

Talladh-a-Beithe Windfarm

Section 36 Application by Eventus BV

Landscape and Visual Impact Assessment Review

on behalf of The John Muir Trust

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1.0 Introduction

1.1 Experience

1.1.1 The author of this review 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 sixty windfarm / wind turbine landscape and visual impact assessments prepared by a broad range of landscape practices.

1.2 Appointment and Scope

1.2.1 MSC was instructed to act on behalf of the John Muir Trust (JMT) in April 2014, to address matters relating to the landscape and visual impact of the proposed Talladh-a-Beithe Windfarm planning application.

1.2.2 The review is based upon a desk study of relevant ES and other documents, as well as detailed fieldwork including visits to the site, the Environmental Statement (ES) viewpoints and the wider study area.

1.2.3 Matters relating to wild land are addressed in the report prepared by Stephen Carver (Wildland Research Institute) and the planning context and overall objection on behalf of the Trust is set out in the Planning Report prepared by Ian Kelly (Graham + Sibbald).

1.3 Documents

1.3.1 The MSC review will refer to the following documents in particular:

- Volume 1: Non-Technical Summary (June 2014);
- Volume 2: Environmental Statement (June 2014);
- Volume 3: Appendices (June 2014);
- Volume 4: Figures (June 2014);
- Volume 5: LVIA Figures (June 2014);
- 'The Core Paths Plan' (Perth and Kinross Council 2012);
- GLVIA2 'Guidelines for Landscape and Visual Impact Assessment – 2nd Edition' (LI & IEMA 2002);
- GLVIA3 'Guidelines for Landscape and Visual Impact Assessment – 3rd Edition' (LI & IEMA 2013);
- 'Tayside Landscape Character Assessment' (SNH 1999);
- 'Ben Alder, Ardverkie and Creag Meagaidh Landscape Character Assessment' (SNH 1999);
- 'Strategic Locational Guidance for Onshore Wind Farms in Respect of the Natural Heritage' (SNH 2005);
- 'Visual Representation of Windfarms – Good Practice Guidance' (SNH 2014);
- 'Siting and Designing Windfarms in the Landscape' (SNH 2014);
- 'Assessing the Cumulative Impact of Onshore Wind Energy Developments' (SNH 2012); and
- 'The Backclothing of Wind Turbines in the Scottish Landscape' (Cairngorms National Park Authority 2012).

2.0 Design and Proposed Development

2.1 Location

2.1.1 The proposed windfarm is located within the Talladh-a-Bheithe Estate and lies approximately 25 km to the south of Dalwhinnie and 14 km west-north-west of Kinloch Rannoch. The Talladh-a-Bheithe Estate extends from the far north western end of Loch Rannoch northwards to the Talladh-a-Bheithe Forest and the southern end of Loch Ericht (Non-Technical Summary Figure 1).

2.2 Siting and Design Principles and Constraints

2.2.1 ES paragraph 2.5.1 states that *'The following design principles were followed during the design iterations to ensure that the final design of the Proposed Development was the most suitable for the site:*

- *the Proposed Development should appear to relate well to the landform on which it stands;*
- *the Proposed Development should have a cohesive appearance;*
- *Minimise the potential visual effects upon National Scenic Area (NSA) and other designated land; and*
- *other environmental constraints and associated buffers are to be respected.*
- *Consideration of both Landscape and Visual Effects'*

This review will assess whether these rather generic design principles have been achieved, however it should be noted that the design principles do not mention wild land.

2.2.2 ES paragraph 2.6.1 states that *'As a consequence of the EIA process, there have been 3 main design iterations to the layout of the Proposed*

Development in order to avoid, reduce or offset the potential environmental effects associated with the Proposed Development.'

Again this review will determine the degree to which landscape and visual effects have been avoided, reduced or offset.

2.2.3 ES paragraph 2.6.12 states that '*Sensitivity maps produced by Scottish Natural Heritage identify areas of relative sensitivity to wind farm developments. These consider landscape designations, biodiversity interest, areas of value to birds and other aspects of natural heritage sensitivity*' and ES paragraph 2.6.14 states that '*Land on the Estate is predominantly in Zone 2: Medium Natural Heritage Sensitivity.*'

The sensitivity maps form part of '*Strategic Locational Guidance for Onshore Wind Farms in Respect of the Natural Heritage*' published by SNH in 2005. However, paragraph 8 of the guidance confirms that '*This guidance provides SNH's broad overview of where there is likely to be greatest scope for wind farm development, and where there are the most significant constraints, in natural heritage terms, in order to safeguard Scotland's most valued natural heritage. At the strategic scale at which it is presented, this locational guidance cannot be prescriptive at the level of an individual site. The maps do not purport to provide guidance on the acceptability to SNH of any particular proposal in any given location. However they provide a starting point for the assessment that SNH will make and the advice that it will offer on individual proposals.*'

Therefore given the strategic nature of this SNH guidance greater weight should be given to more recent SNH guidance and mapping and in particular that relating to wild land.

2.3 Design Phase 1: Pre-EIA Scoping

2.3.1 ES paragraph 2.6.4 states that *'During the preparation of the Scoping Report the site was considered with regard to three separate land parcels, known as the 'North Area' the 'South West Area' and the 'South East Area' and ES paragraph 2.6.25 confirms that 'A simple red, amber, green colour coding system has been used to compare the constraints by area...'*

ES Table 2.2 demonstrates that the *'landscape and views'* constraints are either red or amber for all areas. None are green (the least constrained).

2.4 Design Phase 2: Post-EIA Scoping

2.4.1 ES paragraph 2.7.22 states that *'Access to the site in terms of construction traffic and abnormal loads was a key consideration in the context of all design iterations.'*

However no details are provided for the works required to enable the two proposed access options (by barge via Loch Ericht and/or by rail via Rannoch Station) or any assessment of effects that might justify the selection of either option. This is a major omission in the ES.

2.4.2 ES paragraph 2.7.27 states that *'Initial ZTV modelling and site survey demonstrated that turbines in the northern study area, which is higher than the other two study areas (South East and South West), could affect views extending further north and toward the Cairngorms National Park. This influence, when considered together with potential ecological impacts discussed above, has led to a decision to focus further*

investigation of turbine siting in the two more southerly study areas (southeast and southwest).'

The 'initial' zone of theoretical visibility (ZTV) map is not provided for turbines within the 'northern area', so it is not possible to determine the reduction of effects when compared with the final development layout.

2.4.3 ES paragraph 2.7.28 states that *'The slopes in the South East and South West study areas are lower than in the north and offer acceptable wind resource. These areas also offer opportunity to utilise hills to the immediate north and southeast for screening and backgrounding. The design process since the scoping consultation has involved assessing the effects on landscape and views of moving turbines within the three study areas which were identified at the scoping stage. A 3D modelling exercise has helped to demonstrate that this could be effective especially in minimising effects on viewpoints including those from the shores of Loch Rannoch, Bridge of Gaur, Kinloch Rannoch and more distantly Rannoch Moor.'*

Again comparative zone of theoretical visibility (ZTV) maps are not provided, so it is not possible to determine the reduction of effects when compared with the final development layout.

The reference to 'backgrounding' as a design 'opportunity' is informative as it demonstrates a lack of understanding with reference to the magnitude of effects arising from turbines seen against a landform backdrop.

2.4.4 Furthermore, ES paragraph 2.7.36 states that *'...consideration was given to the relationship of the turbines with the underlying characteristics of the landscape, 'skyline breaks' where turbines appear above the natural horizon in key views, and the general pattern of the layout in within the landscape.'*

The treatment of turbines *'above the natural horizon'* as a design constraint also demonstrates a lack of understanding.

2.4.5 *'The Backclothing of Wind Turbines in the Scottish Landscape'* was commissioned by the Cairngorms National Park Authority for the Alt Duine s.36 Windfarm PLI in 2012, as the majority of principal viewpoints were located in elevated locations above the level of the proposed windfarm. A similar situation exists for the Talladh-a-Biethe Windfarm.

