# Chapter 7: Landscape and Visual Impact Assessment

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# Appendices

Appendix 7.1: Methodology

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# 7 Landscape and Visual Impact Assessment

# 7.1 Executive Summary

- 7.1.1 The purpose of the Landscape and Visual Impact Assessment (LVIA) is to identify and record the potential significant effects that the Development may have on physical elements of the landscape; landscape character; areas that have been designated for their scenic or landscape-related qualities; areas of wild land; and views from various locations such as settlements, routes, hilltops and other sensitive locations. The potential cumulative effects that may arise from the addition of the Development to other wind farms are also considered.
- 7.1.2 The LVIA has been carried out across a study area with a radius of 35km from the nearest turbine in the Development. The assessment has indicated that the Development would result in some significant effects on the landscape and visual resource within this study area, as described below.
- 7.1.3 The landscape character types that cover the site and its surroundings are likely to be subject to significant effects up to a maximum distance of around 6.5km away, although this would only be the case where there is notable visibility of the Development and landform is oriented towards the Development. The extent of these effects also depends to a considerable degree on the type of visibility of the Development; effects tend to be greater when it is seen without the operational Gordonbush Wind Farm, or where it has a notable effect in addition to the operational Gordonbush Wind Farm due to an increased extent across the skyline, for example. Beyond approximately 6.5km, the Development would be a relatively minor influence in the setting to landscape character types, and would no longer result in a significant effect. Some limited parts of the Loch Fleet, Loch Brora and Glen Loth SLA (a minimum of 1.6km from the Development) would have significant effects, but there would be no significant effects on wild land areas (WLA) or National Scenic Areas (NSA).
- 7.1.4 The assessment of effects on views is informed by a series of 17 viewpoints that have been selected, in agreement with Scottish Natural Heritage (SNH) and The Highland Council (THC), to represent visibility from sensitive locations throughout the study area. This visual assessment has found significant effects on two hilltop viewpoints (Beinn Smeorail and Ben Horn); intermittent significant effects on up to 3km of the minor road from Brora to Rogart travelling eastwards and 1.4km travelling westwards (with potential for an additional several hundred metres if forestry is felled); intermittent significant effects on approximately 5.6km of core path SU06.02 on the west side of Loch Brora; intermittent significant effect on a part of the access track to Ben Armine Lodge. There would be no significant effects on other routes, including the A9, A836, A839, A897, A949, national cycle routes, long distance walking routes and railway lines.
- 7.1.5 As well as assessing the effect of the Development itself, the LVIA assesses the cumulative effect that may arise when it is added to operational, consented and application stage wind farms. The cumulative assessment indicates that the addition of the Development to operational and consented wind farms would result in significant cumulative effects on the landscape character of small parts of Strath Brora, including one very small part of the Loch Fleet, Loch Brora and Glen Loth SLA; the minor road from Brora to Rogart, travelling in

either direction; and on the view from Creag nam Fiadh. The consideration of application stage wind farms does not lead to any additional significant cumulative effects.

7.1.6 The design process for the Development has been fundamental in the mitigation of potential significant effects, with the scoping layout of 20 wind turbines being reduced to the concentrated group of 16 wind turbines that is seen in the final layout. The key effect of this reduction was to pull turbines northwards away from Strath Brora, thus reducing the potential for significant effects to arise within and to the south of the strath. The layout design has also achieved a high level of integration with the operational Gordonbush Wind Farm, and this has been fundamental in the avoidance and reduction of effects on the landscape and visual resource.

# 7.2 Introduction

- 7.2.1 This landscape and visual impact assessment (LVIA), which has been undertaken by Optimised Environments Limited (OPEN), evaluates the effects of the Development on the landscape and visual resource. The assessment considers effects on the landscape resource both direct effects and effects on how the landscape is perceived and the effect on visual amenity (views) within the study area (Figure 7.1). Cumulative effects arising from the addition of the Development to other wind farms are also considered.
- 7.2.2 There is one technical appendix to this Chapter:
  - Appendix 7.1: Methodology, a detailed description of the methodology used in the landscape and visual assessment. A summary of the methodology is provided in Section 7.5 of this Chapter.

# 7.3 Scope of Assessment

#### **The Development**

- 7.3.1 This assessment covers the construction, operational phase and decommissioning of the Development. The Development is an extension to the operational Gordonbush Wind Farm and consists of 16 turbines with associated infrastructure, including access tracks, meteorological mast, operations building, temporary borrow pits and temporary batching plant as described in ES Chapter 4 (Description of Development).
- 7.3.2 The LVIA is based on turbines of two different heights: Turbine 1 to Turbine 13 are 130m to blade tip (77.5m hub height and 105m rotor diameter) and Turbine 14 to Turbine 16 are 115m to blade tip (68.5m hub height and 93m rotor diameter). The turbines in the operational Gordonbush Wind Farm are 110m to blade tip (69m hub height and 82m rotor diameter).

#### Study Area

7.3.3 The initial step in the LVIA is the establishment of the study area for the assessment. Guidance developed by Scottish Natural Heritage (SNH) (Visual Representation of Wind Farms Version 2.1, December 2014) indicates that an area with a radius of 35km from the nearest turbine is appropriate for turbines of the size proposed at the Development. This study area is shown in Figure 7.1. Zone of Theoretical Visibility (ZTV) analysis has been carried out for this area, as has mapping of landscape character, landscape related designations, Wild Land Areas and principal visual receptors.

- 7.3.4 The study area is not intended to provide a boundary beyond which the Development will not be seen, but rather to define the area within which it may have a significant landscape or visual effect. A significant effect is, in reality, very unlikely to occur towards the edges of the study area.
- 7.3.5 The cumulative landscape and visual assessment covers an initial study area of 60km from the nearest turbine in the Development, in accordance with guidance developed by SNH (Assessing the Cumulative Impact of Onshore Wind Energy Developments, 2012). This is shown on Figure 7.15.

#### Scoping and Consultation

7.3.6 The Highland Council (THC) and SNH have been consulted on various aspects of the assessment process, including viewpoint locations, the production of visualisation information, and wind farms to be included in the cumulative assessment. Table 7.1 summarises this consultation and describes how issues raised by these consultees have been addressed in the LVIA.

Consultee	Summary Response	Comment/Action Taken
The Highland Council: scoping opinion	Viewpoints must be discussed with THC in consultation with SNH. While viewpoints used in the initial wind farm are likely to form the basis of visualisations for the Development, there will need to be a review of the proposed ZTV and recent applications in the area also need to be considered.	Viewpoints have been agreed with THC and SNH.
	The applicant will be expected to adopt THC photography/visualisation standards when presenting information on the expected visual impact of the development.	THC visualisation standards have been followed in photography and the production of one set of visualisations (see Volume 3B of this ES).
	The Development will further extend the number of wind farm proposals in the surrounding area, necessitating appropriate cumulative impact assessment in the ES. This will be a significant material consideration in the final determination of the application.	A cumulative LVIA has been included in this chapter.
	Mitigation to offset any predicted impact, including the design of site layout and turbine height, will need to be clearly set out as part of the assessment.	The design process, including mitigation through design, has been described in Chapter 3: Site Selection, Design Evolution and Consideration of Alternatives and Appendix 3.1: Design Statement.
The Highland Council: Pre- application Consultation	<ul> <li><u>Pre-application consultation: email 11/8/14</u></li> <li>Suggested additional viewpoint at Ben Griam Beg.</li> <li>The viewpoints at Strath Fleet and Beinn Dhorain selected by OPEN may not be necessary.</li> </ul>	In agreement with THC/SNH, the Strath Fleet and Ben Klibreck viewpoints have been omitted, while Ben Griam Beg and Beinn Dhorain have been included.
	<ul> <li>Viewpoint from Ben Klibreck may be considered, but it is not essential as Ben</li> </ul>	

## Table 7.1: Summary of Consultation

Consultee	Summary Response	Comment/Action Taken
	Armine is nearby.	
	Pre-application consultation: meeting 8/9/14	Noted.
	Final viewpoint list was agreed (with Strath Fleet and Ben Klibreck viewpoints omitted and Beinn Dhorain viewpoint included).	
Turbine height will need to be justified in the Environmental Statement (ES) – a mix of heights may be appropriate at this site.		Turbine height is discussed in the Design Statement (Appendix 3.1).
	All viewpoints should be accompanied by a photomontage as well as wireline unless it can be justified otherwise (i.e. distant and limited visibility).	In the THC visualisations (Volume 3B), all viewpoints are accompanied by a photomontage.
	THC and SNH guidance must be followed in the production of visualisations.	THC and SNH guidance has been followed, and the two sets of visualisations are presented in two separate volumes.
	Visualisations produced for each viewpoint to be agreed with THC/ SNH.	Visualisations for each viewpoint have been agreed (emails 30.10.14 and 3.11.14).
	Pre-application consultation: email 11/8/14	Panoramic viewer images have been
	A panoramic viewer image will be required for Viewpoint 5 (Brora – Rogart road near Sciberscross) and potentially at other viewpoints suggested by OPEN. OPEN to make the final decision.	produced for Viewpoints 1 (Beinn Smeorail), 6 (Brora to Rogart minor road near Sciberscross), 8 (Craggie Beg), 9 (Ben Horn) and 11 (Hope Hill).
	Cumulative approach sites to be included agreed (as per OPEN email to THC/SNH (28/10/14).	Noted.
	Reminder to supply raw photographic images, to allow THC to check original photography for correct use of camera/lens and sensors.	Noted.
SNH: scoping opinion	The scale of the Development is likely to produce major landscape and visual impacts across some areas, notably Strath Brora, both in its own right and cumulatively.	The extent of the Development has reduced subsequent to scoping, particularly in relation to Strath Brora, where effects have been considered throughout the design and assessment process.
	The Development is likely to produce impacts on an area of wild land character, contributing to attrition of wild land characteristics.	Effects on the wild land area have been considered throughout the design and assessment process (see Section 7.11 of this Chapter).
	The LVIA should refer to the key characteristics, special qualities and sensitivities listed in the citation for the Loch Fleet, Loch Brora & Glen Loth SLA.	The key characteristics, special qualities and sensitivities described in the citation for the Loch Fleet, Loch Brora & Glen Loth SLA are referred to in Section 7.10 of the this Chapter.
	Other potential landscape and visual effects to be considered and minimised include:	Potential effects on these receptors have been considered in Section 7.12 of this chapter.
	<ul> <li>Visibility from the Brora - Rogart minor road and the Strath Brora 'corridor';</li> <li>Recreational users, residential visual amenity and westward views from hills between Strath Brora and Glen Loth; and</li> <li>Visual impact of associated development</li> </ul>	Effects arising from infrastructure have been considered, as has possible mitigation of these effects through the design and location of infrastructure (see Appendix 3.1: Design Statement).
	(with consideration given to internal	

Consultee	Summary Response	Comment/Action Taken
	transformers and siting of construction compound, welfare building, borrow pits).	
	SNH welcomes the intention of the applicant to seek advice on viewpoints from SNH/THC.	The final viewpoint list has been agreed with SNH and THC (meeting 8/9/14).
	The updated SNH Visual Representation of Wind Farms guidance is likely to be published before the end of 2013.	The updated SNH guidance was published in July 2014 (updated in December 2014) and has been followed in the production of one set of visualisations.
	Although SAWLs continue to be applied (at the time of the scoping opinion), the wild land assessment should be informed by other information e.g. SNH 2012 wildness maps, which have informed CAWLs. The applicant should consult SNH on the wild land assessment methodology prior to carrying out the wild land assessment.	Subsequent to the issue of the scoping opinion, SNH 'wild land areas' have been mapped and, as agreed with SNH (meeting 8/9/14) these will form the basis of the wild land assessment (see Section 7.11 of this Chapter). The methodology used for the wild land assessment follows that of the 2007 SNH guidance, as agreed with SNH (meeting 8/9/14).
	<ul> <li>Cumulative assessment will be a critical part of the EIA – this should consider the scenarios listed below and should focus on the additional effects of the Development.</li> <li>The Development in conjunction with consented/operational wind farms;</li> <li>The Development in conjunction with consented/operational wind farms + submitted planning applications; and</li> <li>The Development in conjunction with consented/operational wind farms + submitted planning applications; hits with submitted scoping reports, where there is detailed layout information.</li> </ul>	A full cumulative assessment has been included in the LVIA. This focusses on the additional effects of the Development, and considers the scenarios described by SNH. The sites included in the cumulative assessment have been agreed (with one subsequent inclusion – West Garty) with THC (email 30/10/14) and were issued to SNH (email 28/10/14) with no further comment made by SNH. This agreed list does not include any scoping sites as none are considered relevant to the assessment, and the final scenario suggested by SNH has therefore not been included.
	<ul> <li>The following cumulative issues should be considered:</li> <li>Visual conflict is likely to arise between the Development (max 132m blade tip at scoping) and Gordonbush Wind Farm;</li> <li>Visual conflict with other wind farm development in terms of scale and lowout, and</li> </ul>	These issues have been considered in the layout design of the Development and in the cumulative assessment. We note that SAWLs are no longer relevant to the assessment of effects on wild land.
	<ul> <li>layout; and</li> <li>Cumulative effects on landscape character (e.g. Strath Brora), designated landscapes, the Search Area of Wild Land (SAWL), and areas with wild land character.</li> </ul>	
SNH: Pre- application consultation	<ul> <li><u>Pre-application consultation: email 2/9/14</u></li> <li>SNH provided the following comments on OPEN's selection of proposed viewpoints:</li> <li>Beinn Dhorain viewpoint should be retained;</li> <li>Content for Strath Fleet and Ben Klibreck viewpoints to be removed;</li> </ul>	In agreement with THC/SNH, the Strath Fleet and Ben Klibreck viewpoints have been omitted while Ben Griam Beg and Beinn Dhorain have been included. Morven gains very little visibility and has not been included (as agreed with SNH/THC at meeting 8/9/14).

Consultee	Summary Response	Comment/Action Taken
	<ul> <li>Ben Griam Mor might be a better option than Ben Griam Beg; and</li> <li>Suggest that Morven is included as a viewpoint.</li> </ul>	
	Request a ZTV showing the difference in visibility of Gordonbush and the Development	Provided to SNH/THC at meeting 8/9/14 (see Figure 7.8c).
	Pre-application consultation: meeting 8/9/14 (see also above in relation to THC) Wild land citations are likely to be available in early 2015. Wild land assessment should be based on 2007 SNH guidance; however SNH confirmed that the first step (identification of study area and baseline study) can be skipped.	Noted.
	Updated SNH guidance 'Siting and Designing Wind Farms in the Landscape' (2014) should be followed and referenced in the ES.	Noted.
	All viewpoints within 20km should be accompanied by a photomontage.	In the SNH volume of visualisations (see Volume 3A), photomontages have been produced for all viewpoints that fall within a 20km radius of the Development.
	Pre-application consultation: email 8/9/14	Noted. See Figures 7.17 – 7.33 of this ES.
	All cumulative wind farms can be shown on the main wirelines (without need for additional specific cumulative wirelines) as long as this is legible.	
	Pre-application consultation: email 3/11/14	Advice sought from relevant community
	With regard to the SNH viewpoint pack requirement, the advice of the relevant community council(s)/local residents may be sought as to which viewpoints they consider to be important for inclusion. It is important that the public have the ability to use the pack and are aware that it is being produced.	councils at meetings in January, February and May 2015. No viewpoints were suggested by community councils either at the meetings or in subsequent correspondence.

# 7.4 Policy & Guidance

7.4.1 Planning policy and legislation that is relevant to the Development is described in detail in Chapter 5 (Planning Policy Context). A summary of those aspects that are of key relevance to the LVIA is included below.

## **National Policy**

- 7.4.2 Scotland's third National Planning Framework (NPF3) was published by the Scottish Government in June 2014. NPF3 is a long term strategy for Scotland and is the spatial expression of the Government's Economic Strategy and plans for development and investment in infrastructure.
- 7.4.3 A new Scottish Planning Policy (SPP) was also published in June 2014. The purpose of the SPP is to set out national planning policies which reflect Scottish Government Ministers' priorities for the operation of the planning system and for the development and use of land. The SPP is a statement of Scottish Government policy on how nationally important land use planning matters should be addressed.
- 7.4.4 SPP sets out the required approach to spatial frameworks which will guide wind energy development to appropriate locations, taking into account important features, and includes provision for the protection of areas of landscapes that are recognised for their landscape-related qualities at a national level, including National Scenic Areas (NSAs), National Parks, wild land areas (WLAs) and Gardens and Designed Landscapes (GDLs). The relevant paragraphs from SPP are described in the baseline section of this Chapter (see Section 7.6).

# **Regional Policy**

- 7.4.5 The current THC statutory Development Plan for the 35km study area comprises the following:
  - Highland-wide Local Development Plan (HwLDP) (adopted April 2012);
  - Caithness Local Plan (as continued in force April 2012, adopted 2002);
  - Ross and Cromarty East Local Plan (as continued in force April 2012, adopted 2007); and
  - Sutherland Local Plan (as continued in force April 2012, adopted 2010).
- 7.4.6 Relevant policies from these documents are referred to in the baseline section of this Chapter (see Section 7.6).

#### Guidance

- 7.4.7 The following sources have been utilised in the formulation of methodology for the assessment and the presentation of graphics:
  - Advice Note 01/11 Photography and Photomontage in Landscape and Visual Impact Assessment (Landscape Institute, 2011);
  - Assessing the Cumulative Impact of Onshore Wind Energy Developments (SNH, 2012);
  - Assessing the Impacts on Wild Land-Interim Guidance Note (SNH, February 2007 with note added October 2014);

- Assessment of Highland Special Landscape Areas (THC in partnership with SNH, 2011);
- Guidelines for Landscape and Visual Impact Assessment: Third Edition (Landscape Institute and IEMA, 2013)(GLVIA3);
- Landscape Character Assessment Guidance for England and Scotland (SNH and TCA, 2002);
- Siting and Designing of Windfarms in the Landscape: Version 2 (SNH 2014);
- Visual Representation of Wind Farms Version 2.1 (SNH, December 2014); and
- Visualisation Standards for Wind Energy Developments (The Highland Council, May 2013 and March 2015).

## 7.5 Methodology

7.5.1 This section summarises the methodology and guidance used to carry out the LVIA, which is described in full in Appendix 7.1.

#### **Desk Study**

- 7.5.2 The assessment is initiated through a desk study of the site and 35km radius study area. This study identifies aspects of the landscape and visual resource that may need to be considered in the landscape and visual assessment, including landscape-related planning designations (i.e. National Scenic Areas), landscape character typology, wild land areas, operational and potential cumulative wind farms, and views from routes (including roads, railway lines, National Cycle Routes and long distance walking routes), and settlements.
- 7.5.3 The desk study also utilises Geographic Information System (GIS) and Resoft Windfarm software to explore the potential visibility of the Development. The resultant Zone of Theoretical Visibility (ZTV) diagrams and wirelines provide an indication of which landscape and visual receptors are likely to be key in the assessment.

#### **Field Survey**

- 7.5.4 Field surveys are carried out throughout the 35km radius study area, although the focus is on the areas shown on the ZTV to gain theoretical visibility of the Development. The baseline field survey has four broad stages:
  - A preliminary familiarisation around the study area in order to visit the aspects of the landscape and visual resource that have been identified through the desk study and verify their existence and importance. Important features and characteristics that have not become apparent through the desk study are also identified, and particularly sensitive receptors are noted in order to inform the design process.
  - A visit onto the site, in order to establish the potential of the site for wind farm development and identify the most suitable areas for Development in landscape and visual terms, along with any constraints that may restrict the developable area.
  - Further field survey around the study area, concurrent with the design process for the proposed development, to identify those receptors that are likely to be particularly important in the assessment and inform the layout design, possible turbine height, and the extent of the Development.

• The identification of representative viewpoints to include in the landscape and visual assessment, including a wide range of receptors, landscape character, and directions and distances from the Development.

## **Categories of Effects**

- 7.5.5 The LVIA is intended to determine the effects that the Development would have on the landscape and visual resource. For the purpose of assessment, the potential effects on the landscape and visual resource are grouped into five categories:
- 7.5.6 **Physical effects** are restricted to the area within the Development site boundary and are the direct effects on the existing fabric of the site, such as alteration to ground cover. This category of effects is made up of landscape elements, which are the components of the landscape such as rough grassland and moorland that may be directly and physically affected by the Development.
- 7.5.7 **Effects on landscape character**: landscape character is the distinct and recognisable pattern of elements that occurs consistently in a particular type of landscape, and the way that this pattern is perceived. Effects on landscape character arise either through the introduction of new elements that physically alter this pattern of elements, or through visibility of the Development, which may alter the way in which the pattern of elements is perceived. This category of effects is made up of landscape character receptors, which fall into two groups; landscape character types and landscape-related designated areas.
- 7.5.8 **Effects on wild land areas**: the assessment of effects on wild land areas (WLAs) is carried out in accordance with SNH guidance (Assessing the Impacts on Wild Land-Interim Guidance Note February 2007 with note added October 2014).
- 7.5.9 **Effects on views**: the assessment of effects on views is an assessment of how the introduction of the Development will affect views throughout the study area. The assessment of effects on views is carried out in two parts:
  - An assessment of the effects that the Development would have on a series of viewpoints around the study area; and
  - An assessment of the effects that the Development would have on views from principal visual receptors, which are relevant settlements and routes found throughout the study area.
- 7.5.10 **Cumulative effects** arise where the study areas for two or more wind farms (or in some cases other relevant development) overlap so that both of the wind farms/developments are experienced at a proximity where they may have a greater incremental effect, or where wind farms/other developments may combine to have a sequential effect. In accordance with guidance (SNH, 2012), the LVIA assesses the effect arising from the addition of the Development to the cumulative situation, and not the overall effect of multiple wind farms.

#### Assessment of Effects

7.5.11 The broad principles used in the assessment of significance of the categories of effects noted in paragraph 7.5.5 to 7.5.9 (other than the assessment of effects on wild land areas) are the same, and are described below. The detailed methodology for the assessment of

significance does, however, vary, and the specific criteria used are described in Appendix 7.1.

- 7.5.12 The objective of the assessment of the Development is to predict the likely significant effects on the landscape and visual resource. In accordance with the EIA Regulations the LVIA effects are assessed to be either **significant** or **not significant**. The LVIA does not define intermediate levels of significance as the EIA Regulations do not provide for these.
- 7.5.13 The significance of effects is assessed through a combination of two considerations; the **sensitivity** of the landscape receptor or view and the **magnitude of change** that will result from the addition of the Development.

#### <u>Sensitivity</u>

- 7.5.14 Sensitivity is an expression of the ability of a landscape receptor or view to accommodate the Development. Sensitivity is determined through a combination of the **value** of the receptor and its **susceptibility** to the Development. The factors that determine these criteria are described in Appendix 7.1.
- 7.5.15 Levels of sensitivity high, medium-high, medium, medium-low and low are applied in order that the judgement used in the process of assessment is apparent.

## Magnitude of Change

- 7.5.16 Magnitude of change is an expression of the extent of the effect on landscape receptors and views that will result from the introduction of the Development. The magnitude of change is assessed in terms of a number of variables, including the **size** and **scale** of the impact and the **extent** of the affected area. The factors that determine these criteria are described in Appendix 7.1.
- 7.5.17 Levels of magnitude of change high, medium-high, medium, medium-low, low and negligible are applied in order that the judgement used in the process of assessment is apparent.

# Assessment of Significance

7.5.18 The significance of effects is assessed through a combination of the **sensitivity** of the landscape receptor or view and the **magnitude of change** that will result from the addition of the Development. While this methodology is not reliant on the use of a matrix to arrive at the conclusion of a significant or not significant effect, a matrix is included below to illustrate how combinations of sensitivity and magnitude of change ratings can give rise to significant effects. The matrix also gives an understanding of the threshold at which significant effects may arise.

Magnitude Sensitivity	High	Medium- High	Medium	Medium-Low	Low	Negligible
High	Significant	Significant	Significant	Significant/ Not Significant	Not Significant	Not Significant
Medium-High	Significant	Significant	Significant/ Not Significant	Significant/ Not Significant	Not Significant	Not Significant
Medium	Significant	Significant/ Not Significant	Significant/ Not Significant	Not Significant	Not Significant	Not Significant
Medium-Low	Significant/ Not Significant	Significant/ Not Significant	Not Significant	Not Significant	Not Significant	Not Significant
Low	Not Significant	Not Significant	Not Significant	Not Significant	Not Significant	Not Significant

 Table 7.2: Illustrative Significance Matrix

- 7.5.19 Effects within the dark grey boxes in the matrix are considered to be significant in terms of the EIA Regulations. Effects within the light grey boxes may be significant or not significant depending on the specific relevant factors that arise at a particular landscape or visual receptor. In accordance with GLVIA3, experienced professional judgement is applied to the assessment of all effects and reasoned justification is presented in respect of the findings of each case.
- 7.5.20 A significant effect occurs where the Development will provide a defining influence on a landscape element, landscape character receptor or view. A not significant effect occurs where the effect of the Development is not material, and the baseline characteristics of the landscape element, landscape character receptor, view or visual receptor continue to provide the definitive influence. In this instance the Development may have an influence but this influence will not be definitive. Significant cumulative landscape and visual effects arise where the addition of the Development to other wind farms and/or other major developments leads to wind farms becoming a prevailing landscape and visual characteristic.
- 7.5.21 It is important to remember that the objective of the cumulative assessment is different from the assessment of effects of the Development itself. In the cumulative assessment the intention is to establish whether or not the addition of the Development, in combination with other relevant existing and proposed wind farms, may lead to a landscape character or view that is characterised primarily by wind farms so that other patterns and components are no longer definitive. The assessment of the effects of the Development itself focusses on the effect that the Development will have on the viewpoints, principal visual receptors and landscape character receptors, taking baseline wind farms into consideration but not assessing the contribution of the Development to the cumulative situation. Baseline (operational, under construction and consented) cumulative wind farms are taken into consideration in both the assessment of the Development itself and the cumulative assessment, while application-stage wind farms are considered only in the cumulative assessment.

#### Nature of Effects

- 7.5.22 The 'nature of effects' relates to whether the effects of the Development are positive/beneficial or negative/adverse. Guidance provided in GLVIA3 states that "thought must be given to whether the likely significant landscape and visual effects are judged to be positive (beneficial) or negative (adverse) in their consequences for landscape or for views and visual amenity", but does not provide an indication as to how that may be established in practice. The nature of effect is therefore one that requires interpretation and reasoned professional opinion.
- 7.5.23 In relation to many forms of development, the ES will identify beneficial and adverse effects under the term nature of effect. The landscape and visual effects of wind farms are difficult to categorise in either of these brackets as, unlike other disciplines, there are no definitive criteria by which these effects can be measured as being categorically beneficial or adverse. For example, in disciplines such as noise or ecology it is possible to identify the nature of the effect of a wind farm by objectively quantifying its effect and assessing the nature of that effect in prescriptive terms. However, this is not the case with landscape and visual effects, where the approach combines quantitative and qualitative assessment.
- 7.5.24 In this assessment, beneficial, neutral and adverse effects are defined as follows:
  - Beneficial effects contribute to the landscape and visual resource through the enhancement of desirable characteristics or the introduction of new, beneficial attributes. The removal of undesirable existing elements or characteristics can also be beneficial, as can their replacement with more appropriate components;
  - Neutral effects occur where the Development neither contributes to nor detracts from the landscape and visual resource and is accommodated with neither beneficial nor adverse effects, or where the effects are so limited that the change is hardly noticeable. A change to the landscape and visual resource is not considered to be adverse simply because it constitutes an alteration to the existing situation; and
  - Adverse effects are those that detract from or weaken the landscape and visual resource through the introduction of elements that contrast, in a detrimental way, with the existing characteristics of the landscape and visual resource, or through the removal of elements that are key in its characterisation.
- 7.5.25 A precautionary approach has been adopted which assumes that significant landscape and visual effects will be weighed on the negative side of the planning balance, although beneficial or neutral effects may arise in certain situations. Unless it is stated otherwise, the effects of the Development are therefore considered to be adverse.

#### **Duration and Reversibility of Effects**

7.5.26 The effects of the Development are of variable duration, and are assessed as short-term or long-term, and permanent or reversible. It is anticipated that the operational life of the Development will be 25 years. The turbines, permanent meteorological mast, site access tracks and operations building would be apparent during this time, and these effects are considered to be long-term.

- 7.5.27 Other infrastructure and operations such as the construction processes and plant (including tall cranes for turbine erection) and construction and storage compounds would be apparent only during the initial construction period of the Development and are considered to be short-term effects. Borrow pit excavation would also be short-term as borrow pits would be restored at the end of the construction process, although a permanently altered ground profile may remain evident.
- 7.5.28 The reversibility of effects is variable. The most apparent effects on the landscape and visual resource, which arise from the presence of the turbines, are reversible as the turbines would be removed on decommissioning, as would the permanent meteorological mast. The effects of the tall cranes and heavy machinery used during the construction and decommissioning periods are also reversible.
- 7.5.29 It is anticipated that access tracks would remain at decommissioning. Turbine foundations and underground cabling would be left in-situ below ground with no residual landscape and visual effects.
- 7.5.30 In order to avoid repetition, the duration and reversibility of effects are not reiterated throughout the assessment.

#### Limitations to the Assessment

- 7.5.31 There are limitations in the theoretical production of ZTVs, and these should be borne in mind in their consideration and use:
  - The ZTVs illustrate the 'bare ground' situation, and do not take into account the screening effects of vegetation, buildings, or other local features that may prevent or reduce visibility;
  - The ZTVs do not indicate the decrease in visibility that occurs with increased distance from the Development. The nature of what is visible from 3km away will differ markedly from what is visible from 10km away, although both are indicated on the ZTVs as having the same level of visibility; and
  - It is important to remember that there is a wide range of variation within the visibility shown on the ZTV. For example, an area shown on the blade tip ZTV as having visibility of all of the turbines may gain views of the smallest extremity of blade tips, or of full turbines. This can make a considerable difference in the effects of the proposed development on that area.
- 7.5.32 These limitations mean that while the ZTVs are used as a starting point in the assessment, providing an indication of where the Development will theoretically be visible, the information drawn from the ZTVs is not completely relied upon to accurately represent visibility of the Development.
- 7.5.33 Photographs and other graphic material such as wirelines and photomontages used in the assessment are for illustrative purposes only and, whilst useful tools in the assessment, are not considered to be completely representative of what will be apparent to the human eye. The assessment itself is carried out from observations in the field and therefore may include elements that are not visible in the photographs.

## 7.6 Baseline Conditions and Preliminary Assessment

- 7.6.1 The baseline section of the LVIA records the existing conditions of the study area. Establishing a baseline helps to gain an understanding of what makes the landscape distinctive and what its important components or characteristics are. The baseline is instrumental in the identification of the landscape character receptors, visual receptors and viewpoints that are included in the assessment. This section is presented in the following headings:
  - The site;
  - Landscape character;
  - Landscape planning designations;
  - Wild land areas;
  - Principal visual receptors;
  - Viewpoints; and
  - Cumulative wind farm developments.
- 7.6.2 This section also identifies which of the landscape and visual receptors have potential to undergo significant effects or significant cumulative effects as a result of the Development, and therefore require to be assessed in detail. This is implemented through a two-stage filtering process.
- 7.6.3 Firstly, ZTV mapping is used to identify those receptors which will gain any theoretical visibility of the Development. Where there is no theoretical visibility, receptors are discounted from the assessment. Secondly, the receptors that are shown on the ZTV mapping to gain some visibility of the Development have a preliminary assessment to ascertain if they have potential to undergo a significant effect or a significant cumulative effect. This preliminary assessment considers various factors that contribute to the sensitivity of the receptor, the magnitude of change that will result from the addition of the Development, and the level of visibility and influence of cumulative wind farms. Various methods of verification are used in this second stage, including site visits, ZTVs, GIS mapping, wirelines and aerial photography.
- 7.6.4 In the case of some receptors, this preliminary assessment indicates that the landscape or visual receptor does not have potential to undergo a significant effect or significant cumulative effect as a result of the Development, despite gaining visibility of it. This is most frequently due to a combination of the limited predicted level of visibility and influence of the Development and/or other wind farms, and the limited sensitivity of the receptor. Where this is the case, the potential effects on the receptor do not need to be assessed in any further detail and at this stage they can be discounted from the assessment.
- 7.6.5 Where the preliminary assessment indicates that there is potential for the receptor to undergo a significant effect or cumulative effect as a result of the Development, this is assessed in detail subsequently in this Chapter.

