# RWE

Clachaig Glen Wind Farm

Environmental Impact Assessment Report

Volume 2a

**Main Report** 

Chapter 7: Landscape and Visual

## 7. Landscape and Visual

### 7.1 Introduction

- 7.1.1 This Landscape and Visual Impact Assessment (LVIA) chapter of the Environmental Impact Assessment Report (EIAR) considers the likely effects of the Proposed Development on landscape character and visual amenity. Landscape and visual effects are interrelated but assessed separately. Landscape effects relate to changes to physical elements and the aesthetic and perceptual aspects of a landscape which contribute to its distinctive character. Visual effects relate to changes to views available to and experienced by people.
- 7.1.2 The Development Site subject to this assessment is shown on Figure 7.1 (EIAR Volume 2c). An existing planning consent for a wind farm (the 'Consented Development') is present on the Development Site, as described in Chapter 1 of this EIAR: Introduction. As the Consented Development has not been constructed and would not coexist with the Proposed Development, it will not be taken into account in assessing the potential landscape and visual effects associated with the Proposed Development. This follows guidance issued by NatureScot (Scottish Natural Heritage¹ (SNH), 2018). Reference to the Consented Development is therefore only made in relation to policy and guidance and the future baseline.
- 7.1.3 This chapter of the EIAR is supported by the following technical appendices (provided in EIAR Volume 3):
  - Appendix 7.1: Landscape and Visual Methodology,
  - Appendix 7.2: Aviation Lighting,
  - Appendix 7.3: National Scenic Area Special Landscape Quality Assessment,
  - Appendix 7.4: Wild Land Assessment, and
  - Appendix 7.5: Landscape and Visual Assessment Tables.
- 7.1.4 A series of supporting figures are provided in EIAR Volume 2c: Landscape and Visual Impact Assessment Figures, with LVIA Visualisations provided in EIAR Volume 2d.
- 7.1.5 Landscape and visual effects are interrelated with other environmental effects but are assessed separately. Historic features and ecological designations can have an influence on the perception and value of the landscape character or view. Potential effects on the cultural or heritage value of historic sites are provided in Chapter 12 of this EIAR: Cultural Heritage, and potential effects on ecological assets are provided in Chapter 9: Ecology. A number of tourist destinations and routes are identified as visual receptors within this chapter, and the effects on views are assessed. Effects relating to tourism and social-economic aspects are provided in Chapter 13 of this EIAR: Socio-economics, Recreation and Tourism. The separate Design Statement provides details of the design process, which has been heavily influenced

<sup>&</sup>lt;sup>1</sup> SNH changed its name to NatureScot on 24 August 2020; references to SNH within this chapter therefore refer to publications and/or advice prior to this date.

by landscape and visual considerations, including limiting impacts on national designations and landscape and visual receptors on Kintyre.

### 7.2 Legislation, Policy and Guidance

7.2.1 The following section provides a brief outline of legislation, national and local planning policies, and good practice guidance relevant to landscape character and visual amenity. Further details of planning policy are provided in Chapter 6 of this EIAR: Planning and Energy Policy Context and also the Planning Statement which accompanies the Section 36 application.

### Legislation

- 7.2.2 The European Landscape Convention (ELC) was signed by the UK Government in 2006 and came into effect in March 2007. The ELC recognises landscape in law. It focuses specifically on landscape issues and highlights the importance of integration of landscape into areas of policy, to promote protection, management and planning of all landscapes including the assessment of landscape and analysis of landscape change.
- 7.2.3 The ELC defines landscape as 'an area, as perceived by people, whose character is the result of the action and interaction of natural and / or human factors'. The ELC considers landscape as a whole (land or marine), from urban to rural areas, and whether special or degraded.
- 7.2.4 Section 263A of the Town and Country Planning (Scotland) Act 1997, as amended, provides for the designation and protection of National Scenic Areas (NSAs).

### National Policy

- 7.2.5 National planning policy relevant to landscape and wind energy includes:
  - National Planning Framework for Scotland 3 (NPF3),
  - Scottish Planning Policy (SPP),
  - Draft National Planning Framework for Scotland 4 (NPF4), which will replace NPF3 and SPP following adoption,
  - Scottish Government Online Planning Guidance for Onshore Wind Turbines (updated 2014),
  - Planning Advice Note 60 Planning for Natural Heritage (PAN 60) (2000), and
  - Scottish Energy Strategy: The future of energy in Scotland (2017).
- 7.2.6 The draft NPF4 indicates a shift in focus towards net zero, placing a greater emphasis on addressing climate change and therefore strengthening support for sustainable development.

### Local Policy

7.2.7 The Argyll and Bute Local Development Plan (LDP) was adopted in March 2015. This is the current LDP for the area that sets out a settlement strategy and spatial framework for how Argyll and Bute Council (ABC) wants to see the region develop to 2024 and beyond.

- 7.2.8 The following provides a list of policies from the LDP that are relevant to the Proposed Development, and to the landscape and visual resource of the study area:
  - Policy LDP 3 Supporting the Protection, Conservation and Enhancement of our Environment,
  - Policy LDP 6 Supporting the Sustainable Growth of Renewables, and
  - Policy LDP 9 Development Setting, Layout and Design.
- 7.2.9 Relevant Supplementary Guidance (SG) for landscape and / or visual matters that accompanies the LDP includes:
  - SG LDP ENV 6 Development Impact on Trees / Woodland,
  - SG LDP ENV 9 Development Impact on Areas of Wild Land,
  - SG LDP ENV 12 Development Impact on NSAs,
  - SG LDP ENV 13 Development Impact on Areas of Panoramic Quality (APQs),
  - SG LDP ENV 14 Landscape,
  - SG LDP ENV 15 Development Impact on Historic Gardens and Designed Landscapes, and
  - Supplementary Guidance 2 (Dec 2016), section 4: Renewable Energy.
- 7.2.10 ABC are currently in the process of preparing their new Local Development Plan (LDP2). Consultation on this has ended and the next stage will be examination. The LDP2 is planned to be adopted in January 2023. Until LDP2 is adopted, the statutory status of the current LDP remains
- 7.2.11 A review of the policies in the Proposed LDP2 has indicated that the main points of relevance in policies relating principally to landscape and visual considerations are largely unchanged. A more detailed comparison of the key policies from the LDP and Proposed LDP2 has been provided in Chapter 6 of this EIAR: Planning and Energy Policy Context.

#### Landscape Capacity Study

- 7.2.12 In addition to the local policies and supplementary guidance outlined above, ABC have produced a landscape capacity study for wind farms for this area. The Argyll and Bute Landscape Wind Energy Capacity Study (ABLWECS) was first published in 2012 and updated in 2017 in order to include consideration of larger turbine typologies.
- 7.2.13 Landscape capacity studies are strategic level documents, generally undertaken at a regional level, which explore how sensitive a landscape is to changes resulting from a certain type of

development. Their role is generally to provide high level information to help identify the most suitable locations for development and therefore their use is largely to provide broad scale guidance on the relative sensitivity of different landscape character types to certain types of development. The findings of capacity studies cannot therefore be applied at a site level or replace the need for site specific and project specific assessment which give a more detailed picture of potential landscape and visual impacts.

7.2.14 ABLWECS recognises these limitations and states:

"Caution is needed in interpreting the combined sensitivity scores set out in this report as these represent an average across broad character types and areas and considerable variation can occur across these landscapes. The assessment identifies constraints in analysis and at a strategic scale and developers would need to consider landscape and visual effects at a more detailed level."

- 7.2.15 Therefore, while the ABLWECS provides background information and context, it does not consider the Development Site in detail or the specifics of the Proposed Development. A detailed LVIA is therefore required to determine the specific levels of sensitivity, magnitude and effect.
- 7.2.16 This is further supported in the Report to Scottish Ministers (Scottish Government, 2019) for the successful appeal of what is now the Consented Development. It was established that the ABLWECS is not part of the Council's spatial plan and is considered guidance only, rather than a zoning policy for wind farms within the region. Examination of the Development Site, in relation to the Consented Development, also established the principle of this location being suitable for a large-scale wind farm.
- 7.2.17 The ABLWECS provides a strategic level evaluation of sensitivity and capacity of defined Landscape Character Types (LCT) based on a limited number of theoretical turbine typologies and development scenarios. In relation to the largest typology included in the study (turbines >130m in height), ABLWECS identifies some limited capacity for development within one LCT: Upland Forest Moor Mosaic. However, it goes on to conclude that there is no scope for turbines greater than 150m in height to be accommodated in this LCT or in the whole of the Argyll and Bute region. It is not clear from ABLWECS on what basis the indicative height limit of 150m has been determined. However, as outlined above, the ABLWECS provides guidance at a broad scale and given the combined sensitivity scores are an average. The advice in ABLWECS should not be interpreted as precluding the possibility that there may be suitable discrete locations for turbines greater than 150m. Site-specific assessment is needed to determine actual landscape and visual effects.
- 7.2.18 The landscape character of the Development Site is consistent with the characteristics of the wider Upland Forest Moor Mosaic LCT and is defined by a large-scale simple landscape pattern of forestry and moorland on an undulating landform of rolling hills. It is considered that turbines of the height proposed are able to relate to this large-scale simple landscape. ABLWECS identifies that the Upland Forest Moor Mosaic LCT is of the lowest sensitivity to very large turbines, relative to the sensitivity of other LCTs within the Argyll and Bute region. Wind farms are an existing feature of this landscape and the Development Site is sufficiently

distant from other existing and consented wind farms to minimise the potential for cumulative landscape effects.

7.2.19 The Development Site is located within the upland interior of the Kintyre Peninsula and is both physically and visually separated from the smaller scale landscapes along the Kintyre coast by an inland upland ridge, reducing potential for indirect change. Careful site selection, informed in part by RWE's viewshed model, has helped to limit the extent of potential visibility and indirect change within Upland Forest Moor Mosaic and adjacent LCTs, from much of Kintyre and from national landscape designations in the wider area.

7.2.20 Our site specific and detailed analysis of the landscape character of the Development Site has concluded that it has the capacity to support wind turbines greater than 150m in height.

#### Guidance

- 7.2.21 This LVIA has been carried with due reference to the following guidance:
  - Guidelines for Landscape and Visual Impact Assessment, Third Edition, Landscape Institute, and Institute of Environmental Management & Assessment (2013) ('GLVIA'),
  - Assessing landscape value outside national designations, Technical Guidance Note 02/21, Landscape Institute (2021),
  - Assessing the Cumulative Impact of Onshore Wind Energy Developments (SNH; 2012),
  - Visual Representation of Wind Farms, Version 2.2, SNH (2017),
  - Siting and Designing Wind Farms in the Landscape, Guidance, Version 3a (2017), SNH,
  - Spatial Planning for Onshore Wind Turbines natural heritage considerations, SNH (2015),
  - Policy Statement No 02/02: Strategic Locational Guidance for Onshore Windfarms in Respect of the National Heritage, SNH (updated 2009),
  - Assessing impacts on Wild Land Areas technical guidance, SNH (2020): [Available online] https://www.nature.scot/assessing-impacts-wild-land-areas-technical-guidance, and
  - General pre-application and scoping advice for onshore wind farms, SNH (2020).
- 7.2.22 The following informal / draft guidance has also been referred to in the preparation of this LVIA:
  - Guidance for Assessing the Effects on Special Landscape Qualities, NatureScot (Working Draft 11, 2018).

#### Consultation

7.2.23 Consultation for this chapter is summarised in Table 7-1.

**Table 7-1 Summary of Consultation Responses** 

Consultee	Summary of Consultation Response	LVIA Response		
NatureScot	Photomontages should be supplied from viewpoints at distances greater than 10km as stated in the Scoping Report.	Photomontages have been provided for the majority of assessment viewpoints within 20 km of the Proposed Development. The exception to this is Viewpoint 3: Ardpatrick, from which a wireline rather than photomontage has been provided as agreed with ABC.		
Scoping advice,	Viewpoints requested:			
Ref: CEA159942 (04/09/20) and NatureScot	Water-based viewpoints to represent boats / recreational watercraft in the Kilbrannan Sound,	Viewpoint 21: Lochranza - Claonaig ferry is representative of views from watercraft on the Kilbrannan Sound.		
Post-Scoping	Gigha South Pier,	Viewpoint 09: Gigha South Pier is included at this location.		
advice, Ref: CPA160546	Kennacraig – Port Ellen Ferry,	Viewpoint 07: Kennacraig – Port Ellen Ferry provides a second viewpoint on the ferry routes between Islay and Kintyre.		
(12/10/20)-and e- mail dated 17/06/21	Dun Skeig,	Viewpoint 05: Dun Skeig is located on the summit of this hill and is now included in the assessment.		
11700/21	The Kintyre Way Long Distance Route between Rhunahaorine and Tayinloan,	Viewpoint 11: Rhunahaorine/ Point Sands and Viewpoint 12: Tayinloan Ferry Terminal are located on the Kintyre Way between Rhunahaorine and Tayinloan.		

Consultee	Summary of Consultation Response	LVIA Response	
	Nearby settlements (e.g. Glenbarr, Tayinloan),	Viewpoint 12: Tayinloan Ferry Terminal is located close to Tayinloan and is considered to represent the potential 'worst-case' view from this settlement. Potential visibility of the Proposed Development is extremely limited from Glenbarr, such that there is no potential for significant effect and therefore this has been scoped out of the assessment. Viewpoint 18: Glenacardoch is located to the west of Glenbarr and is representative of the 'worst-case' view from nearby scattered properties.	
	Machrihanish,	The Zone of Theoretical Visibility (ZTV) indicates no or very limited and distant visibility of the Proposed Development from the main settlement area of Machrihanish and therefore this has been scoped out of the assessment.	
	An additional low elevation viewpoint from within the North Arran NSA, i.e. Catacol or Lochranza,	Viewpoint 22: Newton Point is located to the north of Lochranza and is representative of views from low elevations in the North Arran NSA.	
	Additional elevated viewpoints from North Arran Wild Land Area (WLA),	Viewpoint 25: Goat Fell provides an additional high-level viewpoint from within the North Arran WLA.	
	Jura NSA, e.g. Craighouse – given the distance, a wireline is likely to be acceptable in this case,	Viewpoint 01: Craighouse is representative of views from the Jura NSA.	
	Additional wireline from a northern or elevated location on Gigha.	A supplementary wireline from Creag Bhan, the highest point on Gigha, has been provided in Figure SW1 (EIAR Volume 2d).	
	Baseline photography should be provided for the representative viewpoint 'A83, BT Car Park'.	Baseline photography provided in Figure VP17.2 (EIAR Volume 2d).	

Consultee	Summary of Consultation Response	LVIA Response		
	LCT boundaries should be as defined in the ABLWECS (2017 update) and other current wind capacity studies. Seascape should include all potentially significantly affected waterscapes.  Recommend that a wild land assessment is undertaken for the North Arran WLA  The Cumulative Base Plan should be to a 60 km radius unless a reduced radius is justified and agreed. We recommend also including consideration of small-scale proposals (50m or less) within a 20 km radius.	The landscape assessment is based on the LCT boundaries defined in the ABLWECS and the North Ayrshire Landscape Wind Capacity Study (2018) (NALWCS), with reference also made to the SNH / NatureScot (2019) 'Scottish Landscape Character Types Map and Descriptions'.		
		A wild land assessment has been undertaken for the North Arran WLA and is presented in Appendix 7.4 (EIAR Volume 3).		
		All existing, consented and applications stage wind farms within 60 km, including those less than 50m in height within 20 km, are indicated on Figure 7.11 (EIAR Volume 2c).		
	We advise that there is a need for a lighting impact assessment.  Night-time ZTV and visualisations should be provided in accordance with our guidance.	The LVIA includes consideration of visible aviation lighting for key receptors. Details of the approach to aviation lighting and potential visibility from each viewpoint are provided in Appendix 7.2 (EIAR Volume 3). The assessment is supported by aviation lighting ZTVs (Figures 7.8 and 7.9 (EIAR Volume 2c) and night-time visualisations for select viewpoints (Figures VP8.5 – 8.6, VP11.5 – 11.6 and VP24.5 – 24.6, EIAR Volume 2d).		
	The Cultural Heritage section should be cross-referenced with the Landscape section of the EIAR with representative assessment viewpoints and assessment of the effects of the proposal on the views and experience of the landscape; in particular the effect on historic character as it contributes to landscape experience.	This cross-referencing with Chapter 12 of this EIAR: Cultural Heritage occurs throughout this chapter where relevant.		

