EIA Report Chapter 6: Landscape and Visual Impact Assessment

Monan Repower

Client: Constantine Wind Energy (UK) Ltd
Reference: C5507-442
Version 3.0

March 2024

Report Prepared for:
Constantine Wind Energy (UK) Ltd

Author:
Green Cat Renewables Ltd

Checked by	Alasdair Warnock	Date	24/01/2024
Approved by	Rob Collin	Date	31/01/2024

Issue History	Date	Details
V1.0	01/02/2024	Client Draft
V2.0	12/03/2024	Second Client Draft
V3.0	14/03/2024	Submission

Table of Contents

6 Landscape and Visual Impact Assessment

6.1 Introduction

The methodology for the Landscape and Visual Impact Assessment (LVIA) and the Cumulative Landscape and Visual Impact Assessment (CLVIA) has been undertaken in accordance with the methodology set out in **Appendix 6.1** and conforms with the Guidelines for Landscape and Visual Impact Assessment, Third Edition (Landscape Institute and IEMA, 2013 [1]. The assessment process has encompassed the construction, operational and decommissioning phases of the wind turbine and has included the design, landscape and visual assessment (including cumulative) and assessment of the residual effects. Consultation relevant to the assessment has been undertaken with Comhairle nan Eilean Siar who commented on aspects of methodology, sources of information, scope of assessment, viewpoint assessment and cumulative development.

This chapter assesses the landscape and visual effects of the Proposed Development. The LVIA forms one of the key components of the EIA process to comply with the EIA Regulations. This chapter assesses the Proposed Development against the requirements of the Town and Country Planning (Scotland) Act 1997 and any relevant planning policies, relating to the landscape resource and visual amenity.

The purpose of this assessment has been to determine the landscape and visual effects of the Proposed Development on the existing landscape visual resource. The following landscape and visual receptors have been assessed.

- Landscape character, key characteristics, and elements;
- Designated landscapes; and
- Views and visual amenity experienced by residents, tourists, visitors, and road users.

The Proposed Development is situated in North Harris, solely in Comhairle nan Eilean Siar. The proposed turbines would replace the three existing 2-bladed turbines of 46m to tip and two of their locations would be in very close proximity to the current positions. The nearest turbines are 15.5km to the north-east of the Proposed Development. The Site is located within Prominent Hills and Mountains LCA which is characterised by individual peaks with pronounced summits, long ridges, and slopes, rising steadily from the surrounding terrain. The landcover is dominated by a mixture of low moorland, mixed windswept heather with damp rough grassland which gives a course texture surface. The wider area is sparsely populated, with the nearest residential properties situated 1.2km to the south-west in Bunavoneader. The settlement of Tarbert is 5km south of the Site.

The repowering proposal will comprise three wind turbines up to 86m to tip. The proposed turbines would replace the three existing 2-bladed turbines of 46m to tip and two of their locations would be in very close proximity to the current positions. The existing substation building and existing access tracks and turning/passing areas on the Site would be utilised. A short section of new access track will be required to access turbine one, see **Chapter 2 - Proposed Development and Design Evolution** for full details.

The assessment process has encompassed the construction, operation, and decommissioning of the Proposed Development and has included design parameters and further assessment of the residual effects. The design process has sought to achieve the highest energy generation capacity for the Site, whilst balancing this with environmental considerations and achieving an acceptable design in terms of landscape and visual effects.

[1] Guidelines for Landscape and Visual Impact Assessment, Third Edition, Landscape Institute and IEMA, 2013

This chapter is accompanied by:

- Appendix 6.1 Methodology;
- Landscape and Visual Impact Assessment Figures 6.1- 6.8
  - Figure 6.1 – Study Area
  - Figure 6.2 – 86m Tip ZTV
  - Figure 6.3 – 59m Hub ZTV
  - Figure 6.4 – Landscape Character Types
  - Figure 6.5 – Landscape Character Area with 86m Tip ZTV
  - Figure 6.6 – Landscape Planning Designations
  - Figure 6.7 – Landscape Planning Designations with 86m Tip ZTV
  - Figure 6.8 – Cumulative Basemap
- Landscape and Visual Impact Assessment Visualisations Figures 6.9 to 6.14
  - Figure 6.9 – Viewpoint 1, A859 at Loch a'Mhorghain
  - Figure 6.10 – Viewpoint 2, A859 overlooking Ceann an Ora
  - Figure 6.11 – Viewpoint 3, A859 at Loch na Ciste
  - Figure 6.12 – Viewpoint 4, B887 at Tolmachan
  - Figure 6.13 – Viewpoint 5, Taransay
  - Figure 6.14 – Viewpoint 6, Beinn Mhor

The aim of the design and assessment process is to promote the best "environmental fit" for the Proposed Development through consideration of the existing landscape resource, the potential landscape and visual effects and design alternatives. The assessment process will refer to landscape value, and in particular landscape designations and related planning policy, as well as landscape character and capacity for wind farm development at this Site.

6.2 Legislation, Policy and Guidance

The methodology for the LVIA and the CLVIA has been undertaken in accordance with the methodology set out below and conforms with the Guidelines for Landscape and Visual Impact Assessment, Third Edition, Landscape Institute and IEMA, 2013.

6.2.1 Legislation

National legislation relating to landscape and visual includes:

- *Climate Change Act (Scotland),* Scottish Government, 2009;
- *The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations,* Scottish Government, 2017; and
- *The Town and Country Planning (Scotland) Act*, Scottish Government, 1997.

6.2.2 Policy

National and local policy relating to landscape and visual includes:

- *National Planning Framework for Scotland 4*, Scottish Government, 2023;

- *Policy Statement No. 05/01 – Landscape Policy Framework*, Scottish Natural Heritage, December 2005;
- *Policy EI 8: Energy and Heat Resources*, Outer Hebrides Local Development Plan, Comhairle nan Eilean Siar, November 2018; and
- *Policy NBH1: Landscape*, Outer Hebrides Local Development Plan, Comhairle nan Eilean Siar , November 2018.

6.2.3 Guidance

National and local guidance relating to landscape and visual includes:

- *Landscape Character Assessment: Guidance for England and Scotland (Countryside Agency and Scottish Natural Heritage publication*, produced by the University of Sheffield and Landuse Consultants), 2002;
- *Siting and Designing Wind Farms in the Landscape*, NatureScot, Version 3a, August 2017;
- *Visual Representation of Wind Farms*, NatureScot, February 2017;
- *Photography and Photomontage in Landscape and Visual Assessment*, Landscape Institute Advice Note 01/2011, 2011;
- *Landscape Character Assessment Topic Paper 6 - Techniques and Criteria for Judging Capacity and Sensitivity*, Countryside Agency and NatureScot, 2015;
- *Assessing the Cumulative Impacts of Onshore Wind Energy Developments*, Scottish Natural Heritage Version 3, March 2021;
- *Outer Hebrides Local Development Plan Supplementary Guidance: Large Scale Wind Energy Developments*, Comhairle nan Eilean Siar, September 2011.; and
- *Landscape Character Assessment: Outer Hebrides Evolution and influences*, NatureScot, 2019.

6.3 Consultation and Scope

The scope of the assessment has been established on the basis of professional judgment and early discussions with Comhairle nan Eilean Siar and is set out in Table 6.1. A Scoping Report was submitted to Comhairle nan Eilean Siar in September 2023, and the feedback from this has been taken on board in the scope of the following assessment.

Table 6.1 - Scope of the Landscape and Visual Assessment

Landscape Issues	Description
Landscape Character	The effects of the Proposed Development on the landscape character and quality of the site area, as defined by the Western Isles – Lewis and Harris Landscape Character Assessment and site survey.
Landscape Elements	Direct or physical effects on any landscape elements which characterise the area.
Landscape Designations	Views from any designated landscape including National Scenic Areas (NSA), Special Landscape Areas (SLA), or Gardens and Designated Landscapes (GDL). Views from other areas of landscape character as perceived by people.
Visual Issues	**Description**
Local Community	Views from the local rural community, particularly from residential properties near the site and from local settlements which lie within the ZTV. Views from roads and popular tourist/walker destinations and hilltops will also be taken into consideration.

Tourist Destinations	Views from popular outdoor tourist destinations which entail an appreciation of the landscape, and the setting of features and visitor experience.
Major Transport Routes	Transport routes including the A859 as well as any popular walking routes in the area.
Cumulative Issues	**Description**
Cumulative Assessment	The cumulative assessment includes viewpoint assessment within the study area where simultaneous and/or successive views of more than one wind energy development may be achieved, and sequential cumulative assessment, where more than one wind energy development may be viewed along transport routes (simultaneous or successive).

6.3.1 Viewpoint Selection

The final list of selected viewpoints was borne out of consultation with Comhairle nan Eilean Siar, professional experience and the scoping process. Table 6.2 below provides a summary of the viewpoint locations and rationale for their selection. The selected viewpoints offer views from near, middle and distant locations as well as views from the north, south, east and west. Four locations in total have been photographed across the study area with photomontages created, and two further locations have had wireline illustrations produced. These locations represent a number of different receptors, viewing directions and distances, and are the locations perceived to experience the greatest change regarding the height increase of the turbines. As far as possible, viewpoints were selected to represent the development at its most visible. Viewpoint locations are illustrated on Figures 6.2 and 6.3.

