Glenshero Wind Farm Environmental Impact Assessment Report

Technical Appendix 4.6: Wild Land Impact Assessment

The formal scoping responses received from ECU and other consultees are summarised in EIAR Volume 2: Chapter 4: LVIA, Table 4.1.

Methodology

The WLIA has been undertaken by Robert Bainsfair, by a Chartered Landscape Architect with relevant experience utilising desk top assessment and field work (CV included in Volume 4: Technical Appendix 1.2).

The methodology utilised for the WLIA follows SNH's consultation Draft Guidance¹.

The WLIA comprises the following steps:

- Step 1 Definition of the study area and scope of the assessment: Comprising the identification of a study area appropriate to the scale of development and extent of likely significant effects on the WLA.
- Step 2 Establish the baseline: Confirmation of the wild land qualities of the study area and the nature of their contribution to the WLA. The assessment will identify which qualities could be susceptible to the proposed development.
- Step 3 Assess the sensitivity of the WLA within the study area, assuming a high value for the included area
 of landscape. The wild land qualities of the WLA, including the physical attributes and perceptual responses
 that contribute to those qualities, will be identified that are most sensitive to the type and scale of change
 proposed.
- Step 4 Assess the effects: Given the size or scale of change, extent and duration, the effects on individual qualities and/or combinations of qualities will be described, drawing out which physical attributes and perceptual responses will be affected and how, and the potential for mitigation.
- Step 5 Judgement of the significance of effect: The significance of residual effects on the wild land qualities of the WLA will be outlined, taking into account mitigation.

Step 1 Defining the Study Area

The study area for the WLIA reflects the extent of likely effects, including any cumulative effects, and along with the following:

- The scale of development and extent of effects.
- The extent of visibility.
- Routes and movement through the WLA.
- The wild land qualities likely to be affected will be the focus of the assessment.
- The potential for significant cumulative effects in respect of other developments.

Based on an initial analysis of the viewshed for the proposed development (as illustrated in EIAR Volume 3: Figure 4.5a) effects on the following WLAs have been addressed:

- Monadhliaths Wild Land Area (WLA No.20).
- Rannoch-Nevis Mamores-Alder (No.14).
- Braeroy, Glenshirra and Creag Meagaidh WLA (No.19).

Step 2 Establishing the Baseline

The baseline appraisal:

- Establishes and describes the extent to which physical and perceptual attributes of wild land are present.
- Describes the character, sensitivity and condition of the area affected and its contribution to the wild land areas as a whole.

The WLIA considers the baseline context of the WLA, not just areas predicted in the viewshed to have theoretical visibility of the proposed development and will consider the effects on the experience of receptors processing into and out of the WLAs, as well as throughout each WLA.

The principle sources of information used were SNH's Wild Land Mapping and the recently published Wild Land Descriptions². The findings of these publications were verified using Ordnance Survey data/mapping, aerial photography review and field survey.

SNH's advice to Government in 2014³, acknowledges that wildness is a subjective matter that requires informed judgements. This is because people respond differently according to their individual experience and expectations. For some, Scotland's wild landscapes are the setting for their home and workplace; for others, they are places that they visit. But there is sufficient commonality in appreciation to identify a set of attributes and responses that can be assessed if presented in a systematic, transparent and consistent way.

The Guidance defines the physical attributes of Wild Land as comprising:

- A high degree of perceived naturalness.
- · A lack of modern human artefacts or structures.
- Little evidence of contemporary land uses.
- Landform which is rugged, or otherwise physically challenging.
- Remoteness and / or inaccessibility.

The perceptual responses evoked by these physical attributes include:

- A sense of sanctuary or solitude.
- Risk or, for some visitors, a sense of awe or anxiety.
- Perceptions that the landscape has arresting or inspiring qualities.
- Fulfilment from the physical challenge required to penetrate into these places.

The extent to which physical attributes and perceptual responses are evident in the field is recorded as high, medium, low or negligible as set out in Table 1 of the Guidance. It is noted that, as the proposed development is located outwith the WLAs the focus of the WLIA is on indirect effects on key wild land qualities.

Step 3 WLA Sensitivity

Whilst WLAs are assumed to have a high value their susceptibility to different forms of development vary according to the particular wild land qualities, to what extent they are intact and the scale and likely impact of different development types on such qualities.

