



Environmental Impact Assessment Report

Lairdmannoch Energy Park

Technical Appendix 5-5: Assessment of Effects on
Special Landscape Qualities (Additional
Information)

Lairdmannoch Energy Park Limited

wind2

your project our expertise

AI APPENDIX 5.5: ASSESSMENT OF EFFECTS ON SPECIAL LANDSCAPE QUALITIES (AESLQ) ON FLEET VALLEY NATIONAL SCENIC AREA (NSA)

1. INTRODUCTION

1.1 BASELINE INFORMATION REFERENCES & SOURCES

This AESLQ follows the guidance in “Special Landscape Qualities-Guidance on assessing effects” (the Guidance) published by NatureScot in January 2025. It also refers directly to SNH Commissioned Report No. 374 “The Special Qualities of the National Scenic Areas” (the NSA Report), Dumfries and Galloway Wind Energy Landscape Sensitivity Study (2025) (DGWELSS) and NatureScot Landscape Character Assessment (LCT) (*quotes from these documents are shown below in italics*). In addition, this document draws upon research and site assessment carried out for this EIA *revised* Chapter 5 LVIA *of the AI Report* and associated Technical Appendices and cross-refers to these where necessary. All the EIA Representative Viewpoints (VPs) mentioned in the text are described in EIA *AI* Appendix 5.3 (Viewpoint Analysis).

1.2 FLEET VALLEY SLQs

The Special Landscape Qualities (SLQ) within the NSA, as taken from the NSA Report, are as follows. Further details of these can be found in the NSA Report and are therefore not repeated here.

- A compact, working landscape of great charm**
- A sense of timelessness arising from a rich heritage**
- The gradation from coastal islands to upland hills**
- The traditional boundaries of dyke and hedge**
- Abundance of trees and woodlands**
- The variety and influence of water**
- A rich variety of colour, light, texture and scale**
- Landmarks, contributing to the identity of the area**
- Views out of the Fleet Valley to the Isle of Man and the Merrick**
- Gatehouse as a picturesque and historic centre**

2. SCOPE OF AESLQ

2.1 THE STUDY AREA

Following the fieldwork, it was considered that the whole NSA area should constitute the study area. This is due to the relatively small size of the NSA and because the changes arising from the Proposed Development, both indirectly from the wind turbines and both directly and indirectly from

the access track, have the potential to result in adverse effects upon the SLQs to a greater or lesser extent, as determined in the assessment.

1.3 APPROACH TO AESLQ

The Guidance recommends a four-step approach to AESLQ;

Step 1: Review and describe the Proposed Development

Step 2: Identify SLQs that may be affected by the Proposed Development

Step 3: Assessment of effects on SLQs and design objectives

Step 4: Summary of significant effects on SLQs

The Guidance suggests assessors may wish to group SLQs, provided justification for these groupings is supplied. Having reviewed the individual SLQs on site, it was ascertained that many of these are interwoven; some are visual, some experiential; some are related to physical artefacts or locations; others, heritage related. They are all expressed individually or in combination, to different extents, in different parts of the NSA. Moving through the NSA from south to north, as experienced sequentially (and described below in section 3.2.4), five discrete landscape zones (LZs) were identified at the time of the site assessment, as follows.

- Fleet Bay
- The Hinterland
- Gatehouse of Fleet
- Lower Fleet Valley
- Upper Fleet Valley

The approach to this SLQ assessment was therefore, in Step 2, to group the SLQs geographically; examining in each landscape unit identified above, (bearing in mind the underpinning landscape character as described in the EIAR and summarised below in 3.2); how well these were expressed individually and collectively; before then evaluating those with greatest sensitivity to the Proposed Development in each location.

Sensitivity, Magnitude and Significance criteria used for the assessment are the same as for the EIAR and can be found in Appendix 5.1. It should be noted, however, that for the “value” aspect of the sensitivity evaluation, all SLQs are considered to be at a “national” level. SLQs evaluated in Step 2 as having Sensitivity to the Proposed Development in excess of Medium are then taken forward to Step 3 for assessment having been identified as “key” SLQs.

Step 3 involved reviewing the intervisibility of these key SLQs with the elements of the Proposed Development using the ZTVs as a tool, confirmed by site observation, and determining the likely magnitude of change before and after potential design objectives are applied; and finally in Step 4, the AESLQ summarises the likely residual effects on the key SLQs so identified.

3. THE ASSESSMENT

3.1 STEP 1: THE PROPOSED DEVELOPMENT; OUTLINE DESCRIPTION AND SUPPORTING ILLUSTRATIVE MATERIAL

The Proposed Development consists of three main elements namely, a nine-turbine wind farm not exceeding 180m tip height, a solar farm and a new site access road. Further details may be found in the EIAR, Chapter 3. However, the solar farm element is not intervisible with the NSA (as evidenced by EIAR Figure 5.11) and can thus be discounted from this AESLQ.

The wind farm element occupies the eastern slopes of Bankben and Millae, two low hills which reach up to 257m AOD approximately 4km to the northeast of the NSA at its closest point. This is where the proposed nine wind turbines would be located. The ZTV (Figures 5.5.1 to 5.5.4 showing visibility of hubs and tips in “bare ground” and “screened” scenarios) indicate intervisibility.

The main access road for the proposed development would be to the southwest of the wind farm through Glengarr Forest and Disdow wood from the B727 above Gatehouse of Fleet.

All VPs are illustrated in the EIAR with photomontages and wirelines. In addition, VP13 is illustrated by a night-time photomontage.

Figures specific to this AESLQ and included in this study in respect of the wind turbines element of the Proposed Development are as follows.

