Linfairn Windfarm

Section 36 Application

Review of Environmental Statement - Landscape and Visual Impact Assessment

Objection on behalf of Save Straiton for Scotland

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1.0 Introduction

1.1 Experience

1.1.1 The author of this report is Mark Steele BA DipLD CMLI, a fully qualified landscape architect and a chartered member of the Landscape Institute. He has over thirty years' experience of landscape planning and design in Great Britain, Australia and Hong Kong.

1.1.2 Since establishing Mark Steele Consultants Limited (MSC) in 2007 he has reviewed over fifty windfarm landscape and visual impact assessments, prepared by a broad range of landscape practices and has given evidence at numerous windfarm inquiries.

1.2 Appointment and Scope

1.2.1 MSC was instructed to act on behalf of Save Straiton for Scotland in the summer of 2013 but undertook this assessment in October and November 2013 to address matters relating to the landscape and visual impact of the proposed Linfairn s.36 wind farm development.

1.2.2 The MSC review is based upon a desk study of relevant ES and other documents, as well as detailed fieldwork including visits to the site, the applicant's viewpoints and the wider study area.

1.2.3 The MSC report will refer to the following documents in particular:

- Design and Access Statement (Planning Consultant - September 2013);
- Environmental Statement Volume 1: Written Statement Chapter 6;
- Environmental Statement Volume 2: Technical Appendix 6;

- Environmental Statement Volume 3: Figures;
- *'Landscape Capacity Study for Wind Turbine Development in Ayrshire'* (South Ayrshire Council 2013);
- *'Gardens and Designed Landscape Inventory'* (Historic Scotland);
- *'Guidelines for Landscape and Visual Impact Assessment – 2nd Edition'* (LI & IEMA 2002);
- *'Guidelines for Landscape and Visual Impact Assessment – 3rd Edition'* (LI & IEMA 2013);
- *'Assessing the Cumulative Impact of Onshore Wind Energy Developments'* (SNH 2012);
- *'Wildness in Scotland's Countryside: Policy Statement No. 02/03';*
- *'Assessing the Impacts of Wild Land* (SNH 2007);
- *'Core Areas of Wildland in Scotland'* (SNH 2013); and
- *'Visual Representation of Windfarms – Good Practice Guidance'* (SNH 2006).

1.2.4 With reference to the important and up to date *'Landscape Capacity Study for Wind Turbine Development in Ayrshire',* the last section of ES paragraph 6.3.3 states that *'A report on the above study has been prepared and was approved by South Ayrshire Council's Leadership Panel at the end of August 2013. The study will be used in the assessment of the landscape impact of WTG developments and to inform future, revised spatial guidance on such developments. However, since not published or approved at the time of assessment it has not been referred to in this study.'*

ES paragraph 6.5 confirms that the LVIA was undertaken *'…from January to March 2013'* however the guidance was published and approved in August 2013 prior to the publication of the ES in September 2013.

Therefore the publication of the ES should have been postponed until after the assessment had been revisited to reflect current policy and guidance that is of key importance in the assessment and review of these application proposals.

1.2.5 With reference to the GLVIA ES, paragraph 6.4.1 states that '*At the time of the assessment the revised GLVIA (Third) Edition had not been published and the Landscape Institute has advised landscape practitioners that '…an assessment started using GLVIA2 should be completed using that edition'. This advice has been followed and hence the assessment has been carried out using the GLVIA Second Edition.'*

This approach is correct and the ES methodology will be reviewed accordingly. However the MSC LVIA assessment has been undertaken after the publication of the GLVIA 3rd Edition and as such the MSC methodology (Appendix A) is based upon this current guidance.

1.2.6 With reference to SNH guidance, ES paragraph 6.4.1 omits '*Assessing the Cumulative Impact of Onshore Wind Energy Developments'* (SNH 2012) but it is referred to in ES paragraph 6.8.2.

'Mapping Scotland's Wildness: Wildness Map' (SNH 2012) is also omitted but is referred to in ES paragraph 6.6.2.4 which states that '*…this revision of SNH's policy and guidance relating to wild land is still in the early stages and the 'Map of Relative Wildness' is still at a consultative phase, therefore, although the mapping has been given consideration in the identification of potential wild land, the assessment method has continued to follow existing guidance.'*

However, the situation has progressed with the publication of '*Core Areas of Wildland in Scotland*' (SNH 2013) issued at the start of May 2013 and so well before the publication of the ES.

1.2.7 The overall objection prepared by Ian Kelly (Graham+Sibbald) draws on the conclusions of the MSC evidence and addresses the planning policy context as well as specific policies relevant to the application.

1.3 The Proposed Development

1.3.1 The proposed development comprises twenty five turbines (hub height of 80m, rotor diameter of 93m and an overall height of 126.5m to blade tip) and ancillary works. The ancillary works include the construction of a road providing access to the development and linking what is actually two groups of turbines.

1.3.2 The proposed turbines are located approximately 8 km southeast of Maybole and approximately 2 km southwest of Straiton, South Ayrshire.

1.3.3 Design Statement paragraph 3.1 states that '*The site comprises areas of farmland in the north and south of the site, currently used for sheep grazing, and an area of commercial forestry to the west.*'

Although there is an oblique reference to the '*north and south of the site*' (as well as reference to the '*north area*' and '*south area*' in ES paragraph 6.6.1) the Design Statement and ES fail to accurately describe the development as two geographically separate groups of turbines. This is evidently because the applicant is seeking to present the proposed development as a single windfarm rather than two discrete developments.

1.3.4 The two separate groups of turbines are different in scale (northern group: 6 turbines - southern group: 19 turbines) and layout (northern group: a line of turbines following a ridge – southern group: a broadly geometric grouping of turbines).

1.4 Design

1.4.1 Design Statement paragraph 3 states that '*Several key constraints and issues have been considered from a very early stage including wind resource, proximity to residential properties in relation to noise and shadow flicker, surface hydrology and designated sites. The design of the Project has taken these constraints into consideration and has evolved with the EIA process in order to avoid or reduce environmental effects.*'

It is noted that consideration of landscape and visual effects is excluded from the determination of '*proximity to residential properties*'.

2.0 ES Landscape and Visual Impact Assessment Methodology

2.1 Assessment of Effects

2.1.1 ES section 6.4 sets out the methodology used in the ES assessment of landscape and visual effects. This review will use a similar structure to ease cross reference.

2.2 Baseline

2.2.1 ES paragraph 6.4.2 includes the following desk based task:

- '*A site appraisal of landscape character and its key landscape, ecological and cultural elements and identification of its Sensitivity to Change to development of the type proposed.*'

However ecology and cultural heritage are addressed elsewhere in the ES. Furthermore the ES assessment of landscape character sensitivity has now been rendered redundant by the publication of the '*Landscape Capacity Study for Wind Turbine Development in Ayrshire*'.

2.3 Landscape Sensitivity

2.3.1 ES paragraph 6.4.4.1 relates to the quality of the landscape and defines a three point scale (based on '*scenic quality*'). This differs from the GLVIA 2nd Edition where the glossary defines the assessment of landscape quality (or condition) as being '*…based on judgements about the physical state of the landscape, and about its intactness, from visual, functional, and ecological perspectives.*

2.3.2 With reference to landscape value, ES paragraph 6.4.4.2 states that the absence of a designation '*…does not necessarily imply a lack of quality or value. Factors such as accessibility and local scarcity can render areas of nationally unremarkable quality, a highly valuable local resource.*'

This point is confirmed in GLVIA 2nd Edition paragraph 6.17 which states that '*A judgement needs to be made on the value or importance to society of the affected landscape. This will be based on and take account of views of consultees including (if possible) the public, about what is important in a landscape and why…*'

The landscape in the vicinity of Straiton is a '*highly valuable local resource*' that is made accessible through Core Paths as well as a number of locally promoted paths (MSC Appendix B Figure 1). Furthermore the village signs describe Straiton as '*rambler territory*'.

2.4 Landscape Magnitude of Change

2.4.1 ES paragraph 6.4.6.1 sets out the criteria used to assess the landscape magnitude of change. It is more typical practice to use criteria based upon those set out in GLVIA 2nd Edition Appendix 6 *'Determination of Magnitude: Option 2'* (MSC Appendix A paragraph A3.4.1).

2.4 Landscape Significance of Effect

2.4.1 ES paragraph 6.4.7 sets out the following criteria adopted for the assessment of the significance of landscape effects:

- *'Substantial adverse (or beneficial) impact: very noticeable deterioration / improvement in the existing landscape;*
- *Moderate adverse (or beneficial) impact: noticeable deterioration / improvement in the existing landscape;*
- *Slight adverse (or beneficial) impact: perceptible deterioration / improvement in the existing landscape; and*
- *Negligible adverse (or beneficial) impact: virtually imperceptible deterioration / improvement in the existing landscape.'*

These definitions (as well as ES *'descriptive scale'*) rely on an understanding of adverse/beneficial effects (which result from a deterioration/improvement in the landscape). However these are not defined in the ES but are defined in the MSC methodology (MSC Appendix A paragraph 3.6.1).

2.4.2 ES paragraph 6.4.7 states that *'For the purposes of this assessment, impacts of Moderate and above are considered to be significant.'* MSC adopt a more flexible approach with moderate effects considered

potentially significant and moderate/major effects and above considered significant (Appendix A paragraphs 3.5.1 and 3.5.2).

2.5 Wild Land

2.5.1 ES Appendix 6.2 sets out the ES methodology which is based upon *'Interim Guidance Note: Assessing the Impacts on Wild Land'* (SNH 2007).

This is the appropriate method for assessing wild land. However, SNH have now identified proposed Core Areas of Wild Land (CAWLs) and CAWL1 is located to the south of the application site.

2.6 Cumulative Landscape Effects

2.6.1 ES paragraph 6.8.2 fails to distinguish between *'combined cumulative effects'* and *'additional cumulative effects'* as set out in SNH and GLVIA guidance (MSC Appendix A paragraph A5.1.1 to A5.1.3).

2.6.2 ES paragraph 6.8.2 states that *'The cumulative assessment is based on the LCTs and designated areas identified for inclusion in the landscape character assessment. However, areas identified in the previous section as experiencing a Negligible effect or No Change have been scoped out of the cumulative landscape assessment as it is considered that potential cumulative landscape impacts arising from the Project in such areas are unlikely to be significant.'*

A similar approach is adopted by MSC (MSC Appendix A paragraph A5.1.4).

2.7 Landscape Capacity

2.7.1 The landscape capacity methodology set out in ES paragraph 6.8.2.1 is not relevant, as firstly it is not the purpose of LVIA for a particular proposed development to determine landscape capacity and secondly the ES assessment of landscape capacity has now been superseded by the *'Landscape Capacity Study for Wind Turbine Development in Ayrshire'* (South Ayrshire Council 2013).

2.8 Viewpoints

2.8.1 ES paragraph 6.9.3 claims that the assessment of visual effects has been carried out in accordance with GLVIA and SNH guidance. However there are issues relating to the selection and positioning of ES viewpoints that do not accord with guidance:

- Viewpoint 1 – The viewpoint is poorly positioned due to distracting foreground elements and the screening effect of existing trees. MSC provide an alternative viewpoint (MSC Appendix B: Figures 1 and 2) which demonstrates the effects from the unclassified road to the south of Straiton;
- Viewpoint selection – 'Visual Representation of Windfarms' paragraph 93 states that *'Viewpoints are initially selected as being those places from where a proposed development is likely to be visible and would result in significant effects…'* and this is endorsed in the GLVIA 2nd Edition and 3rd Edition (paragraph 6.21). There are a disproportionately high number of distant ES viewpoints (where effects are unlikely to be significant) and a disproportionately low number of ES viewpoints in closer proximity (where effects are likely to be significant). MSC provide a selection of additional viewpoints

that should have been included in the ES assessment (MSC Appendix B: Figures 1, 3, 4 and 5);

- Misrepresentation of effects - Some ES viewpoints do not properly represent effects on visual receptors. The effects on users of the road to the south of Straiton, as illustrated by ES Viewpoint 1 should be contrasted with the effects illustrated by MSC Viewpoint 1;
- Visitor Receptors – A 'viewpoint' is identified on the OS map at Bennan Hill (to the southwest of Straiton) that is promoted as the *'Bennan Hill View Point'* in the *'Straiton Paths'* leaflet published by South Ayrshire Council (available at the Straiton village car park information board). Furthermore ES paragraph 6.10.3.3 does not identify users of the Straiton Paths as potential visual receptors. MSC provide two wirelines illustrating the two groups of proposed turbines (MSC Appendix B: Figures 1 and 4). MSC also provide viewpoints on Core Path SA47 (MSC Appendix B: Figure 6) as well as *'The Hill Wood'* Straiton Path (MSC Appendix B: Figure 5);
- Residential Receptors – Residential receptors are not properly represented and MSC provide a selection of additional viewpoints from nearby properties (MSC Appendix B: Figures 6 to 12 as well as Figure 5).