Table 6.2 - Summary of locations selected for viewpoint assessment

Viewpoint	Reason for initial selection	Distance from nearest turbine
1. A859 at Loch a'Mhorghain	Selected to cover additional visibility caused by the taller turbines from the Loch a'Mhorghain area and impacts on drivers travelling west on the A859.	0.9km
2. A859 Overlooking Ceann an Ora	Selected to represent views experienced by road users travelling north on the A859.	1.7km
3. A859 at Loch na Ciste	Selected to cover additional visibility caused by the taller turbines from the Loch na Ciste area and impacts on drivers travelling west on the A859.	1.9km
4. B887 near Cliasmol	Selected to cover additional visibility caused by the taller turbines from the Cliasmol area and impacts on drivers travelling east on the B887.	6.2km
5. Taransay	Selected to assess the impacts on the Taranasay part of the South Lewis, Harris and North Uist NSA. It is proposed that a wireline would be sufficient to cover this.	10.6km
6. Beinn Mhor	Selected to assess the impacts on the Eisgein Wild Land Area, as well as cumulative impacts. It is proposed that a wireline would be sufficient to cover this.	11.9km

6.3.2 LVIA Study Area

An overall study area of 30km radius from the outermost proposed turbines has been established following NatureScot Guidance. This study area is illustrated in Figure 6.1. The cumulative assessment will consider existing wind energy development proposals that have permissions, and those that are currently the subject of

undetermined applications within a Search Area of 30km radius of the Site centre. The detailed assessment focuses on the relationship with other schemes in the area and the potential for significant cumulative effects in combination with the operational turbines.

6.3.3 Cumulative Assessment

Drawing from NatureScot guidance, a cumulative baseline of all operational and consented wind energy development and other planning applications for wind energy development, within the 30km study area is created. All turbines above 50m within 15km of the Proposed Development Site are included in the assessment. Wind farms over 15km away are highly unlikely to give rise to significant cumulative effects. In accordance with the NatureScot guidance, projects at or up to the scoping stage have not been included.

All other wind energy developments included in the assessment are listed in Table 6.3 below and illustrated in Figure 6.8.

Table 6.3 - Summary of key projects for consideration in the CLVIA

Development Name	Scale of project	Number of turbines	Tip height	Distance to project
In Planning projects				
Uisenis Wind Farm	Wind Farm	25	200	15.5km

The above developments will be included on any wirelines and CZTV's will be run for each of these in conjunction with the Proposed Development, primarily focussed on the cumulative visibility between the wind turbine elements of the proposal. For a full list of all cumulative projects see Figure 6.8.

6.4 Landscape Design Considerations

6.4.1 Landscape Capacity

The Proposed Development would involve the replacement of three existing 2-bladed wind turbines of 46m to tip at Monan Wind Farm, with three 3-bladed wind turbines with a tip height of up to 86m. The Site is located within the Prominent Hills and Mountains Landscape Character Area within the Mountain Massif Landscape Character Type (LCT). According to the *'Landscape Capacity Study for Onshore Wind Energy Development in the Western Isles'* 2004, the landscape is described as the following:

> *"This landscape is generally very large scale. Vertical scale is particularly pronounced, especially where the mountains rise sharply from the sea. Within glens and where there are complex landforms, the horizontal scale and (sense of) openness are limited. Openness is greater where slopes are shallower, ridges are broader, and summits are rounder. At summits or on higher ground the landscape is very open and large scale.*
>
> *These landscapes are highly sensitive and form the backdrop to many key views around the Western Isles. There may be some very limited opportunity to site development on the lower, slacker slopes in less visible areas; however, a large proportion of adjacent land is made up of Dramatic Mountain Massif, Boggy Moor 2 and Rocky Moor, all of which have high sensitivities. There are some areas which merge with Boggy Moor 1 where the landscape is simpler, however these mainly occur along the stretch of road along Loch Seaforth. Development in this area may diminish the experience (particularly driving south) along this route with key views and the important landscape character change between Harris and Lewis.*

Where there are very limited opportunities for development, the size and number of turbines would have to relate carefully to the particular site. Larger scale typologies would in some areas suit the landscape scale; however, in areas where scale is apparent due to the steepness of the mountains, large typologies would diminish this effect greatly. Careful consideration would also need to be paid to the siting of tracks and power lines. Where these elements already exist in this LCT they are very visible and detract from the natural landforms and landscape patterns"

According to the *'Landscape Capacity Study for Onshore Wind Energy Development in the Western Isles'* 2004, the area has a low-medium capacity for commercial windfarm development. This is due to the Mountain Massif LCT being an important backdrop to other LCTs such as the Boggy Moor LCT and the Machair LCT in addition to the landscape being prominent with a complex landform, scale and pattern, deeming it to be of a medium to high sensitivity. Despite this, an application for 86m turbines at this Site in 2008 was deemed acceptable in landscape terms. Given that this decision was post the 2004 study, it can be concluded that study was a consideration of the decision. The Proposed Development would also be for turbines of 86m and in the same landscape.

6.4.2 Design Objectives

NatureScot's guidance *'Siting and Designing Wind Farms in the Landscape'* has been used to inform the layout and design of the scheme and the final development will be in accordance with its key principles.

Scale – Turbine size and location has been chosen at a maximum of 86m to be in scale with the landscape and not offer a substantially greater impact than the operational turbines. While the taller turbines would increase the vertical scale, the design should minimise the change in horizontal scale by positioning the turbines in a similar layout and as close to the operational turbines as possible. The maximum size was also considered in the context of the previously granted planning consent for an 86m tip turbine at the Site granted in 2008.

Skylines – The design is such that the proposed turbine would affect the same section of the skyline already characterised the existing Monan wind turbines. Keeping to turbines appropriate to the scale of the landscape and on similar positions to the operational turbines should minimise any impacts on the skyline. The scale should be such as to not affect any 'new' skylines.

Aesthetics – By maintaining a three turbine layout on similar positions to the operational turbines, the aesthetic would not be too dissimilar. The proposed turbines would slightly alter the aesthetics as they are three-bladed turbines as opposed to the existing two-bladed turbines. However, design and positioning means that the chance of overlapping and visual clutter on the skyline is avoided.

6.4.3 Layout Design

The proposed, broad location has been chosen as it is considered to represent the best compromise between technical and environmental considerations, whilst not exacerbating the effects of the operational development. The design in terms of turbine position and height, was developed to limit the development's visibility over the local receptors including the NSA and appear in scale with the surrounding landscape.

6.4.4 Turbine Selection

The LVIA has been assessed on the basis of a proposed turbine height of 86m to tip. Other likely design considerations include the following:

- Modern turbines will be used that have a simple and balanced appearance with three blades and tapered, non-lattice towers; and
- The turbines will be semi-matt and pale grey in colour to reduce its contrast with the background sky under most weather conditions.

For a full description and details of the scheme and all its components see Chapter 2 – Proposed Development and Design Evolution.

6.4.5 Construction activities

Temporary landscape and visual effects would occur during the construction period, and would result from the visibility of construction activity, use of lay down areas, and site compound. The landscape and visual effects would be of a low to negligible magnitude of change and not significant. The lay down areas and compound would be located adjacent to the proposed turbine locations. During the construction period the landscape and visual effects would be significant for a small number of receptors along the A859 to the south-west of the Proposed Development. This is due to the movement and contrast of workers and machinery in this area. These effects would be temporary and fully restored on completion.

All disturbed areas resulting from the construction (around turbine bases, temporary access tracks and onsite compounds and lay down areas) will be restored upon completion of the construction period. Specific mitigation measures necessary during construction would include:

- Colour and finish of substation to be agreed with Comhairle nan Eilean Siar prior to construction;
- Land clearance and occupation will be limited to the minimum necessary for the works;
- Vegetation removal will be minimised as far as possible; and
- Valued features, such as any historic features and field boundaries will be protected. Fencing will be used to define such areas to avoid accidental damage.

6.4.6 Decommissioning

All of the visible, above ground structures (turbines, substation and grid connection) will be removed upon decommissioning, thus rendering the landscape and visual effects of the development as reversible. There would, therefore, be no landscape and visual effects remaining after decommissioning as a result of the Proposed Development.

6.5 Assessment of Landscape Effects

The methodology for the Landscape Assessment has been undertaken in accordance with the methodology set out in Appendix 6.1 and conforms with *The Guidelines for Landscape and Visual Impact Assessment,* Third Edition (Landscape Institute and IEMA, 2013).

6.5.1 Landscape Baseline

Information on the existing landscape and visual resource has been collected by reference to Local Plans, OS maps and relevant literature, including the NatureScot Landscape Character Assessment as well as information gathered from field surveys.

6.5.2 Broad Landscape Context

The study area for the Proposed Development (Figure 6.4) is located within the Western Isles Landscape Character Assessment – Lewis and Harris area.