### The Site

- 7.6.6 The Development site consists of a single slope of moorland that falls from approximately 330m AOD in the north-east to approximately 150m AOD in the south-west. All sides of the site other than the west are surrounded by higher landform; to the north, north-west and north-east is a series of cnocans of which the highest is Cnoc a' Chrubaich Mhoir (421m AOD); immediately to the south of the site is an unnamed local high point (233m AOD) and, slightly further, Cnoc a' Ghrianain (214m AOD); to the east is the steeply rising landform of Meallan Liath Mor (511m AOD); and to the south-east is the distinctive landform of Beinn Smeorail (486m AOD). To the west and south-west, the slope of the site continues to fall into the valley of the Allt a' Mhuilinn before rising gently again into a series of cnocans. Landform around the site and the study area can be seen on Figure 7.2.
- 7.6.7 To the north-east of the site, the moorland continues to rise up to Cnoc a' Chrubaich Mhoir, and on this slope, above the site, is the operational Gordonbush Wind Farm. Access to the operational Gordonbush Wind Farm is gained by a track that runs from the public road in Strath Brora at Ascoile, across the southern edge and up the eastern side of the Development site.
- 7.6.8 To the south of the site is Strath Brora, which is particularly enclosed at this point, contained to the north by Cnoc a' Ghrianain and to the south by Kilbraur Hill (324m AOD) and Carroll Rock. Loch Brora lies within the strath due south of the site. The minor road that links Brora to Rogart also runs through Strath Brora at this point, passing to the south of the site in a narrow corridor between Loch Brora and Cnoc a' Ghrianain. There is scattered settlement in this part of Strath Brora, largely to the north of the road, loch and river, including Gordonbush Estate buildings, properties at Ascoile, Ascoilemore and, slightly further west, Balnacoil Estate buildings. Around 5km to the south of the site, on the north-west-facing slopes of Meall Horn and Meall Odhar, is the operational Kilbraur Wind Farm.
- 7.6.9 Immediately to the west of the site, east of the Allt a' Mhuilinn, is a 275kV transmission line which runs north-south through the northern part of the study area before diverting westwards around the Dornoch Firth in the southern part of the study area.
- 7.6.10 There are several small forestry blocks on the lower ground around the southern part of the site. To the south-west is forestry, all of which has recently been felled in association with the operational Gordonbush Wind Farm habitat management plan. Deciduous woodland is found along the banks of Loch Brora and is a notable characteristic of the enclosed strath landscape.

# Landscape Character

- 7.6.11 Landscape character information is based on the relevant SNH Landscape Character Assessment (LCA) reviews. The 35km study area is covered by the following reviews:
  - Stanton, C. 1998. Caithness and Sutherland landscape character assessment. Scottish Natural Heritage Review No 103: this review covers the site and the majority of the study area;
  - Fletcher, S. 1998. Inner Moray Firth landscape character assessment. Scottish Natural Heritage Review No 90: this review covers southern and south-eastern coastal parts of the study area; and

- McIlveen, F. 1999. Ross and Cromarty landscape character assessment. Scottish Natural Heritage Review No 119: this review covers a very small part of the study area at its southern extremity.
- 7.6.12 The SNH reviews divide the landscape into tracts that are referred to as landscape character types. The landscape character types that cover the study area are shown on Figures 7.3a (to a 35km radius) and b (to a 10km radius), and are shown in relation to the blade tip ZTV on Figures 7.10a and b. Many of these landscape character types are extensive, sometimes covering several areas that are geographically separate, and the effects of the Development can vary widely across a single landscape character type. Several of the landscape character types have therefore been divided into 'units', and these are also shown on Figures 7.3a and b and 7.10a and b. The landform of the site and study area is also of relevance in the survey of landscape character, and this is shown in Figure 7.2.

#### Landscape Character of the Site

- 7.6.13 The site lies on the cusp of two landscape character types as identified in the Caithness and Sutherland LCA; *sweeping moorland* (the western part of the site) and *moorland slopes and hills* (the eastern part). This boundary is not clearly defined and the site as a whole is covered by a transitional landscape that displays characteristics of both types. The operational Gordonbush Wind Farm has a similar relationship with these two landscape character types, lying within both *sweeping moorland* and *moorland slopes and hills*.
- 7.6.14 The Caithness and Sutherland LCA describes the key characteristics of *sweeping moorland* as follows:
- 7.6.15 "Sweeping moorland is dominated by its wide open space. This results in a high degree of exposure, affording extensive visibility...This landscape possesses a simple visual composition, its main elements being the sky, a horizontal or gently sloping, uninterrupted skyline, and vegetation. There is generally an absence of dominant visual foci, although these are sometimes locally formed by, for example, a lone lochan, tree, area of rock outcrops or hill...Sweeping moorland is usually characterised by having a fairly flat or gently sloping or undulating landform, allowing open movement throughout the landscape...this landscape is largely uninhabited, resulting in a perceived sense of remoteness..."
- 7.6.16 The key characteristics of *moorland slopes and hills* landscape character type are described in the Caithness and Sutherland LCA as follows:
- 7.6.17 "This character type occurs throughout Sutherland often acting as a transition between low lying sweeping moorland and the higher mountains. The appearance of different areas of this landscape varies; however, they are invariably linked by their overall openness, subtle mix of sloping landform and ground cover, and the forces for change which prevail...This landscape comprises sloping open moorland, which usually undulates or gradually rises to form broad hills. The convex character of the slopes tends to limit distant visibility and views of the hill tops from their base...The variable slope of landform creates some pockets of enclosure; however, at its broadest level this landscape remains overwhelmingly open, allowing unrestricted movement.
- 7.6.18 Towns, estates, crofts and farms, and infrastructure routes tend to be concentrated along the straths and coastline and the edge of this landscape character type...the interior of the

landscape remains largely uninhabited, typically inaccessible to vehicles and grazed extensively by deer."

- 7.6.19 The relationship between *sweeping moorland* and *moorland slopes and hills* described in the LCA as follows:
- 7.6.20 "This landscape [moorland slopes and hills] often borders the sweeping moorland character type; indeed these two landscapes have quite a few similar key characteristics and forces for change principally related to their openness and the peatland ground and vegetation. However, they differ in relation to their landform, and the implications that this has for the impact of forces for change within the landscape."
- 7.6.21 These descriptions indicate that *sweeping moorland* and *moorland slopes and hills* are both characterised by open moorland with a sense of vast openness and remoteness. As described in the LCA, the most notable difference between these landscape types is the underlying landform and topography; *sweeping moorland* has a gently undulating and less distinctive topography, whereas *moorland slopes and hills* is more variable and includes locally distinctive landforms such as Beinn Smeorail, Ben Horn and Carroll Rock.
- 7.6.22 The landscape of the site may therefore be described as a transitional zone of sloping open moorland that lies on the periphery of a group of more distinctive hills.
- 7.6.23 The innate character of both *sweeping moorland* and *moorland slopes and hills* as described in the Caithness and Sutherland LCA has been altered in the vicinity of the site by the addition of the operational Gordonbush Wind Farm and, to a lesser degree, the 275kV transmission line that runs immediately to the west of the site. The presence of these features in the landscape has specifically altered the following characteristics of *sweeping moorland: "this landscape possesses a simple visual composition, its main elements being the sky, a horizontal or gently sloping, uninterrupted skyline, and vegetation"* and "There is generally an absence of dominant visual foci, although these are sometimes locally formed by, for example, a lone lochan, tree, area of rock outcrops or hill...this landscape is largely uninhabited, resulting in a perceived sense of remoteness..." The introduction of the and scape, altering the typical visual composition and reducing the perceived sense of remoteness.
- 7.6.24 The characteristic of *moorland slopes and hills* that is most affected by the operational Gordonbush Wind Farm is "the interior of the landscape remains largely uninhabited, typically inaccessible to vehicles". Whilst the site area does not lie in the interior of moorland slopes and hills, it would have displayed this characteristic prior to the development of the operational Gordonbush Wind Farm, lacking the level of development, infrastructure and accessibility that is found in the straths and coastal areas of the landscape type. The introduction of the operational Gordonbush Wind Farm has notably increased the level of development and ease of accessibility in this area.

#### Landscape Character around the Study Area

7.6.25 The study area covers the widely varied coastal and interior landscape of the north-eastern Highlands. The *sweeping moorland* and *moorland slopes and hills* landscape types that cover the site are found extensively in Caithness and Sutherland, covering large parts of the interior of the study area. These are interspersed by smaller but still extensive areas of *lone mountains* and *flat peatland* as well as the relatively complex landscapes found in the straths and coastal areas where crofting and intensive farming are more prevalent.

- 7.6.26 *Lone mountains* and *flat peatland* are found in the northern part of the study area, with very limited occurrence within 20km of the site. There are, however, several *strath* landscapes that extend inland from the coast and are in closer proximity to the Development: to the south is Strath Brora, which runs from Dalnessie in the west to Brora in the east, a minimum of around 1km from the site; and to the north is the Strath of Kildonan, which runs from Borrobol in the north-west to Helmsdale in the south-east, a minimum of around 8km from the site. Other straths found within the study area are the Golspie Burn, Strath Fleet and Strath Oykel/Kyle of Sutherland, approximately 8.5km, 14km and 30km respectively to the south of the site, and the straths of the Langwell and Berriedale Waters, 21km and 26.5km respectively to the north. There is also one small area of *strath* on the River Evelix, west of Dornoch.
- 7.6.27 The Caithness and Sutherland LCA includes the following descriptions of key characteristics of the *strath* landscape:
- 7.6.28 "Straths act as channels which pass through the surrounding landscape character types. The dominance of their characteristics may subtly vary along their length; however, they are invariably linked by their enclosure and the distinct composition of a strath floor with contrasting slopes...The strath creates a linear space. Its floor, typically open and containing either a river or a loch, forms the central visual focus, with dominant views passing along and between opposite slopes of the strath. Where slightly curved, visibility along the strath is restricted; this results in a sense of surprise when travelling through the area...The degree of spatial enclosure within a strath depends on the height and steepness of its slopes in relation to the width of the strath floor. It is also based upon the character of the ground surface, for example a loch creates a more open and exposed space than fields, houses and woodland, which form a rough texture and sub-divide the central space.
- 7.6.29 The pattern of land use tends to relate to the distinct linear space of the strath, with the occasional bridge, church or large house creating a minor focus...Most access routes within the interior of Caithness and Sutherland pass through straths. These routes...tend to offer a restricted view of their surroundings due to screening by the strath slopes. Power lines often run parallel to the roads; these tend to accentuate the linear form of the strath but may appear to intimidate the strath floor where they are located on high ground or cross the central space...Many areas of strath contain ribbons of broadleaf woodland along the shores of the rivers or lochs...Certain areas also contain coniferous plantations, usually upon the strath slopes."
- 7.6.30 Many of these characteristics are found in Strath Brora, which is the closest *strath* to the Development. Strath Brora falls into two distinctive sections; the western section, which runs between Dalnessie and Dalreavoch, and the eastern section, divided from the western section by a block of *coniferous woodland plantation*, which runs from near Sciberscross to the western side of Brora. The western section of Strath Brora is a relatively straight, narrow, enclosed strath that is almost completely inaccessible by vehicle other than at Dalreavoch, where the Brora Rogart road crosses the strath, and has very little settlement or woodland, again other than at Dalreavoch. There is, however, much evidence of historic occupation of this strath, with abandoned houses and a number of archaeological features.

- 7.6.31 In contrast, the eastern section of Strath Brora is sinuous, following a notable crescent shape as it follows the River Brora and Loch Brora, and is relatively developed, containing the Brora to Rogart road and a number of occupied houses including the estate buildings and lodges of Gordonbush and Balnacoil.
- 7.6.32 The majority of both the eastern and western sections of Strath Brora is surrounded by the *moorland slopes and hills* landscape type, with some smaller areas of *sweeping moorland*. There are also several small pockets of the *small farms and crofts* landscape adjacent to the *strath* at Balnacoil, Sciberscross, and Knockarthur/Rhilochan. The *small farms and crofts* landscape type has several additional sub-types, and the Balnacoil and Sciberscross areas in Strath Brora are classified in the Caithness and Sutherland LCA as *small farms and crofts: fringe crofting and historic features*, while the third area Knockarthur/ Rhilochan is classified as the main type *small farms and crofts*. There is a third area of *small farms and crofts: fringe crofting and historic features* at Cnoc an t-Socaich but this is currently largely covered by coniferous forestry and does not display the characteristics of the landscape type.
- 7.6.33 The key characteristics of the main type *small farms and crofts* are described as follows in the LCA:
- 7.6.34 "The character of this landscape is dominated by the occupation and activity of people, who are responsible for a complex variety of different land use characteristics; this results in a range from clearly ordered crofts, to open and fairly rich, small farms and areas of marginal moorland and ruined properties, with a multitude of variations in between...This landscape type typically comprises a number of common elements despite the variation in their arrangement; for example, houses, outbuildings, a pattern of fields depicted by fences or walls, access roads, powerlines, remnants of woodland or clumps of trees and machinery.
- 7.6.35 The extent of visibility tends to be limited within this character type because of the screening effect of buildings, woodland and barriers, and the typically sloping landform. This typically results in a semi-enclosed landscape, where the scale of spaces is fairly small so that they seem quite intimate and views are directed towards foreground details...The various characteristics of this landscape create a complex visual composition of different spaces, edges, points, colours, shades, textures and lines."
- 7.6.36 The characteristics of the sub-type *small farms and crofts: fringe crofting and historic features* are described as follows in the LCA:
- 7.6.37 "This landscape contains only sparse habitation, with a proliferation of croft ruins and ancient structures, often occupying prominent and slightly raised sites. These create a very strong sense of history and cultural change...Even where historic structures are not obvious, the location of ancient or recent archaeological features tends to be highlighted by improved areas of ground – often evident as bright pockets of grassland.
- 7.6.38 Most areas of this landscape type are not actively managed, resulting in many buildings being in a state of disrepair, and with once improved agricultural land reverting to rough grassland; this is mainly grazed by sheep where utilised at all..."
- 7.6.39 In relation to the transition between this landscape and adjacent types, the LCA states that:

- 7.6.40 *"This landscape type often forms a transition between moorland areas and more intensive crofting and settlement types, typically in areas on the edge of economic viability..."*
- 7.6.41 These characteristics are typified by the areas of *small farms and crofts: fringe crofting and historic features* that are found at Balnacoil, Sciberscross, and Cnoc an t-Socaich, all of which contain archaeological features and are largely unmanaged although several of the areas are partially forested.

### Landscape Character Types Included in the Detailed Assessment

- 7.6.42 A total of 23 landscape character types are found within the 35km study area. Of these, the landscape types described above are most likely to have potential to undergo a significant effect as a result of the Development. The remaining landscape types are very unlikely to have potential to undergo a significant effect, largely due to a combination of lack of, or very limited visibility, of the Development and distance from the Development.
- 7.6.43 Table 7.3 includes the preliminary assessment of all of the landscape character types that are found in the study area, and indicates which of them are considered to have potential to undergo a significant effect as a result of the Development (including cumulative effects), and which of them do not require further detailed assessment. The landscape character types that do have potential to undergo a significant effect, or significant cumulative effect, as a result of the Development, are assessed in full subsequently in this Chapter.

Status	Landscape Character Type	Comment
Included in detailed assessment due	Inland loch: Loch Brora	Intermittent visibility from a minimum of approximately 3km away. Included due to its proximity to the Development and the sensitivity of the receptor.
to level of influence and visibility of the Development	Small farms and crofts (fringe crofting and historic features subtype): Balnacoil area	Visibility from a minimum of approximately 1.1km away. Included due to its proximity to the Development and the level of visibility.
	Strath (Strath Brora): eastern section	Intermittent and sometimes limited visibility from a minimum of approximately 1.1km away. Included due to its proximity to the Development, the level of visibility in some areas, and the sensitivity of the receptor.
	Moorland slopes and hills: unit A	The site lies partially within this unit.
	Moorland slopes and hills: units B, C and D	Visibility is gained from units B, C and D which are, at closest, adjacent to the site.
	Sweeping moorland: unit A	The site lies partially within this unit.
	Sweeping moorland: unit B	Visibility is gained from unit B which is, at closest, adjacent to the site.
	Sweeping moorland: unit C	Intermittent visibility from a minimum of approximately 5.2km away.
Not included in detailed assessment: limited and/or	Flat peatland	The majority of this landscape type gains no visibility of the Development. The limited areas that do gain visibility are a minimum of over 11km away and visibility is partly blade tip only.

#### Table 7.3: Preliminary Assessment of Landscape Character Types within the Study Area

Status	Landscape Character Type	Comment	
distant visibility	Hard coastal shore	Intermittent visibility from a minimum of 26km away.	
of the Development	Intensive farming	Very intermittent and limited visibility from a minimum of 29.5km away.	
	Lone mountains	The majority of this landscape type gains no visibility of the Development. The limited areas that do gain visibility are a minimum of 20km away and visibility is partly blade tip only.	
	Open farmed slopes	Intermittent visibility from a minimum of 26.5km away.	
	Open firth	Very intermittent and limited visibility from a minimum of 26km away.	
	Small farms and crofts: Knockarthur/ Rhilochan area	Very intermittent visibility from a minimum of 8.5km away.	
	Small farms and crofts (fringe crofting and historic features subtype): Sciberscross area	Visibility from part of this area, a minimum of 6.2km away. Landform is orientated strongly south-south-east, away from the Development. The Development is seen in close association with the operational Gordonbush Wind Farm and will have a limited additional influence on landscape character.	
	Strath (Strath Brora): western section	Very intermittent and limited visibility from a minimum of 9km away.	
	Strath (Strath Fleet)	Very intermittent and limited visibility from a minimum of 16km away.	
	Moorland slopes and hills: all other areas	Intermittent and limited visibility from a minimum of 10km away. Many areas gain no visibility at all of the Development.	
	Sweeping moorland: unit D	Intermittent and limited visibility from a minimum of approximately 6.2km away. Where the Development is visible, it has a strong association with the operational Gordonbush Wind Farm, which reduces the additional effect of the Development.	
	Sweeping moorland: all other areas	Intermittent and often limited visibility from a minimum of 10km away. Many areas gain no visibility at all of the Development.	
Table contents Not included in detailed assessment: no or negligible visibility of the Development	inland loch (except for Loch dunes and links; rounded hi	; enclosed firth; forest edge farming; harbour; high cliffs and sheltered bays; except for Loch Brora)*; intensive farming; loch island**; long beaches, hks; rounded hills; small farms and crofts (except for Balnacoil, Sciberscross thur/ Rhilochan areas); strath (except for Strath Brora and Strath Fleet); hoorland	

\* There is theoretical visibility of the Development from three small unnamed *inland lochs* that lie within *sweeping moorland unit B*. The lochs in this area have been included in the assessment of effects on *sweeping moorland unit B* due to their small size and integration into this landscape type.

\*\* Where loch islands do gain theoretical visibility of the Development, they are included in the assessment of effects on the *inland loch* within which they lie.

7.6.44 *Coniferous woodland plantation* is identified in the Caithness and Sutherland LCA as a specific landscape character type, although no descriptions of the key characteristics of the landscape are provided. Where these areas are still covered by coniferous forestry, they have not been individually assessed in this LVIA as they will not gain a notable level of visibility of the Development due to tree cover. Where the plantation has been removed

subsequent to the production of the LCA, the previously forested areas have been included in the relevant adjacent landscape type for the purpose of the assessment. In the majority of cases this is *moorland slopes and hills* or *sweeping moorland*.

#### Landscape Planning Designations

- 7.6.45 The site itself is not covered by any known international, national, regional or local landscape-related planning designations. Various designated areas are, however, found elsewhere in the study area and these have been considered in the assessment. These are shown on Figure 7.4, and in conjunction with the blade tip ZTV on Figure 7.11.
- 7.6.46 There are three ways in which such designations are relevant to the LVIA:
  - The presence of a designation can give an indication of a recognised value that may increase the sensitivity of a landscape character receptor, viewpoint or visual receptor, and may therefore affect the significance of the effect on that receptor;
  - The presence of a relevant designation can lead to the selection of a representative viewpoint within the designated area, as the viewpoint will provide a representative outlook from that area; and
  - Designated areas may be included as landscape character receptors so that the effects of the Development on these features of the landscape that have been accorded particular value can be specifically assessed.

#### National Scenic Areas

- 7.6.47 National Scenic Areas (NSAs) are areas of land considered to be important on a national level. The Town and Country Planning (National Scenic Areas) (Scotland) Designation Directions 2010 defines a National Scenic Area as an area "*of outstanding scenic value in a national context."*
- 7.6.48 Paragraph 212 of Scottish Planning Policy (SPP) (Scottish Government, 2014) states that:
- 7.6.49 "Development that affects a National Park, National Scenic Area, Site of Special Scientific Interest or a National Nature Reserve should only be permitted where:
  - the objectives of designation and the overall integrity of the area will not be compromised; or
  - any significant adverse effects on the qualities for which the area has been designated are clearly outweighed by social, environmental or economic benefits of national importance."
- 7.6.50 There is one NSA within the study area; the Dornoch Firth NSA, which lies to the south of the Development. The ZTV indicates some limited visibility of the Development from the eastern end of the Dornoch Firth NSA, a minimum of around 23km away. The Development may have some influence on the NSA but this will not be significant due to the limited level of visibility and the distance at which the Development would be seen. The Dornoch Firth NSA is therefore discounted from the assessment and is not assessed in any further detail.

#### Gardens and Designed Landscapes

- 7.6.51 Gardens and Designed Landscapes (GDLs) are described in paragraph 133 of SPP (Scottish Government, 2014) as follows:
- 7.6.52 "Planning authorities should protect and, where appropriate, seek to enhance gardens and designed landscapes included in the Inventory of Gardens and Designed Landscapes and designed landscapes of regional and local importance."
- 7.6.53 There are six GDLs in the study area:
  - Dunbeath Castle;
  - Dunrobin Castle;
  - House of the Geanies;
  - Kildonan Lodge;
  - Langwell Lodge; and
  - Skibo Castle.
- 7.6.54 There is no visibility of the Development from Dunbeath Castle, Kildonan Lodge, Langwell Lodge or Skibo Castle, and these GDLs are discounted from the assessment. There is some limited visibility from the eastern extremity of Dunrobin Castle, a minimum of approximately 10km away, but the affected areas are covered by woodland and are unlikely to undergo any notable effect as a result of the Development. The landform of these areas is also orientated away from the Development. There is also some visibility from House of the Geanies, but at over 33km away this will not have a significant effect on the landscape character of the GDL.
- 7.6.55 The six GDLs that lie within the study area are therefore discounted from the assessment and are not assessed in any further detail.

#### Special Landscape Areas

- 7.6.56 Special Landscape Areas (SLAs) are areas of land considered to be important at a regional level, as designated by THC and protected through Development Plan Policy. The policy context for SLAs is within Policy 57 (Natural, Built and Cultural Heritage) of the adopted HwLDP (The Highland Council, 2012), which also has an Appendix item for SLAs.
- 7.6.57 In reference to designated areas in general, Policy 57 states that:
- 7.6.58 "Many of the landscapes of highest quality and value within Highland are designated landscapes including National Scenic Areas (NSAs) and Special Landscape Areas (SLAs). Within these areas it will be particularly important for landscape change to relate to the key characteristics and special qualities of the designated area."
- 7.6.59 Detailed citations for each of the 27 SLAs that lie within The Highland Council administrative area are provided in 'Assessment of Highland Special Landscape Areas' (THC in partnership with SNH, 2011). These citations describe each SLA in terms of its "*key*

landscape and visual characteristics, the special qualities for which it is valued, its key sensitivities to landscape change, and possible measures for its enhancement."

- 7.6.60 There are four SLAs in the study area:
  - Ben Griam and Loch Nan Clar;
  - Ben Klibreck and Loch Choire;
  - Flow Country and Berriedale Coast; and
  - Loch Fleet, Loch Brora and Glen Loth.
- 7.6.61 The closest SLA to the Development is *Loch Fleet, Loch Brora and Glen Loth,* which is a minimum of 1.6km to the east of the nearest turbine. Visibility of the Development from this SLA is not widespread, but there is visibility from the areas that lie closer to the Development and there is potential for a significant effect to arise. Effects on the *Loch Fleet, Loch Brora and Glen Loth* SLA are therefore assessed in detail subsequently in this Chapter.
- 7.6.62 The *Ben Griam and Loch Nan Clar* and *Flow Country and Berriedale Coast* SLAs have very limited and intermittent visibility from a minimum distance of around 18km and 13km respectively. There is also visibility of the Development from the eastern end of the *Ben Klibreck and Loch Choire* SLA, a minimum of around 14.5km away. The Development may have some influence on these SLAs but this will not be significant and will not affect the overall integrity of the designated areas due to the limited level of visibility, the association of the Development with the operational Gordonbush Wind Farm, and the distance at which the Development would be seen. The *Ben Griam and Loch Nan Clar, Ben Klibreck and Loch Choire*, and *Flow Country and Berriedale Coast* SLAs are therefore discounted from the assessment and are not assessed in any further detail.

#### Wild Land Areas

- 7.6.63 In 2002 SNH produced its 'Search Area for Wild Land' (SAWL) mapping as part of the 'Wildness in Scotland's Countryside Policy Statement No. 02/03'. SAWLs were intended to be used as a starting point for a more detailed assessment of the extents of wild land.
- 7.6.64 In 2007 SNH published further guidance on the assessment of wild land in its 'Assessing the Impacts on Wild Land-Interim Guidance Note February 2007'. This built on the earlier advice in Policy Statement 02/03 and set out a methodology to be applied "when assessing the potential adverse and beneficial impacts on areas where wildness is best expressed".
- 7.6.65 Since 2007, SNH has continued to identify and map wildness characteristics and wild land within Scotland and in the course of 2012 and 2013 it published further mapping to articulate its approach to this topic. The culmination of this process was a map showing the 'Core Areas of Wild Land' within Scotland, published in April 2013, which was published to inform a consultation into the Government's updates to Scottish Planning Policy and the National Planning Framework 3. The mapping was subject to a public consultation exercise initiated by SNH in the last quarter of 2013 which led to the publication of a finalised map of 'Wild Land Areas' (WLA) in June 2014. The new map is referred to in recently published updates to SPP and the National Planning Framework for Scotland and is supported by a document titled 'Advice to Government' published in June 2014 which includes

information about the evolution of the map, the consultation process that CAWLs/ wild land areas were subject to and advice as to how it is to be used.

- 7.6.66 SPP refers to the WLA mapping at paragraph 200:
- 7.6.67 "Wild land character is displayed in some of Scotland's remoter upland, mountain and coastal areas, which are very sensitive to any form of intrusive human activity and have little or no capacity to accept new development. Plans should identify and safeguard the character of areas of wild land as identified on the 2014 SNH map of wild land areas."
- 7.6.68 Paragraph 2.7 of SNH's Advice to Government also recognises that sensitively sited development can be integrated into WLAs:
- 7.6.69 "...it is important to emphasise SNH's view that wild land does not denote 'no human management or development' as suggested by some respondents who considered that such a label would restrict all future development options. SPP (2010) recognises that wild land areas are sensitive to development but also that sensitively sited and located development can be accommodated within them whilst maintaining their qualities."
- 7.6.70 There are five WLAs within or partially within the study area (as shown on Figure 7.5, in conjunction with the blade tip ZTV on Figure 7.12a, and in conjunction with the cumulative ZTV for the Development and the operational Gordonbush Wind Farm on Figure 7.12b):
  - Ben Klibreck Armine Forest WLA (Area 35);
  - Causeymire Knockfin Flows (Area 36);
  - East Halladale Flows (Area 39);
  - Foinaven Ben Hee (Area 37); and
  - Reay Cassley (Area 34).

The closest WLA to the Development is *Ben Klibreck - Armine Forest*, which is a minimum of 200m to the west of the nearest turbine. This WLA boundary is marked by the 275kV overhead transmission line that runs down the western side of the site. Visibility of the Development from this WLA is intermittent, and there is visibility from the areas that lie closer to the Development. Effects on the *Ben Klibreck - Armine Forest* WLA are assessed in detail subsequently in this Chapter, following the methodology described within SNH's document 'Assessing the Impacts on Wild Land Interim Guidance Note' (2007).

7.6.71 The parts of the East Halladale Flows and Foinaven – Ben Hee WLAs that lie within the study area have no visibility of the Development and are therefore discounted from the assessment. The Reay – Cassley WLA has very limited and intermittent visibility from a minimum of around 31km away and is also discounted from the assessment. The Causeymire – Knockfin Flows WLA has limited and intermittent visibility of the Development from a minimum of around 13km. It is notable that the Development would be seen behind the operational Gordonbush Wind Farm in these views, and the additional wind farm influence arising from the Development would be very limited. The Development may have some influence on these two WLAs but this would not be significant due to the lack of or limited visibility and the distance at which the Development will be seen. The Causeymire – Knockfin Flows, East Halladale Flows, Foinaven – Ben Hee

and *Reay – Cassley* WLAs are therefore discounted from the assessment and are not assessed in any further detail.

## Principal Visual Receptors

7.6.72 A number of visual receptors such as settlements and travel routes are considered in the assessment as views from them may be affected by the Development. It is not possible to consider every potential visual receptor in the study area due to the extent of ground that it covers and the assessment therefore concentrates on the 'principal' visual receptors that may gain visibility of the Development. Principal visual receptors are shown on Figure 7.6, and in conjunction with the blade tip ZTV on Figure 7.13.

## <u>Settlements</u>

- 7.6.73 The majority of the study area comprises sparsely populated upland landscapes with only a few towns and villages, which are found in sheltered, low-lying coastal and strath locations. The larger settlements include Dornoch, Tain, Golspie, Brora, Helmsdale and Dunbeath, all of which are ranged up the Moray Firth coastline. The largest inland settlement is Lairg, which lies within a crofting landscape at the western end of Strath Brora. Other than these local centres, settlement is generally limited to small village communities such as Pittentrail, Portmahomack, Ardgay and Bonar Bridge, and small clusters of houses within low-lying, more accessible and sheltered straths and on the Moray Firth coast. Isolated farms and estate buildings are also found in the upland interior areas. The closest settlement to the Development is Brora, which is around 9.5km to the south-east. Golspie is approximately 11km to the south, and Pittentrail is around 13km to the south-west.
- 7.6.74 The settlements included in the assessment are those that are classified as 'settlements' in THC Development Plan Mapping. Of these settlements, the majority are shown on the ZTV to gain no visibility of the Development, including the closest settlements of Brora, Golspie and Pittentrail. The settlements that are shown on the ZTV to gain visibility (ranging from negligible to a high theoretical level) are all located at the southern extremity of the study area, and include Portmahomack, Rockfield, Inver, and Hill of Fearn. These settlements all lie a minimum of 28.5km from the Development, and are very unlikely to undergo a significant effect as result of the Development.
- 7.6.75 The settlements within the study area are therefore discounted from the assessment and are not assessed in any further detail.

#### <u>Routes</u>

- 7.6.76 Routes include roads, walking routes, railways, and cycle routes. Routes included as principal visual receptors in the assessment are determined by four criteria:
  - The extent to which the route traverses the study area or extends across a notable part of it;
  - The proximity of the route to the Development;
  - The importance of the route in terms of recognition, traffic volume and usage; and
  - The potential for the Development to contribute to cumulative effects along the route.

- 7.6.77 The location and extent of **roads** in the study area reflects the settlement pattern as they follow the more accessible coastline and low-lying straths. Interior areas are considerably less accessible by road. The roads in the study area that are considered as principal visual receptors, due to various combinations of the criteria listed above, are as follows:
  - A9, which follows the coastline from Tain in the south to Dunbeath in the north-east;
  - A836, which runs from the A9 at Tain, through Lairg and up to Altnaharra, where it leaves the north-western edge of the study area;
  - A839, which runs through Strath Fleet, linking Lairg in the west with the A9 in the east;
  - A897, which runs from the A9 at Helmsdale, through Kinbrace and Forsinard and up to Forsinain, where it leaves the northern edge of the study area;
  - A949, which runs along the northern side of the Dornoch Firth from Dornoch to Bonar Bridge; and
  - The minor road that links Brora and Rogart, passing approximately 2.3km to the south of the Development.
- 7.6.78 Of these roads, the A9, A836, A897, A949 are shown on the ZTV to gain no visibility of the Development. These roads are therefore discounted from the assessment and are not assessed in any further detail. The A839 has a 1.5km stretch of very limited and intermittent visibility between Rosehall and Lairg, a minimum of 31.5km away, and is also discounted from the assessment as it is very unlikely to undergo a significant effect as a result of the Development.
- 7.6.79 The minor road to the south of the Development that links Brora and Rogart does, however, gain visibility as shown on the ZTV and there is potential for a significant effect to arise on views from this road. Effects on this road are therefore assessed in detail subsequently in this Chapter.
- 7.6.80 There is one **railway line** in the study area the main line from Inverness to Wick and Thurso - which runs between Fearn railway station (just south of Tain) on the southern edge of the study area and Altnabreac railway station on the north-eastern edge of the study area. The railway, built prior to the Dornoch firth crossing, takes a winding route across the landscape in order to utilise the most accessible parts of the interior landscape, traversing inland from Tain to Lairg, then back to the coast at Golspie. At Helmsdale it cuts inland again, running along Strath Kildonan to Kinbrace from where it crosses the *flat peatlands* to Forsinard and then Altnabreac, where it leaves the study area.
- 7.6.81 This railway line is shown on the ZTV to gain no visibility of the Development other than a 1km stretch of very limited blade tip visibility from over 26km away, just south of Forsinard. It is therefore discounted from the assessment and is not assessed in any further detail.
- 7.6.82 There is one **National Cycle Route** (NCR) in the study area; NCR 1. This route enters the southern edge of the study area at Hilton of Cadboll, some 10km south-east of Tain, and follows a variety of roads, primarily the A836, across the south-western and western parts of the study area before leaving the north-western edge of the study area at Altnaharra.
- 7.6.83 This NCR is shown on the ZTV to gain no visibility of the Development other than a short stretch of very limited and largely blade tip visibility from over 30km away, between Hilton

of Cadboll and Balnagall at the southern extremity of the study area. It is therefore discounted from the assessment and is not assessed in any further detail.