The report concludes that *'While the design approach of backclothing is advocated for some development types, this study finds that backclothing of wind turbines results in very different landscape and visual effects and is typically not advised for Scottish upland landscapes due to the prominence of colour and texture contrast.'*

2.4.6 A number of reasons are cited for the *'The Backclothing of Wind Turbines in the Scottish Landscape'* conclusion including:

- *'Windfarms are typically more prominent and result in greater visual effects where they appear in strong visual contrast to their backcloth – mainly in terms of colour and pattern contrast';* and

- *'Light-coloured wind turbines seen against a dark-coloured backcloth will typically have greater prominence than either light or dark-coloured wind turbines seen against the sky.'*

Therefore the ES reliance on 'backgrounding' as a design opportunity is totally misguided. Backgrounding would increase rather than mitigate landscape and visual effects.

2.4.7 In addition, the site infrastructure (tracks, substation etc) would be visible from elevated viewpoints (aspects which are not illustrated on the ES photomontages) and would add to the magnitude of landscape and visual effects.

2.4.8 ES paragraph 2.7.31 states that *'In addition to the overall appearance of the wind farm from the surrounding landscape, appropriate buffers have been applied during the design of the proposed wind farm.'*

It is unclear what 'appropriate buffers' have been applied to landscape constraints.

2.4.9 ES paragraph 2.7.39 states that *'No turbines have been sited within the Loch Rannoch and Glen Lyon National Scenic Area and visibility from this area is for the most part restricted only to its northern extent.'*

However, this statement acknowledges that the proposed development would be visible from parts of the Loch Rannoch and Glen Lyon National Scenic Area.

2.4.10 ES paragraph 2.7.40 states that *'In the more immediate vicinity of the site, Layout Option Two has now removed potential views of the turbines from much of the area around Loch Rannoch and sought to ensure the turbines fit well with the landscape in remaining views.'*

However, this statement acknowledges that the proposed development would be visible from some locations *'around Loch Rannoch'*. However the remaining views are predominantly from elevated locations where the turbines would be seen against a landform backdrop. Therefore the turbines would not *'fit well with the landscape'*.

2.5 Design Phase 3: Ongoing Design Iteration

2.5.1 ES paragraph 2.7.51 confirms that *'Overall, changes to the Proposed Development layout during Phase Three were made as a result of the findings of the baseline survey work and consultation undertaken with the consultees and the public. The changes included both the relocation and reduction in the number of turbines into a proposed scheme of 24 turbines as shown in figure 4.1.'*

2.6 Site Access

2.6.1 ES paragraph 3.3.13 confirms that *'The wind turbines will be transported to the Talladh a Bheithe Estate via several different methods. The majority of the components will be shipped to Corpach near Fort William and transported via rail to Rannoch Station. Upon arrival at Rannoch Station, abnormal load vehicles will collect the turbine components and deliver these sections to the site via the A846.'* ES paragraph 3.3.14 continues *'The site access proposal involves the enhancement of the current estate access with the A846 at the south western edge of the site. The site access will replace the existing access and be constructed in the form of a*

priority junction with the B846 adjacent to Ericht Cottage, which lies approximately 7 miles east of Rannoch Railway Station.'

It should be noted that all ES references to the A846 actually relate to the B846. Furthermore, no details are provided for improvement works (typically enlarged laybys and road widening) to the B846 which (for the majority of the route between Rannoch Station and the site entrance) is a narrow single track road (ES Figures B-03, B-04, B-05 and B-08).

- 2.6.2 It should also be noted that ES paragraph 4.2.3 refers to '*Public highway and access route improvements*' and paragraph 4.6.2 refers to '*Detailed plans of any works proposed for the public roads to suit the requirements of the relevant authorities*'.

Therefore, it is implied that improvements to the B846 are anticipated but details are not included in the application. These "improvements" are likely to result in landscape and visual effects that could easily be significant given the current character of the road. These potential effects cannot be assessed at this stage given the absence of information.

- 2.6.3 Furthermore, ES paragraph 4.7.3 states that '*Modifications and improvements would be required for the estate roads. These would be widened and upgraded to a suitable width, typically 5.0m wide, to allow access for the abnormal loads. Additional localised widening would be required at bends to accommodate the oversail of these vehicles. Along the length of the access track, burn crossings would be checked for access and bearing strength, with modifications and strengthening works undertaken as necessary.*'

The 'estate road' in question is not a typical estate track, as it is a bitumen surfaced road providing access to the Loch Ericht hydro-electric dam and facilities (ES Figures B-04, B-13 and B-14). The same abnormal loads would be travelling along the B846 and it may therefore be assumed that similar works would be required to the public highway. If this is the case then these works could potentially contribute to significant landscape and visual effects.

2.6.4 ES paragraph 3.3.13 confirms that '*Larger component parts which cannot be transported by rail will be loaded onto barges on Loch Ericht and transported to the site from the head of the Loch at Dalwhinnie. The arrangements for transporting the turbine components from the barges to on land vehicles is to be determined post consent and is illustrated by way of an indicative hard standing area on Figure 1.2. The component parts will be transported to the head of Loch Ericht by abnormal load vehicles via the A9 and the A889.*'

An 'indicative hard standing area' is inadequate for determining the landscape and visual effects for an integral and potentially large element of the proposed development.

2.6.5 Therefore details of two key and potentially visually prominent elements of the proposed development (works to the B846 and works associated with barge facilities on Loch Ericht) are not included in the application ES.

2.7 The Proposed Development

2.7.1 The final design comprises 24 wind turbines of up to a maximum blade tip height of 125 m (up to 80 m hub height and up to 90m rotor diameter), as well as infrastructure including temporary construction compounds,

borrow pits, permanent hardstandings, external transformers, an onsite substation, a maintenance building and two permanent meteorological monitoring masts.

3.0 Landscape and Visual Impact Assessment Methodology

3.1 ES LVIA Methodology

3.1.1 ES paragraph 1.4.1 confirms that Pegasus Environmental Ltd undertook the landscape and visual assessment.

3.1.2 ES Appendix 7.1 sets out the Pegasus LVIA methodology and paragraph A7.1.3 confirms that the assessment criteria have been '*...developed specifically for this appraisal to ensure that the methodology is fit for purpose*'.

This report will test whether this is the case, as well as highlight differences between the Pegasus methodology and the MSC Methodology (MSC Appendix A).

3.1.3 For ease of reference, this review will follow the structure and section headings used in ES Appendix 7.1: LVIA Methodology.

3.2 'Nature (Sensitivity) of Landscape Features' and 'Nature (Sensitivity) of Landscape Character'

3.2.1 The Pegasus use of the term '*nature of effect*' is potentially confusing, as whilst GLVIA3 paragraph 3.24 (and Box 3.1) refers to the proposed IEMA use of the term, GLVIA3 continues with the use of the terms '*sensitivity*' and '*magnitude*'.

3.2.2 The Pegasus methodology distinguishes between the sensitivity of 'landscape features' and 'landscape character'.

However GLVIA3 makes no such distinction and GLVIA3 paragraph 5.40 confirms that susceptibility to change means '*...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 a particular aesthetic and perceptual aspect) to accommodate the proposed development without undue consequences for the maintenance of the baseline situation and/or the achievement of landscape planning policies and strategies.*'

3.2.3 ES Appendix 7.1 paragraph 7.1.9 states that '*Together with on site appraisal an assessment of landscape sensitivity to wind energy development has been undertaken employing professional judgement for relevant character areas/types*' and paragraph 7.1.10 confirms that '*The nature or sensitivity of landscape character has been described as very high, high, medium, low or very low.*'

However no definitions are provided for the levels of landscape sensitivity (as are described in MSC Appendix A paragraph A3.3.6).

3.3 'Nature (Sensitivity) of Visual Receptors'

3.3.1 ES Appendix 7.1 paragraph 7.1.11 does define the levels of visual sensitivity and in particular that '*...users of trunk/major roads and passengers on commercial railway line (except where these form part of a recognised and promoted scenic route*' are low sensitivity visual receptors.

However, GLVIA3 paragraph 6.33 confirms that *'Travelers on road, rail or other transport routes tend to fall into an intermediate category of moderate susceptibility to change. Where travel involves recognised scenic routes awareness of views is likely to be particularly high'*

3.3.2 The MSC methodology (MSC Appendix A paragraph A4.3.1) acknowledges that the sensitivity of road users will vary from high (tourists and residents) to low (commercial drivers).

