sensitivity of Asset			
	High	Medium	Low	Negligible
High	Major	Major / Moderate	Moderate / Minor	Minor / Negligible
Medium	Major / Moderate	Moderate	Moderate / Minor	Minor / Negligible
Low	Moderate / Minor	Moderate / Minor	Minor	Negligible
Negligible	Minor / Negligible	Minor / Negligible	Negligible	Negligible

10.4.10. Major and Moderate effects are considered to be ‘significant’ in the context of the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (EIA Regulations). Minor and Negligible effects are considered to be ‘not significant.’

10.5. Mitigation Measures

10.5.1. As set out in Section 13.6: Mitigation Measures of the 2018 EIAR for the Consented Development, the proposed wind farm was designed as far as possible to avoid direct effects on the identified heritage assets within the Development Site boundary. Although no significant direct physical effects were predicted (and consequently no mitigation was required), it was recognised that there is a potential for inadvertent damage to both known and unknown archaeological remains.

10.5.2. The potential for inadvertent damage to both known and unknown archaeological remains was addressed in section 13.6.1: Additional Good Practice of the 2018 EIAR for the Consented Development. The forest clearance required for the construction of the Consented Development has the potential to impact upon several known heritage assets located in close proximity of Turbine 9. It has been proposed that all visible remains are photographed, surveyed, and fenced off under archaeological supervision, in advance of forestry operations. Additionally, forestry operations in the vicinity of these known assets will be undertaken in a controlled fashion, with relevant risk assessments, monitored by the Ecological Clerk of Works (ECoW) and an archaeologist to ensure that known assets are not damaged.

10.5.3. Section 13.6.2 of the 2018 EIAR addressed the mitigation measures for the southern part of the Development Site. This area was judged to have a medium potential for previously undiscovered archaeological remains which could be impacted adversely during the construction phase. It has been proposed that an archaeological watching brief would be maintained on a representative proportion of ground-breaking works associated with the construction of the Consented Development. Any remains encountered would either be preserved in situ or would be recorded and removed as appropriate. Details of mitigation would be agreed in consultation with WoSAS and set out in a Written Scheme of Investigation (WSI).

10.5.4. The Varied Development has undergone an iterative design process, resulting in changes that may have both direct and indirect (setting) effects on cultural heritage assets within the Development Site boundary. Accordingly, a revised mitigation strategy, drawing on the findings of the 2018 EIAR and the current design iteration would be developed for the Varied Development.

10.5.5. Residual effects will be assessed taking into account the effectiveness of proposed mitigation measures.

10.6. Summary and Conclusions

10.6.1. The 2018 EIAR documented 46 heritage assets within the Development Site boundary, including two of 'almost certain National Importance' (C) as recorded on the NSR maintained by WoSAS; and 19 assets of 'probable National Importance (V) as recorded on the NSR maintained by WoSAS. The remaining 25 were defined in the WoSAS HER as being 'standard' non-designated heritage assets. These assets range in date from the prehistoric to the modern period.

10.6.2. Following the implementation of outlined mitigation measures, no residual direct (physical) effects were predicted by the 2018 EIAR on known and unknown heritage assets as a result of the construction of Consented Development. The Varied Development includes limited proposed changes to infrastructure locations from those assessed in the 2018 EIAR for the Consented Development, which may result in additional predicted direct (physical) effects on cultural heritage assets.

10.6.3. It is predicted that the Varied Development's increase in turbine tip height (up to 200 m) could result in an increase in any effects on the setting of cultural heritage assets within the surrounding landscape.

10.6.4. The following potential effects on cultural heritage associated with construction and/or operation of the Varied Development will be scoped in for the cultural heritage assessment:

- Direct and indirect effects on known non-designated cultural heritage sites or features within the Development Site boundary, as well as effects on unknown, buried archaeology.

- Effects on the settings of heritage assets within 10 km of the outermost turbines, resulting from intervisibility between the assets and the Varied Development, based on detailed analysis of ZTV mapping.
- Cumulative effects on the settings of heritage assets with other existing or proposed developments.

10.6.5. The following potential effects on cultural heritage associated with construction and/or operation of the Varied Development will be **scoped out** for the cultural heritage assessment:

- Effects on the settings of heritage assets beyond 10 km of the Varied Development will be scoped out, with the exception of those considered to have sensitive settings that are revealed through analysis of the ZTV and/or consultations with statutory consultees.
- Effects on the settings of Category C Listed Buildings beyond 5 km of the Development Site.
- Effects on the settings of Listed Buildings within towns and villages, or characterised by otherwise localised settings.

10.7. References

- 10.7.1. Chartered Institute for Archaeologists (2014, updated 2020) 'Standard and guidance for historic environment desk-based assessment', London, Chartered Institute for Archaeologists. Available at: <https://www.archaeologists.net/sites/default/files/2023-11/CIfA-SandG-DBA-2020.pdf>
- 10.7.2. Historic Environment Scotland (2016, updated 2020) 'Managing Change in the Historic Environment – Setting', Edinburgh. Available at: <https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=80b7c0a0-584b-4625-b1fd-a60b009c2549>
- 10.7.3. Historic Environment Scotland (2019) Designation Policy and Selection Guidance, Edinburgh. Available at: <https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=8d8bbaeb-ce5a-46c1-a558-aa2500ff7d3b>
- 10.7.4. IEMA (2021) 'Principles of Cultural Heritage Impact assessment in the UK', Lincoln, IEMA, IHBC & CIfA. Available at: <https://www.archaeologists.net/publications/principles-cultural-heritage-impact-assessment-uk-2021>
- 10.7.5. Scottish Government (2011) Planning Advice Note (PAN) 2/2011: Planning and Archaeology, Edinburgh. Available at: <https://www.gov.scot/publications/pan-2-2011->

[planning-archaeology/](#)

- 10.7.6. Scottish Government (2013) Planning Advice Note (PAN) 1/2013: Environmental Impact Assessment. Edinburgh. Available at: <https://www.gov.scot/publications/planning-advice-note-1-2013-environmental-impact-assessment/>
- 10.7.7. SNH & Historic Environment Scotland (2018) 'Environmental Impact Assessment Handbook'. Available at: <https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=6ed33b65-9df1-4a2f-acbb-a8e800a592c0>
- 10.7.8. SSE Renewables (2018) Tangy IV Wind Farm. Volume 2: Main Report. Section 36 Environmental Impact Assessment Report.