The Western Isles Landscape Character Assessment covers the area of the Isle of Lewis, Harris, North Uist, Benbecula, South Uist and Barra. This assessment is divided into north and south areas, with Lewis and Harris being the northern section of the assessment. The majority of this landscape is a combination of boggy moor to the north, rocky moor in the centre and mountain massive to the south. The coastlines feature scattered areas of crofting.

6.5.3 Regional Landscape

The Proposed Development is situated within the Outer Hebrides Regional Landscape Area as identified by NatureScot in their *'Landscapes of Scotland'* document. A brief description is offered by NatureScot:

> *"The Prominent Hills and Mountains Landscape Character Type is characterised by individual peaks with pronounced summits, long ridges and slopes, rising steadily from the surrounding terrain. Steep sided corries and short u-shaped glens form an integral part of this character type. The upper slopes of the Prominent Hills and Mountains consist of irregular rock buttresses, ledges, shelves and deep gullies. Where the hills and mountains meet the coast the deeply indented coastline is dominated by rocky headlands, sea cliffs and occasional caves. The upper slopes have little vegetation cover, other than thin grassland which inhabits the thin soils between outcrops. The lower slopes are dominated by a mixture of low moorland, mixed windswept heather with damp rough grassland which gives a course textured surface which is much roughened in places by the presence of large numbers of boulders. The lower slopes eventually merge gently into the surrounding moorlands."*

6.5.4 Key Landscape Character Areas within the Study Area

The Site is located within the Prominent Hills and Mountains LCA on the Isle of Harris, as illustrated in Figure 6.4. This LCA covers an area spanning to both east/west coastlines of Harris from Taran Mòr in the northwest of the LCA to Carnach in the southeast and covers a large area of the more mountainous region of Lewis and Harris. Table 6.4 summarises the landscape character areas that are situated within the 30km study area and have potential visibility.

Table 6.4 - Key Characteristics of Landscape Character Areas

Name	Key Characteristics
Outer Hebrides Landscape Character Assessment	
Prominent Hills and Mountains	The Prominent Hills and Mountains run along the eastern edge of Uist and are characterised by individual peaks with pronounced summits, long ridges and slopes. Steep sided corries and u-shaped glen make up an integral part of this landscape and where the landscape meets the coast, rocky headlands and sea cliffs are prominent. The lower slopes contain low moorland and windswept heather moorland whereas the upper slopes have little vegetation cover. This LCA is largely uninhabited.
Dispersed Crofting	Dispersed Crofting occurs in coastal locations in throughout Southern Lewis, Harris, the Uists and Barra. Dispersed Crofting tens to have a more varied landform and non-linear field patterns. This LCA is characters by short, even slopes scattered between rocky cnocan and boulder outcrops. There is little to no woodland in this LCA with only small mature deciduous woodlands are found adjacent to croft houses. Settlements are dispersed with occasional clusters near harbours and sheltered Glens.
Machair	The Machair landscape character type can be found along coastlines and form flat coastal grasslands behind sweeping curved beaches and dunes. The low headlands are backed by dune systems which protect expansive machair grasslands. This LCA has a wide range of habitats, archaeological and landscape features therefore low intensity farming has been adopted to achieve a balance of maximum production but sustainable land management. Settlement in this region is sporadic and dispersed and often includes farms and crofts.
Rounded Rocky Hills	The Rounded Rocky Hills LCA is characterised by broad shoulders sweeping up to rounded summit ridges. Bare rock is prominent in this area with angular boulders and scattered scree. The area appears large scale when viewed from a distance, however the scale feels smaller when within due to the individual rocks and boulders. The lower slopes feature a combination of low heather moorland and damp boggy grassland whilst the upper slopes feature exposed areas of bedrock and sparse grasses and mosses.

Boggy Moorland	Boggy Moorland LCA generally characterises extensive inland areas but in areas where it extends to the coast, it can terminate in sea cliffs with eroded gullies cut into it. A key characteristic of this Outer Hebrides LCA is large scale, gently undulating peat moorlands which contain a number of large and small rounded lochs which are interconnected by narrow slow-moving rivers. This is a predominantly uninhabited landscape with sporadic groups of isolated croft house located low in the landscape.
Gently Sloping Crofting	The Gently Sloping Crofting LCA is characterised by long sweeping gentle slopes which end in long curving beaches to the seaweed and merging evenly into the above boggy moorland. There are sporadic small patches of woodland and scrub found in sheltered areas. This is a large scale landscape with open views.
Cnoc and Lochan	The Cnoc and Lochan LCA is mainly confined to discrete coastal areas and is characterised by steep sided irregular outlines of small cnocs, separated by depressions which frequently contain small lochans. Near the coastline, this LCA forms a coastline of small rocky promontories, small bays and offshore skerries. The diversity of landforms creates differing microclimates. Similarly, to the aforementioned LCAs this area is predominantly uninhabited.
Rock and Lochan	The Rock and Lochan LCT is a form of Cnoc and Lochan mentioned above however this LCA form a large tract of land stretching inland from the western coastline of Harris into the interior. This LCA is predominantly found in rural and remote areas therefore it is a simple landscape with few elements. This LCA is characterised by low ridges with a general north-west/south-east orientation. The bedrock is partly covered with heather and thin grasses and scattered with boulders. This is LCA is largely uninhabited with occasional isolated crofts and clusters at coastal bays.
Linear Crofting	This LCA has strong landforms such as strong linear rectangular field patterns on irregular landform of sweeping slightly concave slopes with rocky knolls. This rises into rocky or boggy moor inland and sloping down to rocky shores or broad shallow glens. The landcover is predominantly improved and semi-improved grassland fields due to differing grazing regimes. Residential properties and settlements are influenced by topography therefore appear dispersed throughout this LCA.
Rocky Moorland	Rocky Moorland is characterised by irregular topography due to the combinations of rocky convexities and smooth dip slopes, these features create a rocky and stepped landscape. Prominent rocky knolls are joined by peaty moorland vegetation and small lochans. The landcover is mainly open heather moorland and rough grassland. There are occasional areas of forestry, small woodlands and shelter planting. The landscape is predominantly uninhabited apart from croft housing near coastal areas.

6.5.5 Land Use and Land Use Change

Due to the landform, the area is largely uninhabited. However, the slopes of open hill pasture are used for common grazing for any local crofting townships.

6.5.6 Landscape Planning Designations

The study area for the Proposed Development covers an area of the Na h-Eileanan Siar and governed by the Comhairle nan Eilean Siar. The local development plan contains policies which seek to protect landscape resources. The Proposed Development is situated within the South Lewis, Harris and North Uist National Scenic Area. This, and all other key landscape planning designations are illustrated in **Figure 6.6.**

Landscape planning designations and policies are considered in the determination of the sensitivity of the landscape and visual receptors as the provide an indication of value ascribed to the landscape or visual resource.

The assessment will consider those designated landscapes within 15km of the Proposed Development. Those designated landscapes that overlap the ZTV (and may have potential views of the Proposed Development) have been considered as part of this assessment and are listed in **Table 6.5**. Planning policies and designated landscapes outside the ZTV have been scoped of the assessment.

Table 6.5 - Landscape Planning Designations

Designation	Description
National Scenic Area (NSA)	The Proposed Development is situated within the **South Lewis, Harris and North Uist NSA.** The designation covers an area from Great Bernera in South Lewis, across the Sound of Harris to the northern section of North Uist. The designation is covered under **Policy 5: Landscape** and **Policy 28: Natural Heritage** in the Outer Hebrides Local Development Plan. The NSA is considered to have the following special qualities: • A rich variety of exceptional scenery; • A great diversity of seascapes; • Intervisibility; • The close interplay of the natural world, settlement and culture; • The indivisible linkage of the landscape and history; • The very edge of Europe; • The dominance of the weather; • The wild, mountainous character; • Deep sea lochs that penetrate the hills; • The narrow gorge of Glen Bhaltos; • The rockscapes of Harris; • Extensive machair and dune systems with expansive beaches; • The drama of Ceapabhal and Traigh an Taoibh Thuath; • The landmark of Amhuinnsuidhe Castle; • The distinct, well-populated island of Sgalpaigh; and • The enclosed glens of Cloisleitir, Shranndabhal and Roghadail.
Wild Land Area (WLA)	**Harris - Uig Hills WLA** is the largest of the 11 Island WLAs. The area runs between Uíg in the north and Loch a Siar in the south to Acha Mòr in the east. Two of the three proposed turbines are located within the southern most corner. The designation is covered under **Policy 1: Development Strategy** in the Outer Hebrides Local Development Plan. The Proposed Development is within this WLA and will have some impact on its key attributes: • A rugged west coast with awe-inspiring landform features, that combine with the sea to increase remoteness and the perceived naturalness and extent of the area; • Awe-inspiring towering, irregular mountains that adjoin low-lying peatland or the sea, offering panoramic views and possessing a strong sense of naturalness; • Extensive peatland that is simple at a broad scale, but interwoven with a complex pattern of lochs, lochans, pools and bogs at the local level that highlight the rugged nature of the landform and limit access. **Eisgein WLA** is the second of the Wild Land Areas located on the Isle of Lewis and Harris. Defined in part by the coast, landward access is limited to its north east corner from the minor road to Eisgein, being edged by Loch Sìophort to the west, Caolas nan Eilean to the south, and Loch Sealg to the east. The designation lies 7.7km east of the Proposed Development and is covered by **Policy 1: Development Strategy** in the Outer Hebrides Local Development Plan. The Proposed Development is not within this WLA.