The sensitivity of the WLA qualities to different types and scales of development was informed by the WLA descriptions and fieldwork and is classified as High, Medium or Low, as described below.

Volume 4: Technical Appendices

TA 4.6: Wild Land Impact Assessment

¹ Scottish Natural Heritage (2007) Assessing the Impacts on Wild Land – Interim Guidance Note and Scottish Natural Heritage (2017) consultation on draft guidance: Assessing impacts on Wild Land Areas – technical guidance

² Available at https://www.nature.scot/wild-land-area-descriptions

³ SNH (2014) Advice to Government – Core Areas of Wild Land 2013 Map, available at https://www.nature.scot/professional-advice/landscape-change/landscape-policy-and-quidance/landscape-policy-wild-land

Step 4 Impacts on Wild Land Areas

Impacts on wild land qualities are expressed as follows:

- Substantial: Total Loss or considerable alteration to attributes, assessed on a case by case basis.
- Moderate: Partial loss or alteration to attributes.
- Slight: Minor loss or alteration to attributes resulting in a change to the baseline.
- Negligible: Very minor loss or alteration to baseline attributes.
- None: No loss or alteration to baseline attributes.

Step 5 Judging Significance of Effects

Professional judgement has been applied to the findings of the baseline and predicted effects arising from the proposed development to assess whether effects on the physical attributes and perceptions of the WLA would be significant. As discussed in EIAR Volume 2: Chapter 4: LVIA, residual effects are ascertained by means of a comparison of Sensitivity and Magnitude of Impact, as indicated in Table 4.6.1, below. However, it is important to note that the matrix was not applied prescriptively or arithmetically, but rather, as a starting point from where professional judgement was brought to bear.

Table 4.6.1 Residual Effects						
	Magnitude of Change					
Sensitivity	Substantial	Moderate	Slight	Negligible	None	
High	Major	Major/moderate	Moderate	Moderate/ minor	None	
Medium	Major/moderate	Moderate	Moderate/minor	Minor	None	
Low	Moderate	Moderate/minor	Minor	Minor/none	None	

Illustrative Materials

EIAR Volume 3: Figure 4.5a, presents a Zone of Theoretical visibility (ZTV) drawing for the proposed development and Figure 4.3 indicates the location and extent of WLAs. A number of viewpoints were utilised in the LVIA that are also relevant to the WLIA (the viewpoints are presented in EIAR Volume 3: Figure 4.5a). These are as follows:

- Monadhliaths Wild Land Area (WLA No.20): Viewpoint 6: Carn Dearg (west of Gleann Ballach).
- Rannoch-Nevis Mamores-Alder (No.14): Viewpoints 7 (Geal Charn, Adverikie Forest), 8 (Ben Alder), 18 (Meall Cruaidh) and 19 (A Mharconaich).
- Braeroy, Glenshirra and Creag Meagaidh WLA (No.19): Viewpoints 4 (Glen Roy), 5 (Footpath east of Loch Spey), 13 (Carn Dearg), 15 (Carn Liath) and 21 (Beinn Teallach).

It should be noted, however, that these represent a worst case in respect of likely residual effects, and not necessarily the general effect on the WLA. Consequently, effects on wild land qualities at these viewpoints shouldn't be extrapolated across the wider WLA.

Table 4.6.2 to Table 4.6.4 present the results of the WLIA.

Table 4.6.2: Effects on Monadhliaths Wild Land Area (WLA No.20)