11. Noise

11.1. Consented Development EIAR Baseline

- 11.1.1. A noise assessment was undertaken to support the application for the Consented Development, covering the construction, operational, and decommissioning phases.
- 11.1.2. The original desk-based study of construction noise involved calculating anticipated noise levels based on typical construction methods and comparing them with existing baseline conditions and relevant guideline criteria.
- 11.1.3. Although likely construction noise levels were found to be within guideline criteria for daytime, various mitigation methods were proposed to reduce the effects of construction noise, the most important of these being the restriction of working to between the hours of 0700 to 1900 Monday to Friday and 0700 to 1300 on Saturdays, along with application of best practice means of controlling noise on site. It was concluded that noise generated from construction activities, or related to construction stage traffic movement, would not have a significant effect.
- 11.1.4. Decommissioning noise was assumed to be likely to result in less noise than during construction and was therefore also assessed as not significant.
- 11.1.5. Operational noise effects were assessed by measuring existing baseline background noise levels at a number of properties in the area, deriving noise limits from the results of these measurements, and comparing predicted operational noise levels to these limit values to demonstrate that turbines of the type and size proposed could be operated within the limits. It was concluded that operational noise would be within levels deemed by national guidance to be acceptable for wind energy developments and therefore would be not significant under the terms of the EIA Regulations.

11.2. Consultation & Existing Planning Conditions

- 11.2.1. A&BC raised no objection to the S36 application subject to a condition being imposed to minimise the adverse impact of noise generated by the operations on the local community. A&BC sought a condition to restrict the working methods and operating times for decommissioning of existing Tangy I and Tangy II wind farm. This resulted in Condition 34 (Noise) and Condition 12 (CEMP) being obliged on the Consented Development's consent.
- 11.2.2. Condition 34 sets out noise limits to control noise immission levels at dwellings specified within the condition. It also requires the Applicant to log wind speed, wind direction and power generation data, and to provide A&BC with a list of consultants who can undertake compliance monitoring ahead of any electricity being generated by the Consented Development.
- 11.2.3. Condition 12 (CEMP) required, prior to any development commencing, details of the

methods to be adopted to reduce the effects of noise occurring during the construction period to the lowest practicable level in accordance with BS5228.

- 11.2.4. The documents submitted to discharge Condition 12 were approved in 2024 by A&BC, SEPA, and NatureScot. It is anticipated that all control and mitigation measures set out in those approved documents will continue to apply to the Varied Development.
- 11.2.5. No documents were submitted in relation to Condition 34 partly because it is an operational compliance condition, meaning it does not require the submission or approval of further documentation, and also because the Consented Development did not reach the stage of generating electricity.

11.3. The Proposed Varied Development

- 11.3.1. As there will be no significant change to the construction locations, methods or numbers of plant and vehicles required, there is unlikely to be a significant change in the effects of construction or decommissioning noise and therefore it is proposed that these elements are scoped out of the EIA.
- 11.3.2. It is proposed to limit the scope of noise assessment within the EIA to an updated assessment of operational noise effects.
- 11.3.3. The Proposed Varied Development includes a change in the hub height of the proposed turbines. Baseline background noise levels for wind farms are expressed in relation to a standardised 10m wind speed, which is derived from the wind speed at hub height. Therefore, there is potential for the relationship between wind speed and background noise level to change as a result of the proposed variation.
- 11.3.4. It is proposed that the assessment of operational noise will include a reanalysis of baseline noise levels to account for the proposed increase in turbine hub height. This will result in updated noise limits, based on the reanalysed baseline noise levels.
- 11.3.5. There is also potential for the range of turbine models that would be suitable for installation to have changed since the original consent, due to changes in both market availability and proposed turbine dimensions. Therefore, an updated, worst-case turbine model will be identified from the available options and considered as the candidate turbine within the assessment.
- 11.3.6. Any relevant changes to the cumulative scenario will also be accounted for in the updated assessment by making allowance in the site-specific noise limits for the effects of any application, consented or operational wind farms with the potential to result in significant cumulative operational noise effects together with the Proposed Varied Development.

12. Access, Traffic and Transport

12.1. Consented Development EIAR Baseline

12.1.1. The Consented Development's assessment of potential effects on access, traffic and transport is contained within Chapter 15 of Tangy IV's EIAR.

12.1.2. The Proposed Varied Development will use the same transport and access routes as the Consented Development. Wind turbine components will be delivered from Campbeltown Harbour via the Abnormal Load Route (ALR) as indicated on Figure 15.1 of the Consented Development EIAR. Other materials are likely to be delivered by heavy goods vehicle (HGV), with the majority of deliveries approaching the site from the north via the A83 although some may also originate from the south.

12.1.3. Baseline traffic flow conditions were established by three automatic traffic counts conducted during May 2018. Projected baseline traffic flows for the expected year of construction (2020) were also calculated. The anticipated traffic generated during the peak of construction was then estimated and compared to the measured baseline. In accordance with The Institute of Environmental Assessment Guidelines, the percentage change in overall traffic flow or HGV traffic flow compared with baseline was compared against an upper 30% threshold, and a lower 10% threshold in areas of high sensitivity. Areas where the predicted change exceeded these thresholds were considered in detail.