- 7.6.84 There are no recognised **long-distance walking routes** in the study area. There are, however, a number of **core paths** in the study area, as designated by THC. These are not all individually considered in the assessment due to the number of routes and the limited relevance of the majority of these to the Development. However, core paths that lie within 10km of the Development are considered in the assessment due to the potential for the Development to lead to effects on views from these nearby locations.
- 7.6.85 Core paths within 10km are shown on Figure 7.7 and in conjunction with the blade tip ZTV on Figure 7.14. These are SU06.02, SU06.03, SU06.04, SU06.07, SU06.09, SU06.10, SU06.11, SU06.12, SU06.14 and SU12.19. Of these paths, SU06.07, SU06.09, SU06.10, SU06.11, SU06.12 and SU12.19 are shown on the ZTV to gain no visibility of the Development. These core paths are therefore discounted from the assessment and are not assessed in any further detail. Core path SU06.03 ('The Drove Road') is shown to have a 200m stretch of very limited blade tip visibility from over 6km away while SU06.04 has some limited visibility from over 8km away, and these two paths are also discounted from the assessment as it is very unlikely to undergo a significant effect as a result of the Development.
- 7.6.86 There is, however, visibility of the Development from paths SU06.02 ('Loch Brora West Track', which runs along the western side of Loch Brora) and SU06.14 ('Doll Bridge Loch Brora', which runs along the eastern bank of the River Brora and the south-eastern side of Loch Brora) and there is potential for significant effects to arise on views from these paths. These effects are assessed in detail subsequently in this Chapter.

# Viewpoints

- 7.6.87 The assessment of landscape and visual effects is informed by a series of 17 viewpoints which are selected to represent visibility from landscape character types, landscape planning designations and principal visual receptors around the study area. These include points of specific importance such as recognised viewpoints, designated landscapes, settlements, important routes and attractions. A variety of landscape character types and points from different directions and distances have also been represented. It should be noted that while the majority of the viewpoints are chosen to represent receptors that have potential to undergo a significant effect this is not always the case, and some viewpoints are included to demonstrate a lower level of visibility from certain locations. Viewpoints for the landscape and visual assessment have been discussed and agreed in consultation with THC and SNH.
- 7.6.88 The viewpoint assessment is used to inform and illustrate the assessment of effects on landscape character as well as the assessment of effects on views and principal visual receptors. The viewpoints used in the assessment are described in Table 7.4, which also includes a preliminary assessment to identify which viewpoints have potential to undergo significant effects. These potential significant effects are expanded upon subsequently in this Chapter.
- 7.6.89The viewpoint locations are shown in conjunction with the blade tip ZTV on Figures 7.8a(A3 size) and 7.8b (A1 size) and the hub height ZTV on Figures 7.9a (A3 size) and 7.9b (A1

size). They are also shown in conjunction with the comparative ZTV for the Development and the operational Gordonbush Wind Farm on Figure 7.8c (A1 size).

Viewpoint	Data	Comments	Included in detailed assessment?
1. Beinn Smeorail	Grid ref: 286245/911699 Km to nearest turbine in Development: 1.60km	On the edge of the Loch Fleet, Loch Brora and Glen Loth SLA, and with a useful overview of the site and other wind farms in relation to the Ben Klibreck- Armine Forest Wild Land Area.	Yes, due to the level and nature of visibility of the Development.
2. Loch Brora (south-west side)	Grid ref: 284710/908389 Km to nearest turbine in Development: 3.98km	View from core path that runs along the western side of Loch Brora, near Carrol Rock. Within the Loch Fleet, Loch Brora and Glen Loth SLA.	Yes, due to the level and nature of visibility of the Development.
3. Brora to Rogart minor road south of Killin	Grid ref: 285892/905961 Km to nearest turbine in Development: 6.53km	First of a series of five views from the minor road between Brora and Rogart. View along Strath Brora, within the Loch Fleet, Loch Brora and Glen Loth SLA, and gained by westbound travellers.	Yes, due to the level and nature of visibility of the Development.
4. Brora to Rogart minor road north of Killin	Grid ref: 285565/907283 Km to nearest turbine in Development: 5.17km	The second view from the minor road between Brora and Rogart. View along Loch Brora, within the Loch Fleet, Loch Brora and Glen Loth SLA, and gained by westbound travellers.	Yes, due to the level and nature of visibility of the Development.
5. Strath Brora near Balnacoil	Grid ref: 281797/910867 Km to nearest turbine in Development: 2.85km	Third view from the Brora to Rogart road. Gained by eastbound travellers only.	Yes, due to the level and nature of visibility of the Development.
6. Brora to Rogart minor road near Sciberscross	Grid ref: 278487/910447 Km to nearest turbine in Development: 5.86km	Fourth view from the Brora to Rogart road. Gained by eastbound travellers only.	Yes, due to the level and nature of visibility of the Development.
7. Brora to Rogart minor road near Dalreavoch	Grid ref: 275550/909090 Km to nearest turbine in Development: 9.09km	Final view from the Brora to Rogart road, representing a short stretch of visibility. Gained by eastbound travellers only.	No, there is not potential for a significant effect/ cumulative effect due to limited visibility of the Development, its association with the operational Gordonbush Wind Farm, the moving nature of the viewer, the angled nature of the view and the limited

#### Table 7.4: Viewpoint List

Viewpoint	Data	Comments	Included in detailed assessment?
			susceptibility of the viewer.
8. Craggie Beg	Grid ref: 273869/908142 Km to nearest turbine in Development: 11.02km	Viewpoint located on a minor dead-end road that leads off the Brora to Rogart road.	Yes, due to the level and nature of visibility of the Development.
9. Ben Horn	Grid ref: 280735/906364 Km to nearest turbine in Development: 7.17km	Viewpoint within the Loch Fleet, Loch Brora and Glen Loth SLA, and with a useful overview of the site and other wind farms, particularly Kilbraur.	Yes, due to the level and nature of visibility of the Development.
10. Beinn Dhorain	Grid ref: 292539/915656 Km to nearest turbine in Development: 7.07km	Viewpoint within the Loch Fleet, Loch Brora and Glen Loth SLA, and with a useful overview of the site and other wind farms in relation to the Ben Klibreck- Armine Forest Wild Land Area.	No, there is not potential for a significant effect/ cumulative effect due to limited visibility of the Development and its association with the operational Gordonbush Wind Farm as it lies almost completely within the same visual envelope.
11. Hope Hill	Grid ref: 277861/918871 Km to nearest turbine in Development: 7.97km	Viewpoint within the Ben Klibreck-Armine Forest Wild Land Area.	Yes, due to the level and nature of visibility of the Development.
12. Track to Ben Armine Lodge	Grid ref: 275899/913789 Km to nearest turbine in Development: 7.97km	Viewpoint located on the access track into Ben Armine Lodge.	Yes, due to the level and nature of visibility of the Development.
13. Creag nam Fiadh	Grid ref: 284110/923700 Km to nearest turbine in Development: 8.88km	Viewpoint within the Ben Klibreck-Armine Forest Wild Land Area. Mid-range visibility from areas to the north of the site is very limited and this high point provides a useful outlook in this direction.	Yes, due to the level and nature of visibility of the Development.
14. Ben Bhraggie	Grid ref: 281355/901011 Km to nearest turbine in Development: 11.83km	Viewpoint on a core path near the Sutherland monument and within the Loch Fleet, Loch Brora and Glen Loth SLA. Mid-range visibility from areas to the south of the site is very limited and this high point provides a useful outlook.	No, there is not potential for a significant effect/cumulative effect due to the limited visibility of the Development (all lower towers and the majority of hubs are screened by landform), its strong association with the operational Gordonbush Wind Farm, the very limited additional part of the full open view that will be affected (less than 4- degrees), the location of the Development in a relatively

Viewpoint	Data	Comments	Included in detailed assessment?
			unremarkable aspect of the view, and the distance of the Development from the viewpoint.
15. Ben Armine	Grid ref: 269522/927232 Km to nearest turbine in Development: 19.62km	Viewpoint within the Ben Klibreck-Armine Forest Wild Land Area and the Ben Klibreck and Loch Choire SLA. Useful long- distance vantage point.	No, there is not potential for a significant effect/ cumulative effect due to both the distance of the Development from the viewpoint (which ensures that it will affect a very small additional proportion - less than 6-degrees - of the 360-degree view and that the turbines will constitute very minor components in the outlook) and the association of the Development with the operational Gordonbush Wind Farm (which ensures that it will not introduce wind farm influence into a part of the view that currently displays remote, undeveloped characteristics and will not extend wind farm influence into a new aspect of the view). The separation that is retained between the combined operational and proposed Gordonbush development and Kilbraur is also important, as this ensures that coalescence across the skyline would not occur.
16. Portmahomack	Grid ref: 291545/884832 Km to nearest turbine in Development: 28.38km	This viewpoint is included to represent views from the area of visibility at the southern edge of the study area.	No, there is not potential for a significant effect/ cumulative effect due primarily to the distance of the Development from the viewpoint, which ensures that it would affect a very small proportion (less than 4-degrees) of the full open view that is available and that the turbines would constitute very minor components in the outlook. The enclosure of the Development on both sides by higher landform (including Beinn Smeorail to the east) also reduces its influence on the view as this reduces the perceived height and prominence of the turbines.
17. Ben Griam Beg	Grid ref: 283180/941176 Km to nearest turbine in Development: 26.38km	Viewpoint within the Ben Griam and Loch nan Clar SLA. Useful long-distance vantage point to the north.	No, there is not potential for a significant effect/ cumulative effect due to both the distance of the Development from the viewpoint (which ensures that it would affect a very small proportion - less than 5-degrees - of the 360-degree view and that the turbines would constitute a

Viewpoint	Data	Comments	Included in detailed assessment?
			very minor component in the
			outlook) and the association of
			the Development with the
			operational Gordonbush Wind
			Farm (which ensures that it
			would not introduce wind farm
			influence into a part of the view
			that currently displays remote,
			undeveloped characteristics and
			would not extend wind farm
			influence to a new aspect of the
			view). The separation that is
			retained between the overall
			Gordonbush development and
			Kilbraur is also important, as this
			ensures that coalescence across
			the skyline would not occur.

- 7.6.90 In the process of viewpoint selection, several viewpoints have been suggested by THC and SNH but have not been included in the assessment (with the agreement of THC and SNH) for various reasons. These are described below:
  - Morven: visibility of the Development is limited to nine blade tips, which are seen entirely within the visual envelope of the operational Gordonbush Wind Farm from over 20km away;
  - Ardachu road (Strath Fleet): visibility of the Development is limited to seven blade tips and one hub, which are seen almost entirely within the visual envelope of the operational Gordonbush Wind Farm from over 18km away; and
  - Ben Klibreck: visibility is similar to that gained from Ben Armine (Viewpoint 15) but more distant (over 30km away). The Ben Armine viewpoint represents elevated views from within the Ben Klibreck and Loch Choire SLA and the Ben Klibreck-Armine Forest WLA and it was agreed that this viewpoint was not necessary in addition to Ben Armine.

#### **Cumulative Wind Farm Developments**

7.6.91 Cumulative effects are defined in the SNH guidance 'Assessing the Cumulative Impact of Onshore Wind Energy Developments' (SNH, 2012) as "the additional changes caused by a proposed development in conjunction with other similar developments" and may arise where a landscape receptor, visual receptor or view is affected by more than one wind farm, or other relevant development. This occurs where the study areas for two or more wind farms overlap so that both are experienced at proximity where they may have a greater incremental effect, or where wind farms may combine to have a sequential effect, irrespective of any overlap in visibility.

#### Wind Farm Sites Included in the Cumulative Assessment

7.6.92 In accordance with best practice guidance, the cumulative assessment initially covers a radius of 60km from the Development, and includes wind farms that are operational, consented, and planning or Section 36 applications. Scoping stage wind farms are not generally included unless they are in close proximity to the Development and therefore of notable relevance, or if their application date is anticipated to be prior to or around the same time as the application for the Development. In this case, no scoping sites are
considered to be relevant for inclusion in the cumulative assessment, as agreed with THC and SNH.

- 7.6.93 The cumulative situation changes frequently as applications are made or withdrawn, and the layouts of submitted application wind farms are changed. It is therefore necessary to decide on a cut-off date when the sites and layouts to be included are fixed. The 28<sup>th</sup> February 2015 has been used as a cut-off for this cumulative assessment, and any changes in the cumulative situation after this date are not incorporated in the assessment.
- 7.6.94 Wind farm sites that lie within a 60km radius of the Development are shown on Figure 7.15. Before the cumulative assessment is carried out, it is necessary to ascertain which of these sites will be relevant to the cumulative assessment. A wind farm is considered to be relevant if the addition of the Development to this and other wind farms could result in a significant cumulative effect on a landscape character receptor, view or visual receptor. SNH guidance on cumulative assessment (SNH, 2012) suggests that the study area for detailed cumulative assessment will generally extend to a "35km radius from the outer boundary of proposal but may be extended due to the nature of likely cumulative effects identified above." Wind farm sites outwith the 35km radius may be included where, for example, a more distant wind farm would be seen from the same route as the Development and the visibility of both sites could lead to significant cumulative effects. However, in the case of the Development, preliminary cumulative assessment has indicated that all of the relevant cumulative sites lie within 35km of the Development.
- 7.6.95 Table 7.5 lists the wind farms that are included in the detailed cumulative assessment, within 35km of the Development.

Wind Farm Name	Status	Description	
Achany	Operational	19 turbines, 100m to blade tip	
Braemore	S36 Application	18 turbines, 126m to blade tip	
Creag Riabhach	S36 Application	22 turbines, 125m to blade tip	
Rosehall	Operational	19 turbines, 90m to blade tip	
Gordonbush	Operational	35 turbines, 110m to blade tip	
Kilbraur and extension	Operational	19 turbines in original development (115m to blade tip) + 8 turbines in extension (125m to blade tip)	
Lairg	Operational	3 turbines, 99.5m to blade tip	
Strathy South	S36 Application (appeal)	39 turbines, 135m to blade tip	
West Garty	S36 Application	18 turbines, 120m to blade tip	

Table 7.5: Wind Farm Sites within 60km of the Development

7.6.96 Cumulative ZTVs that show the visibility of the relevant sites along with the visibility of the Development have been included for each of these relevant wind farms (Figures 7.16a to 7.16i). The relevant cumulative sites are also shown in the SNH wirelines (Figures 7.17 to Figure 7.33 in Volume 3A of this ES) for each of the representative viewpoints. In these wirelines, the Development turbines are shown in red, operational wind farms are indicated in blue, consented wind farms are shown in green, and proposed wind farms that are in planning are coloured orange. The wirelines are produced in increments of 90-degrees and cover a variable width of the view, ranging from 90-degrees to 360-degrees, dependent on the horizontal field of view that has been used for each viewpoint.

7.6.97 In some instances, wind farms appear in the wirelines although they are beyond their own study area radius (i.e. the radius that is appropriate for the turbine tip height of the wind farm in accordance with SNH guidance). Where this occurs, the wind farm is not included in the assessment as it is considered to lie beyond the radius within which it may contribute to a significant cumulative effect.

# 7.7 Potential Effects

7.7.1 Potential effects are those which could result from the construction, operation and decommissioning of a wind farm. Table 7.6 describes the typical landscape and visual effects that can arise from the construction, operation and decommissioning of a wind farm; it should be noted that their inclusion does not imply that they will occur, or be significant, in the case of the Development. A variety of landscape and visual mitigation measures have been incorporated through the iterative design of the Development in order to prevent, reduce or offset potential landscape and visual effects. These are described in Chapter 3: Site Selection, Design Evolution and Consideration of Alternatives and Appendix 3.1: Design Statement of this ES. The residual effects of the Development is under construction, operation or decommissioning, are assessed subsequently in this Chapter.

Activity	Specific Element	Potential Effects	Potential Sensitive Receptors	
Construction	Construction plant, borrow pit excavation, temporary construction facilities, temporary meteorological mast, construction cranes.	Temporary physical effects on landscape fabric Temporary effects on landscape character Temporary effects on views Temporary cumulative effects	Physical landscape features e.g. trees and ground cover Landscape character receptors – landscape character types, wild land areas and designated landscapes Views – experienced by different receptors e.g. residents, road	
Operation	Turbines, access tracks, restored borrow pits, operations building, permanent meteorological mast, transformers.	Long term effects on landscape character Long term effects on views Long term cumulative effects with other wind farms		
Decommissioning	Construction plant, cranes.	Temporary physical effects on landscape fabric Temporary effects on landscape character Temporary effects on views.	users, walkers.	

7.7.2 The effects of the construction, operation and decommissioning of the Development on the landscape and visual resource will arise principally from the construction, operation and decommissioning of the turbines and access tracks. The temporary construction facilities, such as cranes, construction vehicles, borrow pits, construction compounds and delivery vehicles required during the construction will also have effects on the landscape and visual resource. It is anticipated that construction of the Development would take approximately 13 months, therefore the construction effects identified are therefore

predicated to occur during this period and end at the start of the operational stage. It is anticipated that the Development would be in operation for approximately 25 years.

# 7.8 Mitigation

- 7.8.1 The layout design of the Development is a vital part of the EIA process and is the stage where the biggest contribution can be made to mitigate potential landscape and visual effects, creating a wind farm which is appropriate for the existing landscape character and visual features of an area. Landscape and visual objectives have driven the wind farm design from an early stage, while allowing environmental constraints, technical and economic factors to be fed in by the EIA team and the Applicant (see Chapter 3: Site Selection, Deign Evolution and Consideration of Alternatives of this ES).
- 7.8.2 The LVIA has been carried out in conjunction with the design iteration of the Development, and has closely informed the final layout and design. Landscape and visual mitigation measures have therefore been incorporated through the iterative design process in order to prevent or reduce potential adverse landscape and visual effects caused by the Development. This has included the removal of turbines, repositioning of turbines and variation to turbine heights. The design process is described in the Design Statement (Appendix 3.1 of this ES).

## 7.9 Assessment of Physical Effects

- 7.9.1 The residual effects (i.e. those which remain after mitigation) that the Development would have on the landscape and visual resource are assessed in the following four sections; physical effects, effects on landscape character, effects on wild land areas, and effects on views. The assessment of cumulative effects is incorporated into these assessments.
- 7.9.2 The first category of effects covered in the assessment is physical effects, which are direct effects on the fabric of the site, such as changes to ground cover. Physical effects are found only on the site, where existing landscape elements may be removed or altered by the Development. This category of effects is made up of landscape elements, and in this case there is one element involved: rough grassland/moorland ground cover. It should be noted that this landscape element is assessed with reference to its contribution to the landscape rather than in ecological terms.

### Rough Grassland/Moorland Ground Cover

7.9.3 The construction of turbine bases, access tracks and other infrastructure would require the removal of areas of rough grassland and moorland ground cover.

### **Baseline Description**

7.9.4 Rough grassland and moorland is the predominant landcover across the site. This type of landcover is typical throughout much of the uplands of the Highlands and while there is local diversity, the general effect is of a homogenous landcover across the site and surrounding area.

7.9.5 The value of rough grassland and moorland is **medium**; it is a relatively widespread landscape element that is not rare or specifically recognised for its value but it is a highly characteristic element of the moorland slopes and hills and sweeping moorland landscapes that cover the site and surrounding areas and contributes to the exposed, open character of the site and its surroundings. There is also value in the contrast that rough grassland and moorland have with the improved grassland that is found in the adjacent strath landscape, as this variation in ground cover is one of the indicators of the difference between the two character types.

### <u>Sensitivity</u>

7.9.6 The sensitivity of the landscape element is determined through a combination of the value attached to it, as described above, and its susceptibility to the Development. The susceptibility to change of this landscape element is **medium-low** due to the potential for reinstatement and restoration of the ground cover following construction and at the end of the lifetime of the Development. The combination of the **medium** value and **medium-low** susceptibility to change of the landscape element results in a **medium** sensitivity for rough grassland and moorland ground cover.

## Magnitude of Change

7.9.7 The area of rough grassland and moorland to be removed or disturbed in the construction and operation of the Development is limited in relation to the total area found on the site and beyond. In relation to the overall area, the magnitude of change of this removal is considered to be **medium-low**.

# Significance of the Effect

7.9.8 The effect of the Development on rough grassland and moorland is **not significant**. This is due to the **medium** sensitivity of the landscape element and the **medium-low** magnitude of change on it.

# Summary of Physical Effects

7.9.9 The Development would affect one landscape element; rough grassland and moorland ground cover. This effect would be **not significant**.

# 7.10 Assessment of Effects on Landscape Character

### Introduction

7.10.1 Landscape character is the distinct and recognisable pattern of elements that occurs consistently in a particular type of landscape, and the way that this pattern is perceived. Effects on landscape character occur both on the site, where the pattern of elements that characterises the landscape will be directly altered by the addition of the Development to the landscape; and off-site, around the study area, where visibility of the Development may alter the way in which this pattern of elements is perceived. For example, if the Development is visible from an area of strath landscape type, the perceived experience of this area may be altered as visibility of the Development introduces different contextual characteristics despite its physical location in another, separate area.

- 7.10.2 It should be noted that levels of magnitude of change on landscape character receptors are generally found to be lower than the magnitude of change on viewpoints that lie within these landscape character areas. This means, for example, that if a viewpoint is assessed to undergo a medium-high magnitude of change it does not necessarily follow that the landscape character area within which it lies would also undergo a medium-high magnitude of change a medium magnitude of change instead.
- 7.10.3 This is because the effects on viewpoints are assessed within the context of a specific outlook of the Development and are usually specifically selected to gain a direct view over the site. The landscape character of a receptor is not necessarily determined so specifically by the outlook over the Development, and there are many other considerations, both visual and perceptual, that may combine to give an area its landscape character. This means that the Development may have a lesser degree of influence on landscape character than on a specific view. This is particularly true of areas that lie slightly further away from the Development. In the immediate vicinity of the site, up to around 2km away - the magnitude of change on viewpoints and landscape character is likely to be similar, but beyond this, the magnitude of change on landscape character is found to often diminish more rapidly as the influence of the turbines is subsumed in the many other influences on landscape character. Viewpoints are referred to in this assessment as they do give a useful indication of the appearance of the Development from specific locations within the various landscape receptors, but the level of magnitude of change may vary between the viewpoint assessment and the landscape character assessment.
- 7.10.4 The assessment of effects on landscape character covers three groups of receptors, landscape character types and units, landscape planning designations and WLAs. Section 7.6, Baseline Conditions and Preliminary Assessment, identifies the landscape character receptors which have the potential to undergo significant effects (including cumulative effects) as a result of the Development and therefore require further assessment. The effect on each of these relevant receptors is assessed below. These receptors are as follows:
  - Landscape character type inland loch: Loch Brora;
  - Landscape character type *small farms and crofts (fringe crofting and historic features subtype): Balnacoil area;*
  - Landscape character type strath (Strath Brora): eastern section;
  - Landscape character type moorland slopes and hills: unit A, unit B, unit C and unit D;
  - Landscape character type *sweeping moorland: unit A, unit B* and *unit C;*
  - Designated area Loch Fleet, Loch Brora and Glen Loth SLA; and
  - Wild land area *Ben Klibreck Armine Forest* (Area 35).
- 7.10.5 Units A, B, C and D of moorland slopes and hills are as follows:
  - Unit A covers the eastern part of the site and the eastern part of the operational Gordonbush Wind Farm;
  - Unit B extends from the Allt Smeorail valley to a maximum of approximately 5km from the nearest turbine on the eastern side of the site. The distinctive landform of Beinn Smeorail (Viewpoint 1) is within this unit;

- Unit C lies to the south of the site, separated from units A and B by Strath Brora, and covers distinctive landform such as Carroll Rock, Ben Horn (Viewpoint 9) and Kilbraur Hill. Kilbraur Wind Farm lies within this receptor; and
- Unit D covers two areas to the west of the site: firstly, the southern part of the Black Water, Dailbane Hill and Meall na Gaoithe, and secondly, the hills of Cnoc Leamhnachd and Cnoc a' Garbh-leathaid, to the west of Sciberscross.
- 7.10.6 *Units A, B* and *C* of *sweeping moorland* are as follows:
  - Unit A covers the western part of the site and the western part of the operational Gordonbush Wind Farm;
  - Unit B covers the expansive area of *sweeping moorland* that extends from the Allt Mhuilinn and 275kV transmission line to a maximum of approximately 11km from the nearest turbine on the western side of the site; and
  - Unit C covers an area of *sweeping moorland* that lies to the west of the Black Water and north of Strath Brora.
- 7.10.7 Each of these units has differing factors that determine level of sensitivity, magnitude of change, cumulative magnitude of change and significance of effects, and they are therefore assessed separately.

### Inland loch: Loch Brora

7.10.8 The *inland loch* of Loch Brora lies within the *strath (Strath Brora)* landscape type, a minimum of approximately 2.6km to the south of the nearest turbine in the Development. While there are no viewpoints from the loch itself, Viewpoints 2 (Loch Brora (west side), 3 (Brora to Rogart minor road south of Killin) and 4 (Brora to Rogart minor road north of Killin) illustrate views from the western and eastern sides of the loch and provide an indication of the type of visibility available from the loch itself.

### **Baseline Description**

- 7.10.9 Loch Brora is a small and relatively narrow loch on the River Brora, approximately 5km long and with a maximum width of approximately 700m. It is enclosed to the east and west by steeply sloping landform (including Carrol Rock) and falls into four parts, divided by promontories of alluvial matter that extend much of the way across the loch. Loch Brora is popular for fishing and the banks of the loch are used for informal recreation, with a core path running along the west side and several laybys and picnic areas on the east side. The eastern side of the loch is more accessible than the western due to the route of the Brora to Rogart road, and houses are scattered along this bank of the loch. The western side is uninhabited other than the farm at Carrol, and Kilbraur, at the northern head of the loch. There is extensive deciduous woodland along the loch shores, and coniferous plantations at the southern end and western side of the loch. There are several islands on Loch Brora, including Eilean nam Faoileag, which lies towards the southern end of the loch and is thought to be an artificial island built for defensive purposes.
- 7.10.10 The operational Gordonbush Wind Farm has some visibility from small areas of Loch Brora. This is primarily in the northernmost section of the loch, opposite Gordonbush Estate buildings, where parts of up to 15 turbines are seen from a minimum of around 4.5km away. The highest level of visibility is from the western side of the loch, as landform limits

visibility from other areas to a maximum of several blades. There is also theoretical visibility from a small area towards the south of the loch, but this is limited to several blade tip extremities. Kilbraur Wind Farm is visible from the northernmost part of the loch, north of the Gordonbush Estate buildings, where some turbines are visible from a minimum of around 2.4km away. There is another area of theoretical visibility further to the south but this is limited to one or two blade tip extremities. No other operational or consented wind farms are visible from Loch Brora.

7.10.11 Inland loch: Loch Brora has a **high** value. It lies within the Loch Fleet, Loch Brora and Glen Loth SLA and whilst the scenic qualities of Loch Brora are not specifically mentioned in the citation, it is implicit in the title of the SLA that this loch is an important element of the SLA and the citation also makes it clear that the lochs found in the SLA are an integral aspect of its character. The loch has scenic qualities, a sense of place, and the landscape character has remained generally intact despite the minor wind farm influence that is currently apparent. The landscape experience also leads to a high value due to the recreational use of the loch.

## <u>Sensitivity</u>

- 7.10.12 This landscape has a **high** susceptibility to the Development due largely to its enclosed, relatively small-scale and complex character with which the Development would contrast. The association between the *inland loch* landscape and the *moorland slopes and hills* and *sweeping moorland* landscapes, within which the site lies, that surround and enclose it also contributes to the high susceptibility. The presence of operational wind farm influence in some areas both reduces and heightens susceptibility; the reduction in susceptibility occurs because wind turbines are part of the baseline influence on the landscape character of some parts of this receptor and the Development would therefore not introduce an entirely new external characteristic to these areas, while the heightening in susceptibility occurs because of the potential for cumulative effects to arise as a result of the addition of the Development.
- 7.10.13 The combination of the **high** susceptibility to change of the landscape and the **high** value of the landscape results in a **high** sensitivity for the *inland loch (Loch Brora)*.

- 7.10.14 Effects on this receptor would arise from changes to the way that the landscape character is perceived as a result of visibility of the Development. The Development will be visible to varying degrees from all four parts of *inland loch (Loch Brora)*, which are referred to here as parts 1, 2, 3 and 4, with 1 being the northernmost and 4 being the southernmost. The highest levels of visibility are gained from part 3 of the loch, from where visibility of the Development is broadly similar to that seen in Viewpoint 3, Brora to Rogart minor road south of Killin. This area does not gain any notable influence of the operational Gordonbush and Kilbraur Wind Farms. The magnitude of change on part 3 of the loch would vary from **medium/medium-low** to **medium-low**, dependent on the level of visibility of the Development and its distance from the receptor, due to the following factors:
  - The influence of the turbines in the setting of a landscape type that is not otherwise notably influenced by wind farm development;
  - The level of visibility of the Development and its relative proximity to the receptor between 5.5km and 7.4km away;

- The importance of the upland skyline as part of the setting that constitutes the enclosed landscape character of the loch, and the appearance of the turbines in this setting;
- The contrast that the scale, colour and movement of the Development would have with the *"sense of seclusion, tranquillity and intimacy"* of the loch and wider strath, as described as a special quality of the SLA, within which this receptor lies;
- The elevation of the Development in relation to the relatively low-lying loch, which could increase the perceived influence of the turbines;
- Channelling of the strath landform, which encloses the loch, to the north, towards the Development;
- Visibility of the Development across water, where external features tend to appear closer and have more influence due to the lack of eye-catching foreground detail; and
- The fairly consistent influence of the Development on this part of the loch.
- 7.10.15 The factors that limit the magnitude of change to a maximum **medium/medium-low** level are as follows:
  - The effects of the Development would be indirect and will not alter the pattern of elements that makes up the landscape character of the receptor;
  - The nearest turbine is 5.5km from the receptor, from which distance the Development would not have an immediately or very readily apparent effect on landscape character;
  - The Development would affect one small part of the setting to the receptor, with all other aspects remaining unaffected by wind farm influence;
  - The Development would not be seen in the context of the eye-catching and influential focal point of Carroll Rock;
  - The human elements in the landscape around the loch mean that it lacks the unspoilt wildness characteristics with which the Development would have the greatest contrast;
  - The location of the Development in the large-scale and open uplands ensures that uncomfortable scale comparisons with its landscape setting would not arise; and
  - The location of turbine bases behind the skyline ensures that the Development is associated with the upland landscape, and would not appear to be encroaching downwards into the strath and loch landscape.
- 7.10.16 Parts 1 and 2 of the loch generally would have more limited visibility of the Development, and the majority of part 1 would gain no visibility at all, while other areas gain negligible visibility, or limited visibility that is strongly associated with the operational Gordonbush Wind Farm (which has a notable level of visibility from some areas of the northernmost part of the loch). The magnitude of change on these areas would be a maximum of **low**.
- 7.10.17 There are, however, areas of parts 1 and 2 (the southern end of the part 1 and the western side of part 2) that gain higher visibility of the Development, similar to that seen in Viewpoint 2, Loch Brora (west side). The magnitude of change on these areas would be medium/medium-low, as for part 3 of the loch.
- 7.10.18 Part 4 of the loch has relatively high theoretical visibility, but a combination of its small extent and discrete nature (which has less association with the surrounding landscape than the other parts of the loch), the distance from the Development (a minimum of 7km),

screening by forestry and woodland and the orientation of the landform around it ensures that the influence of the Development would be limited. The magnitude of change on part 4 of the loch would therefore be **low/medium-low**.

### Significance of the Effect

7.10.19 The effect of the Development on the landscape character of the part 3, the southern end of part 1 and the western side of part 2 of *inland loch: Loch Brora* would be **significant** due to the factors that lead to the **high** sensitivity of the receptor and the **medium/medium-low** magnitude of change on these areas. Elsewhere, the effect would be **not significant** due to the more limited magnitude of change.

## **Cumulative Effects**

- 7.10.20 There is baseline visibility of Gordonbush and Kilbraur Wind Farms from this receptor, as described above. There is no visibility of any other operational, consented, or application stage sites.
- 7.10.21 The addition of the Development to the operational Gordonbush and Kilbraur Wind Farms would have some cumulative effect on the landscape character of the loch due to the addition of wind farm visibility to sections that are not notably affected by the presence of baseline wind farms and the addition of wind farm visibility to the limited area that is affected by notable visibility of the operational Gordonbush Wind Farm.
- 7.10.22 However, this cumulative effect is limited by the restricted overall visibility of baseline wind farms, the high level of integration between the Development and the operational Gordonbush Wind Farm (when it is visible), and the lack of notable visibility of the Development in conjunction with Kilbraur Wind Farm. These factors ensure that the addition of the Development would not result in an impression that the character of the loch is characterised by multiple wind farms, and the cumulative effect would be **not significant**.