3.4 'Nature (Magnitude) of Effects – General Note'

3.4.1 ES Appendix 7.1 paragraph A7.1.18 states that *'The flow diagram on page 39 of GLVIA3 now suggests that the magnitude of effect is a function of three factors (the size/scale of the effect, the duration of the effect and the reversibility of the effect). This is somewhat problematic in the context of assessing wind energy development.'*

ES Appendix 7.1 paragraph A7.1.19 confirms that *'...it would be incorrect to report a lesser magnitude of change to the landscape or view as a result of the time limited period of the effect or the relative reversibility of the effect'* and A7.1.20 concludes that *'The approach taken in this LVIA is therefore to consider magnitude of effect solely as the scale or size of the effect in the traditional sense of the term 'magnitude'. Having identified the magnitude of effect as defined above the LVIA also describes the duration and reversibility of the identified effect before drawing a conclusion on significance.'*

3.4.2 MSC Appendix A paragraphs A3.4.3 and A3.4.4 discuss duration and reversibility and conclude that effects are long term and are unlikely to be

reversed within a generation. SPP2 (June 2014) now confirms that wind farm sites should be regarded as permanent.

3.5 'Nature (Sensitivity) of Effects on Landscape Features' and 'Nature (Sensitivity) of Effects on Landscape Character'

3.5.1 The Pegasus LVIA methodology again distinguishes between the magnitude of effects on 'landscape features' as well as 'landscape character'. Furthermore the landscape character criteria set out in ES Appendix 7.1 paragraph 7.1.23 rely on the assessment of effects on 'landscape features'.

3.5.2 The MSC methodology uses criteria based on GLVIA2 Appendix 6 'Determination of Magnitude: Option 2' updated with reference to GLVIA3 paragraphs 5.48 and 5.49 (MSC Appendix A paragraph A3.4.1).

3.6 'Nature (Magnitude) of Effects on Views and Visual Amenity'

3.6.1 ES Appendix 7.1 paragraph A7.1.25 sets out relatively simplistic 'Criteria for Magnitude of Visual Amenity Change'.

The reference to 'dominating' and 'overbearing' are of particular concern, as these are terms more commonly used to describe the acceptability of residential visual amenity effects rather than the magnitude of effect. Neither term is defined in the Pegasus methodology nor are they used in published LVIA guidance.

3.6.2 The MSC methodology uses more comprehensive criteria based on GLVIA2 Appendix 6 'Determination of Magnitude: Option 2' and updated with reference to GLVIA3 paragraphs 6.38 to 6.41 (MSC Appendix A paragraph A4.4.1).

3.7 'Duration of Effect' and 'Reversibility of Effect'

3.7.1 ES Appendix 7.1 paragraph A7.1.28 sets out periods for short ('under 1 year') to long term ('over 5 years') effects.

3.7.2 The MSC methodology uses the periods suggested in GLVIA3 paragraph 5.51:

- 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 and therefore appropriate emphasis should be given to the duration of effects. As previously stated wind farm sites are now to be regarded as permanent.

3.7.3 ES Appendix 7.1 paragraph A7.1.29 simply describes effects as 'permanent' or 'not permanent'.

However, GLVIA3 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*'.

It could be argued that the 25 year planning approval period for windfarms equates to a 'generation' (and in any case the development is likely to be subject to a new application before the end of the 25 year period). Therefore less emphasis should be placed on reversibility than is implied by the development being 'not permanent'.

3.8 'Level of Effect'

- 3.8.1 ES Appendix 7.1 paragraph A7.1.34 states that '*...effects described as Substantial, Substantial/Moderate and in some cases Moderate may be regarded as significant effects as required by the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2011. These are the effects which the authors of the LVIA consider to be material in the decision making process.*'
- 3.8.2 The MSC methodology uses a matrix to illustrate relative levels of effect (MSC Appendix A paragraph A3.5.1). However, whilst a 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...*'
- 3.8.3 Therefore a reasoned professional judgment for the final allocation of the MSC level of significance is based on significance criteria derived from GLVIA3 paragraphs 3.32 to 3.36, 5.53 to 5.57 and Figure 5.10 (MSC Appendix A paragraph A3.5.2).
- 3.8.4 The MSC methodology also determines whether significant effects are adverse, neutral or beneficial.

4.0 Landscape Impact Assessment

4.1 Landscape Character Assessment

- 4.1.1 In the experience of MSC landscape characterising effects of windfarm developments do not extend much beyond 5km, therefore the MSC landscape character assessment is limited to the main Landscape Character Types (LCTs) within 5km of the proposed turbines (ES Figure 7.7).

4.1.2 The landscape character effects are summarised below (based on the assessment in ES Table 7.12 and MSC Appendix B):

Landscape Character Type	ES Sensitivity	ES Magnitude	ES Significance	MSC Sensitivity	MSC Magnitude	MSC Significance
LCT 3: Highland Summits and Plateaux LCU (j) Talla Bheith and Craignour Forest	Medium/High	Very High (Up to 1km)	Substantial	Very High	Very High	Very Major Adverse (Direct effects up to at least 5km)
		High (Up to 4km)	Substantial/Moderate			
LCT 2a: Highland Glens with Lochs LCU Loch Ericht	High	Very High (Up to 1km)	Substantial	High	High	Major Adverse (Direct and indirect effects up to at least 5km)
		High (Beyond 1km)				
LCT 2b: Mid Highland Glens with Lochs LCU Loch Rannoch	High	Low	Slight	High	Low	Moderate Adverse (Indirect effects up to at least 5km)
LCT 4: Plateaux Moor LCU Loch Rannoch	Medium to Very High	Generally Low	Moderate	High	Low	Moderate Adverse (Indirect effects up to at least 5km)
		Medium at the centre of Moor				

NB * Not Assessed

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

4.1.3 The ES and MSC assessments find that LCT 3, 2a would be subject to significant landscape effects (which the MSC assessment finds to be adverse). However the ES assessment finds significant effects at the centre of the Plateaux Moor LCT whilst the MSC assessment concludes that effects would not be significant due to the distance from the proposed turbines.

A similar conclusion applies to the ES finding of significant effects on the Blanket Bog LCT.

4.1.4 However, the ES finds significant effects on the Carn Gorm / Schiehallion landscape character unit of the Highland Summits and Plateaux LCT and the lower slopes of Ben Alder within the Isolated Mountain LCT. Given the particular sensitivity of these two LCTS, MSC agree (in this case) that significant landscape character effects extend beyond 5km and into the areas described.

4.2 Cumulative Landscape Character Assessment

4.2.1 ES paragraph 7.20.10 concludes that *'The nearest other wind farm lies over 35km from the proposed development. An assessment of the potential for significant cumulative effects has been undertaken and no significant cumulative effects on landscape character or visual amenity have been assessed.'*

MSC agrees that there are no other existing, consented or planning stage windfarms that impact upon the LCTs affected by the proposed development (as illustrated by ES Figures 7.50, 7.51, 7.52, 7.53, 7.54, 7.56 and 7.58).

4.3 Designated Landscape Assessment

4.3.1 With reference to the Loch Rannoch and Glen Lyon National Scenic Area (NSA), ES paragraph 7.15.10 states that *'The special qualities of this NSA do not specifically refer to views or human activity but reference wild summits, mountain grandeur and natural beauty. Overall it is acknowledged that that there would be a significant effect on some views and on the landscape character within part of the NSA, however it is considered that the proposals would not have significant harm to the special qualities. The mountain grandeur, wild summits and natural beauty within the NSA would not be directly affected by the proposed development, which lies beyond the NSA boundary with the nearest*

turbine over 1.8km away, and would remain appreciable following construction of the proposed development.'

However, the references to '*wild summits, mountain grandeur and natural beauty*' demonstrate that views and perceptions of the landscape are important.

4.3.2 The ES also implies that '*the NSA would not be directly affected by the proposed development*' as the development lies outwith the NSA boundary. However, the turbines are visible from ES Viewpoints 4, 5, 6, 7, 8 and 21 (which are all located within the NSA) and the ES finds significant visual effects from each of these viewpoints. Therefore appreciation of the '*wild summits, mountain grandeur and natural beauty*' of the NSA would inevitably be significantly and adversely affected by the proposed development.