12.1.4. Three locations were identified where the increase in overall traffic, or HGV traffic, was predicted to exceed the relevant threshold:

1. The unnamed road between the A83 and the site entrance: Major significant effects were predicted to occur in relation to traffic generation and in relation to driver delay.
2. Glenbarr Primary School: Moderate significant effects in relation to pedestrian amenity.
3. Rhunahaorine Primary School: Moderate significant effects in relation to pedestrian amenity.

12.1.5. In relation to the identified areas of significant effects, mitigation measures were proposed by way of a Traffic Management Plan (TMP).

12.1.6. The Consented Development EIAR concluded that, following implementation of mitigation, the significance of the identified effects will be reduced to low and not significant. All other effects were predicted to be negligible and not significant.

12.2. Consultation & Existing Planning Conditions

12.2.1. Transport Scotland, as advisors to the Scottish Government on potential traffic and

transport impacts, did not object to the Consented Development. It requested a condition to prevent movement of abnormal loads on trunk roads without prior approval of route plans indicating accommodation measures including the removal of street furniture, junction widening, and traffic management. There was also a request to require the use of a recognised “QA traffic management consultant” in the event additional signage or temporary traffic control measures were deemed necessary.

12.2.2. Similarly, A&BC did not object to the Consented Development and recommended conditions for traffic management as required by Transport Scotland.

12.2.3. Condition 15 (Traffic Management Plan) was secured to ensure mitigations would be implemented during the construction phase. In the interests of road safety, Condition 16 (Road Improvement Scheme) was also included which required further detail about the provision of new passing places, the improvement of existing passing places, and the location of temporary carriageway widening and reinstatement measures.

12.2.4. Documents seeking discharge of Condition 15 (Traffic Management Plan) have been approved by Transport Scotland but are awaiting approval by A&BC. Condition 16 is also awaiting formal discharge.

12.2.5. The subsequent S36C application will set out how the Applicant proposes to modify those conditions to address any additional impacts resulting from the Proposed Varied Development.

12.3. Issues scoped in / out

12.3.1. The Proposed Varied Development will utilise the same delivery routes, access points, and general construction approach as the Consented Development which found, following implementation of mitigation, effects would be low and not significant. All other effects were predicted to be negligible and not significant.

12.3.2. The increased turbine tip height will require more tower sections per turbine - rising from approximately three to up to six sections per tower. This will result in a net increase of approximately 48 AIL movements compared to the Consented Development.

12.3.3. Initial swept path analysis has been carried out and the Applicant is confident the larger turbine blades can be delivered via the consented ALR. However, given the up to 50m increase in height, an updated assessment of the delivery route will be **scoped in** to the updated Varied EIAR. This will demonstrate the larger turbines can negotiate the selected route and that their transportation will not have any detrimental effect on structures within the trunk road route path.

12.3.4. The additional AIL movements will not increase the daily rate of deliveries but are predicted instead to modestly extend the turbine delivery programme. The nature of the local and strategic road network is such that no additional receptors would be affected and no changes to the conclusions of the previous assessments are anticipated. The previously identified mitigation and route management measures advised in the TMP

would remain effective, although they will be reviewed and updated to ensure this.

- 12.3.5. In terms of general construction traffic, the original assessment identified an average of 30 HGV and 59 LGV movements per day during peak construction. While the proposed turbines and supporting infrastructure (e.g. hardstands) will be marginally larger, efforts to optimise deliveries (such as sourcing aggregate on site) are expected to broadly offset any potential increases in construction traffic. As such, overall vehicle numbers are anticipated to remain in line with the original EIAR assumptions.
- 12.3.6. A screening assessment, undertaken in accordance with the Institute of Environmental Management and Assessment (IEMA) Guidelines entitled Environmental Assessment of Traffic and Movement (July 2023), will be completed to support the view that any increased traffic will not result in significant impacts.
- 12.3.7. This assessment will be based on updated base traffic data from Traffic Scotland's National Traffic Data System. In addition, National Road Traffic Forecast (NRTF) Low Traffic Growth assumptions will be applied to provide a common future year baseline to coincide with the expected construction traffic peak.
- 12.3.8. A revised TMP will be submitted alongside the application to reflect the updated turbine specification and delivery programme, but no changes are proposed to the delivery routes or access strategy. On this basis, and considering that the anticipated change in construction and AIL traffic does not materially alter the nature or significance of effects previously assessed, it is considered that further detailed assessment of traffic and transport is not required for the Proposed Varied Development's EIA.

13. Land Use, Socio-economics, and recreation

13.1. Consented Development EIAR Baseline

13.1.1. The Consented Development's assessment of potential effects on land use, socio-economics and recreation is contained within Chapter 16 of Tangy IV's EIAR. Overall it found there would be minor effects associated with land use during construction, moderate, minor and negligible benefits in the economy, and negligible or minor (beneficial) effects on tourism and recreation.

13.1.2. The land within the site application boundary is predominantly managed commercial forest with areas of agricultural grazing land. The southern section of the site is already used for wind power generation (Tangy I and II Wind Farm), with 22 operational turbines.

13.1.3. The coniferous plantation woodland on the site (270.75ha) will be felled to enable construction, with replanting to a keyhole design following the construction phase. The Consented Development's EIAR stated the Consented Development would alter the existing land use, with some permanent (approximately 13.74 ha) and some additional temporary (15.98 ha) land take to accommodate the turbines, associated structures and access tracks. However, no significant effects were predicted.

13.1.4. Regarding socioeconomics, the Consented Development's EIAR stated that renewable energy brings opportunities for economic development within Argyll and Bute and that this is particularly important for Campbeltown. The Consented Development was expected to deliver:

- Up to £7.5 million in Gross Value Added (GVA) and support 63 job years in Argyll and Bute during its construction. This translated into £36.1 million GVA and 298.2 job years across Scotland.¹⁹
- Operationally, it would result in £1.78 million in annual spending, supporting up to 13 jobs locally, and £4.52 million and 37 jobs across Scotland.