# Small farms and crofts (fringe crofting and historic features subtype): Balnacoil area

7.10.23 The Balnacoil area of *small farms and crofts (fringe crofting and historic features subtype)* lies on the northern side of Strath Brora, between the enclosed *strath* landscape and the surrounding expansive and exposed landscapes of *upland moorland slopes and hills* and *sweeping moorland*. This receptor is approximately 1.1km from the nearest turbine in the Development. There are no viewpoints within this receptor.

### **Baseline Description**

- 7.10.24 This area is typical of the *small farms and crofts (fringe crofting and historic features subtype)* landscape as described in Section 7.6, an uninhabited, semi-enclosed landscape with a relatively complex visual composition. There is a characteristically strong sense of history and, in places, abandonment due to a lack of active management, and former areas of improved grassland are still visible. There are also areas of coniferous plantation to the east of Balnacoil Lodge and to the north and north-west of Ascoile.
- 7.10.25 However, more recent man-made influences have affected the historical character of this receptor, with the 275kV transmission line and access track to the operational Gordonbush

Wind Farm running across the eastern end of the area. The operational Gordonbush Wind Farm itself has an influence on much of this area, seen from a minimum of just over 3km away. Kilbraur Wind Farm is also highly influential, lying a minimum of 2.7km away to the south and thus in the direct orientation of views from much of the landscape. There is also theoretical visibility of Lairg Wind Farm, but this has very limited influence at over 20km away.

7.10.26 Small farms and crofts (fringe crofting and historic features subtype): Balnacoil area has a **medium** value. It is not covered by any landscape designations, has limited local resource value and lacks distinctive, consistent and well-defined attributes due to the variety of influences and land uses, both historic and more recent, that are apparent in the landscape. It does, however, have value in the strong sense of history and sense of place that is evoked by elements that are still apparent in the landscape and by the archaeological importance of these elements, and this leads to a medium value.

### <u>Sensitivity</u>

- 7.10.27 This landscape has a **medium** susceptibility to the Development due largely to its relatively complex visual composition, with which the Development would provide a large-scale contrast and a further external influence of man-made development. The association between the receptor and the moorland slopes and hills and sweeping moorland within which the site lies also gives it some susceptibility as the receptor relies to some degree on these adjacent upland landscapes in its characterisation. However, susceptibility is limited to a medium level by the large scale of the underlying landform and topography that exists in small farms and crofts (fringe crofting and historic features subtype) despite the visual composition of the landscape, as the uncomfortable scale comparisons that can arise with physically intimate and enclosed landscapes would not be apparent. The presence of operational wind farm influence both reduces and heightens susceptibility; the reduction in susceptibility occurs because wind turbines are part of the baseline influence on the landscape character of some parts of this receptor and the Development would therefore not introduce an entirely new external characteristic to these areas, while the heightening in susceptibility occurs because of the potential for cumulative effects to arise as a result of the addition of the Development.
- 7.10.28 The combination of a **medium** susceptibility to change of the landscape and the **medium** value of the landscape results in a **medium** sensitivity for *small farms and crofts (fringe crofting and historic features subtype): Balnacoil area.*

- 7.10.29 Effects on this receptor would arise primarily from changes to the way that the landscape character is perceived as a result of visibility of the Development. Physical effects may, however, arise as a result of minor improvements to the existing Gordonbush Wind Farm access track, which will also be used to access the Development.
- 7.10.30 This is a relatively small receptor, and the magnitude of change would be fairly consistent across it, other than a part of the valley of the Allt Ach a' Bhathaich and the south-eastern corner, which gains no visibility of the turbines but may be affected by minor physical changes as a result of the upgraded access track. The Development has a generally high level of visibility, with the majority of the turbines theoretically seen as hubs and blades, and would be seen in front and adjacent to the operational Gordonbush Wind Farm. The

maximum magnitude of change would generally vary from **medium-high** to **medium**, due to the following factors:

- The level of visibility of the Development and its relative proximity to the receptor between 1.1km and 3km away;
- The scale comparison between the turbines in the Development and those in the operational Gordonbush Wind Farm, due to the closer proximity of the Development turbines (approximately 1.1km away as compared to just over 3km) and their larger dimensions;
- The variation between the layouts of the Development and the operational Gordonbush Wind Farm;
- The orientation of landform in some areas towards the Development, so that it would be seen in a key aspect of the setting to the landscape;
- The increase in wind farm development on the skyline, and the resultant increase in wind farm influence in the setting to the receptor; and
- The increase in the number of turbines seen from a landscape that is already characterised to some degree by wind energy development at both Gordonbush and Kilbraur Wind Farms.
- 7.10.31 The factors that limit the magnitude of change to a maximum **medium-high** level are as follows:
  - The baseline influence of the operational Gordonbush Wind Farm which is already visible in the same part of the setting to the receptor as the Development, and within the same visual envelope, ensuring that the Development would not introduce a completely new influence to the landscape;
  - The consistency of the landscape setting of the Development and the operational Gordonbush and Kilbraur Wind Farms, so that wind energy development is concentrated within the *moorland slopes and hills* and *sweeping moorland* landscape types and the Development would not be perceived as blurring the distinction between landscape types; and
  - The location of the Development (and baseline wind farm development) in the largescale and open uplands, where uncomfortable scale comparisons with the landscape setting would not arise.

# Significance of the Effect

7.10.32 The effect of the Development on the landscape character of the majority of *small farms and crofts (fringe crofting and historic features subtype): Balnacoil area* would be **significant**, due to the combination of factors that lead to the **medium** sensitivity and the **medium-high** or **medium** magnitude of change. In some areas (the south-eastern end of the receptor and along the valley of the Allt Ach a' Bhathaich), the effect would be **not significant** due to the lack of visibility of the Development, although minor upgrades to the existing access track may be required in this area.

### Cumulative Effects

- 7.10.33 This receptor has influence of baseline wind farms at Gordonbush and Kilbraur as described above. There is also theoretical visibility of Lairg Wind Farm, but this has very limited influence at over 20km away. The application stage site at Braemore has some limited theoretical visibility but this too would be very limited at over 27km away. No other baseline or application stage sites are visible, and the key cumulative wind farms are therefore Gordonbush and Kilbraur.
- 7.10.34 In this context, the Development would lead to some cumulative effect due to the addition of further wind farm influence in the overall Gordonbush development and increase in the extent of wind farm development on the skyline setting of the receptor. However, a notable cumulative effect is unlikely to arise from the addition of the Development due to its close visual and physical association with the operational Gordonbush Wind Farm in terms of proximity, location, and landscape setting. These factors ensure that the Development would not be perceived as a distinctive 'new' or separate wind farm influence on landscape character. The addition of the Development would therefore not result in an impression that the character of the receptor is characterised by multiple wind farms, and the cumulative effect would be **not significant**.

## Strath (Strath Brora): eastern section

7.10.35 The eastern section of *strath (Strath Brora)* runs from near Sciberscross to the western side of Brora, and is a minimum of approximately 1.1km to the south of the nearest turbine. Viewpoints 2 (Loch Brora (west side)), 3 (Brora to Rogart minor road south of Killin), 4 (Brora to Rogart minor road north of Killin), 5 (Strath Brora near Balnacoil) and 6 (Brora to Rogart minor road near Sciberscross) lie within this receptor.

# **Baseline Description**

- 7.10.36 The eastern section of Strath Brora is sinuous, following the River Brora and Loch Brora, and is relatively developed, containing the Brora to Rogart road and a number of occupied houses including the estate buildings and lodges of Gordonbush and Balnacoil. Notable deciduous woodland is found on the northern side of the river and loch around Sciberscross, Balnacoil and Gordonbush, and also on the southern side of Loch Brora at and to the west of Carroll Rock, while coniferous forestry is apparent at the eastern end of the strath and around Gordonbush and Sciberscross. The width of this eastern section of the strath varies from the narrow, enclosed stretches at Sciberscross and Balnacoil, where landform and woodland provide strong enclosure, to the open and more exposed areas around Loch Brora, where longer views are available across the loch and the surrounding valley sides. Even in these wider areas, however, the strath has a strong sense of enclosure as a result of the steep landform and in places, forestry, that rise on each side of the valley.
- 7.10.37 Carroll Rock and Loch Brora are perhaps the most notable natural features in this eastern section of Strath Brora, while Kilbraur Wind Farm (which is clearly visible from areas around Sciberscross, Balnacoil, Ascoile, Gordonbush) and the 275kV transmission line (which crosses the strath between Balnacoil and Gordonbush) are the most notable manmade features. The operational Gordonbush Wind Farm is visible from some areas, most notably around Balnacoil and Sciberscross, but does not have a widespread influence due to screening by the landform that encloses the northern strath side. Achany, Lairg and

Rosehall Wind Farms are shown on ZTVs to have a negligible theoretical influence on this receptor.

7.10.38 *Strath (Strath Brora): eastern area* has a **high** value. It lies within the *Loch Fleet, Loch Brora and Glen Loth* SLA and whilst the scenic qualities of Loch Brora are not specifically mentioned in the citation, it is implicit in the title of the SLA that this loch is an important element of the SLA and the citation also makes it clear that the lochs found in the SLA are an integral aspect of its character. The strath has scenic qualities, a strong sense of place, and the landscape character has remained generally intact despite the minor wind farm and transmission line influence. The landscape experience also leads to a high value due to the recreational use of the strath.

### **Sensitivity**

- 7.10.39 This landscape has a **medium-high** susceptibility to the Development due largely to the contrast that may arise between its enclosed, relatively small-scale character and patterns, and the scale and form of the Development. The association between the *strath* landscape and the *moorland slopes and hills* and *sweeping moorland* landscapes (within which the site lies) that surround and enclose it also contributes to the level of susceptibility. The presence of operational wind farm influence in some areas both reduces and heightens susceptibility; the reduction in susceptibility occurs because wind turbines are part of the baseline influence on the landscape character of some parts of this receptor and the Development would therefore not introduce an entirely new external characteristic to these areas, while the heightening in susceptibility occurs because of the potential for cumulative effects to arise as a result of the addition of the Development.
- 7.10.40 The combination of the **medium-high** susceptibility to change of the landscape and the **high** value of the landscape results in a **high** sensitivity for the *strath* (*Strath Brora*): *eastern area*.

- 7.10.41 Effects on this receptor would arise from changes to the way that the landscape character is perceived as a result of visibility of the Development, and there would be no physical effects on landscape character. The sinuous valley landform of the strath ensures that visibility varies considerably across the receptor, and some areas (the southern side of Killin Rock, the south-west-facing slopes above Killin and Oldtown, the areas around Balnacoil, Gordonbush and Ascoile, the south-western slopes of Cnoc a' Ghrianain, the area at the northern end of Loch Brora, and the area to the west of Sciberscross) gain no, or negligible visibility of the Development.
- 7.10.42 The higher visibility of the Development is generally found around the southern/western side of the strath, including the lower slopes of Cnoc an t-Socaich and Carroll Rock (Viewpoint 2, Loch Brora (west side)). There are also several areas where higher visibility extends across the strath floor, including areas between Sciberscross and Point (Viewpoint 6, Brora to Rogart minor road near Sciberscross), to the south of the graveyard (Viewpoint 5, Strath Brora near Balnacoil), and to the south of Killin (Viewpoints 3, Brora to Rogart minor road south of Killin and 4, Brora to Rogart minor road north of Killin). There are further smaller areas on the upper northern/eastern edge of the strath that would also gain high visibility, including the slope at Sciberscross (where the boundary of the receptor

is relatively low down the valley side), the ridge line of Cnoc a'Ghrianain, and very small areas above Oldtown and on Killin Rock.

- 7.10.43 The operational Gordonbush Wind Farm is visible from some of these areas, particularly the southern/western side of the strath, the strath floor near Sciberscross (Viewpoint 6, Brora to Rogart minor road near Sciberscross) and Cnoc a'Ghrianain. Elsewhere, and particularly in the south-eastern part of the strath around Killin, it has more limited visibility than the Development, as seen in Viewpoints 2 (Loch Brora (west side)), 3 (Brora to Rogart minor road south of Killin) and 4 (Brora to Rogart minor road north of Killin).
- 7.10.44 The highest magnitude of change will arise on areas around Sciberscross and the graveyard, the lower slopes of Cnoc an t-Socaich and Carroll Rock; the loch shore to the south of Carroll Rock; the ridge line of Cnoc a'Ghrianain, and very small areas above Oldtown and on Killin Rock. These areas would gain the highest visibility, and therefore influence of the Development, and the magnitude of change would vary from **medium-high** to **medium/medium-low**, dependent on the level of visibility of the Development and its distance from the receptor, due to the following factors:
  - Where the operational Gordonbush Wind Farm is not visible, the influence of the turbines in the setting of a landscape type that is not otherwise notably influenced by wind farm development;
  - Where the operational Gordonbush Wind Farm is visible, the additional wind farm development that is seen in this part of the setting to the receptor and the intensification of wind farm influence;
  - The level of visibility of the Development and its relative proximity to the receptor (a minimum of 1.1km away);
  - The contrast that the scale, colour and movement of the Development would have with the "sense of seclusion, tranquillity and intimacy" of the strath, as described as a special quality of the SLA, within which part of this receptor lies;
  - The importance of the upland skyline as part of the setting that constitutes the enclosed landscape character of the strath, and the appearance of the turbines in this setting;
  - The contrast that the scale, colour and movement of the Development will have with the innately tranquil, enclosed and relatively complex character of the strath, and the resultant changes to these aspects of its character;
  - The elevation of the Development in relation to the relatively low-lying strath floor, which could increase the perceived influence of the turbines; and
  - In the western and southern parts of the strath, channelling of the strath landform towards the Development;
- 7.10.45 The factors that limit the magnitude of change to a maximum **medium-high** level are as follows:
  - The effects of the Development would be indirect and would not alter the pattern of elements that makes up the landscape character of the receptor;
  - From some areas, the distance of the Development from the receptor;
  - The Development would affect one small part of the setting to the receptor, with other aspects remaining unaffected;

- Where the operational Gordonbush Wind Farm is visible, the Development would not introduce an entirely new external character influence to the receptor;
- The Development would not be seen in the context of the eye-catching and influential focal point of Carroll Rock;
- The human elements in the strath landscape mean that it lacks the unspoilt wildness characteristics with which the Development would have the greatest contrast;
- The location of the Development in the large-scale and open uplands ensures that uncomfortable scale comparisons with its landscape setting would not arise; and
- The location of turbine bases behind the skyline of the strath ensures that the Development is associated with the upland landscape, and does not appear to be encroaching downwards into the strath landscape.
- 7.10.46 The other areas of the strath that gain visibility, most notably the south-eastern part of the strath, to the south of Oldtown and around Killin, would generally have a lower magnitude of change due to the lower levels of visibility (as seen in Viewpoints 3 and 4), further screening by forestry and woodland, and increased distance from the Development. In some areas (e.g. the lower slopes of Cnoc Daiul a' Bhathaidh), the integration of the Development with the operational Gordonbush Wind Farm also reduces its level of influence. The magnitude of change on these areas would vary from **medium-low** to **low**.

## Significance of the Effect

7.10.47 The effect of the Development on the landscape character of the majority of *strath (Strath Brora): eastern area* would be **not significant** due to the lack of or limited influence of the Development, which leads to a maximum **medium-low** magnitude of change. There would, however, be **significant** effects on the landscape character of some parts of the receptor, including areas around Sciberscross and south of the graveyard, the lower slopes of Cnoc an t-Socaich and Carroll Rock; the loch shore to the south of Carroll Rock; the ridge line of Cnoc a'Ghrianain, and very small areas above Oldtown and on Killin Rock due to the factors that lead to the **high** sensitivity of the receptor and the **medium-high** to **medium/medium-low** magnitude of change on these areas.

# **Cumulative Effects**

- 7.10.48 There is baseline visibility of Gordonbush and Kilbraur Wind Farms from this receptor, as described above. Achany, Lairg and Rosehall also have some very limited theoretical visibility but have been discounted from the cumulative assessment due to their negligible influence. The application wind farms have also been discounted due to the lack of, or very limited, visibility of these sites. The operational wind farms at Kilbraur and Gordonbush are therefore the relevant sites for inclusion in the cumulative assessment.
- 7.10.49 The addition of the Development would result in a **medium** cumulative magnitude of change on some parts of *strath (Strath Brora): eastern area*. The affected areas are those where the Development itself would have a significant effect on landscape character and Kilbraur Wind farm is also clearly visible; the area around and to the east of Sciberscross, the ridge line of Cnoc a'Ghrianain, and a very small area above Oldtown. This level of change arises from the introduction of significant additional wind farm influence to parts of the strath that are already notably affected by the operational Kilbraur Wind Farm and is emphasised by the location of the Development to the north of Strath Brora while Kilbraur

lies to the south of the strath, as wind farm influence would arise from both sides of the strath.

- 7.10.50 The addition of the Development to the operational Gordonbush Wind Farm would also have some cumulative effect but this is limited by the level of integration that is apparent between the Development and the operational Gordonbush Wind Farm when they are seen in association with each other from the strath.
- 7.10.51 The addition of the Development would lead to a **significant** cumulative effect on some small areas of the *strath* (*Strath Brora*): *eastern area*; the area around and to the east of Sciberscross, the ridge line of Cnoc a'Ghrianain, and a very small area above Oldtown, due to the factors that lead to the **medium** cumulative magnitude of change on these areas and the **high** sensitivity of the receptor.

## Moorland Slopes and Hills: unit A

7.10.52 Unit A of moorland slopes and hills covers the eastern part of the site and also the eastern part of the operational Gordonbush Wind Farm. This unit has been distinguished from unit B of moorland slopes and hills by the topography of the Allt Smeorail, which clearly defines the eastern side of the Development site and the operational Gordonbush Wind Farm. This is the only unit of moorland slopes and hills that will be directly affected by the Development.

## **Baseline Description**

- 7.10.53 This unit of *moorland slopes and hills* covers the long slope of landform that rises from Cnoc Ghrianain (214m AOD), which forms the edge of Strath Brora, in the south-west to Cnoc a' Chrubaich Mhoir (421m AOD) in the north-east. While the general trend of the landform is a single south-west to north-east slope, there is local topographical variation along the western side of the Allt Smeorail where ground falls to the burn. There are some pockets of enclosure along the Allt Smeorail, but this landscape is generally open and exposed. This unit is typical of its type in its lack of habitation and settlement and the moorland ground cover that is interspersed by small forestry blocks.
- 7.10.54 The character of the landscape has been considerably altered by the addition of the operational Gordonbush Wind Farm, which lies largely within this unit and is visible across the area. This provides a prevailing local influence on the character of *unit A*, notably increasing the level of development and ease of accessibility in this area. Kilbraur Wind Farm is also visible from extensive parts of *unit A* at a minimum distance of around 4km, although its level of visibility and influence is less than that of Gordonbush Wind Farm. Achany and Rosehall Wind Farms are shown on ZTVs to have some visibility from this receptor but are both seen from outwith their study areas, while Lairg has some limited visibility at a minimum of 24km away.
- 7.10.55 *Moorland slopes and hills: unit A* has a **medium** value. It is not covered by any scenic designations, does not have notable cultural or historical associations, and the distinctive innate attributes of *moorland slopes and hills* have been notably altered by the development (Gordonbush Wind Farm and the transmission line) that has taken place within the unit. The moorland does, however, have some scenic qualities and there is a sense of place in some areas, particularly in the valley of the Allt Smeorail. There is also

some value for informal recreation within this area, partially due to the access that can be gained via the operational Gordonbush Wind Farm tracks.

#### <u>Sensitivity</u>

- 7.10.56 This landscape has a **medium-low** susceptibility to the Development. This level of susceptibility is due largely to the baseline presence of the operational Gordonbush Wind Farm within the receptor itself, which strongly characterises the physical patterns of the landscape and reduces susceptibility as the Development would not introduce new or highly contrasting characteristics of development directly into the landscape.
- 7.10.57 The combination of the **medium-low** susceptibility to change of the landscape and its **medium** value results in a **medium** sensitivity for *moorland slopes and hills: unit A*.

- 7.10.58 The Development lies within this receptor, and there would therefore be a direct effect on the pattern of elements that constitutes the landscape character as well as through visibility and external influence, particularly of the turbines. The turbines and associated infrastructure would be immediately apparent new additions to the landscape and would alter the pattern of elements that make up landscape character.
- 7.10.59 Away from the immediate site area, visibility of the Development would affect the experiential characteristics of the landscape. Visibility is generally consistent across the receptor, with almost all areas other than enclosed parts of the Allt Smeorail valley gaining high visibility of the Development at close proximity.
- 7.10.60 The magnitude of change on this receptor would be **medium**, due to the following factors:
  - The direct effect that the various elements of the Development (including the turbines and infrastructure) would have on the pattern of elements that make up the character of the receptor; while the same characteristics are already in place on the operational Gordonbush Wind Farm site, the Development would extend these characteristics onto otherwise unaffected parts of the receptor;
  - The variation in the turbine dimensions of the Development and the operational Gordonbush Wind Farm turbines, which may reduce perceived integration within the receptor;
  - The effect of construction operations on the character of the landscape; and
  - The increase in the level of wind farm influence and intensification of development within the receptor.
- 7.10.61 The factors that limit the magnitude of change to a **medium** level are as follows:
  - The baseline influence of the operational Gordonbush Wind Farm (which has similar visibility and landscape patterns/elements as the Development) within the receptor, ensuring that the Development would not introduce a completely new characteristic into the landscape;
  - The large-scale, open and single-slope nature of the landform of the receptor has the ability to accommodate further development without visual confusion or uncomfortable scale comparisons arising;

- The similarity between the landscape characteristics of the Development site (in terms of landform, orientation, gradient and ground cover) and those of the operational Gordonbush Wind Farm site is important, as these aspects of landscape character that are found on the site have a baseline association with wind energy development within the receptor and would ensure a high level of integration between the Development and the operational Gordonbush Wind Farm;
- The use of existing infrastructure within the receptor; and
- The location of the Development and the operational Gordonbush Wind Farm in the large-scale and open uplands, where uncomfortable scale comparisons with the landscape setting would not arise.

### Significance of the Effect

7.10.62 The effect of the Development on the landscape character of *moorland slopes and hills: unit A* would be **significant** due to the factors that lead to the **medium** sensitivity of the receptor and the **medium** magnitude of change on the receptor.

### **Cumulative Effects**

- 7.10.63 This receptor has influence of baseline wind farms at Gordonbush and Kilbraur as described above. There is also theoretical visibility of Lairg Wind Farm, but this has very limited influence at 24km away, while Achany and Rosehall have some theoretical visibility but are seen from outwith their study areas. The application stage site at Braemore has some limited theoretical visibility but this will be very limited at over 30km away. There are also very small areas of visibility of West Garty (a minimum of 9km away) and Strathy South (33km away) at the northern end of the receptor, on the edge of the operational Gordonbush Wind Farm.
- 7.10.64 In this context, the Development would lead to some cumulative effect due to the addition of further wind farm influence to the overall Gordonbush development within the receptor. However, a notable cumulative effect would not arise from the addition of the Development due to its close visual and physical association with the operational Gordonbush Wind Farm in terms of proximity, location, and landscape setting. These factors ensure that the Development would not be perceived as a distinctive 'new' or separate wind farm influence on landscape character within the receptor. The addition of the Development will therefore not result in an impression that the character of the receptor is characterised by multiple wind farms, and the cumulative effect would be **not significant**.

# Moorland Slopes and Hills: unit B

7.10.65 Unit B of moorland slopes and hills extends eastwards from the Allt Smeorail to a maximum of approximately 5km from the nearest turbine on the eastern side of the Development. The distinctive landform of Beinn Smeorail (Viewpoint 1) is within this unit. This unit of moorland slopes and hills would not be directly affected by the Development.

# **Baseline Description**

7.10.66 This unit of *moorland slopes and hills* is typical of its type in that it comprises sloping open moorland which gradually rises to form broad and sometimes distinctive hills such as Beinn

Smeorail. While there are some pockets of enclosure, particularly along the Allt Smeorail, this landscape is generally open and exposed, sloping down from the hills that surround this eastern side of the site. This unit is also typical in its lack of habitation and settlement, and the moorland ground cover that is interspersed by small forestry blocks.

- 7.10.67 The character of the landscape has, however, been considerably altered by the external influence of the operational Gordonbush Wind Farm, which is adjacent to the north-western part of this unit and is visible across the majority of the area other than localised enclosed areas between hills where landform provides a screen. Kilbraur Wind Farm is also visible from extensive parts of *unit B* at a minimum distance of around 4km, although its level of visibility and influence is less than that of Gordonbush Wind Farm. Achany and Rosehall Wind Farms are shown on ZTVs to have some visibility from this receptor but are both seen from outwith their study areas, while Lairg has some limited visibility at a minimum of 24km away.
- 7.10.68 *Moorland slopes and hills: unit B* has a **medium-high** value. The central and eastern part of the receptor lies within the *Loch Fleet, Loch Brora and Glen Loth* SLA and the distinctive hills in this area contribute to the qualities of the SLA. The landscape has retained its innate and distinctive attributes, displays scenic qualities and there is a sense of place in some areas, particularly within the hills that lie towards the east of the unit. There is also some value for informal recreation.

## <u>Sensitivity</u>

- 7.10.69 This landscape has a **medium** susceptibility to the Development. This is due to the largescale and open nature of the landform, as it is considered to have the ability to accommodate the influence of further wind farm development without uncomfortable scale comparisons arising. The very close-proximity of Gordonbush Wind Farm, which strongly characterises parts of the baseline landscape, also reduces susceptibility as wind turbines are part of the baseline influence on the landscape character of this receptor and the Development would therefore not introduce an entirely new external characteristic. Susceptibility is, however, heightened by the potential for cumulative effects to arise as a result of the addition of the Development to the baseline wind farm influence.
- 7.10.70 The combination of the **medium** susceptibility to change of the landscape and its **mediumhigh** value results in a **medium-high** sensitivity for *moorland slopes and hills: unit B*.

- 7.10.71 Effects on this receptor would arise from changes to the way that the landscape character is perceived as a result of visibility of the Development, and there would be no physical effects on landscape character. The large-scale rolling landform of this receptor results in a clear divide between areas that gain high visibility of the Development (the west-facing slopes that face towards the Development including Cnoc Cragaidh, Beinn Smeorail, Colbheinn, Meallan Liath Beg and Mor, Carn Garbh, and Cnoc a'Chrubaich Mhoir) and areas of no visibility where landform slopes away from the Development.
- 7.10.72 The operational Gordonbush Wind Farm is visible from the same areas as the Development, while Kilbraur Wind Farm is seen from south-facing slopes as well as those that face west.

- 7.10.73 Visibility of the Development is generally consistently high across the west-facing slopes, and the magnitude of change on these areas will vary from **medium-high** to **medium** due to the following factors:
  - The introduction of further wind farm development (in addition to the operational Gordonbush Wind Farm) and the intensification of external wind farm influence on the receptor;
  - The notable increase in the extent of wind farm development around the setting of the receptor; wind farm influence on the western setting of the receptor would increase from approximately 50-degrees to 95-degrees;
  - The level of visibility of the Development and its proximity to the receptor (between 500m and 3.5km);
  - The reduced separation between the overall Gordonbush development and Kilbraur Wind Farm, which can emphasise wind farm influences; and
  - The orientation of the west-facing slopes towards the Development, so that the association between landscape character and the Development is emphasised.
- 7.10.74 The factors that limit the magnitude of change to a maximum **medium-high** level are as follows:
  - The effects of the Development would be indirect and would not alter the pattern of elements that makes up the landscape character of the receptor;
  - The baseline influence of Gordonbush Wind Farm on the same areas of the receptor that will gain influence of the Development ensures that the Development would not introduce a new external character influence;
  - The baseline influence of Gordonbush Wind Farm in the same (western) aspect of the setting to the receptor as the Development ensures that wind farm influence would not be extended to other aspects of the setting;
  - The Development would affect one part of the setting to the receptor (the western side), with other aspects to the north, south and east remaining unaffected by the overall development at Gordonbush; and
  - The location of the Development in the large-scale and open uplands ensures that uncomfortable scale comparisons with its landscape setting would not arise.
- 7.10.75 There are some small areas of the receptor (on the eastern fringes of the Allt Smeorail, for example) that would gain a lower level of visibility of the Development due to screening by landform, and the magnitude of change on these areas would be **low** to **medium-low** due to the limited influence of the Development.

# Significance of the Effect

7.10.76 The effect of the Development on the landscape character of the majority of *moorland slopes and hills: unit B* would be **not significant** due to the lack of or very limited influence of the Development. There would, however, be **significant** effects on the landscape character of the west-facing slopes that gain a high level of visibility of the Development, including Cnoc Cragaidh, Beinn Smeorail, Col-bheinn, Meallan Liath Beg and Mor, Carn Garbh, and Cnoc a'Chrubaich Mhoir due to the factors that lead to the **medium** sensitivity of the receptor and the **medium-high** to **medium** magnitude of change on these areas.

### Cumulative Effects

- 7.10.77 This receptor has influence of baseline wind farms at Gordonbush and Kilbraur as described above. Achany and Rosehall Wind Farms are shown on ZTVs to have some visibility but are both seen from outwith their study areas, while Lairg has some limited visibility at a minimum of 24km away. The application stage site at Braemore has some limited theoretical visibility but this would be very limited at over 32km away. There are also areas of visibility of West Garty (a minimum of 5km away) and Strathy South (32km away) in the north-eastern part of the receptor.
- 7.10.78 The addition of the Development would have some cumulative effect on this receptor due to the addition of further turbines to the setting of the receptor, which would intensify the external wind farm influence on landscape character. However, a notable cumulative effect would not arise from the addition of the Development due to its close visual and physical association with the operational Gordonbush Wind Farm in terms of proximity, location, and landscape setting. These factors ensure that the Development would not be perceived as a distinctive 'new' or separate wind farm influence on the landscape character of the receptor. The addition of the Development would therefore not result in an impression that the character of the receptor is characterised by multiple wind farms, and the cumulative effect would be **not significant**.

## Moorland Slopes and Hills: unit C

7.10.79 Unit C of moorland slopes and hills lies to the south of the site, separated from unit A by Strath Brora, and covers distinctive landform such as Carroll Rock, Ben Horn (Viewpoint 9) and Kilbraur Hill. Kilbraur Wind Farm lies within this receptor. This unit of moorland slopes and hills would not be directly affected by the Development.

# **Baseline Description**

- 7.10.80 This unit is a relatively small and discreet area of *moorland slopes and hills* that separates Strath Brora in the north from Dunrobin Glen in the south. The majority of the unit consists of a tight-knit group of hills of which Ben Horn (520m AOD) is the highest, while the northern area, north of Kilbraur Hill and Meall Horn, has a looser, more open landform that falls away to the north in a long sweep. This unit is typical of its type in its very sparse settlement, and the moorland ground cover that is interspersed by small forestry blocks.
- 7.10.81 The character of the landscape has been notably altered by the addition of Kilbraur Wind Farm, which lies within the more open landform at the northern end of the unit. Kilbraur Wind Farm is visible from the northern area but has only limited visibility from the southern part of the receptor due to screening by the higher central hills. The 275kV transmission line that runs past the western side of the Development site also passes through this unit, in the same area as Kilbraur Wind Farm. Gordonbush Wind Farm is visible from extensive parts of this unit, particularly north-facing slopes and elevated areas, at a minimum distance of 5.2km. Achany, Rosehall and Lairg Wind Farms have some very limited visibility from this receptor a minimum of 24.5km, 26.5km and 15.5km away respectively. These sites have little influence on landscape character due to a combination of limited visibility and distance.

7.10.82 *Moorland slopes and hills: unit C* has a **medium-high** value. A band across the central part of the receptor lies within the *Loch Fleet, Loch Brora and Glen Loth* SLA and the distinctive hills in this area (which include Ben Horn and Kilbraur Hill) contribute to the qualities of the SLA. The moorland has scenic qualities and there is a sense of place in some areas, particularly in the part of the receptor that is covered by the SLA. There is also some value for informal recreation. However, these factors are tempered by the physical changes that have resulted from the location of Kilbraur Wind Farm and, to a lesser extent, the transmission line within the receptor; these elements have notably altered the defined and distinctive attributes of the innate *moorland slopes and hills* character, leading to a redefined landscape character in those parts of the receptor that are physically affected by Kilbraur Wind Farm, or gain clear visibility of it.

## <u>Sensitivity</u>

- 7.10.83 This landscape has a **medium** susceptibility to the Development. This level of susceptibility is due to the baseline presence of Kilbraur Wind Farm within the unit, which strongly characterises the baseline landscape and reduce susceptibility as the Development would not introduce new or highly contrasting characteristics of development to these parts of the landscape. The large-scale and open nature of the landform also reduces susceptibility as it is considered to have the ability to accommodate the influence of further development without uncomfortable scale comparisons arising. However, susceptibility is heightened by the strong visual association between the receptor and the Development site area, which form the south and north valley sides of Strath Brora respectively.
- 7.10.84 The combination of the **medium** susceptibility to change of the landscape and its **medium-high** value results in a **medium-high** sensitivity for *moorland slopes and hills: unit C*.