- Figure 5.5.1: Bare ground hub height Zone of Theoretical Visibility study (ZTV) with VPs
- Figure 5.5.2: Screened hub height ZTV with VPs
- Figure 5.5.3: Bare ground blade tip ZTV with VPs
- Figure 5.5.4: Screened blade tip ZTV with VPs

In addition to potential views of the turbine hubs and blades, potential visibility of the access track has been taken into consideration. The most potentially visible section of the route would follow an existing forest track /Core Path which runs along the edge of Disdow Wood above and to the northeast of Gatehouse of Fleet between the peripheral deciduous trees and the coniferous woodland. This is illustrated by the following figures:

- Figure 5.5.5: Bare ground access track ZTV with VPs
- Figure 5.5.6: Screened access track ZTV with VPs

These two ZTV studies indicate by colour-coding the percentage of the track theoretically visible throughout the NSA both with and without screening by trees. The bare earth visibility appears widespread and greatly over estimates the visibility whereas the screened ZTV indicates a vastly more restricted visibility, but over estimates the extent of peripheral woodland on the downhill (western side of the track). There is a more detailed assessment of visibility within the main Chapter 5 LVIA. Whilst there would be some limited noticeable changes during the short term construction period, there would be limited change from the baseline during the operational phase, given that this track is a substantial forestry access track. Therefore, limited visual effects have been predicted and likewise limited effects upon SLQs would be likely to occur. It should also be noted that all Long-Established Plantation Origin (LEPO) woodland-mostly broadleaved-would be retained on the western (downhill) side of the track for screening purposes and to maintain the existing woodland edge, as part of the embedded mitigation.

All the figures indicate the location of the NSA LZs identified above.

3.2 STEP 2: IDENTIFICATION OF SLQs MOST SENSITIVE TO THE PROPOSED DEVELOPMENT

3.2.1 Underpinning Baseline Landscape Characteristics: Fleet Bay and The Hinterland

The lower (southeast) part of the NSA, which includes part of the hinterland around Bar Hill, falls into **AU 2: Peninsula with Gorsey Knolls** (LCT 157) which has “... *an exposed coastal character and a predominantly small scale and complex landform of linear low rocky ridges, dips and knolls...*”

accentuated by scrubby vegetation and stunted wind sculpted trees. ...There is a distinctive pattern of small walled pastures in places and small buildings are often traditional in character and appear hunkered down in this exposed coastal landscape. The coastal edge is diverse and rugged with an undeveloped character and a sense of wildness is associated with much of the coast."

The lower (southwest) part of the NSA falls into three character areas in a small area, descending from Knock Mill (**AU19: Foothills** (LCT 175) through **AU15: Coastal Fringe** (LCT 179: Coastal Uplands) to **AU3: Coastal Flats** (LCT 158).

Knock Mill in AU19 marks the edge of the Cairnharrow foothills in this area and frames the entrance to the NSA from the southwest. It forms *"...a distinctively rugged arc of hills with southern slopes falling steeply to the coast, knolly lower tops and defined higher peaks. Although these hills have a large scale and open character, they are not extensive in area. These hills are highly visible from surrounding well-settled coasts and valleys where they provide a rugged open backdrop to more patterned landscapes and the Solway Firth."*

Lower down the slopes of these hills, AU15, the Coastal Fringe, is *"...a rolling and occasionally knolly landform and an often diverse cover of broadleaved woodlands, planted policy features and small enclosed pastures, particularly evident on lower slopes. These landscapes are settled and commonly feature a rich archaeological and historic heritage. They are also important in the wider landscape context in that they form highly visible 'edge' landscapes that often provide a scenic backdrop to adjacent dales, valleys and coasts."*

Below this interim landscape, on the narrow coastal margin, can be found AU3, the Coastal Flats, notable for their *"...distinctly natural qualities of the merse, tidal mudflats and estuarine wetlands, the rich pattern of historic features and settlements and the proximity to landmark hills and ridges ...(which) are highly visible from roads and settlement which are often elevated above them."* This encompasses part of the hinterland zone around Skyreburn Bay.

3.2.2 Underpinning Baseline Landscape Character Descriptions: Gatehouse of Fleet, Lower and Upper Fleet Valley

The upper (northern) part of the NSA, including the Boreland Hills area of the hinterland, Gatehouse of Fleet and the lower and upper Fleet Valley, falls largely within DGWELSS Assessment Unit (**AU**) **4; Narrow Valleys**, which equates to NatureScot LCT 160; Wooded River Valley. *"The steep V-shaped upper reaches are dominated by wooded slopes. The lower reaches usually have flat valley floors...through which the river meanders. These flat sections have river meadows and riparian woodland: their side slopes are also steep and mostly wooded. Woodlands are an essential feature of this landscape character type, creating intimate enclosure and restricting views...the woodlands are separated by pastures of small scale that provide spatial interest and permit views across the valleys. The fields are divided by hedges and fences in the lower areas with stone dykes more prevalent in the upper reaches. These landscapes typically contain minor roads which follow the valley floor giving access to isolated houses, some of which have large gardens or designed parkland... Generally, these are intimate, small-scale landscapes with enclosed views."*

AU4 is bounded to the east by **AU 19: Foothills** (LCT 175). Falling within Galloway Hills Regional Scenic Area, *"... the western edge of this AU (also) falls within the Fleet Valley NSA. The enclosure given by the ridge of small hills to the east of the Fleet valley which culminates in Barr Hill south of Gatehouse of Fleet is noted as a special quality of the NSA."* Appendix 5.4 of the LVIA evaluates this area to have a Medium Sensitivity to development of the type proposed.

3.2.3 Predicted extent and distribution of intervisibility with the Proposed Development

The theoretical extent and distribution of visibility of the Proposed Development within the Fleet Valley NSA is illustrated by Zone of Theoretical Visibility (ZTV) studies in the aforementioned Figures 5.5.1 - 5.5.6 which show both "bare ground" and "screened" scenarios; the latter including

modelling or tree blocks and building groups. These figures also show viewpoints (VPs) which can be cross-referred to EIAR Appendix 5.3 (Viewpoint Analysis) for further details. An explanation and interpretation of these figures in terms of potential intervisibility with the wind turbine and access track elements of the Proposed Development is reviewed in Step 3B below, where they are used as a tool to help determine the magnitude of change upon identified sensitive geographically grouped key SLQs.