Therefore it must be concluded that there would be significant harm to the special qualities of the NSA.

4.4 Cumulative Designated Landscape Assessment

4.4.1 It should be noted that the special qualities of the NSA have already been adversely affected by windfarm developments to the southeast of the NSA (ES Figure 7.51, 7.53, 7.54, 7.55 and 7.57)

5.0 Visual Impact Assessment

5.2 Viewpoint Assessment

5.2.1 The MSC viewpoint assessment (MSC Appendix C) is summarised below alongside the relevant parts of the ES viewpoint assessment (Table 7.13):

ES Viewpoint (Distance to turbine)	ES Sensitivity	ES Magnitude	ES Significance	MSC Sensitivity	MSC Magnitude	MSC Significance
Viewpoint 1 Kinloch Rannoch (Car park adjacent to Loch Rannoch) (11.87km)	High	Very Low	Moderate/ Negligible	Very High (Tourists)	Low/ Very Low	Moderate/ Minor
Viewpoint 2 Bridge of Gaur (5.945km)	High	Very Low – Negligible	Slight/ Negligible	Very High (Walkers)	High (Alternative Viewpoint)	Very Major/ Major Adverse (Alternative Viewpoint)
Viewpoint 3 Rannoch Railway Station (10.298km)	Medium (Station High)	Very Low - Negligible	Slight/ Negligible	High to Low (Road Users)	Very Low (Turbines)	Minor to Negligible (Turbines)
					High (Highway Works)	Major Adverse to Moderate Adverse (Highway Works)
Viewpoint 4 Leagag (8.383km)	High	Medium - High	Substantial	Very High (Walkers) High (Field Sportsmen)	High	Very Major/ Major (and Major) Adverse
Viewpoint 5 Meall Buidhe (Peak at the southern extent of Meall Buidhe ridge) (13.583km)	Medium - High	Medium - High	Substantial	Very High (Walkers) High (Field Sportsmen)	Medium/ High	Major (and Major/ Moderate) Adverse
Viewpoint 6 Meall a Mhuic (11.566km)	High	Medium - High	Substantial	Very High (Walkers) High (Field Sportsmen)	Medium/ High	Major (and Major/ Moderate) Adverse
Viewpoint 7 Meall Garbh (14.580km)	High	Medium	Moderate/ Substantial	Very High (Walkers) High (Field Sportsmen)	Medium/ High	Major (and Major/ Moderate) Adverse
Viewpoint 8 Schiehallion (18.1km)	Very High	Medium	Moderate/ Substantial	Very High (Walkers) High (Field Sportsmen)	Medium	Major (and Major/ Moderate) Adverse
Viewpoint 9 Beinn Mholach (4.233km)	Medium	High	Moderate/ Substantial	Very High (Walkers) High (Field Sportsmen)	High	Very Major/ Major (and Major) Adverse
Viewpoint 10 Loch Ercht, shoreline (3.497km)	Medium to High	High	Substantial	Very High (Walkers) High (Anglers)	High	Very Major/ Major (and Major) Adverse

Viewpoint 11 Ben Alder summit (8.031km)	Very High	Low to Medium	Moderate	Very High (Walkers) High (Field Sportsmen)	High	Very Major/ Major (and Major) Adverse
Viewpoint 12 A82 Rannoch Moor (24.46km)	High	Very Low - Low	Moderate - Slight	High to Low (Road Users)	Low/ Very Low	Minor to Negligible
Viewpoint 13 West Highland Way (26.243km)	High	Very Low	Slight	Very High (Walkers)	Very Low	Moderate/ Minor
Viewpoint 14 Ben Lawers (22.887km)	High/ Very High	Low	Moderate - Slight	Very High (Walkers) High (Field Sportsmen)	Low	Moderate Adverse
Viewpoint 15 Meall Reamhar (31.854km)	High	Negligible	No Effect	Very High (Walkers) High (Field Sportsmen)	Very Low	Moderate/ Minor (and Minor)
Viewpoint 16 Southern shore of Loch Rannoch nr Croiscrag (5.353km)	High	Very Low	Slight/ Negligible	High to Low (Road Users)	Very Low	Moderate/ Minor to Negligible
Viewpoint 17 Southern shore of Loch Rannoch at Tay Forest Park Car Park (9.606km)	High	Low	Slight	Very High (Tourists)	Low	Moderate Adverse
Viewpoint 18 Stob Dearg (30.449km)	High	Very Low - Low	Slight	Very High (Walkers) High (Field Sportsmen)	Very Low	Moderate/ Minor (and Minor)
Viewpoint 19 Rannoch Moor – within the moor (18.374km)	Very High	Low	Moderate	Very High (Walkers) High (Field Sportsmen)	Low	Moderate Adverse
Viewpoint 20 Glencoe Ski Centre – top of first lift (20.847km)	High	Very Low - Low	Slight	High (Skiers)	Very Low	Minor
Viewpoint 21 Meall Gorm (1.871km)	Medium to High	High	Substantial	Very High (Walkers) High (Field Sportsmen)	Very High	Very Major (and Very Major/Major) Adverse
Viewpoint 22 Sgor Gaibhre (8.501km)	Medium to High	High	Substantial	Very High (Walkers) High (Field Sportsmen)	High	Very Major/ Major (and Major) Adverse

Viewpoint 23 Sron Bealach (Ben Alder massif) (6.918km)	High	High	Substantial	Very High (Walkers) High (Field Sportsmen)	High	Very Major/ Major (and Major) Adverse
Viewpoint 24 Beinn Udlamain (10.131km)	High	Medium	Moderate/ Substantial	Very High (Walkers) High (Field Sportsmen)	Medium	Major (and Major/ Moderate) Adverse
Viewpoint 25 Carr Dearg (2.559km)	Medium	High	Moderate/ Substantial	Very High (Walkers) High (Field Sportsmen)	Very High	Very Major (and Very Major/Major) Adverse

NB * Not assessed as no view

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

5.2.2 The ES assessment finds potential significant effects at ES Viewpoints 14, 17 and 19. However the MSC assessment concludes that only the effects at ES Viewpoint 19 are significant and adverse.

5.2.3 The ES and MSC assessments of sensitivity and magnitude of effect vary, nevertheless both assessments find significant visual effects at ES Viewpoints 4 to 11, 19 and 21 to 25. However the MSC assessment finds these effects to be adverse.

5.2.4 In addition the MSC assessment finds significant adverse visual effects at ES Viewpoints 2 (for an alternative viewpoint location) and 3 (for highway improvement works).

5.3 Hill Walkers and Field Sportsmen

5.3.1 The ES fails to acknowledge hill walkers or field sportsmen as baseline visual receptors (neither in the text nor on ES Figure 7.8), despite the majority of viewpoints being located on mountain summits (ES Viewpoints 4, 5, 6, 7, 8, 9, 11, 14, 15, 18, 21, 22, 23 and 24).

5.3.2 The mountains that are most likely to be climbed are the 'Munros' (mountains with summits over 3000 feet).

5.3.3 The following 'Munro' summits have theoretical visibility of the proposed development (that are within 20km of the proposed development):

- Beinn Udlamain (ES Viewpoint 24);
- A'Mharconaich;
- Sgairneach Mhor;
- Scheihallion (ES Viewpoint 8);
- Carn Mairg;
- Meall Garbh (ES Viewpoint 7);
- Carn Gorm;
- Meall Buidhe (ES Viewpoint 5);
- Sgor Gaibhre (ES Viewpoint 22);
- Chno Dearg;
- Aonach Beag;
- Bein Eibhinn;
- Ben Alder (ES Viewpoints 11 and 23); and
- Beinn Bheoil.

As ES viewpoints 5, 7, 8, 11, 22, 23 and 24 are all found to be subject to significant adverse visual effects, it is reasonable to assume that the remaining Munros (that are not represented by ES viewpoints and are within 20km of the proposed development) may also be subject to significant adverse visual effects.

Therefore walkers on the summits of fourteen Munros (~ 5% of the total 282 Munros in Scotland) may be subject to significant adverse visual effects.