- 7.10.85 Effects on this receptor will arise from changes to the way that the landscape character is perceived as a result of visibility of the Development, and there would be no physical effects on landscape character. The large-scale rolling landform of this receptor results in a clear divide between areas that gain high visibility of the Development (the north-facing slopes that are orientated towards the Development including the slopes of Meall Odhar, Nen Horn, Meall Horn, Kilbraur Hill, Meall Coire Aghaisgeig, Carroll Rock and Cagar Feosaig) and areas of no visibility where landform slopes away from the Development.
- 7.10.86 The operational Gordonbush Wind Farm is visible from the same areas as the Development, while Kilbraur Wind Farm, which lies within this receptor, is seen from much of the western part of the receptor as well as some west-facing areas in the eastern part.
- 7.10.87 Visibility of the Development is generally consistently high across the north-facing slopes and the principal criterion that leads to a variation in magnitude of change is the orientation of visibility towards the Development. In views from the western part of the receptor, west of Ben Horn, the Development is seen directly in front of the operational Gordonbush Wind Farm with a high level of integration, and will not notably increase the extent of wind farm influence on the setting of the receptor. This ensures that the Development wouldhave a limited influence on the landscape character of the receptor, and the magnitude of change in the western area would be **low/medium-low**.

- 7.10.88 This **low/medium-low** level of change would also apply to the more distant southern parts of the receptor, south of Ben Horn, where the increased distance from the Development (over 6km) and the diminishing additional influence of the Development ensure that it would not lead to a notable change on the landscape character of the receptor.
- 7.10.89 A higher level of influence would be found in the north-eastern part of the receptor, north and east of Ben Horn, where the Development would increase the extent of wind farm influence on the setting of the receptor and is seen at relatively close proximity, between 3.5km and 6km away. The influence of the Development on this area, which includes Carroll Rock and Kilbraur Hill as well as several unnamed hills and high points, is emphasised by the orientation of landform of the receptor to the north, towards the site. The magnitude of change in this area would be **medium/medium-low**.

## Significance of the Effect

7.10.90 The effect of the Development on the landscape character of the majority of *moorland slopes and hills: unit C* will be **not significant** due to the lack of or limited influence of the Development. There would, however, be a **significant** effect on the landscape character of the north-facing slopes in the north-eastern part of the receptor (including Carroll Rock and Kilbraur Hill, as well as several unnamed hills and high points) due to the factors that lead to the **medium-high** sensitivity of the receptor and the **medium/medium-low** magnitude of change on these areas.

## **Cumulative Effects**

- 7.10.91 This receptor has influence of baseline wind farms at Gordonbush and Kilbraur as described above. Achany, Rosehall and Lairg Wind Farms have some limited visibility from this receptor a minimum of 24.5km, 26.5km and 15.5km away respectively. These sites have little influence on landscape character due to a combination of limited visibility and distance. The application stage site at Braemore has some limited theoretical visibility from over 22km away. There are also areas of visibility of West Garty (a minimum of 13km away) and Strathy South, which is seen from outwith its study area.
- 7.10.92 The addition of the Development would have some cumulative effect on this receptor due to the addition of further turbines to the setting of the receptor, which would intensify the external wind farm influence on landscape character. However, a notable cumulative effect will not arise from the addition of the Development due to its close visual and physical association with the operational Gordonbush Wind Farm in terms of proximity, location, and landscape setting. These factors ensure that the Development would not be perceived as a distinctive 'new' or separate wind farm influence on the landscape character of the receptor. The addition of the Development would therefore not result in an impression that the character of the receptor is characterised by multiple wind farms, and the cumulative effect will be **not significant**.

# Moorland Slopes and Hills: unit D

7.10.93 Unit D of moorland slopes and hills lies to the west of the site, and covers two areas; firstly, the southern part of the Black Water valley, Dailbane Hill and Meall na Gaoithe, and secondly, the hills of Cnoc Leamhnachd and Cnoc a' Garbh-leathaid, to the west of Sciberscross. There are no viewpoints within this unit. This unit of moorland slopes and hills would not be directly affected by the Development.

#### **Baseline Description**

- 7.10.94 This unit covers two unusually restricted and narrow areas of *moorland slopes and hills* that lie between areas of *sweeping moorland* and Strath Brora to the north and south, and to the west extends into an extensive area of *moorland slopes and hills* which is not included in *unit D* due to lack of visibility of the Development. This unit is atypical of *moorland slopes and hills* in its limited extent but displays other innate characteristics in its open, moorland slopes with enclosed pockets; moorland land cover with adjacent forestry blocks; and lack of development. Unlike *unit A* there is no large-scale development within this unit although both Gordonbush and Kilbraur Wind Farms are intermittently visible from parts of the receptor, a minimum of 3km and 2km away respectively. The unit is relatively inaccessible other than the private access track to Ben Armine Lodge, which crosses the landscape near Dailbain Hill and a vehicular track, also private, that runs up the Black Water from Balnacoil Lodge to Strath Skinsdale. ZTVs indicate that Achany, Rosehall and Lairg Wind Farms have limited visibility from over 22km, 25km and 15km away respectively.
- 7.10.95 *Moorland slopes and hills: unit D* has a **medium** value. The unit has some scenic qualities and a sense of place, particularly in the Black Water valley, and has remained fairly intact. There is also some value for informal recreation. However, it is not covered by any scenic designations and the relatively enclosed and restricted extent of the unit ensures that the typical *moorland slopes and hills* characteristics are not fully apparent, so that in this respect it does not provide a distinctive and fully representative example of its type.

### <u>Sensitivity</u>

- 7.10.96 This landscape has a **medium** susceptibility to the Development due largely to the enclosed and, in comparison with the majority of areas of *moorland slopes and hills*, relatively smallscale character of the Black Water valley, with which the Development will provide some contrast. However the underlying landform of other parts of the receptor retains the large-scale and expansive landform that is more characteristic of *moorland slopes and hills*, and this can accommodate the influence of the Development without uncomfortable scale comparisons. It is also notable that this receptor does not have a particular association with the site area that would increase its susceptibility. The presence of operational wind farm influence both reduces and heightens susceptibility; the reduction in susceptibility occurs because wind turbines are part of the baseline influence on the landscape character of this receptor and the Development will therefore not introduce an entirely new external characteristic, while the heightening in susceptibility occurs because of the potential for cumulative effects to arise as a result of the addition of the Development.
- 7.10.97 The combination of the **medium** susceptibility to change of the landscape and its **medium** value results in a **medium** sensitivity for *moorland slopes and hills: unit D*.

#### Magnitude of Change

7.10.98 Effects on this receptor would arise from changes to the way that the landscape character is perceived as a result of visibility of the Development, and there would be no physical effects on landscape character. The distinctive and relatively small-scale hill and valley landform that characterises this unit of *moorland slopes and hills* results in a clear divide between areas that gain high visibility of the Development (the high points and east-facing slopes that are orientated towards the Development including Meall na h-Amaite, Cnoc

Cille Pheadair, Cnoc Leamhnachd, and Cnoc a' Garbh-Leathaid) and areas of no visibility within valleys and where landform slopes away from the Development.

- 7.10.99 The operational Gordonbush Wind Farm is visible from the same areas as the Development while Kilbraur Wind Farm is seen from higher areas and south and east-facing parts of the receptor due to its location to the south.
- 7.10.100 Visibility of the Development is generally consistently high across the east-facing slopes and it is generally seen in close association with the operational Gordonbush Wind Farm, with an extensive overlap but also leading to some increase in the extent of wind farm influence on the setting of the receptor. The principal criterion that leads to a variation in magnitude of change is the distance of the Development from the various parts of the receptor, and the closer areas at Meall na h-Amaite and Cnoc Cille Pheadair would have a **medium/medium-low** magnitude of change due to the following factors:
  - The introduction of further wind farm development (in addition to the operational Gordonbush Wind Farm) and the intensification of external wind farm influence on the receptor;
  - The increase in the extent of wind farm development around the setting of the receptor;
  - The level of visibility of the Development and its proximity to the receptor (between approximately 4km and 6.5km) which is closer than the operational Gordonbush Wind Farm;
  - The reduced separation between the overall Gordonbush development and Kilbraur Wind Farm, which can emphasise wind farm influences; and
  - The orientation of the east-facing slopes towards the Development, so that the association between landscape character and the Development is emphasised.
- 7.10.101 The factors that limit the magnitude of change to a **medium/medium-low** level are as follows:
  - The effects of the Development would be indirect and would not alter the pattern of elements that makes up the landscape character of the receptor;
  - The baseline influence of Gordonbush Wind Farm on the same areas of the receptor that would gain influence of the Development ensures that the Development would not introduce a new external character influence;
  - The level of integration with the operational Gordonbush Wind Farm ensures that the Development would not be perceived as a 'new' wind farm site;
  - The baseline influence of Gordonbush Wind Farm in the same (eastern) aspect of the setting to the receptor as the Development ensures that wind farm influence would not be extended to other aspects of the setting; and
  - The location of the Development in the large-scale and open uplands ensures that uncomfortable scale comparisons with its landscape setting would not arise.
- 7.10.102 The other parts of the receptor that would gain relatively high visibility of the Development, including Cnoc Leamhnachd, and Cnoc a' Garbh-Leathaid, would have a **medium-low** to **low** magnitude of change due to the increased distance from the Development, which ensures that the Development provides a diminishing influence on

landscape character. It is also relevant that these areas lie slightly further to the south than the closer areas, and the Development is therefore seen largely within the visual envelope of the operational Gordonbush Wind Farm, with a reduced increase in extent of wind farm development.

### Significance of the Effect

7.10.103 The effect of the Development on the landscape character of the majority of *moorland slopes and hills: unit D* would be **not significant** due to the lack of or limited influence of the Development. There would, however, be a **significant** effect on the landscape character of the east-facing slopes of Meall na h-Amaite and Cnoc Cille Pheadair in the eastern part of the receptor due to the factors that lead to the **medium** sensitivity of the receptor and the **medium/medium-low** magnitude of change on these areas.

### **Cumulative Effects**

- 7.10.104 This receptor has influence of baseline wind farms at Gordonbush and Kilbraur as described above. ZTVs indicate that Achany, Rosehall and Lairg Wind Farms have limited visibility from over 22km, 25km and 15km away respectively, and have little influence on landscape character due to a combination of limited visibility and distance. The application stage site at Braemore has some limited theoretical visibility from over 21km away. There is also a very small area of visibility of West Garty (a minimum of 18km away), where it would be seen directly behind Gordonbush Wind Farm with negligible additional influence.
- 7.10.105 The addition of the Development would have some cumulative effect on this receptor due to the addition of further turbines to the setting of the receptor, which would intensify the external wind farm influence on landscape character. However, a notable cumulative effect would not arise from the addition of the Development due to its close visual and physical association with the operational Gordonbush Wind Farm in terms of proximity, location, and landscape setting. These factors ensure that the Development would not be perceived as a distinctive 'new' or separate wind farm influence on the landscape character of the receptor. The addition of the Development would therefore not result in an impression that the character of the receptor is characterised by multiple wind farms, and the cumulative effect would be **not significant**.

# Sweeping Moorland: unit A

7.10.106 Unit A of sweeping moorland covers the western part of the site and also the western part of the operational Gordonbush Wind Farm. This unit has been distinguished from unit B of sweeping moorland by a combination of the topography of the Allt Mhuilinn and the 275kV transmission line, which combine to clearly define the western side of the Development site and the operational Gordonbush site. This is the only unit of sweeping moorland that would be directly affected by the Development.

### **Baseline Description**

7.10.107 This unit of *sweeping moorland* is typical of its type in its wide open space and gently undulating landform, which results in a high degree of exposure and extensive visibility. This unit is also typical of its type in its lack of habitation and settlement, and the moorland ground cover that is interspersed by small forestry blocks.

- 7.10.108 The character of the landscape has, however, been altered by the addition of the operational Gordonbush Wind Farm, which lies partially within this unit and is visible across the majority of the area due to the open, gentle landform. This provides a prevailing local influence on the character of the receptor, creating a key visual focus in the landscape, altering the typical visual composition and reducing the perceived sense of remoteness. The 275kv transmission line also affected landscape character, again creating a key visual focus in the landscape, albeit more localised than the wind farm. Kilbraur Wind Farm is visible from extensive parts of the receptor at a minimum distance of around 3.9km. Achany and Rosehall Wind Farms have some visibility from this receptor but this is from outwith their study areas, while Lairg has some visibility at a minimum of 23km away, where it has a very limited influence on landscape character.
- 7.10.109 *Sweeping moorland: unit A* has a **medium** value. It is not covered by any scenic designations, does not have notable cultural or historical associations, and the distinctive innate attributes of *sweeping moorland* have been notably altered by the development that has taken place within the unit. The landscape does, however, have some scenic qualities and there is a sense of place in some areas, particularly in the valley of the Allt Mhuilinn. There is also some value for informal recreation within this area, partially due to the access that can be gained via the operational Gordonbush Wind Farm tracks.

### <u>Sensitivity</u>

- 7.10.110 This landscape has a **medium-low** susceptibility to the Development. This level of susceptibility is due largely to the baseline presence of the operational Gordonbush Wind Farm within the receptor itself, which strongly characterises the physical patterns of the landscape and reduces susceptibility as the Development would not introduce new or highly contrasting development directly into the landscape.
- 7.10.111 The combination of the **medium-low** susceptibility to change of the landscape and its **medium** value results in a **medium** sensitivity for *sweeping moorland: unit A*.

- 7.10.112 The Development lies within this receptor, and there would therefore be a direct effect on the pattern of elements that constitutes the landscape character as well as through visibility and external influence, particularly of the turbines. The turbines and associated infrastructure would be apparent new additions to the landscape and would alter the pattern of elements that makes up landscape character. Away from the immediate site area, visibility of the Development would affect the experiential characteristics of the landscape. Visibility is generally consistent across the receptor, with almost all areas other than enclosed parts of the Allt a' Mhuilinn valley gaining high visibility of the Development at close proximity.
- 7.10.113 The magnitude of change on this receptor would be **medium**, due to the following factors:
  - The direct effect that the various elements of the Development (including the turbines and infrastructure) would have on the pattern of elements that make up the character of the receptor; while the same characteristics are already in place on the operational Gordonbush Wind Farm site, the Development would extend these characteristics onto otherwise unaffected parts of the receptor;

- The variation in the turbine dimensions of the Development and operational turbines, which may reduce perceived integration within the receptor. The effect of construction operations on the character of the landscape; and
- The increase in the level of wind farm influence and intensification of development within the receptor.

7.10.114 The factors that limit the magnitude of change to a **medium** level are as follows:

- The baseline influence of the operational Gordonbush Wind Farm (which has similar visibility and landscape patterns/elements as the Development) within the receptor, ensuring that the Development would not introduce a completely new characteristic into the landscape;
- The large-scale, open and single-slope nature of the landform of the receptor has the ability to accommodate further development without visual confusion or uncomfortable scale comparisons arising;
- The location of the Development and the operational Gordonbush Wind Farm in the large-scale and open uplands, where uncomfortable scale comparisons with the landscape setting would not arise;
- The similarity between the landscape characteristics of the Development site (in terms of landform, orientation, gradient and ground cover) and those of the operational Gordonbush Wind Farm site is important, as these aspects of landscape character that are found on the site have a baseline association with wind energy development within the receptor and would ensure a high level of integration between the Development and the operational Gordonbush Wind Farm; and
- The use of existing infrastructure within the receptor.

### Significance of the Effect

7.10.115 The effect of the Development on the landscape character of *sweeping moorland: unit A* will be **significant** due to the factors that lead to the **medium** sensitivity of the receptor and the **medium** magnitude of change on the receptor. While this combination of medium sensitivity and magnitude of change can result in an effect that is not significant, this specific effect has been assessed as significant due to the direct physical effect that the Development will have on the receptor.

### **Cumulative Effects**

- 7.10.116 This receptor has influence of baseline wind farms at Gordonbush and Kilbraur as described above. There is also theoretical visibility of Lairg Wind Farm, but this has very limited influence at a minimum of 23km away, while Achany and Rosehall have some theoretical visibility but are seen from outwith their study areas. The application stage site at Braemore has some limited theoretical visibility but this would be very limited at over 29km away. There is also a very small area of visibility of Strathy South (33km away) at the northern end of the receptor.
- 7.10.117 In this context, the Development would lead to some cumulative effect due to the addition of further wind farm influence to the overall Gordonbush development within the receptor. However, a notable cumulative effect would not arise from the addition of the Development due to its visual and physical association with the operational Gordonbush

Wind Farm in terms of proximity, location, and landscape setting. These factors ensure that the Development would not be perceived as a distinctive 'new' wind farm influence on landscape character within the receptor. The addition of the Development would therefore not result in an impression that the character of the receptor is characterised by multiple wind farms, and the cumulative effect would be **not significant**.

### Sweeping Moorland: unit B

7.10.118 Unit B of sweeping moorland extends westwards from the Allt a' Mhuilinn and 275kV transmission line to a maximum of approximately 11km from the nearest turbine on the western side of the site. The gently rising landform of Hope Hill (Viewpoint 10) is within this unit. This unit of sweeping moorland will not be directly affected by the Development.

#### Baseline Description

- 7.10.119 This unit of *sweeping moorland* is typical of its type in its wide open space and gently undulating landform, which results in a high degree of exposure and extensive visibility. This unit is also typical of its type in its lack of habitation and settlement, and the moorland ground cover that is interspersed by small forestry blocks.
- 7.10.120 The character of the landscape has, however, been considerably altered by the external influence of the operational Gordonbush Wind Farm, which is adjacent to the eastern edge of this unit and is visible across the majority of the area. The 275kV transmission line that runs across the eastern end of this receptor has also affected its character, again creating a visual focus in the landscape, albeit more localised than the wind farm. Kilbraur Wind Farm is visible from extensive parts of the receptor at a minimum distance of around 3.2km. In the western and north-western parts of the receptor, the influence of these baseline wind farms is considerably more limited, and more remote, wild characteristics remain apparent. Achany and Lairg Wind Farms are shown on ZTVs to have very limited visibility from this receptor at a distance of 29km and 22km respectively, while Rosehall has negligible visibility from outwith its study area.
- 7.10.121 *Sweeping moorland: unit B* has a **high** value due to the coverage of an extensive northern and central part of the receptor by the nationally-recognised Ben Klibreck Armine Forest WLA.

### <u>Sensitivity</u>

7.10.122 This landscape has a **medium** susceptibility to the Development. This is due in part to the large-scale and open nature of the landform, as it is considered to have the ability to accommodate the influence of wind farm development without uncomfortable scale comparisons arising. The very close proximity of Gordonbush Wind Farm, which strongly characterises parts of the baseline landscape, also reduces susceptibility as the Development would not introduce the influence of new or highly contrasting characteristics of development to these parts of the landscape. However, the susceptibility of the receptor is heightened by the wildness characteristics that are found in parts of the receptor that lie at a greater distance from the baseline development and by the potential for cumulative effects to arise as a result of the addition of the Development to the baseline wind farm influence.

7.10.123 The combination of the **medium** susceptibility to change of the landscape and its **high** value results in a **medium-high** sensitivity for *sweeping moorland: unit B*.

- 7.10.124 Effects on this receptor would arise from changes to the way that the landscape character is perceived as a result of visibility of the Development, and there would be no physical effects on landscape character.
- 7.10.125 The large-scale and gently sweeping landform of this receptor results in generally consistent visibility of the Development from east-facing slopes and higher areas up to approximately 8.5km away, with only the more enclosed valleys not gaining any visibility. Where there is visibility of the Development, magnitude of change would vary largely according to the level of wind farm influence that would arise in addition to the operational Gordonbush Wind Farm and the distance of the receptor from the Development.
- 7.10.126 The operational Gordonbush Wind Farm is visible from very similar areas to the Development, while Kilbraur Wind Farm is seen from south-facing slopes as well as those that face east.
- 7.10.127 Visibility of the Development is generally consistently high across the east-facing slopes within approximately 6km, and the magnitude of change on these areas will vary from **medium-high** to **medium/medium-low,** dependent on distance from the Development, due to the following factors:
  - The introduction of further wind farm development (in addition to the operational Gordonbush Wind Farm) and the intensification of external wind farm influence on the receptor;
  - The location of the Development adjacent to the operational Gordonbush Wind Farm, with a minimal overlap, when seen from this receptor due to the angle of views, so that wind farm influence on the eastern setting of the receptor would be approximately doubled in extent;
  - The level of visibility of the Development and its proximity to the receptor (between 400m and approximately 6km);
  - The reduced separation between the overall Gordonbush development and Kilbraur Wind Farm, which can emphasise wind farm influences; and
  - The orientation of the east-facing slopes towards the Development, so that the association between landscape character and the Development is emphasised.
- 7.10.128 The factors that limit the magnitude of change to a maximum **medium-high** level are as follows:
  - The effects of the Development would be indirect and would not alter the pattern of elements that makes up the landscape character of the receptor;
  - The baseline influence of Gordonbush Wind Farm on the same areas of the receptor that would gain influence of the Development ensures that the Development would not introduce a new external character influence;

- The baseline influence of Gordonbush Wind Farm in the same (eastern) aspect of the setting to the receptor as the Development ensures that wind farm influence would not be extended to other aspects of the setting; and
- The location of the Development in the large-scale and open uplands ensures that uncomfortable scale comparisons with its landscape setting would not arise.
- 7.10.129 Beyond approximately 6km away from the Development, the magnitude of change would reduce to a **medium-low** or **low/medium-low** level due to the increased distance and diminishing additional influence of the Development.
- 7.10.130 There are some small areas of the receptor (mainly valleys and west-facing slopes) that would gain no visibility or a lower level of visibility of the Development due to screening by landform, and the magnitude of change on these areas will be **negligible** to **low** due to the limited influence of the Development.

### Significance of the Effect

7.10.131 The effect of the Development on the landscape character of the majority of *sweeping moorland: unit B* would be **not significant** due to the lack of or very limited influence of the Development. There would, however, be **significant** effects on the landscape character of the east-facing slopes that lie within approximately 6km of the Development and gain a high level of visibility of the Development, due to the factors that lead to the **medium-high** sensitivity of the receptor and the **medium-high** to **medium/medium-low** magnitude of change on these areas.

### **Cumulative Effects**

- 7.10.132 This receptor has influence of baseline wind farms at Gordonbush and Kilbraur as described above. Achany and Lairg Wind Farms are shown on ZTVs to have very limited visibility from this receptor at a distance of 29km and 22km respectively, while Rosehall has negligible visibility from outwith its study area. The application stage site at Braemore has some theoretical visibility but this would be very limited at over 29km away. There is also negligible visibility of Strathy South and West Garty.
- 7.10.133 The addition of the Development would have some cumulative effect on this receptor due to the addition of further turbines to the setting of the receptor, which would intensify the external wind farm influence on landscape character. However, a notable cumulative effect would not arise from the addition of the Development due to its close visual and physical association with the operational Gordonbush Wind Farm in terms of proximity, location, and landscape setting. These factors ensure that the Development would not be perceived as a distinctive 'new' or separate wind farm influence on the landscape character of the receptor. The addition of the Development would therefore not result in an impression that the character of the receptor is characterised by multiple wind farms, and the cumulative effect would be **not significant**.

### Sweeping Moorland: unit C

7.10.134 *Unit C* of *sweeping moorland* lies to the west of the Black Water and north of Strath Brora, east of the site. Viewpoint 12 (Track to Ben Armine Lodge) lies within this unit. This unit of *sweeping moorland* would not be directly affected by the Development.

## **Baseline Description**

- 7.10.135 This unit is an unusually narrow and sinuous area of sweeping moorland, and is surrounded and interleaved by moorland slopes and hills and coniferous plantation. This unit is atypical of sweeping moorland in its limited extent but displays other innate characteristics in its open, sweeping and broad moorland slopes; moorland land cover with adjacent forestry blocks; and lack of development. Unlike *unit A* there is no large-scale development within this unit although both Gordonbush and Kilbraur Wind Farms are intermittently visible from parts of the receptor, a minimum of 6.5km and 2.5km away respectively. The unit is relatively inaccessible other than the private access track to Ben Armine Lodge, which crosses the landscape. ZTVs indicate that Achany, Rosehall and Lairg Wind Farms have limited visibility from over 21km, 24km and 13km away respectively, and have little influence on landscape character.
- 7.10.136 Sweeping moorland: unit C has a **medium-high** value. It is not covered by any scenic designations, although the western extremity of the unit is within the Ben Klibreck Armine Forest WLA, which adds value to this area. The unit has scenic qualities and a sense of place, and has remained fairly intact. There is also some value for informal recreation via the track that runs through the receptor. However, the relatively enclosed and restricted extent of the unit ensures that the typical sweeping moorland characteristics are not fully apparent, and in this respect it does not provide a distinctive and fully representative example of its type.

### **Sensitivity**

- 7.10.137 This landscape has a **medium** susceptibility to the Development. This is due to the largescale and open nature of the landscape patterns and landform, as it is considered to have the ability to accommodate the influence of wind farm development without uncomfortable scale comparisons arising. The susceptibility of the receptor is heightened by the wildness characteristics that are found in parts of the extreme western part of the receptor, away from the influence of baseline wind farm development. The presence of operational wind farm influence both reduces and heightens susceptibility; the reduction in susceptibility occurs because wind turbines are part of the baseline influence on the landscape character of this receptor and the Development will therefore not introduce an entirely new external characteristic, while the heightening in susceptibility occurs because of the potential for cumulative effects to arise as a result of the addition of the Development.
- 7.10.138 The combination of the **medium** susceptibility to change of the landscape and its **medium-high** value results in a **medium-high** sensitivity for *sweeping moorland: unit C*.

- 7.10.139 Effects on this receptor would arise from changes to the way that the landscape character is perceived as a result of visibility of the Development, and there will be no physical effects on landscape character. The distinctive sinuous landform that characterises this unit of *sweeping moorland* results in a clear divide between areas that gain high visibility of the Development (the high points and east-facing slopes that are orientated towards the Development including Meall na h-Amaite, Cnoc Cille Pheadair, Druim Torr nan Cliabh, Cnoc an Torra Mhoir, cnoc an Liath-bhaid and Creag Riabhach) and areas of no visibility within valleys and where landform slopes away from the Development.
- 7.10.140 The operational Gordonbush Wind Farm is visible from the same areas as the Development while Kilbraur Wind Farm is seen from higher areas and south and east-facing parts of the receptor due to its location to the south of the receptor.
- 7.10.141 Visibility of the Development would be generally consistently high across the east-facing slopes and it is generally seen in close association with the operational Gordonbush Wind Farm, with an extensive overlap but also leading to some increase in the extent of wind farm influence on the setting of the receptor. The principal criterion that leads to a variation in magnitude of change is the distance of the Development from the various parts of the receptor, and the closer slopes of Meall na h-Amaite, Cnoc Cille Pheadair and Druim Torr nan Cliabh would have a magnitude of change that varies from **medium/medium-low** to **medium-low** due to the following factors:
  - The introduction of further wind farm development (in addition to the operational Gordonbush Wind Farm) and the intensification of external wind farm influence on the receptor;
  - The increase in the extent of wind farm development around the setting of the receptor;
  - The level of visibility of the Development and its proximity to the receptor (between approximately 5km and 7km) which is closer than the operational Gordonbush Wind Farm;
  - The reduced separation between the overall Gordonbush development and Kilbraur Wind Farm, which can emphasise wind farm influences; and
  - The orientation of the east-facing slopes towards the Development, so that the association between landscape character and the Development is emphasised.
- 7.10.142 The factors that limit the magnitude of change to a maximum **medium/medium-low** level are as follows:
  - The effects of the Development would be indirect and would not alter the pattern of elements that makes up the landscape character of the receptor;
  - The baseline influence of Gordonbush Wind Farm on the same areas of the receptor that would gain influence of the Development ensures that the Development would not introduce a new external character influence;
  - The level of integration with the operational Gordonbush Wind Farm ensures that the Development would not be perceived as a 'new' wind farm site;

- The baseline influence of Gordonbush Wind Farm in the same (eastern) aspect of the setting to the receptor as the Development ensures that wind farm influence would not be extended to other aspects of the setting; and
- The location of the Development in the large-scale and open uplands ensures that uncomfortable scale comparisons with its landscape setting would not arise.
- 7.10.143 The other parts of the receptor that gain relatively high visibility of the Development, including Cnoc an Torra Mhoir, cnoc an Liath-bhaid and Creag Riabhach, would have a **medium-low** to **low** magnitude of change due to the increased distance from the Development, which ensures that the Development provides a diminishing influence on landscape character.

### Significance of the Effect

7.10.144 The effect of the Development on the landscape character of the majority of *sweeping moorland: unit C would* be **not significant** due to the lack of or limited influence of the Development. There would, however, be a **significant** effect on the landscape character of the east-facing slopes of Meall na h-Amaite, Cnoc Cille Pheadair and Druim Torr nan Cliabh in the eastern part of the receptor due to the factors that lead to the **medium-high** sensitivity of the receptor and the **medium-low** or **medium/medium-low** magnitude of change on these areas.

## **Cumulative Effects**

- 7.10.145 This receptor has influence of baseline wind farms at Gordonbush and Kilbraur as described above. ZTVs indicate that Achany, Rosehall and Lairg Wind Farms have very limited visibility from over 21km, 24km and 13km away respectively, and have little influence on landscape character due to a combination of limited visibility and distance. The application stage site at Braemore has some limited theoretical visibility from over 21km away. There is also a very small area of visibility of West Garty (a minimum of around 18km away), where it would be seen directly behind Gordonbush Wind Farm with negligible additional influence.
- 7.10.146 The addition of the Development would have some cumulative effect on this receptor due to the addition of further turbines to the setting of the receptor, which would intensify the external wind farm influence on landscape character. However, a notable cumulative effect would not arise from the addition of the Development due to its close visual and physical association with the operational Gordonbush Wind Farm in terms of proximity, location, and landscape setting. These factors ensure that the Development would not be perceived as a distinctive 'new' or separate wind farm influence on the landscape character of the receptor. The addition of the Development would therefore not result in an impression that the character of the receptor is characterised by multiple wind farms, and the cumulative effect would be **not significant**.

# Loch Fleet, Loch Brora and Glen Loth SLA

### Baseline Description

7.10.147 The Loch Fleet, Loch Brora and Glen Loth SLA lies a minimum of approximately 1.6km from the nearest turbine in the Development. Viewpoints 2, 3, 4, 9, 10 and 14 lie within the SLA, and Viewpoint 1 lies on the western edge of the designated area.

- 7.10.148 The location, extent and overview of the SLA is described as follows in The Assessment of Highland Special Landscape Areas (Horner + Maclennan with Mike Wood, 2011):
- 7.10.149 "Lying along the east coast of Sutherland, this area stretches from the southern slopes of Strath Ullie in the north to Loch Fleet in the south, including areas of coastal shelf and interior moorland and hills...This is an area of rolling moorland hills, punctuated by a series of southeast orientated glens, straths and lochs, and edged to a narrow strip of farmed coastal shelf running along the shoreline. The character of this area is distinguished by its composition of contrasting landscape features – the contrasting landform, landcover and landscape pattern that empathise the distinction of each other."
- 7.10.150 The citation goes on to list the key landscape and visual characteristics of the SLA:
  - "A relatively simple uniform, rolling plateau of interior broad, interwoven rounded hills, clothed by an open mosaic of heather and grass moorland. As this composition is fairly simple, and extends throughout the area, there is a strong consistency of this backdrop to the coast.
  - The hill area is breached by major straths and glens which have differing local character derived from the varying combination of native woodland, forest plantation, moorland and water bodies. They provide sheltered access routes through the hills and provide physical and visual connections between the interior and the coastal shelf and North Sea.
  - To the east lies a narrow but relatively fertile coastal shelf contains the main road and rail routes in this area, and small farms and settlements at fairly regular intervals. A distinctive field pattern of pasture runs parallel to the coast, marked in places by windswept trees and stone walls.
  - The linear coastal shelf, is defined on its interior side by the edge formed by the adjacent hill slopes, the elevation which provide expansive views both along the coastal edge and outwards across the open sea. Interior views are limited by the convex nature of the hill slopes.
  - Loch Fleet is the most northerly inlet on the east coast. Where an inlet occurs, defined by its distinctive opposing spits of land, a sheltered, enclosed tidal basin is fringed with shingle shores and pine woods. At low tide, exposed mudflats create a distinctive feature whose character is enlivened by large flocks of wading birds.
  - Views are obtained from some areas of wind turbines and overhead electricity lines whose large scale and man-made character can seem to diminish the scale of the interior hills and their wildness qualities.
  - Along the coast and around the inlet, there are a number of historic built features that form prominent focal features and landmarks."
- 7.10.151 The Loch Fleet, Loch Brora and Glen Loth SLA has a **high** value. This is due to its regionallyimportant scenic designation and the high quality of the landscape, which has a strong sense of place and notable scenic qualities. The majority of the landscape is largely intact, displaying consistent and well-defined characteristics.