6.6 Assessment of Predicted Landscape Effects

Landscape effects are determined by the Landscape Institute as “Change in elements, characteristics, charact, and qualities of the landscape as a result of development.” These effects are assessed by considering the landscape sensitivity against the magnitude of change. A matrix is used to guide the evaluation or level of effect as illustrated in **Appendix 6.1.** The type of effect may also be described as temporary or long term/permanent, direct or indirect, cumulative and positive, neutral or negative.

6.6.1 Potential Operational Effects on Local Landscape Fabric

Changes to landscape fabric can occur where there would be direct or indirect physical changes to the landscape. In this instance, direct changes to the landscape fabric would only occur within the Application Boundary.

The landscape has been assessed to be of high sensitivity.

6.6.1.1 Magnitude of Change

During operation the Proposed Development would occupy and directly affect a minor extent of the Proposed Development Site landscape character. This would only result in the loss of a minor area of heather moorland as two of the turbines are located on ground already modified by the existing turbines, and would not result in the loss of any landscape features key to the character of the area such as heritage features, woodland, dry-stone dykes or lochans. The largest part of the direct impacts would be as a result of the larger turbine foundations and the small section of additional access track and despite these only being minor losses, the impacts will have a minor influence over the wider Prominent Hills and Mountains LCT.

This local landscape has already been modified by the existing Monan development. While the existing turbines have some influences over the local landscape, given the increased size the Proposed Development will have greater prominence. While their influence is greater than the operational turbines, it remains relatively limited and contained to a local area around the development Site, as can be seen by the ZTV.

The Proposed Development would be a notable feature, particularly when seen from the south, and south-west, however its presence would not be sufficient to alter the perceived character of this section of the LCT. The development is never an overbearing or dominant presence on the coastline to the south-west, not the glen to the south-east and the mountains retains their dominant presence and ability to enclose this pocket of the wider LCT.

The magnitude of change for direct landscape effects as a result of the Proposed Development on the local landscape character resource, would be medium, resulting in a major/moderate level of effect, which would be significant.

6.6.2 Potential Operational Effects on the Dramatic Mountain Massif LCA section of the Prominent Hills and Mountains LCT

This is a large scaled landscape which covers a significant section of Northern Harris, including the hills at An Cliseam, Mulla Bho Dheas Mulla Bho Thuath and Uisgneabhal, which are the largest in the Western Isles. The landscape has a strong sense of naturalness, remains scenic and the condition/quality of the landscape is generally high.

In terms of landscape value within the study area, this landscape is designated both as an NSA and WLA. As such, the landscape value is considered to be high.

The overall sensitivity of the landscape unit is considered to be high.

Magnitude of Change

The ZTV coverage across the LCA is limited to the area immediately around the Proposed Development, by ~2km, with some occasional sections of hill summit. The Proposed Development will have the potential to impact on the characteristics which comprise the landscape when seen from these locations.

While the turbines are situated on an area of higher ground above the coastline, these are not the high peaks or dramatic skylines which do occur in sections of this landscape. The Proposed Development is situated on a simpler, lower-lying shoulder and is typically backdropped by the higher more dramatic hills when seen. The presence of the turbines at this point would not diminish the hills' ability to provide enclosure to the coast and glens below.

When seen from the areas of higher ground within the LCA and the summits such as An Cliseam, the Proposed Development is a minor feature of the lower ground at the foot of the hills. It neither interrupts the important long-range vistas over the coastlines, islands and lochs, nor does it appear on the dramatic skylines. This landscape also has a strong sense of remoteness as can be seen by the WLA designation, however the area in which the Proposed Development is seen, is already modified with the operational turbines and with the other infrastructure such as the telegraph poles, A859 and scattered development along the coastline. As such, it would not be affecting a pristine section of the LCA which is currently unaffected by human development.

In addition to the section of Dramatic Mountain Massif LCA in which the development is located, there is also potential visibility from the north facing slopes of the Frith Losgaintir peninsula. From here the Proposed Development would appear at over ~5km distance and be a minor feature which is backdropped by the landscape, and are not seen on a dramatic skyline or interrupting important vistas. This is a particularly remote section of the LCA and as discussed above the Proposed Development would be seen in conjunction with human activity along the northern shores of Loch A Siar, and not within a remote section such as Frith Losgaintir. From the vast majority of the LCA there would be no visibility of the Proposed Development and it would have no impact on the quality, character, scale or setting of the LCA.

The magnitude of change on the section of Dramatic Mountain Massif surrounding the Site would be low, resulting in a **moderate** level of effect, which would not be significant. Impacts on the remainder of the LCA would be negligible.

6.6.3 Indirect Effects on Neighbouring Landscape Character Areas

Neighbouring areas of landscape character are formed by moorlands, crofting, machair and coastlines.

None of these areas would be directly affected by the Proposed Development and there would be no direct effects on the key physical characteristics that form the areas landscape character or their quality and integrity. However, parts of the Proposed Development may be visible from these areas and as such, could indirectly affect the landscape character where particular views or scenic qualities are noted as a key characteristic of the landscape. Alternatively, the Proposed Development could be frequently visible and particularly prominent in the landscape such that the addition of these new features affects the character of the area. In this instance the Proposed Development is located on an upland landscape with surrounding hills which will somewhat restrict impacts to the surrounding landscapes.

The likelihood of significant effects on landscape character areas dramatically diminishes beyond 15km, those LCAs lying beyond 15km of the Proposed Development have been scoped out of the final assessment due to lack of visibility and distance. The potential visibility of those inside 15km can be seen in **Figure 6.5.** An assessment of those inside 15km with visibility predicted are assessed in the **Table 6.6** below.

Table 6.6 - Indirect landscape effects on neighbouring landscape character areas

Dumfries and Galloway Landscape Character Assessment	
Mountain Massif	This LCA forms the lower lying hills which surround the Dramatic Mountain Massif LCA and together with that forms the Prominent Hills and Mountains LCT. The closest section of this landscape is less than 1km to the west and while the Abhainn Eadarra Glen area is predicted by the ZTV to have visibility, the remainder of the LCA is generally free from views. When seen from the Abhainn Eadarra Glen area the turbines their presence would not be too dissimilar to the existing turbines, however the southern most turbine is seen in full, while currently only two of the turbines are typically seen. Although situated above this glen, the turbines would not constitute an overbearing presence and given the existing turbines, their contrast to the baseline is limited. There would be visibility from the north-eastern slopes of Taransay, which would be as illustrated in **Viewpoint 5.** Again, the turbines appear as minor features of the distance and seen in part of the landscape which already contains some manmade features. While the do

	breach the skyline from here, it would only be marginally and seen on the lower sections of the skyline and not on the dramatic sections and summits to which the eye is drawn. The magnitude of change on the section of Mountain Massif would be low, resulting in a **moderate** level of effect, which would not be significant
Dispersed Crofting	While there are a few pockets of this LCA along the Loch A Siar coast the only affected section would be that at Bunavoneadar, which is predicted to have visibility across the whole LCA. **Viewpoint 2** from across Loch Bun Abhainn Eadarra illustrates the impact on the landscape. While the viewpoint itself is not within the LCA, it views towards it and this LCA occupies the majority of the foreground. As can be seen the turbines are notable features, but do not dominate over the landscape. The most open views from this landscape would be from the B887, on the western side of Bunavoneadar, however even here the ridgeline above the coast provides good screening and reduces the vertical extent of the turbines, any sense of overbearingness and provides a sense of separation between this landscape and the development Site. The magnitude of change on the section of Dispersed Crofting would be low, resulting in a **moderate** level of effect, which would not be significant
Rocky Moorland	This LCA features along the lower-lying coastal areas, in between the areas of Dispersed Crofting LCAs. The ZTV indicates scattered visibility from some areas of the LCA, although in general it would be free of views. **Viewpoint 4** illustrates the most impacted section of the LCA near Tolmachan, where the turbines are seen rising behind a lower-lying ridgeline. While they are notable features, they are not prominent, overbearing or out of scale with the surrounding landscapes which retain their grand dramatic character scale. In addition to this, this landscape has a strong associated with the coastline and as such, views tend to be south over Loch A Siar and over to islands such as Taransay. Generally there is little visibility of the Proposed Development from this LCA and that, that occurs would not be sufficient to alter the perceived character of the LCA. The magnitude of change on the section of Rocky Moorland would be negligible, resulting in a **moderate/minor** level of effect, which would not be significant
The LCTs that have either no, or highly limited visibility predicted by the ZTV or located beyond 25km distance have been scoped out of the final assessment.	

6.6.4 Effects on Landscape Planning Designations

The Site area is designated as an NSA and as such, there will be some direct impacts to this landscape designation.