Step One (Study Area)	Step Two (Baseline Aspects)	Step Three (Sensitivity of Study Area to the type of Development Proposed)	Step Four (Assessment of Impacts)	Step Five (Residual Effects and Significance)
The majority of this WLA would be subject to no views of the proposed development. The study area for this WLA therefore concentrated on summits between Carn a' Choire Ghlaise (north of Glen Markie) to Carn Dearg (west of Gleann Ballach). The following Viewpoints are included in this WLA:	A range of massive rounded hills and plateaux that are awe-inspiring in their simplicity, openness and immense scale, and offer panoramic views to distant mountain ranges.	Medium. Within the study area the susceptibility of the WLA to the type of development proposed varies considerably and is dependent, in part, to the location and proximity of receptors to the existing/consented Stronelairg Wind Farm that already exerts considerable influence on southern parts of this WLA. Thereby reducing the perceived simplicity of the WLA. Key susceptibilities relate to the visual context formed by the adjacent WLAs and summits to the east, south and southwest.	Slight. The proposed development would affect a small proportion of the WLA from where it would be seen in the context and generally overlapping or behind the existing Stronelairg Wind Farm. This existing development already exerts a considerable influence on the wild land qualities of the study area. It is also the case that the proposed development would not obstruct or be interposed in views towards key summits.	Moderate/minor. Not significant.
 Viewpoint 6: Carn Dearg (west of Glenn Ballach) is located within this WLA. 	An extensive, simple interior with few human artefacts, contributing to a perceived 'emptiness' and a strong sense of naturalness, remoteness and sanctuary.	Medium. Within the study area Stronelairg Wind Farm forms a prominent feature and results in a reduction in the perceived naturalness of the landscape.	Slight. The proposed development would affect a small proportion of the WLA and would constitute only a limited additional effect on its perceived naturalness.	Moderate/minor. Not significant.
	A hill range in which many types of recreation take place, but its large, remote interior maintains a sense of sanctuary/solitude, challenge and risk.	Medium. The sense of sanctuary and solitude is lessened within the study area by the prominence of the existing/consented Stronelairg turbines. A sense of challenge and risk is retained, however.	Slight. Views of the proposed development within the study area would be confined to a relatively small number of summits that are subject to the influence of the existing/consented Stronelairg turbines. In this context, the effect of the proposed development on the remoteness and sense of solitude would be limited.	Moderate/minor. Not significant.
	Long, narrow glens cutting into the hill and plateau edges which are remote, but, facilitate access.	High. Despite the presence of some human artefacts and contemporary landuses, these glens retain a sense of remoteness.	None. The proposed development would not be visible from glens and would therefore result in no effect on the form or remote qualities of the WLA.	None.

Table 4.6.3: Effects on Rannoch-Nevis – Mamores-Alder Wild Land Area (WLA 14)

Step One (Study Area)	Step Two (Baseline Aspects)	Step Three (Sensitivity of Study Area to the type of Development Proposed)	Step Four (Assessment of Impacts)	Step Five (Residual Effects and Significance)
The study area considered for this WLA comprised an area between the northern extents of the WLA between Beinn Eilde and Meall Liath, and Talla Beith Forest. The following Viewpoints are located within this WLA:	Mountain ranges and glens of varying landform, but all arresting, with towering, steep and rugged slopes and striking physical features.	High. Awe inspiring with a high degree of naturalness due to the predominance of dramatic topographical forms and absence of human artefacts. Summits and elevated slopes are especially susceptible to the influence of developments that could compromise the distinctive form and naturalness of the landscape.	Slight. Viewed from elevated summits, the proposed development would introduce further prominent wind farm development to the north of the study area where it would overlap with the existing/consented Stronelairg Wind Farm. As such, the proposed development would not represent a wholly new feature in views in this direction and would be seen distantly. Consequently, any influence on the landscape's naturalness would be limited.	Moderate. Not significant.
• Viewpoint 7: Geal Charn (Ardverikie Forest);	A strong contrast of wide open peatland, lochs and steep-sided mountains that highlight the visibility and awe-inspiring qualities of each.	High. Development has the potential to provide scale indication and to detract from the contrasting and distinctive forms of mountains, peatlands, as well as the smaller scale enclosed lochs.	Slight. The proposed development would be seen distantly and generally in the context of the exiting/consented Stronelairg Wind Farm, which provides an existing developed context in views from this WLA.	Moderate. Not significant.
 Viewpoint 8: Ben Alder; Viewpoint 18: Meall Cruaidh; and Viewpoint 19: A'Mharconaich. 	An extensive and remote mountain and peatland interior with a strong sense of sanctuary, appearing even larger due to distant views to surrounding wild land areas.	High. Development has the potential to provide scale indication and to detract from the contrasting and distinctive forms of mountains, peatlands, as well as interrupting key connecting views and backgrounds comprising adjacent mountain ranges including the Loch Etive mountains (WLA 9), Braeroy – Glenshirra – Creag Meagaidh (WLA 19), the Cairngorms (WLA 15) and Breadalbane to Schiehallion (WLA 10) that can	Slight. The proposed development would introduce further prominent wind farm development to the north of the study area where it would overlap with the existing/consented Stronelairg Wind Farm. As such, the proposed development would not represent a wholly new feature in views in this direction and would be seen distantly. Consequently, any influence on the naturalness	Moderate. Not significant.