#### <u>Sensitivity</u>

- 7.10.152 The Loch Fleet, Loch Brora and Glen Loth SLA has a **medium-high** susceptibility to the Development. The proximity of Gordonbush Wind Farm, which strongly characterises parts of the baseline landscape, reduces susceptibility in some areas as wind turbines are part of the baseline influence on the landscape character of this receptor and the Development would therefore not introduce an entirely new external characteristic. Susceptibility is, however, heightened by the potential for cumulative effects to arise as a result of the addition of the Development to the baseline wind farm influence, and by the following relevant sensitivities that are listed in the SLA citation:
  - "Additional large scale features could, in combination with the existing wind turbines and overhead electricity line to the west of the SLA, diminish the perceived scale of the hills and their qualities of wildness and tranquillity.
  - Additional features within the moorland hills could appear to compromise the simplicity of the existing land cover and landform shape.
  - Additional access tracks within the moorland hills could contrast to its simple cover, by introducing dominant lines and reduce its sense of remoteness."
- 7.10.153 The combination of the **medium-high** susceptibility to change of the landscape and its **high** value results in a **high** sensitivity for the *Loch Fleet, Loch Brora and Glen Loth* SLA.

#### Special Qualities of the SLA

7.10.154 The assessment of effects on the *Loch Fleet, Loch Brora and Glen Loth* SLA includes consideration of the 'special qualities' of the SLA. Table 7.7 lists these special qualities and assesses whether or not the Development would affect each of them. Where there is potential for the Development to have a significant effect on a special quality, the boxes are shown shaded.

Special Quality	Effect of the Development
Historic Features	The Development will not affect
Skelbo Castle is a dominant feature on the south-side of Loch Fleet, sitting atop a hill commanding excellent views of the loch.	the <b>Historic Features</b> of the SLA.
The Mound is a very prominent and clearly man-made causeway over which the main A9 coastal road passes. Engineered by T Telford in 1814 - 16 it spans the mouth of Loch Fleet with a bridge at its northern end and offers spectacular coastal views.	
The hills that separate Loch Brora from Glen Loth have a light scattering of mainly late medieval settlement and shielings. Apart from on the most inaccessible hills, head dykes and enclosures can be traced through the landscape with the occasional remains of a settlement located along a river valley in between.	
Glen Loth is rich in the remains of past settlement. Well preserved prehistoric remains proliferate from the flat coastal areas. Heading north the steepness of the glen sides soften the density of prehistoric settlement and later medieval township increases. Interspersed within the remaining prehistoric settlement, souterrains and standing stones still survive.	
Substantial remains of later medieval township occur, centred around Loth	

Table 7.7: Special Qualities of the Loch Fleet, Loch Brora and Glen Loth SLA
Special Quality	Effect of the Development	
Burn in the lower slopes of Beinn Mhealaich, and are still clearly visible and easily identifiable within the landscape.		
Centred around the banks of Loch Brora, monuments include well defined burial cairns, roundhouses and associated field systems, brochs and homesteads. Many of these early sites have been incorporated within the field systems and head dykes of later medieval townships which themselves survive along the Loch.		
Prehistoric settlement and burial cairns are located on the eastern slopes of Cnoc Odhar overlooking Loch Fleet and on the south-facing slopes of Creag an Amalaidh. On the north side of Loch Fleet on the flat improved plains in between The Mound and Kirkton another extensive prehistoric settlement exists.		
An Integrated Combination of Landforms	The Development would not affect	
The combination and juxtaposition of the rolling moorland hills, linear glens, the coastal shelf and tidal basin creates a diverse yet connected landscape composition which is experienced in sequence when travelling along the A9 and from the railway.	the <b>Integrated Combination of</b> Landforms of the SLA.	
Many small, often linear, settlements lie to the north west of the A9, strung along the footslopes of the interior hills, and these enjoy panoramic views out to sea. In contrast the larger settlements fall just outside the SLA boundary but visible from within it.		
There is a strong contrast between the expansive open forms of the moorland hills, the narrow, enclosed and intimate forms of the glens and straths, the linear coastal fringe with its extensive sea views and the intimate wooded enclosure of the Loch Fleet tidal basin.		
The locally dominant ridgeline of Ben Bhraggie overlooking Loch Fleet and lower lying coastland is overlooked by the monument to the Duke of Sutherland which acts as a focal feature within the southern part of the SLA.		
Accessible yet Secluded Glens and Lochs	The Development will affect the	
The interior is largely screened by the edge of the hill landform but occasional views are obtained where glens intersect with the coastal shelf. Readily accessible, these sheltered glens offer a sense of seclusion, tranquillity and intimacy from the busier coastal fringe.	character of some parts of Strath Brora, which is one of the 'sheltered glens' referred to in the special quality. This special quality of the SLA may therefore be affected by the Development	

7.10.155 This assessment indicates that the Development would have no effect on two of the three special qualities of this SLA; 'historic features' and 'an integrated combination of landforms'. The 'accessible yet secluded glens and lochs' special quality may however be affected as the Development would affect the character of some parts of Strath Brora, which is one of the 'sheltered glens' referred to in the special quality. The effect of the Development on this special quality has been referred to in the assessment of magnitude of change on the two landscape character types that cover the strath area of the SLA – *inland loch: Loch Brora* and *strath (Strath Brora): eastern section*.

### Magnitude of Change

7.10.156 The considerations made in assessing the magnitude of change on the SLA are very similar to those used in the assessment of effects on the landscape character types that cover the SLA and is therefore described in relation to the relevant landscape character types. These are summarised in Table 7.8. It should be noted that this table includes the landscape character types that are considered to have potential to undergo a significant effect (as

listed in Table 7.3) as a result of visibility of the Development. Landscape character types that lie within the SLA but are considered to not have potential to be significantly affected are not included in the table, as it is assumed that these parts of the SLA would not undergo a significant effect as a result of the Development.

Landscape Character Type	Magnitude of change on the part of the Landscape character type that lies within the SLA	Significance of effect on the part of the landscape character type that lies within the SLA
Inland loch: Loch Brora (lies fully within the SLA)	Maximum: medium/ medium-low.	Significant effect on part 3 (the second to southernmost part of the loch) the southern end of part 1 (northernmost part) and the western side of part 2 (the second to the north part).
Strath (Strath Brora): eastern section (eastern part lies within the SLA)	Maximum: medium-high	Significant effect on areas around the lower slopes of Carroll Rock, the loch shore to the south of Carroll Rock, and very small areas above Oldtown and on Killin Rock.
Moorland slopes and hills: unit A (very small area lies within the SLA)	Medium	Significant
Moorland slopes and hills: unit B (lies largely within the SLA)	Maximum: medium-high	Significant effect on west-facing slopes that gain high visibility, including Cnoc Cragaidh, Col-bheinn, Meallan Liath Beg and Mor, and Carn Garbh.
Moorland slopes and hills: unit C (lies partly within the SLA)	Maximum: medium/ medium-low	Significant effect on north-facing slopes including Carroll Rock and Kilbraur Hill as well as several unnamed hills and high points.

Table 7.8: Effects on Landscape Character Types within the SLA

# Significance of the Effect

- 7.10.157 Table 7.8 indicates that there would be **significant** effects on the landscape character of the following parts of the SLA:
  - Some parts of Loch Brora;
  - The lower slopes of Carroll Rock and the southern loch shore around and to the south of Carroll Rock;
  - Very small elevated areas above Oldtown and on Killin Rock; and
  - The west-facing slopes that rise close to the eastern edge of the Development, including Cnoc Cragaidh, Col-bheinn, Meallan Liath Beg and Mor, and Carn Garbh.
- 7.10.158 The areas of the SLA where these effects of the Development are likely to be most apparent are Loch Brora, the lower slopes of Carroll Rock and the southern loch shore around and to the south of Carroll Rock. In these areas the Development would affect the SLA special quality of 'accessible yet secluded glens and lochs'.

### **Cumulative Effects**

7.10.159 The assessment of the landscape character types that cover the SLA indicates that the addition of the Development would have a **significant** cumulative effect on the landscape

character of one part of the SLA (a very small area above Oldtown). Elsewhere within the SLA, the Development may lead to some cumulative effect due to the addition of further wind farm influence to the overall Gordonbush development, but a notable cumulative effect would not arise from the addition of the Development due to its visual and physical association with the operational Gordonbush Wind Farm in terms of proximity, location, and landscape setting. These factors ensure that the Development would not be perceived as a distinctive 'new' wind farm influence on landscape character within the receptor. The addition of the Development will therefore not result in an impression that the character of the SLA is characterised by multiple wind farms, and the cumulative effect would be **not significant**.

## Summary of Effects on Landscape Character

7.10.160 Table 7.9 provides a summary of effects on landscape character, as assessed in Sections 7.9 and 7.10 of this Chapter.

Landscape Character Receptor	Sensitivity	Magnitude of Change	Significance of Effect	Significance of Cumulative Effect
Inland loch: Loch Brora	High	Maximum: medium/ medium-low	Significant effect on the landscape character of part 3 (the second to southernmost part) the southern end of part 1 (northernmost) and the western side of part 2 (the second to the north).	Not significant
Small farms and crofts (fringe crofting and historic features subtype): Balnacoil area	Medium	Maximum: medium-high	Significant effect on the landscape character of the majority of the receptor. Not significant effect on the south-eastern end of the receptor and along the valley of the Allt Ach a' Bhathaich.	Not significant
Strath (Strath Brora): eastern section	High	Maximum: medium-high	Significant effect on the landscape character of areas around Sciberscross and south of the graveyard, lower slopes of Cnoc an t-Socaich and Carroll Rock; the loch shore to the south of Carroll Rock; the ridge line of Cnoc a'Ghrianain, and very small areas above Oldtown and on Killin Rock. Not significant elsewhere.	Significant effect on the area around and to the east of Sciberscross, the ridge line of Cnoc a' Ghrianain and a very small area above Oldtown. Not significant elsewhere.
Moorland slopes and hills: unit A	Medium	Medium	Significant	Not significant
Moorland slopes and hills: unit B	Medium-high	Maximum: medium-high	Significant effect on the landscape character of the west-facing slopes that gain a high level of visibility of the Development, including Cnoc Cragaidh, Beinn Smeorail, Col- bheinn, Meallan Liath Beg and Mor, Carn Garbh, and Cnoc a'Chrubaich Mhoir. Not significant elsewhere.	Not significant

#### Table 7.9: Summary of Effects on Landscape Character

Landscape Character Receptor	Sensitivity	Magnitude of Change	Significance of Effect	Significance of Cumulative Effect	
Moorland slopes and hills: unit C	Medium-high	Maximum: medium/ medium-low	Significant effect on the landscape character of the north-facing slopes in the north-eastern part of the receptor (including Carroll Rock and Kilbraur Hill as well as several unnamed hills and high points). Not significant elsewhere.	Not significant	
Moorland slopes and hills: unit D	Medium	Medium/ medium-low	Significant effect on the landscape character of the east-facing slopes of Meall na h-Amaite and Cnoc Cille Pheadair in the eastern part of the receptor. Not significant elsewhere.	Not significant	
Sweeping moorland: unit A	Medium	Medium	Significant	Not significant	
Sweeping moorland: unit B	Medium-high	Maximum: medium-high	Significant effects on the landscape character of the east-facing slopes within the receptor that gain a high level of visibility and lie within approx. 6km from the Development.	Not significant	
Sweeping moorland: unit C	Medium-high	Maximum: medium/ medium-low	Significant effect on the landscape character of the east-facing slopes of Meall na h-Amaite, Cnoc Cille Pheadair and Druim Torr nan Cliabh in the eastern part of the receptor. Not significant elsewhere.	Not significant	
Loch Fleet, Loch Brora and Glen Loth	High	Maximum: medium-high	Significant effect on the landscape character of:	Significant effect on a very small area above Oldtown. Not	
SLA			<ul> <li>Some parts of Loch Brora;</li> <li>The lower slopes of Carroll Rock and the southern loch shore around and to the south of Carroll Rock;</li> </ul>	significant elsewhere.	
			<ul> <li>Very small elevated areas above Oldtown and on Killin Rock; and</li> </ul>		
			<ul> <li>The west-facing slopes that rise close to the eastern edge of the Development, including Cnoc Cragaidh, Col-bheinn, Meallan Liath Beg and Mor, and Carn Garbh.</li> </ul>		
			Not significant elsewhere.		

# 7.11 Assessment of Effects on Wild Land

7.11.1 The preliminary assessment has ascertained that there is one WLA that may be significantly affected by the Development; *Ben Klibreck - Armine Forest WLA (Area 35).* This is shown on Figures 7.5, 7.12a and 7.12b. The eastern boundary of this WLA lies a minimum of approximately 200m from the nearest turbine in the Development. This WLA boundary follows the line of an existing 275kV transmission line and marks the eastern extremity of

the WLA, which extends 30km westwards to Strath Vagastie. Viewpoints 11 (Hope Hill), 13 (Creag nam Fiadh) and 15 (Ben Armine) are within the *Ben Klibreck - Armine Forest WLA* and illustrate both the baseline conditions and the effect that the Development would have on views from locations within the WLA.

- 7.11.2 This section describes the process of the assessment of effects on the WLA and is carried out according to the SNH 'Advice Note Assessing the Impacts on Wild Land' (2007, with note added October 2014). This advice note provides the following broad guidance:
- 7.11.3 "The assessment of impact on wild land comprises two stages: first, establishing a baseline of the condition and extent of the wild land resource; and secondly, assessing the magnitude and significance of the impact upon it."
- 7.11.4 SNH wild land mapping of WLAs has been carried out subsequent to the production of this guidance, and SNH has advised (at a meeting on 8/9/14) that the first stage of the 2007 methodology; the identification of the study area and study of the baseline condition of the wild land resource, can be omitted from the assessment due to the identification of WLAs, which would provide the basis of the study area for the assessment of effects on wild land and have an established baseline as areas of wild land. The baseline section has therefore been largely omitted from this assessment, although a brief summary of the WLA baseline situation is included in order to provide context to the assessment.

### **Assessment Methodology**

- 7.11.5 A series of principles is applied to development within WLAs, as described in SNH guidance:
  - "Development should ideally be sited so as to avoid adverse impacts upon wild land. Where detractors cannot be avoided their impact upon the condition of wild land should be minimised. Detractors include anything that:
    - Adds an artificial element to the vegetation pattern (i.e. reduces perceived naturalness);
    - *Results in new visible structures;*
    - Makes contemporary land use more obvious;
    - Makes access to the area easier; or
    - *Reduces the remoteness of the area.*
  - A detractor does not have to be within an area of wild land to affect it. For example, a prominent development outside the wild land may well be visible from many places within the wild land and so detract from the quality of wildness and remoteness.
  - Gradual attrition at the edge of wild land should be avoided if possible. Wild land can be damaged, if not lost, through the cumulative effect of detractors around the edges reducing the central area.
  - Much of Scotland's wild land is not pristine and does contain detractors. NPPG 14's definition of wild land acknowledges that the "influence of human activity on the character and quality of the environment has been minimal", not absent.
  - Different parts of the wild land resource will inevitably vary in the strength to which they portray both the physical and perceptual attributes and perhaps score low, but the low scoring areas contribute to the whole (especially areas at the edge). So a baseline score of low being damaged further may still be a significant problem.

- Temporary detractors may be acceptable if it can be shown that all visible signs can be removed at the end of the construction phase".
- 7.11.6 The guidance states that "SNH requires a set of defined physical attributes to be present and well expressed across an area of sufficient size to evoke certain perceptual responses, and where the impact of detracting features is limited, for an area to be considered wild land."

### **Physical Attributes**

- 7.11.7 In accordance with the SNH methodology, the assessment of effects on the WLA is implemented through the identification of the magnitude of change on a set of five physical attributes that are required to "be present and well expressed across an area of sufficient size to evoke certain perceptual responses" (SNH, 2007). These five physical attributes are:
  - "A high degree of perceived naturalness in the setting, especially in its vegetation cover and wildlife, and in the processes affecting the land;
  - The lack of any modern artefacts, constructions or structures;
  - Little evidence of contemporary human land uses;
  - Landform which is rugged, or otherwise physically challenging; and
  - Remoteness and/or inaccessibility."
- 7.11.8 Further description of each of these physical attributes is given in Annex 1 of 'Wildness in Scotland's Countryside Policy Statement No. 02/03' (SNH, 2003).
- 7.11.9 **"Perceived naturalness:** vegetation cover primarily composed of functioning, natural habitats. Catchment systems largely unmodified, and other geomorphological processes unaffected by land management.
- 7.11.10 Lack of constructions or other artefacts: no contemporary or recent, built or engineering works within the area. Little impact from outwith the area on wild qualities from built development, power lines, or masts or other intensive land uses (say forestry), or from noise or light pollution. Limited effects on the wild qualities of the area from older artefacts.
- 7.11.11 Little evidence of contemporary land uses: extensive range-grazing and field sports (as economic uses of the land) will often be present, as well as public recreation. Land uses of an intensive nature should not be present...The cumulative effects of the economic uses of the land should not be intrusive.
- 7.11.12 **Rugged or otherwise challenging terrain**: striking topographic features, or land having extensive rough terrain or extensive boglands, difficult to traverse. Natural settings for recreational activities requiring hard physical exercise or providing challenge.
- 7.11.13 **Remoteness and inaccessibility**: distance from settlements or modern communications. Limited accessibility, either by scale of the area, difficulty in passage, or the lack of easy access, say by vehicular tracks, bridges, or by boat."

- 7.11.14 The magnitude of change from the baseline on these physical attributes situation is defined in levels, as described in the SNH guidance:
  - *"High*: total loss or alteration to attribute;
  - Medium: partial loss or alteration to attribute;
  - Low: minor loss or alteration to attribute resulting in a change to the baseline; and
  - **Negligible:** very minor or no loss to the baseline attribute. The introduction of the development does not change the baseline assessment".

#### Perceptual Responses

- 7.11.15 The perceptual responses that may be evoked by the physical attributes described above are listed in SNH guidance as:
  - "A sense of sanctuary or solitude;
  - *Risk, or for some visitors, a sense of awe or anxiety, depending on the individual's emotional response to the setting;*
  - Perceptions that the landscape has arresting or inspiring qualities; and
  - Fulfilment from the physical challenge required to penetrate into these places."
- 7.11.16 The level of change to perceptual criteria is not defined using levels of magnitude of change, but rather each of the perceptual criteria is again assessed to be **present** or **absent**, taking into consideration the presence of the Development in relation to the baseline.

*Significance of the Effect* 

7.11.17 The significance of the effect on the physical attributes and perceptual criteria is then assessed, based on the level of change that will arise from the addition of the Development. The guidance states that "the degree to which the categories of physical attributes may change along with any losses in perceptual attributes will require professional informed judgement in concluding if these impacts constitute a significant adverse effect on the extent and condition of the resource."

### Baseline

- 7.11.18 SNH guidance states that the purpose of establishing the baseline is:
- 7.11.19 "To establish and describe the extent to which physical and perceptual attributes of wild land are present and...to identify and describe the character, sensitivity and condition of the area affected and its contribution to the wild land area as a whole."
- 7.11.20 As indicated by SNH, the boundary of the Ben Klibreck Armine Forest WLA has been used as the study area for the assessment of effects on wild land. A full baseline study as described above has not been carried out as part of this assessment as it has been assumed that the area is covered by 'wild land' and has a high sensitivity due to its recognition in SPP as having national importance.

- 7.11.21 There are, however, several baseline aspects of the WLA that are not fully expressed in its description as a WLA. Most notably, the substation and associated access track for the operational Gordonbush Wind Farm site lies within the WLA and the nearest turbine in the operational Gordonbush Wind Farm is approximately 400m from the boundary of the WLA. The eastern boundary of the WLA effectively forms the western edge of turbine development at the operational Gordonbush Wind Farm site, and approximately 2.8km length of the eastern edge of the WLA is affected by visibility of turbines that lie within 2km of the WLA. The 35 turbines in the operational Gordonbush Wind Farm have a notable level of visibility from some parts of the WLA, as can be seen in Viewpoints 11 (Hope Hill) and 13 (Creag nam Fiadh), and to a lesser extent Viewpoint 15 (Ben Armine, which is 19.6km away from the operational Gordonbush Wind Farm). The wider visibility of the operational Gordonbush Wind Farm from the WLA can be seen on the cumulative ZTV for Gordonbush Wind Farm (Figure 7.15d). It is therefore considered that the operational Gordonbush Wind Farm has a significant effect on parts of the WLA, both physically and in terms of visibility and influence on the perceptual responses of parts of the WLA.
- 7.11.22 Other wind farm influence on the WLA arises from Kilbraur Wind Farm, which lies approximately 5.4km from the southern boundary of the WLA and can be seen in Viewpoints 11 (Hope Hill), 13 (Creag nam Fiadh) and 15 (Ben Armine). Wind farms at Achany, Rosehall and Lairg have visibility from within the WLA at 17km, 12km and 18km away respectively, where they have a more limited influence.
- 7.11.23 The 275kV transmission line that forms the eastern boundary of the WLA over a length of approximately 5.6km is also visible from extensive parts of the WLA and has a significant physical and visual effect on the closer parts of the WLA.
- 7.11.24 These aspects of the WLA are considered as part of the baseline situation, and are relevant to the assessment of the additional influence that may arise from the Development.

# Assessment

### Visibility of the Development

- 7.11.25 Prior to carrying out the assessment of effects on the WLA, it is important to recognise the theoretical extent of the influence that the Development would have on the WLA. This is dependent on visibility; where the Development is not visible, it would not affect wild land characteristics. The level of visibility of the Development can be seen on Figure 7.12, which shows the ZTV in relation to the WLAs.
- 7.11.26 It should be noted that the assessment of effects on wild land is carried out using a different methodology to that used for the assessment of effects on views and landscape character. Some of the viewpoints used in the assessment of effects on views are, however, referred to here as these provide a useful illustration of visibility of the Development, and that of other wind farms.
- 7.11.27 Figures 7.5 and 7.12 show that the WLA lies to the north-west of the Development, and that the part of the WLA that lies within 5km of the Development is very limited in extent as it forms the south-eastern corner of the WLA. This area within 5km has intermittent visibility from high areas and south/south-east-facing slopes. The part of the WLA that lies

between 5km and 10km of the Development is also limited in extent due to the shape of the WLA and visibility from here is very intermittent, although Viewpoints 11 (Hope Hill) and 13 (Creag nam Fiadh) are within this area. Between 10km and 20km from the Development, visibility remains intermittent and Viewpoint 15 (Ben Armine), which is close to the 20km radius band, illustrates the type of visibility gained from particularly elevated locations. Beyond 20km, visibility drops and ZTVs indicate that very few areas beyond this distance would gain theoretical visibility of the Development.

7.11.28 Figure 7.12b shows visibility of the Development from the WLA in conjunction with that of the operational Gordonbush Wind Farm. This illustrates that the Development would be seen in conjunction with the operational Gordonbush Wind Farm from almost all of its areas of theoretical visibility, and only very small areas may gain visibility of the Development without the baseline influence of the operational Gordonbush Wind Farm.

#### Assessment of Effects

- 7.11.29 Table 7.10 assesses the magnitude of change and significance of effects on the physical attributes and perceptual responses of the WLA. The physical attributes are assessed first, followed by the perceptual criteria. This assessment is carried out on the basis of the parts of the WLA that would gain visibility of the Development; the parts of the WLA that would not gain visibility would have no change.
- 7.11.30 As described above, the baseline stage of the assessment has not been carried out and as a result, the study area has not been divided into separate areas of differing wildness characteristics as is suggested in the 2007 guidance. The assessment in Table 7.10 is therefore based on the whole of the WLA, as identified by SNH. The assessment does, however, focus on the areas that are most likely to be affected by the Development in terms of levels of visibility of the Development (and the operational Gordonbush Wind Farm) and distance from the Development.
- 7.11.31 SNH provides definitions for the different levels of 'strength of attribute at baseline' for each of the physical attributes. These are used in Table 7.10 and can be read in full in SNH guidance (2007).

Physical Attribute	Strength of Attribute at Baseline	Magnitude of Change
Perceived naturalness	High: area perceived as generally natural.	<b>Negligible:</b> this attribute would not be affected.
Lack of constructions or other artefacts	<b>Negligible:</b> a number of artefacts (operational turbines at Gordonbush Wind Farm and 275kV line) are clearly visible and are prominent.	Medium-low: alteration to attribute due to the addition of the Development, which would extend baseline turbine influence on the eastern edge of the WLA (currently approximately 2.8km) by approximately 850m. The level of change is restricted by the limited increase in wind farm influence, the integration of the Development with the baseline wind farm, and its location on a part of the boundary that is already affected by the 275kV line.

Table 7.10: Assessment of Effects on Ben Klibreck - Armine Forest WLA

Physical Attribute	Strength of Attribute at Baseline	Magnitude of Change	
Little evidence of contemporary land uses	<b>Medium</b> : some contemporary land use apparent though not significantly detracting.	<b>Negligible:</b> this attribute would not be affected.	
Rugged or otherwise challenging terrain	<b>Medium:</b> appreciable skill in navigation required, requiring degree of accuracy. Rough terrain with some steep ground and requiring fitness and sturdy footwear.	<b>Negligible:</b> this attribute would not be affected.	
Remoteness and inaccessibility	<b>Low:</b> few tracks or paths available to traverse area but wider area still relatively inaccessible.	<b>Negligible</b> : this attribute would not be affected.	
Perceptual Response	Strength of Response at Baseline	Magnitude of Change	
A sense of sanctuary, solitude or refuge	<b>Absent</b> : the presence of moving turbines and the 275kV line adjacent to the WLA ensures that this attribute is not present.	No change: the response would remain absent.	
Risk or anxiety - hazard	<b>Absent</b> : the presence of human influences and infrastructure within and adjacent to the WLA ensures that this attribute is not present.	No change: the response would remain absent.	
Arresting/ inspiring qualities, sense of awe - prospect	<b>Absent to a large degree</b> : the presence of human influences, including the structures of the turbines, adjacent to the WLA ensures that the focus is drawn away from the natural landscape and the attribute is not present.	There would be a further <b>slight</b> reduction in this perceptual response due to the increase in the number of turbines visible and the extent of development along the WLA boundary.	
Physically challenging	<b>Present to a large degree:</b> in some areas tracks reduce the physical challenge of entering the area but in many places there is a strong physical challenge.	No change: the response would remain present to a large degree.	
Significance	The Development will lead to a medium-low magnitude of change on one physical attribute ('lack of constructions or other artefacts') and a minor reduction in one perceptual response ('arresting/ inspiring qualities, sense of awe –prospect').		
	The other physical attributes and perceptual criteria will remain unchanged. The effect will be <b>not significant</b> .		

- 7.11.32 This assessment indicates that the Development would have a **not significant** effect on the *Ben Klibreck Armine Forest WLA*. There would be a **medium-low** magnitude of change on one physical attribute ('lack of constructions or other artefacts') and a **minor reduction** in one perceptual response ('arresting/ inspiring qualities, sense of awe –prospect') but other physical attributes and perceptual criteria would remain unchanged.
- 7.11.33 The **not significant** effect on the WLA is due to the following factors:
  - There would be no direct effects on the WLA as the Development lies outwith its boundary;
  - The baseline presence of the operational Gordonbush Wind Farm (35 turbines) adjacent to the WLA;
  - The similarity in the ZTVs for the operational Gordonbush Wind Farm and the Development, so that the Development would almost always be seen in conjunction with the operational Gordonbush Wind Farm. This ensures that very few areas of the

WLA that are not currently affected by wind farm influence would gain influence from the Development;

- The limited increase in the extent of the WLA boundary that would be affected by wind farm development. Currently, approximately 2.8km length of the eastern edge of the WLA is affected by visibility of the operational Gordonbush Wind Farm turbines that lie within 2km of the WLA. The addition of the Development would increase this by approximately 850m;
- The part of the WLA boundary that would be affected by the Development is already affected by the 275kV transmission line;
- The Development would affect the same part of the setting to the WLA as the operational Gordonbush Wind Farm (the eastern edge of the south-eastern end of the WLA); and
- The high level of integration of the Development with the operational Gordonbush Wind Farm in terms of landscape setting, site characteristics and layout.

## **Cumulative Effects**

- 7.11.34 The *Ben Klibreck Armine Forest WLA* has notable influence of baseline wind farms at Gordonbush and Kilbraur as described above. Achany, Rosehall and Lairg Wind Farms have some limited and distant influence. Of the application sites, Creag Riabhach has high visibility from the western edge of the WLA at a minimum of 750m away. The other application sites are less visible; Braemore has some intermittently theoretical visibility from the south-western part of the WLA at over 17km away, Strathy South is intermittently visible from some northern areas, also from 17km away, and West Garty intermittently affects eastern and central areas from 12km away.
- 7.11.35 The addition of the Development would have some cumulative effect on the *Ben Klibreck Armine Forest WLA* due to the addition of further turbines to the setting of the WLA, which would intensify the external wind farm influence. However, a notable cumulative effect would not arise from the addition of the Development due to its visual and physical association with the operational Gordonbush Wind Farm in terms of visibility, proximity, location, and landscape setting. These factors ensure that the Development would not be perceived as a distinctive 'new' wind farm influence on the WLA. The addition of the Development would therefore not result in an impression that the WLA is characterised by multiple wind farms, and the cumulative effect would be **not significant**.

# 7.12 Assessment of Effects on Views

- 7.12.1 Effects on views are the changes to views that result from the introduction of the Development. The assessment of effects on views includes effects on the 17 viewpoints which represent visibility of the Development from around the study area and effects on principal visual receptors such as settlements and routes.
- 7.12.2 The viewpoint locations are shown in conjunction with the blade tip ZTV on Figures 7.8a (A3 size) and 7.8b (A1 size) and the hub height ZTV on Figures 7.9a (A3 size) and 7.9b (A1 size). They are also shown in conjunction with the comparative ZTV for the Development and the operational Gordonbush Wind Farm on Figure 7.8c (A1 size). Visualisations have been prepared to meet the requirements of both SNH (Visual Representation of Wind Farms Version 2.1, December 2014) and THC (Visualisation Standards for Wind Energy

Developments, May 2013 and March 2015). and the viewpoints are illustrated in two separate volumes, **SNH Viewpoints** (Volume 3A, Figures 7.17 to 7.33) and **THC Viewpoints** (Volume 3B, Figures 7.34 to 7.50).

- 7.12.3 Section 7.6 (Baseline Conditions and Preliminary Assessment) of this Chapter identifies the viewpoints and principal visual receptors that have the potential to undergo significant effects (including significant cumulative effects) and therefore require further assessment. The effect on each of these viewpoints and principal visual receptors is assessed below. The other viewpoints and principal visual receptors were found through the initial filtering process to not have the potential to undergo a significant effect and have therefore not been assessed in any further detail.
- 7.12.4 The viewpoints and principal visual receptors that are assessed in more detail are as follows:
  - Viewpoint 1: Beinn Smeorail
  - Viewpoint 2: Loch Brora (south-west side)
  - Viewpoint 3: Brora to Rogart minor road south of Killin
  - Viewpoint 4: Brora to Rogart minor road north of Killin
  - Viewpoint 5: Brora to Rogart minor road near Balnacoil
  - Viewpoint 6: Brora to Rogart minor road near Sciberscross
  - Viewpoint 8: Craggie Beg
  - Viewpoint 9: Ben Horn
  - Viewpoint 11: Hope Hill
  - Viewpoint 12: track to Ben Armine Lodge
  - Viewpoint 13: Creag nam Fiadh
  - Brora to Rogart minor road
  - SU06.02 ('Loch Brora West Track'
  - SU06.14 ('Doll Bridge Loch Brora')

### Viewpoint 1: Beinn Smeorail

### **Baseline Description**

7.12.5 This viewpoint is located at the summit cairn of Ben Smeorail (486m AOD), a distinctive landform that lies within the same area of *moorland slopes and hills* landscape character type as the Development. This viewpoint gains a panoramic outlook over the interior and coastal area of Sutherland, and clearly illustrates the relationships between the contrasting landscape types that form the setting to the Development; *strath (Strath Brora), sweeping moorland, moorland slopes and hills* (within which the viewpoint lies), *inland loch* and *small farms and crofts*. The contrast between the small-scale, enclosed and settled Strath Brora landscape and the massive, open and undeveloped moorland landscape (including the distinctive shapes of Ben Klibreck, Ben Armine and Ben Loyal) to the west and north-west is particularly notable in this view. To the east of the viewpoint is the local high point of Colbheinn (538m AOD). The turbines, access tracks and a borrow pit of the operational

Gordonbush Wind Farm are clearly visible (with the nearest turbine 1.91km away) on the long moorland slope that lies to the north of the viewpoint, beyond the valley of the Allt Smeorail. The permanent meteorological mast and substation are also visible, although less clearly. Kilbraur Wind Farm is clearly visible at a minimum of 6.12km away on the south side of Strath Brora, ranged across the north-western slopes of Ben Horn. Lairg Wind Farm is theoretically visible to the west, although at 26.04km away this site is only seen in clear conditions. Achany and Rosehall are also theoretically visible but are seen from outwith their study areas.