Any other designated landscape would only be affected indirectly, where the ZTV pattern in relation to the various landscapes is illustrated in **Figure 6.7**. The assessment below considers if these effects on the views would lead to an indirect effect on either the landscape character or valued features and characteristics for which these areas are designated. The assessment of the overall indirect effects experienced by people viewing the Proposed Development from designated landscape and the Proposed Development's impact on the setting and character of any designated landscapes areas is provided in **Table 6.7**. The sensitivity of all designated landscapes considered as part of this assessment has been considered as high.

Table 6.7 - Indirect landscape effects on designated landscapes

Landscape Planning Designations	
Harris and Uig Hills NSA	The following assessment will test the Proposed Development against each of the special qualities of the NSA and the impact that the turbines will have on these qualities.

	A rich variety of exceptional scenery The Proposed Development would be located within the NSA and as such has an influence over the quality of the scenery. The turbines would be directly in front of An Cleasim, which is a prominent feature of the scenic landscape. Currently the existing turbines also are seen in front of An Cleasim, however to a lesser extent, as can be seen in Viewpoint 2. Despite this the scale of the turbines is such that they do not diminish the perceived scale of An Cleasim and thus its prominence is still an important part of the scenic qualities of the NSA. In addition to this the ZTV indicates very limited visibility of the Proposed Development, this its influence over the scenery of the NSA is also limited. *A great diversity of seascapes* The ZTV illustrates that there would be visibility from the Loch a Siar water body and the smaller Loch Bun Abhain Eadarra. The turbines are seen in conjunction with these water bodies from part of the coastline at Ardhasaig, as seen in Viewpoint 2 and from the island of Taransay. While the turbines are seen, they are never prominent and only experienced in conjunction with these seascapes and coastlines when views from their southern sides, from the northern edges the turbines would be to the rear and have no influence over the seascapes. There are many diverse seascapes across the NSA and the Proposed Development would only affect a very small proportion of these. Viewpoints 1 and 3 illustrate that the Proposed Development would not interrupt the narrow framed views from the A859 over Loch a Siar, nor would the Proposed Development ever be backdropped by the seascapes. *Intervisibility* The enclosed nature of the Proposed Development Site limits any impacts on intervisibility. Due to the topography the turbines are never seen as part of a wide ranging or expansive vista. *The close interplay of the natural world, settlement and culture* The Proposed Development would have no direct effects on any features of cultural heritage. It is located near the dispersed crofting at Bunavoneadar on the northern side of Loch Bun Abhainn Eadarra. There are views toward the settled coast at Bunavoneadar in conjunction with the mountains from the south, where the Proposed Development appear. However, the turbines are not prominent and the sense of juxtaposition between these features of the coast and the natural mountains remains. *The indivisible linkage of the landscape and history* There is an old whaling Station which is a Scheduled Monument on the northern coastline of Loch Bun Abhainn Eadarra, however views from this area towards the turbines is limited given the topography. There would be some views across the water, where the Whaling Station would be seen in conjunction with the Proposed Development, however, the sense of history remains and the turbines have a strong sense of separation from this part of the coastline given a ridge which is located between the coast and the Proposed Development. It is unlikely that the Proposed Development would have any impact on any other historical landscape features. *The very edge of Europe* Given the tucked in nature of the development Site, this particular aspect is not overly apparent, which is more evident on the western coastlines, where there are views over the vastness of the northern Atlantic Ocean. *The dominance of the weather* The proximity of the Proposed Development to the higher mountains will mean that the Site will be susceptible to low clouds and mists often completely screening the development. As the weather changes the turbines will come into view. This will create a changing visual experience, however this aspect would have only a limited impact on the NSA and may even create an additional dramatic aspect to the NSA. *The wild, mountainous character* This is best experienced from the north of the NSA viewing south, where these wild mountains create a stark contrast of the flatter peatland and form a backdrop and dramatic skyline. Give the turbines are south of this, they would have limited impact on this aspect of the mountainous character. There would be some localised effects given that the Proposed Development is seen in front of An Cleasim from the south, however the scale of the vertical scale of Proposed Development is within the 1:3 ratio that is advised by NatureScot in their *Siting and Designing Wind Farms in the Landscape*, *2017* document.

	Deep sea lochs that penetrate the hills This element is not particularly evident in the areas where there is potential visibility of the Proposed Development. While Loch a Siar and the smaller Loch Bun Abhainn Eadarra will have views from and in conjunction with the Proposed Development, neither of these have the fjord-like sea loch character which penetrate the hills. These fjord-like sea lochs are found further to the east and west of the Proposed Development and would not be affected. While Loch a Siar does eventually have this fjord-like character, it would not occur until nearer Tarbet, where the topography screens any visibility of the Proposed Development. *The narrow gorge of Glen Bhaltos* This feature is located ~30km to the north-west of the Proposed Development and no visibility is predicted. As such the Proposed Development would have no impact on it. *The rockscapes of Harris* The Proposed Development would not result in the loss of any rockscapes and this area of the NSA is not particularly rich with rockscapes, which are more pronounced in the more remote section further west, on some of the smaller islands and to the south-east along the Golden Road. There would be no visibility of the Proposed Development from the Golden Road, which is ~8km to the south-east. *Extensive machair and dune systems with expansive beaches* This element typically occurs along the western coastline of Harris, at Luskentyre, Losgaintir, Seilebost, Horgabost and Sgarasta Mhor. These areas would not have any visibility of the Proposed Development, nor would there be visibility in conjunction with these landscapes. *The drama of Ceapabhal and Traigh an Taoibh Thuath* This element is located ~19km to the south-west of the Proposed Development and while there would be some theoretical visibility from the western coast of Ceapabhal, the drama of these features is in the views towards them, which would be unaffected. *The landmark of Amhuinnsuidhe Castle* There would be no visibility of the Proposed Development from this feature on in views towards this feature. As such, there would be no impact on this element of the NSA. *The distinct, well-populated island of Sgalpaigh* There would be no impact on this landscape aspect, which is ~10km to the south-east. *The enclosed glens of Cloisleitir, Shranndabhal and Roghadail* This element in over ~20km to the south of the Proposed Development, on Harris's southern coast. There would be no impact on this element. Overall, the Proposed Development would have a low magnitude of change, resulting in a **moderate** level of effect, which would not be significant. While there are localised significant visual effects, none of the key attributes would be significantly effected and the character and quality of the NSA as a whole would remain intact.

6.6.5 Wild Land Assessment

The Proposed Development is situated with the Harris-Uig Hills Wild Land Area, and will have an impact on this landscape.

6.6.5.1 Defining the Scope

The assessment will consider the impacts of the Proposed Development for those areas of the Harris-Uig Hills WLA within 15km. Although parts of the Eisgein WLA is within 15km of the Site, will be scoped out, as per NPF4 which states that '*the effects of development outwith a WLA will not be a significant consideration*'[2].

6.6.5.2 Verifying the Baseline

The Harri-Uig Hills WLA features three key attributes which comprise this landscape:

- *A rugged west coast with awe-inspiring landform features, that combine with the sea to increase remoteness and the perceived naturalness and extent of the area;*
- *Awe-inspiring, towering, irregular, rocky mountains that adjoin low-lying peatland or the sea, offering panoramic views and possessing a strong sense of naturalness; and*
- *Extensive peatland that is simple at a broad scale, but interwoven with a complex pattern of lochs, lochans, pools and bogs at the local level that highlight the rugged nature of the landform and limit access*.

While the second two attributes feature within the 15km study area, the first attribute is located beyond 15km and thus will be unaffected by the Proposed Development as it is neither seen from, or in conjunction with the Proposed Development. There have been no major changes to these attributes since the area was designated as a WLA.

6.6.5.3 Assess the Sensitivity of the Qualities

Given the potential for turbine development to have wide ranging indirect effects across the landscape, and the potential for a strong visual presence when seen, it is considered that these attributes have a **high** sensitivity to this type of development.

6.6.5.4 Assess the Magnitude of the Effects

Awe-inspiring, towering, irregular, rocky mountains that adjoin low-lying peatland or the sea, offering panoramic views and possessing a strong sense of naturalness

As described in the Wild Land Description, An Cliseam is not particularly tall, however given its relation to the low-lying surroundings appears much higher. This (and the adjacent hills) would be the features of this attribute most likely to be affected by the Proposed Development. These hills are popular for walkers given their proximity to the A859 and B887, as such it has resulted in path erosion and braiding that diminishes the sense of naturalness at a local level and the hills further north represent a stronger sense of solitude. While the Proposed Development is seen in conjunction with An Cliseam, it is also always seen in conjunction with the human activity along the coastline and is positioned in a section already containing wind turbines. As such, its contrast to this aspect of the baseline is mitigated somewhat.

Views from the summit of An Cliseam and adjacent hills contain panoramic views over the low-lying surroundings. While the turbines would feature in these views, their position is such that they are often overlooked by the viewer, where the eye is drawn further afield to distinct dramatic skylines of Frith Losgaintir, Taransay and Giolabhal Glas. These views would not be affected due to the low position of the development. Additionally views over the sea lochs, lochans and coastlines are also relatively unaffected as the turbines tend to be backdropped by the landscape and not interrupting the views of these aspects.