Consultee	Summary of Consultation Response	LVIA Response					
	Inclusion of Mullach Buidhe (or Beinn Bharrain) as both a daytime and a night-time visualisation (wireline, photo, and photomontage) showing all lit turbines in accordance with NatureScot aviation lighting guidance.	Daytime and night-time visualisations from Viewpoint 24: Beinn Bharrain are provided in Figures VP24.2 to VP24.6 (EIAR Volume 2d).					
	An assessment of the impact on the North Arran NSA and its Special Landscape Qualities (SLQ), with supporting assessment visualisations should also be provided in accordance with NatureScot guidance.	viewpoints from locations within the NSA (Viewpoint 22: Newton Point,					
	Additional Cumulative Wirelines Requested:						
	Sequential wirelines from the Kilbrannan Sound (to be assessed in the cumulative assessment), and	Viewpoint 21: Lochranza – Claonaig Ferry is provided as an assessment viewpoint in the LVIA. Supplementary cumulative wirelines from two additional locations in the Kilbrannan Sound (Northwest of Pirnmill and Machrie Bay) have also been provided. See Figures CW3 and CW4 (EIAR Volume 2d).					
	Sequential views from the north Arran coastline (NSA and North Arran Coastal Way) to be assessed and supported with wirelines.	Viewpoint 22: Newton Point and Viewpoint 23: A841, Whitefarland are provided as assessment viewpoints in the LVIA. Supplementary cumulative wirelines from two additional locations (Catacol and Rubha Airigh Bheirg) have been provided. See Figures CW1 and CW2 (FIAB					

Volume 2d).

Airigh Bheirg) have been provided. See Figures CW1 and CW2 (EIAR

Consultee	Summary of Consultation Response	LVIA Response		
	Related technical assessment would include a Night-time Lighting Assessment.	The LVIA includes consideration of visible aviation lighting for key receptors. Details of the approach to aviation lighting and potential visibility from each viewpoint are provided in Appendix 7.2 (EIAR Volume 3). The assessment is supported by aviation lighting ZTVs (Figures 7.8 and 7.9 (EIAR Volume 2c) and night-time visualisations for select viewpoints (Figures VP8.5 – 8.6, VP11.5 – 11.6 and VP24.5 – 24.6, EIAR Volume 2d).		
Argyll and Bute Council Consultation	Viewpoints requested:  • Dun Skeig; and  • A'Chleit.	Additional viewpoints at Dun Skeig (Viewpoint 05, as referred to above in response to NatureScot consultation) and A'Chleit (Viewpoint 14) have been included as part of the assessment.		
Response LPA Ref: 20/01325/S36 (01/09/20) and	A further viewpoint was requested from Ardpatrick, Knapdale (approx. location: NR740580). A wireline rather than photomontage acceptable if effects not anticipated to be significant.	Viewpoint 03: Ardpatrick has been included within the visual assessment.  A baseline panorama and wirelines are provided in Figures VP3.2 and VP3.3 (EIAR Volume 2d).		
consultation meeting of 02/03/21	Requested an additional wireline from the Kintyre Way at Rhunahaorine to support the assessment of impacts on this recreational receptor.	A supplementary wireline from the Kintyre Way where it first emerges from the beach near Rhunahaorine has been provided in Figures SW2 (EIAR Volume 2d).		
	The Council also recommends that consideration is given to the production of some comparative wirelines and photomontages which display the difference between the Consented Development and the Proposed Development to assist in the understanding of the difference between the schemes in terms of Landscape and Visual Impact.	As outlined in Section 7.1 above, the Consented Development is not considered within this LVIA, as per guidelines from NatureScot (SNH, 2018). The LVIA is therefore based solely on the details of the Proposed Development and for this reason comparative visualisations are not provided.		

### 7.3 Methodology

7.3.1 The following section provides an overview of the approach adopted for the LVIA. Further details of the assessment methodology are provided in Appendix 7.1 – Methodology (EIAR Volume 3).

### Technical Scope

- 7.3.2 The LVIA aims to identify the likely significant landscape and visual effects of the Proposed Development upon the Development Site and surrounding area.
- 7.3.3 The assessment forms part of an iterative process where, as potentially significant effects are identified, these inform the siting and design of the Proposed Development alongside consideration of other constraints. This process and the considerations which have informed it are described within the Design Statement. Chapter 3 of the EIAR: Project Description, describes the final configuration of the Proposed Development which forms the basis of the assessment of effects.
- 7.3.4 When considering the potential changes that future development may have on the landscape and visual resource, it is necessary to identify those key elements of the landscape which make it distinctive. These elements mainly comprise of landform, settlement pattern, land use and built environment, circulation and access, vegetation and views. Landscape effects arise from changes to the physical components of the landscape, its character and how this is experienced.
- 7.3.5 In relation to 'visual effects', visual amenity can be described as the appreciation or pleasantness of the views people enjoy of their surroundings and as such includes a degree of subjectivity. The visual assessment determines the degree of anticipated change to views and visual amenity that would occur as a result of the Proposed Development, based on professional judgement. The visual assessment considers views from static locations and sequential views experienced from key transport and recreational routes.
- 7.3.6 Landscape and visual effects can be positive (beneficial) or negative (adverse) and landscape effects direct or indirect.
- 7.3.7 The Proposed Development includes aviation lighting on the nacelle of eight of the turbines, in line with Civil Aviation Authority (CAA) requirements. Aviation lighting has the potential to contribute to landscape and visual effects and as such judgements made in the LVIA include consideration of potential change experienced during the daytime and at night.
- 7.3.8 It is also necessary to consider potential cumulative effects of the Proposed Development with other developments in the vicinity. Cumulative effects arise from the additional changes brought about by one development in conjunction with those of another. The cumulative assessment includes other wind farms that are operational, consented / under construction or for which a consent application has been submitted and is not yet determined or is under

appeal. The cumulative assessment considers potential effects from static locations and from key routes and includes consideration of aviation lighting from key receptors.

### Temporal Scope

- 7.3.9 The type and duration of the landscape and visual effects fall within three main stages as follows:
  - Construction activities temporary and of a short duration (12 months to a maximum of 18 months), comprising:
    - Effects of temporary site infrastructure, such as small temporary quarry operations; site traffic; laying of underground cabling; and construction compounds,
    - Proposed permanent structures, including wind turbines, are not included within the construction stage assessment as potential impacts of the partially constructed structures are considered to be similar to, but less than, the completed structures which are assessed as part of the operational phase.
  - Operational (the operational phase of the wind turbines is proposed to be 35 years),
     comprising:
    - o 12 wind turbines; seven of which would have a maximum height to blade tip of up to 185m, a maximum nacelle (hub) height of up to 112m, and maximum rotor diameter of up to 155m; and the remaining five proposed wind turbines would have a maximum height to blade tip of up to 200m, a maximum hub height of up to 132m, and maximum rotor diameter of up to 155m. Aviation obstruction lighting would be provided on eight of the turbines, positioned on the nacelle,
    - o a permanent anemometer mast (lattice structure) up to 110m in height,
    - a control building, substation compound and battery storage (control building up to 5.5m maximum height and battery storage comprising 27 containers not exceeding 2.6m height), and
    - 8.9 km length of new access track and 2.1 km upgraded existing track within the main Development Site, and 6 km length of upgrade existing wind farm and forestry track between the A83 and main Development Site.
  - Decommissioning Temporary and of a short duration (an anticipated period of 12 months).

#### Study Area

- 7.3.10 The study area for the LVIA is defined as 45 km from the outermost turbines of the Proposed Development as recommended by NatureScot Guidance<sup>2</sup>.
- 7.3.11 Initial desk and field-based survey and analysis, including the use of ZTV diagrams and wirelines, indicated that significant landscape and visual effects are unlikely to occur beyond 10 to 15 km of the Proposed Development. Taking a precautionary approach, a detailed study

<sup>&</sup>lt;sup>2</sup> SNH (2017) Visual Representation of Wind Farms, Version 2.2, February 2017

area of 20 km (see Figure 7.1, EIAR Volume 2c) from the outermost turbines has been identified, allowing a targeted, proportionate approach focused on potential significant effects. The extent of the study area was agreed in consultation with NatureScot and ABC, with a few additional viewpoints requested from key locations beyond this area.

7.3.12 An initial search area of 60 km from the Proposed Development was utilised for the cumulative assessment. All identified large scale wind farms within the search area, along with smaller scale and single turbine developments within 20 km were mapped. A short list of wind developments to be included within the cumulative assessments, which focused on those with the potential to contribute to significant cumulative effects, was then identified through initial appraisal and consultation with ABC and NatureScot. Further details of the cumulative schemes included in the assessment are provided in Section 7.9, below.

#### Assessment Process

- 7.3.13 The landscape and visual assessments have been undertaken in accordance with the approach and principles set out in GLVIA and with reference to the guidance listed in 7.2.21, above.
- 7.3.14 The assessments have been undertaken based on the following main steps:
  - Establishment of the baseline,
  - · Appreciation of the Proposed Development, and
  - Assessment of effects.

#### Establishment of the Baseline

7.3.15 A baseline study has been undertaken through a combination of desk-based research and site appraisal in order to establish the existing conditions of the landscape and visual resources of the study area. The landscape baseline study identifies landscape designations and distinct landscape character units within the study area and describes their key characteristics and special qualities. The visual baseline aids in the identification of potential visual receptor locations and provides a description of the nature of the existing views. A description of both the daytime and night-time baseline is provided for relevant receptors.

#### Appreciation of the Proposed Development

7.3.16 In order to be able to accurately assess the full extent of likely effects on landscape character and visual amenity it is essential to develop a thorough and detailed knowledge of the Proposed Development. This includes a comprehensive understanding of its location, nature and scale, and is achieved through a review of drawings, computer modelling and on-site appraisal. The LVIA includes consideration of all elements of the Proposed Development as detailed in Chapter 3 of this EIAR: Project Description.

#### Assessment of Effects

7.3.17 The landscape and visual assessments seek to identify, predict and evaluate the significance of potential effects to landscape characteristics and established views. The assessments are based on an evaluation of the sensitivity to change and the magnitude of effect for each landscape or visual receptor. For clarity and in accordance with good practice, the assessment of potential effects on landscape character and visual amenity, although closely related, are undertaken separately.

7.3.18 GLVIA places a strong emphasis on the importance of professional judgement in identifying and defining the significance of landscape and visual effects. This LVIA has been undertaken by Chartered Landscape Architects and professional judgement has been used in combination with structured methods and criteria to evaluate value, susceptibility, sensitivity, magnitude and significance of effect.

#### Assessment of Cumulative Effects

- 7.3.19 The assessment of cumulative effects follows a similar process to that described above, first identifying and describing the baseline, followed by an assessment of the magnitude of change and significance of effect. However, as there is no certainty that consented or application stage schemes will be constructed, the cumulative baseline involves consideration of two theoretical scenarios, as follows:
  - Scenario 1: The cumulative effects of the Proposed Development introduced into a baseline which includes wind farms which have been consented and/or are under construction, in addition to existing operational schemes, and
  - Scenario 2: The cumulative effects of the Proposed Development introduced into a
    baseline which includes wind farms at the application stage (as at 01 July 2021), in
    addition to existing operational schemes and those which have been consented and/or
    are under construction.
- 7.3.20 The assessment of cumulative magnitude of change and significance of effects involves consideration of the additional change resulting from the Proposed Development to each cumulative baseline scenario.

### Assumptions and Limitations of the Assessment

- 7.3.21 Details of the assumptions and limitations of the assessment are provided in Appendix 7.1 (EIAR Volume 3) and are summarised below:
  - Duration of operational effects are assumed to be long-term, based on a 35-year operational lifespan of the Proposed Development,
  - Graphics and visualisations have been provided to support the assessment. It is
    important that these are read in conjunction with the assessment text and should be
    viewed in the field and with an understanding of their inherent limitations,
  - Baseline photography has been captured over a number of years. Where older photography is used, site survey has identified no significant change to the baseline since

photography taken. The exception is viewpoint photography from a recreational watercraft in the sound of Gigha where it has not been possible to retake the photography,

- A cumulative cut-off date of 1<sup>st</sup> July 2021 was set to allow progress with the cumulative assessment and visualisations. Any subsequent changes to the cumulative baseline have not been assessed,
- At the time of undertaking fieldwork (October 2020 to June 2021) the Beinn an Tuirc III
  and Blary Hill wind farms were under construction, but no turbines were observed or
  captured in baseline photography and as such they are considered as part of the
  cumulative assessment, rather than an existing baseline feature, and
- The night-time baseline is based on targeted site survey at night couple with daytime observations.

#### The Influence of Weather

- 7.3.22 Wind direction, weather and prevailing atmospheric conditions can all have an influence on the visibility and impression of wind turbines during both the daytime and night-time, particularly from more distant locations. Changeable visibility in this region of Scotland is common due to its location near the coast, topographic variation and incidence of haze, fog, mist and rain.
- 7.3.23 The assessment adopts a 'worst case' approach to daytime effects which assumes clear weather conditions and good visibility. In relation to night-time effects, a realistic worse case approach is taken, highlighting the theoretical, but unlikely, scenario of the lights operating at peak intensity in clear conditions. This is then qualified with the more likely scenario of the lights operating in the lower intensity mode during clear conditions, and the higher intensity mode in poorer conditions.
- 7.3.24 Further details of the influence of weather, including reference to available recorded data for this area, is provided in Appendix 7.1 (EIAR Volume 3).

### 7.4 Landscape Baseline

7.4.1 This section provides an overview of the existing baseline landscape resource of the study area.

### The Development Site

7.4.2 The location of the Development Site is shown on Figure 7.1: Site Location and LVIA Study Area (EIAR Volume 2c). Figure 7.2 (EIAR Volume 2c) illustrates the landform and topography within the 45 km study area. An aerial photograph of the Development Site is provided at Figure 7.3 Aerial Photograph and Proposed Development (EIAR Volume 2c). Viewpoints 1 to 25 baseline photography (Figures VP1.2 to VP25.2, EIAR Volume 2d).) are a useful aid to understanding the Development Site and the wider study area.

7.4.3 The Development Site is located within the upland interior of Kintyre, the topography of the site is principally defined by the valley of Clachaig Water. The shallow valley cuts into the rolling to undulating upland moorland landscape and drains to the south west towards Muasdale. The highest point of the Development Site is Cruach Mhic-an t-Saoir at c.364m Above Ordnance Datum (AOD); the lowest point is near High Clachaig at around 110m AOD.

- 7.4.4 Figure 7.3 (EIAR Volume 2c) contains an aerial photograph of the Development Site. Land cover is principally conifer plantation, comprising mostly Sitka spruce species. Natural plant communities have largely been displaced by productive forestry. Future management strategies for the Development Site are set out in Chapter 17 of this EIAR: Forestry. Small areas of heath and bog vegetation are restricted to higher ground to the north, and across the undulating minor ridgeline that encloses the Development Site to the east. This is likely to change in the future if the updated Carradale Land Management Plan, put forward by Forestry and Land Scotland (*unpublished*), is adopted, as the long-term restocking plan indicates a reduction in Sitka spruce on the Development Site in favour of areas of open ground and broadleaf species.
- 7.4.5 Post and wire fence lines enclose the Development Site boundaries and excavations / borrow pits pockmark the Development Site along the line of existing forestry tracks; both of these features are indicative that this is a landscape modified by human activity.
- 7.4.6 Visitors and local residents are likely to visit the Kintyre peninsula for the variety of land and seascapes on offer. The interior of the peninsula, within which the Development Site is located, provides a rugged and unsettled landscape more easily accessible than surrounding islands.
- 7.4.7 Forestry tracks run through the Development Site. While the forestry tracks and land within the Development Site are open to the public there is little evidence of recreation taking place. Nevertheless, the Kintyre Way long distance recreational path follows much of the Proposed Development's access track from Killean, until the long-distance route diverges and heads in an easterly direction approximately 0.6 km to the north of the main Development Site (whilst the Proposed Development's access track heads south). Core Path C293 is a circular route located approximately 2 km to the south west of the Development Site.
- 7.4.8 SNH (2015) 'Spatial Planning for Onshore Wind Turbines natural heritage considerations: Guidance' sets out the main natural heritage considerations that should be taken into account when planning for onshore wind turbines. The Argyll and Bute Spatial Framework for onshore wind energy developments has been produced in accordance with this guidance, as set out in Table 1 of SPP.
- 7.4.9 The Development Site is located partially within Group 2: Areas of Significant Protection, and partially within Group 3: Areas where wind farms are likely to be acceptable. The Group 2 areas found within the Development Site primarily relate to carbon rich soils and peatland rather than landscape and visual considerations. The majority of the proposed turbines and ancillary elements of the Proposed Development would be located in the parts of the site within Group 3.

7.4.10 The Development Site is not covered by any landscape designation and is typical of the wider upland landscape of the interior of the Kintyre peninsula. There is a uniformity of land cover across much of the Development Site, consisting of productive forestry plantation with an access track and quarry. The Development Site landscape is considered to be of **Low** value.