3.2.4 Experience of the SLQs from within different NSA Landscape Zones & SLQ Sensitivity

Introduction

The approach taken to describing the experience of the SLQs and how they mesh together is to undertake a descriptive journey from the south of the NSA to the north. The underpinning LCTs, visibility of the Proposed Development as indicated by the ZTVs, highlighting any areas of tranquillity and the experience at the LVIA VP locations, will also be referred to along this NSA “journey.” This approach in itself will illustrate one of the SLQs; **The gradation from coastal islands to upland hills**; *“With coastal scenery dominating in the south, moving inland there is a gentle transformation through ordered farms and fields, to a landscape with a wilder feel of hills and moors. This juxtaposition enables contrasting aspects of the Scottish countryside to be experienced within a short journey or a single view.”*

This journey is described in different Landscape Zones (LZs) and these are marked on the Figures in this Appendix.

Fleet Bay LZ

The lower (southeast) part of the NSA falls into **AU 2: Peninsula with Gorse Knolls** (LCT 157) to the southeast and **AU3: Coastal Flats** (LCT 158) to the southwest. The former has “... an exposed coastal character and a predominantly small scale and complex landform of linear low rocky ridges, dips and knolls... accentuated by scrubby vegetation and stunted wind sculpted trees” and the latter is represented by **VP21, Mossyard**. However, it is the sea itself which is the focal point of this most southerly part of the NSA, where the **influence of water** plays a key role. *“Fleet Bay, open to the Solway Firth, dominates the southern half of the NSA. At times, a sea of sand, at others brimful of water, it provides an ever-changing vista.”* In views out to sea from the sandy beach at Carrick Shore, Murray’s Isles, with the iconic ruined house silhouetted against the sunset, form one of the **landmarks which contribute to the identity of the area** and on a clear day “...there are places where expansive vistas out to the Isle of Man to the south, or the Merrick to the north, create a ... feeling of spaciousness.” There is a sense of light and openness here where the sea meets the sky, and “...**the variety of colour and light** adds great beauty to the area. The sea and the bay continually change with the weather and tides, and the mosaic of houses, water, woodland, fields and hills results in a tapestry of different colours that changes with the season. Additionally there is a range of different textures, often adjacent – such as the mud and sandflats next to the rocky shore.” Above a short transition through wood and farmland - **AU15: Coastal Fringe** (LCT 179: Coastal Uplands) the west of the bay is enclosed by the towering form of Cairnharrow (**VP23**)-which is not within the NSA-and its foothills Ben John and Mill Knock, which are, and fall within **AU19: Foothills** (LCT 175). From Mill Knock (**VP22**), a good overview can be obtained of the broader open reaches of Fleet Bay gradually narrowing into the Fleet Valley as it rises into the hills to the north of Gatehouse of Fleet.

SLQs well expressed in Fleet Bay LZ but potentially sensitive to development of the type proposed are as follows.

- *The variety and influence of water*; this LZ is focused on the interplay between land and the sea, in its varying moods and its function as a focal point in the view. This SLQ may be compromised if a wind turbine development with its vertical emphasis

and moving blades was sufficiently noticeable in the view to distract from the movement of the sea in the bay and its predominantly horizontal coastal interactions. Value: National; Susceptibility: High; Sensitivity: **High**

- *A rich variety of colour, light, texture and scale*; the variety of local coastal forms and colours is less susceptible to change from views of development of this type, as at the distance indicated would add to the variety and would be unlikely to detract from the foreground interest.

Value: National; Susceptibility: Low; sensitivity: **Medium**

- *Views out of the Fleet Valley to the Isle of Man*; in the steadily opening seaward horizon, on a clear day the Isle of Man forms a distant focal point. This SLQ in this location having widespread visibility, is highly susceptible to any wind turbine development which could impede or distract from this important view or detract from the vast sense of scale to the south.

Value: National; Susceptibility High; Sensitivity: **High**

- *Landmarks, contributing to the identity of the area*; the main landmark in this LZ is the derelict cottage on one of Murray's Isles which is especially noticeable in the foreground when looking out to sea from the Carrick Shore area. However, unlike the Isle of Man which has widespread visibility, the landmark is of foreground interest mainly when silhouetted against the skyline in a limited and localised area and whilst an important SLQ in the southeast part of the LZ, susceptibility to development of the type proposed would only occur if the local views were compromised.

Value: National; Susceptibility: Low; sensitivity: **Medium**

- *The gradation from coastal islands to upland hills*; the start of the NSA "journey" as described above, from the islands of Fleet in Fleet Bay to the top of the upper Fleet Valley near Upper Rusko, is one of progressive constriction and elevation and the contrast between these extremes. This SLQ is therefore particularly sensitive to any development of the type proposed which in this LZ detracts from the sense of breadth and space or which in any way reduces its sense of large-scale openness.

Value: National; Susceptibility: High; Sensitivity: **High**

The key SLQs which are well-expressed in Fleet Bay LZ but potentially sensitive to development of the type proposed and which are therefore to be taken forward as the subject of design objectives and for subsequent assessment in Step 3 are therefore:

The variety and influence of water (Fleet Bay)

Views out of the Fleet Valley to the Isle of Man; and

The gradation from coastal islands to upland hills

The Hinterland LZ

As the sandy open reaches of Fleet Bay give way to the narrower mudflats of Skyeburn Bay, a series of low hills rise to the south, including Bar Hill and Belvedere Hill largely clothed in swathes

of coniferous woodland and the policy woodland surrounding Cally Palace and gardens. They enclose an open floodplain cut through north to south by an ancient communication route, the canal taking sea traffic to Gatehouse, and cut through east to west by a modern communication route, the A75 Gatehouse of Fleet diversion, taking traffic away from the town. This is a transitional landscape where the influence of the sea gradually gives way to the influence of the land. To the north of the canal lies a small group of low hilly knolls called the Boreland Hills, a focus for **rich heritage** in which “...several **landmarks** (which) are particularly distinctive and provide focal points ... that help give the area its unique identity. These include structures such as Cardoness Castle, ...and the Rutherford Monument (**near VP12**) The area also contains “...a range of scales, varying from the intimate scale of the Anwoth Valley (with its ancient church and graveyard), to the open, exposed landscapes of the bay.”

SLQs well expressed in *The Hinterland LZ* but potentially sensitive to development of the type proposed are as follows.