13.1.5. The Consented Development's EIAR concluded the potential for direct economic benefit and induced employment creation was expected to create moderate and significant beneficial effects at a local scale in Kintyre.

13.1.6. Regarding tourism, the Consented Development's potential effects were stated to have been considered in light of a report by BIGGAR Economics undertaken in 2017 and concluded that wind farms are not likely to have a significant detrimental effect on tourism nor on the economic benefits of tourism.

¹⁹ The EIAR also noted the potential for up to £8.2m of investment in the local area through turbine supply contracts. However this turbine manufacturing facility located in Machrihanish closed permanently in 2021 and so potential investment figures will be removed from the Proposed Varied Development's EIAR.

13.2. Consultation & Existing Planning Conditions

- 13.2.1. A&BC did not object to the Consented Development but did recommend that Scottish Ministers require an independent tourism impact assessment be undertaken. However, Scottish Ministers were content that the EIAR sufficiently addressed tourism impacts and the recommendation was not progressed.
- 13.2.2. In terms of land use Scottish Forestry initially objected however it withdrew that objection following engagement with SSER regarding compliance with UK Forestry Standards. Scottish Forestry requested that Ministers include a condition to secure appropriate compensatory planting.
- 13.2.3. This resulted in Condition 33 (Compensatory Planting) which has since been reviewed, approved and discharged by A&BC in consultation with Scottish Forestry (Perth and Argyll Conservancy) in November 2024.
- 13.2.4. Condition 4 (Long Term Forest Plan) was also attached which required plans detailing the felling and restocking of the woodland within the Site to be approved by the Scottish Ministers in advance of any felling. This condition was discharged by Scottish Ministers, in consultation with Scottish Forestry, Perth & Argyll Conservancy, in February 2022.

13.3. Issues scoped in / out

- 13.3.1. The Applicant does not expect that the Proposed Varied Development will introduce significant changes to the Land Use, Socio-economics, and Recreation baseline established for the Consented Development.
- 13.3.2. The Proposed Variation includes increased turbine tip heights, rotor diameters, and hardstand areas. However, no additional felling is required, and land use within the site remains the same as consented. While there will be a marginal increase in permanent land take due to larger hardstands and bat buffer-related set back distances for forestry, the changes are not expected to materially alter the findings of the original assessment.
- 13.3.3. Updated replanting plans and compensatory planting proposals will be presented in the Proposed Varied EIAR. However, these are considered to be mitigation and wholly forest management matters and not indicative of a change in underlying land use.
- 13.3.4. On this basis, it is proposed that additional assessment of land use is **scoped out** of the Proposed Varied EIAR, as no new or significant effects are predicted beyond those already assessed and consented.
- 13.3.5. Similarly, the Proposed Varied Development would not introduce significant changes to the socio-economic or recreation baseline established for the Consented Development.
- 13.3.6. The original assessment assessed potential effects on recreation and tourism and found no evidence to suggest that wind farm development negatively affects visitor numbers

or tourism revenue. The Proposed Varied Development is not expected to alter that conclusion.

13.3.7. Given that the socio-economic impacts of the Proposed Varied Development are expected to be wholly positive, and in light of recent work by the EIA Task and Finish Group established under the Onshore Wind Sector Deal, where it has been agreed that socio-economics will be reported separately from the EIA as a stand-alone document, it is proposed to **scope out** the socio-economics and Recreation chapter from the EIA.

13.3.8. While further assessment of socio-economic effects are proposed to be scoped out of the EIAR, the Applicant will submit a dedicated Socio-Economic Report as part of the Section 36C application. This report will set out how the Proposed Varied Development is expected to maximise net socio-economic benefit, in accordance with Policy 11(c) of National Planning Framework 4. It will summarise the evidence base, rationale, and proposed approach to delivering economic, social, and community benefits associated with the project.

14. Shadow Flicker

14.1. Consented Development EIAR Baseline

- 14.1.1. Baseline conditions were established by completing a desktop analysis of potential receptors which was followed by a site survey in March 2018 to confirm conditions on site.
- 14.1.2. The shadow flicker assessment which followed considered the maximum tip height of 149.9m and rotor diameter of 130m. An assessment area of 1,300m around each turbine was considered (based on a study area of 10 rotor diameters) and seven receptors were found within the area potentially susceptible to shadow flicker.
- 14.1.3. The assessment demonstrated that the likely number of shadow flicker hours experienced at all seven shadow flicker assessment location (SFAL), taking into account typical sunshine hours for the area, is below 30 hours per year. Refer to Table 17.2 of the Consented Development's EIAR for a list of maximum theoretical shadow flicker occurrence at each SFAL.
- 14.1.4. The highest predicted likely level of shadow flicker at any SFAL is 15.4 hours per year at Killarow Farm (SFAL2). The maximum amount of shadow flicker which could theoretically occur in a single day, not considering cloud coverage, is approximately 31 minutes which is experienced at Tangy Mill (SFAL4).
- 14.1.5. The previous assessment recommended that, to protect the amenity of local residents, the turbines be programmed to shut down during periods when shadow flicker could occur. Accordingly, the impact from shadow flicker was predicted to be not significant.

14.2. Consultation & Existing Planning Conditions

- 14.2.1. A&BC recommended a condition to control potential shadow flicker by requiring certain turbines be programmed to shut down at appropriate times to avoid adverse impacts on residential amenity. A shadow flicker scheme was developed to address this condition and submitted to A&BC in early 2024, however it has not yet been discharged.