### Wider Study Area Overview

- 7.4.11 The Development Site is located within the upland moor plateau that runs along the centre of the Kintyre peninsula. The uplands consist of an elevated undulating to rolling plateau landscape which covers much of the peninsula and contain a mix of large productive coniferous forestry and moorland. A number of existing wind farms are present within these uplands and as such they are an existing characteristic of this landscape.
- 7.4.12 Major transport and communication networks tend to follow the coast, with the A83 running along the west Kintyre coast and the B842 running along the east Kintyre coast. These roads form part of the recently promoted Kintyre 66 tourist route. The various peninsulas and islands in this part of Scotland are connected by ferry crossings that provide connectivity within the area for local residents and tourists alike.
- 7.4.13 There are few large settlements within the study area and Campbeltown in south Kintyre is the largest. Other smaller settlements can be found along the coastal margins of Kintyre, Arran, Islay and Jura, and to a lesser extent within the glens which are sparsely populated with scattered properties and farmsteads.
- 7.4.14 The vast majority of the study area is taken up by surrounding waterbodies; the Sound of Jura, Clyde and North Channel, to the west of Kintyre; Kilbrannan Sound, Sound of Bute and Loch Fyne, to the east of Kintyre, adding to the open, large-scale qualities of the study area.
- 7.4.15 As highlighted, a number of existing wind farms are present along the Kintyre peninsula, including Auchadaduie, Beinn an Tuirc I-II, Cour, Deucheran Hill, Freasdail, and Tangy I and II. In addition, Blary Hill and Beinn an Tuirc III are under construction (at the time of survey, up to July 2021). A number of other schemes have been consented but are yet to be constructed, including Airigh, Eascairt, High Constellation, and Tangy IV (repowering of the existing Tangy I and II).

### Development Site and Context: Future Baseline

- 7.4.16 The EIA Regulations require a description of the likely evolution of the baseline environment without the implementation of the Proposed Development as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge.
- 7.4.17 The Development Site is subject to planning consent for a wind farm of 14 wind turbines and associated infrastructure (the Consented Development). If constructed this would have an influence on the landscape character of the Development Site and immediate context. However, it is understood that this is unlikely to be progressed due to concerns over the

longer-term prospects of the scheme. Reasons for this include the availability of turbine components as manufacturers turn their focus to larger, more efficient turbines and end production of smaller machines. As such, the Consented Development would not influence the future baseline.

- 7.4.18 Forestry within the Development Site is managed under the Carradale Land Management Plan. This is currently being updated (FLS, *unpublished*). For the purposes of the future baseline scenario, it is assumed that this document will be adopted. Thus, the baseline landscape within the Development Site would be subject to a continued cycle of forestry operations, which would include clear-felling and restocking. If any significant changes are made to the updated Carradale Land Management Plan prior to it being adopted, the Applicant is committed to updating the EIA if necessary.
- 7.4.19 The likely cumulative future baseline (i.e. considering operational, under-construction, and consented wind energy schemes) is considered in Scenario 1 of the cumulative assessment, see Section 7.9. The predicted future baseline would see existing wind farms on Kintyre in place for the duration of their planned operational lifespan. The Blary Hill, Beinn and Tuirc III, High Constellation, Tangy IV, Eascairt, and Airigh wind farms would be constructed and begin their operational phase.
- 7.4.20 The less certain future baseline (i.e. also considering wind energy schemes in planning but pending decisions) is considered in Scenario 2 of the cumulative assessment. This future baseline would see the addition of the Narachan and Sheirdrim wind farms to the landscape of Kintyre. Taking into account the age of some schemes on the peninsula, most notably Deucheran Hill and Beinn an Tuirc I, it is probable that re-powering and/or decommissioning of sites will also occur in the future.

### Designated Landscapes

- 7.4.21 There are no national landscape designations that cover the Development Site.
- 7.4.22 A small part of the Development Site the site entrance from the A83 falls within the locally designated West Kintyre Area of Panoramic Quality.
- 7.4.23 Designated landscapes within the detailed study area are described below and are illustrated on Figure 7.4 and 7.4b (EIAR Volume 2c).

#### National Scenic Areas

- 7.4.24 There are three NSAs within the 45 km study area:
  - Knapdale NSA in the north, approximately 25.5 km from the nearest turbine,
  - Jura NSA in the north-west, approximately 27 km from the nearest turbine, and
  - North Arran NSA in the east, approximately 11.5 km from the nearest turbine.
- 7.4.25 Considering the separating distances involved, and limited theoretical visibility, including at night, as indicated by the ZTVs (Figures 7.6 to 7.8, EIAR Volume 2c), it is judged that

significant effects on the Jura and Knapdale NSAs would be unlikely, and they are not considered further in the assessment.

- 7.4.26 A description of relevant special qualities of the North Arran NSA is provided in Appendix 7.3 (EIAR Volume 3).
- 7.4.27 Due to the recognised national importance and special qualities of the NSAs, the landscape value of the North Arran NSA is considered to be **High**.

#### Gardens and Designed Landscapes

7.4.28 Achamore House on the Isle of Gigha is the only Garden and Designed Landscape (GDL) within the 20 km detailed study area. Mature woodland and shelterbelt planting as noted in the Inventory citation, screens outward views from the GDL and as such no visibility of the Proposed Development is anticipated. For this reason, Achamore House GDL has not been considered further within the LVIA.

#### Wild Land Areas

7.4.29 WLAs are defined in SNH's 'Wildness in Scotland's Countryside Policy Statement No. 02/03' as:

"uninhabited and often relatively inaccessible countryside where the influence of human activity on the character and quality of the environment has been minimal."

- 7.4.30 The Scottish Government's NPF3 recognises wild land as a nationally important asset and indicates that these areas should be protected. SPP requires the identification of wild land and provisions for its protection within the Development Plan which is recognised in the LDP (2016) Supplementary Guidance Policy SG LDP ENV 9.
- 7.4.31 There are two WLAs within the 45 km study area (Figure 7.4, EIAR Volume 2c):
  - North Arran WLA, approximately 14.5 km from the nearest turbine, and
  - Jura, Scarba, Lunga and Garvellachs WLA, approximately 32.5 km from the nearest turbine.
- 7.4.32 The latter has been 'scoped out' of further assessment as significant effects are judged to be unlikely as a result of the distant and fragmented nature of theoretical visibility.
- 7.4.33 The value of the North Aran WLA, which is included in the assessment, is considered to be **High.**

#### **Areas of Panoramic Quality**

- 7.4.34 APQs are a local level designation identified in local development plans. The following APQs (shown on Figure 7.4b, EIAR Volume 2c) are found within the 20 km detailed study area and within the ZTV of the Proposed Development:
  - West Kintyre Coast APQ, approximately 2 km to the west of the nearest turbine,

Knapdale / Melfort APQ, approximately 15 km to the north of the nearest turbine, and

- East Kintyre Coast APQ, 8 km to the east of the nearest turbine.
- 7.4.35 Analysis of the ZTVs (Figures 7.6 to 7.8) indicates no potential visibility of the Proposed Development from the East Kintyre Coast APQ and as such it is not considered further in this assessment.
- 7.4.36 The value of West Kintyre Coast and Knapdale / Melfort APQs, which are included in the assessment, is considered to be **Medium**.
- 7.4.37 It is understood that the APQ designation is intended to be replaced with a new Local Landscape Area (LLA) designation within LDP2. The boundaries of the LLAs appear to be consistent with the existing defined APQ boundaries and as such the change is largely in name only, with the status and level of designation unchanged.

#### Special Landscape Area

- 7.4.38 One Special Landscape Area (SLA) is located within the 20 km detailed study area and the ZTV of the Proposed Development. The North Arran SLA, shown on Figure 7.4b (EIAR Volume 2c), is designated under Policy 15 of the North Ayrshire Council (2019) Adopted Local Development Plan.
- 7.4.39 The SLA covers an extensive area of north Arran, largely coinciding with the area designated as the North Arran NSA, but also extending south as far as Blackwaterfoot and east of Crochandoon.
- 7.4.40 No citation exists for the North Arran SLA and as such the baseline is provided with reference to the identified key characteristics with the underlying LCTs.
- 7.4.41 In the context of this LVIA, the value of the landscape covered by the SLA, primarily as a result of it also being within an NSA, is judged to be **High.**

### Landscape Character Types and Seascape Character Units

- 7.4.42 This chapter focuses on landscape or seascape character as a means of assessing landscape character effects within the study area.
- 7.4.43 As requested by NatureScot in their Scoping Opinion (reference: CEA159942) the baseline for this LVIA has been informed by LCT boundaries defined in the following wind capacity studies, and shown on Figures 7.5 (EIAR Volume 2c):
  - The Argyll and Bute Landscape Wind Energy Capacity Study (2017) (ABLWECS), and
  - North Ayrshire Landscape Wind Capacity Study (2018) (NALWCS).
- 7.4.44 The seascape character baseline has been informed by the following published study:
  - SNH Commissioned report No. 103: An assessment of the sensitivity and capacity of the Scottish seascape in relation to windfarms (2005).

7.4.45 It should be noted that the purpose of this study was to assess the seascape issues surrounding offshore wind energy developments, and so the sensitivities of Seascape Character Units (SCU) stated in this publication relate to offshore, rather than onshore, wind developments. SCUs found within the study area are shown on Figure 7.5 (EIAR Volume 2c).

- 7.4.46 GLVIA confirms that capacity studies such as the ABLWECS and NALWCS are useful in determining a general sensitivity, however, advocates an approach whereby a detailed assessment of sensitivity is undertaken in order to understand fully the potential landscape character effects of a development.
- 7.4.47 Reference has also been made to the National Landscape Character Assessment, SNH (2019) and this is considered to provide the most up-to-date published description of the landscape character within the study area. Since the publication of the ABLWECS and NALWCS studies, several wind farms have been constructed on Kintyre, which has changed the baseline.

# Landscape Character Types and Seascape Character Areas included in the Assessment

- 7.4.48 Consistent with the principles of a proportionate approach, this LVIA focuses on LCTs and SCUs located within the 20 km detailed study area (see Figure 7.5b, EIAR Volume 2c). LCTs and SCUs beyond this distance are judged unlikely to receive significant effects.
- 7.4.49 Baseline descriptions of each landscape receptor included in the LVIA are provided in Appendix 7.5 (EIAR Volume 3).
- 7.4.50 In total, 12 LCTs and two SCUs fall within the 20 km detailed study area (Table 7-2).

Table 7-2 LCTs and SCUs located within the detailed study area (20 km from the Proposed Development)

Wind Capacity Study Source	SNH (2019) LCT Reference	ZTV Coverage (Figures 7.6 to 7.7, EIAR Volume 2c)	Included in Assessment
Hidden Glens (ABLWECS LCT 3)	Coastal Glens LCT (36)	None	No
Upland Forest Moor Mosaic (ABLWECS LCT 6)	Plateau Moor and Forest  – Argyll LCT  (39)	'Host' LCT to the Proposed Development. The ZTV shows localised areas of theoretical visibility within 5 km and beyond	Yes

Knapdale Upland Forest Plateau Moor and Forest Moor Mosaic – Argyll LCT (ABLWECS LCT 6b) (39)		The ZTV shows distant theoretical visibility, extensive within the 20 km detailed study area but reducing beyond this point	Yes
Bay Farmland (ABLWECS LCT 14)	Bay Farmland (47)	None	No
Coastal Plain (ABLWECS LCT 19)	Coastal Plain – Argyll LCT (52)	The ZTV shows broad areas of theoretical visibility within 5 km	Yes
Rocky Mosaic (ABLWECS LCT 20)	Rocky Coastland – Argyll LCT (53)	The ZTV shows fragmented visibility across much of the LCT, but some localised areas of more extensive theoretical visibility within 10 km	Yes
Low Coastal Hills (ABLWECS LCT 21)	Low Coastal Hills (54)	None	No
Sand Dunes and Machair (ABLWECS LCT25)	Sand Dunes and Machair (58)	None	No
Coastal Parallel Ridges (ABLWECS LCT 22)	Coastal Parallel Ridges LCT (55)	The ZTV shows relatively extensive but partly fragmented theoretical visibility across the LCT within the 20 km detailed study area	Yes
Arran Raised Beach Coast (NALWCS LCT 1b)	Raised Beach Coast and Cliffs LCT (59)	The ZTV shows distant but relatively extensive theoretical visibility of parts of the Proposed Development within the 20 km detailed study area	Yes
Coastal Lowland Moor Coastal Lowland Moor (NALWCS LCT 6) LCT (65)		The ZTV shows distant theoretical visibility of parts of the Proposed Development, extensive but partly fragmented within the 20 km detailed study area and reducing beyond this point	Yes
Arran Rugged Granite Uplands (NALWCS LCT 21b)	Rugged Uplands – Ayrshire LCT (83)	The ZTV shows some distant fragmented areas of theoretical visibility within 20 km detailed study area	Yes

West Kintyre / South East Jura and South East Islay (SNH Seascape Assessment Seascape Unit 24)	N/A	The ZTV shows extensive theoretical visibility across much of this SCU within the 20 km detailed study area	Yes
Loch Fyne / Kilbrannan Sound (SNH Seascape Assessment Seascape Unit 25)	N/A	The ZTV shows some areas of broad visibility within the 20 km detailed study area	Yes

7.4.51 As highlighted in Appendix 7.1 (EIAR Volume 3) consideration of potential landscape impacts of aviation lighting is limited to the Upland Forest Moor Mosaic LCT, and the nationally designated landscapes of north Arran.

### 7.5 Visual Baseline

- 7.5.1 The following provides an overview of the visual baseline, highlighting key visual receptors and providing details of the viewpoint locations on which the visual assessment is based.
- 7.5.2 Visual receptors are the people at locations within the study area who would potentially be affected by changes to views or visual amenity as a result of the Proposed Development. Visual receptors can be static or dynamic and include the following:
  - Residential properties and settlement residents of isolated dwellings and settlements,
  - Transport routes people in vehicles and others using main roads and local roads, and commercial passenger ferry routes, and
  - Recreation routes people using footpaths, bridleways and tracks, cycleways, local roads designated as recreation routes, areas of land (not under cultivation but including forestry) and open water for informal recreation and tranquillity.
- 7.5.3 A series of ZTVs (Figures 7.6 to 7.9, EIAR Volume 2c) have been produced to illustrate the pattern of theoretical visibility of the Proposed Development within the study area. These have been analysed and tested and have helped to guide identification of potential visual receptors, described below.

### Residential Properties and Settlements

7.5.4 Settlement within the overall 45 km study area is generally found along the coast of the Kintyre peninsula and adjacent islands (Arran, Gigha, Islay and Jura) and occasional low-lying areas further inland. The inland areas tend to consist of upland moorland landscapes, with a general lack of settlement.

7.5.5 Analysis of the ZTVs (Figures 7.6 to 7.7, EIAR Volume 2c) show that the majority of the settlements within the 20 km detailed study area would not have visibility of the Proposed Development during operation.

- 7.5.6 Three small settlements, Tayinloan, Killean and Muasdale, and a number of scattered individual properties are located within 5 km of the Proposed Development. In each case the main orientation of views tends to be westwards towards the coast and the scenic seascape beyond, as is the case with the West Kintyre APQ within which these three settlements are located. Views inland tend to be more limited and restricted by rising topography and/or trees and woodland, and as such the ZTVs indicate limited or no visibility of the Proposed Development from the three settlements. The ZTVs indicate greater visibility from the small number of scattered residential properties north east of Muasdale.
- 7.5.7 The small settlements of Glenbarr on Kintyre, Ardminish on Gigha and a few small settlements and scattered properties on Arran (including Whitefarland, Pirnmill, and Catacol) have been identified within 5 to 20 km of the Proposed Development. The ZTVs indicate limited visibility of the Proposed Development from most of these settlements, with the exception of Ardminish. A number of other settlements, including Bellochantuy, Clachan, Carradale and other small groups of properties along the east of Kintyre, are also located within 20 km, with the larger settlement of Campbeltown just beyond 20 km. Each of these settlements, along with the majority of scattered residential properties on Kintyre, are outwith the ZTV due to screening from landform and intervening vegetation. The limited nature of visibility of the Proposed Development from settlement and properties on Kintyre is in part a result of the site selection and design process which has sought to limit visual impacts.

### Sequential Views from Transport Routes

#### Roads

7.5.8 The 'A' road network within the overall study area is shown on Figure 7.10 EIAR Volume 2c. The A83 and A841 are partially located within the 20 km detailed study area (Figure 7.10b, EIAR Volume 2c). These routes and those within the wider area largely follow coastlines and tend to be at low levels with variable, but often scenic, views which are predominantly focused along the coast and out to sea.

#### **Ferries**

- 7.5.9 Kintyre is connected to the surrounding islands via a number of ferry routes, as shown on (Figure 7.10b, EIAR Volume 2c). Those located at least partly within the detailed study area are:
  - Lochranza to Claonaig,
  - · Kennacraig to Port Ellen,
  - · Kennacraig to Port Askaig, and
  - Tayinloan to Gigha.

7.5.10 These routes tend to gain open and expansive views, with those to the west including Islay and the distinctive profile of Jura, and the route to the east including scenic views of the mountains of north Arran.

#### Recreational Routes

- 7.5.11 A number of recreational routes, including Long Distance Routes; National Cycle Routes; and Core Paths are found within the detailed study area. Recreational routes with potential visibility of the Proposed Development, as indicated by the ZTV, are shown on Figure 7.10b, EIAR Volume 2c, and include the following:
  - The Kintyre Way long distance recreational trail,
  - The Arran Coastal Way long distance recreational trail,
  - National Cycle Route (NCR) 78 a long distance cycle route from Campbeltown to Inverness,
  - Core Paths on Kintyre:
    - Core Path C293 A83 to Crubasdale, and
  - Core Paths on the Isle of Gigha
    - Core Path C095 Gigha Ferry pier to South Pier,
    - o Core Path C096 Gigha Jetty to Port Mor,
    - Core Path C495 Eilean Garbh, Gigha,
    - o Core Path C534 St. Catherine's Church to Poll More Bay, Gigha, and
    - o Core Path C539 Creag Bhan viewpoint, Gigha.