2.8.2 ES paragraph states that '*…viewpoints have been chosen in consultation with South Ayrshire Council, East Ayrshire Council and SNH and are intended to provide a representative cross section of potential visibility and impact…*' Whilst consultees may have agreed the initial list of viewpoints '*Visual Representation of Windfarms*' paragraph 97 makes it clear that viewpoint selection is an iterative process and that '*…additional or alternative viewpoints may need to be considered throughout the VIA process…*'

Therefore it is incumbent upon the assessor to ensure that the final list of viewpoints is properly representative of the likely significant visual effects.

2.8.3 The presentation of the photomontages does not accord with the following aspect of guidance:

- The viewing distance for the ES viewpoints is 300m and 201mm for the ES cumulative viewpoints. *'Visual Representation of Windfarms'* paragraph 126 states that the viewing distance *'…should be between 300mm and 500mm, although a distance between 400mm and 500mm is recommended…'*. Therefore the MSC visualisations have a viewing distance of 500mm as this is *'comfortable viewing distance'* for images *'held at arms length'*.

2.9 *Visual Sensitivity*

2.9.1 ES paragraph 6.9.3.4 states that *'Sensitivity to change proposed has been evaluated with reference to the subject areas above and using a three-point scale as follows:*

- *High sensitivity: dwellings, footpaths, tracks and vantage points where the changes form part of an important view;*
- *Medium sensitivity: dwellings, footpaths, tracks and vantage points where the changes form part of a less important view, and tourist routes where the changes form part of an important view; and*
- *Low sensitivity: dwellings, footpaths, tracks and vantage points where the changes form part of an unimportant view, tourist routes where the changes form part of a less important view, and farm buildings (not used as dwellings) and industrial buildings where the changes form part of an important view.'*

This methodology is not in accordance with the GLVIA 2nd Edition as:

- GLVIA paragraph 7.32 includes '*occupiers of residential properties*' in a list of the most sensitive receptors. Therefore all residents are of high sensitivity;
- Likewise GLVIA paragraph 7.32 includes '*users of public rights of way*' in a list of the most sensitive receptors. Therefore all users of footpaths are of high sensitivity;
- The importance of the view is the only variable in the ES methodology. However GLVIA paragraph 7.31 makes it clear that '*the importance of the view*' relates to established viewpoints locations that are identified in guide books or on tourist maps (such as the Bennan Hill View Point).

2.10 Visual Magnitude of Change

2.10.1 ES paragraph 6.9.5.1 describes the criteria used to determine the magnitude of change on a scale ranging from '*High*' to '*Negligible*'.

There is no reference to the ES terminology in the '*Scale or Magnitude of Visual Effects*' section of the GLVIA 2nd Edition. The criteria would appear to be based upon GLVIA 2nd Edition Appendix 6 Example 3 where the ES terminology is used to describe the significance of visual impact rather than the magnitude of effect.

2.11 Significance of Visual Effects

2.11.1 ES paragraph 6.9.5.2 sets out the impact criteria used for the determination of the level of visual impact significance. These criteria are based upon GLVIA Appendix 6 Example 3.

2.12 Cumulative Visual Effects

2.12.1 ES paragraph 6.12 fails to distinguish between '*combined cumulative effects*' and '*additional cumulative effects*' as set out in SNH and GLVIA guidance (MSC Appendix A paragraph A5.1.1 to A5.1.3).

2.13 Visual Residential Amenity

2.13.1 The ES does not set out a methodology for the assessment of residential visual amenity and ES paragraph 6.10.3.3 does not identify residents as potential visual receptors. Nevertheless ES paragraph 6.9.6 states that *'The assessment of visual impacts for built receptors has been undertaken from the nearest public road, footpath or open space to each property and assumptions have been made about the types of rooms, and about the types and importance of views obtained from these rooms. Only buildings that are in use have been assessed. Derelict buildings or those considered to be unoccupied at the time of the survey were not assessed. The assessment of visual impacts was undertaken in March 2013 and therefore any building development that has taken place since these surveys has not been considered within this assessment.'*

There are several points arising from this statement:

- some properties are a considerable distance from '*the nearest public road, footpath or open space'* and GLVIA 2nd Edition paragraph 7.30 suggests that the assessment should be undertaken from the curtilage of nearby properties;
- it is conceded in the ES that the ES assessment describes assumed rather than actual views from within properties. This inherent weakness undermines its reliability; and

- unoccupied properties may become occupied during the 25 year planning approval period for a windfarm and should be assessed, as should any current residential planning applications locations.

3.0 Landscape Impact Assessment

3.1 Landscape Character Baseline

3.1.1 The landscape character baseline is defined in the following documents:

- '*Ayrshire Landscape Character Assessment* (SNH 1998); and
- '*Dumfries and Galloway Landscape Character Assessment'* (1998).

3.1.2 ES paragraph 6.6.3 states that *'The Dumfries and Galloway Landscape Character Assessment has been updated as part of Dumfries and Galloway's Wind Energy Interim Planning Policy (IPP) which forms the council's most recent position in respect to wind energy developments. Carol Anderson and Alison Grant Landscape Architects reviewed the existing Dumfries and Galloway Landscape Assessment and suggested some revisions were made to a number of landscape character types. As Dumfries and Galloway covers a large part of the study area and its associated LCA is a more recently published document, this has been used in preference in this assessment.'*

However the ES does not give equivalent consideration to the '*Landscape Capacity Study for Wind Turbine Development in Ayrshire'* (South Ayrshire Council 2013) which is South Ayrshire Council's *'most recent position in respect to wind energy developments'* and which was also produced by Carol Anderson and Alison Grant Landscape Architects.

3.1.3 ES paragraph 6.6.3 confirms that *'The Project falls within two LCTs; the majority of the site is covered by Foothills with Forest LCT, with a small area along the northern boundary being covered by Middle Dale LCT and a small section of the North Area falling within Intimate Pastoral Valley LCT.'*

Therefore there will be direct effects on these LCTs and indirect effects on adjacent LCTs.

3.2 Landscape Character Sensitivity

3.2.1 ES Appendix 6.1: Landscape Assessment provides an assessment of sensitivity for each LCT.

3.2.2 The MSC assessment of landscape character sensitivity is based upon the levels of sensitivity identified in '*Landscape Capacity Study for Wind Turbine Development in Ayrshire'*, as this provides a detailed analysis of sensitivity to windfarm development for each LCT.

3.3 Landscape Designations

3.3.1 ES paragraph 6.6.2 confirms that *'There are no national level designations within the study area however there are a number of sites included on the Inventory of Gardens and Designed Landscapes and a SNH Search Area for Wild Land (SAWL). Whilst these are not nationally designated, they are important in terms of the national interest. Within the study area, there are a number of regional / local designations comprising of a range of Scenic Areas (SA), Regional Scenic Areas (RSA), Sensitive Landscape Character Areas (SLCAs), which are identified by Local Authorities within their relevant Development Plans.'*

It should be noted that extent of the SAWL has been updated a draft Core Area of Wild Land which may become a national designation.

3.3.2 ES paragraph 6.6.2.3 confirms that *'The Galloway Forest Park is the first national park in the UK to be awarded Dark Sky Park status from the International Dark Sky Association (IDA) in November 2009'* and concludes that *'Infrared lighting is proposed to be used if aviation lighting is required by the MoD and except insofar as it indicates elevated local landscape value, since the proposals will not create any light pollution, the Dark Sky Park is not considered further in this study.'*

3.4 Landscape Designation Sensitivity

3.4.1 ES Appendix 6.1: Landscape Assessment provides an assessment of sensitivity for each Designated Landscape.

3.4.2 The MSC assessment of landscape designation sensitivity is similar to that within ES Appendix 6.1 apart from the Garden and Designed Landscapes which MSC judge to be of high sensitivity. For example, the ES assessment of the sensitivity of the Auchincruive, Bargeny and Kilkerran GDLs is medium even though it is acknowledged that the *'…scenic qualities are considered 'Outstanding'…'* for all three GDLs.

Therefore the ES understates that sensitivity of some GDLs.

3.5 Wild Land

3.5.1 ES Appendix 6.2 sets out the ES assessment of the attributes of the Merrick Search Area for Wild Land (SAWL) which ES paragraph 1 claims has been undertaken *'…in accordance with criteria from Scottish Natural Heritage Interim Guidance Note: Assessing the Impacts on Wild Land (February 2007), with reference to Scottish Natural Heritage Policy Statement No. 02/03: Wildness in Scotland's Countryside.'*

3.5.2 However the ES section identifying Wild Land Quality criteria are not derived from '*Assessing the Impacts on Wild Land*'.

It should be noted that '*Assessing the Impacts on Wild Land*' paragraph 3.1 identifies a number of principles in assessing change to attributes. These include:

- *'A detractor does not have to be within an area of wild land to affect it. For example, a prominent development outside the wild land may well be visible from many places within the wild land and so detract from the quality of wildness and remoteness.*
- *Gradual attrition at the edge of wild land should be avoided if possible. Wild land can be damaged, if not lost, through the cumulative effect of detractors around the edges reducing the central area.*
- *Much of Scotland's wild land is not pristine and does contain detractors. NPPG 14's definition of wild land acknowledges that the "influence of human activity on the character and quality of the environment has been minimal", not absent.*
- *Different parts of the wild land resource will inevitably vary in the strength to which they portray both the physical and perceptual attributes and perhaps score low, but the low scoring areas contribute to the whole (especially areas at the edge). So a baseline score of low being damaged further may still be a significant problem.'*

The ES wild land assessment does not appear to address these principles.

3.5.3 Furthermore the ES section *'Assessment of Impact'* is also not derived from *'Assessing the Impacts on Wild Land'* and contradicts the SNH guidance principles.