- 7.12.6 Beyond and to the left of the operational Gordonbush Wind Farm, following the distinctive line of the Allt a' Mhuilinn valley, is the 275kV transmission line that marks the eastern boundary of the Ben Klibreck Armine Forest WLA. This WLA boundary returns westwards along the northern edge of the extensive deforested area that lies to the west of the valley and transmission line. The Development site lies in the foreground, in the area bounded by the operational Gordonbush Wind Farm to the north, the existing wind farm access track to the south, and the Allt a' Mhuilinn to the west.
- 7.12.7 The value of this view is **medium-high**. This is not a specific recognised viewpoint and while part of the route follows tracks, there is no path to the summit and no facilities are provided for the enjoyment of the view. The view does have value in its scenic qualities and location on the edge of an SLA, which implies value to both the viewpoint and the view that can be gained from it. It is notable, however, that the SLA lies to the south, east, south-west and north-east of the viewpoint, and does not cover the part of the view where the Development would be seen to the north-west.

### <u>Sensitivity</u>

- 7.12.8 The susceptibility to change at this viewpoint will be **medium-high**. People who gain the view would be walkers who are engaging in outdoor recreation and are likely to have a specific focus on the scenery and surrounding landscape, gained from a static viewpoint. The wildness characteristics that are seen in parts of the view, within the WLA, also heighten susceptibility. The presence of operational wind farms (particularly Gordonbush Wind Farm) both reduces and heightens susceptibility; the reduction in susceptibility occurs because wind turbines are part of the baseline visual amenity at this location and the Development would therefore not introduce an entirely new experience for the viewer, while the heightening in susceptibility occurs because of the potential for cumulative effects to arise as a result of the addition of the Development.
- 7.12.9 The combination of the **medium-high** susceptibility to change and the **medium-high** value of the view results in a **medium-high** sensitivity for the viewpoint.

- 7.12.10 The 16 turbines in the Development would be seen in this view, a minimum of 1.68km (T13) away. The Development would extend across 50-degrees of the view to the southwest (left) of the operational Gordonbush Wind Farm (which is a minimum of 1.91km away), with a small overlap.
- 7.12.11 While the turbines would be the principal visible element of the Development, other elements would be seen in this view due to the elevation of the viewpoint, including long-term visibility of the access tracks between turbines, the operations building, turbine hard

standings, transformers and the permanent meteorological mast. Access tracks would be most visible during construction when excavation is underway and the ground along the track routes is disturbed. Once construction is completed and the disturbed ground along the edges of the tracks has been restored the effect would be more limited, especially as they would be formed of local rock material.

- 7.12.12 A number of other activities would be apparent during the construction phase, including borrow pit excavation, the excavation and construction of turbine bases, the construction of the operations building, the construction compound, the presence of cranes, erection of turbines, and underground cabling. During the operational lifetime of the Development, when these activities have been completed and disturbed ground is made good, the effects of the construction phase would no longer be clearly apparent as construction is completed and restoration is underway.
- 7.12.13 Effects during the decommissioning phase would be similar to the construction phase but with less activity apparent as some elements such as the restored borrow pits, turbine foundations and underground cabling are not affected by the decommissioning phase.
- 7.12.14 The magnitude of change on this view would be **high**, for the following reasons:
  - The high level of visibility of the turbines and infrastructure at close proximity to the viewpoint;
  - The increase in the extent of wind farm development around the viewpoint (approximately 50-degrees) so that the combined Gordonbush development will cover 95-degrees;
  - The distance between the viewpoint and turbines in the overall Gordonbush development is reduced from 1.91km to 1.68km away;
  - The angle of the view and elevation of the viewpoint illustrate the lower elevation of the Development site and its increased proximity to Strath Brora in comparison with the operational Gordonbush Wind Farm site;
  - The variation between the blade tip height and hub height/rotor diameter proportions of the Development and the operational Gordonbush Wind Farm turbines, which may be apparent due to the proximity of the viewpoint to the turbines; and
  - The reduction in the separation between the overall Gordonbush development and Kilbraur Wind Farm, which may lead to a perception of increased encroachment onto Strath Brora by wind farms.
- 7.12.15 There are factors that mitigate the effect of the Development to some extent, although these are not sufficient to reduce the level of magnitude of change:
  - The baseline presence of turbines at Gordonbush, which ensures that the Development would not introduce a completely new characteristic into this aspect of the view;
  - The level of integration of the Development with the operational Gordonbush Wind Farm in terms of visual and physical association;
  - The location and appearance of the Development on the same long moorland slope as the operational Gordonbush Wind Farm, which increases integration as the Development site effectively appears as a continuation of the operational site, with no apparent separation or differentiation in landscape characteristics;

- The backclothing of turbines by landform, which reduces vertical impact and avoids interruption of the dramatic mountainous skyline beyond;
- The containment of the southern end of the Development by the landform of Cnoc a' Ghrianain, which ensures that the Development is associated with the upland landscape of *moorland slopes and hills* and *sweeping moorland* and prevents perceived or actual encroachment into Strath Brora;
- The broad, simple and open landform of the site, which reduces the perceived scale of the turbines and has the capacity to accommodate the turbines without uncomfortable scale comparisons arising; and
- The use of existing infrastructure on the site (including access tracks and the substation) reduces the extent of new infrastructure required.

7.12.16 The effect of the Development on this view would be **significant.** This is due to a combination of the factors that lead to the **high** magnitude of change on the view and the **medium-high** sensitivity of the viewpoint.

## **Cumulative Effects**

- 7.12.17 There is baseline visibility of Gordonbush, Kilbraur and Lairg Wind Farms from this viewpoint, as described above. There is also visibility of the application stage sites at Braemore (32.39km to the west) and West Garty (9.56km to the north-east). Strathy South is theoretically visible but at 37.94km away it is seen from outwith its study area and would make a very limited contribution to the cumulative situation.
- 7.12.18 The addition of the Development would have some cumulative effect on this view due to the increased number of turbines and increase in width of the overall Gordonbush development by approximately 50-degrees to 95-degrees, and the resultant reduction in the separation from Kilbraur Wind Farm from approximately 95-degrees to 45-degrees.
- 7.12.19 However, this cumulative effect is limited due to the level of integration between the Development and the operational Gordonbush Wind Farm in terms of visual and physical association (including visibility of shared infrastructure) and landscape setting; the retention of a notable separation from Kilbraur Wind Farm, which reduces the perception of coalescence; the containment of the southern end of the Development by Cnoc a' Ghrianain, which ensures that it is not perceived as encroaching closer to Kilbraur; and the clear visual and physical separation of the Development and Kilbraur by Strath Brora.
- 7.12.20 These factors ensure that the addition of the Development would not result in an impression that the view is characterised by multiple wind farms, and the cumulative effect would be **not significant** in any scenario.

### Viewpoint 2: Loch Brora (south-west side)

### Baseline Description

7.12.21 This viewpoint is located just north of Carrol Rock on the core path that runs along the western side of Loch Brora. Views from some sections of the path are screened by woodland along the loch-side, and this location provides a relatively open outlook across

the loch. A similar view would be gained by waterborne loch-users on the western side of the loch.

- 7.12.22 This view clearly shows the typical landscape characteristics of Loch Brora and Strath Brora with the relatively enclosed, complex and cultivated landscape in the strath floor rising to the wooded lower slopes and then the simple and undeveloped open moorland of the surrounding *moorland slopes and hills*. The buildings on the eastern loch shore are Gordonbush Estate buildings, and Gordonbush Lodge is just visible in forestry on the lower slopes of the strath. The 275kV transmission line that crosses Strath Brora can be seen towards the left (north) of the view, and at the extreme left of the view is the distinctive summit of Creag Mhor. The more rounded summit of Ben Armine is also visible on the skyline to the right of Creag Mhor.
- 7.12.23 One blade tip of the operational Gordonbush Wind Farm is theoretically visible in this view but is currently screened by forestry. Should this be felled, the blade tip is unlikely to be discernible due to a combination of the very limited visibility and a distance of 5.40km. No other baseline wind farms are seen in the view.
- 7.12.24 The value of this view is **high**. Although it is not a recognised or signposted outlook, this viewpoint is located on a core path, is within the SLA (which also covers much of the setting to the view) and has strong scenic qualities across Loch Brora and up Strath Brora.

### Sensitivity

- 7.12.25 The susceptibility to change at this viewpoint would be **high**. People who gain the view would be walkers or waterborne loch-users who are engaging in outdoor recreation and are likely to have a specific focus on the scenery and surrounding landscape. The relatively small-scale and complex landscape characteristics that are seen in the view also heighten susceptibility.
- 7.12.26 The combination of the **high** susceptibility to change of the view and its **high** value results in a **high** sensitivity for this viewpoint.

- 7.12.27 Eleven turbines (eight as hubs and three as blades only) in the Development would be seen in this view, a minimum of 3.98km (T16) away. The Development would be seen in a dip between the landform of Cnoc a'Ghrianain to the west and the forested footslope of Beinn Smeorail to the east, with some screening by forestry on the skyline.
- 7.12.28 There would be no visibility of long-term site infrastructure due to landform screening. Tall cranes would be apparent during the construction and decommissioning phases.
- 7.12.29 The magnitude of change on this view would be **medium**, for the following reasons:
  - The introduction of the turbines at reasonably close proximity into a view that is not affected by wind farms;
  - The contrast that the scale, colour, texture and movement of the turbines would have with the upland moorland and forestry landscape in which would be seen;

- The contrast that the scale of the Development would have with the smaller scale context seen in the foreground *strath* landscape, and particularly the Gordonbush Estate buildings on the loch shore;
- The appearance of the turbines in relation to an area of lower landform, so that their height is apparent; and
- The fairly consistent visibility of the Development from this path, albeit with filtering and screening by vegetation along the path.
- 7.12.30 The factors that restrict the magnitude of change to a **medium** level are as follows:
  - The limited part of the Development that is visible in terms of both turbine numbers and visible proportions of turbines due to landform and forestry screening;
  - The containment of the Development on both sides by rising landform, which would reduce the perceived scale of the turbines;
  - The containment of the Development by landform also reduces the vertical impact of the turbines as they would not be seen on prominent ridges and skylines that would emphasise their scale and height;
  - The limited extent of the open view from this location that would be affected by the Development (approximately 13-degrees), although the clearly visible part of the Development covers less than this;
  - The simple and open landform setting in which the Development would be seen has the capacity to accommodate turbines without uncomfortable scale comparisons arising;
  - The containment of turbine bases behind the skyline ensures that the Development would be associated with the upland landscapes and would not appear to be detrimentally encroaching into the smaller-scale, relatively complex, settled landscape of the foreground *strath*; and
  - Forestation of the upland landscape in which the Development would be seen ensures that it lacks unspoilt remote and wild characteristics with which the Development would have the greatest contrast.
- 7.12.31 If the forestry that appears on the skyline was felled during the lifetime of the Development, the magnitude of change would increase to a **medium/medium-high** level due to increased visibility of the turbines.

7.12.32 The effect of the Development on this view would be **significant**. This is due to a combination of the factors that lead to the **medium** or **medium/medium-high** magnitude of change on the view and the **high** sensitivity of the viewpoint.

### **Cumulative Effects**

7.12.33 Other than one blade tip of the operational Gordonbush Wind Farm, which is currently screened by forestry and would have a very limited effect should the forestry be felled, no other operational, consented or application stage wind farms are seen from this viewpoint. The addition of the Development would therefore not lead to any cumulative effects, and the cumulative effect would be **not significant**.

## Viewpoint 3: Brora to Rogart minor road south of Killin

## **Baseline Description**

- 7.12.34 This viewpoint is located in a passing place to the south of Killin on the minor Brora to Rogart road that runs along the eastern side of Loch Brora. This viewpoint is on the first stretch of the road from where an open view towards the Development is available to westbound travellers. A similar view would be gained by westbound travellers over a stretch of several hundred metres of the road, and may also be gained by walkers on the nearby core path SU06.14 (Doll Bridge to Loch Brora (see Section 7.12.215 7.12.223), which terminates at a small parking area around 100m to the south of the viewpoint. A similar view is gained from nearby parts of Loch Brora, although this appears to be less well-used than the more open northern parts of the loch.
- 7.12.35 This view shows the landscape characteristics of Loch Brora and Strath Brora with the relatively enclosed landscape and waterbody in the strath floor rising to the wooded lower slopes and then the simple and undeveloped open moorland and forestry of the surrounding *moorland slopes and hills* and *sweeping moorland*. It is notable, however, that this outlook over the strath is less cultivated and settled than the area slightly further to the north (as seen in Viewpoints 2, Loch Brora (south-west side) and 4, Brora to Rogart minor road near Killin), and while the landform is enclosed and of relatively small scale, the overlaid landscape patterns are simpler and broader than those seen elsewhere in Strath Brora. Carrol Rock forms a notable focal point on the west side of Loch Brora, and to the left of Carrol Rock, at the head of the strath, is Cnoc a' Ghrianain (214m AOD), which lies between the Development site and the minor road as it passes to the south of the site.
- 7.12.36 There is no visibility of baseline wind farms in this view.
- 7.12.37 The value of this view is **high**. The viewpoint is within the *Loch Fleet, Loch Brora and Glen Loth SLA*, which also covers much of the setting to the view, and has strong scenic qualities across the loch and up Strath Brora. The value is heightened by the core path nearby, from where similar views will be gained by a number of people, and for which parking is provided.

### <u>Sensitivity</u>

7.12.38 The susceptibility to change at this viewpoint would be **high**. Some viewers would be walkers who are engaging in outdoor recreation and have a high level of awareness of the surrounding landscape, and while others would be driving along the road, a number of these road-users are also likely to have an awareness of the scenery due to the attractive

setting of the road. The generally undeveloped landscape seen in the view also heightens susceptibility.

7.12.39 The combination of the **high** susceptibility to change of the view and its **high** value results in a **high** sensitivity for this viewpoint.

- 7.12.40 Nine turbines (five as hubs and four as blades only) in the Development would be visible in this view, a minimum of 6.53km (T16) away. The Development is seen on the skyline, partially screened by the wooded lower slopes of the strath side.
- 7.12.41 There would be very limited visibility of site infrastructure due to landform screening, and the upper part of the permanent meteorological mast would be the only long-term visible element. Tall cranes would be apparent during the construction and decommissioning phases.
- 7.12.42 The magnitude of change on this view will be **medium**, for the following reasons:
  - The introduction of the turbines at reasonably close proximity into a view that is not affected by baseline wind farms;
  - The contrast that the scale, colour, texture and movement of the turbines would have with the upland moorland and forestry landscape in which they are seen;
  - The appearance of the Development in the direct orientation of views from the road;
  - Channelling of views down the strath, towards the Development, by the enclosed linear valley landform; and
  - The fairly consistent visibility of the Development from several hundred metres of the road.
- 7.12.43 The factors that restrict the magnitude of change to a **medium** level are as follows:
  - The limited part of the Development that would be visible in terms of both turbine numbers and visible proportions of turbines due to landform and woodland screening;
  - The containment of the Development on both sides by rising landform, which reduces the perceived scale of the turbines;
  - The containment of the Development by landform also reduces the vertical impact of the turbines as they are not seen on prominent and elevated ridges and skylines that would emphasise their scale and height;
  - The limited extent of the open view from this location that would be affected by the Development (approximately 11-degrees), although the clearly visible part of the Development covers less than this;
  - The simple, open setting in which the Development would be seen lacks complex and small-scale features and has the capacity to accommodate turbines without uncomfortable scale comparisons arising;
  - The appearance of the Development on a section of the skyline that is relatively unremarkable in comparison with the prominent and complex landform that is seen in the north-western aspect of the view;

- The containment of turbine bases behind the skyline ensures that the Development would be associated with the upland landscapes and does not appear to be detrimentally encroaching into the smaller-scale, relatively complex landscape of the foreground strath; and
- Forestation of the upland landscape in which the Development would be seen ensures that it lacks unspoilt remote and wild characteristics with which the Development would have the greatest contrast.
- 7.12.44 If the forestry and woodland that appears on the skyline was felled during the lifetime of the Development, the magnitude of change would increase slightly due to increased visibility of the turbines, but this increase would not be sufficient to increase the level of magnitude of change.

7.12.45 The effect of the Development on this view would be **significant**. This is due to a combination of the factors that lead to the **medium** magnitude of change on the view (either with or without forestry in place) and the **high** sensitivity of the viewpoint.

## **Cumulative Effects**

7.12.46 No operational, consented or application stage wind farms are seen from this viewpoint, and the addition of the Development would therefore not lead to any cumulative effects.

## Viewpoint 4: Brora to Rogart minor road north of Killin

### **Baseline Description**

- 7.12.47 This viewpoint is located in an informal layby just north of Killin on the minor Brora to Rogart road that runs along the eastern side of Loch Brora. Visibility from this road is intermittent and generally limited due to screening by landform and vegetation (as described in the assessment of effects on the route in section 7.12.172 7.12.198 of this Chapter), and this view, which is around 1.5km to the north of the previous viewpoint (Viewpoint 3) illustrates that visibility of the Development reduces as the road approaches the Development. A similar view may also be gained by waterborne loch-users on the nearby part of the loch.
- 7.12.48 As with Viewpoint 2 (Loch Brora(west side)) this view clearly shows the typical landscape characteristics of Loch Brora and Strath Brora with the relatively enclosed, complex and cultivated landscape in the strath floor rising to the wooded lower slopes and then the simple and undeveloped open moorland and forestry of the surrounding *moorland slopes and hills* and *sweeping moorland*. Carrol Rock forms a notable focal point on the west side of Loch Brora, and to the left of Carrol Rock are Ben Horn (Viewpoint 9) and Meall Horn. The buildings seen on the western loch shore, left of Carrol Rock, are Carrol Farm, past which core path SU06.02 runs. The buildings seen in amongst woodland on the eastern loch side are Oldtown and Gordonbush. The 275kV line that crosses Strath Brora can be seen to the right of Carrol Rock, and just to the left of this the rounded summit of Ben Armine is seen on the skyline. There is no visibility of baseline wind farms in this view.
- 7.12.49 The value of this view is **medium-high**. The viewpoint is within the *Loch Fleet, Loch Brora and Glen Loth SLA* (which also covers much of the setting to the view) and has strong scenic

qualities across the loch and up Strath Brora. The value is, however, tempered by the location of the viewpoint on a minor road, where facilities are not provided for the enjoyment of the view, and the viewpoint is not recognised or signposted.

#### <u>Sensitivity</u>

- 7.12.50 The susceptibility to change at this viewpoint would be **high**. While the majority of people who gain the view would be driving along the road, a number of these road-users are likely to have an awareness of the scenery and surrounding landscape due to the scenic setting of the road. Moreover, the view may also be gained by waterborne loch-users who are engaging in outdoor recreation. The relatively small-scale landscape characteristics that are seen in the view also heighten susceptibility.
- 7.12.51 The combination of the **high** susceptibility to change of the view and its **medium-high** value results in a **high** sensitivity for this viewpoint.

- 7.12.52 Five turbines (two as hubs and three as blades only) in the Development would be visible in this view, a minimum of 5.17km (T16) away. The Development is seen on the skyline, partially screened by forestry on the lower slopes of the strath side. The magnitude of change is likely to alter if this forestry is felled, as described below.
- 7.12.53 There would be very limited visibility of site infrastructure due to landform screening, and the upper part of the permanent meteorological mast would be the only long-term visible element. Tall cranes would be apparent during the construction and decommissioning phases.
- 7.12.54 The magnitude of change on the baseline view, with the forestry in place, would be **low/medium-low** due to the very limited visibility of the turbines. Should the forestry be felled, the magnitude of change would increase to a **medium** level for the following reasons:
  - The introduction of the turbines at reasonably close proximity into a view that is not affected by wind farms;
  - The contrast that the scale, colour, texture and movement of the turbines would have with the upland moorland and forestry landscape in which they are seen;
  - The appearance of the Development in the orientation of views from the road;
  - Channelling of views down the strath, towards the Development, by the enclosed linear valley landform; and
  - The fairly consistent visibility of the Development from several hundred metres of the road.
- 7.12.55 The factors that restrict the magnitude of change to a **medium** level if the forestry was felled are as follows:
  - The very limited part of the Development that would be visible in terms of both turbine numbers and visible proportions of turbines due to landform screening;
  - The containment of the Development on both sides by rising landform, which reduces the perceived scale of the turbines;

- The containment of the Development by landform also reduces the vertical impact of the turbines as they would not be seen on prominent and elevated ridges and skylines that would emphasise their scale and height;
- The limited extent of the open view from this location that is affected by the Development (approximately 8-degrees);
- The simple, open setting in which the Development would be seen lacks complex and small-scale features and has the capacity to accommodate turbines without uncomfortable scale comparisons arising;
- The appearance of the Development on a section of the skyline that is relatively unremarkable in comparison with the prominent and complex landform that would be seen in the western aspect of the view;
- The containment of turbine bases behind the skyline ensures that the Development would be associated with the upland landscapes and would not appear to be detrimentally encroaching into the smaller-scale, relatively complex landscape of the foreground strath; and
- Forestation of the upland landscape in which the Development would be seen ensures that it lacks unspoilt remote and wild characteristics with which the Development would have the greatest contrast.

7.12.56 The effect of the Development on this view would be **not significant** under current baseline conditions, where forestry screens much of the visibility. Should the forestry be felled, the effect would be **significant** due to a combination of the factors that lead to the **medium** magnitude of change on the view and the **high** sensitivity of the viewpoint.

### **Cumulative Effects**

7.12.57 No operational, consented or application stage wind farms are seen from this viewpoint, and the addition of the Development will therefore not lead to any cumulative effects.

### Viewpoint 5: Strath Brora near Balnacoil

### **Baseline Description**

- 7.12.58 This viewpoint is located on the north bank of the River Brora near Balnacoil. ZTVs (Figures 7.8a and b and 7.9a and b) show theoretical visibility of the Development from this stretch of the Brora to Rogart minor road but this is screened and filtered by woodland, and this slightly more elevated location to the south of the road has therefore been included instead of a view from the road. There is a bench nearby and a rough path has been worn on the grass, suggesting that this is a location where people walk and sit beside the river. A similar view would be gained by people fishing on the River Brora.
- 7.12.59 This view across and down Strath Brora shows a different character from that seen in two of the previous views (Viewpoint 2, Loch Brora (south-west side) and Viewpoint 4, Brora to Rogart minor road north of Killin). Here, the strath appears more as it does in Viewpoint 3 (Brora to Rogart minor road south of Killin); remote and simple in terms of landscape patterns, and while the landform enclosure by surrounding *moorland slopes and hills* and

*sweeping moorland* is still apparent, the strath landscape lacks the small-scale complexity that is seen in other views. This is most apparent in the south-easterly view down the strath where there are few domestic-scale features in the landscape. The view across the strath, to the north-east, includes stone walls, local woodland, fences and some agricultural infrastructure, and these elements give a more settled and occupied character to this part of the view.

- 7.12.60 The 275kV line that crosses Strath Brora is clearly visible across the view, running a minimum of approximately 800m from the viewpoint, and appearing on the skyline on the northern side of the strath. Also on the skyline, to the right of the transmission towers, is the local landmark of Ben Smeorail (Viewpoint 1). There is negligible visibility of two blade tips of Gordonbush Wind Farm from this location, and no other visibility of baseline wind farms.
- 7.12.61 The value of this view is **medium-high**. This is not a recognised viewpoint and while part of the outlook down the strath is covered by the SLA, this is over 1.5km away and beyond the transmission line. However, this part of the strath does have scenic qualities and a sense of place, and people may sit on the nearby bench (from where a similar but slightly less open view is gained) in order to gain the view.

### <u>Sensitivity</u>

- 7.12.62 The susceptibility to change at this viewpoint would be **high**. People who gain the view would be engaging in outdoor recreation; walking along the river, using the bench or fishing, and are likely to have a specific focus on the scenery and surrounding landscape. The generally undeveloped landscape seen in the view also heightens susceptibility.
- 7.12.63 The combination of the **high** susceptibility to change of the view and its **medium-high** value results in a **high** sensitivity for this viewpoint.

- 7.12.64 Thirteen turbines (five as hubs and eight as blades only) in the Development would be seen in this view, a minimum of 2.83km (T14) away. The Development is seen in a dip formed by the valley of the Allt a' Mhuilinn, between the landforms of Cnoc a'Ghrianain to the east and Balnacoil Hill to the west.
- 7.12.65 There would be very limited visibility of site infrastructure due to landform screening, and the upper part of the permanent meteorological mast would be the only long-term visible element. Tall cranes would be apparent during the construction and decommissioning phases.
- 7.12.66 The magnitude of change on this view will be **medium-high**, for the following reasons:
  - The introduction of the turbines at close proximity into a view that is not notably affected by wind farms;
  - The contrast that the scale, colour, texture and movement of the turbines would have with the upland moorland and forestry landscape in which they are seen;
  - The irregular appearance of the Development, with varying visible proportions of turbines; and

- The appearance of the turbines in conjunction with the transmission line, which provides a scale comparison and may lead to some visual confusion.
- 7.12.67 The factors that restrict the magnitude of change to a **medium-high** level are as follows:
  - The containment of the Development on both sides by rising landform, which reduces the perceived scale of the turbines;
  - The containment of the Development by landform also reduces the vertical impact of the turbines as they are not seen on prominent ridges and skylines that would emphasise their scale and height;
  - The limited extent of the open view from this location that is affected by the Development (approximately 22-degrees), although the clearly visible part of the Development covers less than this;
  - The simple landform setting in which the Development is seen lacks complex, smallscale features and has the capacity to accommodate turbines without uncomfortable scale comparisons arising;
  - The location of the Development is peripheral to the main orientation of the view from this location, which is down Strath Brora;
  - The appearance of the Development on a section of the skyline that is relatively unremarkable in comparison with the prominent and complex landform that would be seen in the eastern and south-eastern aspect of the view;
  - The Development would not interrupt views towards the focal point of Beinn Smeorail;
  - The containment of turbine bases behind the skyline ensures that the Development would be associated with upland landscapes and does not appear to be detrimentally encroaching into the smaller-scale landscape of the foreground strath; and
  - The presence of the transmission line and forestation of the upland landscape in which the Development would be seen ensures that it lacks the unspoilt remote and wild characteristics with which the Development would have the greatest contrast.

7.12.68 The effect of the Development on this view will be **significant**. This is due to a combination of the factors that lead to the **medium-high** magnitude of change on the view and the **high** sensitivity of the viewpoint.

### **Cumulative Effects**

7.12.69 No operational, consented or application stage wind farms are seen from this viewpoint other than negligible visibility of the operational Gordonbush Wind Farm, and the addition of the Development will therefore not lead to any cumulative effects.

### Viewpoint 6: Brora to Rogart minor road near Sciberscross

### **Baseline Description**

7.12.70 This viewpoint is located on an elevated stretch of the minor Brora to Rogart road that runs along the eastern side of Loch Brora. There is no layby or footpath in this location and

views will be gained by eastbound road-users only. Visibility from this stretch of the road is very limited and intermittent due to screening by vegetation (as described in the assessment of effects on the route in section 7.12.172 – 7.12.198 of this Chapter), and this is one of the few open views that is available.

- 7.12.71 This outlook across and down Strath Brora is foreshortened by the shoulder of *moorland slopes and hills* that falls down to the strath from Kilbraur Hill and Meall Horn. The typical enclosed and relatively complex strath landscape is therefore contained in the foreground and middle ground of the view, while the large-scale, simple landscape of *moorland slopes and hills* provides backdrop containment around the outlook. Ben Smeorail (Viewpoint 1), Ben Horn (Viewpoint 9) and Meall Horn are all prominent on the skyline. This view shows the extensive forestry that lies along the northern side of the strath, separating the lower landscape from the surrounding uplands.
- 7.12.72 The turbines and some access tracks of the operational Gordonbush Wind Farm are clearly visible from a minimum of 7.83km away to the north-east of the viewpoint on a long moorland slope that rises above the forestry on the edge of the strath. Kilbraur Wind Farm is immediately apparent on the southern side of the strath at a minimum distance of 1.81km. The 275kV line that crosses Strath Brora can be seen dropping down into the strath from the north and then rising out again to the south.
- 7.12.73 The value of this view is **medium-high**. This is not a recognised viewpoint and no facilities are provided for the enjoyment of the view. However, while it does not lie within the SLA, part of the outlook across the strath and the uplands beyond is covered by the SLA and the view has scenic qualities and a sense of place.

### <u>Sensitivity</u>

- 7.12.74 The susceptibility to change at this viewpoint would be **medium**. People who gain the view would be driving and would have a brief, transitory outlook, although some of these road-users are likely to have an awareness of the surrounding landscape and scenery due to the scenic setting of the road. The relatively small-scale and complex landscape characteristics that are seen in parts of the view also heighten susceptibility. The presence of operational wind farms both reduces and heightens susceptibility; the reduction in susceptibility occurs because wind turbines are part of the baseline visual amenity at this location and the Development would therefore not introduce an entirely new experience for the viewer, while the heightening in susceptibility occurs because of the potential for cumulative effects to arise as a result of the addition of the Development.
- 7.12.75 The combination of the **medium** susceptibility to change and the **medium-high** value of the view results in a **medium-high** sensitivity for the viewpoint.

### Magnitude of Change

7.12.76 The 16 turbines in the Development would be seen in this view, all with hubs and some turbine bases visible, a minimum of 5.86km (T14) away. The Development has an extensive overlap with the operational Gordonbush Wind Farm (which is a minimum of 7.83km away) and would extend wind farm development across the view by approximately 5-degrees.

- 7.12.77 While the turbines would be the principal visible element of the Development, the permanent meteorological mast and some sections of new access tracks and would be visible throughout the lifetime of the Development. Access tracks would be most visible during construction when excavation is underway and the ground along the track routes is disturbed. Once construction is completed and the disturbed ground has been restored the effect would be more limited.
- 7.12.78 Some other activities (such as the excavation and construction of turbine bases, the presence of cranes and erection of turbines) may be visible during the construction phase although the influence on the view would be limited by distance. During the operational lifetime of the Development, when these activities have been completed and disturbed ground is made good, the effects of the construction phase would no longer be apparent as construction is completed and restoration is underway. Tall cranes would be visible during the decommissioning phase.
- 7.12.79 The magnitude of change on this view would be **medium**, for the following reasons:
  - The visibility of additional turbines at reasonably close proximity to the viewpoint so that the presence of turbines is increased and wind farm influence is concentrated;
  - The increase in the extent of wind farm development around the view, albeit very limited (approximately 5-degrees);
  - The resulting slight reduction in the separation between the overall Gordonbush development and Kilbraur Wind Farm, which may lead to a perception of increased encroachment onto Strath Brora by wind farms;
  - The distance between the viewpoint and turbines in the overall Gordonbush development is reduced from 7.83km to 5.86km away;
  - The angle of the view illustrates the lower elevation of the Development site and its increased proximity to Strath Brora in comparison with the operational Gordonbush Wind Farm site;
  - The variation between the layout of the Development and the operational Gordonbush turbines in some areas, which can lead to visual confusion and overlapping/gapping of turbines;
  - The variation between the blade tip height and hub height/rotor diameter proportions of the Development and the operational Gordonbush Wind Farm turbines, which may be discernible, particularly as the Development lies closer to the viewpoint and the proposed larger turbines are therefore seen at closer proximity;
  - The varying visible proportions of turbines in the Development; and
  - The direct orientation of views from the road towards the Development.
- 7.12.80 The factors that restrict the magnitude of change to a **medium** level are as follows:
  - The baseline presence of turbines at Gordonbush, which ensures that the Development would not introduce a completely new characteristic into this aspect of the view;
  - The level of integration of the Development with the operational Gordonbush Wind Farm in terms of proximity and visual and physical association, despite the variations described above;

- The similarity between the layout of the Development and the operational Gordonbush Wind Farm in some areas, so that the distinctive pattern of rows in the northern part of the site would be maintained;
- The very limited additional proportion of the view that would be affected by wind farm influence (approximately 5-degrees);
- The location and appearance of the Development on the same long moorland slope as the operational Gordonbush Wind Farm, which increases integration as the Development site effectively appears as a continuation of the operational site with no apparent separation or differentiation in landscape characteristics;
- The containment of the southern end of the Development by the landform of Cnoc a' Ghrianain, which ensures that the Development would be associated with the upland landscape of *moorland slopes and hills* and *sweeping moorland* and prevents perceived or actual encroachment into Strath Brora;
- The focal point of Beinn Smeorail remains uninterrupted in the view; and
- The broad, simple and open landform of the site, which reduces the perceived scale of the turbines and has the capacity to accommodate the turbines without uncomfortable scale comparisons arising.

7.12.81 The effect of the Development on this view would be **significant**. This is due to a combination of the factors that lead to the **medium** magnitude of change on the view and the **medium-high** sensitivity of the viewpoint.