- *A sense of timelessness arising from a rich heritage; this LZ*, where the head of the bay meets the approaches and outskirts of Gatehouse of Fleet and the ancient village of Anwoth and where modern and ancient communication routes vie for attention, is also steeped in heritage features as described above; many of which form *Landmarks, contributing to the identity of the area*. These combined SLQs are susceptible to development of the type proposed which may compromise their settings and in so doing, reduce the sense of timelessness which they imbue to the local landscape.

Value: National; Susceptibility: High; Sensitivity: **High**

- *The gradation from coastal islands to upland hills; this important zone* where the sea gradually gives way to the land, is an important contributor to this SLQ and is potentially susceptible to large scale wind turbine development if it appears to reduce the sense of scale of the surrounding hills, thereby also reducing the sense of a gradual transition from horizontal scale and breadth experienced to the south, to the vertical scale and height experienced in the north.

Value: National; Susceptibility: High; Sensitivity: **High**

The key SLQs which are well-expressed in *The Hinterland LZ* but potentially sensitive to development of the type proposed and which are therefore to be taken forward as the subject of design objectives and for subsequent assessment in Step 3 are therefore:

A sense of timelessness arising from a rich heritage combined with landmarks, contributing to the identity of the area; and

The gradation from coastal islands to upland hills

Gatehouse of Fleet LZ

The attractive town of Gatehouse of Fleet with its distinctive clock tower forms **a picturesque and historic centre** to the NSA and acts as a fulcrum between the open bay and its hinterland to the south and the increasingly enclosed Fleet valley to the north. “*Gatehouse of Fleet was originally a planned town and, with its characteristic white-washed stone buildings, retains its original integrity. Now by-passed by the main road, it is both peaceful and picturesque. Situated at the upper tidal reach of the river, it was once a prosperous mill town and port and is nowadays both the geographic centre and the economic heart of the area.*”

SLQs well expressed in Gatehouse of Fleet LZ but potentially sensitive to development of the type proposed are as follows.

- Combining several SLQs, Gatehouse (is) a *picturesque and historic centre*; forming the fulcrum of the NSA where the hinterland meets the lower reaches of the Fleet Valley. The town plays a pivotal role both as a landscape feature and as a cultural centre to the area. The picturesque unspoiled and un-commercialised planned central streets of its conservation area, and notably the High Street and Ann Street, contribute to a *sense of timelessness arising from a rich heritage*. An iconic *landmark, contributing to the identity of the area*; is the attractive clock tower located near the top of the High Street as it rises uphill, which acts as an eye-catching feature near the top of the axis in views from the west. These combined SLQs are susceptible to any element of the Proposed Development which potentially compromises the setting of the village and its landmarks.

Value: National; Susceptibility: High; Sensitivity: **High**

The key combined SLQs which are well-expressed in *The Gatehouse of Fleet LZ* considered highly sensitive to development of the type proposed and which are therefore to be taken forward as the subject of design objectives and for subsequent assessment in Step 3 are therefore:

Picturesque and historic centre (which has) a sense of timelessness arising from a rich heritage combined with landmarks, contributing to the identity of the area.

Lower Fleet Valley LZ

Lying within **AU 4; Narrow Valleys**(LCT 160; Wooded River Valley) and represented by **VP25**, the River Fleet winds through a broad flood plain. Demonstrating the **variety and influence of water**, “... the Water of Fleet is the focus in the north. Meandering peacefully through the glen, it provided both access to the sea and contributed to the power that gave Gatehouse its prosperity.” The valley at this point is characterised by a mosaic of small fields enclosed by **the traditional boundaries of dyke and hedge**; “Particularly distinctive is the pattern of fields bounded by dykes and hedgerows, traditional boundaries which are still active elements of this farmed landscape.” Also, in this section of the valley “**trees** do not appear overly dominant but, by breaking up the open fields and hills, give an enclosed and intimate feel to many areas.”

SLQs well expressed in Lower Fleet Valley LZ but potentially sensitive to development of the type proposed are as follows.

- The variety and influence of water*; in this LZ the Fleet Water snakes lazily north-south through a broad floodplain hemmed in by low hills to the east and west. This SLQ would be susceptible to any element of the Proposed Development which detracted from this central, focal component of the local landscape.

Value: National; Susceptibility: Medium; Sensitivity: **High/Medium**

- The traditional boundaries of dyke and hedge*; a matrix of mostly well-maintained hedgerows, hedgerow trees and drystone dykes characterise the valley floor enclosing improved pastureland. Dotted with farms and outbuildings; these elements together contribute to the impression of a *compact, working landscape of great charm*. These combined SLQs would be susceptible to any large-scale development which diluted or compromised the small-scale, complex and managed characteristics of this LZ.

Value: National; Susceptibility: Medium; Sensitivity: **High/Medium**

- *Abundance of trees and woodlands*; as well as the mature trees which mark the course of the two riverbanks as they wind through the valley and the mature hedgerow trees which further punctuate the valley floor, large groups of deciduous and coniferous trees overlook the valley from the slopes on either side; notably Killiegowan wood, above Anwoth to the west and Disdow Wood, above Gatehouse, to the east. This SLQ would therefore be susceptible to any part of the Proposed Development which directly or indirectly, reduced the sense of enclosure and enrichment provided by these green valley backdrops.

Value: National; Susceptibility: High; Sensitivity: **High**

The key SLQs which are well-expressed in *The Lower Fleet Valley LZ* potentially sensitive to development of the type proposed and which are therefore to be taken forward as the subject of design objectives and for subsequent assessment in Step 3 are therefore:

The variety and influence of water (Fleet Water);

The traditional boundaries of dyke and hedge and a compact, working landscape of great charm; and

Abundance of trees and woodlands.