14.3. Issues scoped in / out

- 14.3.1. Given the Proposed Varied Development will seek to increase the tip height and rotor diameter of turbines, there is a potential for an increase in the number of shadow flicker hours and the number of properties affected by shadow flicker.
- 14.3.2. To ensure a thorough evaluation of these potential impacts, an assessment of shadow flicker is proposed to be **scoped in** to the Proposed Varied Development's EIA. An updated assessment will be carried out to identify any additionally affect receptors within an increased study area of 1,500m, and to update the predicted impacts to account for

these and the amended characteristics of the Proposed Varied Development. Appropriate mitigation will be outlined, which is likely to comprise the future submission of an update to the previously submitted control scheme.

15. Aviation

15.1. Introduction

15.1.1. This section of the Scoping Report identifies the aviation receptors of relevance to the Proposed Varied Development and considers the potential impacts arising from the construction, operation and decommissioning of the Proposed Varied Development on aviation receptors.

15.1.2. The potential effects of wind turbines on aviation are widely publicised, but the primary concern is one of safety. There are three primary scenarios that may lead to potential impacts:

- Physical obstruction: Wind turbines can present a physical obstruction to aircraft in flight;
- Impacts on aviation radar systems and the provision of radar-based Air Traffic Services (ATS): Wind turbines can create unwanted radar clutter which appears on radar displays and can affect the provision of ATS to pilots. Radar clutter (or false radar returns) can make it difficult for air traffic controllers to differentiate between aircraft and those radar returns resulting from the detection of wind turbines. Furthermore, the appearance of multiple false targets in close proximity can generate false aircraft tracks and reduce those returns from 'real' aircraft away from their true positions. It should be noted that impacts on radar systems are only possible if the wind turbine blades are moving, therefore this impact is generally applicable to the operation phase, or at the time of blade tip installation; and
- Communication, Navigation and Surveillance (CNS) equipment: A wide range of systems, together with air-ground communications facilities, can be adversely affected by development of infrastructure projects; specifically, when located within the physical safeguarding zones of CNS equipment. Examples of CNS equipment that will be discussed in this chapter are the Non-Directional Beacon (NDB), Doppler Very High Frequency Omni Range (DVOR) beacon and Distance Measuring Equipment (DME) all of which are located at, or nearby to, Campbeltown Airport.

15.2. Legislation and Policy Context

15.2.1. This section outlines the specific legislation, policy and guidance taken into consideration on the potential impacts on aviation from the Proposed Varied Development.

Legislation

- Civil Aviation Publication (CAP) 393 – Air Navigation, The Order and the Regulations, 2016 (Version 6, 12 February 2021) (Civil Aviation Authority (CAA),

2021a): Contains the Air Navigation Order (ANO) 2016 and Regulations made under the order; and defines the Rules of the Air regarding civil aviation in the United Kingdom (UK).

Policy

- CAP 670 – Air Traffic Services Safety Requirements (Issue 3, 7 June 2019) (CAA, 2019): Sets out the safety regulatory framework and requirements associated with the provision of ATS.
- CAP 764 – CAA Policy and Guidelines on Wind Turbines (Version 6, February 2016) (CAA, 2016): Provides CAA policy and guidance on a range of issues associated with wind turbines and their effect on aviation that need to be considered by aviation stakeholders, wind energy developers and Local Planning Authorities when assessing the viability of wind turbine developments.
- CAP 774 – The UK Flight Information Services (Version 4, 15 December 2021) (CAA, 2021b): Details the suite of ATS which (excluding aerodrome services) are the only services provided in Class G airspace within the UK Flight Information Region. This document is equally applicable to civilian and military pilots and air traffic controllers.
- Military Aviation Authority (MAA) Regulatory Publication 3000 Series: Air Traffic Management Regulations (last updated 15 April 2024) (MAA, 2024): Provides the regulatory framework and instructions to military personnel for provision of military Air Traffic Control (ATC).
- MAA Manual of Military Air Traffic Management (last updated 30 September 2019) (MAA, 2019): Provides regulations for military ATC and emergency procedures and utilisation of military designated airspace.

Guidance

- CAP 032 - UK Integrated Aeronautical Information Package (IAIP) (CAA, 2025a): Provides comprehensive information on UK civilian aerodromes and aviation procedures within UK airspace.
- CAA 1:500,000 Visual Flight Rules (VFR) Aviation Chart (CAA, 2025b): Designed to assist in the [navigation](#) of [aircraft](#). Enables [pilots](#) to determine their position, safe altitude and route to a destination, highlighting navigation aids along the way, alternative landing areas in case of an in-flight emergency, and other useful information such as [radio](#) frequencies and [airspace](#) boundaries.
- Ministry of Defence (MoD) Obstruction Lighting Guidance (1 January 2020) (MoD, 2020): Sets out the MoD's minimum requirements and standards for installation of aviation lighting of onshore and offshore wind turbine developments.

- National Air Traffic Services (NATS) Self-Assessment Maps (2025): Assists wind farm developers to understand where interference with NATS infrastructure is likely.
- UK Military Aeronautical Information Publication (UK Mil AIP) (MoD, 2025): Provides comprehensive information on UK military aerodromes and guidance to military aircrew on in-flight navigation procedures.

15.3. Consented Development EIAR Baseline

15.3.1. The Aviation and Radar baseline environment remains as described in Chapter 18 of the 2018 EIAR for the Consented Development. However, the Proposed Variation seeks to modify the Consented Development by increasing the maximum tip height of the turbines from 149.9 metres (m) to 200 m.

15.4. Consultation & Existing Planning Conditions

15.4.1. Following submission of the Proposed Variation Scoping Report, and receipt of the Scoping Opinion, the Applicant will engage with all relevant aviation stakeholders in order to confirm any potential impacts and identify potential mitigation solutions. In particular, the Applicant expects to consult with the following aviation stakeholders regarding potential impacts on their operations:

- CAA;
- Glasgow International Airport;
- Glasgow Prestwick Airport;
- Highlands and Islands Limited (HIAL) (Campbeltown Airport and Islay Airport);
- MoD; and
- NATS.