### Representative Viewpoint Selection

- 7.5.12 The visual assessment is informed by a series of viewpoints which have been selected to represent a range of views and viewer types, including each of the settlements, transport routes and recreational routes with potential visibility of the Proposed Development, as listed above.
- 7.5.13 These viewpoints represent typical views that people who live in the area, visitors to the area, and people passing through area are likely to experience. The context of views currently experienced by visual receptor locations is described in the viewpoint assessment (Appendix 7.5, EIAR Volume 3).
- 7.5.14 ABC and NatureScot were consulted on viewpoint locations during scoping and through consultation during the pre-application period. In total 25 representative viewpoint locations, have been identified, as detailed in Table 7-3, and these form the basis of the visual assessment for each of the receptors outlined above. The relationship between the assessment viewpoints and the ZTV is shown on Figures 7.6 to 7.8 (EIAR Volume 2c).

**Table 7-3: Assessment Viewpoint Locations** 

No	Viewpoint	Grid Reference		Reason for Selection
1	Craighouse, Jura	152740	667370	Representative of views experienced from the main settlement on Jura.  Within Jura NSA and Coastal Parallel Ridges LCT.
2	B8024 south of Kilberry	171541	661638	Representative of road users and cyclists on the B8024 and NCR 78.  Within Knapdale / Melfort APQ and Rocky Mosaic LCT.
3	Ardpatrick	174063	658086	Representative of recreational receptors visiting Ardpatrick Point.  Within Knapdale / Melfort APQ and Rocky Mosaic LCT.
4	A83 north of Clachan	177920	657558	Representative of views from A83 travelling south.  At edge of Upland Forest Moor Mosaic LCT and Rocky Mosaic LCT.
5	Dun Skeig	175775	175775	Representative of elevated views from a specific viewpoint at Dun Skeig.  Within West Kintyre APQ and Rocky Mosaic LCT.  This viewpoint is also used in the assessment of cultural heritage presented in Chapter 12 of this EIAR (EIAR volume 2a).
6	Kennacraig – Port Askaig ferry	168126	657382	Representative of views experienced by passengers on the ferry to Islay.  Within West Kintyre / South East Jura and South East Islay SCU.
7	Kennacraig – Port Ellen Ferry	154091	649118	Representative of views experienced by passengers on the ferry to Islay.  Within West Kintyre / South East Jura and South East Islay SCU.
8	Ardminish, Gigha	164896	648662	Representative of views from settlement and core paths on the Isle of Gigha.  Within Coastal Parallel Ridges LCT.
9	South Pier, Gigha	164371	646362	Representative of views from the south of the Isle of Gigha. Within Coastal Parallel Ridges LCT.

No	Viewpoint	Grid Reference		Reason for Selection
10	Sound of Gigha, from Gigha ferry	167781	647310	Representative of views experienced by passengers on the ferry to Gigha.  Within West Kintyre / South East Jura and South East Islay SCU.
11	Rhunahaorine / Point Sands near the caravan park	169539	648433	Representative of visitors to the caravan park and beach and users of the Kintyre Way.  Within West Kintyre APQ and Coastal Plain LCT.
12	Tayinloan ferry terminal	169336	646531	Representative of views from the ferry terminal, the Kintyre Way and more broadly Tayinloan settlement. Within West Kintyre APQ and Coastal Plain LCT.
13	Kintyre Way north of the Development Site	174336	643968	Representative of recreational receptors on the Kintyre Way close to the Development Site.  Within Upland Forest Moor Mosaic LCT.
14	A'Chleit	168106	641746	Representative of views experienced by visitors to A'Chleit.  Within West Kintyre APQ and Coastal Plain LCT.  This viewpoint is also used in the assessment of cultural heritage presented in Chapter 12 of this EIAR (EIAR volume 2a).
15	Sound of Gigha from recreational watercraft	164905	640419	Representative of recreational watercraft in Gigha Sound.  Within West Kintyre / South East Jura and South East Islay SCU.
16	North Muasdale	168136	639771	Representative of residential receptors east of Muasdale and users of the local core path network.  At edge of Upland Forest Moor Mosaic LCT and Rocky Mosaic LCT.
17	A83 south of Muasdale	167248	638737	Representative of views from A83 travelling north.  Within West Kintyre APQ and Coastal Plain LCT.
18	Glenacardoch	166619	637287	Representative of a nearby residential receptor, and more broadly Glenbarr/ Belloch.  Within Rocky Mosaic LCT.
19	Beinn an Tuirc	175223	636169	Representative of views from hilltops to the south east.  Within Upland Forest Moor Mosaic LCT.
20	A83 near Bellochantuy	166040	632191	Representative of views from A83 travelling north.  Within West Kintyre APQ and Coastal Plain LCT.

No	Viewpoint	Grid Reference		Reason for Selection
21	Lochranza-Claonaig ferry	190950	652364	Representative of views experienced by passengers on the ferry to Arran and boats within Kilbrannan Sound.  Within Loch Fyne / Kilbrannan Sound SCU.
22	Newton Point, Arran	193137	651538	Specific viewpoint north of Lochranza, Arran and on the Arran Coastal Way. Within North Arran NSA, SLA and Arran Coastal Headland LCT.
23	A841 Whitefarland, Arran	186613	642531	Representative of low-level views from north-west Arran, including settlements and routes.  Within North Arran NSA, SLA and Arran Raised Beach Coast LCT.
24	Beinn Bharrain, Arran	189439	642218	Representative of elevated views from north-west Arran.  Within North Arran NSA, WLA, SLA and Arran Rugged Granite Uplands LCT.
25	Goatfell, Arran	199135	641538	Representative of elevated views from north-east Arran.  Within North Arran NSA, WLA, SLA and Arran Rugged Granite Uplands LCT.

7.5.15 In addition to the 25 assessment viewpoints listed above, two supplementary wireline locations and four supplementary cumulative wireline locations have been included at the request of ABC and NatureScot. These are not assessment viewpoints, but are included to provide additional supporting information to aid understanding of the assessment of specific receptors. Details of each location and the reason for inclusion are provided in Table 7-4, below, and their locations shown on Figures 7.6 to 7.8 (EIAR Volume 2c).

**Table 7-4: Supplementary Wireline Locations** 

Ref	Location	Grid Reference		Reason for Inclusion
SW1	Craig Bhan, Gigha	164780	650900	Included to support the assessment of visual effects from the Isle of Gigha, as represented by Viewpoint 8: Ardminish, Gigha.
SW2	Kintyre Way, Rhunahaorine North	169315	649455	Included to support the assessment of visual effects from part of the Kintyre Way, as represented by Viewpoint 11: Rhunahaorine / Point Sands.
C1	Catacol, Arran	191040	649630	Included to support the assessment of cumulative impacts from the north Arran coastline, as

Ref	Location	Grid Reference		Reason for Inclusion
C2	Rubha Airigh Bheirg, Arran	188595	647875	represented by Viewpoints 22: Newton Point, Arran and Viewpoint 23: A841 Whitefarland, Arran. These supplementary cumulative wirelines provide additional views to aide understanding of potential sequential effects.
C3	Kilbrannan Sound, northwest of Pirnmill	186715	645010	Included to support the assessment of cumulative impacts from the Kilbrannan Sound, as represented by Viewpoint 21: Lochranza-Claonaig ferry. These supplementary cumulative wirelines provide additional views to aide understanding of potential sequential effects.
C4	Kilbrannan Sound, Machrie Bay	188410	635690	

### 7.6 Embedded Mitigation

7.6.1 The design of the Proposed Development has evolved as part of an iterative process which has aimed to provide an optimal design in environmental, as well as technical and economic terms. A number of mitigation measures have been introduced in order to minimise the likely landscape and visual effects, as set out below.

### Siting and Design Strategy

- 7.6.2 The site selection process included detailed analysis of large parts of Argyll to identify locations most likely to be suitable for onshore wind development. This analysis took into consideration a range of technical, environmental, planning and commercial factors, including potential landscape and visual effects. Key considerations included ensuring sufficient distance from, and therefore minimising potential effects on, nationally designated landscapes, focusing on larger scale simple landscapes, and application of a viewshed model to identify areas of lower visibility. This identified that the Proposed Site was one of the most suitable locations for wind farm development within this region. Further information on this process can be found within the Design Statement.
- 7.6.3 The design strategy for the principal elements of the Proposed Development has taken into account the following objectives relating to landscape and visual effects:
  - To provide a turbine layout with a simple form, which relates to the landscape character
    of the Development Site and its surroundings and minimises impacts on the character of
    the local landscape,
  - To minimise adverse effects on nationally important and designated landscapes, and from both principal and smaller settlements, as far as possible,
  - To achieve a balanced composition of the turbines against the landscape, skyline and other cumulative wind farm developments from key receptor locations,

 To minimise waste throughout the works and, where waste is generated, to reuse and recycle it as far as possible,

- To create a design that takes account of the relevant national, regional and local policy context as far as possible, and
- To respond to the various key landscape and visual constraints identified through survey, consultation and assessment.
- 7.6.4 It is important to note that these objectives are only part of the design process and must be balanced with a number of other objectives and constraints, including other environmental considerations and technical and commercial viability.

# Site Specific Design Mitigation Measures Integral to Site Layout and Design

- 7.6.5 Various iterations of the turbine layout were considered as part of the design process, as described in the Design Statement and referenced in Chapter 4 of this EIAR: Reasonable Alternatives. These layouts were tested through a combination of modelling and analysis, informed by site survey, with landscape and visual considerations important factors in guiding design.
- 7.6.6 Landscape and visual constraints were applied to exclude turbines from specific areas of the Development Site, principally the areas of higher ground in the north and east, and away from the western extent to allow turbines to be positioned behind the ridge landform and into the spine of the peninsula. The number of turbines was reduced slightly from 14 as per the Consented Development, to 12. The removal of two turbines ensured greater offset from settlement, which helps to achieve a cohesive layout, as well as improving technical efficiency during operation.
- 7.6.7 Variable turbine heights have been used for the Proposed Development, with seven turbines on higher ground having a lower height (up to 185m to blade tip). The remaining five turbines on lower ground are taller (up to 200m to blade tip). This difference in sizing helps to achieve a balanced layout and minimise the visibility of turbine hubs from the Kintyre coast.
- 7.6.8 The design process has helped to ensure adverse effects on the most sensitive landscapes and the majority of settlement and roads have been avoided and/or reduced as far as possible. Interim layouts were also tested from a series of key viewpoint locations with a focus on achieving a well-balanced and cohesive layout which minimises turbine stacking, uneven spacings and gaps, and a perception of uniformity of heights.
- 7.6.9 Aviation lighting has also been designed to minimise potential landscape and visual effects, principally through a reduction in the numbers of lights, focusing them on perimeter and cardinal turbines. The use of an aviation obstruction light with a direction beam also helps to reduce the apparent intensity of the lighting, particularly from lower lying locations such as Gigha and in close proximity to the Proposed Development. In addition, it has been agreed with the CAA that mid mast lights are not required, further limiting the numbers of light sources

included in the Proposed Development. Further details of the approach to aviation lighting are provided in Appendices 7.2 and 16.1 (EIAR Volume 3).

7.6.10 The location and management of construction activities have been carefully considered to minimise landscape and visual effects. Ground disturbance on-site would be restricted as far as practicable, and any soil materials excavated would be retained on the Development Site for re-use on areas to be re-vegetated following the construction phase. The small temporary quarries (borrow pits), hard standing areas, construction compound and access tracks are positioned to avoid or minimise visual impact. The widened bends of the access tracks would be partially covered with topsoil and allowed to regenerate. The substation and battery storage compounds have been located on a part of the Development Site that shows little visibility from key receptors within close proximity, reducing visual impacts overall.

### Mitigation of Access Works and Site Infrastructure

- 7.6.11 A single access track is proposed for the construction of all turbines and their associated infrastructure. This is the existing forestry and Deucheran Hill Wind Farm access track which leaves the A83, north of Killean, travelling east principally through coniferous plantation woodland.
- 7.6.12 As with the proposed wind turbines, the access track modifications and other associated works have been designed using an iterative process in order to reduce potential environmental effects as far as possible. The key embedded mitigation measures are as follows:
  - Use of 2.1 km of existing forestry track network, reducing the creation of new tracks and removal of landscape features,
  - Use specialist transport vehicles to minimise loss of trees at the access junction with the A83, and reinstate planting and trees that require to be removed to avoid long term impacts (see Figure 17.8: Proposed Species Restock Composition; EIAR Volume 2b),
  - Track material to be locally won, where practical, and a similar appearance to that of existing forestry tracks,
  - Drainage infrastructure located and aligned with natural landforms,
  - Five of six borrow pits to be reinstated and re-vegetated (one currently in use by FLS likely to continue as such), and
  - Restocking of forestry around the substation and battery storage compounds.

### Forestry Management

7.6.13 The aims and management of the plantation woodland within the Development Site have been considered in light of the Proposed Development. The following provides a high-level summary of elements most relevant to landscape and visual effects, with more details provided in Chapter 17 of this EIAR: Forestry.

7.6.14 The wind farm felling programme would largely be driven by technical constraints and requirements. Areas of forestry would be felled to accommodate the construction and operation of the Proposed Development. Typically, keyhole felling would be required to a distance of 100m from each turbine, and a 10m buffer around each item of infrastructure and on each side of the corridor for access roads.

7.6.15 The construction of the Proposed Development would also present an opportunity to review and enhance restocking plans to increase biodiversity through the incorporation of broadleaved trees and to restore peatland habitat in areas of deep peat (see Chapter 9: Ecology and 17: Forestry of this EIAR).

### 7.7 Assessment of Effects on Landscape Character

7.7.1 The landscape assessment provides details of the predicted effects arising from the Proposed Development on the physical landscape of the Development Site, landscape and seascape character, and designated landscapes within the detailed study area. The assessment focusses on likely significant effects during construction and operation of the Proposed Development.

### Designated Landscapes

#### North Arran National Scenic Area

- 7.7.2 A detailed assessment of effects of the Proposed Development on the identified Special Landscape Qualities (SLQs) of the North Arran NSA is provided in Appendix 7.3 (EIAR Volume 3), with the key findings summarised below.
- 7.7.3 Initial appraisal informed by desk-based research and targeted site survey identified little or no potential for the Proposed Development to influence an appreciation of the majority of the identified SLQs of the NSA. The detailed assessment therefore focused on one SLQ, an exceptional area for outdoor recreation, concluding a **Negligible** (not significant) effect on this SLQ during construction, a **Minor** (not significant) effect during operation and **Negligible** (not significant) effect in relation to cumulative scenarios 1 and 2.
- 7.7.4 On balance, considering the limited nature of potential change on one SLQ, and no effects on the remaining SLQs, the overall significance of effect on the North Arran NSA would be Negligible (not significant).

#### North Arran Wild Land Area

- 7.7.5 The Wild Land Assessment of the North Arran WLA is contained in Appendix 7.4 (EIAR Volume 3). A summary of the findings is presented below.
- 7.7.6 One of the perceptual responses, a sense of sanctuary and solitude, in relation to the following two WLA attributes within the published WLA description were identified as having the potential to be affected by the Proposed Development:

 A readily accessible area, but with strong wild land attributes, especially within the remote interior, and

- A landscape which is well-defined, whose rugged qualities are widely experienced from the surrounding areas.
- 7.7.7 It was judged that there would be very little or no potential for change in relation to the other defined attributes and perceptual responses of the WLA.
- 7.7.8 The assessment found that there would be very little perceptible change to the sense of sanctuary and solitude experienced within the WLA as a result of the Proposed Development, including at night. Primarily, this is a result of the limited extent of the ZTV, the separating distance involved between the Proposed Development and WLA, and the existing influence that operational wind farms, other development and existing light sources on Kintyre and the Arran coast have on the WLA.
- 7.7.9 The overall significance of effect of the proposed Development on the North Arran WLA is judged to be **Negligible (not significant)**.

#### Local Level Designations

- 7.7.10 A detailed assessment of potential effects on the West Kintyre APQ, Knapdale / Melfort APQ and North Arran SLA is provided in Appendix 7.5 (EIAR Volume 3) and the findings are summarised below.
- 7.7.11 As a result of the limited and/or distant nature of potential direct and indirect change, potential effects during both construction and operation on the West Kintyre APQ, Knapdale / Melfort APQ and North Arran SLA would be **Minor or less (not significant)**.

### Physical Effects - Development Site

- 7.7.12 This section concerns the potential effects of the Proposed Development on the physical elements that make up the landscape within the Development Site. It assesses the effects potentially arising during construction and enduring through operation. Non-physical effects (indirect) on the landscape character and valued landscapes are dealt with separately below.
- 7.7.13 An aerial photograph of the Development Site landscape is shown on Figure 7.3, EIAR Volume 2c. Readers should also refer to Chapter 3 of this EIAR: Project Description.