The Proposed Development is at the very southern edge of the WLA and views from these mountain tops into the interior of the WLA, which has a stronger sense of naturalness, remoteness and general lack of human artifacts is

[2] National Planning framework 4, Scottish Government, 13th February 2023, Part 2, Page 41

unaffected. Views form the south, outwith the WLA, towards the WLA would have views of the Proposed Development, however the topography is such that viewing into this interior is not possible until summits north of the Proposed Development such as An Cliseam.

The magnitude of change on this quality is considered to be low.

Extensive peatland that is simple at a broad scale, but interwoven with a complex pattern of lochs, lochans, pools and bogs at the local level that highlight the rugged nature of the landform and limit access.

This aspect of the WLA is particularly evident in the central and eastern sections which comprise of a wide expanse of peatlands, that are simple and open at a broad scale. Given the turbines position on the southern edge, any views over this peatland from the higher ground would have the Proposed Development to the rear and it is not seen in conjunction with the extensive areas of peatland, lochs and lochans to the north.

There would be no direct impact to any of these features, as the Proposed Development is not situated in an area of peatland, and is on landscape already altered by the operational wind farm. Nor would there be any physical impacts to any lochs, lochans, pools or bogs. The nearest of which would be Loch na Learga, with the Proposed Development actually moving the turbines further away from this feature than the existing turbines.

While there is a prevalent lack of human artefacts within the peatland interior and little evidence of contemporary land use, the larger mountains to the south of the peatland will screen any views of the turbines and this aspect will remain unaffected.

The magnitude of change on this quality is considered to be negligible.

6.6.5.5 Judge the Significance of the Effects

Given that the sensitivity of the WLA is considered to be high, and the two affected qualities are affected to a low and negligible level, the level of effect will be minor. No mitigation is required or proposed.

6.7 Assessment Visual Impacts

6.7.1 Visual Baseline and Receptors

Visual effects are recognised by the Landscape Institute as a subset of landscape effects and are concerned wholly with the effect of the Proposed Development on views, and the general visual amenity. Visual receptors would include anyone who may have visibility of the proposed turbines, such as people who may work in the area, residents, or tourists. Table 6.8 below identifies all visual receptors that were considered as part of the assessment.

Table 6.8 - Key Visual Receptors

Visual Receptor	Description
Residents	Views from the local community, particularly from residential properties near the Site and from local settlements which lie within the ZTV including Bunavoneadar.
Road Users	The A859, and the B887 will be considered, with viewpoints provided from both.
Recreational	Recreational receptors in the area mostly refer to visitors to historical sites and those partaking in outdoor pursuits such as walking, cycling and horse riding.

6.7.2 Broad Visual Context

The visual context is highly influenced by the topography which surrounds the Site. This restricts opportunities for long-range views to the north, east and west, and focuses views south over Loch a Siar. From the higher slopes views are open across the loch towards islands such as Taransay and the Firth Losgaintir peninsula, where dramatic skylines created by the hill summits are common. Views north from the lower landscape surrounding the Loch a

Siar are backdropped by the mountains of North Harris which includes An Cliseam, these mountains restrict any long-range views north and most open views are localised.

6.7.2.1 Weather Conditions

Changing weather patterns and local climatic conditions will influence the visibility of the wind turbines in terms of the extent of view, the colour and contrast of the turbines as well as the visibility and thus the perceived visual impact. There will be periods of low visibility (fog, low cloud, and bright sunny conditions that are accompanied by haze generated by temperature inversions) as well as periods of high visibility in clear weather. In some instances, and from some locations the wind turbines may be 'back-lit' (e.g. appearing darker in colour during sunset/sunrise and periods of pale or white blanket cloud) and in other circumstances may appear to be 'up-lit' (e.g. during stormy periods that combine dark clouds and bright sunshine).

The assessment has been conducted in periods of fine weather and assumes good visibility and limited seasonal leaf cover.

6.7.3 Visual Effects during Operation

Post construction and during operation, the appearance of the Site would recover a calmer visual character with negligible levels of maintenance activity visible on-site from the nearest visual receptors, and no significant visual effects likely. Visibility of the proposed turbines would extend over the study area affecting a range of visual receptors including residents, road users, tourists, and people undertaking recreational activity. The visual effects of the proposed wind turbines on views and visual amenity during operation are assessed in the following sections.

6.7.4 ZTV and visual Receptors

A blade tip ZTV is illustrated in **Figure 6.2** and indicates the maximum potential visibility of the Proposed Development, assuming there are no trees, woodland, or buildings within the area (i.e. a bare earth scenario). It is likely that this visibility would be reduced further by the screening effect of trees, woodland, and buildings on the ground, particularly in relation to settlements. A hub height ZTV is also provided in **Figure 6.3**. The key visual effects to be addressed include the following:

Visual effects on the views experienced by local communities;

- Visual effects on the views experienced by users of footpaths and general recreational areas/ tourist destinations; and
- Visual effects on the views experienced by road users along the main transport routes.

6.7.5 Viewpoint Analysis

Viewpoint analysis has been undertaken for each of the viewpoints, the viewpoints are contained in the Landscape & Visual Assessment Figures – **Figures 6.9** to **6.14** and the analysis is detailed in below.

6.7.5.1 Viewpoint 1: A859 at Loch a Mhorghian

This viewpoint is located at E115444, N905215 around 1.1km from the nearest turbine and looks west towards the Proposed Development. The view looks along the glen in which Loch a Mhorghain is situated, with the loch itself seen in the foreground. The steep valley sides create a well enclosed scene and draw the eye towards the summit of Beinn Dhubh, which is framed by the topography. The character of the scene is one of uplands, with a uniform landcover of heather moorland across much of the landscape. Man made features are limited, with the road itself seen in the foreground, but disappearing quickly behind the topography and a row of wooden telegraph poles situated on the western side of the valley. The operational turbines at Monan are not visible from this location.

The viewpoint is representative of views experienced by road users on the A859 and is therefore is considered to be of medium sensitivity as a visual resource. Due to it being part of the NSA, its landscape sensitivity would be high.

The Proposed Development would appear rising from behind the horizon to the right of the glen, where it would occupy a moderate extent of the horizontal view and a minor extent of the vertical view, seen against the sky. Two of the turbines would be afforded significant screening, with only the hubs upwards visible, while the third turbine has a notable section of the tower visible. The Proposed Development is seen in a section of the landscape containing the wooden telegraph poles, as such the contrast to the baseline in this part of the view is limited. While the turbines are obvious features in the view, they are not overbearing due to the topography screening limiting their vertical presence combined with the scale relative to the scale of the side of the glen. The eye is naturally drawn along the glen towards the summit at Beinn Dhubh and over the loch and the Proposed Development would not interrupt these views, being visible off top the side.

The magnitude of change is considered to be medium, resulting in a moderate level of effect that would not be significant to visual receptors. In landscape terms, the high sensitivity would result in a major/moderate level of effect which would be significant. However, the turbines would not considerably alter the character of the view or the visual experience.

6.7.5.2 Viewpoint 2: A859 Overlooking Ceann an Ora

This viewpoint is located at E113134, N903077 around 1.9km from the nearest turbine and looks north-east towards the Proposed Development. While the position is above the Loch Bun Abhainn Eadarra, the water is not actually visible in the view due to the form of the topography, although there would be more open views of the loch further to the left. The mountains at Uisgneabhal Mor, Teileasbhal, Mulla bho Dheas and An Cliseam form a strong and dramatic backdrop to the scene. These hills also help create an enclosed scene and one which has no long-range vistas. Manmade features in the view include the existing turbines at Monan, seen on a shoulder in front of An Cliseam, telegraph poles and a scattering on dwellings along the opposite coastline at Bunavoneadar and to the right of the view in the foreground.

The viewpoint is representative of views experienced by road users on the A859 (medium sensitivity), residents of Ardhasaig (high), however is also representative of the impact on the National Scenic Areas, thus is considered to be of high sensitivity.

The Proposed Development would appear on the same shoulder of landscape as the operational turbines, appearing backdropped by An Cliseam. They occupy a minor extent of the horizontal view and a minor to moderate extent of the vertical view and are fully backdropped by topography. While the turbines appear larger in the view than the operational turbines, they are not sufficiently larger as to diminish the scale of the landscape, particularly An Cliseam, as they are within the preferred 1:3 ratio of its vertical scale. The turbines are notable features and sit above the viewer, however, do not present an overbearing presence and by being fully backdropped by the topography somewhat mitigates their prominence in the scene.

The magnitude of change is considered to be medium, resulting in a major/moderate level of effect that would be significant to both landscape and visual receptors, as both the residential visual receptors are considered to be of high sensitivity as is the NSA landscape receptor. While this is significant, the impact would not be unacceptable as the Proposed Development does not diminish the presence of the mountains in the view, and the major/moderate level of effect is a result of the location being within the NSA, giving a high sensitivity.

6.7.5.3 Viewpoint 3: A859 at Loch na Ciste

This viewpoint is located at E115950, N905166 around 1.9km from the nearest turbine and looks west towards the Proposed Development. Located on the banks of Loch na Ciste, the view looks south-west over Loch a' Mhorghain, with the topography rising steeply on either side to create a strongly enclosed view with glimpses into Loch a Siar. Landcover in the scene is uniform with heather moorland common and occasional rocky outcrops,

seen on the slopes to the right and left. Manmade features are limited, however the A859 can be seen in the foreground wrapping round the Loch a' Mhorghain and two of the operational turbines are present on the horizon, one of which is well screened, as well as telegraph poles along much of the lower slopes of the hills.