15.4.2. The intention will be to confirm impacts and, if required, identify suitable mitigation solutions prior to submission of the formal planning application. Full details will be provided in the Environmental Impact Assessment Report (EIAR).

15.4.3. It is anticipated that should planning consent be awarded for the Proposed Variation, the following planning conditions, as applied to the Consented Development, will be required:

- Condition 31- Aviation Safety:

No development shall commence until the Company has provided the Planning Authority, Ministry of Defence, Defence Geographic Centre and NATS with the following information, and has provided evidence to the Planning Authority of having done so:

- (a) the date of the expected commencement of each stage of construction;*
- (b) the height above ground level of the tallest structure forming part of the Development;*
- (c) the maximum extension height of any construction equipment; and*
- (d) the position of the turbines and masts in latitude and longitude.*

Reason: *In the interests of aviation safety.*

- Condition 32 - Aviation Lighting:

(1) No wind turbine forming part of the Development shall be erected until, the Company has submitted a scheme for aviation lighting for the Development to the Planning Authority for written approval. The scheme shall include details of Red Aviation Warning Lighting or infra-red aviation lighting to be applied. No lighting other than that described in the scheme may be applied at the site, other than as required for health and safety, unless otherwise agreed in advance and in writing by the Planning Authority.

(2) No turbines shall be erected on site until the scheme has been approved in writing. The Development shall thereafter be operated fully in accordance with the approved scheme.

15.5. Issues scoped in / out

Study Area

15.5.1. To assess the impact on Aviation and Radar, a study area has been devised that takes into account the immediate vicinity of the Proposed Varied Development, the consultation criteria for aviation assets as described in CAP 764 (Policy and Guidelines on Wind Turbines) and a wider study area determined by the range of potentially affected radar systems; both ATC and AD radar systems. A pictorial representation of the site location and potential aviation receptors (airports and radar locations) is depicted on an aviation chart and shown at Figure 15.1.

15.5.2. A detailed desk-top review has been undertaken to characterise existing and future aviation baseline conditions in the vicinity of the Proposed Variation to inform this Scoping Report. This has been undertaken by reviewing the relevant aviation legislation, policy and guidance documents outlined in section 15.2 above, in particular the UK IAIP and will be augmented by consultation with the relevant aviation stakeholders during the EIA phase. The potential aviation issues considered for the Proposed Variation assessment were as follows:

- Civil airport Instrument Flight Procedures (IFPs) (including CNS equipment);
- Military aerodrome IFPs (including CNS equipment);
- Civil ATC radar;
- Military ATC radar;

- Military Air Defence (AD) radar;
- Low flying (military and civilian Emergency Helicopter Support Units (EHSUs));
- Local minor aerodromes;
- Local airspace restrictions (Prohibited/Restricted/Danger Areas and Military Practice and Exercise Areas (PEXAs); and
- Meteorological (Met) Office radars.

15.5.3. As a result of the desk-top review, coupled with the Aviation and Radar assessment carried out in the 2018 EIAR for the Consented Development, it has been possible to identify which aviation receptors are likely to be affected by the Proposed Variation and will be assessed in the EIAR and which receptors can be scoped out of the EIAR. Details on which receptors are scoped in/out of the EIAR are contained in Table 15:3.

15.5.4. It should be noted that adverse effects on radar systems are only possible if the wind turbine blades are moving, therefore this impact is applicable to the operation phase only.

Table 15:3 Aviation elements scoped in or out of future Environmental Impact Assessment

Element	Phase	Scoped In	Scoped Out	Justification
Civil airport Instrument IFPs (including CNS equipment): Campbeltown Airport/Islay Airport IFPs and NDB and DME navigation beacons. Note: DVOR beacon discussed in 2018 EIAR now removed.	Construction	✓		The Proposed Development is within the 30 nm (56 km) IFP safeguarding area for Campbeltown and Islay airports. Consultation will be required with HIAL to ascertain whether increasing turbine tips heights to 200 m (from 149.9 m for the Consented Development) will adversely impact the airports' IFPs (which includes Campbeltown's Outer Horizontal Surfaces (OHS) as detailed in the 2018 EIAR), and Campbeltown's NDB/DME beacons. Consultation will also be required with NATS to ascertain any adverse impact

Element	Phase	Scoped In	Scoped Out	Justification
				on the DME beacon located in the vicinity of Campbeltown Airport. A formal IFP assessment may need to be carried out by a CAA Approved Procedure Design Organisation (APDO).
Military aerodrome IFPs (including CNS equipment)	Construction		✓	The Proposed Development is outside the designated 30 nm (56 km) IFP safeguarding area for military aerodromes. Consequently, there will be no impact on military aerodrome IFPs.
Civil ATC radar (NATS, Glasgow International Airport and Glasgow Prestwick Airport)	Operation	✓		Consultation will be required with NATS to ascertain whether increasing turbine tips heights to 200 m (from 149.9 m for the Consented Development) will adversely impact the Lowther Hill and Tiree ATC radars. Consultation will also be required with Glasgow International Airport and Glasgow Prestwick Airport to ascertain whether their ATC radars will be adversely affected by the Proposed Variation. Formal radar assessments may need to be carried out.
Military ATC radar	Operation		✓	The Proposed Development is not within radar coverage of any military ATC radar systems. Consequently, there will be no impact on military ATC radar operations.
Military AD radar	Operation		✓	The Proposed Development is not within radar coverage of

Element	Phase	Scoped In	Scoped Out	Justification
				any military AD radar systems. Consequently, there will be no impact on military AD radar operations.
Low flying operations (military and civilian EHSUs)	Construction	✓		Installation of wind turbines pose physical obstructions to aviation operations carried out in the vicinity of wind farms. Wind turbines can be difficult to see from the air, particularly in poor meteorological conditions, leading to a potential increase in obstacle collision risk.
Local minor aerodromes	All Phases		✓	The Proposed Development is outside the designated consultation distances of any minor aerodromes. Consequently, there will be no impact on local minor aerodrome operations.
Local airspace restrictions (Prohibited/Restricted/Danger Areas and Military PEXAs)	All Phases		✓	The Proposed Development is outside the lateral boundaries of any Prohibited/Restricted/Danger Areas and Military PEXAs. Consequently, there will be no impact on restricted airspace.
Met Office radars	All Phases		✓	The Proposed Development is outside the designated 20km safeguarding zone of any Met Office radar. Consequently, there will be no impact on Met Office radar operations.