Volume 4: Technical Appendices

TA 4.6: Wild Land Impact Assessment

Step One (Study Area)	Step Two (Baseline Aspects)	Step Three (Sensitivity of Study Area to the type of Development Proposed)	Step Four (Assessment of Impacts)	Step Five (Residual Effects and Significance)
		appear contiguous with this landscape.	of the landscape would be limited. Additionally, the proposed development would not be interposed between summit receptor locations and key mountain ranges adjacent that form important background contexts.	
	A large area which is visited by many people to experience wild land qualities in different ways, whilst maintaining a sense of remoteness, sanctuary, challenge and risk.	High. Whilst glens and lochs contain a high proportion of human artefacts along with concentrations of human access, the summits and elevated peatlands are remote and contain few human artefacts.	Slight. The proposed development, whilst adding to existing external development and consequent influence on the perceived remoteness and naturalness of the WLA, would not compromise these qualities, partially due to the distance at which the proposed development would be seen.	Moderate. Not significant.

Step One (Study Area)	Step Two (Baseline Aspects)	Step Three (Sensitivity of Study Area to the type of Development Proposed)	Step Four (Assessment of Impacts)	Step Five (Residual Effects and Significance)
The study area considered for this WLA comprised an area covering the majority of the WLA due to the extent of theoretical visibility of the proposed development within the WLA. The following Viewpoints are included in this WLA:	Rounded hills and plateaux that are awe-inspiring in their massive scale and simplicity, whilst geological features and rivers contribute strongly to the sense of naturalness.	High: The awe inspiring and arresting qualities of the interior of the WLA are sensitive to development in both short and long frame views that could detract from the sense of naturalness experienced within the WLA.	Slight. The existing/consented Stronelairg turbines, as well as grid infrastructure within the Corrieyairack Pass exert an existing influence on elevated parts of this WLA, as well as the eastern end of Glen Roy and Loch Spey. In this this context, the proposed development, whilst adding to the complexity in views out of the WLA and reducing the perceived naturalness of a small number of locations at the northern end of the WLA (e.g. east of Loch Spey and at the summit of Carn Liath, would represent a slight impact on the scale, simplicity and sense of naturalness of the WLA overall, and the 'hidden' interior of the WLA in particular.	Moderate. Not significant.
 Viewpoint 4: Glen Roy; Viewpoint 5: Footpath (east of Loch Spey); Viewpoint 13: Carn Dearg; Viewpoint 15: Carn Liath; and Viewpoint 21: Beinn Teallach. 	A strong contrast of experience between the hills and plateaux with the straths, glens and corries, varying in their accessibility, exposure and visibility of human elements.	High: The sense of remoteness and wildness of hill tops is emphasised where human artefacts and contemporary land use (including access routes) located within adjacent glens and straths are screened by the intervening landform, and where connecting views across adjacent upland WLAs and the Cairngorms are evident. Such perspectives are susceptible to the influence of any prominent development.	Negligible. The proposed development would be screened from much of the WLA with the exception of a number of elevated summits. Where visible, the proposed development would generally be seen overlapping with and against a backdrop of the existing/consented Stronelairg Wind Farm. This existing scheme, along with a number of others to the north-east, form a concentration of development in views to the north-east of the WLA. The proposed development, whilst adding to the prominence of wind farm developments, would not compromise the contrast between the hills and plateaux with the straths, glens and corries.	Moderate/minor. Not significant.
	A hidden interior that is simple in landform and land cover, contributing to a perceived 'emptiness' and a strong sense of remoteness and sanctuary.	Medium: Despite a general absence of human elements within the interior, some are located just outside the WLA, for example the Beauly-Denny high voltage power lines, access track and Melgarve substation within the Corrieyairack Pass. In addition, a few human artefacts and some evidence of contemporary land use occur within the area itself, for example access tracks, fences, borrow pits and forest plantations. These diminish the wild land attributes individually and cumulatively and tend to appear most prominent and intrusive where contrasting in line, colour or pattern to the simple landform and vegetation cover.	Negligible. The proposed development would be screened from much of the interior of this WLA with the exception of a number of elevated summits and the eastern end of Glen Roy and Loch Spey. Where visible, the proposed development would generally be seen overlapping with and against a backdrop of the existing/consented Stronelairg Wind Farm and a number of other wind farms form a concentration of development in views to the northeast of the WLA. The only exception to this is in the eastern end of Glen Roy and in the vicinity of Loch Spey from where proposed development would be seen without other wind farms. The proposed development, whilst adding to the prominence of wind farm developments nearby, would not compromise the perceived 'emptiness' or sense of remoteness.	Moderate/minor. Not significant.