#### Site Entrance and Access Tracks

- 7.7.14 In order to allow for delivery of the turbines, the access off the A83 would require modification and widening. This would involve removal of short sections of hedgerow and some trees. It is anticipated that these would be replanted following completion of the construction works.
- 7.7.15 The access track has been chosen to make use of the existing Deucheran Hill Wind Farm access track (also a timber haulage route) and other existing forestry tracks where possible. Spur roads required to access elements of the Proposed Development would be designed to work with the topography of the Development Site to reduce the need for cut and fill slopes

and minimise the required land take extent. Access tracks would be constructed or widened where necessary as they progress using material excavated from borrow pits. With the natural colonisation of vegetation, over time, the surface area of borrow pits and other temporary works areas should re-integrate into surrounding vegetation during operation of the Proposed Development.

#### **Crane Pads**

7.7.16 Permanent areas of hardstanding at each turbine are required as crane pads for construction and for servicing purposes. These pads would be of similar construction and materials to the access track. Their size and orientation relative to slope angles have in each case been designed to minimise potential effects on the landscape. Their surface would be permeable and constructed from local materials, won on site where feasible.

#### **Temporary Construction Compound**

- 7.7.17 The temporary construction compound would be built in a similar manner to the access tracks and located as shown on Figure 1.3 (EIAR Volume 2b).
- 7.7.18 Chapter 3 of this EIAR: Project Description provides further information on the dimensions, construction activities and storage likely to be sited at the compound.

#### **Turbine Foundations**

- 7.7.19 Areas of forestry would be felled to accommodate the construction and operation of the Proposed Development. Typically, keyhole felling would be required to a distance of 100m from each turbine, and a 10m buffer around each item of infrastructure and on each side of the access roads. Felling prior to construction has been assumed and planting afterwards is detailed in Chapter 17 of this EIAR: Forestry.
- 7.7.20 During construction, the stripped topsoil and excavated sub-surface material would be stored nearby in accordance with the principles outlined in the future Construction Environmental Management Plan (CEMP). It is anticipated that potential aggregate recycling and concrete batching would take place onsite. After pouring and curing the concrete, the topsoil would be replaced and the ground above the foundations made up with previously removed soil, leaving only a small flange of exposed concrete around the turbine base. Surplus excavated material would be recycled either as backfill for restoration of the borrow pit areas, or appropriately redistributed across the Development Site. In some instances, piled foundation may be used for turbines, and these would have a similar treatment to that described above to minimise the exposed surface.

#### Control Building, Substation Compound and Battery Storage

7.7.21 The proposed wind turbines would be connected to a new on-site control building via underground cabling running alongside access tracks. The location of the proposed control building is shown on Figure 1.3 (EIAR Volume 2b). Proposed battery storage would be installed in the construction compound on completion of the majority of the construction works. The battery storage facility will comprise 27 containers, not exceeding 2.6m in height.

7.7.22 The location of the substation and battery storage has been designed to work with the topography of the Development Site, existing access and screening provided by forestry. The Forestry and Land Scotland (FLS, *unpublished*) updated Carradale Land Management Plan indicates that the forestry surrounding the substation and battery storage would be clear-felled after 2041. Thus, for the majority of the operational phase (35 years) of the Proposed Development these features would benefit from screening by the surrounding forestry. The indicative restocking plan suggests that clear felled areas would be replanted with mixed conifers and Sitka spruce, with open ground beyond this.

7.7.23 The Proposed Development will require a connection to the electrical distribution network.

This is not the subject of the current Section 36 Application to which this EIAR relates. The Transmission and Distribution Network Operator will develop the future connection.

#### **Existing Land Uses**

7.7.24 As described previously, the existing land use of the Development Site predominantly comprises productive forestry and designed open ground. There is limited public access and no other function is accommodated. The updated Carradale Land Management Plan (as detailed in Chapter 17 of this EIAR: Forestry) is designed to integrate a broader range of uses and species diversification, in line with Scottish Forestry Strategy. Overall, the susceptibility to change is judged to be **Low**, resulting in **Low** sensitivity.

#### Magnitude of Effect

- 7.7.25 Construction activity would result in a short duration, and theoretically reversible, change to the Development Site landscape. Notwithstanding the existing land uses, the scale of change is considered to be medium as a result of the direct (physical) changes to the Development Site fabric arising from temporary vegetation clearance and built form, construction activity including cranes, and additional vehicular movement. However, the geographic extent of change would be limited when taken in the context of the Development Site as a whole. All areas temporarily disturbed during construction, and not required during operation, would be reinstated and revegetated. Overall, the magnitude of effect on the Development Site landscape during construction is judged to be **Medium**.
- 7.7.26 During operation, the main change would be the loss of areas of existing vegetation and some localised land reprofiling. This direct change would be limited to the physical development footprint of the turbines, tracks and other permanent elements, with other areas temporarily used for construction reinstated and revegetated. The extent of direct change would be reduced from that experienced during construction but would occur over a longer time period. Thus, the magnitude of effect during operation would be **Medium**.
- 7.7.27 At the end of its 35-year operational life, the Proposed Development would be decommissioned, with similar, although less intrusive, operations as described for the construction phase in reverse. It is anticipated that the proposed access tracks would be retained for use by Forestry and Land Scotland to facilitate future forestry operations and peatland restoration. A decommissioning plan would be prepared by the Applicant and agreed with ABC.

7.7.28 As the alterations to the physical character of the Development Site are largely reversible this is considered to be a moderating factor when determining the significance of effect.

## Significance of Effect

7.7.29 During construction and operation, the significance of effect on the physical Development Site landscape would be **Minor (not significant)**.

## Landscape Character Types and Seascape Character Units

7.7.30 A detailed assessment of potential effects on each of the identified LCTs and SCUs is provided in Appendix 7.5 (EIAR Volume 3). The assessment has identified that there would be no significant effects on the majority of the LCTs and both SCUs during both construction and operation. Localised significant effects have been identified on one LCT (Upland Forest Moor Mosaic) as described in more detail below.

## Upland Forest Moor Mosaic LCT (ABLWECS LCT 6)

#### Baseline

- 7.7.31 The interior of the Kintyre uplands forms an extensive, fairly homogenous undulating plateau with occasional hills. This LCT forms the backdrop of extensively forested hills and moorland to the more richly patterned and low-lying coastal fringes. Land cover comprises a large-scale mosaic of extensive coniferous forestry and open moorland with some blanket bog. This is a sparsely settled landscape, with isolated farms and houses located on lower hill slopes, and generally little evidence of domestic-scale development.
- 7.7.32 This landscape is difficult to access, and although a sense of seclusion can be experienced in many areas, the perception of naturalness is reduced by the presence of extensive commercial forestry, several operational wind farm developments and power lines between Carradale and Crossaig, and Crossaig and Inveraray, the latter of which is currently undergoing an upgrade / replacement. No landscape designations apply to this LCT, although it abuts the APQ designated areas on the west and east coasts of the Kintyre peninsula (Figure 7.4b and 7.5b, EIAR Volume 2c).
- 7.7.33 The published descriptions of this LCT do not refer to any specific dark sky characteristics. There are no existing medium intensity visible aviation lights on existing wind turbines or other structures within this LCT, although lower intensity (32 candela) aviation lighting is present on the Auchadaduie and Tangy schemes. As described above, this is a sparsely settled landscape, containing few vehicular routes, and as such sources of artificial light are limited. In certain locations light sources from the surrounding more settled lowland and coastal landscapes are visible and have a localised influence.
- 7.7.34 Overall, the Upland Forest Moor Mosaic LCT is judged to have **Medium** landscape value.

#### Sensitivity

7.7.35 On balance, this medium to large scale landscape, which includes a number of existing operational wind farms to the north and south, contributes to a **Low** susceptibility to change. The overall landscape sensitivity of this LCT is judged to be **Medium**.

Magnitude of Effect

- 7.7.36 The Proposed Development would be located within this LCT and would therefore result in both direct (physical) and indirect change. A description of the physical effects within the Development Site is provided above.
- 7.7.37 There would be a noticeable, but short-duration indirect change to the immediate surroundings of the Development Site as a result of the increased movement and activity and the addition of temporary features such construction compounds and borrow pits, and to a lesser extent, the removal of areas of commercial forestry.
- 7.7.38 The scale of change during construction is judged to be small as a result of the LCT being characterised partly by large-scale commercial forestry operations and having a context of several existing wind farm developments. The geographic extent of change (i.e. characterising effects) would be very contained, generally perceived from areas of open ground up to c.2 km from the Development Site and would diminish quickly with distance amid the undulating topography and large areas of commercial forestry. Effects would theoretically be reversible. It is judged that the magnitude of effect on the landscape character of this LCT during construction would be **locally Medium** up to 2 km, and **Low** for the LCT as a whole.
- 7.7.39 The Proposed Development would create a long duration change during operation. The ZTVs (Figures 7.6 and 7.7, EIAR Volume 2c) show a heavily fragmented pattern of visibility. Areas of continuous theoretical visibility are concentrated to the Development Site and immediate surroundings, within approximately 3 km to the north and south-west, although in reality this would be restricted locally by commercial forestry. A further band of visibility extends across the southern side of Teanchoisin Glen and Barr Glen. The pattern of visibility decreases substantially with distance amid the undulating topography. Further south, there are small areas of theoretical visibility from north-facing slopes of hill tops, including Meall Buidhe (8 km); Cnoc Buidhe; and Sgreadan Hill (12 km). To the north of this LCT, the patches of theoretical visibility are larger, but generally receptors would perceive fewer turbines, other than on the highest summits. In addition, many of the areas indicated as gaining theoretical visibility coincide with forestry plantations and as such the actual impression of change would be further reduced.
- 7.7.40 The lighting ZTV (Figure 7.8, EIAR Volume 2c) indicates a similar, although reduced pattern of visibility of the aviation lighting to that of the wider Proposed Development, as the aviation lighting will be located at hub height and on only eight of the 12 proposed turbines. The night-time baseline of this landscape is one with few existing light sources and no existing medium intensity aviation lights. The introduction of lighting would therefore be a notable change, but generally only to localised parts of this landscape, and given the relative inaccessibility of the area, few people are likely to be in this landscape at night to experience the change. Furthermore, as indicated by the lighting intensity ZTV (Figure 7.9, EIAR Volume 2c), the

intensity of the lighting at those parts in closest proximity to the Proposed Development would be considerably reduced due to the directional nature of the proposed light. From more distant locations beyond 5 km, when visible, the lighting is likely to be operating on the lower (10%) intensity mode. In addition, with distance and closer to the settled coastal landscapes to the east and west that contain other light sources, the influence of the proposed aviation lighting would reduce.

7.7.41 Operational wind farms are an existing characteristic of this landscape, both to the north and south of the Development Site, seen to varying degrees amid the undulating topography of the upland moorland. The wider perceived change would be appreciated as an incremental increase in the number of wind turbines within an LCT partly characterised by similar forms, and the introduction of aviation lighting into central parts of this LCT during hours of darkness. There would be localised notable change from areas of open ground within up to approximately 2 km from the Development Site, resulting in a locally Medium magnitude of effect. The magnitude of effect beyond these localised areas and for the LCT as a whole would be Low.

Significance of Effect

7.7.42 During construction and operation there would be a locally Moderate (significant) effect on a small part of this LCT, in the immediate vicinity of the Proposed Development and areas of open ground up to approximately 2 km from the Development Site. Effects on the wider extent of this LCT during construction and operation would be **Minor (not significant)**.

## Summary of Effects on Landscape Character

7.7.43 As outlined above and detailed in Appendix 7.5 (EIAR Volume 3), the majority of the identified landscape receptors would not be subject to significant effects as a result of the Proposed Development. Table 7-5 provides a summary of the landscape receptors predicted to receive significant effects.

Table 7-5 Summary of Significant Effects on Landscape Receptors

Receptor	Sensitivity (Value / Susceptibility)	Magnitude of Effect	Significance of Effect		
Landscape Receptors – Construction/ Decommissioning Effects					
Upland Forest Moor Mosaic LC (ABLWECS LCT 6)	Medium (Medium / Low)	Low (locally Medium within 2 km)	Minor (locally Moderate within 2 km)		
Landscape Receptors - Operational Effects					
Upland Forest Moor Mosaic LCT (ABLWECS LCT 6)	Medium (Medium / Low)	Low (locally Medium within 2 km)	Minor (locally Moderate within 2 km)		

## 7.8 Assessment of Effects on Visual Amenity

7.8.1 A detailed assessment of potential effects on each of the identified representative viewpoints and associated visual receptors is provided in Appendix 7.5 (EIAR Volume 3). The assessment has identified that there would be no significant effects on the majority of the viewpoints (19 out of 25 VPs) as a result of limited visibility and/or distance. The following provides details of those six viewpoints and associated visual receptors anticipated to experience significant effects (VPs 8, 9, 10, 13, 15 and 16).

## Viewpoint 8: Ardminish, Isle of Gigha (Figure VP8.1 to VP8.6, EIAR Volume 2d)

Baseline

- 7.8.2 Slightly elevated, open and panoramic view looking east from Ardminish. The focus of this view is towards the Sound of Gigha and Kintyre mainland. The foreground of the view is characterised by rough hummocky grassland, scrub vegetation and craggy foreshore of Gigha. Small clusters of residential properties and isolated white render houses nestle within the topography. The view extends across the Sound of Gigha and beyond to the generally uniform profile of the Kintyre coastline. The distant low undulating hills are overlain by large swathes of open moorland, fragmented by equally extensive blocks of coniferous forestry. There are a number of foreground vertical elements including telegraph poles and masts of watercraft moored offshore. The turbines of Auchadaduie Wind Farm are visible on the lower slopes above the coast to the south. In the far distance the blades and hubs of the Beinn an Tuirc I and II, Tangy I and II are also visible.
- 7.8.3 After dark, the lights of scattered properties along the near Gigha shore and the Kintyre coastline beyond, and distant car headlights along the A83 are visible as are occasional lights on vessels at sea.
- 7.8.4 Overall, the value of the view is judged to be **Medium**.

Sensitivity

7.8.5 This viewpoint is representative of views from the settlement at Ardminish and parts of the core path network on Gigha. Views experienced by residents in their home are generally considered to be of primary importance, indicating an elevated susceptibility to change. The focus of views from Ardminish and parts of the core path network would tend towards the Kintyre peninsula, in which existing wind farms are present. On balance a **High** susceptibility to change is assessed, resulting in **High** sensitivity.

Magnitude of Effect

7.8.6 Views of most construction activities would be restricted by intervening moorland topography and vegetation on Kintyre. Upgrading works and movement of vehicles on the access track may be visible in good weather conditions but would form a very small and distant component of the overall view. The magnitude of effect is judged to be **Very Low**.

7.8.7 The rotors or parts of the rotors of all 12 proposed turbines, and upper parts of towers of 10 turbines, would be visible, seen over c.9 km from this location and set behind the inland ridgeline of the upland interior of the Kintyre peninsula. The Proposed Development would extend the influence of wind farms within the view and would be located in closer proximity to the viewpoint than the existing schemes. The location beyond the initial upland ridge of Kintyre reduces the apparent height of the turbines. However, the Proposed Development would be a notable feature and create an additional focus in the background of part of the broad view east.

- 7.8.8 An additional supplementary wireline from Craig Bhan, the tallest hill on Gigha, is provided in Figure SW1 (EIAR Volume 2d) to give an indication of views experienced from a more elevated part of the island. This demonstrates a broadly similar view of the Proposed Development to that experienced at Ardminish. However, it would be seen in the context of a greater impression of existing wind farms on Kintyre and within a broader panorama, which includes the distant hills of Arran to the east and scenic seascape and hills of Islay, Jura and Knapdale to the west and north. As indicated by the ZTVs (Figures 7.6 and 7.7, EIAR Volume 2c) and the baseline photography from Achamore House (included as part of the Cultural Heritage assessment, Figure VP E.1, EIAR Volume 2b), visibility of the Proposed Development from other parts of the island is often more limited and restricted by landform and/or mature vegetation. Viewpoint 8: Ardminish therefore is representative of the likely worst case visual effects from receptors on the Isle of Gigha, with effects experienced from other parts of the island often reduced.
- 7.8.9 Aviation lighting on eight turbines would be visible, seen as relatively distant red lights elevated slightly above the silhouette of the mainland ridge of Kintyre, thus introducing lighting into a new part of the view in addition to that seen along the Kintyre coast. Night-time photomontages are provided in Figures VP and VP8.6 (EIAR Volume 2d) to give an impression of the lighting relative to other existing light sources in the view. It is important to note that these give an impression of how the lighting would appear within a photograph. In reality, the lights would appear as a consistent red colour to the naked eye, without the brighter central glow. The low elevation of this viewpoint and the distance to the Proposed Development would result in the apparent intensity of the aviation lighting being reduced such that when in peak mode it would appear similar to a sodium streetlight at a distance of approximately 5 km or a car brake light at a little under 5 km distance. As this location is greater than 5 km from the Proposed Development, when visible, the aviation lighting is likely to be operating on the lower intensity mode, 10% of peak intensity, as indicated in Figure VP8.6 (EIAR Volume 2d). Details of the calculated intensity for each of the aviation lights from this location are provided in Appendix 16.1 (EIAR Volume 3).
- 7.8.10 The Proposed Development would occupy a relatively small horizontal extent within the broad view east. The ZTVs (Figures 7.6 and 7.7, EIAR Volume 2c) indicate that the geographic extent of change would, theoretically, be experienced from much of the eastern half of Gigha, although in reality would be locally reduced by the presence of variable landform, trees and woodland. The Proposed Development would be perceived as a notable feature, occupying part of the view within the main direction of focus from this location.