Upper Fleet Valley LZ

Also within **AU 4; Narrow Valleys**(LCT 160; Wooded River Valley) from Pulcree northwards the valley becomes notably narrower, more incised and thickly wooded, with mostly deciduous trees. The B786, the old military road, starts to climb up from the valley floor reflecting the higher moorland hills rising up on both sides and creating a feeling of enclosure and remoteness. At Nether Rusko the valley floor can be reached via a steep winding road, crossing the valley floor at Castramont Bridge. Nearby is Carstramon House set in gardens and surrounded by Castramont wood, an **ancient oak woodland**. There is a great sense of peace and tranquillity in the valley floor and the woodland as the river weaves through it. Higher up on the valley sides near Upper Rusko (**VP13**) the predominant view across the valley and above the road is of open moorland with some **coniferous tree clumps** and here the atmosphere is contrastingly wild, remote and exposed.

SLQs well expressed in Upper Fleet Valley LZ but potentially sensitive to development of the type proposed are as follows.

- *Views out of the Fleet Valley to the Merrick*; from the higher section of the B796 near Upper Rusko, views northwards feature the distant sky-lined form of the Merrick on clear days and on clear/ moonlit nights. This SLQ is susceptible to the potential for large wind turbines impinging on the view and/ or distracting from it as well as; possibly reducing the apparent scale of the deeply incised Fleet Valley it overlooks ~~and reducing the sense of remoteness by day, and also by night (if aviation warning light(s) are visible) thereby also eroding the experience of the northernmost upland hills in the NSA as part of the gradation from coastal islands to upland hills SLQ.~~

Value: National; Susceptibility: High; Sensitivity: **High**

- *The gradation from coastal islands to upland hills; the end of the “journey” as described in the NSA Report, from the islands of Fleet in Fleet Bay to the top of the*

upper Fleet Valley near Upper Rusko, is one of progressive constriction and elevation and the contrast between these extremes. This SLQ is therefore particularly sensitive to any development of the type proposed which detracts or reduces its sense of large-scale openness and elevation at the top of the journey. It is also sensitive to a reduction in the sense of remoteness by day, and also by night (if aviation warning light(s) are visible).

- **Value: National; Susceptibility: High; Sensitivity: High**
- **Abundance of trees and woodlands;** the deciduous native and non-native, mixed and coniferous policy woodland which characterise the deeply incised narrow valley floor of this LZ alongside the murmuring river, provide sheltered and enclosed pockets of peace and tranquillity. This contrasts with the exposure and openness of the higher valley slopes which nevertheless also feature coniferous woodland clumps.

Value: National; Susceptibility: High; Sensitivity: **High**

The key SLQs which are well-expressed in *The Upper Fleet Valley LZ* potentially sensitive to development of the type proposed and which are therefore to be taken forward as the subject of design objectives and for subsequent assessment in Step 3 are therefore:

- *Views out of the Fleet Valley to the Merrick;*
- *The gradation from coastal islands to upland hills; and*
- *Abundance of trees and woodlands.*

Summary

The NSA special qualities are well summed up by one of those qualities; “...with its coastland, farmland, woodland and upland, together with a picturesque town and a designed landscape, this area contains great variety within a small area. Its various elements, both natural and cultural, blend well together, resulting in a **working landscape of great charm.**”

3.2 STEP 3A: DESIGN OBJECTIVES IN DIRECT RESPONSE TO IDENTIFIED KEY SLQs

As advised by the Guidance, the initial part of Step 3 of the AESLQ, is to identify SLQ design objectives which have been developed by directly responding to the grouped key SLQs identified in Step 2 and which are to be assessed in Step 3.

The aim of these objectives is to provide the basis for design mitigation proposals which reduce potentially adverse effects on the identified key SLQs. These objectives and the resultant design mitigation are listed and summarised below in Table 5.5.1.

TABLE 5.5.1: DESIGN OBJECTIVES IN DIRECT RESPONSE TO GEOGRAPHICALLY GROUPED KEY SLQs		
Grouped Key SLQs	Design Objectives	Design Mitigation
Fleet Bay LZ		
<i>The variety and influence of water (Fleet Bay)</i>	Avoid the Proposed Development with its vertical emphasis and moving blades being sufficiently noticeable in the view to distract from the movement of the sea in the bay and its predominantly horizontal coastal interactions	Intervisibility between the turbines and Fleet Bay LZ minimised by design. <i>The revised Proposed Development layout presents an even further reduced extent of visibility across the bay as illustrated in AELSQ Figure 5.5.1</i>

TABLE 5.5.1: DESIGN OBJECTIVES IN DIRECT RESPONSE TO GEOGRAPHICALLY GROUPED KEY SLQs

Grouped Key SLQs	Design Objectives	Design Mitigation
<i>Views out of the Fleet Valley to the Isle of Man</i>	Avoid the Proposed Development impeding or distracting from this important view or detract from the vast sense of scale to the south	Intervisibility between the turbines and Fleet Bay LZ minimised by design; no impedance of Isle of Man views
<i>The gradation from coastal islands to upland hills</i>	Avoid the Proposed Development detracting from the sense of breadth and space or which in any way reduces the sense of large-scale openness	Intervisibility between the turbines and Fleet Bay LZ minimised by design. <i>The revised Proposed Development presents an even further reduced visibility across the bay as illustrated in VP21.</i>
The Hinterland LZ		
<i>A sense of timelessness arising from a rich heritage combined with landmarks, contributing to the identity of the area; and</i>	Avoid the Proposed Development compromising heritage settings	Intervisibility between the turbines and the Hinterland LZ minimised by design. <i>The revised Proposed Development presents an even further reduced extent of visibility across the bay as illustrated in AELSQ Figure 5.5.1</i>
<i>The gradation from coastal islands to upland hills</i>	Avoid the Proposed Development reducing the sense of scale of the surrounding hills, thereby also reducing the sense of a gradual transition from horizontal scale and breadth experienced to the south, to the vertical scale and height experienced in the north.	Intervisibility between the turbines and the Hinterland LZ minimised by design by reducing the number of turbines. <i>The revised Proposed Development presents an even further reduced visibility from this LZ as illustrated in VP12.</i>
Gatehouse of Fleet LZ		
<i>Picturesque and historic centre (which has) a sense of timelessness arising from a rich heritage combined with landmarks, contributing to the identity of the area.</i>	Avoid the Proposed Development compromising heritage and landmark settings esp. Clock Tower and High Street	Intervisibility with turbines avoided by design. In Disdow Woods which part of the backdrop to Gatehouse of Fleet, potential direct effects arising from improvements to the existing forestry access track construction minimised by retaining all trees on the western side to maintain the predominantly screened views of the track.
Lower Fleet Valley LZ		
<i>The variety and influence of water (Fleet Water)</i>	Avoid any element of the Proposed Development detracting from this central, focal component of the local landscape	Intervisibility with turbines avoided/minimised by design
<i>The traditional boundaries of dyke and hedge and a compact, working landscape of great charm</i>	Avoid any element of the Proposed Development which dilutes or compromises the small-scale, complex and managed characteristics of this LZ.	In Disdow Woods, potential direct effects arising from access track improvements minimised by retention of trees on the downhill side of access track to help screen views of track.
<i>Abundance of trees and woodlands</i>	Avoid the Proposed Development directly or indirectly reducing the sense of enclosure and enrichment provided by treed backdrops.	