3.6 *Assessment of Landscape Effects*

3.6.1 The MSC assessment is summarised alongside the ES assessment for key landscape receptors (ES Appendix 6.1: landscape Assessment). For simplicity the assessment is confined to predicted effects during operation:

Landscape Receptor	***ES Sensitivity***	***ES Magnitude***	***ES Significance***	***MSC Sensitivity***	***MSC Magnitude***	***MSC Significance***
Middle Dale LCT	*High*	*High (within 5km) Medium (elsewhere)*	***Substantial (within 5km)*** *and* ***Moderate Adverse (elsewhere)***	*High*	*High (within 5km) Medium (5km to 10km) Low to Negligible (elsewhere)*	***Indirect Major Adverse (within 5km) Major / Moderate Adverse (5km to 10km)*** *and* ***Moderate Adverse*** *to Negligible (elsewhere)*
Intimate Pastoral Valley LCT	*High*	*High (within 5km) Low (elsewhere)*	***Substantial (within 5km)*** *Slight (elsewhere)*	*High*	*High (within 5km) Medium (5km to 10km) Low to Negligible (elsewhere)*	***Indirect Major Adverse (within 5km) Major / Moderate Adverse (5km to 10km)*** *and* ***Moderate Adverse*** *to Negligible (elsewhere)*
Foothills LCT	*High*	*High (within 5km) Slight (elsewhere)*	***Substantial (within 5km)*** *Slight Adverse (elsewhere)*	*High / Medium*	*High (within 5km) Medium (5km to 10km) Low to Negligible (elsewhere)*	***Indirect Major Adverse (within 5km) Major / Moderate Adverse (5km to 10km)*** *and* ***Moderate Adverse*** *to Negligible (elsewhere)*
Foothills with Forest LCT	*High*	*High (within 5km) Low to*	***Substantial (within 5km)*** *and*	*High / Medium*	*High (within 5km) Medium*	***Direct Major / Moderate Adverse***

		Negligible (elsewhere)	***Moderate Adverse (components to north-east)*** *Slight or Negligible (elsewhere)*		*(5km to 10km) Low to Negligible (elsewhere)*	***(within 5km) Moderate Adverse (5km to 10km)*** *and Moderate / Minor to Negligible (elsewhere)*
Southern Uplands LCT	*High*	*Medium (within 5km) Low to Negligible (elsewhere)*	***Moderate Adverse (within 5km)*** *Slight Adverse or negligible (elsewhere)*	*High*	*High (within 5km) Medium (5km to 10km) Low to Negligible (elsewhere)*	***Indirect Major Adverse (within 5km) Major / Moderate Adverse (5km to 10km)*** *and* ***Moderate Adverse*** *to Negligible (elsewhere)*
Rugged Granite Uplands LCT	*High*	*Low*	*Slight Adverse*	*High*	*Medium (5km to 10km) Low to Negligible (elsewhere)*	***Indirect Major / Moderate Adverse (5km to 10km)*** *and* ***Moderate Adverse*** *to negligible (elsewhere)*
South Ayrshire Scenic Area / Ayrshire Sensitive Landscape Character Area	*High*	*High (within 5km) Low to Negligible (elsewhere)*	***Substantial (within 5km)*** *and* ***Moderate Adverse (components to north-east)*** *Slight or Negligible (elsewhere)*	*High*	*High (within 5km) Medium (5km to 10km) Low to Negligible (elsewhere)*	***Major Adverse (within 5km) Major / Moderate Adverse (5km to 10km)*** *and* ***Moderate Adverse*** *to negligible (elsewhere)*
Blairquhan Garden and Designed Landscape	*High*	*Negligible*	*Negligible*	*High*	*	*
Kilkerran Garden and Designed Landscape	*Medium*	*Negligible*	*Negligible*	*High*	*	*

NB ***** Not Assessed

Red Significant Effect **Blue** Potential Significant Effect **Black** No Significant Effect

3.6.2 The MSC assessment of LCT sensitivity is derived from the '*South Ayrshire Landscape Wind Capacity Study: Appendix Report*'.

Middle Dale LCT 12

3.6.3 ES Appendix 6.1 concludes that the sensitivity of the LCT is *'High'* and the *'South Ayrshire Landscape Wind Capacity Study: Appendix Report'* also concludes that the sensitivity is *'High'*.

3.6.4 ES Appendix 6.1 concludes that *'Magnitude of change during construction and operation is considered to be Locally High within 5 km of the Project…'* and *'Medium'* elsewhere.

ES Figure 6.7a demonstrates that there is theoretical visibility of the proposed development within the majority of the LCT to the north.

The MSC assessment judges that the magnitude of effects will range from *'High'* (within 5km) to *'Medium'* (5km to 10km) and *'Low to Negligible'* elsewhere, as the introduction of prominent uncharacteristic elements to an adjacent LCT will alter the attributes of the LCT to varying degrees.

3.6.5 ES Appendix 6.1 concludes that *'The resultant effect on the Middle Dale LCT is therefore considered to be Locally Substantial and significant during construction and operation, and the impact on the LCT as a whole is considered to be Moderate and significant during both construction and operation.'*

The MSC assessment finds that indirect landscape character effects (arising from the introduction of intrusive elements to an adjacent LCT) will vary but will be significant and adverse (causing a deterioration to landscape characteristics) for up to 10km from the proposed development, rather than just *'locally'* (5km).

Intimate Pastoral Valley LCT

3.6.6 ES Appendix 6.1 states that the sensitivity of the LCT is '*High*' and the '*South Ayrshire Landscape Wind Capacity Study: Appendix Report*' also concludes that the sensitivity is '*High*'.

3.6.7 ES Appendix 6.1 states that '*Magnitude of change during construction and operation is considered to be Locally High …*' and '*Low*' elsewhere.

ES Figures 6.7a and 6.7b demonstrate that there is theoretical visibility of the proposed development within the majority of the LCT to the east.

The MSC assessment judges that the magnitude of effects will range from '*High*' (within 5km) to '*Medium*' (5km to 10km) and '*Low to Negligible*' elsewhere, as the introduction of prominent uncharacteristic elements to an adjacent LCT will alter the attributes of the LCT to varying degrees.

3.6.8 ES Appendix 6.1 concludes that '*The resultant effect on the Intimate Pastoral Valley LCT is therefore considered to be Locally Substantial and significant but Slight and not significant elsewhere during both construction and operation.*'

The MSC assessment finds that indirect landscape character effects (arising from the introduction of intrusive elements to an adjacent LCT) will vary but will be significant and adverse (causing a deterioration to landscape characteristics) for up to 10km from the proposed development, rather than just '*locally*' (5km).

Foothills LCT

3.6.9 ES Appendix 6.1 concludes that the sensitivity of the LCT is *'High'*, whilst the *'South Ayrshire Landscape Wind Capacity Study: Appendix Report'* concludes that the sensitivity is *'High/Medium'*.

3.6.10 ES Appendix 6.1 states that *'Magnitude of change during construction and operation is considered to be High within 5km of the proposed project…'* and *'Slight'* elsewhere.

ES Figure 6.7a demonstrates that there is theoretical visibility of the proposed development at the western end of the LCT to the east and ES Figure 6.7b demonstrates that there is theoretical visibility of the proposed development for the majority of the LCT to the west.

The MSC assessment judges that the magnitude of effects will range from *'High'* (within 5km) to *'Medium'* (5km to 10km) and *'Low to Negligible'* elsewhere, as the introduction of prominent uncharacteristic elements to an adjacent LCT will alter the attributes of the LCT to varying degrees.

5.6.11 ES Appendix 6.1 concludes that *'The resultant effect on the Foothills LCT is therefore considered to be Locally Substantial Adverse (significant) during both construction and operation, but the impact on the LCT elsewhere is considered to be Slight Adverse (not significant) during both construction and operation.'*

The MSC assessment finds that indirect landscape character effects (arising from the introduction of intrusive elements to an adjacent LCT) will vary but will be significant and adverse (causing a deterioration to

landscape characteristics) for up to 5km from the proposed development and potentially significant and adverse for up to 10km, rather than just *'locally'* (5km).

Foothills with Forest LCT

5.6.12 ES Appendix 6.1 concludes that the sensitivity of the LCT is *'High'*, whilst the *'South Ayrshire Landscape Wind Capacity Study: Appendix Report'* concludes that the sensitivity is *'High/Medium'*.

3.6.13 The *'South Ayrshire Landscape Wind Capacity Study: Appendix Report'* also identifies Glenalla Fell (MSC Appendix B: Figure 1) and Genoch Inner Hill (MSC Appendix B: Figure 6) as *'Key Landmark Hills'* which contribute to the sensitivity of the LCT.

The sensitivity 'Landform' criterion in *'South Ayrshire Landscape Wind Capacity Study: Appendix Report'* Table 1 considered *'…the overall topographical shape and the degree of complexity of landform including identification of any distinct 'landmark' features. Assessment of how development, including ancillary works, would impact on or relate to landform and whether it would intrude or detract if close to distinctive landform features.'*

3.6.14 ES Appendix 6.1 concludes that *'Magnitude of change during construction and operation is considered to be Locally High within 5 km of the Project…'* and *'Low'* or *'Low to Negligible'* elsewhere.

ES Figures 6.7a and 6.7c demonstrate that there is theoretical visibility of the proposed development within the majority of the northeastern section of the LCT.

The MSC assessment judges that the magnitude of effects will range from *'High'* (within 5km) to *'Medium'* (5km to 10km) and *'Low to Negligible'* elsewhere, as the introduction of prominent uncharacteristic elements on the flanks of two *'Key Landmark Hills'* within the LCT will alter the attributes of the receiving LCT to varying degrees.

3.6.15 ES Appendix 6.1 concludes that *'The resultant effect on the Foothills with Forest LCT is therefore considered to be Locally Substantial and significant within 5 km of the site during construction and operation and components to the north east are considered to be Locally Moderate Adverse and significant during both construction and operation. The other components of the LCT within the overall study area would be Slight or Negligible and not significant during both construction and operation.'*

The MSC assessment finds that direct landscape character effects (arising from the introduction of intrusive elements to a sensitive part of the LCT) will vary but will be significant and adverse (causing a deterioration to landscape characteristics) for up to 5km from the proposed development and potentially significant and adverse for up to 10km, rather than just *'locally'* (5km).

Southern Uplands

3.6.16 ES Appendix 6.1 states that the sensitivity of the LCT is *'High'* and the *'South Ayrshire Landscape Wind Capacity Study: Appendix Report'* also concludes that the sensitivity is *'High'*.

3.6.17 ES Appendix 6.1 states that *'Magnitude of change during construction and operation is considered to be Locally Medium …'* and *'Low'* or *'Negligible'* elsewhere.

ES Figures 6.7c and 6d demonstrate that there is theoretical visibility of the proposed development within the majority of the northeastern section of the LCT.

The MSC assessment judges that the magnitude of effects will range from *'High'* (within 5km) to *'Medium'* (5km to 10km) and *'Low to Negligible'* elsewhere, as the introduction of prominent uncharacteristic elements to an adjacent LCT will alter the attributes of the LCT to varying degrees.

3.6.18 ES Appendix 6.1 concludes that *'The resultant effect on the Southern Uplands LCT is therefore considered to be Locally Moderate Adverse (significant) during both construction and operation, but the impact on the LCT elsewhere is considered to be Slight Adverse or Negligible (not significant) during both construction and operation.'*

The MSC assessment finds that indirect landscape character effects (arising from the introduction of intrusive elements to an adjacent LCT) will vary but will be significant and adverse (causing a deterioration to landscape characteristics) for up to 10km from the proposed development, rather than just *'locally'* (5km).

Rugged Granite Uplands

3.6.19 ES Appendix 6.1 states that the sensitivity of the LCT is *'High'* and the *'South Ayrshire Landscape Wind Capacity Study: Appendix Report'* also concludes that the sensitivity is *'High'*.

3.6.20 ES Appendix 6.1 states that '*Magnitude of change during construction and operation is considered to be Low as a result of the main areas of intervisibility closest to the Project being potentially screened by dense forestry surrounding Loch Braden within the Foothills with Forest LCT. Overall, the LCT would experience limited intervisibility.*'

The ES is inconsistent as screening by '*dense forestry*' is not cited as a reason to reduce the magnitude of effect from the adjacent Southern Uplands LCT (where effects are found to be significant). In any case the forestry in question is commercial, is not identified as being in the control of the applicants and will be felled during the 25 year approval period of the proposed development. ES Figure 6.7d demonstrates that there is theoretical visibility of the proposed development from within the majority of the northernmost section of the LCT as well as mountain summits within the remainder of the LCT.

The MSC assessment judges that the magnitude of effects will range from '*High*' (within 5km) to '*Medium*' (5km to 10km) and '*Low to Negligible*' elsewhere, as the introduction of prominent uncharacteristic elements to an adjacent LCT will alter the attributes of the LCT to varying degrees.