15.6. Methodology

15.6.1. The early identification of significant potential aviation effects is fundamental to informing the EIAR and the methodology in doing so will involve a high-level assessment of any,

and all, likely effects distinguishing between those which are likely to be of significance.

15.6.2. The methodology used will be a desk-based review using the data sources as described in Section 15.5 above. However, defining categories of receptor sensitivity and magnitude of impact is not appropriate for aviation as baseline aviation activities and equipment are highly sensitive to impacts and any magnitude of restriction on, or compromise to, activities or equipment (without embedded mitigation) is considered to be high. Therefore, the sensitivity of receptor and magnitude of impact will be explained via professional reasoning and judgement rather than via definitions of different categories. These judgements will then feed into the determination of significance.

- Major: a significant restriction on the ability of the Air Navigation Service Provider (ANSP) to continue to ensure safety and/or provide unrestricted ATS;
- Moderate: a possible restriction on the ability of the ANSP to continue to ensure safety and/or provide unrestricted ATS but which might be mitigated by changes to operating procedures or technical mitigation;
- Minor: a possible restriction on the ability of the ANSP to continue to provide unrestricted ATS but which is manageable with little change to existing operating procedures;
- Negligible: any effect should be completely manageable within current operating practices and without any requirement for change to procedures.

15.6.3. Any anticipated impact upon aviation stakeholders which results in restricted operations will be considered to be of significance prior to implementation of suitable mitigation measures.

15.6.4. The aviation chapter within the EIAR will conclude with a high-level summary of potential effects, an overview of any radar, technical or operational mitigation requirements, together with mitigation options.

15.7. Mitigation Measures

15.7.1. As part of the project design process, a number of best practice and designed-in mitigation measures (referred to collectively as embedded mitigation) are either present or will be included to reduce the potential for effects relating to aviation. Current embedded mitigation measures relevant to aviation are described in Table 15:4 as follows:

Table 15:4 Embedded Mitigation Measures

Embedded Mitigation Measures	Justification
Approval and implementation of a Lighting Plan (LP), which will set out	A LP will be prepared in consultation with CAA and MoD and will take into account

specific requirements in terms of aviation lighting to be installed on the wind turbines, as required under CAA (2016). CAP 393, Air Navigation: The Order and the Regulations 2016.	requirements for aviation lighting as specified in Article 222 of the UK ANO, 2016 and changes to International Civil Aviation Organisation Annex 14 Volume 2, Chapter 6, Paragraph 6.2.4 promulgated in November 2016. The production of an LP will be a condition of any planning consent. Measures will be adopted to ensure that the potential for risk of aircraft collision with the Proposed Development's infrastructure is minimised.
All structures of more than 91.4m in height will be charted on aeronautical charts and reported to the Defence Geographic Centre, which maintains the UK's database of tall structures (Digital Vertical Obstruction File) at least ten weeks prior to construction.	Aeronautical charting requirements will be a condition of any planning consent. Measures will be adopted to ensure that the potential for risk of aircraft collision with the Proposed Development's infrastructure is minimised.
Any temporary obstacles associated with wind farms which are of more than 91.4m in height are to be alerted to aircrews by means of the Notice to Airmen (NOTAM) system.	Consultation with the CAA will be required to ensure that temporary obstacles of more than 91.4m are identified to aircrews by NOTAM. Notification of temporary obstacles would be a condition of the planning consent. Measures will be adopted to ensure that the potential for risk of aircraft collision with the Proposed Development's infrastructure is minimised.
CAA will be informed of the locations, heights and lighting status of the wind turbines including estimated and actual dates of construction and the maximum heights of any construction equipment to be used, prior to the start of construction.	Consultation with the CAA will be required. Inclusion of locations, heights and lighting status of the wind turbines on aviation charts and in the UK IAIP would be a condition of the planning consent. Measures will be adopted to ensure that the potential for risk of aircraft collision with the Proposed Development's infrastructure is minimised.

15.7.2. The embedded mitigation measures outlined in Table 15:4 will need to be implemented prior to the construction phase of the Proposed Development to ensure that any potential effects caused by the presence of obstacles (e.g. cranes and stationary wind turbines)

are mitigated successfully.

15.7.3. If any changes are required to any civil airport IFPs (such as Campbeltown and Islay), these procedures will need to be amended and re-published in appropriate aviation documentation ahead of the construction phase of the Proposed Variation.

15.7.4. In addition, if adverse effects on radar systems are identified, these effects will need to be mitigated ahead of the operation phase of the Proposed Variation as any impacts are only possible once the wind turbine blades are moving.

Decommissioning

15.7.5. No mitigation measures are anticipated for the decommissioning phase of the Proposed Development other than the embedded mitigation measures outlined in Table 15:4.

15.8. Summary and Conclusions

15.8.1. The likely significant effects for the construction phase have been identified as potential impact on:

- Campbeltown Airport IFPs (which includes OHS) and NDB/DME navigation beacons;
- Islay Airport IFPs;
- NATS DME navigation beacon; and
- Low flying operations (military and civilian EHSUs).