TABLE 5.5.1: DESIGN OBJECTIVES IN DIRECT RESPONSE TO GEOGRAPHICALLY GROUPED KEY SLQs		
Grouped Key SLQs	Design Objectives	Design Mitigation
Upper Fleet Valley LZ		
<i>Views out of the Fleet Valley to the Merrick; gradation from coastal islands to upland hills</i>	The Proposed Development is to avoid impinging on the view and/ or distracting from it as well as; possibly reducing the apparent scale of the deeply incised Fleet Valley it overlooks; and reducing the sense of remoteness by day, and also by night (if aviation warning light(s) are visible) thereby also eroding the experience of the northernmost upland hills in the NSA as part of the gradation from coastal islands to upland hills SLQ	Intervisibility with turbines avoided by design except on higher section of B796 near Upper Rusko and on western slopes; and here minimised as much as possible; visible effects limited and localised from publicly accessible locations. Mitigation of a reduce lighting scheme and automatic dimming of the lights would result in only one aviation warning light visible at night as illustrated in night time photomontage in EIAR Volume 4, which would minimise the effect at night. No impedance of views to the Merrick <i>to the north. Amendments to the Proposed Development design have reduced views of the Proposed Development from the B796, valley and eastern slopes within this LZ. Views east, from the western Fleet Valley foothills remain due to their elevation.</i>
<i>The gradation from coastal islands to upland hills</i>	<i>Avoid or minimise reduction in the sense of large-scale openness and elevation at the top of the journey and reducing the sense of remoteness by day, and also by night (if aviation warning light(s) are visible).</i>	<i>Amendments to the Proposed Development design have reduced views of the Proposed Development. Intervisibility with turbines avoided by design except on highest section of B796 near Upper Rusko and on western slopes of the foothills; and here minimised as much as possible. Visual effects very limited and localised from more accessible locations where the journey is most commonly experienced, as illustrated in VP13. The FEI design has removed visibility of the hubs and any aviation warning lights from the road.</i>
<i>Abundance of trees and woodlands</i>	Avoid the Proposed Development directly or indirectly reducing the sense of enclosure and enrichment provided by tree groups in valley floor	Direct and indirect effects on woodland avoided.

3.3 STEP 3B: ASSESSMENT OF RESIDUAL EFFECTS ON KEY SLQs

Incorporating the primary (embedded) mitigation proposals listed above in Table 5.5.1, and as advised by the Guidance, Step 3B involves the assessment of predicted residual effects of the elements of the Proposed Development which have the potential to result in adverse direct and indirect effects (in this case, arising from the wind turbines and the access track) on identified key grouped SLQs.

Assessment has been carried out using the methodology and criteria contained in EIAR Appendix 5.1. In the assessment below (Table 5.5.2), Sensitivity of the key SLQs has been brought forward from the Step 2 sensitivity evaluation (High, Medium, Low); whilst the evaluation of Magnitude of change (Substantial, Moderate, Slight, Negligible) is based upon a combination of a descriptive review of the ZTV coverage in each case, combined with professional judgements made during the SLQ field appraisal.

The assessment of the significance of effects upon the geographically grouped key SLQs (Major,

Moderate, Minor, Negligible) includes consideration of intervisibility with the Proposed Development elements, including seasonal change as reflected by “bare ground” and “screened” ZTVs and night-time changes, where applicable; and the degree and nature of change to the SLQs themselves as a result of this. Residual effects on key grouped SLQs above the level of Moderate are considered to be significant.

TABLE 5.5.2: MAGNITUDE AND SIGNIFICANCE OF EFFECT UPON GEOGRAPHICALLY GROUPED KEY SLQs			
Grouped SLQs	Sensitivity	Residual Magnitude of Change	Residual Effects
FLEET BAY LZ			
Residual Explanation (with ZTV figure references) Figure 5.5.1: Bare ground hub ZTV Visibility of turbine hubs would be restricted to the highest points on the west side of the bay at Ben John and Mill Knock (VP22). Below these hilltops, theoretical visibility rapidly drops to a few blade tips being theoretically visible from Mossyard Beach (VP21). Figure 5.5.2: Screened hub ZTV Similar to above but with some reduced coverage Figure 5.5.3: Bare ground blade tip ZTV Four tips would be theoretically visible at Mossyard Beach (VP21) but these would be relatively distant and appear as a very minor part of the view and screened by topography. Figure 5.5.4: Screened blade tip ZTV Similar to above but with reduced coverage. Figure 5-8: Aviation Lighting ZTV Little or no lighting visible from the low lying areas of the Fleet Bay. Visibility of only 3 or 4 lights within the foothills of this LZ.		Key SLQs associated with the variety and influence of water, the views out to the Isle of Man and the gradation experience moving through the landscape would all be largely unaffected by the Proposed Development in this LZ due to limited and localised intervisibility and no impediment or distraction to open southerly views. The revised Proposed Development design reduces visibility of the proposed development even further within the Fleet Bay, both in the extent of visibility but also the nature of views when visible. Views of the lights predominantly removed from low lying areas.	
The variety and influence of water (Fleet Bay)	HIGH	SLIGHT/NEGLIGIBLE	MODERATE/MINOR
Views out of the Fleet Valley to the Isle of Man	HIGH	NEGLIGIBLE	MINOR
The gradation from coastal islands to upland hills	HIGH	SLIGHT/NEGLIGIBLE	MODERATE/MINOR
THE HINTERLAND LZ			
Residual Explanation (with ZTV figure references) Figure 5.5.1: Bare ground hub ZTV Bare Ground Hub ZTV theoretical visibility reduced to a small patch on the western foothill with no hub height visibility of up to three turbine hubs from The Millennium Monument (near Rutherford's Monument) (VP12). Figure 5.5.2: Screened hub ZTV Similar to above but with reduced coverage. Figure 5.5.3: Bare ground blade tip ZTV Four to six tips would be theoretically visible at the Millennium Monument (near Rutherford's Monument) (VP12). Figure 5.5.4: Screened blade tip ZTV Theoretical visibility similar but with reduced coverage. Figure 5-8: Aviation Lighting ZTV No lighting visible from the low lying areas, only one light from small elevated area.		Key SLQs associated with the sense of timelessness, the setting of landmarks, and the gradation experience moving through the landscape would all be minimally affected by the Proposed Development in this LZ due to limited and localised intervisibility. The FEI design reduces visibility of the proposed development even further within this area, both in the extent of visibility but also the nature of views when visible.	
A sense of timelessness arising from a rich heritage combined with landmarks, contributing to the identity of the area; and	HIGH	SLIGHT/NEGLIGIBLE	MODERATE/MINOR
The gradation from coastal islands to upland hills	HIGH	NEGLIGIBLE	MINOR