5.4 Paths and Tracks

5.4.1 The introduction to the Core Paths Plan confirms that it was '*...produced by Perth & Kinross Council as required by the Land Reform (Scotland) Act 2003 and shows a system of paths (core paths) which the Council believes is sufficient to provide reasonable public access throughout Perth and Kinross*'.

The Core Paths Plan also confirms that '*Core paths link into a wider network of paths...*' In the context of the proposed development the '*wider network*' comprises tracks and paths indicated on the Ordnance Survey Plans, as well as routes to mountain summits.

5.4.2 Core Paths are indicated on ES Figure 7.8: Principal Visual Receptors (whilst other paths and tracks are not identified).

5.4.3 Core Paths that have sections with theoretical visibility of the proposed development are:

- RANN/7 (Rannoch Station to Kingshouse, Highlands);
- RANN/11 (Road to the Isles from Loch Eigheach);
- RANN/8 (Loch Rannoch to Dalwhinnie, Cairngorms NP);
- RANN/104 (Bridge of Ericht to Loch Ericht dam);
- RANN/112 (Bridge of Gaur - Luban Feith a'Mhadaidh - Camghouran)
- RANN/114 (Rannoch Forest path, Allt Camghouran to Dall);
- RANN/117 (Forest link path south of Dall);
- RANN/51 (Dall to Innerwick);
- RANN/2 (Carie to Innerwick); and
- RANN/9 (Loch Rannoch to Dalnaspidal via Annat).

5.4.4 Only ES Viewpoint 10 (Loch Ericht Shoreline) is located on one of these Core Paths. Both the ES and MSC assessments find significant effects at this viewpoint and it can be anticipated that walkers on sections of all the above Core Paths would be subject to significant visual effects.

5.4.5 Other paths and tracks with theoretical visibility of the proposed development are:

- Track from Loch Ericht Dam to Corrievarkie Lodge;
- Path from Loch Ericht Dam to Corrievarkie Lodge track to Forestry Commission land to north of Loch Rannoch;
- Path to north of Loch Rannoch;
- Path to north of Dunalastair Water;
- Tracks to west of Shiehallion;
- Path from Finnart to Loch Finnart;
- Tracks to the south and southwest of Bridge of Gaur;
- Path from Loch Ericht dam to Core Path RANN/8;
- Paths to the east and west of Ben Alder; and
- Various routes to the summits of Munros.

5.4.6 There are no ES viewpoints on any of these paths and tracks (apart from the summits of some Munros). However it can be anticipated that walkers on sections of all these paths would be subject to significant visual effects.

5.5 Cumulative Viewpoint Assessment

5.5.1 ES paragraph 7.20.10 concludes that *'The nearest other wind farm lies over 35km from the proposed development. An assessment of the potential for significant cumulative effects has been undertaken and no significant cumulative effects on landscape character or visual amenity have been assessed.'*

However ES Cumulative Viewpoints 8, 11, 14 and 23 demonstrate that the proposed development would make the largest contribution to cumulative visual effects.

6.0 Conclusion

6.1 Summary

6.1.1 The salient points arising from the MSC Review of the proposed siting and design are:

- the location of the proposed development fails to '*Minimise the potential visual effects upon National Scenic Area*';
- the design iterations may have '*avoided*' and '*reduced*' some but not all effects. It is unclear what effects are '*offset*';
- the ES reliance on '*backgrounding*' as a design opportunity is misguided, as this would increase rather than mitigate landscape and visual effects;
- In addition, the site infrastructure (tracks, substation etc) would be visible from elevated viewpoints (which are not illustrated on the ES photomontages) and would add to the magnitude of landscape and visual effects;
- greater weight should be given to recent SNH guidance and in particular that relating to wild land;
- the '*landscape and views*' constraints are either red or amber for all potential development areas. None are green (the least constrained); and
- no details are provided for the works required to enable the two proposed access options (by barge via Loch Ericht and/or by rail via Rannoch Station) or any assessment of effects that might justify either of the options.

6.1.2 The salient points arising from the MSC Review of the ES methodology are:

- no definitions are provided for the levels of landscape sensitivity;
- MSC conclude that effects are long term and are unlikely to be reversed within a generation; and
- ‘*dominating*’ and ‘*overbearing*’ are terms more commonly used to describe the acceptability of residential visual amenity effects rather than the magnitude of effect.

6.1.3 The salient points arising from the MSC Review of the assessment of landscape effects are:

- the ES and MSC assessments find that LCT 3, 2a would be subject to significant landscape effects (which the MSC assessment finds to be adverse);
- the ES assessment finds significant effects at the centre of the Plateaux Moor LCT whilst the MSC assessment concludes that effects would not be significant due to the distance from the proposed turbines. A similar conclusion applies to the ES finding of significant effects on the Blanket Bog LCT;
- the ES finds significant effects on the Carn Gorm / Schiehallion landscape character unit of the Highland Summits and Plateaux LCT and the lower slopes of Ben Alder within the Isolated Mountain LCT. Given the particular sensitivity of these two LCTs, MSC agrees that significant landscape character effects extend beyond 5km and into the areas described;
- there are no other existing, consented or planning stage windfarms that impact upon the LCTs affected by the proposed development;
- the NSA references to ‘*wild summits, mountain grandeur and natural beauty*’ demonstrate that views are important;

- contrary to the findings of the ES, MSC conclude that there would be significant harm to the special qualities of the NSA; and
- the special qualities of the NSA have already been adversely affected by windfarm developments to the southeast of the NSA.

6.1.4 The salient points arising from the MSC Review of the viewpoint assessment and visual effects are:

- the ES and MSC assessments of sensitivity and magnitude of effect vary, nevertheless both assessments find significant visual effects at ES Viewpoints 4 to 11, 19 and 21 to 25. However the MSC assessment finds these effects to be adverse;
- In addition the MSC assessment finds significant adverse visual effects at ES Viewpoints 2 (for an alternative viewpoint location) and 3 (for highway improvement works);
- The ES fails to acknowledge hill walkers or field sportsmen as baseline visual receptors, despite the majority of viewpoints being located on mountain summits;
- As ES viewpoints 5, 7, 8, 11, 22, 23 and 24 are all found to be subject to significant adverse visual effects, it is reasonable to assume that the remaining Munros (that are not represented by ES viewpoints and are within 20km of the proposed development) would also be subject to significant adverse visual effects;
- Therefore walkers on the summits of fourteen Munros (~ 5% of the total 282 Munros in Scotland) may be subject to significant adverse visual effects;
- only ES Viewpoint 10 (Loch Erich Shoreline) is located on a Core Path. Both the ES and MSC assessments find significant effects at this viewpoint and it can be anticipated that walkers on sections of other Core Paths would be subject to significant visual effects;

- there are no ES viewpoints on any other paths and tracks (apart from the summits of some Munros). However it can be anticipated that walkers on sections of these paths would be subject to significant visual effects; and
- ES Cumulative Viewpoints 8, 11, 14 and 23 demonstrate that the proposed development makes the largest contribution to cumulative visual effects.

6.2 Conclusion and Recommendation

6.2.1 The ES design approach is based on the false premise that a landform backdrop mitigates landscape and visual effects. Nevertheless, the ES does acknowledge that there would be significant landscape character effects, as well as significant visual effects from surrounding mountains.

6.2.2 The ES does not provide details for (or assessment of) the works required to enable the two proposed access options, when both options may give rise to significant adverse landscape and visual effects.

6.2.3 The ES fails to acknowledge hill walkers as visual receptors, when walkers on approximately 5% of Scotland's Munros may be subject to significant adverse visual effects.

6.2.3 Furthermore, the MSC assessment finds that there would be significant adverse effects on perceptions of the '*wild summits, mountain grandeur and natural beauty*' attributes of the Loch Rannoch and Glen Lyon National Scenic Area.

8.2.3 Therefore there is ample justification for a refusal of s.36 consent and deemed planning permission on the grounds of insufficient information and/or significant adverse landscape and visual effects.

Mark Steele – August 2014

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 and (in the absence of equivalent guidance) where principles are applicable in England and Wales:

- 'Siting and Designing Windfarms in the Landscape' (SNH 2014);
- '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 2014).

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'*.

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 policies and strategies'*.