The viewpoint is representative of views experienced by road users on the A859 and is therefore considered to be of medium sensitivity as a visual resource. Due to it being part of the NSA, its landscape sensitivity would be high.

The Proposed Development will appear on the horizon on the western side of the valley, where the turbines will appear in full and occupying a moderate extent of the horizontal view and a minor extent of the vertical view. They form a similar linear development and while have a strong visual presence than the operational turbines, they are not out of scale with the surrounding landscape nor present an overbearing presence. The Proposed Development would not interrupt the open framed vista towards Loch a Siar. The simplicity and uniformity of the scene combined with the simple design allows the turbines to be accommodated without detrimental impacts to the character of the view. The turbines are seen alongside the A859 and the line of telegraph poles, as such its contrast to the baseline is mitigated slightly, although it should be noted that the turbines will have a stronger presence than both these elements.

The magnitude of change is considered to be high, resulting in a major/moderate level of effect that would be significant to visual receptors. In landscape terms, the high sensitivity would result in a major level of effect which would also be significant. This impact is not unacceptable as the turbines are in scale with the landscape and would not control the view, alter the existing character of the scene of the landscape, or interrupt the views towards Loch a Siar.

6.7.5.4 Viewpoint 4: B887 at Tolmachan

This viewpoint is located at E115950, N905166 around 1.9km from the nearest turbine and looks west towards the Proposed Development. A view was requested on the B887 at Cliasmol, however on closer investigation it was not possible to view the turbines from any areas near Cliasmol. As such, a location further south-east where more open views of the Site occurred was selected. This location represent one of the more open locations with views of the Proposed Development on the B887, and as can be seen there are views along the coastline with the edges of Loch a Siar seen to the right and a series of dramatic summits backdropping the scene. Landcover is typically heather moorland with areas of rocky outcrops and manmade features are seen on the lower sections near the coastline, where a scattering of crofts is visible on the extreme right, as well as the road itself in the foreground. The scale is large and while the view is well enclosed to the east and north, there is a strong sense of openness to the south, albeit this is just outwith the image provided.

The viewpoint is representative of views experienced by road users on the B887 and is therefore is considered to be of medium sensitivity as a visual resource. Due to it being part of the NSA, its landscape sensitivity would be high.

The Proposed Development would appear rising from behind a low-lying ridgeline, where they occupy a minor extent of both the horizontal and vertical view. While larger than the original turbines, the Proposed Development is dwarfed by the surrounding landscape which is of a large scale and encloses the Site. From this location the turbines are seen breaking the skyline in a low saddle between An Cliseam and Sron a Sgaoth. Despite this these summits are both of such a height that their presence and scale remains intact and is not diminished by the Proposed Development. Manmade features in this direction are rarer and the existing turbines (while visible) have only a negligible presence in the scene, as such there is some contrast to the baseline, however this is not sufficient to alter the existing perceived character of the scene.

The magnitude of change is considered to be medium, resulting in a moderate level of effect that would not be significant. In landscape terms, the high sensitivity would result in a major/moderate level of effect which would be significant. This is as a result of the Proposed Development having a stronger presence in the view than the operational turbines. However, the Proposed Development would not alter the character of the scene nor affect the more important vistas south.

6.8 Conclusion

The Proposed Development will replace three existing 2-bladed wind turbines of 46m to tip at Monan Wind Farm, with three 3-bladed wind turbines with a tip height of up to 86m. The advantages of this are the ability to impact a section of the landscape, both directly and indirectly, that is already affected by this type of development, albeit with a larger scheme. The Proposed Development thus would have a slightly greater impact than the existing development however any impacts would not be sufficient to significantly alter the existing landscape. This is due to two of the turbines located on the same areas as the existing turbines, minimising direct physical effects and the level of containment provided by the topography restricts the influence even the larger turbines will have.

While there is slightly greater impact on the setting and scale of landscape features such as An Cliseam, this would not be sufficient to diminish the scale of these mountains, whose grand scale and dramatic presence remain intact. This is due to maintaining a 1:3 vertical ratio when the two are seen in conjunction.

Visually the turbines would be more prominent, although significant visual effects are only predicted from two of the four viewpoint locations, in these cases, the increased height never causes them to appear dominant, or overbearing on the visual receptors below such as the A859, crofting properties at Ardhasaig. The high sensitivity of the area due to the NSA means that even a medium magnitude of change results in significant effects, thus all four viewpoint locations have significant effects predicted in landscape terms. These represent singular static locations and would also represent the worst affected locations, and despite these localised effects, they would not be sufficient to cause significant effects on the NSA as a whole. The changeable topography allows for common screening of the development and ridgelines often screen the lower sections of the turbines reducing the vertical prominence. While the included viewpoints have some significant effects, these views were selected as they represent the areas most affected by the Proposed Development and not necessarily the most scenic views, or commonly experienced views.

While the Proposed Development is within both an NSA and a WLA, its presence is not sufficient to significantly alter the quality, character or setting of these designed landscapes, particularly the NSA as it is situated on the very southern edge of the designation. Many of the key qualities of the NSA are completely unaffected due to the limited visual influence the turbines have. None of the key qualities that are affected, are affected to significant levels. The four viewpoints provided are all within the NSA and while significant effects would occur on these specific locations, this impact would not occur throughout the NSA and is highly localised.

Overall, while the proposed increased scale of the turbines causes slightly greater effects, none of these would be sufficient to cause additional new impacts (bar a short section of the A859 at Loch a Mhorghain) and would not result in significant impacts on the two landscape planning designations.

Appendix 6.1 – LVIA Methodology

6.1 Defining the Study Area

An overall Study Area of 30km radius from the Site centre has been established based on guidance[3] provided in *Visual Representation of Wind farms Version 2.2,* NatureScot, February 2017. The study area was further defined for each part of the assessment process as follows:

Landscape and Visual Impact Assessment (LVIA) – the study area was restricted to the application Site, access routes, and the potential Zone of Theoretical Visibility (ZTV) from where there may be a view of the Proposed Development at up to 30km distance from the turbine. Based on professional experience of similar scaled projects, the main focus of the assessment with respect of landscape and visual receptors would be within 15km, which would be the distance within which receptors are more likely to experience significant effects as a result of the Proposed Development. Although effects may occur beyond 15km it is unlikely that these will be significant and is informed with reference to the findings of field survey and viewpoint analysis, as well as professional experience from previous assessments.

Cumulative Landscape and Visual Impact Assessment (CLVIA) - considered existing wind energy development proposals that have permissions, and those that are currently the subject of undetermined applications within a Search Area of 30km radius of the Site centre. An initial assessment of the cumulative visibility of these wind farms within the Cumulative Search Area was then undertaken in order to determine which wind farms have the potential to contribute to a significant cumulative effect following addition of the Proposed Development. Many of these developments were scoped out of the assessment at this stage due to the lack of combined visibility or long distance from the Site such that they would not contribute to significant cumulative effects. The detailed assessment, therefore, focuses on those sites with potential for significant cumulative effects, in combination with the Proposed Development.

A Zone of Theoretical Visibility (ZTV) was calculated using the ReSoft © WindFarm computer software to produce areas of potential visibility of any part of the proposed wind turbines calculated to blade tip and hub-height. The ZTV however, does not take account of built development and vegetation, which can significantly reduce the area and extent of actual visibility in the field and as such provides the limits of the visual assessment study area.

Figure 6.2 illustrates the ZTV for blade tip height of 86m at 1:125,000 at A1 scale, **Figure 6.3** illustrates the ZTV to a 59m hub height at the same scale.

6.2 Baseline Landscape and Visual Resource

This part of the LVIA refers to the existing landscape character, quality or condition and value of the landscape and landscape elements on the Site and within the surrounding area, as well as general trends in landscape change across the study area. A brief description of the existing landscape character and land use of the area which includes reference to settlements, transport routes, vegetation cover, as well as landscape planning designations, local landmarks, and tourist destinations.

6.3 Assessing Landscape Effects

Landscape effects are defined by the Landscape Institute as "changes to landscape elements, characteristics, character, and qualities of the landscape as a result of development". The potential landscape effects, occurring during the construction and operation period, may include, but are not restricted to, the following:

[3] Visual representation of wind farms: Guidance (Accessed 08/01/2024).

- Changes to landscape elements: the addition of new elements or the removal of trees, vegetation, and buildings and other characteristic elements of the landscape character type;
- Changes to landscape quality: degradation or erosion of landscape elements and patterns, particularly those that form characteristic elements of landscape character types;
- Changes to landscape character: landscape character may be affected through the incremental effect on characteristic elements, landscape patterns and qualities and the cumulative addition of new features, the magnitude of which is sufficient to alter the overall landscape character type of a particular area; and
- Cumulative landscape effects: where more than one wind farm may lead to a potential landscape effect.