Table 4.6.4: Effects on Braeroy – Glenshirra and Creag Meagaidh Wild Land Area (WLA 19)

Step One (Study Area)	Step Two (Baseline Aspects)	Step Three (Sensitivity of Study Area to the type of Development Proposed)	Step Four (Assessment of Impacts)	Step Five (Residual Effects and Significance)
	Access and recreation focused around the margins, with an interior that is visited by few and possesses a sense of solitude, physical challenge and risk.	Medium: Recreational activity tends to occur most frequently within the outer parts of the WLA or upon the Munros and Corbetts, particularly as accessed from the Aberarder visitor car park (serving Creag Meagaidh National Nature Reserve (NNR) and circuit). In contrast, away from the margins, there are fewer visitors to the interior, with just one through-path across the WLA between Brae Roy Lodge and Melgarve (with a MBA bothy in-between at Luib chonnal), contributing to a strong sense of sanctuary and solitude within the interior. Whilst potentially adverse in respect of the naturalness of the landscape, the concentration of access/recreation means that there is greater presence of tracks, albeit in lower lying and enclosed positions such as Glen Roy. The WLA is therefore less susceptible to potentially sensitively design tracks, especially where they do not intrude into the interior of the WLA or form dominant elements in views from the interior or from remote summits.	Negligible. The proposed development would be obscured from much of the interior of this WLA, including sensitive incised locations such as Glen Roy. However, it would be visible from a number of elevated summits the eastern end of Glen Roy and Loch Spey. Where visible, the proposed development would generally be seen overlapping with and against a backdrop of the existing/consented Stronelairg Wind Farm and a number of other wind farms form a concentration of development in views to the north-east of the WLA. The only exception to this is in the eastern end of Glen Roy and in the vicinity of Loch Spey from where proposed development would be seen without other wind farms. The proposed development, whilst adding to the prominence of wind farm developments in views to the northeast, would not compromise the sense of solitude, challenge and risk of the WLA.	Moderate/minor. Not significant.
	and plateaux: some arresting by virtue of their narrowness and steep side-slopes, and some because of their openness against a surrounding backcloth of towering mountains. that of most set three p along the loch. Some of the WL artefact building fences. The effict they ap contrast they are	High: A key glen within the study area for this WLA is that of Glen Roy, which bisects the WLA. One of the most sensitive part of this glen is associated with the three parallel roads or loch terraces that were formed along the sides of the glen by an ancient ice-dammed loch. Some of the glens within the margins or just outside the WLA include more extensive areas of human artefacts or contemporary land use, such as estate buildings, forest plantations, electricity power lines, fences or access tracks. The effects of these elements may be limited where they appear contained within the glen floor; whilst, in contrast, their effects tend to be more intrusive where they are large or extend up the glen side slopes or over bealachs.	Slight. Views of the proposed development from the remote glens would be highly constrained and limited to sections at the eastern end of Glen Roy, beyond the location of the loch terraces. As walkers progress eastwards and emerge from the glen the proposed development would be revealed on the skyline on the northern side of the Corrieyairack Pass which bounds the view to the northeast and marks the edge of the Monadhliaths. Whilst the proposed development would be relatively prominent, it would be partially screened and seen at a distance of over 8 km. Whilst the turbines would form a focus they would have a localised effect and would not compromise the form or arresting qualities of this glen.	Moderate. Not significant.

Volume 4: Technical Appendices

TA 4.6: Wild Land Impact Assessment