A 3.3.3 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 3.3.4 The determination of landscape capacity is outwith the scope of LVIA, as landscape capacity studies are prepared and published by Local Authorities.

A 3.3.5 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 3.3.6 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 (it should be noted that these definitions, as well as those in following tables, are only an aid to assessment and will be applied with appropriate professional judgement):

Table A1: Landscape Receptor Sensitivity Criteria

Sensitivity	Criteria
Very High	<i>Landscape character of very high value (i.e. a nationally designated landscape) and/or very susceptible landscape characteristics, features or perceptual qualities.</i>
High	<i>Landscape character of high value (i.e. a regionally designated landscape) and/or susceptible landscape characteristics, features or perceptual qualities.</i>
Medium	<i>Landscape character of moderate value (i.e. undesignated landscape with local value) and/or moderately susceptible landscape characteristics, features or perceptual qualities.</i>
Low	<i>Landscape character of low value and landscape characteristics, features or perceptual qualities of limited susceptibility.</i>
Very Low	<i>Landscape character of very low value lacking susceptible landscape characteristics, features or perceptual qualities.</i>

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:

Table A2: Landscape Magnitude of Effect Criteria

Magnitude	Criteria
Very High	Very large scale loss or 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.
High	Large scale loss or 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 particularly uncharacteristic when set within the distinctive attributes of the receiving landscape.
Medium	Moderate scale loss or 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	Small scale loss or 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.
Very Low	Very small scale loss or 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:

Table A3: Landscape Level of Effect Matrix

	Very High Sensitivity	High Sensitivity	Medium Sensitivity	Low Sensitivity	Very Low Sensitivity
Very High Magnitude	Very Major	Very Major/ Major	Major	Moderate	Moderate/Minor
High Magnitude	Very Major/ Major	Major	Moderate/Major	Moderate	Minor
Medium Magnitude	Major	Moderate/Major	Moderate	Moderate/Minor	Minor/Negligible
Low Magnitude	Moderate	Moderate	Moderate/Minor	Minor	Negligible
Very Low Magnitude	Moderate/Minor	Minor	Minor/Negligible	Negligible	Negligible/None

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

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

A 3.5.2 The levels of effects do not follow a linear progression, as a very low magnitude of effect and/or very low receptor sensitivity will not result in potential significant effects.

A 3.5.3 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):

Table A4: Landscape Level of Effect Criteria

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

A3.6 Adverse/Beneficial Landscape Effects

- A 3.6.1 GLVIA3 (CD10.2) paragraph 3.22 requires that ‘...thought must be given to whether the likely significant effects...’ are ‘...judged to be positive (beneficial) or negative (adverse) in their consequences for landscape or for views and visual amenity...’

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). In the experience of MSC, windfarm ES LVIAs that do make this assessment acknowledge that the LVIA effects are adverse.

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'.

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

A 4.2.4 MSC wirelines are 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 visual receptors:

Table A5: Visual Receptor Sensitivity Criteria

Sensitivity	Criteria
Very High	People engaged in an occupation or activity where their attention or interest will be focused primarily on visual amenity (i.e. residents, walkers, tourists, visitors to heritage assets, etc).
High	People engaged in an occupation or activity where their attention or interest will be focused on visual amenity (i.e. communities with visual settings, those engaged in outdoor recreation (e.g. cyclists, equestrians, field sportsmen, anglers, golfers, etc) and tourist as well as resident road users.
Medium	People engaged in an occupation or activity where their attention or interest may be focused on 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. those involved in team sports, commercial vehicle road users etc).
Very Low	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:

Table A6: Visual Magnitude of Effect Criteria

Magnitude	Criteria
Very High	Very large scale loss or 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.
High	Large scale loss or 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	Moderate scale loss or 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	Small scale loss or 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.
Very Low	Very small scale loss or 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' (Version 1) 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 (Table A3).
- 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):

Table A7: Visual Level of Effect Criteria

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

A4.6 Adverse/Beneficial Visual Effects

- A 4.6.1 GLVIA3 (CD10.2) paragraph 3.22 requires that ‘...thought must be given to whether the likely significant effects...’ are ‘...judged to be positive (beneficial) or negative (adverse) in their consequences for landscape or for views and visual amenity...’

It is usual for windfarm LVIA's 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). In the experience of MSC, windfarm ES LVIA's that do make this assessment acknowledge that the LVIA effects are adverse.

A5.0 Cumulative Landscape and Visual Effects

A5.1 Cumulative Landscape and Visual Effects

A 5.1.1 *'Assessing the Cumulative Impact of Onshore Wind Energy Developments'* paragraph 7 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...'*

A5.1.2 Therefore, the MSC methodology seeks to address cumulative effects by assessing the combined effects of all existing, under construction and planning stage windfarms and then assessing the additional contribution of the proposed windfarm to these combined effects.

A5.1.3 *'Assessing the Cumulative Impact of Onshore Wind Energy Developments'* paragraph 30 suggests two cumulative development scenarios *'...a proposal in combination with existing and consented developments, or proposal in combination with existing, consented and planning stage developments...'*

However, where there are a number of existing windfarms in the baseline (resulting in existing cumulative effects) it is reasonable to address these in the LVIA and/or the first development scenario within the cumulative LVIA.

A5.1.4 The MSC assessment of cumulative effects does not assess receptors that are subject to less than moderate individual effects in the LVIA assessment, as these effects are less likely to contribute to significant cumulative effects.

Appendix B

MSC Landscape Impact Assessment

B1.0 Landscape Character Impact Assessment

B1.1 LCT 3: Highland Summits and Plateaux

LCU (i) Talla Bheith and Craignour Forest

B1.1.1 ES Figure 7.5 demonstrates that twenty one of the proposed turbines are located in this LCT. Therefore effects would be largely direct.

B1.1.2 The Tayside Landscape Character Assessment describes one of the 'Key Characteristics' of this LCT as '*one of the remotest and wildest landscapes in the UK*'.

B1.1.3 Tayside Landscape Character Assessment (LCA) paragraph 5.3.20 states that '*The following guidelines reflect the sensitivities of the landscape and the pressures for change acting upon it. They are intended to promote a broad basis for the development of more detailed management strategies. The overall aim of such strategies should be to conserve the characteristic upland landscape of open, unsettled moorland vegetation and to maintain the contrast with the more settled and wooded glens and lowlands*'.

The Landscape Guidelines 'Development' section recommends '*Discourage any development on the Highland Summits and Plateaux*' and the 'Tall Structures' section recommends '*Discourage proposals for aeriels, masts or wind turbines or additional pylons because of their likely impact on the harsh undeveloped character of the Highlands Summits and Plateaux*'.

B1.1.4 Therefore (based on the LCA guidelines) MSC judges that the sensitivity of the LCT to windfarm development is **very high**.

B1.1.5 ES Figure 7.22 demonstrates that theoretical visibility extends over the majority of the western part of the LCT.

The MSC assessment judges that the magnitude of effects would be **very high**, as the introduction of a prominent uncharacteristic element to the LCT would alter the attributes of the LCT.

B1.1.6 The MSC assessment finds that direct landscape character effects (arising from the introduction of intrusive elements) would vary but would be **very major, significant and**

adverse (causing a deterioration in landscape characteristics) up to at least 5km from the proposed windfarm.

B1.2 LCT 2a: Upper Highland Glens with Lochs

LCU Loch Ericht

B1.2.1 ES Figure 7.5 demonstrates that three of the proposed turbines are located in this LCT. Therefore effects would be both direct and indirect.

B1.2.2 Tayside Landscape Character Assessment (LCA) paragraph 5.2.11 states that *'The Upper Highland Glens with Lochs are comparatively free from tall structures. The exception occurs where lines serve the hydro installations located adjoining the dams that impound the lochs. This landscape type would be sensitive to proposals for further tall structures, be they pylons, masts or wind turbines, either within the glen itself or visible from within it'*.

The Landscape Guidelines 'Development' section recommends *'Discourage proposals for aeriels, masts or wind turbines because of their likely impact on the character of the Upper Highlands Glens with Lochs''*.

B1.2.3 Therefore (based on the LCA guidelines) MSC judges that the sensitivity of the LCT to windfarm development is **high**.