3.6.21 ES Appendix 6.1 concludes that '*The resultant effect on the Rugged Granite Uplands LCT is therefore considered to be Slight Adverse and not significant during both construction and operation.*'

The MSC assessment finds that indirect landscape character effects (arising from the introduction of intrusive elements to an adjacent LCT) will vary but will be significant and adverse (causing a deterioration to

landscape characteristics) for up to 10km from the proposed development.

South Ayrshire Scenic Area / Ayrshire Sensitive Landscape Character Area

3.6.22 ES Appendix 6.1 states that the sensitivity of the LCT is *'High'* and MSC also conclude that the sensitivity is *'High'*.

3.6.23 ES Appendix 6.1 states that *'Magnitude of change during construction and operation is considered to be Locally High within 5km…'* and *'Low'* or *'Negligible'* elsewhere.

ES Figures 6.7a, b, c and d demonstrate that there is theoretical visibility of the proposed development within the majority of the designated landscape within 5km as well as elevated areas of the designated landscape within 5km to 10km.

The MSC assessment judges that the magnitude of effects will range from *'High'* (within 5km) to *'Medium'* (5km to 10km) and *'Low to Negligible'* elsewhere, due to the introduction of prominent uncharacteristic elements.

3.6.24 ES Appendix 6.1 concludes that *'The resultant effect on the South Ayrshire Scenic Area & Sensitive Landscape Character Area is therefore considered to be Locally Substantial and significant within 5km of the site during construction and operation and components to the north east are considered to be Locally Moderate Adverse and significant during both construction and operation. The other components of the designations within the overall study area would be Slight or Negligible and not significant during both construction and operation.'*

However, the MSC assessment finds that direct landscape effects (arising from the introduction of intrusive elements) will vary but will be significant and adverse (causing a deterioration to landscape quality) for up to 10km from the proposed development (particularly in elevated areas), rather than just 5km.

Blairquhan Garden and Designed Landscape

3.6.25 MSC has not undertaken a site visit as the garden was not open when the fieldwork was undertaken.

3.6.26 The Gardens and Designed Landscape Inventory section on the *'Importance of the Site'* states that *'The landscape has high Scenic value as it makes a significant contribution to the local scenery, particularly when viewed from the north and west.'*

The ES Landscape Designations with ZTV Overlay (Figure 6.5a) indicates that the majority of the GDL will have potential visibility of the proposed development.

The view from the north is illustrated by MSC Viewpoint 4 (Appendix B: Figure 5). The '*significant contribution to the local scenery'* will be compromised by the proposed development.

Kilkerran Garden and Designed Landscape

3.6.27 MSC has not undertaken a site visit as the garden was not open when the fieldwork was undertaken.

3.6.28 The Gardens and Designed Landscape Inventory section on the *'Importance of the Site'* states that *'It makes an outstanding contribution to the surrounding scenery by virtue of its valley setting and size, layout and quality of the parkland trees.'*

The ES Landscape Designations with ZTV Overlay (Figure 6.5a) indicates that the northern and southern parts of the GDL will have potential visibility of the proposed development.

There are no representative ES viewpoints however the ES ZTVs indicate that there is potential visibility from the B741. Therefore the '*outstanding contribution to the surrounding scenery'* may be compromised by the proposed development.

Merrick Search Area for Wild Land / Draft Core Area of Wild Land N1

3.6.29 The ES assessment of the Merrick SAWL (ES Appendix 6.2: Wild Land Assessment Table 3) is summarised below. For simplicity the assessment is confined to predicted effects during operation:

Attribute	*ES Strength of Attribute*	*ES Magnitude of Change*	*ES Significance*	*MSC Strength of Attribute*	*MSC Magnitude of Change*	*MSC Significance*
Perceived Naturalness	*Low*	*Negligible*	*	*	*	*
Lack of Construction or other Artifacts	*Low*	*Low*	*	*	*	*
Evidence of Contemporary Land Uses	*Low*	*Low*	*	*	*	*
Rugged or Challenging Terrain	*Medium*	*Negligible*	*	*	*	*
Remoteness and Inaccessibility	*Low*	*Negligible*	*	*	*	*
Sense of Sanctuary or Solitude	*Low*	*Negligible*	*	*	*	*
Risk, Sense of Awe or Anxiety	*Low*	*Negligible*	*	*	*	*
Arresting or Inspiring Qualities	*Medium*	*Low*	*	*	*	*

Physically Challenging Terrain	*Medium*	*Negligible*	*	*	*	*

NB ***** Not Assessed

Red Significant Effect **Blue** Potential Significant Effect **Black** No Significant Effect

3.6.30 The ES assessment of *'Low'* or *'Medium'* for *'Strength of Attribute'* is untenable, as it contradicts the area identified as a SAWL and subsequently as the proposed Core Area of Wild Land designation.

The ES does not confirm whether fieldwork was undertaken (as required by the SNH methodology) which seems unlikely, given the nature of the assessment findings.

3.6.31 Furthermore the ES assessment fails to determine the significance of effects for each attribute, as required by the SNH methodology.

3.6.32 MSC have not undertaken a detailed assessment of the effects on Wild Land, as this is outwith the remit of this review. However, it is evident from the MSC assessment of the Rugged Granite Uplands LCT (which broadly coincides with the extent of the SAWL) that there will be significant and adverse effects (compromising wild land attributes) for up to 10km from the proposed development.

Therefore it is reasonable to place greater weight on the most recent SNH Core Area of Wild Land mapping exercise rather than a questionable and unsubstantiated ES assessment.

3.7 Assessment of Cumulative Landscape Effects

3.7.1 ES paragraph 6.8.2.1 states that *'A cumulative capacity value has been attributed to each area based on a three point scale from High to Low…'*

and ES paragraph 6.8.2.2 states that *'An evaluation of sensitivity to change has been attributed to each landscape designation and LCT…'*

However the *'Landscape Capacity Study for Wind Turbine Development in Ayrshire'* concludes that the affected LCTs are of high sensitivity to the proposed scale of windfarm and that there is no capacity. A similar finding would apply to designated landscapes.

Therefore the ES assessment of cumulative landscape effects has now been superseded.

4.0 Visual Appraisal

4.1 Visual Baseline

4.1.1 ES Figures 6.8 and 6.10a to 6.10d identify potential receptors within the ES study area and ES Figures 6.2 and 6.3 indicate the Zone of Theoretical Visibility (ZTV) for turbine blade tip and hub height.

4.1.2 The *'Landscape Capacity Study for Wind Turbine Development in Ayrshire'* although primarily concerned with landscape characteristics includes Table 1 which also addresses *'visual amenity'* (which places an emphasis on *'The significance of skylines and visual horizons'*). Furthermore the assessment of landform also identifies *'distinct 'landmark' features'* which are important elements of the baseline landscape and visual resource.

4.1.3 The *'Landscape Capacity Study for Wind Turbine Development in Ayrshire'* assessment for the LCTs most affected by the proposed development identifies the following constraints:

- **Intimate Pastoral Valleys LCT** - *'…well-defined 'landmark' hills including the craggy-topped Knockdolian, Craig and Bargain Hills and Craig of Dalwine along the Stinchar valley and the Big Hill of the Baing, Kildoach Hill and Genoch Hill on the edge of the upper Girvan valley'* and *'Views from roads and settlement along more open sections of these valleys and from popularly accessed hills and where the skyline of containing uplands and 'landmark' hills are key visual foci';*
- **Foothills with Forest LCT** – *'The landmark hill of Glenalla Fell which forms a prominent high top seen from the Carrick Forest Drive and from parts of the Middle Dale (12) and Genoch Inner Hill whose steep, rugged slopes form the backdrop to the Intimate Pastoral Valley (13) at the head of the Water of Girvan.'*

It is evident that Glenalla Fell (MSC Figures 1, 3, 5, 6 and 10) and Genoch Inner Hill (MSC Figure 6 and ES Viewpoint 5) are key landscape and visual features. The proposed northern turbine group is situated on the northeastern flank of Glenalla Fell (MSC Figure 1) and the proposed southern turbine group is situated between Glenalla Fell and Genoch Inner Hill (MSC Figure 6).

4.2 Viewpoint Assessment

4.2.1 The MSC viewpoint assessment is summarised alongside the ES viewpoint analysis (ES Appendix 6.5: Visual Impact Tables):

Viewpoint	*ES Sensitivity*	*ES Magnitude*	*ES Significance*	*MSC Sensitivity*	*MSC Magnitude*	*MSC Significance*
ES VP1 Straiton Cemetery	*Medium*	*Low*	*Slight*	*High (Cemetery Visitors)*	*Medium / High (Assuming view from within cemetery)*	***Major / Moderate Adverse***
				High to Low (Road Users)	*Medium / Low*	***Moderate Adverse*** *to Minor*

ES VP2 Straiton Park	Low	Low	Slight	High (Park Users, Walkers & Residents)	Medium / Low (Coniferous Trees Retained)	**Moderate Adverse**
					Medium / High (Coniferous Trees Felled)	**Major / Moderate Adverse**
ES VP3 Craigengower Monument	High	High	**Substantial**	High (Walkers)	High	**Major Adverse**
ES VP4 Maybole	Low	Low	Slight	High / Medium (Golfers)	Low	Moderate / Minor
ES VP5 Minor Road Near Tairlaw	Medium	Medium	**Moderate**	High to Low (Road Users)	Medium / High	**Major / Moderate Adverse** to Moderate / Minor
ES VP6 Kirkmichael	Low	Low	Slight	High to Low (Road Users)	Medium / Low	**Major / Moderate Adverse** to Moderate / Minor
ES VP7 Craigengillan GDL	High	Low	Slight	High (Walkers)	Low	**Moderate Adverse**
ES VP8 Little Eriff Hill / Loch Doon	High	Low	slight	*	*	*
ES VP9 Eldrick Hill	Low to Medium	Medium	**Moderate**	High (Walkers)	Medium	**Major /Moderate Adverse**
ES VP10 Auchensoul Hill	Medium / High	Negligible	Negligible	*	*	*
ES VP11 A713 / Holehouse Railway Junction	Low	Negligible	Negligible	*	*	*
ES VP12 Benquahat Hill	Low	Low	Slight	*	*	*

ES VP13 B741 near Clawfin	*Low - Medium*	*Low*	*Slight*	*	*	*
ES VP14 A713 and B742 Road Junction	*Medium*	*Low*	*Slight*	*	*	*
ES VP15 A719 near Ayr	*Low*	*Negligible*	*No Change*	*	*	*
ES VP16 Prestwick East	*Low*	*Negligible*	*No Change*	*	*	*
ES VP17 B749 near Troon	*Low*	*Negligible*	*Negligible*	*	*	*
ES VP18 A76 near Mauchline	*Low*	*Negligible*	*Negligible*	*	*	*
ES VP19 Cairnsmore of Carsphairn	*High*	*Low*	*Slight*	*	*	*
ES VP20 Merrick	*High*	*Negligible*	*Negligible*	*	*	*
MSC VP1 Unclassified Road (South of Straiton)	*	*	*	*High to Low (Road Users)*	*High*	***Major Adverse** to **Moderate Adverse***
MSC VP2A & 2B Bennan Hill View Point	*	*	*	*High (Walkers)*	*High*	***Major Adverse***
MSC VP3 Unclassified Road (Threethorns)	*	*	*	*High (Residents)*	*High*	***Major Adverse***
				High to Low (Road Users)		***Major Adverse** to **Moderate Adverse***
MSC VP4 B7045 (Altizourie)	*	*	*	*High (Residents & Walkers)*	*High*	***Major Adverse***
				High to Low (Road Users)		***Major Adverse** to **Moderate Adverse***

NB * Not assessed

Red Significant Effect **Blue** Potential Significant Effect **Black** No Significant Effect

4.2.2 MSC does not assess ES Viewpoints 8 and 10 to 20, as significant effects (or potential significant effects) are not anticipated from these viewpoints.