TABLE 5.5.2: MAGNITUDE AND SIGNIFICANCE OF EFFECT UPON GEOGRAPHICALLY GROUPED KEY SLQs

<i>Grouped SLQs</i>	<i>Sensitivity</i>	<i>Residual Magnitude of Change</i>	<i>Residual Effects</i>
GATEHOUSE OF FLEET LZ			
Residual Explanation (with ZTV figure references) Figure 5.5.1: Bare ground hub ZTV <i>No visibility.</i> Figure 5.5.3: Bare ground blade tip ZTV <i>No visibility.</i> Figures 5.5.5 & 5.5.6: Bare ground and screened access track ZTVs In this instance neither the “bare ground” nor the “screened” figures give an entirely accurate representation of potential visibility, as one indicates no tree screening and the other indicates full tree screening. The reality would be somewhere between these two representations. Embedded design will retain the downhill mainly deciduous trees in upgrading of the access track during construction, nevertheless it is likely that filtered views of the cut and fill works together with construction vehicles, would be visible through thinner sections or gaps in the foreground trees. Field assessment of magnitude of change using professional judgement and experience were necessary to interpolate between the two ZTVs both for the LVIA and this AESLQ. Viewpoint 25 indicates some of the gaps in tree cover on the western side of the track. There would be little or no change to SLQs arising from the wind turbine elements of the Proposed Development in this LZ due to foreground topographic, building and tree screening, so impacts arise purely during the construction phase due to the access track. Figure 5-8: Aviation Lighting ZTV <i>No lighting visible from area.</i>			Deciduous trees on downhill side of widened track to be retained in order to screen the track and vehicles, thereby avoiding potential indirect construction phase effects on the conservation area and setting of Gatehouse Clock Tower / High Street. Residual effects on these SLQs would not be significant Residual operational effects on this SLQ would represent a change from existing use as a forestry track.
<i>Picturesque and historic centre (which has) a sense of timelessness arising from a rich heritage combined with landmarks, contributing to the identity of the area.</i>	HIGH	CONSTRUCTION: SLIGHT/NEGLIGIBLE OPERATION: NEGLIGIBLE	CONSTRUCTION: MODERATE/MINOR OPERATION: MINOR
LOWER FLEET VALLEY LZ			
Residual Explanation (with ZTV figure references) Figure 5.5.1: Bare ground hub ZTV <i>No visibility.</i> Figure 5.5.3: Bare ground blade tip ZTV There would be theoretically short stretches of potential blade tip visibility at Pulcrea and Blackloch (VP25) but from field appraisal it would appear that these limited theoretical views would in reality be screened/filtered by foreground and midground deciduous tree groups. There would be no blade tip visibility from the B796 (VP25) in this LZ. There would some limited visibility from a small part of the area west of the B796 but the turbines would be unlikely to be noticeable, even if theoretically visible. Figure 5.5.4: Screened blade tip ZTV <i>Theoretical visibility similar but with reduced coverage.</i> Figures 5.5.5 & 5.5.6: Bare ground and screened access track ZTVs As above For Gatehouse of Fleet LZ but generally more distant from the access track. Figure 5-8: Aviation Lighting ZTV <i>No lighting visible from the area.</i>			There would be little or no change to these key SLQs arising from either the wind turbine or access track elements of the Proposed Development in this LZ due to screening from tree groups and topography leading to very limited, or no intervisibility. Tree removal is to be reduced to the minimum necessary to complete the access track construction works, noting retention of trees on the western side. Little to no effect on appearance of woodland and overall abundance of trees in the lower Fleet Valley area. Residual effects on the SLQ unlikely to be significant
<i>The variety and influence of water (Fleet Water)</i>	HIGH/MEDIUM	NEGLIGIBLE	MODERATE/MINOR
<i>The traditional boundaries of dyke and hedge and a compact, working landscape of great charm</i>	HIGH/MEDIUM	NEGLIGIBLE	MODERATE/MINOR