B1.2.4 ES Figure 7.22 demonstrates that theoretical visibility extends over the majority of the southwestern part of the LCT.

The MSC assessment judges that the magnitude of effects would be **high**, as the introduction of a prominent uncharacteristic element to the LCT would alter the attributes of the LCT.

B1.2.5 The MSC assessment finds that direct and indirect landscape character effects (arising from the introduction of intrusive elements) would vary but would be **major, significant and adverse** (causing a deterioration in landscape characteristics) up to at least 5km from the proposed windfarm.

B1.3 LCT 2b: Mid Highland Glens with Lochs

LCU Loch Rannoch

B1.3.1 ES Figure 7.5 demonstrates that the proposed turbines are located in the adjacent LCT to the north of the western end of the LCT. Therefore any effects would be indirect.

B1.3.2 Tayside Landscape Character Assessment (LCA) paragraph 5.2.29 states that *'Each of the Mid Highland Glens with Lochs has a line of pylons running along the northern shore, linking components of the Tummel hydro scheme and serving settlements in the area. These pylons tend to run parallel to the road corridor and are often seen against a backdrop of rising hills. Their impact within the large-scale landscape of the lochs is therefore comparatively limited'*.

Therefore the ES LVIA suggestion that the existing pylons create a precedent for the proposed turbines is unfounded.

B1.3.3 Therefore (based on the LCA guidelines) MSC judges that the sensitivity of the LCT to be **high**.

B1.3.4 ES Figure 7.22 demonstrates that theoretical visibility is variable and is predominantly on the southern side of Loch Rannoch, at distances over 5km. There are limited areas with visibility to the north of Loch Rannoch however effects are unlikely to be dominant.

The MSC assessment judges that the magnitude of effects would be **low**.

B1.3.5 The MSC assessment finds that indirect landscape character effects would vary but would be generally **moderate and not significant**.

B1.4 LCT 4: Plateaux Moor

LCU Loch Rannoch

B1.4.1 ES Figure 7.5 demonstrates that the proposed turbines are located in the adjacent LCT to the east of the eastern end of the LCT. Therefore any effects would be indirect.

B1.4.2 The Tayside Landscape Character Assessment describes one of the *'Key Characteristics'* of this LCT as *'wild, exposed and remote'*.

B1.4.3 Tayside Landscape Character Assessment (LCA) Landscape Guidelines 'Development' section recommends '*Discourage proposals for aeriels, masts or wind turbines or additional pylons because of their likely impact on the harsh, undeveloped character of the moor*'.

B1.4.4 Therefore (based on the LCA guidelines) MSC judges that the sensitivity of the LCT to be **high**.

B1.4.5 ES Figure 7.22 demonstrates that theoretical visibility is variable and is predominantly on the southern side of Loch Rannoch, at distances over 5km. There are limited areas with visibility to the north of Loch Rannoch however effects are unlikely to be dominant.

The MSC assessment judges that the magnitude of effects would be **low**.

B1.4.6 The MSC assessment finds that indirect landscape character effects would vary but would be generally **moderate and not significant**.

Appendix C

MSC Visual Impact Assessment

C1.0 Viewpoint Assessment

C1.1 ES Viewpoint 1: Kinloch Rannoch (Car park adjacent to Loch Rannoch)

C1.1.1 Tourist users of the car park are **very high** sensitivity receptors.

The magnitude of effect would be **low/very low**, as there would be a small/very small scale alteration to the visual baseline (due to the screening effect of topography and forestry) and whilst the proposed development would introduce turbine blade tips to the skyline (nine turbine blade tips if forestry felled) of a key view of Loch Rannoch, they are over 11.5km from the viewpoint.

Therefore the level of effect would be **moderate/minor and not significant**.

However, it should be noted that a reduction in turbine height and/or the removal of nine turbines would result in no visual effect.

C1.2 ES Viewpoint 2: Bridge of Gour

C1.2.1 Walkers are **very high** sensitivity receptors.

The magnitude of effect from the ES viewpoint position would be **low** due to the screening effect of foreground trees. However, if the viewpoint were repositioned to a location without foreground screening or the trees were lost during the operation period (as they are outwith the applicant's control) then the magnitude of effect would be **high**, as there would be large scale alteration to the visual baseline with the introduction of six (plus the blade tips of four other) visually prominent moving turbines that would breach the skyline, are not characteristic of the view and are less than 6km from the viewpoint.

Therefore the level of effect at an alternative viewpoint location would be **very major/major, significant and adverse**.

C1.3 ES Viewpoint 3: Rannoch Railway Station

C1.3.1 A range of sensitivity reflects a range of road users (residents/tourists (**high**) to commercial drivers (**low**)), however it can be anticipated that the majority of users would be either residents or tourists.

The magnitude of effect would be **very low**, as there would be a very small scale alteration to the visual baseline with the introduction of two turbine blade tips breaching the skyline that are over 10km from the viewpoint.

Therefore the level of effect would range from **minor to negligible and not significant**.

It should be noted that a reduction in turbine height and/or the removal of two turbines would result in no visual effect from this viewpoint.

Furthermore, highway improvements to the B846 are not illustrated and these are likely to cause a **high** magnitude of effect (based on MSC experience of other windfarm highway improvements) and a level of effect that would range from **major, significant and adverse to moderate and potentially significant**.

C1.4 ES Viewpoint 4: Leagag

C1.4.1 Walkers and field sportsmen are **very high** and **high** sensitivity receptors.

The magnitude of effect would be **high**, as there would be large scale alteration to the visual baseline with the introduction of twenty four visually prominent moving turbines that are not characteristic of the view, would be seen in the foreground of a view of Ben Alder and are less than 8.5km from the viewpoint. The turbines would also be particularly visually prominent, as their grey colour would contrast with the landscape backdrop.

Therefore the level of effect would be **very major/major (and major), significant and adverse**.

C1.5 ES Viewpoint 5: Meall Buidhe (peak at the southern extent of Meall Buidhe ridge)

C1.5.1 Walkers and field sportsmen are **very high** and **high** sensitivity receptors.

The magnitude of effect would be **medium/high**, as there would be moderate/large scale alteration to the visual baseline with the introduction of twenty four visually prominent moving turbines that are not characteristic of the view, would be seen in the foreground of a view of Ben Alder, but are over 13.5km from the viewpoint. The turbines would also be particularly visually prominent, as their grey colour would contrast with the landscape backdrop.

Therefore the level of effect would be **major (and moderate/major), significant and adverse**.

C1.6 ES Viewpoint 6: Meall a Mhuic

C1.6.1 Walkers and field sportsmen are **very high** and **high** sensitivity receptors.

The magnitude of effect would be **medium/high**, as there would be moderate/large scale alteration to the visual baseline with the introduction of twenty four visually prominent moving turbines that are not characteristic of the view, would be seen in the foreground of a view of Ben Alder, but are over 11.5km from the viewpoint. The turbines would also be particularly visually prominent, as their grey colour would contrast with the landscape backdrop.

Therefore the level of effect would be **major (and moderate/major), significant and adverse**.

C1.7 ES Viewpoint 7: Meall Garbh

C1.7.1 Walkers and field sportsmen are **very high** and **high** sensitivity receptors.

The magnitude of effect would be **medium/high**, as there would be moderate/large scale alteration to the visual baseline with the introduction of twenty four visually prominent moving turbines that are not characteristic of the view, would be seen in the foreground of a view of Ben Alder, but are over 14.5km from the viewpoint. The turbines would also be particularly visually prominent, as their grey colour would contrast with the landscape backdrop.

Therefore the level of effect would be **major (and moderate/major), significant and adverse**.

C1.8 ES Viewpoint 8: Schiehallion

C1.8.1 Walkers and field sportsmen are **very high** and **high** sensitivity receptors.

The magnitude of effect would be **medium**, as there would be moderate scale alteration to the visual baseline with the introduction of twenty four visually prominent moving turbines that are not characteristic of the view, would be seen in the foreground of a view of Ben Alder, but are over 18km from the viewpoint. The turbines would also be particularly visually prominent, as their grey colour would contrast with the landscape backdrop.

Therefore the level of effect would be **major (and moderate/major), significant and adverse**.

C1.9 ES Viewpoint 9: Beinn Mholach

C1.9.1 Walkers and field sportsmen are **very high** and **high** sensitivity receptors.