7.8.11 Overall, the magnitude of effect is judged to be **Medium**.

Significance of Effect

7.8.12 During construction, the visual effect is judged to be **Negligible (not significant)**. During operation, the visual effect seen at this location is judged to be **Moderate (significant)**.

Viewpoint 9: Gigha, south pier (Figure VP9.1 to VP9.4, EIAR Volume 2d)

Baseline

- 7.8.13 Open, expansive panoramic view from Gigha, on the south pier at the southern end of the island. The natural focus of the view would tend to be across the sound and southwards along the long sweep of the Kintyre peninsula.
- 7.8.14 The open expanse of the Sound of Gigha defines and separates the fore-to-mid ground of the view. A number of low-lying, small craggy islets protrude from the sound in close proximity to Gigha. In the mid to background of the view is the relatively uniform coastline of Kintyre. Seen from this location the hills rise relatively steeply from the coast. Small linear settlements are strung out along the A83 coastal road. As the topography rises, settlement is restricted to isolated farmsteads. Large blocks of coniferous forestry fragment upland areas and ridgelines; creating a textured skyline.
- 7.8.15 The Beinn an Tuirc scheme is visible as one large group of varying turbine sizes, with Auchadaduie slighting outlying at its southern extent. The Tangy schemes (I-II) form a cluster further to the south along Kintyre. The Gigha and Leim Farm schemes are visible in close proximity to the west.
- 7.8.16 After dark, lights on the pier in the immediate foreground influence the appreciation of the view. The lights of scattered properties along the Kintyre coastline are visible, as are occasional car headlights along the A83 further inland. Scattered lights of settlement on Gigha and occasional lights on vessels at sea are also visible.
- 7.8.17 Overall, the value of the view is judged to be **Medium**.

Sensitivity

7.8.18 This view is representative of those from this small working pier. Wind farms on Kintyre are an existing component of the views. Overall, **Medium** susceptibility is assessed, resulting in **Medium** sensitivity.

Magnitude of Effect

- 7.8.19 Views of most construction activities would be restricted by intervening moorland topography and vegetation on Kintyre. Upgrading works and movement of vehicles on the access track may be visible in very good weather conditions but would form a very small and distant component of the overall view. The magnitude of effect is judged to be **Very Low**.
- 7.8.20 The rotors or parts of rotors of all 12 proposed turbines, and upper parts of towers of 11 turbines, would be visible, seen at a distance of over c.8 km and set behind the inland ridgeline

of the upland interior of the Kintyre peninsula. From this direction there would be a slight separation between the Proposed Development and the large cluster of wind turbines formed by Beinn an Tuirc I and II, similar to that between this cluster and Auchadaduie to the south. Nonetheless, the Proposed Development would extend the influence of wind turbines in this part of the view further north and consequently closer to this location. The location of the Proposed Development beyond the initial upland ridge of Kintyre reduces the apparent height of the turbines. However, the Proposed Development would appear as a notable feature and create an additional focus in the background of part of the broad view east.

- 7.8.21 Aviation lighting on eight turbines would be visible, seen as distant red lights elevated above the silhouette of the mainland ridge of Kintyre, thus introducing lighting into a new part of the view in addition to that seen along the Kintyre coast. The low elevation of this viewpoint and the distance to the Proposed Development would result in the apparent intensity of the aviation lighting being reduced such that when in peak mode, it would appear similar to a sodium streetlight at a distance of approximately 5 km or a car brake light at a little under 5 km distance. As this location is greater than 5 km from the Proposed Development, when visible, the aviation lighting is likely to be operating on the lower intensity mode, 10% of peak intensity, reducing the impression of change. The existing foreground lighting on the pier is likely to have a greater influence on the night-time view and may also lessen the perception of more distant light sources such as that on the Proposed Development. Details of the calculated intensity for each of the aviation lights from this location are provided in Appendix 16.1 (EIAR Volume 3).
- 7.8.22 The Proposed Development would occupy a relatively small proportion of the horizontal field of a panoramic view in this direction. The ZTVs (Figures 7.6 and 7.7, EIAR Volume 2c) indicate the geographic extent of similar views would, theoretically, be experienced from much of the eastern half of Gigha, although in reality would be locally reduced by the presence of variable landform, trees and woodland. The Proposed Development would be perceived as a notable feature within part of the views east towards Kintyre from this location.
- 7.8.23 Overall, the magnitude of effect is judged to be **Medium**.

Significance of Effect

7.8.24 During construction, the visual effect is judged to be **Negligible (not significant)**. During operation, the visual effect experienced at this location is judged to be **Moderate** (significant).

# Viewpoint 10: Sound of Gigha from Gigha ferry (Figure VP10.1 to VP10.4, EIAR Volume 2d)

Baseline

7.8.25 Open panoramic views are possible from this viewpoint located on the Gigha ferry on the Sound of Gigha. The natural focus of the view would tend towards the direction of travel. When travelling west the focus of the view is towards Gigha and along the coastline of Kintyre to the north and south. In journeys back to the mainland – represented here - views would tend to be focussed east, towards the Kintyre peninsula and the undulating hills that rise

steeply inland from the coast plain. The hill slopes are overlain by moorland, rough grazing, and large blocks of coniferous forestry. Built form is strung out along the coastline in the form of linear settlement, individual properties, landing areas for watercraft and several isolated farmsteads on the lower slopes of hills. The Tangy I and II schemes are visible on the distant skyline to the south east.

7.8.26 After dark, the lights of the Tayinloan ferry terminal, scattered properties along the coastline, and occasional car headlights along the A83 are visible inland. Scattered lights of settlements on Gigha are also visible, as are occasional lights on vessels at sea and fish farms within the sound. The winter timetable (from 19 October 2020 - 25 March 2021³) indicates that (around the winter solstice) during the week one sailing per day would take place approximately half an hour before sunset⁴, and three sailings after that point up to the final arrival on Gigha at approximately 17:55. During summer months no sailings would be undertaken during hours of darkness. The ferry decks are lit, which reduces perception of distant light sources.

7.8.27 Overall, the value of the view is judged to be **Medium**.

Sensitivity

7.8.28 Users of the passenger ferry would be travelling between the Isle of Gigha and mainland at a relatively steady pace. Distant views of wind farms on Kintyre are a component of the view from this location. Views from the ferry are important, however are generally not the primary purpose of the journey. On balance a **Medium** susceptibility to change is assessed, resulting in **Medium** sensitivity.

Magnitude of Effect

- 7.8.29 Views of most construction activities would be restricted by intervening moorland topography and vegetation on Kintyre. Upgrading works and the movement of vehicles on the access track may be visible in very good weather conditions; however, would form a very small and relatively distant component of the overall view. The magnitude of effect is judged to be **Very Low**.
- 7.8.30 The blades of 12 proposed turbines would be visible from this location, seen over a distance of 6 km. Receptors would also see several hubs and upper tower sections set beyond the inland ridgeline on Kintyre. The proposed turbines would appear as a relatively evenly spaced array beyond the initial upland ridge of the peninsula. The Proposed Development would extend the influence of wind turbines further north and closer to this location.
- 7.8.31 Aviation lighting on five turbines would be theoretically visible from this viewpoint, seen as relatively distant red lights elevated above the silhouette of the inland ridge. Both internal and external lighting on the ferry would influence the perception of other light sources in outward views. The low elevation of this viewpoint and the distance to the Proposed Development would result in the apparent intensity of the aviation lighting being reduced such that when in peak mode it would appear similar to a car brake light at a distance of a little under 5 km. As this location is greater than 5 km from the Proposed Development, when visible, the aviation

<sup>&</sup>lt;sup>3</sup> https://www.calmac.co.uk/article/2929/Gigha-Tayinloan---Gigha (accessed 28/10/20)

<sup>&</sup>lt;sup>4</sup> Calculated using Metcheck.com as 15:50 on the winter solstice 21/12/2020.

lighting is likely to be operating on the lower intensity mode, 10% of peak intensity, reducing the impression of change. Details of the calculated intensity for each of the aviation lights from this location are provided in Appendix 16.1 (EIAR Volume 3). Approaching the Kintyre coast, fewer lights would be visible due to increased screening and separation by the inland upland ridge.

- 7.8.32 The Proposed Development would occupy just under one third of the horizontal field of view in this direction, a small part of the wider views available. The ZTVs (Figures 7.6 and 7.7, EIAR Volume 2c) indicate that the geographic extent of change of similar views, i.e. where hubs and / or rotors may be visible, would occur over much of the duration of the sailing from Gigha to the mainland. However, there would be a steady decrease in visibility of the Proposed Development as the ferry progresses towards Kintyre, as evidenced by Viewpoint 12: Tayinloan Ferry Terminal. The scale of change is judged to be large as a result of the introduction of a prominent array of moving features to the near skyline that would become a new focus within the view.
- 7.8.33 Overall, the magnitude of effect is judged to be **Medium**.

Significance of Effect

**7.8.34** During construction, the visual effect is judged to be **Negligible (not significant)**. During operation, the visual effect seen at this location is judged to be **Moderate (significant)**.

Viewpoint 13 – Kintyre Way, north of the Development Site (Figure VP13.1 to VP13.4, EIAR Volume 2d)

Baseline

- 7.8.35 Open and slightly elevated view from the Kintyre Way, one of Scotland's 'Great Trails'. The view looks across open moorland to the near horizon formed by the undulating topography, minor ridgelines and craggy knolls. The focus of this segment of the view is across Loch na Naich, however 360-degree views are possible from this location. The view illustrates that this is a large scale, relatively simple landscape comprising forestry, open moorland, large scale landscape features in the form of the Loch and rolling to undulating topography. Wind energy is a feature of the experience from this section of the route; the existing Deucheran Hill Wind Farm can be seen to the east of this view. Overall, in recognition of the Kintyre Way being a promoted long-distance route and one of Scotland's 'Great Trails', the value of the view is judged to be **High**.
- 7.8.36 After dark there are no notable light sources visible at this location. Albeit possible, there are unlikely to be receptors at this location during darkness hours.

Sensitivity

7.8.37 This is a popular walking route and people are likely to be at this location for an appreciation of the landscape. A number of existing wind farms, including most notably Deucheran Hill Wind Farm, are features of the experience from this section of the route. On balance, the susceptibility to change to the type of development proposed would be **Medium**. The sensitivity is judged to be **High**.

#### Magnitude of Effect

7.8.38 Users of the Kintyre Way may appreciate an increase in vehicular traffic during construction. Close range views of construction activity associated with the access track would be seen in the foreground and midground of the view. Views of construction activity around the substation and within the Development Site to the south are likely to be screened by intervening undulating landform, which falls away gently to the south of this location, and by forestry within the Development Site.

- 7.8.39 The scale of change during construction would be medium, taking into consideration the context of existing forestry operations and wind farm maintenance. The horizontal extent of construction activity would be large near the access track, diminishing with increasing distance. The geographic extent of change would be limited to a short section of the Kintyre Way before the route passes into commercial forestry to the east and west of this location. The magnitude of effect during construction experienced from this section of the Kintyre Way would be **Medium**.
- 7.8.40 The blades of 12 proposed turbines, and hubs / rotors of eight turbines, would be theoretically visible from this location, the closest of which at a distance of c.1.5 km. In reality, forestry would screen two of the turbine hubs. The lower tower sections of seven turbines would be screened below the near skyline. The size of the proposed turbines would be large but commensurate to the scale of the surrounding open undulating moorland topography and large swathes of commercial forestry. Within this landscape and taking into account they are seen in different parts of the views from this location, variation in turbine size between the Proposed Development and Deucheran Hill and Cour would be somewhat moderated.
- 7.8.41 Aviation lighting on the hubs of six turbines would be theoretically visible in relatively close proximity, although in reality two of the aviation lights would be screened by forestry. The remaining four would be seen as red lights slightly elevated above the silhouette of the surrounding landform and forestry. As a result of the close proximity, the aviation lights would introduce a new notable feature into the predominantly dark views from this location. However, there are unlikely to be people at this location at night to experience the change. Details of the calculated intensity of the aviation light from this location are provided in Appendix 16.1 (EIAR Volume 3).
- 7.8.42 The proposed turbines would occupy approximately one third of the field of view in this direction. The ZTVs (Figures 7.6 and 7.7, EIAR Volume 2c) indicate that similar views would be theoretically visible across a short section of the Kintyre Way to the north of the Development Site. In actuality, the screening effect of commercial forestry would reduce the duration of similar views to c.1.5 to 2 km of this long-distance route. The scale of the change is considered to be large as a result of the close proximity to the Proposed Development; the introduction of wind turbines into a new part of views available from this location; and the visibility of aviation lights.
- 7.8.43 Overall, the magnitude of effect is judged to be **High**.

#### Significance of Effect

**7.8.44** The visual effect experienced at this location is judged to be **Moderate (significant)** during construction and **Major (significant)** during operation.

7.8.45 This viewpoint represents the 'worst case' view from a static point on the Kintyre Way. Two other viewpoints (VP11: Rhunahaorine/ Point Sands and VP12: Tayinloan Ferry Terminal), described above, are also located on the Kintyre Way. These viewpoints give an indication of potential views from two short sections of the Kintyre Way. However, as demonstrated by the ZTVs (Figures 7.6 and 7.7, EIAR Volume 2c), and as a result of the site selection guided by the RWE viewshed model, there would be no visibility of the Proposed Development from the majority of the route. In reality, visibility would be further limited by screening from forestry. As such, although the Proposed Development would be a notable feature from localised locations, this would represent a very small change to views experienced from the overall route both during construction and operation. Effects on the wider extent of the Kintyre Way would be **Minor (not significant)**.

# Viewpoint 15: Sound of Gigha from recreational watercraft (Figure VP15.1 to VP15.4, EIAR Volume 2d)

#### Baseline

- 7.8.46 View from a recreational watercraft on the Sound of Gigha, west of Muasdale. The focus of this view will vary depending on the direction of travel, however, would naturally tend towards the dramatic views to Gigha, Islay and Jura to the west. From the mid to the background of the view, the uniform coastline of Kintyre rises inland to form a series of low undulating hills. Settlement is visible along the line of the A83 coast road and includes Muasdale, a number of individual properties and small hamlets strung out along the coastline. The existing Beinn an Tuirc I and II wind farms are visible between two higher shoulders of landform to the south east set back from the coastal area, with Auchadaduie<sup>5</sup> Wind Farm in front of the ridge and closer to the coast. The Tangy I and II schemes are visible, but more distant to the south east of this location, becoming more prominent as one travels south towards Machrihanish Bay. The prominence and influence of each of the wind farms on Kintyre and Gigha would vary in different parts of the Sound of Gigha.
- 7.8.47 After dark, the lights of scattered properties along the Kintyre coast and on Gigha and adjacent fish farms are visible, as well as the movement of occasional car headlights along the A83 and potentially lights from other vessels at sea. Low intensity aviation lighting on the Auchadaduie scheme may also be visible in certain conditions.
- 7.8.48 Overall, the value of the view is judged to be **Medium**.

Sensitivity

7.8.49 Users of recreational watercraft are likely to be at this location to enjoy the panoramic views from the Sound of Gigha. Views towards Kintyre would be less important and include a

<sup>&</sup>lt;sup>5</sup> Refer to consultation feedback from NatureScot in Section 7.1.

number of existing wind farms. On balance the susceptibility to change is considered to be **Medium**. The sensitivity of the view is judged to be **Medium**.

Magnitude of Effect

7.8.50 Between the steeply rising landform on Kintyre, and intervening vegetation on the low-lying hills and forestry within the upland moorland, views of construction activity would be restricted from this location and no perceptible change would occur.