15.8.2. Effects on civil airport IFPs will be identified through IFP assessments which the Applicant will commission from a CAA-accredited APDO. Any identified impact is likely to be alleviated by amending the affected IFPs and re-publishing the procedures prior to commencement of the construction phase of the Proposed Variation. Once mitigation measures have been identified and implemented, the residual impact on civil airport IFPs is expected to be insignificant.

15.8.3. Effects on low flying operations (military and civilian EHSUs) will be alleviated by installation of appropriate aviation lighting. The Applicant will commission an Aviation Lighting Assessment which will produce an LP aimed at reducing the impact of visible lighting on local communities while ensuring that low flying aviation operations can continue safely. The aviation LP will be provided to CAA and MoD for approval and full details will be included in the EIAR.

15.8.4. The likely significant effects for the operation phase have been identified as potential interference on:

- Glasgow International Airport's ATC radar;
- Glasgow Prestwick Airport's ATC radar; and
- NATS' Lowther Hill and Tyree ATC radars.

15.8.5. The Applicant will consult with all relevant stakeholders in order identify any effects and, if required, the mitigation options required to alleviate any impact.

15.8.6. No significant effects are expected for the decommissioning phase above those already identified for the construction phase.

15.9. References

- CAA (2016). CAP 764 - CAA Policy and Guidelines on Wind Turbines (Version 6, February 2016). Available at: [CAA Policy and Guidelines on Wind Turbines](#) (Accessed on: 18 July 2025)
- CAA (2019). CAP 670, Air Traffic Services Safety Requirements (Issue 3, 7 June 2019). Available at: [Air Traffic Services Safety Requirements](#) (Accessed on: 18 July 2025)
- CAA (2021a). CAP 393, Air Navigation: The Order and the Regulations (2016). Available at: [The Air Navigation Order 2016](#) (Accessed on: 18 July 2025)
- CAA (2021b). CAP 774 - The UK Flight Information Services (Version 4, 15 December 2021). Available at: [UK Flight Information Services: Fourth Edition](#) (Accessed on: 18 July 2025)
- CAA (2025a). CAP 032 - UK Integrated Aeronautical Information Package (2025). Available at: [eAIS Package United Kingdom](#) (Accessed on: 18 July 2025)
- CAA (2025b). Visual Flight Rules Chart (CAA, 2025). Available at: [NATS UK | VFR Charts](#) (Accessed on: 18 July 2025)
- MAA (2019). Manual of Military Air Traffic Management (30 September 2019). Available at: [Manual of Military Air Traffic Management](#) (Accessed on: 18 July 2025)
- MAA (2024). MAA Regulatory Publication 3000 Series: Air Traffic Management Regulations (15 April 2024). Available at: [AIR TRAFFIC MANAGEMENT \(ATM\) 3000 SERIES](#) (Accessed on: 18 July 2025)
- MoD (2020). Lighting Obstruction Guidance (1 January 2020). Available at: [MOD Obstruction Lighting Guidance 2020.pdf](#) (Accessed on: 18 July 2025)
- MoD (2025). UK Military Aeronautical Information Publication (2025). Available at: [UK Mil AIP | AIP](#) (Accessed on: 18 July 2025)
- NATS (2025). NATS Self-Assessment Maps (2025). Available at: [Wind farm self-assessment maps - Wind farm services - NATS](#) (Accessed on: 18 July 2025)

Figures

Figure 1: S36C Scoping Report Proposed Varied Development Layout

Figure 1.1: S36C Scoping Report Proposed Varied Development Layout and Consented Layout

Figure 1.2: 2018 EIAR Site Location Plan

Figure 1.3 2018 EIAR Site Layout (Consented Development)

LVIA Figures:

Figure 5.1 Proposed Viewpoints with Comparative ZTV.pdf

Figure 5.2 Designated and Protected Landscapes with Comparative ZTV.pdf

Figure 5.3 Landscape Character Types with ZTV.pdf

Figure 5.4 Visual Receptors with ZTV.pdf

Figure 5.5a - VP1 A83 at Glenbarr Burial Ground - Location Plan.pdf

Figure 5.5b - Figure 5.5b - VP1 A83 at Glenbarr Burial Ground - Baseline Photo and Wireline (Consented Development)

Figure 5.5c - VP1 A83 at Glenbarr Burial Ground - Baseline Photo and Wireline (Varied Development)

Figure 5.6a - VP6 Machrihanish Seating Area (Little Scone) - Location Plan

Figure 5.6b - VP6 Machrihanish Seating Area (Little Scone) - Baseline Photo and Wireline (Consented Development)

Figure 5.6c - VP6 Machrihanish Seating Area (Little Scone) - Baseline Photo and Wireline (Varied Development)

Figure 5.7a - VP8 Southend Road - Location Plan

Figure 5.7b - VP8 Southend Road - Baseline Photo and Wireline (Consented Development)

Figure 5.7c - VP8 Southend Road - Baseline Photo and Wireline (Varied Development)

Figure 5.8a - VP21 B842 North of Peninver - Location Plan

Figure 5.8b - VP21 B842 north of Peninver Sands - Baseline Photo and Wireline (Consented Development)

Figure 5.8c - VP21 B842 north of Peninver Sands - Baseline Photo and Wireline (Varied Development)

Figure 5.9a - VP23 Beinn Bharrain - Location Plan

Figure 5.9b - VP23 Beinn Bharrain - Baseline Photo and Wireline (Consented Development)

Figure 5.9c - VP23 Beinn Bharrain - Baseline Photo and Wireline (Varied Development)

Figure 10.1: Cultural Heritage: Outer Study Area and 200m Tip Height ZTV

Figure 15.1: Aviation Study Area and Locations of Potential Receptors