The magnitude of effect would be **high**, as there would be large scale alteration to the visual baseline with the introduction of twenty four visually prominent moving turbines that are not characteristic of the view and are less than 4.5km from the viewpoint. The turbines would also be particularly visually prominent, as their grey colour would contrast with the landscape backdrop.

Therefore the level of effect would be **very major/major (and major), significant and adverse**.

C1.10 ES Viewpoint 10: Loch Ericht, shoreline

C1.10.1 Walkers and anglers are **very high** and **high** sensitivity receptors.

The magnitude of effect would be **high**, as there would be large scale alteration to the visual baseline with the introduction of thirteen visually prominent moving turbines that are not characteristic of the view and are less than 3.5km from the viewpoint. It should be noted that the number of turbines increases from views further south on the shoreline.

Therefore the level of effect would be **very major/major (and major), significant and adverse**.

C1.11 ES Viewpoint 11: Ben Alder Summit

C1.11.1 Walkers and field sportsmen are **very high** and **high** sensitivity receptors.

The magnitude of effect would be **high**, as there would be large scale alteration to the visual baseline with the introduction of twelve visually prominent moving turbines that are not characteristic of the view and are less than 8.5km from the viewpoint. The turbines would also be particularly visually prominent, as their grey colour would contrast with the landscape backdrop.

Therefore the level of effect would be **very major/major (and major), significant and adverse**.

It should be noted that a reduction in the height of five turbines and the removal of seven turbines would result in no visual effect from this viewpoint.

C1.12 ES Viewpoint 12: A82 Rannoch Moor

C1.12.1 A range of sensitivity reflects a range of road users (residents/tourists (**high**) to commercial drivers (**low**)).

The magnitude of effect would be **low/very low**, as there would be a small/very small scale alteration to the visual baseline with the introduction of twenty four turbines that are not characteristic of the view, but are over 24km from the viewpoint.

Therefore the level of effect would range from **minor** to **negligible** and not significant.

C1.13 ES Viewpoint 13: West Highland Way

C1.13.1 Walkers are **very high** sensitivity receptors.

The magnitude of effect would be **very low**, as there would be a very small scale alteration to the visual baseline with the introduction of sixteen turbines that are not characteristic of the view, but are over 26km from the viewpoint.

Therefore the level of effect would be **moderate/minor and not significant**.

C1.14 ES Viewpoint 14: Ben Lawers

C1.14.1 Walkers and field sportsmen are **very high** and **high** sensitivity receptors.

The magnitude of effect would be **low**, as there would be small scale alteration to the visual baseline with the introduction of twenty four turbines that are not characteristic of the view but are over 22.5km from the viewpoint.

Therefore the level of effect would be **moderate but not significant**.

C1.15 ES Viewpoint 15: Meall Reamhar

C1.15.1 Walkers and field sportsmen are **very high** and **high** sensitivity receptors.

The magnitude of effect would be **very low**, as there would be very small scale alteration to the visual baseline with the introduction of one turbine blade tip that is over 31.5km from the viewpoint.

Therefore the level of effect would be **moderate/minor (and minor) and not significant**.

It should be noted that a reduction in the height or removal of a single turbine would result in no visual effect from this viewpoint.

C1.16 ES Viewpoint 16: Southern shore of loch Rannoch nr Crolscrag

C1.16.1 A range of sensitivity reflects a range of road users (residents/tourists (**high**) to commercial drivers (**low**)).

The magnitude of effect would be **very low**, as there would be a very small scale alteration to the visual baseline with the introduction of one turbine blade tip that is less than 5.5km from the viewpoint.

Therefore the level of effect would range from **moderate/minor to negligible and not significant**.

It should be noted that a reduction in the height or removal of a single turbine would result in no visual effect from this viewpoint.

C1.17 ES Viewpoint 17: Southern shore of loch Rannoch at Tay Forest Park Car Park

C1.17.1 Tourist users of the car park are **very high** sensitivity receptors.

The magnitude of effect would be **low**, as there would be a small scale alteration to the visual baseline (due to the screening effect of topography and forestry) and the proposed development would introduce turbine blade tips to the skyline (five turbine blade tips if forestry felled) of a key view of Loch Rannoch and they are less than 10km from the viewpoint.

Therefore the level of effect would be **moderate and not significant**.

However, it should be noted that a reduction in turbine height and/or the removal of five turbines would result in no visual effect.

C1.18 ES Viewpoint 18: Stob Dearg

C1.18.1 Walkers and field sportsmen are **very high** and **high** sensitivity receptors.

The magnitude of effect would be **very low**, as there would be very small scale alteration to the visual baseline with the introduction of twenty four turbines that are over 30km from the viewpoint.

Therefore the level of effect would be **moderate/minor (and minor) and not significant**.

C1.19 ES Viewpoint 19: Rannoch Moor – within the moor

C1.19.1 Walkers and field sportsmen are **very high** and **high** sensitivity receptors.

The magnitude of effect would be **low**, as there would be small scale alteration to the visual baseline with the introduction of twenty two turbines that are over 18km from the viewpoint. However the turbines would introduce structures into a view that is otherwise free of human artifacts.

Therefore the level of effect would be **moderate, significant and adverse**.

C1.20 ES Viewpoint 20: Glen Coe Ski Centre - top of first lift

C1.20.1 Skiers are **high** sensitivity receptors.

The magnitude of effect would be **very low**, as there would be small scale alteration to the visual baseline with the introduction of eighteen turbines that are over 27.5km from the viewpoint.

Therefore the level of effect would be **minor and not significant**.

C1.21 ES Viewpoint 21: Meall Gorm

C1.21.1 Walkers and field sportsmen are **very high** and **high** sensitivity receptors.

The magnitude of effect would be **very high**, as there would be very large scale alteration to the visual baseline with the introduction of twenty four visually prominent moving turbines that are not characteristic of the view, would be seen in the foreground of a view of Ben Alder and are less than 2km from the viewpoint. The turbines would also be particularly visually prominent, as their grey colour would contrast with the landscape backdrop.

Therefore the level of effect would be **very major (and very major/major), significant and adverse**.

C1.22 ES Viewpoint 22: Sgor Gaibhre

C1.22.1 Walkers and field sportsmen are **very high** and **high** sensitivity receptors.

The magnitude of effect would be **high**, as there would be large scale alteration to the visual baseline with the introduction of twenty four visually prominent moving turbines that are not characteristic of the view and are 8.5km from the viewpoint. The turbines would also be particularly visually prominent, as their grey colour would contrast with the landscape backdrop.

Therefore the level of effect would be **very major/major (and major), significant and adverse**.

C1.23 ES Viewpoint 23: Sron Bealach (Ben Alder massif)

C1.23.1 Walkers and field sportsmen are **very high** and **high** sensitivity receptors.

The magnitude of effect would be **high**, as there would be large scale alteration to the visual baseline with the introduction of twenty four visually prominent moving turbines that are not characteristic of the view and are less than 7km from the viewpoint. The turbines would also be particularly visually prominent, as their grey colour would contrast with the landscape backdrop.

Therefore the level of effect would be **very major/major (and major), significant and adverse**.

C1.24 ES Viewpoint 24: Beinn Udlamain

C1.24.1 Walkers and field sportsmen are **very high** and **high** sensitivity receptors.

The magnitude of effect would be **medium**, as there would be moderate scale alteration to the visual baseline with the introduction of twenty four visually prominent moving turbines that are not characteristic of the view and are just over 10km from the viewpoint. The turbines would also be particularly visually prominent, as their grey colour would contrast with the landscape backdrop.

Therefore the level of effect would be **major (and major/moderate), significant and adverse**.

C1.25 ES Viewpoint 25: Carn Dearg

C1.25.1 Walkers and field sportsmen are **very high** and **high** sensitivity receptors.

The magnitude of effect would be **very high**, as there would be large scale alteration to the visual baseline with the introduction of twenty four visually prominent moving turbines that are not characteristic of the view and are less than 3km from the viewpoint. The turbines would also be particularly visually prominent, as their grey colour would contrast with the landscape backdrop.

Therefore the level of effect would be **very major (and very major/major), significant and adverse**.