- 7.8.51 During operation, the rotors and upper tower sections of 12 proposed turbines would be visible, seen at a distance of over c.6 km. The Proposed Development would be located beyond a ridge within the undulating moorland interior, separated from the settled coast by an intervening ridgeline. This intervening landform would generally restrict views to the upper portions of towers, with a greater proportion of one turbine visible where the ridgeline is slightly lower. The scale of the proposed turbines would be commensurate to the long, horizontal open skyline and large swathes of upland forestry of the landscape it is sited within.
- 7.8.52 Aviation lighting on eight turbines would be visible, albeit with few people likely to be at this location at night. The lighting would be seen as a relatively distant and evenly spread array of red lights elevated above the silhouette of the peninsula, introducing lights into a new part of the view in addition to those at Muasdale and along the Kintyre coast. The low elevation of this viewpoint and the distance to the Proposed Development would result in the apparent intensity of the aviation lighting being reduced such that when in peak mode it would appear similar to a car brake light at a distance of a little under 5 km. As this location is greater than 5 km from the Proposed Development, when visible, the aviation lighting is likely to be operating on the lower intensity mode, 10% of peak intensity, reducing the impression of change. Details of the calculated intensity for each of the aviation lights from this location are provided in Appendix 16.1 (EIAR Volume 3).
- 7.8.53 The horizontal extent of the scheme within this part of the expansive view is small. The ZTVs (Figures 7.6 and 7.7, EIAR Volume 2c) indicate that theoretical visibility would be extensive across the Sound of Gigha, but that the number and extent of turbines visible would steadily decrease in closer proximity to the mainland coastline from which potential visibility is generally very limited or non-existent. The scale of change would be medium as a result of the introduction of large-scale moving features being added to the skyline, partly moderated by the separating effect of the inland ridgeline and context of open moorland and large-scale forestry in the background of the view.
- 7.8.54 Overall, the magnitude of effect at this location is judged to be **Medium**.

Significance of Effect

**7.8.55** During construction there would be no visual effect at this location. During operation, the visual effect seen at this location is judged to be **Moderate (significant)**.

## Viewpoint 16: North Muasdale (Figure VP16.1 to 16.4, EIAR Volume 2d)

#### Baseline

7.8.56 Open view looking north-east along the line of a farm / forestry track (Core Path C293) to the east of North Muasdale. Views are channelled along the shallow valley of Clachaig Water by a combination of rising topography to the north and south of this location. A series of forested upland ridges form the backdrop to the view east. Views from the adjacent house at North Muasdale farm are focussed west towards the dramatic seascape with distinct forms of the islands creating a distant focus. There are no obvious detractors in the view, but the visual context is one of commonplace rough grazed upland and forestry. Overall, the value of the view is judged to be **Medium**.

7.8.57 After dark, lights at the adjacent house and farm of North Muasdale and a few other scattered houses further east are visible, with occasional car headlights seen to the south-west along the A83.

Sensitivity

7.8.58 This is a locally important walking route. People are likely to be at this location in part for an appreciation of the landscape and as such a **Medium** susceptibility to change is assessed, resulting in **Medium** sensitivity.

#### Magnitude of Effect

- 7.8.59 During construction, short-duration activities associated with the Proposed Development infrastructure would be perceived, although views to tracks and ancillary structures would be restricted by intervening forestry. The scale of change would be small on account of the presence of existing forestry operations, and screening effect of intervening vegetation. Visible construction activity would be present within a small horizontal extent of the view. The geographic extent of change would be perceived from a localised area along the Clachaig Glen. The magnitude of effect during construction would be **Very Low**.
- 7.8.60 The rotors and varying proportions of towers of 11 proposed turbines would be visible, seen over c.3.3 km. Intervening landform and forestry would partially restrict views of lower parts of the towers, slightly reducing their apparent height. The Proposed Development would appear as a relatively compact array forming a new and prominent focus framed by landform within views east. There would be no view of the Proposed Development from the adjacent house at North Muasdale due to screening from adjacent outbuildings.
- 7.8.61 Aviation lighting on seven turbines would be visible, seen as a group of red lights slightly elevated above the silhouette of the surrounding landform and forestry. The lights would add new features into a predominantly dark part of the view from this location, although with more limited visibility from the adjacent residential properties. As a result of the angle of view the lighting would appear at a lower intensity, reducing the impression of change. Details of the calculated intensity for each of the aviation lights from this location are provided in Appendix 16.1 (EIAR Volume 3).

7.8.62 The Proposed Development would occupy approximately one third of the horizontal field of view in this direction, with adjacent residential properties orientated in other directions. The geographic extent of similar views would be experienced from localised areas of the Clachaig Glen and North Muasdale. There would be no visibility of the Proposed Development from the nearby settlement of Muasdale due to screening from landform. The scale of the change at this viewpoint is considered to be large as a result of the introduction of large moving structures at close proximity, which would become a new focus within the view.

- 7.8.63 Overall, the magnitude of the effect on the view is judged to be **High**.
  - Significance of Effect
- 7.8.64 The visual effect seen at this location is judged to be **Negligible (not significant)** during construction, and **Moderate (significant)** during operation.

## Summary of Effects on Visual Amenity

7.8.65 As outlined above and detailed in Appendix 7.5 (EIAR Volume 3), as a result of site selection the majority of the identified visual receptors would not be subject to significant effects as a result of the Proposed Development. Table 7-6 provides a summary of the small number of visual receptors predicted to receive significant effects.

**Table 7-6 Summary of Significant Effects on Visual Receptors** 

Receptor	Sensitivity	Magnitude	Significance of Effect	
	(Value / Susceptibility)	of Effect		
Visual Receptors – Construction/ Decor	nmissioning Effects			
VP13: Kintyre Way north of Development Site	High (High / Medium)	Medium	Moderate	
Visual Receptors – Operational Effects				
VP8: Ardminish, Gigha	High (Medium / High)	Medium	Moderate	
VP9: South Pier, Gigha	Medium (Medium / Medium)	High	Moderate	
VP10: Sound of Gigha from Gigha Ferry	Medium (Medium / Medium)	Medium	Moderate	
VP13: Kintyre Way north of Development Site	High (High / Medium)	High	Major	
VP15: Sound of Gigha from recreational watercraft	Medium (Medium / Medium)	Medium	Moderate	
VP16: North Muasdale	Medium (Medium / Medium)	High	Moderate	

## 7.9 Cumulative Landscape and Visual Assessment

7.9.1 The following section provides and assessment of potential cumulative landscape and visual effects. The approach and methodology for the cumulative landscape and visual assessment is detailed in Appendix 7.1, EIAR Volume 3.

## Cumulative Baseline

7.9.2 As outlined in Section 7.1, the initial step of the cumulative assessment is to establish the existing cumulative baseline context through identification of existing and proposed wind farms within a broad 60 km study area, as shown on Figure 7.11 (EIAR Volume 2c). Analysis was then undertaken to refine this list in order to ensure a proportionate approach focused on potentially significant effects, as advocated by NatureScot guidelines 'Assessing the Cumulative Impact of Onshore Wind Energy Developments' (2012) which states (page 8, paragraph 33):

"Assessments should focus on the most significant cumulative effects and conclude with a clear assessment of those which are likely to influence decision making."

7.9.3 The shortlist of wind farms to be included in the cumulative assessment was agreed in consultation with ABC and NatureScot. Details of the cumulative schemes are provided in Table 7-7 and their locations shown on Figure 7.12 (EIAR Volume 2c).

Table 7-7 Cumulative Schemes Included Within the Assessment

Scheme Name	Status (as of 01/07/2021)	No. of turbines	Blade tip height	Approx. distance from Proposed Development (km)	CLVIA Scenario 1	CLVIA Scenario 2
Airigh	Consented	14	131/138 .5/149.5	22.1	✓	✓
Auchadaduie	Operational	3	100	5.1	✓	✓
Beinn an Tuirc I	Operational	46	63.5	4.8	✓	✓
Beinn an Tuirc II	Operational	19	99.5	6.7	✓	✓
Beinn an Tuirc III	Consented (Under Construction)	16	126	8.7	✓	✓
Blary Hill	Consented (Under Construction)	14	110	3.9	✓	✓
Cour	Operational	10	111.25	7.2	✓	✓
Deucheran Hill	Operational	9	79/93	2.5	✓	✓

Scheme Name	Status (as of 01/07/2021)	No. of turbines	Blade tip height	Approx. distance from Proposed Development (km)	CLVIA Scenario 1	CLVIA Scenario 2
Eascairt	Consented	13	100	15.4	✓	✓
Freasdail	Operational	11	100	17.8	✓	✓
Gigha	Operational	3	43.5	8.9	✓	✓
High Constellation	Consented	10	149.9	8.4	✓	✓
Leim Farm (Gigha)	Operational	1	53.88	9.0	✓	✓
Narachan	Planning - Not determined	17	180	3.6	×	✓
Sheirdrim	Planning - Not determined	19	135/ 149.9	15.7	×	✓
Tangy I & II*	Operational	22	75	12.8	×	×
Tangy IV	Consented	16	149	11.7	✓	✓

<sup>\*</sup> If constructed, Tangy IV would replace the existing Tangy I & II schemes and therefore only Tangy IV is considered within Scenarios 1 and 2 of the cumulative assessment. Tangy I & II are considered as part of the existing baseline.

- 7.9.4 The list of cumulative schemes comprises wind farms at different stages of development, including those which, as of 1st July, are already in operation, are consented and/or under construction and are at the application stage awaiting determination. Wind farms at the scoping or pre-application stage are not considered in the cumulative assessment due to the indicative nature of these schemes and the lack of certainty they will progress to the application stage. No other types of development have been identified for inclusion in the cumulative assessment.
- 7.9.5 The effects of the Proposed Development in a context of operational wind farms are presented in the LVIA baseline and assessment (Sections 7.7 and 7.5). No detailed consideration is given to the lifespan of existing wind farms as it is anticipated that the Proposed Development would be constructed before the consent of these wind farms expires and they are decommissioned. As there is no certainty that consented or application stage schemes will be constructed, the assessment of cumulative effects is based on two cumulative baseline scenarios, as follows:
  - Scenario 1: The cumulative baseline for this scenario includes wind farms which have been consented and/or are under construction in addition to existing operational schemes, and

• Scenario 2: The cumulative baseline for this scenario includes schemes at application stage in addition to existing operational schemes and those which have been consented and/or are under construction.

- 7.9.6 With regards to potential cumulative effects of aviation lighting, none of the existing or consented / under construction schemes include medium intensity aviation lighting and therefore no night-time cumulative effects are reported under Scenario 1. Two schemes (Auchadaduie and Tangy) include low intensity aviation lighting which are present in the baseline and are not considered to contribute to potential cumulative effects. The proposed Narachan Wind Farm, currently at the application stage, includes medium intensity aviation lighting and as such potential night-time cumulative effects are considered where relevant under Scenario 2 of the cumulative assessment.
- 7.9.7 As outlined in Section 7.1, the Consented Development and the Proposed Development would not coexist, therefore the Consented Development has not been taken into account in this LVIA and as such is excluded from the cumulative baseline and assessment.

## Scope of the Cumulative Assessment

## Landscape Character

- 7.9.8 Potential significant cumulative effects would occur where the addition of the Proposed Development to the cumulative baseline would increase the prominence of wind farms to the extent that they would potentially become either an influential characteristic, or character-defining feature of a landscape.
- 7.9.9 As a result of the restricted nature of potential visibility and the limited nature of change resulting from the Proposed Development identified in the LVIA, it is considered that there is no potential for significant cumulative landscape effects on the majority of the landscape receptors found within the study area. The cumulative landscape assessment therefore takes a targeted approach, focusing on those landscape designations and LCTs within closest proximity to the Proposed Development, as listed below, where the potential for significant cumulative effects is greatest:
  - West Kintyre APQ,
  - Upland Forest Moor Mosaic LCT,
  - · Coastal Plain LCT, and
  - Rocky Mosaic LCT.
- 7.9.10 In addition, the detailed assessment of potential effects on the North Arran NSA (Appendix 7.3, EIAR Volume 3) and North Arran WLA (Appendix 7.4, EIAR Volume 3) include consideration of potential cumulative effects.

## Visual Amenity

7.9.11 The assessment of cumulative visual effects on visual receptors has been undertaken for each of the 25 representative viewpoints.

## Assessment of Cumulative Effects on Landscape Designations

#### North Arran NSA and WLA

7.9.12 An assessment of cumulative effects on the special qualities of the North Arran NSA is provided in Appendix 7.3 (EIAR Volume 3), and an assessment of cumulative effects on the identified attributes of the North Arran WLA is provided in Appendix 7.4 (EIAR Volume 3). In both cases the assessment has concluded that potential additional change on these two designations in relation to both Scenarios 1 and 2 would be limited and as such cumulative effects would be not significant.

## West Kintyre APQ

7.9.13 An assessment of cumulative effects on the West Kintyre APQ is provided in Appendix 7.5 (EIAR Volume 3). As a result of the limited extent of direct and indirect change resulting from the Proposed Development on the APQ, the assessment has concluded that cumulative effects for both Scenarios 1 and 2 would be **Minor (not significant)**.

## Assessment of Cumulative Effects on Landscape Character

7.9.14 An assessment of cumulative effects on the identified LCTs is provided in Appendix 7.5 (EIAR Volume 3). The assessment has identified that there would be no significant cumulative effects on the majority of the LCTs for cumulative Scenarios 1 and 2. Localised significant effects have been identified on one LCT (Upland Forest Moor Mosaic) as described in more detail below.

### Upland Forest Moor Mosaic LCT (ABLWECS LCT 6)

#### Scenario 1

- 7.9.15 The majority of the cumulative schemes (with the exception of Gigha and Leim Farm) are within this LCT and as such are an existing characteristic of this landscape, such that it is considered to be a 'landscape with wind farms'. The addition of the approved Beinn an Tuirc III and Blary Hill wind farms may lead to a localised wind farm landscape in the south of the LCT, within which wind farms would be a dominant feature. Eascairt is located further north, slightly south of the operational Freasdail scheme, reinforcing the influence of wind farms on this landscape. The cumulative ZTV (Figure 7.13, EIAR Volume 2c) shows extensive visibility of these schemes.
- 7.9.16 The Proposed Development would introduce an additional wind farm into this LCT, locally increasing the prominence of wind farms within the Development Site and immediate context. Careful siting and design make use of landform to restrict the extent of potential indirect

change on this LCT. This is evidenced by the cumulative ZTV (Figure 7.13, EIAR Volume 2c) which demonstrates the limited extent of visibility of the Proposed Development from much of this LCT and therefore the limited contribution to the overall impression of wind farms within this landscape.

- 7.9.17 The location of the Proposed Development is such that it is sufficiently separated from the cumulative schemes to appear as a distinct cluster of wind turbines. This is consistent with existing wind farm development in Kintyre, which is focussed within the Upland Forest Moor Mosaic LCT. Wind farms within the LCT are located both along the interior (Beinn an Tuirc (I and II) and Deucheran Hill wind farms) and closer to the edge of the LCT (Tangy IV, Auchadaduie, Blary Hill, most of Beinn an Tuirc III, Cour, High Constellation, Freasdail and Eascairt wind farms); such that there is no discernible pattern when viewed on the ground. Barr Glen is an important separating landform between groups of turbines within the central and southern parts of the peninsula, dividing the Proposed Development from the localised wind farm landscape to the south.
- 7.9.18 Wind farms are an existing characteristic of this landscape. The addition of the Proposed Development would result in a local intensification of a 'landscape with wind farms' character but would not result in the character of this LCT becoming dominated by wind farms (i.e. becoming a 'wind farm landscape'). Overall, the Proposed Development would add to the appearance of wind farms within this landscape but would not result in noticeable change to key characteristics.
- 7.9.19 The cumulative magnitude of change in relation to cumulative Scenario 1 would be locally **Medium** within the Development Site and immediate context (within 2 km), where the Proposed Development would increase the contribution that wind turbines make as a feature in the landscape. Taking account of the low sensitivity and locally medium magnitude of additional change, the significance of cumulative effect would be **locally Moderate** (significant) within the Development Site and immediate context. However, when considering the wider extent of this LCT the magnitude of additional change in relation to cumulative Scenario 1 would be Low, resulting in a **Minor (not significant)** effect.

### Scenario 2

- 7.9.20 The cumulative baseline in Scenario 2 involves the addition of the Narachan and Sheirdrim wind farms to this LCT.
- 7.9.21 Narachan is located in close proximity to the grouping formed by High Constellation and Cour, with slight separation from Deucheran Hill to the south, and as such would lead to the local intensification of wind farms in this part of the LCT and potentially resulting in the impression of a localised 'wind farm landscape' between these schemes. The Narachan scheme also includes visible medium intensity red aviation lighting, therefore introducing an additional feature into the night-time cumulative baseline. Sheirdrim Wind Farm would effectively fill the separating space between the Eascairt and Freasdail wind farms, and extend it further west; thus, potentially forming one large cluster of turbines to the north of Kintyre.

7.9.22 The cumulative ZTV (Figure 7.14, EIAR Volume 2c) indicates that the baseline of cumulative Scenario 2 would be one of increased visibility of wind farms in comparison to Scenario 1. The additional increase in the geographic extent of visibility resulting from the Proposed Development would generally be from very localised areas, thus would be very small.