6.2.3 Therefore the detailed MSC detailed assessment is restricted to ES Viewpoints 1 to 7 and 9 and MSC Viewpoints 1 to 4:

- ***ES Viewpoint 1: Straiton Cemetery***

  Cemetery visitors are high sensitivity receptors. The magnitude of effect would be medium/high (assuming an unscreened viewpoint from within the cemetery, as there would be large scale/partial alteration to the visual setting with the introduction of visually prominent moving elements that breach the skyline and that are not characteristic of the view. Therefore the level of effect would be major/moderate significant and adverse;

  A range of sensitivity reflects a range of road users (residents/tourists (high) to commercial drivers (low)). The magnitude of effect would be medium/low, as there would be a partial/minor alteration to the visual baseline with the introduction of visually prominent moving elements that breach the skyline and are not characteristic of the view. Therefore the level of effect would range from moderate, potentially significant and adverse to minor and not significant;

- ***ES Viewpoint 2: Straiton Park***

  Park users, walkers and residents are high sensitivity receptors. The magnitude of effect would be medium/low (whilst screening coniferous trees are retained) medium/high (when screening coniferous trees are felled), as there would be a partial/minor or partial/large scale alteration to the visual baseline with the introduction of visually prominent moving elements that breach the skyline and are not characteristic of the view. Therefore the level of

effect would be moderate, potentially significant and adverse or major/moderate, significant and adverse;

- ***ES Viewpoint 3: Craigengower Monument***

  Walkers are high sensitivity receptors. The magnitude of effect would be high, as there would be a large scale alteration to the visual baseline with the introduction of visually prominent moving elements that breach the skyline (in close proximity to the Glenalla Fell and Genoch Inner Hill key landmarks) and are not characteristic of the view. Therefore the level of effect would be major significant and adverse;

- ***ES Viewpoint 4: Maybole***

  Golfers are high/medium sensitivity receptors. The magnitude of effect would be low, as there would be a minor alteration to the visual baseline. Therefore the level of effect would be moderate/minor and not significant;

- ***ES Viewpoint 5: Minor Road near Tairlaw***

  A range of sensitivity reflects a range of road users (residents/tourists (high) to commercial drivers (low)). The magnitude of effect would be medium/high, as there would be a partial/ large scale alteration to the visual baseline with the introduction of visually prominent moving elements that breach the skyline (in close proximity to the Genoch Inner Hill key landmark) and that are not characteristic of the view. Therefore the level of effect would range from major/moderate significant and adverse to moderate/minor and not significant;

- ***ES Viewpoint 6: Kirkmichael***

  A range of sensitivity reflects a range of road users (residents/tourists (high) to commercial drivers (low)). The magnitude of effect would

be medium/low, as there would be a partial/minor alteration to the visual baseline with the introduction of visually prominent moving elements that breach the skyline (in close proximity to the Genoch Inner Hill key landmark) and are not characteristic of the view. Therefore the level of effect would range from major/moderate significant and adverse to moderate/minor and not significant;

- ***ES Viewpoint 7: Craigengillan GDL***

  Walkers are high sensitivity receptors. The magnitude of effect would be low, as there would be a minor alteration to the visual baseline with the introduction of visually prominent moving elements that breach the skyline and are not characteristic of the view. Therefore the level of effect would be moderate, potentially significant and adverse;

- ***ES Viewpoint 9: Eldrick Hill***

  Walkers are high sensitivity receptors. The magnitude of effect would be medium, as there would be a partial alteration to the visual baseline with the introduction of visually prominent moving elements that breach the skyline and are not characteristic of the view. Therefore the level of effect would be major/moderate significant and adverse;

- ***MSC Viewpoint 1: Unclassified Road (South of Straiton)***

  A range of sensitivity reflects a range of road users (residents/tourists (high) to commercial drivers (low)). The magnitude of effect would be high, as there would be a large scale alteration to the visual baseline with the introduction of visually prominent moving elements that breach the skyline and are not characteristic of the view. Therefore the level of effect would range from major significant and adverse to moderate adverse and potentially significant;

- ***MSC Viewpoint 2A & 2B: Bennan Hill View Point***

  Walkers are high sensitivity receptors. The magnitude of effect would be high, as there would be a large scale alteration to the visual baseline with the introduction of visually prominent moving elements that breach the skyline (in close proximity to the Glenalla Fell and Ailsa Craig key landmarks) and are not characteristic of the view. Therefore the level of effect would be major significant and adverse;

- ***MSC Viewpoint 3: Unclassified Road (Threethorns)***

  Residents are high sensitivity receptors. The magnitude of effect would be high, as there would be a large scale alteration to the visual baseline with the introduction of visually prominent moving elements that breach the skyline (in close proximity to the Glenalla Fell key landmark) and are not characteristic of the view. Therefore the level of effect would be major significant and adverse;

  A range of sensitivity reflects a range of road users (residents/tourists (high) to commercial drivers (low)). The magnitude of effect would be high, as there would be a major alteration to the visual baseline with the introduction of visually prominent moving elements that breach the skyline (in close proximity to the Glenalla Fell key landmark) and are not characteristic of the view. Therefore the level of effect would range from major significant and adverse to moderate adverse and potentially significant; and

- ***MSC Viewpoint 4: B7045 (Altizourie)***

  Residents and walkers are high sensitivity receptors. The magnitude of effect would be high, as there would be a large scale alteration to the visual baseline with the introduction of visually prominent

moving elements that breach the skyline (in close proximity to the Glenalla Fell key landmark) and are not characteristic of the view. Therefore the level of effect would be major significant and adverse;

A range of sensitivity reflects a range of road users (residents/tourists (high) to commercial drivers (low)). The magnitude of effect would be high, as there would be a large scale alteration to the visual baseline with the introduction of visually prominent moving elements that breach the skyline (in close proximity to the Glenalla Fell key landmark) and are not characteristic of the view. Therefore the level of effect would range from major significant and adverse to moderate adverse and potentially significant;

4.2.4 The ES assessment finds significant visual effects at only ES Viewpoints 3, 5 and 9 and only Viewpoint 3 is subject to '*substantial*' effects. This is not a credible assessment and does not accord with GLVIA and SNH guidance.

4.2.5 Whilst there are similarities between the ES and MSC assessment of magnitude of effect, there are a number of anomalies in the ES assessment of sensitivity:

- the ES sensitivity for walkers at ES Viewpoints 3, 7, 8, 19 and 20 is '*High*' (in accordance with GLVIA guidance) but '*Medium / High*', '*Medium / Low*' or '*Low*' for ES Viewpoint 9, 10 and 12 (contrary to GLVIA guidance);
- the ES sensitivity for recreational users of Straiton Park is '*Low*' (contrary to GLVIA guidance) rather than '*High*';
- the ES assessment clearly gives greater weight to the magnitude of effects rather than sensitivity (i.e. ES Viewpoints 7, 8 and 19, where

'*High*' sensitivity combined with a '*Low*' magnitude of change results in a '*Slight*' level of significance).

4.2.6 The ES assessment is not a true reflection of the extent and nature of significant visual effects. The nature of the ES assessment results from a poor selection of viewpoints, as well as the consistent understatement of receptor sensitivity and consequential significance of visual effects.

4.2.7 The MSC assessment finds significant adverse visual effects at ES Viewpoints 1, 2, 3, 5, 6, 7 and 9 (seven of the eight ES viewpoints assessed). In addition the MSC assessment finds significant adverse visual effects at all four MSC viewpoints.

4.3 Cumulative Viewpoint Assessment

4.3.1 The MSC cumulative viewpoint assessment is summarised alongside the ES cumulative viewpoint analysis (ES Appendix 6.6: Cumulative Visual Impact Tables):

Viewpoint	***ES Sensitivity (Application, Consented & Operational / Scoping Windfarms)***	***ES Magnitude (Application, Consented & Operational / Scoping Windfarms)***	***ES Significance (Application, Consented & Operational / Scoping Windfarms)***	***MSC Sensitivity (Scoping Windfarms Only)***	***MSC Magnitude (Scoping Windfarms Only)***	***MSC Significance (Scoping Windfarms Only)***
ES VP1 Straiton Cemetery	*Medium*	*None (Application, Consented & Operational)*	*None (Application, Consented & Operational)*	*High (Cemetery Visitors)*	*High (Combined with Scoping)*	***Major / Moderate Adverse*** *(Combined with Scoping)*
		Negligible (Scoping)	*Negligible (Scoping)*		*High (Additional to Scoping)*	***Major / Moderate Adverse*** *(Additional to Scoping)*
ES VP3 Craigengower Monument	*High*	*Low (Application, Consented & Operational)*	*Slight (Application, Consented & Operational)*	*High (Walkers)*	*High (Combined with Scoping)*	***Major Adverse*** *(Combined with Scoping)*
		High (Scoping)	***Substantial*** *(Scoping)*		*High (Additional to Scoping)*	***Major Adverse*** *(Additional to Scoping)*

ES VP4 Maybole	*Medium*	*Low (Application, Consented & Operational)*	*Slight (Application, Consented & Operational)*	*High / Medium (Golfers)*	*Medium (Combined with Scoping)*	***Moderate / Major Adverse** (Combined with Scoping)*
		Medium (Scoping)	***Moderate** (Scoping)*		*Medium (Additional to Scoping)*	*Moderate / Minor (Additional to Scoping)*
ES VP5 Minor Road Near Tairlaw	*Medium*	*Low (Application, Consented & Operational)*	*Slight (Application, Consented & Operational)*	*High to Low (Road Users)*	*Medium / High (Combined with Scoping)*	***Moderate / Major Adverse** (Combined with Scoping)*
		High (Scoping)	***Substantial** (Scoping)*		*Medium / High (Additional to Scoping)*	***Moderate / Major Adverse** (Additional to Scoping)*
ES VP6 Kirkmichael	*Low*	*Low (Application, Consented & Operational)*	*Slight (Application, Consented & Operational)*	*High to Low (Road Users)*	*Medium (Combined with Scoping)*	***Moderate / Major Adverse** (Combined with Scoping)*
		Medium (Scoping)	*Slight / Moderate (Scoping)*		*Medium (Additional to Scoping)*	***Moderate / Major Adverse** (Additional to Scoping)*
ES VP7 Craigengillan GDL	*High*	*Low (Application, Consented & Operational)*	*Slight (Application, Consented & Operational)*	*High (Walkers)*	*High (Combined with Scoping)*	***Major Adverse** (Combined with Scoping)*
		Low (Scoping)	*Slight (Scoping)*		*Low (Additional to Scoping)*	***Moderate Adverse** (Additional to Scoping)*
ES VP9 Eldrick Hill	*Low to Medium*	*Low (Application, Consented & Operational)*	*Slight (Application, Consented & Operational)*	*High (Walkers)*	*High (Combined with Scoping)*	***Major Adverse** (Combined with Scoping)*
		Medium (Scoping)	***Moderate** (Scoping)*		*Medium (Additional to Scoping)*	***Moderate / Major Adverse** (Additional to Scoping)*
ES VP10 Auchensoul Hill	*Medium to High*	*Negligible (Application, Consented & Operational)*	*Negligible (Application, Consented & Operational)*	*	*	*
		Negligible (Scoping)	*Negligible (Scoping)*			
ES VP12 Benquahat Hill	*Low*	*Negligible (Application, Consented & Operational)*	*Negligible (Application, Consented & Operational)*	*	*	*
		Low (Scoping)	*Slight (Scoping)*			
ES VP19 Cairnsmore of Carsphairn	*High*	*Negligible (Application, Consented & Operational)*	*Negligible (Application, Consented & Operational)*	*	*	*
		Low (Scoping)	*Slight (Scoping)*			