The development may have a direct (physical) effect on the landscape as well as an indirect effect or effect perceived from outwith the landscape character area. Landscape effects are assessed by considering the sensitivity of the landscape against the degree of change posed by the Proposed Development. The sensitivity of the landscape to a particular development is based on factors such as its quality and value and is defined as high, medium or low. Examples of landscape sensitivity and criteria are described below:

High Sensitivity – This would primarily be rare landscapes, or landscapes which have been afforded either a national or local designation such as National Parks, National Scenic Areas or Special Landscape Areas. These landscapes can be dramatic in terms of scale and may feature a number of attractive landscape features, including mature woodland, intricate gorges and river valleys, prominent summits and features of cultural heritage. Man-made features or modifications to the landscape will be minimal and the landscape may have a wild or remote feeling to it.

Medium Sensitivity – This would include landscapes which are still relatively attractive and generally rural but do contain some man-made elements. It may be landscapes which have been modified to accommodate farming practices and landscapes which include more prominent settlement pattern and road networks. These landscapes may also contain woodland including plantation forestry and shelterbelts.

Low Sensitivity – This would only be reserved for landscapes which may be deemed unattractive due to heavy modification and prominent man-made features, such as industrial units.

The magnitude or degree of change considers the scale and extent of the Proposed Development, which may include the loss or addition of particular features, and changes to landscape quality, and character. Magnitude can be defined as high, medium, low or negligible, examples of magnitude are shown below:

High Magnitude – This would be a major change to baseline conditions, where the character of the landscape may be altered from its existing state into a landscape with wind farms;

Medium Magnitude – This would be a noticeable change in the baseline condition but not necessarily one which would be enough to alter the character of the landscape and will generally diminish with distance;

Low Magnitude – This would be a minor change to the baseline conditions where the development would be readily missed by a casual viewer and any character of the landscape would remain intact; and

Negligible Magnitude – This would be a change which would be difficult to notice and the baseline conditions are likely to remain almost as they were.

The level of effect is determined by the combination of sensitivity and magnitude of change as shown in Appendix 6.1 Table 1.

Appendix 6.1 Table 1 - Significance of effects matrix

Sensitivity	Magnitude of Change			
	High	**Medium**	**Low**	**Negligible**
High	Major	Major/Moderate	Moderate	Moderate/Minor
Medium	Major/Moderate	Moderate	Moderate/Minor	Minor
Low	Moderate	Moderate/Minor	Minor	Minor/Negligible
Key:		Significant in terms of the EIA regulations		
		Not Significant		

The significance of any identified landscape or visual effect has been assessed in terms of Major, Major/Moderate, Moderate, Moderate/Minor, Minor or Minor/Negligible. These categories are based on the juxtaposition of receptor sensitivity with the predicted magnitude of change. The matrices should not be used as a prescriptive tool but must allow for the exercise of professional judgement.

Where the visual effect has been classified as Major or Major/Moderate this is considered to be equivalent to likely significant effects referred to in the EIA Regulations. Careful consideration has also been given to Moderate effects to test whether (in the professional opinion of the landscape architect) they are significant in EIA terms or not. In all cases, whether an effect is significant or not is confirmed within the assessment.

6.4 Assessing Visual Effects

Visual effects are recognised by the Landscape Institute as a subset of landscape effects and are concerned wholly with the effect of the Proposed Development on views, and the general visual amenity. The visual effects are identified for different receptors (people) who will experience the view at their places of residence, during recreational activities, at work, or when travelling through the area. These may include:

- Visual effect: a change to an existing view, views or wider visual amenity as a result of development or the loss of particular landscape elements or features already present in the view; and
- Cumulative visual effects: the cumulative or incremental visibility of similar types of development may combine to have a cumulative visual effect. Either:
  - Simultaneously - where a number of developments may be viewed from a single fixed viewpoint simultaneously within the viewer's field of view without moving;
  - Successively - where a number of developments may be viewed from a single viewpoint successively by turning around at a viewpoint, to view in other directions; and
  - Sequentially - where a number of developments may be viewed sequentially or repeatedly from a range of locations when travelling along a route.

The general principles adopted for the assessment of visual effects were taken from the *Guidelines for Landscape and Visual Impact Assessment Third Edition*, Landscape Institute and IEMA, 2013[4]. This guidance outlines the approach to define a 'sensitivity' for a given view and a 'magnitude of change' that would be caused by the development in question over its lifetime. A matrix is then used to guide the overall 'level of effect'. This matrix

[4] Guidelines for Landscape and Visual Impact Assessment, Third Edition, Landscape Institute and IEMA, 2013nel/ (Accessed 08/01/2024).

is the same format as used to understand landscape effects and can be seen in Appendix 6.1 Table 1. Examples of visual sensitivity are highlighted below:

> High Sensitivity – These include residential receptors, such as views from individual properties or views from within settlements. Views from both recreational locations, such as hill summits, long distance footpaths and cycle paths, and tourist locations such as castles and visitor centres are also considered to be of high sensitivity;
>
> Medium Sensitivity – This would include most other visual receptors such as views from roads, other areas of landscape which would not be classed as recreational areas and views from areas within settlements which would not be considered residential; and
>
> Low Sensitivity – This would cover views experienced by people at work and views where the existing view is already dominated by significant man-made features.

In the context of this project, the effects during operation are always direct and long-term (reversible upon decommissioning). Effects may also be non-cumulative or cumulative. None of the visual effects relating to the Proposed Development have been considered positive in order to present a worst case view of any effects.

6.5 Viewpoint Analysis Method

Viewpoint analysis is used to assist the LVIA from selected viewpoints within the Study Area. The purpose of this is to assess both the level of visual impact for particular receptors and to help guide the assessment of the overall effect on visual amenity and landscape character. The assessment involves visiting the viewpoint location in good weather and viewing wireframes and photomontages prepared for each viewpoint location. Illustrated turbines always face the viewer to give a worst case impression of the development under consideration.

- A balance of viewpoints to the north, south, east and west;
- A range of near middle and distance views of the development;
- A proportion representing areas known locally where people use the landscape, such as prominent hill tops or footpaths; and
- A proportion representing designated areas.

6.6 Methodology for Production of Visualisations

With the viewpoints selected, the locations were confirmed and then taken with a full frame digital Single Lens Reflex (SLR) camera set to produce photographs equivalent to that of a manual 35 mm SLR camera with a fixed 50 mm focal length lens.

6.6.1.1 NatureScot Visualisation Standards

In accordance with the NatureScot guidance Visual Representation of Wind Farms, panoramic images were produced from these photographs to record a 53.5° angle of view. This illustrates the typical extent of view that would be experienced by the viewer at the viewpoint when facing in one direction and also includes a 90° angle of view which provides an indication of the visual context of the Proposed Development and any cumulative projects. In addition to these single frame photomontages have been produced at 75mm (extracted from the original 50mm photographs).

The wider 360° of each view were also taken into account when assessing each viewpoint and full 360° photography included where relevant.

Each view was illustrated using a panoramic photograph, a wireline and, in some cases, a photomontage. Wirelines and photomontages were produced using Resoft© WindFarm software using 50m² Ordnance Survey Digital Terrain Mapping (DTM) height data covering the study area.

6.7 Cumulative Landscape and Visual Assessment

In addition to the Landscape Institute methodology for LVIA, the cumulative landscape and visual assessment (CLVIA) has considered the guidance from Scottish Natural Heritage's Assessing the Cumulative Impact of Onshore Wind Energy Developments, Scottish Natural Heritage, March 2012. The CLVIA is however, not a substitute for individual wind farm landscape and visual impact assessment.

6.7.1 Predicting Cumulative Landscape Effects

The assessment considers the extent to which the Proposed Development, in combination with others, may change landscape character through either incremental effect on characteristic elements, landscape patterns and quality, or by the overall cumulative addition of new features. Identified cumulative landscape effects are described in relation to each individual Landscape Character Area and for any designated landscape areas that exist within the study area.

6.7.2 Predicting Cumulative Visual Effects

The assessment of cumulative visual effects involves reference to the cumulative visibility ZTV maps and the cumulative viewpoint analysis. Cumulative visibility maps are analysed to identify the residential and recreational locations and travel routes where cumulative visual effects on receptors (people) may occur as a result of the Proposed Development.

With potential receptor locations identified, cumulative effects on individual receptor groups are then explored through viewpoint analysis, which involves site visits informed by wireline illustrations that include other wind cluster developments. Travel routes are driven to assess the visibility of different wind cluster developments and inform the assessment of sequential cumulative effects that may occur along a route or journey.

6.7.3 Cumulative Viewpoint Analysis

Each viewpoint will be assessed cumulatively in order to understand whether or not the Proposed Development introduces a cumulative impact on the view from that location. All visible operational, consented and undetermined planning application wind energy projects are considered along with the Proposed Development and a level of cumulative magnitude is assigned. The level and significance of cumulative visual effects is determined in the same manner as the main LVIA, using the previous matrix shown in Appendix 6.1 Table 1.

Registered Office
Green Cat Renewables
Stobo House
Roslin
Midlothian
EH25 9RE

+44 (0) 131 541 0060

info@greencatrenewables.co.uk
www.greencatrenewables.co.uk