- 7.9.23 In this Scenario, the Proposed Development would be located approximately 3 km to the south of the large grouping of Narachan, Cour and High Constellation, and also separated from Deucheran Hill to the east; as a result, the Proposed Development would appear as a distinct cluster of wind turbines. The addition of the Proposed Development would, however, result in the further intensification of wind farms within this central part of the LCT. Beyond this local area, potential change resulting from the addition of the proposed turbines on the wider extent of the LCT would be limited, as evidenced by the cumulative ZTV.
- 7.9.24 The cumulative lighting ZTV (Figure 7.15, EIAR Volume 2c) indicates relatively extensive areas of theoretical visibility of the lights on Narachan within the central / northern part of this LCT, with more limited and fragmented visibility in other parts of the LCT. The addition of the Proposed Development would result in a localised increase in the influence of aviation lighting within the central parts of this LCT. The ZTV somewhat overstates visibility of the lighting as in reality large areas of commercial forestry are present, limiting outward views. In addition, as a result of the angle of view, the apparent intensity of the proposed aviation lights would be reduced when seen from the area immediately surrounding the Proposed Development, as indicated by the lighting intensity ZTV (Figure 7.9, EIAR Volume 2c), reducing the impression of change.
- 7.9.25 As with Scenario 1, the cumulative magnitude of change resulting from the addition of the Proposed Development into cumulative Scenario 2 would be **locally Medium** within the Development Site and its immediate context. The level of cumulative effects in Scenario 2 would be **locally Moderate (significant)** within the immediate vicinity (up to approximately 2 km) of the Proposed Development where experienced in combination with Deucheran Hill. With reference to the wider extent of this LCT, the magnitude of additional change would be **Low**, and the level of effect **Minor (not significant)**.

## Assessment of Cumulative Effects on Visual Amenity

7.9.26 A detailed assessment of potential cumulative effects on each of the identified representative viewpoints is provided in Appendix 7.5 (EIAR Volume 3). The assessment has identified that there would be no significant cumulative effects on the majority of the viewpoints in cumulative Scenarios 1 and 2. The following provides details of those viewpoints anticipated to experience significant cumulative effects.

#### Viewpoint 8: Ardminish, Isle of Gigha (Figure VP8.2, EIAR Volume 2d)

Scenario 1:

7.9.27 A number of the identified cumulative wind farms would be visible along the length of the Kintyre peninsula from this location. Airigh Wind Farm is theoretically visible to the north-east but would be largely screened by intervening vegetation from this location, with greater

visibility from other parts of Gigha. A small number of blade tips of the Freasdail and Deucheran Hill schemes are theoretically visible but contribute little to the cumulative baseline from the viewpoint location, although more are visible from other parts of Gigha. Several blades of the High Constellation Wind Farm would be visible in central parts of Kintyre. The Beinn an Tuirc (I-III) and Blary Hill schemes are visible as one large notable group of varying turbines, with Auchadaduie slightly outlying at its western extent. The Tangy IV scheme forms a cluster further to the south along Kintyre. Although theoretically visible, the turbines at Leim Farm and Gigha are screened by buildings and woodland from the viewpoint locations but are more visible from other parts of Gigha.

- 7.9.28 The addition of the Proposed Development to this scenario would add to the influence of wind energy within the central parts of Kintyre. Within the view, the Proposed Development would extend the influence of the Beinn an Tuirc (I-III), Blary Hill and Auchadaduie group northwards along the peninsula, although would be perceived as a separate development within the upland interior of Kintyre.
- 7.9.29 The Proposed Development would be in closer proximity to the other visible schemes and would result in a noticeable additional change. The magnitude of cumulative change is judged to be Medium. The cumulative level of effect in this scenario is judged to be Moderate (significant).

Scenario 2:

- 7.9.30 This scenario sees the introduction of the Narachan and Sheirdrim wind farms into the cumulative baseline. Sheirdrim would be visible as a further cluster of wind turbines in the distance to the north-east. Narachan would appear adjacent to High Constellation in the view, extending the influence of wind farms further south, and at night would introduce seven medium intensity aviation lights along the outline of Kintyre.
- 7.9.31 The Proposed Development would add to the number of turbines within this segment of the view. The proposed turbines would sit inland, beyond the ridgeline of Kintyre in a manner similar to those at Beinn an Tuirc I-III, Blary Hill, High Constellation and Narachan.
- 7.9.32 In this scenario the Proposed Development would reduce the separation between the Beinn an Tuirc I-III, Blary Hill and Auchadaduie grouping to the south, and the Narachan and High Constellation group to the north. The Proposed Development would be in closer proximity to this viewpoint and as a consequence would represent a notable additional feature in the view.
- 7.9.33 Aviation lights on eight of the proposed turbines would be visible at this location. The addition of these features would be seen as a separate and relatively even array of red lights to the south of the Narachan scheme. They would extend the influence of aviation lighting to a slightly greater portion of the overall views. The Proposed Development would be slightly closer to this location. However, the lighting is likely to appear at a similar intensity to those of Narachan as a result of the vertical angle of view.
- 7.9.34 In this scenario, the magnitude of cumulative change is considered to be similar to that of Scenario 1, and as such within the Medium threshold. The cumulative level of effect in this scenario is judged to be Moderate (significant).

## Viewpoint 9: Gigha, south pier (Figure VP9.2, EIAR Volume 2d)

Scenario 1:

7.9.35 A number of the identified cumulative wind farms would be visible along the length of the Kintyre peninsula from this island location. The Beinn an Tuirc I-III and Blary Hill schemes would be seen as one large and relatively prominent group of varying turbine sizes, with Auchadaduie slightly outlying at its southern extent. The Tangy IV scheme forms a cluster further to the south along Kintyre. To the north of Kintyre, the fleeting blade tips of High Constellation would be visible. Airigh Wind Farm would form a compact, distant cluster on Knapdale, although would be partially screened from this location by intervening landform. The Gigha and Leim Farm schemes are visible in close proximity to the west of this location.

- 7.9.36 The addition of the Proposed Development would extend the influence of wind turbines in this part of the view further north. From this direction there would be a slight separation between the Proposed Development and the large cluster of wind turbines formed by Beinn an Tuirc I-III and Blary Hill, similar to that between this cluster and Auchadaduie to the south. The turbine sizes vary between each scheme and the Proposed Development would add further difference to this composition. The Proposed Development would result in a noticeable additional change and increase in the extent of wind farms in the view.
- **7.9.37** The magnitude of cumulative change resulting is judged to be **Medium**. The cumulative level of effect in this Scenario is judged to be **Moderate (significant)**.

Scenario 2:

- 7.9.38 This scenario sees the introduction of the Sheirdrim and Narachan wind farms into the cumulative baseline. Sheirdrim would be visible to the north-east, extending the influence of wind farms to northern Kintyre. Narachan would appear close to High Constellation, adding a further wind farm to central Kintyre. At night it would also see the introduction of seven medium intensity aviation lights slightly above the outline of the peninsula.
- 7.9.39 The Proposed Development would add to the number of turbines within this segment of the view. The proposed turbines would sit inland beyond the ridgeline of Kintyre in a manner similar to those at Beinn an Tuirc I-III, Blary Hill and Narachan.
- 7.9.40 In this scenario the Proposed Development would occupy a space between the Beinn an Tuirc I-III, Blary Hill and Auchadaduie grouping to the south, and the Narachan and High Constellation group to the north. The Proposed Development would reduce the separation between schemes, nonetheless the effect of distance would still give a sense of three distinct groups of turbines. The horizontal extent of the Proposed Development would be similar to both groups, although located in slightly closer proximity to this location.
- 7.9.41 Aviation lights on eight of the proposed turbines would be visible from this location. The addition of these features would be seen as a separate and relatively even array of red lights to the south of the Narachan scheme. They would extend the influence of aviation lighting to a slightly greater proportion of the overall views. The Proposed Development would be slightly

closer to this location. However, the lighting is likely to appear at a similar intensity to those of Narachan as a result of the vertical angle of view.

**7.9.42** In this scenario, the magnitude of cumulative change is considered to be marginally lower than that of the LVIA, but still within the **Medium** threshold. The cumulative level of effect is judged to be **Moderate (significant)**.

# Viewpoint 10: Sound of Gigha from Gigha ferry (Figure VP10.2, EIAR Volume 2d)

Scenario 1:

- 7.9.43 The Tangy IV scheme forms a distant cluster to the south-east of this location. Three blades from individual turbines of the Auchadaduie Wind Farm would appear as relatively minor features to the south of Glen Barr, slightly separate from the tightly clustered and more distant Tangy schemes. Blades of the Blary Hill scheme would be visible above the intervening inland ridgeline and would appear at a similar scale and in close proximity to the Auchadaduie scheme. Airigh is seen to the north as a compact, distant cluster.
- 7.9.44 The proposed turbines would sit inland, beyond the ridgeline of Kintyre and as such would be partially screened from this location. The Proposed Development would extend the existing influence of wind energy to the north of the baseline schemes, and closer to this location. The addition of the Proposed Development would result in a noticeable increase in the prominence and extent of wind turbines seen from this location. Due to the nature of this receptor such views would be of relatively short duration, and the influence of the scheme would vary depending on proximity to the mainland coast and direction of travel.
- **7.9.45** The magnitude of cumulative change resulting is judged to be **Medium**. The cumulative level of effect in this scenario is judged to be **Moderate (significant)**.

Scenario 2:

- 7.9.46 This scenario sees the introduction of the Narachan Wind Farm into the cumulative baseline, adding a further cluster of turbines to the view and extending their influence further north on Kintyre. At night, this scheme would also see the introduction of up to two medium intensity aviation lights along the outline of the peninsula, although one may be screened by forestry.
- 7.9.47 The Proposed Development would occupy a place on the skyline between the Blary Hill and Auchadaduie group to the south and Narachan to the north, with clear separation between the schemes. The addition of the Proposed Development would create a relatively evenly spaced series of turbine groups / clusters along the Kintyre skyline. The Proposed Development would be in closer proximity to this viewpoint than the other schemes and this, together with its greater horizontal extent, would result in a noticeable increase in the prominence of wind turbines seen from this location.
- 7.9.48 Aviation lights on five of the proposed turbines would be visible at this location. The addition of these features would be seen as a separate group of lights slightly above the silhouette of Kintyre to the south of the single visible Narachan aviation light. They would extend the

influence of aviation lighting to a greater proportion of the overall views. The Proposed Development would be slightly closer to this location, but the aviation lighting is likely to appear at a similar intensity due to the greater vertical angle of view.

**7.9.49** The magnitude of cumulative change resulting is judged to be **Medium**. The cumulative level of effect in this scenario is judged to be **Moderate (significant)**.

# Viewpoint 13 – Kintyre Way, north of the Development Site (Figure VP13.2, EIAR Volume 2d)

Scenario 1:

7.9.50 Two cumulative schemes are visible to the north-east of this viewpoint. The Deucheran Hill Wind Farm is prominent in views to the north-east, with three blades of the Cour Wind Farm visible in the same part of the view. Both schemes are present within the existing baseline and as such the cumulative effect resulting from the addition of the Proposed Development would be the same as that reported for the LVIA, **Major (significant)**.

Scenario 2:

- 7.9.51 This scenario sees the introduction of the Narachan Wind Farm into the cumulative baseline. Fleeting blade tips and blades of Narachan would be seen in combination with other cumulative schemes and enlarge the extent of wind turbines within this part of the view.
- 7.9.52 The addition of the Proposed Development would introduce wind turbines into a new part of the view, thus would increase the overall influence of wind energy in the views from this location. The proposed turbines would be in closer proximity to this location and as such would be more prominent. The magnitude of cumulative change resulting is judged to be **High**. The cumulative level of effect in this scenario is judged to be **Major (significant)**.
- 7.9.53 In addition to potential cumulative effects from this static location on the Kintyre Way, there are also potential for sequential cumulative effects when considering the route as a whole. As indicated by the cumulative ZTVs (Figures 7.13 and 7.14, EIAR Volume 2c), the cumulative baseline for both scenarios as experienced from the route is one of relatively widespread visibility of wind farms. In reality the route passes through large areas of forestry and as such outward visibility is reduced. The route also passes through and in close proximity to a number of the cumulative schemes, most notably Eascairt, Sheirdrim, Deucheran Hill and Beinn an Tuirc III. Visibility of the Proposed Development would be limited to a few short sections, with no visibility from the majority of the route. Therefore, although the Proposed Development would have some local influence on views, this would represent a very small additional change which would not alter the overall experience of the route.

# Viewpoint 15: Sound of Gigha from recreational watercraft (Figure VP15.2, EIAR Volume 2d)

Scenario 1:

7.9.54 The Beinn an Tuirc I-III, Blary Hill and Auchadaduie schemes form a large grouping of wind turbines to the south-east of this location. The latter is visible on the upper coastal slopes,

while other schemes would appear to recede into the distant uplands. The Tangy IV scheme would be seen as a separate large scheme further south along the peninsula. Airigh Wind Farm would be seen as a distant and isolated cluster to the north, within the same view as the Gigha and Leim Farm turbines on Gigha.

7.9.55 The addition of the Proposed Development would result in an increase in the appearance and extent of wind turbines further to the north of Kintyre. It would be seen in combination with, but separated from, the large group of turbines to the south formed by Beinn an Tuirc I-III, Blary Hill and Auchadaduie. The proposed turbines would fit the pattern of a series of large clusters and groups of turbines seen along the uplands of Kintyre. Due to the nature of this receptor such views would tend to be of short duration, and the influence of the Proposed Development and other wind farms would vary depending on proximity to the mainland coast and direction of travel. From the viewpoint location, the magnitude of cumulative change is judged to be Medium. The cumulative level of effect in this scenario is judged to be Moderate (significant). From other locations further to the north and south where recreational watercraft would be in closer proximity to cumulative schemes, the level of change resulting from the Proposed Development would be reduced.

#### Scenario 2:

- 7.9.56 This scenario sees the introduction of the Narachan Wind Farm into the cumulative baseline. Fleeting blade tips and blades of Narachan would be seen in combination with other cumulative schemes, extending the influence of wind energy further to the north of Kintyre.
- 7.9.57 The Proposed Development would occupy a space between Narachan to the north and the large grouping of Beinn an Tuirc I-III, Blary Hill and Auchadaduie to the south. However, the influence of the Narachan scheme within the view is limited. Thus, the additional cumulative effect of the Proposed Development would be the same as Scenario 1, **Moderate** (significant).

## Summary of Cumulative Landscape and Visual Effects

7.9.58 As outlined above and detailed in Appendix 7.5 (EIAR Volume 3), cumulative landscape and visual effects resulting from the addition of the Proposed Development would be limited and not significant for the majority of the receptors assessed. Table 7-8 provides a summary of identified significant cumulative effects.

Table 7-8 Summary of Significant Cumulative Effects on Landscape and Visual Receptors

Receptor	Sensitivity (Value / Susceptibility)	Magnitude of Effect	Significance of Effect			
Landscape Receptors – Cumulative Effects						
Upland Forest Moor Mosaic LC (ABLWECS LCT 6)	Medium (Medium / Low)	Low (locally Medium within 2 km)	Minor (locally Moderate within 2 km)			
Visual Receptors – Cumulative Eff	Visual Receptors – Cumulative Effects					
VP8: Ardminish, Gigha	High (Medium / High)	Medium	Moderate			
VP9: South Pier, Gigha	Medium (Medium / Medium)	High	Moderate			
VP10: Sound of Gigha from Gigha Ferry	Medium (Medium / Medium)	Medium	Moderate			
VP13: Kintyre Way north of Development Site	High (High / Medium)	High	Major			
VP15: Sound of Gigha from recreational watercraft	Medium (Medium / Medium)	Medium	Moderate			

## 7.10 Inter-relationship Effects

- 7.10.1 For the purposes of the EIA, the potential effects of the Proposed Development are considered in terms of effects on each discrete environmental topic area. However, the result of the inter-relationship between topic areas, such as visual amenity and cultural heritage, means that effects cannot always be considered in isolation, since changes affecting one factor may often have secondary implications for other areas.
- 7.10.2 There is limited potential for inter-relationship effects with the majority of the landscape and visual receptors included in the assessment. However, two viewpoint locations (VP 5: Dun Skeig and VP 14: A'Chleit) have also been considered in Chapter 12 of this EIAR: Cultural Heritage. Visibility of the Proposed Development from these locations is heavily restricted by intervening topography and/or distance such that potential visual change would be limited, affecting a small and generally less important part of the broad panoramic views.
- 7.10.3 This LVIA has been an important factor in the assessment of the Proposed Development's effect on socio-economics, recreation and tourism (see Chapter 13 of this EIAR). As a result, inter-relationship effects between the two topic areas have been built into Chapter 13, as it is influenced by the assessment results presented within this chapter. No significant effects are identified through Chapter 13, including on routes, attractions, settlements and accommodation providers.

## 7.11 Conclusion

7.11.1 Through careful site selection and design, the influence of the Proposed Development has been considerably restricted, particularly in relation to identified key landscape and visual constraints. Therefore, the Proposed Development would not result in significant effects on any nationally and locally designated landscapes. This has also ensured that only a small number of significant landscape and visual effects would arise, generally limited to locations within relatively close proximity to the Proposed Development.

- 7.11.2 The Proposed Development would be seen in the context of a number of other existing wind farms and the siting and design has taken these into consideration in order to help minimise potential effects. The limited nature of visibility from Kintyre and Arran has also ensured that the Proposed Development would only result in significant cumulative landscape and visual effects on a small number of receptors.
- 7.11.3 In conclusion, although there would be some localised significant effects upon a small number of receptors within close proximity to the Proposed Development, the effect of the Proposed Development on the landscape and visual resource of the wider area is not considered to be significant.

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