CR4 Unclassified Road (Straiton to Newton Stewart)	*Medium*	*Low (Application, Consented & Operational)*	*Slight / Moderate (Application, Consented & Operational)*	*High to Low (Road Users)*	*High (Combined with Scoping)*	***Major Adverse** (Combined with Scoping)*
		High (Scoping)	***Substantial Locally** - Slight / Moderate Elsewhere (Scoping)*		*High (Additional to Scoping)*	***Major Adverse** (Additional to Scoping)*
CF3 Long Distance Footpath 85	*Low*	*Low (Application, Consented & Operational)*	*Slight / Moderate (Application, Consented & Operational)*	*High (Walkers)*	*High (Combined with Scoping)*	***Major Adverse** (Combined with Scoping)*
		High (Scoping)	***Substantial Locally** - Slight / Moderate Elsewhere (Scoping)*		*High (Additional to Scoping)*	***Major Adverse** (Additional to Scoping)*
CF6 South Ayrshire Core Path SA47	*Low*	*Low (Application, Consented & Operational)*	*Slight / Moderate (Application, Consented & Operational)*	*High (Walkers)*	*High (Combined with Scoping)*	***Major Adverse** (Combined with Scoping)*
		High (Scoping)	***Substantial Locally** - Slight / Moderate Elsewhere (Scoping)*		*High (Additional to Scoping)*	***Major Adverse** (Additional to Scoping)*
CF8 South Ayrshire Core Path SA48	*Medium to High*	*Low (Application, Consented & Operational)*	*Slight / Moderate (Application, Consented & Operational)*	*High (Walkers)*	*High (Combined with Scoping)*	***Major Adverse** (Combined with Scoping)*
		High (Scoping)	***Substantial Locally** - Slight / Moderate Elsewhere (Scoping)*		*High (Additional to Scoping)*	***Major Adverse** (Additional to Scoping)*

NB * Not assessed

Red Significant Effect **Blue** Potential Significant Effect **Black** No Significant Effect

4.3.2 In addition to the anomalies identified in the ES Viewpoint assessment there are a number of further inconsistencies in the ES cumulative viewpoint assessment:

- the ES sensitivity for receptors at ES Viewpoint 4 is '*Low*' for the viewpoint assessment (ES Appendix 6.5) and '*Medium*' for the cumulative viewpoint assessment (ES Appendix 6.6);

- the ES sensitivity for walkers on Long Distance Footpath 85 and Core Path SA47 is *'low'* (contrary to GLVIA guidance) whilst the sensitivity for walkers on Core Path SA 48 is *'Medium to High'*;
- Core Path SA 47 and 48 form part of a promoted circuit route from Straiton. It is counter intuitive for walkers sensitivity to change as they move from one path to another; and
- the ES level of significance for Long Distance Footpath 85, Core Path SA47 and Core Path 48 is the same even though the magnitude of change is the same and the sensitivity of receptors differs.

4.3.3 The ES finds no significant cumulative effects with operational, consented or planning stage windfarms. However this is largely due to the selection of ES cumulative viewpoints (i.e. viewpoints that represent cumulative effects with the operational Hadyard Hill Windfarm or the application stage Dersalloch Windfarm).

4.3.4 The ES assessment of cumulative visual effects finds significant effects with scoping stage windfarms at ES cumulative viewpoints 3, 4, 5, and 9 as well as sequential cumulative effects on routes CR 4, CF6 and CF8.

It is unclear how ES viewpoint 4 gives rise to significant additional cumulative effects when the ES individual assessment is *'slight'* and not significant.

4.3.5 The MSC assessment of cumulative visual effects finds significant combined effects with scoping stage windfarms at ES Cumulative Viewpoints 1, 3, 4, 5, 6, 7 and 9 as well as combined sequential cumulative effects on routes CR 4, CF6 and CF8.

4.3.6 The MSC assessment of cumulative visual effects finds significant additional effects with scoping stage windfarms at ES Cumulative Viewpoints 1, 3, 5, 6, and 9 (potential significant additional effects at ES Cumulative Viewpoint 7) as well as additional sequential cumulative effects on routes CR 4, CF6 and CF8.

4.4 Residential Visual Receptors

4.4.1 The MSC and ES assessments of Residential Visual Amenity (ES paragraph 6.11.2 and ES Appendix 6.5: Visual Impact Tables) are summarised below. For simplicity the assessment is confined to predicted effects during operation:

Property	ES Sensitivity	ES Magnitude of Change	ES Significance	MSC Sensitivity	MSC Magnitude of Change	MSC Significance
Knockskae (No ES Reference)	*	*	*	High	High	**Major Adverse & Pervasive**
Craigard (ES Receptor 6)	Medium	High	**Moderate / Substantial**	High	Medium / High	**Moderate / Major Adverse & Pervasive**
Genoch Cottage (ES Receptor 40)	Medium	Low	Slight / Moderate	High	Medium / High	**Moderate / Major Adverse & Pervasive**
Glengill (ES Receptor 4)	High	High	**Substantial**	High	Medium / High	**Moderate / Major Adverse & Pervasive**
Tairlaw Tollhouse 1 (ES Receptor 50)	High	Low	**Moderate**	High	High	**Major Adverse & Pervasive**
Tairlaw Tollhouse 2 (ES Receptor 51)	High	High	**Substantial**	High	High	**Major Adverse & Pervasive**

NB * Not Assessed

Red Significant Effect **Blue** Potential Significant Effect **Black** No Significant Effect

4.4.2 The MSC Residential Visual Amenity Assessment is limited to six properties which have been specifically chosen and visited externally and internally to test the veracity of the ES assessment:

- ***Knockskae: (No ES Reference)***

Residents are high sensitivity receptors. The southern group of turbines is visible in an arc from the southeast to the southwest. The magnitude of effect would be high, as there would be a large scale alteration to the visual baseline with the introduction of visually prominent moving elements that are not characteristic of the view.

The nearest turbine is at ~675m and the turbines are set above the level of the property and would dominate the skyline and views from the access to the property, the garden ground and ground floor (kitchen and sitting room) as well as first floor rooms (spare) particularly on the southern principal façade. The access to the property would also be disrupted by the proposed windfarm access track. Therefore there would be effects during construction, operation and decommissioning.

The level of effect would be major significant, adverse and pervasive;

- ***Craigard (ES Receptor 6)***

  Residents are high sensitivity receptors. The southern group of turbines is visible from the house whilst the northern group is visible from the garden and access. The magnitude of effect would be high, as there would be a large scale alteration to the visual baseline with the introduction of visually prominent moving elements that are not characteristic of the view.

  The turbines are set above the level of the property and would dominate the skyline and views from the access to the property, the garden ground and ground floor (conservatory, sitting room and

dining room) as well as first floor rooms (bathroom and bedroom), particularly on the southern principal façade.

The level of effect would be major significant, adverse and pervasive;

- ***Genoch Cottage (ES Receptor 40)***

  Residents are high sensitivity receptors. The southern and northern groups of turbines are visible from the access whilst the northern group and blade tips of the southern group are visible from the house and garden. The magnitude of effect would be high, as there would be a large scale alteration to the visual baseline with the introduction of visually prominent moving elements that are not characteristic of the view.

  The turbines are set above the level of the property and would dominate the skyline and views from the access to the property, the garden ground and ground floor rooms (kitchen/sitting room and bedrooms) particularly on the western façade.

  The level of effect would be major significant, adverse and pervasive;

- ***Glengill (ES Receptor 4)***

  Residents are high sensitivity receptors. The northern group and blade tips of the southern group are visible from the house and garden. The magnitude of effect would be high, as there would be a large scale alteration to the visual baseline with the introduction

of visually prominent moving elements that are not characteristic of the view.

The turbines are set above the level of the property and would dominate the skyline and views from the garden ground and ground floor rooms (conservatory) as well as first floor rooms (bedroom) particularly on the western façade.

The level of effect would be major significant, adverse and pervasive;

- ***Tairlaw Tollhouse 1 (ES Receptor 50)***

  Residents are high sensitivity receptors. The northern group is visible from the garden and the southern group is visible from the house and garden. The magnitude of effect would be high, as there would be a large scale alteration to the visual baseline with the introduction of visually prominent moving elements that are not characteristic of the view.

  The turbines are set above the level of the property and would dominate the skyline and views from the garden ground and ground floor rooms (kitchen) as well as first floor rooms (sitting room) particularly on the western façade.

  The level of effect would be major significant, adverse and pervasive; and

- ***Tairlaw Tollhouse 2 (ES Receptor 51)***

  Residents are high sensitivity receptors. The northern group is visible from the garden and the southern group is visible from the house and garden. The magnitude of effect would be high, as there would be a large scale alteration to the visual baseline with the introduction of visually prominent moving elements that are not characteristic of the view.

  The turbines are set above the level of the property and would dominate the skyline and views from the garden ground and ground floor rooms particularly on the western façade.

  The level of effect would be major significant, adverse and pervasive.

4.4.3 ES paragraph 6.11.2 states that '*Within the 5 km detailed study area, 162 building receptor locations or receptor group locations were identified comprising individual and grouped residential and workplace properties and recreational facilities. Of these receptors, 26 were identified as potentially experiencing a significant impact as a result of the Project. Impacts to these receptors are described in the following paragraphs and shown on Figures 6.10a to 6.10d.*'

However, Knockskae (the closest property to the proposed development) is not identified as a residential receptor in ES paragraph 6.11.2 or ES Appendix 6.5 and is not indicated on ES Figures 6.10a to 6.10d.

The omission of the residential property most directly affected by the development is another factor that undermines the credibility of the ES assessment of visual effects on residential amenity.

4.4.4 The ES assessment of Genoch Cottage is incorrect and seems to be based on visibility of the southern group rather than the northern and southern groups. The extent of visibility is similar to Glengill. However the ES assesses Glengill as being subject to 'Substantial' effects, even though it is further from both groups of turbines.

4.4.5 There are also mistakes in the description of properties which further undermine the credibility of the ES assessment of visual effects on residential amenity and it may be safely assumed that the number of properties subject to significant (and potentially pervasive) effects exceeds the 26 identified in the ES.

4.4.6 On this basis, it can be concluded that visual residential amenity effects are particularly substantial on residents of Knockskae (as well as residents of the two properties at Tairlaw Tollhouse). Furthermore, visual residential amenity effects are substantial on the wider community within the Water of Girvan valley (to the south of Straiton), as well as residents of properties to the north of the development (i.e. residents of the two properties at Threethorns).