TABLE 5.5.2: MAGNITUDE AND SIGNIFICANCE OF EFFECT UPON GEOGRAPHICALLY GROUPED KEY SLQs			
Grouped SLQs	Sensitivity	Residual Magnitude of Change	Residual Effects
Abundance of trees and woodlands	HIGH	SLIGHT/NEGLIGIBLE	MODERATE/MINOR
Upper Fleet Valley LZ			
Residual Explanation (with ZTV figure references) Figure 5.5.1: Bare ground hub ZTV Visibility of all nine turbine hubs would be restricted to the highest points on the west side of the Upper Fleet valley; on Meikle Bennan, Scrogs of Drumruck, Stey Fell, Kenlum Hill and Ardwall Hill. Below these hilltops, theoretical visibility gradually drops downslope to one to three being visible, including on the B796 near Upper Rusko (VP13). The potential for visibility of up to four aviation warning lights (confirmed by reference to EIAR Figure 5.9; Aviation Lighting ZTV). <i>Visibility of all eight turbine hubs would be restricted to the highest points on the west side of the Upper Fleet valley foothills; on Meikle Bennan, Scrogs of Drumruck, Stey Fell, Kenlum Hill and Ardwall Hill. Below these hilltops, theoretical visibility gradually drops away completely downslope at the B796 near Upper Rusko (VP13). The potential for visibility of up to four aviation warning lights would only occur on the highest ground (confirmed by reference to AI Figure 5.9; Aviation Lighting ZTV) and not along the B796 or within the valley.</i> Figure 5.5.2: Screened hub ZTV This figure indicates that when tree screening is taken into account, the areas of theoretical turbine hub intervisibility are in similar locations on the higher ground to the west side of the valley, but less extensive and absent on the lower slopes and upper valley. Figure 5.5.3: Bare ground blade tip ZTV This ZTV indicates theoretical views of rotating turbine tips would be more widespread on the north and west side of the valley foothills. Figure 5.5.4: Screened blade tip ZTV This figure indicates that when tree screening is taken into account, the areas of blade tip intervisibility are in similar locations on the higher ground to the north and west side of the valley, but less extensive. There are large proportions of native deciduous trees in the valley, so the potential for widespread forestry felling opening views is not likely to be an issue in a future baseline scenario. Figure 5-8: Aviation Lighting ZTV <i>Little or no lighting visible from the low lying areas of the area. Visibility of only 3 or 4 lights within the foothills of this LZ.</i>		Key SLQs associated with the gradation experience moving through the landscape on the B796 would be largely unaffected by the Proposed Development in this LZ due to very limited and localised intervisibility. <i>This includes any impacts at night on the B796 or valley, which have been eliminated in the FEI Proposed Development, as illustrated in VP13.</i> However, there would also be a night time effect limited to this localised section of the B976 near Upper Rusko. Here, a single red aviation light, potentially "blinking" in prevailing south westerly winds, would be visible against an otherwise dark sky and would marginally reduce the feeling of remoteness which is a key component to this most northerly upland section of the "journey" through the NSA. <i>However, there would be views of the Proposed Development from the foothills part of the Upper Fleet Valley LZ.</i> There would be no obstruction of views to the Merrick and very minor distraction, away from primary northwards views. Very limited or no change to the appreciation of trees and tree groups which are such important components in this LZ and the subject of this SLQ.	
Views out of the Fleet Valley to the Merrick and gradation from coastal islands to upland hills	HIGH	SLIGHT NEGLIGIBLE	MODERATE MINOR
<i>The gradation from coastal islands to upland hills</i>	HIGH	SLIGHT/NEGLIGIBLE	MODERATE/MINOR
Abundance of trees and woodlands	HIGH	SLIGHT NEGLIGIBLE	MODERATE/MINOR

4. STEP 4: SUMMARY OF SIGNIFICANT EFFECTS ON SLQS

The Fleet Valley NSA special qualities are well summed up by one of those qualities; "...with its coastland, farmland, woodland and upland, together with a picturesque town and a designed landscape, this area contains great variety within a small area. Its various elements, both natural and cultural, blend well together, resulting in a **working landscape of great charm.**"

This AESLQ through following the step-by-step process outlined in the guidance, has arrived at a conclusion as to the significant effects arising from the turbines and access track elements of Proposed Development on the key SLQs of the NSA. As stated above, the assessment of the significance of effects upon the geographically grouped key SLQs included consideration of intervisibility with these elements, including seasonal change as reflected by “bare ground” and “screened” ZTVs and night-time changes, where applicable; and the degree and nature of change to the SLQs themselves as a result of this.

~~SLQ(s) most affected by direct or indirect effects arising from the Proposed Development are summarised by geographic area as follows;~~

Upper Fleet Valley LZ:

~~Views out of the Fleet Valley to the Merrick and gradation from coastal islands to upland hills.~~

~~Residual Effect: **Moderate (Not Significant)**~~

~~Explanation: Key SLQs associated with the gradation experience moving through the landscape would be largely unaffected by indirect effects arising from the Proposed Development in this LZ, due to the design ensuring that, in day time, there would be only very limited and localised intervisibility with the turbines at all publicly accessible areas; this is especially important in the sensitive upland section of the NSA in the more elevated western side of the valley near Upper Rusko. There would be no obstruction of the valued views to the Merrick in this area, where the Proposed Development would result in only a very minor distraction in a different direction. However, the duration of this minor distraction would continue into the night due to limited and localised views of one red aviation warning light visible above the skyline in an area of otherwise dark skies with no artificial lighting currently present.~~

SLQ(s) most affected by direct or indirect effects arising from the Proposed Development would be SLQ 3 ‘The gradation from coastal islands to upland hills’ within the Fleet Bay LZ and Upper Fleet Valley LZ (but not within the Lower Fleet, Gatehouse of Fleet or Hinterland LZs), whereby a Moderate/Minor effect (Not Significant) is predicted to occur.

The amendments to the Proposed Development design have reduced the impacts in both day and night on the most accessible parts of the NSA “journey” as described in the NSA Report, from the islands of Fleet in Fleet Bay to the top of the upper Fleet Valley near Upper Rusko, is one of progressive constriction and elevation and the contrast between these extremes.

Due to the amendments to the Proposed Development design, the adverse impact on this SLQ would only occur from the elevated foothills of these two LZs, where the Proposed Development, would not result in any reduction in scale or sense of elevation or expansiveness of the upland areas. There would be only a very minor reduction in remoteness from the foothills only.

The main conclusion of the AESLQ therefore, is that, due to the embedded design mitigation measures, there would be **no significant residual effects upon the SLQs of the Fleet Valley NSA** as a result of the Proposed Development. Based on these conclusions reached, the objectives of the designation and the overall integrity of the NSA would not be compromised.