5.0 Conclusion

5.1 Summary

5.1.1 The salient points arising from the MSC review of the ES LVIA are:

- the applicant presents the proposed development as a single windfarm rather than two discrete developments. However the two

groups of turbines are geographically separate and are different in scale and layout;

- the landscape in the vicinity of Straiton is a '*highly valuable local resource*' that is made accessible through Core Paths as well as a number of locally promoted paths;
- the selection and positioning of ES viewpoints does not accord with GLVIA or SNH guidance (effects on users of the road to the south of Straiton, as illustrated by ES Viewpoint 1 should be contrasted with the effects illustrated by MSC Viewpoint 1);
- the ES methodology for visual sensitivity does not accord with the GLVIA 2nd Edition guidance;
- the ES does not set out a methodology for the assessment of residential visual amenity and the ES assessment describes assumed rather than actual views from within properties. This inherent weakness undermines its reliability;
- the MSC assessment finds that direct landscape character / landscape designation effects will vary but will be significant and adverse for up to 10km from the proposed development, rather than the 5km identified in the ES;
- the '*contribution to the local scenery*' by local Gardens and Designed Landscapes may be compromised by the proposed development;
- the ES wild land assessment does not accord with the SNH methodology. Therefore it is reasonable to place greater weight on the most recent SNH Core Areas of Wild Land mapping exercise;
- the ES assessment of cumulative landscape effects has now been superseded, as the '*Landscape Capacity Study for Wind Turbine Development in Ayrshire*' concludes that the affected LCTs are of

high sensitivity to the proposed scale of windfarm and that there is no capacity;

- a similar finding would apply to designated landscapes;
- the '*Landscape Capacity Study for Wind Turbine Development in Ayrshire*' identifies Glenalla Fell and Genoch Inner Hill as key landscape and visual features. The proposed northern turbine group is situated on the northeastern flank of Glenalla Fell and the proposed southern turbine group is situated between Glenalla Fell and Genoch Inner Hill;
- the ES assessment is not a true reflection of the extent and nature of significant visual effects, as it results from the poor selection of viewpoints, as well as the consistent understatement of receptor sensitivity and consequential significance of visual effects;
- the ES assessment finds significant visual effects at only ES Viewpoints 3, 5 and 9 (with only Viewpoint 3 subject to '*substantial*' effects);
- the MSC finds significant adverse visual effects at ES Viewpoints 1, 2, 3, 5, 6, 7 and 9. In addition the MSC assessment finds significant adverse visual effects at all four MSC viewpoints;
- the ES finds no significant cumulative effects with operational, consented or planning stage windfarms. However this is largely due to the selection of ES cumulative viewpoints;
- it is unclear how ES viewpoint 4 gives rise to significant additional cumulative effects when the ES individual assessment for this viewpoint is '*slight*' and not significant;
- the MSC assessment of cumulative visual effects finds significant combined effects with scoping stage windfarms at ES Cumulative Viewpoints 1, 3, 4, 5, 6, 7 and 9 as well as combined sequential cumulative effects on routes CR 4, CF6 and CF8;

- the MSC assessment of cumulative visual effects finds significant additional effects with scoping stage windfarms at ES Cumulative Viewpoints 1, 3, 5, 6, and 9 (potential significant additional effects at ES Cumulative Viewpoint 7) as well as additional sequential cumulative effects on routes CR 4, CF6 and CF8;
- the omission of the residential property most directly affected by the development is a further factor that undermines the credibility of the ES assessment of visual effects on residential amenity;
- the credibility of the ES residential amenity assessment is further undermined by inaccuracies and mistakes;
- visual residential amenity effects are particularly substantial on residents of Knockskae as well as residents of the two properties at Tairlaw Tollhouse; and
- visual residential amenity effects are substantial on the wider community within the Water of Girvan valley, as well as residents of properties to the north of the development.

5.2 Conclusion and Recommendation

5.2.1 The MSC review concludes that the ES LVIA is inadequate (as it has not been undertaken in accordance with GLVIA or SNH guidance) and that its findings cannot be relied upon, whilst the detailed MSC assessment (which does accord with current guidance) concludes that the proposed Linfairn Windfarm:

- would cause significant adverse landscape character effects for up to 10km from the proposed development;
- would compromise the South Ayrshire Scenic Area and Ayrshire Sensitive Landscape Character Area;
- is contrary to the recently adopted *'Landscape Capacity Study for Wind Turbine Development in Ayrshire'*;

- would compromise the SNH draft Core Areas of Wild Land designation;
- would cause significant adverse visual effects for up to 10km from the proposed development (on promoted local walks and viewpoints in particular); and
- would cause substantial effects on the residential amenity of Knockskae, in addition to the wider community.

Each of these points provides sufficient reason, in LVIA terms, for an objection to the proposed development by South Ayrshire Council.

Mark Steele – November 2013

Appendix A

MSC Landscape and Visual Impact Assessment Methodology

A1.0 Landscape and Visual Impact Assessment Methodology Guidance

A1.1 Landscape Institute

A 1.1.1 The MSC methodology is based upon the *'Guidelines for Landscape and Visual Impact Assessment'* (GLVIA) 3rd Edition, supplemented by the GLVIA 2nd Edition where aspects have become part of established practice or are referenced by the 3rd Edition.

A1.2 Scottish Natural Heritage

A 1.2.1 The following SNH guidance will be referred to for windfarm developments in Scotland:

- *'Siting and Designing Windfarms in the Landscape'* (SNH 2009);
- *'Assessing the Cumulative Impact of Onshore Wind Energy Developments'* (SNH 2012), as referenced in GLVIA 3rd Edition; and
- *'Visual Representation of Windfarms – Good Practice Guidance'* (SNH 2006).

A 1.2.2 The following SNH guidance (which has been endorsed by the Landscape Institute) will be referred to for windfarm developments in England or Wales:

- *'Assessing the Cumulative Impact of Onshore Wind Energy Developments'* (SNH 2012), as referenced in GLVIA 3rd Edition; and
- *'Visual Representation of Windfarms – Good Practice Guidance'* (SNH 2006), as referenced in Landscape Institute Advice Note 01/11.

A2.0 Significant Effects

A2.1 Significant Landscape and Visual Effects

A 2.1.1 GLVIA 3rd Edition paragraph 2.21 defines the assessment of landscape effects as *'assessing effects on the landscape as a resource in its own right'* and the assessment of visual effects as *'assessing effects of specific views and on the general visual amenity experienced by people'*.

A 2.1.2 The significance of landscape and visual effects is determined by the sensitivity of the landscape or visual receptor and the magnitude of change to the landscape or visual resource.

A 2.1.3 The *'Summary advice on good practice'* section of GLVIA 3rd Edition chapter 1 confirms that *'The emphasis on likely significant effects stresses the need for an approach that is proportional to the scale of the project that is being assessed and the nature of the likely*

effects'. This is reflected in the MSC methodology which focuses on *'likely significant effects'*.

A3.0 Assessment of Landscape Effects

A3.1 Landscape Baseline

A 3.1.1 GLVIA 3rd Edition paragraph 3.15 confirms that the aim for the landscape baseline is to *'…provide an understanding of the landscape in the area that may be affected – its constituent elements, its character and the way this varies spatially, its geographical extent, its history, its condition, the way the landscape is experienced and the value attached to it'*.

A 3.1.2 GLVIA 3rd Edition paragraph 3.21 confirms that the LVIA must identify *'landscape receptors, including the constituent elements of the landscape, its specific aesthetic or perceptual qualities and the character of the landscape in different areas'*.

A3.2 Landscape Character Assessment

A 3.2.1 GLVIA 3rd Edition paragraph 5.4 states that *'…Landscape Character Assessment (LCA) is the key tool for understanding the landscape and should be used for baseline studies'* and paragraph 5.12 states that *'Those published by competent authorities are usually the most robust and considered documents'*.

A 3.2.2 The Northumberland Landscape Character Assessment was published by Northumberland County Council in 2010.

A3.3 Landscape Receptor Sensitivity

A 3.3.1 GLVIA 3rd Edition paragraph 5.39 states that landscape receptors need to be assessed *'…in terms of their sensitivity, combining judgments of their susceptibility to the type of change or development proposed and the value attached to the landscape'*.

A 3.3.2 GLVIA 3rd Edition paragraph 5.40 defines susceptibility to change as *'…the ability of the landscape receptor (whether it be the overall character or quality/condition of a particular landscape type or area, or an individual element and/or feature, or a particular aesthetic and perceptual aspect) to accommodate the proposed*

development without undue consequences for the maintenance of the baseline situation and/or of landscape planning polices and strategies'.

A 3.3.3 The determination of landscape capacity is outwith the scope of LVIA as landscape capacity studies are prepared and published by Local Authorities.

A 3.3.4 GLVIA 3rd Edition paragraph 5.41 states that existing capacity studies '*…may provide useful preliminary background information for the assessment. But they cannot provide a substitute for the individual assessment of the susceptibility of the receptors in relation to change arising from the specific development proposal'.*

A 3.3.5 GLVIA 3rd Edition paragraph 5.44 confirms that the value of a landscape receptor is determined by a '*…review of any designations at both national and local levels, and where there are no designations, judgments based on criteria that can be used to establish landscape value'* (as set out in GLVIA Box 5.1) as well as the '*…individual contributors to landscape character, especially the key characteristics, which may include individual elements of the landscape, particular landscape features, notable aesthetic, perceptual or experiential qualities and combination of these contributors'.*

A 3.3.6 The MSC methodology uses the following criteria (based on GLVIA 3rd Edition paragraphs 5.19 to 5.31 and 5.39 to 5.47) when assessing the sensitivity of landscape receptors:

Sensitivity	*Criteria*
High	*A poor 'fit' with a landscape character of high value (i.e. designated landscape or adjacent to a designated landscape) and/or key landscape characteristics, features or perceptual qualities.*
Medium	*A moderate 'fit' with a landscape character of moderate value (i.e. undesignated landscape with local value) and/or key landscape characteristics, features or perceptual qualities.*
Low	*A good 'fit' with a landscape character of low value and limited landscape characteristics, features or perceptual qualities.*
Negligible	*A very good 'fit' with a landscape character of very low value lacking key landscape characteristics, features or perceptual qualities.*

A3.4 Magnitude of Landscape Effects

A 3.4.1 The most commonly used criteria are those set out in GLVIA 2nd Edition Appendix 6 – *'Determination of Magnitude Option 2'*. The MSC methodology has amended the criteria to reflect GLVIA 3rd Edition paragraphs 5.48 and 5.49:

Magnitude	*Criteria*
High	*Total loss of or large scale alteration to key elements/features/characteristics of the landscape resource (i.e. landscape or perceptions of the landscape) and/or introduction of prominent elements considered to be totally uncharacteristic when set within the distinctive attributes of the receiving landscape.*
Medium	*Partial loss or moderate scale alteration to one or more key elements/ features/characteristics of the landscape resource (i.e. landscape or perceptions of the landscape) and/or introduction of elements that may be prominent but may not necessarily be considered to be uncharacteristic when set within the distinctive attributes of the receiving landscape.*
Low	*Minor loss of or small scale alteration to one or more key elements/features/characteristics of the landscape resource (i.e. landscape or perceptions of the landscape) and/or introduction of elements that may be characteristic when set within the attributes of the receiving landscape.*
Negligible	*Very minor loss or very small scale alteration to one or more key elements/ features/characteristics of the landscape resource (i.e. landscape or perceptions of the landscape) and/or introduction of elements that are characteristic of the receiving landscape.*

A 3.4.2 The MSC methodology also determines the geographical extent of the varying levels of magnitude (as well as the consequential significance of effects).

A 3.4.3 GLVIA 3rd Edition paragraph 5.51 suggests that the duration of the development can be judged on the following scale:

- Short term – zero to five years;
- Medium term – five to ten years; and
- Long term – ten to twenty five years.

The planning approval period for windfarms and turbines is twenty five years, the upper end of the 'long term' spectrum.

A 3.4.4 GLVIA 3rd Edition paragraph 5.52 states that *'Reversibility is a judgment about the prospects and practicality of the particular effect being reversed in, for example, a generation'*.

'Siting and Designing Windfarms in the Landscape' paragraph 2.16 acknowledges that *'There is likely to be continued demand for renewable energy generation in Scotland for many decades ahead. Thus it is possible that existing well designed windfarms may remain in use well beyond 25 years, with turbines either refurbished or replaced and a planning consent renewed'*. This point is equally relevant to England and Wales.

Therefore, whilst it is practicable for a windfarm or turbine to be removed and the site restored, the prospects are unlikely within a generation.

A3.5 Significance of Landscape Effects

A 3.5.1 The following matrix (derived from GLVIA 3rd Edition paragraphs 3.33 to 3.36) describes the relative levels of significance:

	High Sensitivity	*Medium Sensitivity*	*Low Sensitivity*	*Negligible Sensitivity*
High Magnitude	***Major***	***Moderate/Major***	***Moderate***	***Moderate/Minor***
Medium Magnitude	***Moderate/Major***	***Moderate***	***Moderate/Minor***	***Minor***
Low Magnitude	***Moderate***	***Moderate/Minor***	***Minor***	***Minor/Negligible***
Negligible Magnitude	***Moderate/Minor***	***Minor***	***Minor/Negligible***	***Negligible***

Red – Significant **Blue** – Potentially Significant **Black** – Not Significant

The MSC assessment uses intermediate levels of sensitivity/magnitude (high/medium, medium/low, etc.) and the threshold of significance is placed within the moderate level of effect.

A 3.5.2 Whilst the matrix is a useful tool to illustrate and test the basis for determining the level of effect, GLVIA 3rd Edition paragraph 3.35 advises that there should not be *'an over reliance on matrices…'*

Therefore a reasoned professional judgment for the final allocation of the level of significance is based on the following significance criteria (derived from GLVIA 3rd Edition paragraphs 3.32 to 3.36, 5.53 to 5.57 and Figure 5.10):

Level	Criteria
Major	*The introduction of discordant and/or intrusive elements that will cause the loss or a substantial deterioration to distinctive landscape characteristics, features or perceptual qualities.*
Moderate	*The introduction of discordant and/or intrusive elements that will cause a partial deterioration to distinctive landscape characteristics, features or perceptual qualities.*
Minor	*The introduction of elements that will cause a slight deterioration to landscape characteristics, features or perceptual qualities.*
Negligible	*The introduction of elements that will cause an imperceptible deterioration to landscape characteristics, features or perceptual qualities.*

A3.6 Nature of Landscape Effects

A 3.6.1 GLVIA 2nd Edition paragraph 2.14 states that *'The description and analysis of effects on a landscape resource relies on the adoption of certain basic principles about the positive (or beneficial) and negative (or adverse) effects of change in the landscape.'*

It is usual for windfarm LVIAs to quote various public opinion surveys that report a wide range of public responses. However it is not general perceptions of wind farms that are being assessed by the LVIA but the specific effects of the proposed development. In the absence of opinion surveys for specific proposals it is reasonable to take a precautionary approach and assume that effects are adverse (i.e. the worst case scenario).

A3.7 Wild Land

A 3.7.1 The MSC assessment of effects on wild land is based upon the methodology set out in *'Interim Guidance Note: Assessing the Impacts on Wild Land'* (SNH 2007).

A4.0 Assessment of Visual Effects

A4.1 Visual Baseline

A 4.1.1 GLVIA 3rd Edition paragraph 3.15 confirms that the aim for the Visual baseline is to *'…establish the area in which the development may be visible, the different groups of people who may experience views of the development, the places where they will be affected and the nature of the views and visual amenity at these points'.*

A 4.1.2 GLVIA 3rd Edition paragraph 3.21 confirms that the LVIA must identify *'visual receptors, that is, the people who will be affected by changes in views or visual amenity at different places'*.

A4.2 Viewpoints and Visual Representation

A 4.2.1 The MSC selection and visual representation of viewpoints accords with GLVIA 3rd Edition paragraphs 6.16 to 6.23, Landscape Institute Advice Note 01/11 and *'Visual Representation of Windfarms – Good Practice Guidance'*.

'Visual Representation of Windfarms – Good Practice Guidance' is endorsed by the Landscape Institute *'Landscape Advice Note 01/11'* and *'Visual Representation of Windfarms – Good Practice Guidance'* Table 7 sets out the *'Views and viewers to be represented through choice of viewpoints'*.

A 4.2.2 The MSC photographs are either presented as a panorama (comprising stitched single frame images) with an angle of view or viewing distance corresponding to that used in the Environmental Statement or a single frame image.

A 4.2.3 The MSC photographs have been taken using a digital SLR with a full frame sensor (Canon EOS 5D Mark II) and a 50mm fixed focal length lens. Panoramic photographs have been taken using a Manfrotto calibrated panoramic head and tripod.

A 4.2.4 The MSC wirelines have been produced by Envision 3D Ltd to match the photograph parameters.

A4.3 Visual Receptor Sensitivity

A 4.3.1 The MSC methodology uses the following criteria (based on GLVIA 3rd Edition paragraphs 6.31 to 6.37) when assessing the sensitivity of landscape receptors:

Sensitivity	Criteria
High	People engaged in an occupation or activity with views that make a substantial contribution to visual amenity (i.e. residents, communities with visual settings, those engaged in outdoor recreation (e.g. walkers, cyclists, field sportsmen, golfers, etc), visitors to heritage assets or other attractions and tourist as well as resident road users).
Medium	People engaged in an occupation or activity with views that make a contribution to visual amenity (i.e. general road users, home workers and those engaged in outdoor work (e.g. farmers)).
Low	People engaged in an occupation or activity with limited focus on visual amenity (i.e. commercial vehicle road users).
Negligible	People engaged in an occupation or activity with minimal focus on visual amenity (i.e. industrial workers).

A4.4 Visual Magnitude of Effect

A 4.4.1 The MSC methodology uses the following criteria (based on GLVIA 3rd Edition paragraphs 6.38 to 6.41) when assessing the magnitude of effect on visual receptors:

Magnitude	Criteria
High	Total loss of or large scale alteration to key elements/features/characteristics of the visual resource and/or introduction of visually prominent elements considered to be totally uncharacteristic when set within the distinctive attributes of the view.
Medium	Partial loss or moderate scale alteration to one or more key elements/ features/characteristics of the visual resource and/or introduction of elements that may be visually prominent but may not necessarily be considered to be uncharacteristic when set within the distinctive attributes of the view.
Low	Minor loss of or small scale alteration to one or more key elements/features/characteristics of the visual resource and/or introduction of elements that may be characteristic of the view.
Negligible	Very minor loss or very small scale alteration to one or more key elements/ features/characteristics of the baseline and/or introduction of elements that are characteristic of the view.

A 4.4.2 One of the most prominent aspects of wind turbines is movement and it is of particular relevance that the human eye (and in particular the peripheral field of view) is highly sensitive to movement. Therefore even if the source of movement is towards the edge of a particular view it nevertheless can be a distraction that draws the attention of the viewer.

A 4.4.3 Furthermore, '*Visual Representation of Windfarms*' (APP 7.6) Technical Appendix C paragraph C6 concludes that within a '*…very large field of view only a very small central area will be seen in detail. This is the part of the image which falls on the fovea of the eye and is about 6-10° across.*' Therefore a relatively small vertical and horizontal angle of visibility may nevertheless appear prominent within the view.

A4.5 Significance of Visual Effects

A 4.5.1 The MSC methodology for the assessment of the significance of visual effects uses a similar matrix similar to that used for the assessment of the significance of landscape effects.

A 4.5.2 A reasoned professional judgment for the final allocation of the level of visual significance is based on the following criteria (derived from GLVIA 3rd Edition paragraphs 6.42 to 6.45):

Level	*Criteria*
Major	*The introduction of visually discordant and/or intrusive elements that will cause the loss or a substantial deterioration to distinctive visual characteristics or perceptual qualities.*
Moderate	*The introduction of visually discordant and/or intrusive elements that will cause a partial deterioration to distinctive visual characteristics or perceptual qualities.*
Minor	*The introduction of elements that will cause a slight deterioration to visual characteristics or perceptual qualities.*
Negligible	*The introduction of elements that will cause an imperceptible deterioration to visual characteristics or perceptual qualities.*

A4.6 Residential Visual Amenity

A 4.6.1 There is limited published guidance on the assessment of effects on residential amenity (brief references in GLVIA 2nd Edition (APP 7.1) paragraphs 6.30, 7.30 and 7.32 and GLVIA 3rd Edition (APP 7.2) paragraphs 6.17 and 6.36). In the absence of comprehensive guidance it has become typical for reference to be made to Inspector's/Reporter's Appeal Decisions and in particular those of Mr. D Lavender.

A 4.6.2 Consequently the assessment of residential amenity is often referred to as the 'Lavender Test'. However a 'test' implies an established methodology with agreed terminology and

criteria. Mr. Lavender simply (and rightly for the decision maker) expresses his judgment on the acceptability of residential amenity effects.

A 4.6.3 Furthermore, the specific findings of previous Appeal Decisions do not set a precedent (as each case must be judged on its merits) but may give some guidance on the purpose and scope of a residential amenity assessment.

A 4.6.4 MSC has undertaken a wide review of windfarm Appeal Decisions that refer to residential visual amenity in order to identify a consistent approach. A focus on *'living conditions'* is expressed in a number of Appeal Decisions:

- *'…to ensure satisfactory living conditions…'* – Enifer Downs Farm Windfarm Decision Notice, Ref: APP/X2220/A/08/2071880, paragraphs 103 and 106;
- *'…detrimental effect on the living conditions…'* – Newlands Farm Windfarm Decision Notice, Ref: APP/E0915/A/09/2101659, paragraphs 35 and 36;
- *'…the test should be whether living conditions would be demonstrably harmed by significant and over-dominant visual and other impacts…'* Spittal Hill Windfarm, Report to the Scottish Ministers, paragraph 9.61; and
- *'…pervading effect on living conditions…'* – Palmers Hollow Windfarm Decision Notice, Ref: APP/Y2430/A/09/2108595, paragraph 91.

In summary, the purpose of the residential visual amenity assessment (RVAA) is to determine the *'detrimental'* visual effects on *'living conditions'* arising as a consequence of the proposed development.

A 4.6.5 It is usual for an assessment of effects on residential amenity to consider three factors: noise, shadow flicker and visual effects. The MSC methodology relates specifically to the assessment of visual effects.

A 4.6.6 The diversity of terms used to describe detrimental visual effects reflects the lack of published guidance and a settled terminology. MSC has identified the following commonly used terms in Appeal Decisions:

- Overwhelming / overbearing / overpowering / overdominant;
- Inescapable / pervading / unavoidable;
- Uncomfortable / unpleasant / unattractive.

A 4.6.7 The use of 'over' in the first bullet point implies unacceptability which is a matter to be determined by the decision maker rather than the assessor. The assessment of visual dominance (i.e. proximity, scale, composition, angle of view etc) corresponds to the LVIA assessment of the magnitude of effect and consequential significance.

A 4.6.8 The second and third bullet points are qualitative and describe the way in which the effects are experienced / perceived. Of these terms, 'pervasiveness' best describes the extent to which uncomfortable, unpleasant and unattractive dominant effects will affect the quality of life experienced by residents. The nature of the effect is also relevant as only adverse visual effects could be considered detrimental.

A 4.6.9 Therefore, the MSC residential visual amenity assessment provides a description of the predicted pervasiveness of adverse significant visual effects upon the residential amenity of residents at representative properties.

The Decision Maker can then make a judgment as to whether the level of pervasive significant and adverse visual residential amenity effects is sufficient to object, refuse planning permission or dismiss the appeal. This judgment would be based on whether effects are particularly substantial on residents of one or more nearby properties (i.e. Newlands Farm Windfarm and Palmers Hollow Windfarm Appeal Decision Notices) and/or effects are substantial on a wider community (i.e. Spittal Hill Windfarm, Druim Ba Windfarm and Harelaw Renewable Energy Park Reports to Scottish Ministers).

A5.0 Cumulative Landscape and Visual Effects

A5.1 Cumulative Landscape and Visual Effects

A 5.1.1 ES paragraph 6.11.1 quotes GLVIA 2nd Edition paragraph 7.12 which states that cumulative effects '*…result from additional changes to the landscape or visual amenity caused by the proposed development in conjunction with other developments…*'

This definition is reiterated in '*Assessing the Cumulative Impact of Onshore Wind Energy Developments*' paragraph 55.

A 5.1.2 However '*Assessing the Cumulative Impact of Onshore Wind Energy Developments*' paragraph 7 also defines cumulative impacts as '*…the additional changes caused by a*

proposed development in conjunction with other similar developments or as the combined effect of a set of developments, taken together.'

Furthermore, GLVIA 3rd Edition paragraph 7.18 describes an assessment focused on the additional effects as a *'limited view'* and suggests that some stakeholders may be *'…more interested in the combined effects…'*

A5.1.3 Therefore, the MSC methodology seeks to address both individual and combined effects by assessing the combined effects of all existing, under construction and planning stage windfarms and then assessing the individual contribution of the proposed windfarm to these combined effects.

A5.1.4 The MSC assessment of cumulative effects does not assess receptors that are subject to less than moderate individual effects as these effects are unlikely to make a significant contribution to significant cumulative effects.