### **Cumulative Effects**

- 7.12.82 There is baseline visibility of Gordonbush and Kilbraur Wind Farms from this viewpoint, as described above. There is no visibility of any other operational, consented, or application stage sites.
- 7.12.83 The addition of the Development would have some cumulative effect on this view due to the increased concentration of turbines and the increased depth of the overall Gordonbush development. The minor increase in the extent of wind farm development across the view, the reduction in the separation from Kilbraur Wind Farm, and the increased proximity to Strath Brora also contribute to some cumulative effect.
- 7.12.84 However, this cumulative effect is limited due to the level of integration between the Development and the operational Gordonbush Wind Farm in terms of proximity and visual and physical association, the very minor increase in the extent of wind farm development across the view, and the considerable separation that is therefore retained between overall Gordonbush development and Kilbraur Wind Farm.
- 7.12.85 These factors ensure that the addition of the Development would not result in an impression that the view is characterised by multiple wind farms, and the cumulative effect would be **not significant**.

### Viewpoint 7: Brora to Rogart minor road near Dalreavoch

7.12.86 There is not potential for a significant effect (including cumulative effect) to arise at this viewpoint due to limited visibility of the Development, its association with the operational Gordonbush Wind Farm, the moving nature of the viewer, the angled nature of the view and the limited susceptibility of the viewer due to the location of the viewpoint on a minor road.

### Viewpoint 8: Craggie Beg

## Baseline Description

- 7.12.87 This viewpoint is located on the minor dead-end road to Braegrudie that branches off the Brora to Rogart road. This viewpoint, located in an informal layby, is included to represent the visibility of the Development that may be gained from several dispersed houses in this crofting area.
- 7.12.88 This viewpoint lies just within *sweeping moorland* on the edge of Strath Brora and looks north-eastwards towards the site along the strath, where the view is bisected by the shoulder of *moorland slopes and hills* that falls down to the strath from Kilbraur Hill and Meall Horn. The enclosed, relatively complex and settled crofting landscape of the strath around Dalreavoch is seen in the foreground of the view, while the large-scale, simple landscapes of *sweeping moorland* and *moorland slopes and hills*, including extensive forestry blocks, provide backdrop containment. Ben Smeorail (Viewpoint 1), Ben Horn (Viewpoint 9) and Meall Horn are all prominent on the skyline.
- 7.12.89 The turbines and some access tracks of the operational Gordonbush Wind Farm are clearly visible from 12.99km away to the north-east of the viewpoint on a long moorland slope that rises above the edge of the strath. Kilbraur Wind Farm is readily apparent on the southern side of the strath at a minimum distance of 4.01km. The 275kV line that crosses Strath Brora can be seen in front of Gordonbush Wind Farm in the north and then reappears as it passes through Kilbraur Wind Farm on the southern side of the strath.
- 7.12.90 The value of this view is **medium-high**. This is not a recognised viewpoint and no facilities are provided for the enjoyment of the view. However, while the viewpoint does not lie within the SLA, part of the outlook across the uplands is covered by the SLA and the view has scenic qualities and a sense of place.

### **Sensitivity**

7.12.91 The susceptibility to change at this viewpoint will be **high**, due primarily to the residential nature of views that are represented. The relatively small-scale and complex landscape characteristics that are seen in the foreground of the view also heighten susceptibility. The presence of operational wind farms both reduces and heightens susceptibility; the reduction in susceptibility occurs because wind turbines are part of the baseline visual amenity at this location and the Development will therefore not introduce an entirely new experience for the viewer, while the heightening in susceptibility occurs because of the potential for cumulative effects to arise as a result of the addition of the Development.

7.12.92 The combination of the **high** susceptibility to change and the **medium-high** value of the view results in a **high** sensitivity for the viewpoint.

- 7.12.93 The 16 turbines in the Development are seen in this view, all with hubs and some turbine bases visible, a minimum of 11.02km (T14) away. The Development has an extensive overlap with the operational Gordonbush Wind Farm (which is a minimum of 12.99km away) and would extend wind farm development across the view by approximately 3-degrees.
- 7.12.94 While the turbines would be the principal visible element of the Development, the permanent meteorological mast and some sections of new access tracks would be visible throughout the lifetime of the Development. Access tracks would be most visible during construction when excavation is underway and the ground along the track routes is disturbed. Once construction is completed and the disturbed ground has been restored the effect would be more limited. The operations building may also be discernible.
- 7.12.95 Some other activities (such as the excavation and construction of turbine bases, the presence of cranes and erection of turbines) may be visible during the construction phase although the influence on the view would be limited by distance. During the operational lifetime of the Development, when these activities have been completed and disturbed ground is made good, the effects of the construction phase would no longer be apparent as construction is completed and restoration is underway. Tall cranes would be visible during the decommissioning phase.
- 7.12.96 The magnitude of change on this view would be **low/medium-low**, for the following reasons:
  - The introduction of additional turbines into the view so that the presence of turbines is increased and wind farm influence at Gordonbush is concentrated;
  - The increase in the extent of wind farm development around the view, albeit very limited (approximately 3-degrees);
  - The resulting very slight reduction in the separation between the overall Gordonbush development and Kilbraur Wind Farm, which may result in a perception of increased encroachment onto Strath Brora by wind farms;
  - The distance between the viewpoint and turbines in the overall Gordonbush development is reduced from 12.99km to 11.02km away;
  - The angle of the view and elevation of the viewpoint illustrate the lower elevation of the Development site and its increased proximity to Strath Brora in comparison with the operational Gordonbush Wind Farm site;
  - The variation between the layouts of the Development and the operational Gordonbush turbines in some areas, which can lead to overlapping/gapping of turbines;
  - The appearance of the Development (and the operational Gordonbush Wind Farm) across the open, more distant part of the view, to which the eye of the viewer is drawn;
  - The channelling of the strath landform towards the Development (and the operational Gordonbush Wind Farm site);

- The Development would extend wind farm development so that it appears to bridge the gap between the north and south sides of Strath Brora, in the middle ground landform; and
- The variation in the visible proportion of turbines in the Development, with some turbines seen at full height while others are seen as upper towers, hubs and blades.
- 7.12.97 The factors that restrict the magnitude of change to a **low/medium-low** level are as follows:
  - The baseline presence of turbines at Gordonbush, which ensures that the Development would not introduce a completely new characteristic into this aspect of the view;
  - The level of integration of the Development with the operational Gordonbush Wind Farm in terms of proximity and visual and physical association;
  - The similarity between the layouts of the Development and the operational Gordonbush Wind Farm in some areas, so that the distinctive pattern of rows in the northern part of the site is maintained;
  - The very limited additional proportion of the view that would be affected by wind farm influence (approximately 3-degrees);
  - The location and appearance of the Development on the same long moorland slope as the operational Gordonbush Wind Farm, which increases integration as the Development site effectively appears as a continuation of the operational Gordonbush Wind Farm site with no apparent separation or differentiation in landscape characteristics;
  - The distance of the viewpoint from the Development (a minimum of 11.02km), which ensures that the proposed turbines would not be very readily apparent additions to the view, and that the variation between the blade tip height and hub height/rotor diameter proportions of the Development and the operational Gordonbush Wind Farm turbines are unlikely to be clearly discernible;
  - The backclothing by landform of the Development turbines, reducing vertical impact;
  - The focal point of Beinn Smeorail remains uninterrupted in the view; and
  - The broad, simple and open landform of the site reduces the perceived scale of the turbines and has the capacity to accommodate the turbines without uncomfortable scale comparisons arising.

7.12.98 The effect of the Development on this view would be **not significant**. This is due to a combination of the factors that lead to the **low/medium-low** magnitude of change on the view despite the **high** sensitivity of the viewpoint.

# **Cumulative Effects**

7.12.99 There is baseline visibility of Gordonbush and Kilbraur Wind Farms from this viewpoint, as described above. There is no visibility of any other operational, consented, or application stage sites.

- 7.12.100 The addition of the Development would have some cumulative effect on this view due to the increased concentration of turbines and the increased depth of the overall Gordonbush development. The very minor increase in the extent of wind farm development across the view, the resultant slight reduction in the separation from Kilbraur Wind Farm, and the increased proximity to Strath Brora also contribute to some cumulative effect.
- 7.12.101 However, this cumulative effect is limited due to the level of integration between the Development and the operational Gordonbush Wind Farm, the very minor increase in the extent of wind farm development across the view, and the considerable separation that is retained between the overall Gordonbush development and Kilbraur Wind Farm.
- 7.12.102 These factors ensure that the addition of the Development would not result in an impression that the view is characterised by multiple wind farms, and the cumulative effect would be **not significant**.

### Viewpoint 9: Ben Horn

#### **Baseline Description**

- 7.12.103 This viewpoint is located near the summit cairn of Ben Horn (520m AOD), a distinctive landform that lies within *unit C* of *moorland slopes and hills* landscape character type. This viewpoint gains a panoramic outlook over the interior of Sutherland, and illustrates the relationships between the contrasting landscape types that form the setting to the Development; *strath* (Strath Brora), *sweeping moorland, moorland slopes and hills* (within which the viewpoint lies), and *small farms and crofts*. The eastern part of Strath Brora has limited visibility due to intervening landform and it is primarily the western part of the strath that is visible, lying beyond Kilbraur Wind Farm. The contrast between the relatively small-scale, enclosed and settled Strath Brora landscape and the massive, open and undeveloped moorland landscape (including the distinctive shapes of Ben Klibreck and Ben Armine (Viewpoint 15) to the north-west and Ben Griam Mor, Ben Griam Beg (Viewpoint 17) and Morven to the north is apparent in this view.
- 7.12.104 Kilbraur Wind Farm lies a minimum of 1.10km to the north-west of this viewpoint, between the viewpoint and Strath Brora. To the right of Kilbraur Wind Farm is the operational Gordonbush Wind Farm, with turbines and some infrastructure visible from 9.02km away on the northern side of Strath Brora, on its distinctive long moorland slope. In the foreground below Gordonbush Wind Farm is Loch a Bhididh, immediately in front of the summit of Kilbraur Hill. Lairg, Achany and Rosehall Wind Farms are seen on the skyline to the west in clear conditions, at 19.48km, 27.65km and 30.56km away respectively.
- 7.12.105 This view clearly shows the relationship of the operational Gordonbush Wind Farm and the Development site with the 275kV transmission line (and the Allt a' Mhuilinn valley), which run directly down the left-hand (western) side of the operational and proposed sites. This transmission line also marks the eastern boundary of the Ben Klibreck Armine Forest WLA. The WLA boundary returns westwards along the northern edge of the extensive deforested area, also clearly visible, that lies to the west of the transmission line. The Development site would be in the area bounded by the operational Gordonbush Wind Farm to the north, the existing wind farm access track to the south, and the transmission line and Allt a' Mhuilinn valley to the west.

7.12.106 The value of this view is **medium-high**. This is not a specific recognised viewpoint and while part of the route follows tracks, there is no formal path to the summit and no facilities are proved for the enjoyment of the view. The view does have value in its scenic qualities and location within the SLA, which implies value to both the viewpoint and the view that can be gained from it.

## <u>Sensitivity</u>

- 7.12.107 The susceptibility to change at this viewpoint will be **medium-high**. People who gain the view would be walkers who are engaging in outdoor recreation and are likely to have a specific focus on the scenery and surrounding landscape, gained from a static viewpoint. The wildness characteristics that are seen in parts of the view, within the WLA, also heighten susceptibility. The presence of operational wind farms both reduces and heightens susceptibility; the reduction in susceptibility occurs because wind turbines are part of the baseline visual amenity at this location and the Development would therefore not introduce an entirely new experience for the viewer, while the heightening in susceptibility occurs because of the potential for cumulative effects to arise as a result of the addition of the Development.
- 7.12.108 The combination of the **medium-high** susceptibility to change and the **medium-high** value of the view results in a **medium-high** sensitivity for the viewpoint.

- 7.12.109 The 16 turbines in the Development will be seen in this view, with all hubs and turbine bases visible, a minimum of 7.17km (T16) away. The Development would have a considerable overlap with the operational Gordonbush Wind Farm (which is a minimum of 9.02km away), and will increase the extent of wind farm development around the view by less than 2-degrees. The western edge of the Development would be clearly defined in this view due to the angle of the outlook. This edge is formed by T1, T7, T8, T11 and T14, which would be seen in a row that aligns with the 275kV transmission line and the Allt a' Mhuilinn.
- 7.12.110 While the turbines would be the principal visible element of the Development, other elements would be seen in this view due to the elevation of the viewpoint, including long-term visibility of the access tracks between turbines, the operations building, turbine hard standings and the permanent meteorological mast. Access tracks would be most visible during construction when excavation is underway and the ground along the track routes is disturbed. Once construction is completed and the disturbed ground along the edges of the tracks has been restored the effect would be more limited, especially as they would be formed of local rock material.
- 7.12.111 A number of other activities would be apparent during the construction phase, including borrow pit excavation, the excavation and construction of turbine bases, the construction of the operations building, the construction compound, the presence of cranes, erection of turbines, and underground cabling. During the operational lifetime of the Development, when these activities have been completed and disturbed ground is made good, the effects of the construction phase would no longer be apparent as construction is completed and restoration is underway.

- 7.12.112 Effects during the decommissioning phase would be similar to the construction phase but with less activity apparent as some elements such as the restored borrow pits, turbine foundations and underground cabling are not affected by the decommissioning phase.
- 7.12.113 The magnitude of change on this view would be **medium**, for the following reasons:
  - The visibility of additional turbines and infrastructure at reasonably close proximity to the viewpoint so that the presence of turbines is increased and wind farm influence at Gordonbush is concentrated;
  - The distance between the viewpoint and turbines in the overall Gordonbush development is reduced from 9.02km to 7.17km away;
  - The angle of the view and elevation of the viewpoint illustrate the lower elevation of the Development site and its increased proximity to Strath Brora in comparison with the operational Gordonbush Wind Farm site;
  - The increase in the extent of wind farm development around the view, albeit very limited (approximately 2-degrees);
  - The resulting slight reduction in the separation between the overall Gordonbush development and Kilbraur Wind Farm, which may lead to a perception of increased encroachment onto Strath Brora by wind farms;
  - The clustering of the turbines that form the western edge of the Development (T1, T7, T8, T11 and T14), seen on the left side of the Development; and
  - The variation between the blade tip height and hub height/rotor diameter proportions of the Development and the operational Gordonbush turbines, which may be discernible, particularly as the Development lies closer to the viewpoint and the proposed larger turbines are therefore seen at closer proximity, although the lower base elevation of the Development turbines mitigates this factor to some degree.
- 7.12.114 The factors that restrict the magnitude of change to a **medium** level are as follows:
  - The baseline presence of turbines at Gordonbush, which ensures that the Development would not introduce a completely new characteristic into this aspect of the view;
  - The level of integration of the Development with the operational Gordonbush Wind Farm in terms of proximity and visual and physical association;
  - The similarity of the majority of the layout of the Development and that of the operational Gordonbush Wind Farm, so that the pattern of turbines is maintained other than on the western edge;
  - The very limited additional proportion of the view that would be affected by wind farm influence (less than 2-degrees). This is of particular relevance in this view as the Ben Klibreck Armine Forest WLA lies to the west, and the very limited increase of wind farm development in this direction is beneficial in mitigating effects on the WLA;
  - The location and appearance of the Development on the same long moorland slope as the operational Gordonbush Wind Farm, which increases integration as the Development site effectively appears as a continuation of the operational Gordonbush Wind Farm site with no apparent separation or differentiation in landscape characteristics;

- The containment of the southern end of the Development by the landform of Cnoc a' Ghrianain, which ensures that the Development is associated with the upland landscape of *moorland slopes and hills* and *sweeping moorland* and prevents perceived or actual encroachment into Strath Brora;
- The backclothing by landform of the Development turbines, reducing vertical impact;
- The dramatic mountainous skyline that lies to the north and north-west of the viewpoint is unaffected by the Development;
- The broad, simple and open landform of the site reduces the perceived scale of the turbines and has the capacity to accommodate the turbines without uncomfortable scale comparisons arising; and
- The use of existing infrastructure onto the site reduces the extent of new infrastructure required.

7.12.115 The effect of the Development on this view would be **significant**. This is due to a combination of the factors that lead to the **medium** magnitude of change on the view and the **medium-high** sensitivity of the viewpoint.

#### Cumulative Effects

- 7.12.116 There is baseline visibility of Gordonbush, Kilbraur, Lairg, Achany and Rosehall Wind Farms from this viewpoint, as described above. There is also visibility of the application stage sites at Braemore (25.63km away to the west) and West Garty (16.48km away to the northeast). Strathy South is theoretically visible but at 42.74km away it is seen from outwith its study area and would make a very limited contribution to the cumulative situation.
- 7.12.117 The addition of the Development would have some cumulative effect on this view due to the increased concentration of turbines and the increased depth of the overall Gordonbush development. The very minor increase in the extent of wind farm development across the view, the resultant slight reduction in the separation from Kilbraur Wind Farm, and the increased proximity to Strath Brora also contribute to some cumulative effect.
- 7.12.118 However, this cumulative effect is limited due to the level of integration between the Development and the operational Gordonbush Wind Farm, the very minor increase in the extent of wind farm development across the view, and the considerable separation that is retained between the overall Gordonbush development and Kilbraur Wind Farm.
- 7.12.119 These factors ensure that the addition of the Development would not result in an impression that the view is characterised by multiple wind farms, and the cumulative effect would be **not significant** in scenarios that include operational, consented or application stage wind farms.

### Viewpoint 10: Beinn Dhorain

7.12.120 There is not potential for a significant effect (including cumulative effect) to arise at this viewpoint due to limited visibility of the Development and its association with the operational Gordonbush Wind Farm, as it lies almost completely within the same visual envelope.

### Viewpoint 11: Hope Hill

### **Baseline Description**

- 7.12.121 This viewpoint is located at the trig point of Hope Hill (253m AOD). Hope Hill lies in a vast area of largely undeveloped moorland, covered by a WLA, to the north-west of the Development. This viewpoint has been included to illustrate visibility of the Development from within this part of the WLA. There are very few obvious visual receptors in this area, and whilst Hope Hill is not a distinctive landform and there is no footpath to the summit, a rough track runs to the north of the summit and the trig point also provides a reference point.
- 7.12.122 Hope Hill lies within and is surrounded by *sweeping moorland*, interspersed by areas of coniferous forestry, and the view shows the characteristic massive, simple and extensive nature of this landscape. The most prominent large hills in the outlook are Ben Armine and Creag Mhor, to the north-west, which mark the transition of *sweeping moorland* into *moorland slopes and hills*. To the north *sweeping moorland* forms a low horizon above which the top of Morven and Creag Scalabsdale are visible. Just to the left of Morven is the low rise of Creag nam Fiadh, where Viewpoint 11 is located.
- 7.12.123 Gordonbush Wind Farm is seen from 8.22km away to the south-east of the viewpoint, largely backclothed by the hill landform that runs from Ben Uarie and Beinn Dhorain in the north to Ben Smeorail in the south. The Development site lies to the right of the operational Gordonbush Wind Farm, almost completely backclothed by this same ridge of high ground, including the hills of Meallan Liath Mor, Beinn Smeorail and Cnoc Cragaidh. To the right of Cnoc Cragaidh the skyline landform dips down at the end of Strath Brora (although the strath itself is not visible) before rising again to the high ground of Ben Horn, Meall Horn and Meall Odhar, against which Kilbraur Wind Farm is seen from just over 10km away.
- 7.12.124 The eastern edge of the WLA within which the viewpoint lies extends as far as the edge of the operational Gordonbush Wind Farm, before returning westwards around 1.5km to the south of the southernmost operational Gordonbush Wind Farm turbine. To the north and west, the WLA extends to the horizon. The more distant landform of Morven and Creag Scalabsdale lies within a different WLA (Area 36 Causeymire -Knockfin Flows).
- 7.12.125 The value of this view is **high**. While this is not a specific recognised viewpoint and there is no formal path to the trig point, the viewpoint lies within and overlooks the WLA and overlooks three SLAs (*Loch Fleet, Loch Brora and Glen Loth, Ben Klibreck and Loch Choire* and *Flow Country and Berriedale Coast*). The view also has value in its scenic qualities.

### Sensitivity

7.12.126 The susceptibility to change at this viewpoint would be **medium-high**. People who would gain the view would be walkers who are engaging in outdoor recreation and are likely to have a specific focus on the scenery and surrounding landscape, gained from a static viewpoint. The wildness characteristics (as implied by its location within the WLA) that are seen in the view also heighten susceptibility. The presence of operational wind farms both reduces and heightens susceptibility; the reduction in susceptibility occurs because wind turbines are part of the baseline visual amenity at this location and the Development

would therefore not introduce an entirely new experience for the viewer, while the heightening in susceptibility occurs because of the potential for cumulative effects to arise as a result of the addition of the Development.

7.12.127 The combination of the **medium-high** susceptibility to change and the **high** value of the view results in a **high** sensitivity for the viewpoint.

- 7.12.128 Sixteen turbines (15 as hubs and one as a blade only) in the Development are seen in this view, a minimum of 7.97km (T1) away. The Development would extend across approximately 15-degrees of the view to the south-west (right) of the operational Gordonbush Wind Farm (which is a minimum of 8.22km away), with a small overlap.
- 7.12.129 There would be very limited visibility of site infrastructure due to landform screening, and the upper part of the permanent meteorological mast would be the only long-term visible element. Tall cranes would be apparent during the construction and decommissioning phases.
- 7.12.130 The magnitude of change on this view would be **medium-low**, for the following reasons:
  - The visibility of additional turbines at reasonably close proximity to the viewpoint so that the presence of turbines would increase and wind farm influence at Gordonbush is emphasised;
  - The distance between the viewpoint and turbines in the overall Gordonbush development is reduced from 8.22km to 7.97km away;
  - The increase in the extent of wind farm development around the viewpoint (approximately 15-degrees) so that the combined Gordonbush development would cover 30-degrees;
  - The resulting reduction in the separation between the overall Gordonbush development and Kilbraur Wind Farm;
  - The increase in the proportion of the WLA setting to the viewpoint that would be affected by visibility of turbines (15-degrees); and
  - The variation between the blade tip height and hub height/rotor diameter proportions of the Development and the operational Gordonbush Wind Farm turbines, which may be discernible, and the variation in visible proportion of turbines, although the lower base elevation of the Development turbines mitigates this factor to some degree.
- 7.12.131 The factors that restrict the magnitude of change to a **medium-low** level are as follows:
  - The baseline presence of turbines at Gordonbush, which ensures that the Development would not introduce a completely new characteristic into this aspect of the view;
  - The high level of integration of the Development with the operational Gordonbush Wind Farm in terms of proximity, visual and physical association, and the appearance of the Development as a natural downslope progression from the operational wind farm with no apparent separation or differentiation in landscape setting characteristics;
  - The backclothing by landform of the Development turbines, which reduces vertical impact and avoids interruption of the mountainous skyline beyond;
- The location of the Development between the operational Gordonbush Wind Farm and Kilbraur Wind Farm ensures that wind farm influence is not extended to an otherwise unaffected sector of the view, and would not affect additional aspects of the WLA setting around the viewpoint. Wind farm development (Gordonbush and Kilbraur) therefore continues to be contained within a relatively small part (a total of approximately 75-degrees) of the south-eastern outlook from the viewpoint; and
- The vast, simple and open setting within which the Development would be seen reduces the perceived scale of the turbines and has the capacity to accommodate the turbines without uncomfortable scale comparisons arising.

## Significance of the Effect

7.12.132 The effect of the Development on this view will be **not significant.** This is due to a combination of the factors that lead to the **medium-low** magnitude of change on the view despite the **high** sensitivity of the viewpoint.

## **Cumulative Effects**

- 7.12.133 There is baseline visibility of Gordonbush and Kilbraur Wind Farms from this viewpoint, as described above. There is no visibility of any other operational, consented or application stage sites.
- 7.12.134 The addition of the Development would have some cumulative effect on this view due to the increased number of turbines and increased width of the overall Gordonbush development by approximately 15-degrees to 30-degrees.
- 7.12.135 However, this cumulative effect would be limited due to the level of integration between the Development and the operational Gordonbush Wind Farm; the continued containment of all wind farm development within a 75-degree sector of the 360-degree view, so that all other aspects of the WLA setting to the viewpoint remain unaffected; and the considerable separation that is retained between the overall Gordonbush development and Kilbraur Wind Farm, thus avoiding coalescence.
- 7.12.136 These factors ensure that the addition of the Development would not result in an impression that the view is characterised by multiple wind farms, and the cumulative effect would be **not significant**.

### Viewpoint 12: track to Ben Armine Lodge

- 7.12.137 This viewpoint is located on the private access track to Ben Armine Lodge (which lies just over 8km further north) and is located several hundred metres north of the point where the track emerges from a forestry plantation at Druim Torr nan Cliabh. There is intermittent visibility of the Development from the track and this location has been selected as it gains a relatively high level of visibility without screening by forestry.
- 7.12.138 This viewpoint lies within *sweeping moorland*, and is surrounded by a combination of *sweeping moorland*, *moorland slopes and hills* and coniferous forestry. The view shows the characteristic open, simple and extensive nature of these upland landscapes. Ben Armine and Creag Mhor are prominent to the north-west, and Ben Griam Mor is a distant but

distinctive form on the skyline to the north. To the right of Ben Griam Mor is the gently sloping rise of Hope Hill (Viewpoint 11) and further right still, to the north-east, is Creag nam Fiadh (Viewpoint 13). In the foreground to the north is Lochan Dubh Cul na h-Amaite, and to the east, also in the foreground, is Loch Bad na h-Earba.

- 7.12.139 Gordonbush Wind Farm is seen to the east, above Loch Bad na h-Earba, largely backclothed by the hill landform that runs southwards from Ben Uarie. The Development site would lie to the right of the operational Gordonbush Wind Farm, on the same moorland slope, backclothed by this same ridge of high ground, including the hills of Meallan Liath Mor and the conical form of Beinn Smeorail. To the right of Beinn Smeorail the foreground landform of Druim Torr nan Cliabh foreshortens the view, and this middle-ground skyline continues around the southern and south-western aspects of the view.
- 7.12.140 There is very limited theoretical visibility (up to five blades) of Kilbraur Wind Farm from approximately 6km away, but this is currently screened by forestry. Should the forestry be felled, the very limited visibility is unlikely to have a readily apparent effect on the view. No other operational or consented wind farms are seen from this viewpoint.
- 7.12.141 The value of this view is **medium-high**. This is not a recognised viewpoint, does not have facilities for the enjoyment of the view, and is not on a recognised or promoted walking route. However, the view does have value in its scenic qualities and outlook across the WLA, which surrounds the viewpoint to the north, east and west from a minimum of around 2km away. Two SLAs (*Loch Fleet, Loch Brora and Glen Loth*, and *Ben Klibreck and Loch Choire*) cover parts of the view, and these also imply value to the outlook.

### **Sensitivity**

- 7.12.142 The susceptibility to change at this viewpoint would be **medium-high**. This track is used by people accessing Ben Armine Lodge, and is also used by walkers and cyclists, often as access to Ben Armine and other remote hills. Viewers are therefore likely to be engaging in outdoor recreation, with a specific focus on the scenery and surrounding landscape. The wildness characteristics that are seen in some parts of the view also heighten susceptibility.
- 7.12.143 The combination of the **medium-high** susceptibility to change of the view and its **medium-high** value results in a **medium-high** sensitivity for this viewpoint.

### Magnitude of Change

- 7.12.144 Sixteen turbines (all hubs) in the Development are seen in this view, a minimum of 7.97km (T14) away. Some lower towers are screened while other turbines are seen at their full height. The Development would extend across approximately 9-degrees of the view to the south-west (right) of the operational Gordonbush Wind Farm (which is a minimum of 9.31km away), with a considerable overlap.
- 7.12.145 While the turbines would be the principal visible element of the Development, the permanent meteorological mast and some sections of new access tracks may be visible during the lifetime of the Development. Access tracks would be most visible during construction when excavation is underway and the ground along the track routes is disturbed. Once construction is completed and the disturbed ground has been restored the effect would be more limited.

- 7.12.146 Some other activities (such as the excavation and construction of turbine bases, the presence of cranes and erection of turbines) may be visible during the construction phase although the influence on the view would be limited by distance. During the operational lifetime of the Development, when these activities have been completed and disturbed ground is made good, the effects of the construction phase would no longer be apparent as construction is completed and restoration is underway. Tall cranes would be visible during the decommissioning phase.
- 7.12.147 The magnitude of change on this view will be **medium**, for the following reasons:
  - The visibility of additional turbines at reasonably close proximity to the viewpoint so that the depth of the overall wind farm development at Gordonbush is increased and wind farm influence is emphasised;
  - The increased clustering of turbines would be apparent;
  - The distance between the viewpoint and turbines in the overall Gordonbush development is reduced from 9.31km to 7.97km away;
  - The increase in the extent of wind farm development around the viewpoint (approximately 9-degrees) so that the combined Gordonbush development would cover approximately 25-degrees;
  - The location of the Development in one of the more open aspects of the view, to which the eye of the viewer is drawn;
  - The variation between the blade tip height and hub height/rotor diameter proportions of the Development and the operational Gordonbush turbines, which may be discernible, and the variation in visible proportion of turbines, although the lower base elevation of the Development turbines mitigates this factor to some degree; and
  - The angle of the view and elevation of the viewpoint illustrate the lower elevation of the Development site and its increased proximity to Strath Brora in comparison with the operational Gordonbush Wind Farm site.

### 7.12.148 The factors that restrict the magnitude of change to a **medium** level are as follows:

- The baseline presence of turbines at Gordonbush, which ensures that the Development would not introduce a completely new characteristic into this aspect of the view;
- The integration of the Development with the operational Gordonbush Wind Farm in terms of proximity, visual and physical association, and the appearance of the Development as a natural downslope progression from the operational Gordonbush Wind Farm with no apparent separation or differentiation in landscape setting characteristics;
- The limited increase in wind farm development in the view (approximately 9-degrees) so that the majority of the outlook remains unaffected by wind farm development, including the more dramatic mountainous skyline to the north and north-west;
- This also ensures that the WLA setting to the north, north-west and north-east of the viewpoint will not be affected by visibility of wind farm development;
- The backclothing by landform of the Development turbines, which would reduce vertical impact and avoid interruption of the skyline beyond; and

• The vast, simple and open setting within which the Development would be seen reduces the perceived scale of the turbines and has the capacity to accommodate the turbines without uncomfortable scale comparisons arising.

### Significance of the Effect

7.12.149 The effect of the Development on this view would be **significant**. This is due to a combination of the factors that lead to the **medium** magnitude of change on the view and the **medium-high** sensitivity of the viewpoint.

### Cumulative Effects

- 7.12.150 There is baseline visibility of Gordonbush and Kilbraur Wind Farms from this viewpoint, as described above. There is no visibility of any other operational, consented or application stage sites.
- 7.12.151 The addition of the Development would have some cumulative effect on this view due to the increased number of turbines and increased depth and width of the overall Gordonbush development. However, this cumulative effect is limited due to the very limited visibility of Kilbraur Wind Farm, the level of integration between the Development and the operational Gordonbush Wind Farm, and the containment of wind farm development at Gordonbush within a 25-degree sector of the view.
- 7.12.152 These factors will ensure that the addition of the Development would not result in an impression that the view is characterised by multiple wind farms, and the cumulative effect would be **not significant**.

# Viewpoint 13: Creag nam Fiadh

- 7.12.153 This viewpoint is located at the summit trig point of Creag nam Fiadh (387m AOD) on the Borrobol Estate, due north of the site, and has been included to represent mid-range views from the remote interior landscape that lies to the north of the Development, within the WLA. This area is not readily accessible, and whilst Creag nam Fiadh is not a distinctive landform and there is no footpath to the summit, the trig point provides a reference point in the landscape.
- 7.12.154 The viewpoint is located within the *moorland slopes and hills* landscape character type with highly characteristic views over this landscape type and *sweeping moorland*, displaying the massive scale and extent of the upland moorland interior. There is a great sense of openness and remoteness in all directions, with mountains rising above the long, open slopes of moorland. Panoramic views are gained from this viewpoint, with Ben Klibreck and Creag Mohr prominent to the west; Ben Griam Mor and Ben Griam Beg (Viewpoint 17) the closest large hills to the north; and Morven very distinctive on the skyline to the north-east. To the south-east, Gordonbush Wind Farm (7.44km away) is seen partly on the skyline and partly backclothed by Meallan Liath Mor and the distinctive form of Ben Smeorail. The Development site lies immediately to the right of the operational Gordonbush Wind Farm, behind the gently rising landform of Cnoc Meadhonach (344m AOD), which is close to the north-western edge of the operational Gordonbush Wind Farm. To the right of Cnoc Meadhonach the skyline rises again to the

distinctive profile of Cagar Feosaig (378m AOD), which lies around 4km to the south of Carroll Rock and south-east of Ben Horn.

- 7.12.155 To the right of the operational Gordonbush Wind Farm the distant landform dips at the foot of Strath Brora before rising again to the high ground around Ben Horn and Meall Horn, where Kilbraur Wind Farm is visible at approximately 15.26km away. Lairg, Achany and Rosehall Wind Farms are also theoretically visible, but Achany and Rosehall are seen from outwith their study areas, and at over 30km away Lairg, which is partly screened by landform, has a very limited influence on the view.
- 7.12.156 This viewpoint lies within the WLA and wildness characteristics can be seen around the view, particularly to the north, west and east where wind farm influence is absent (other than the very distant and limited influence of Lairg). To the south, in the direction of the Development site, the WLA boundary runs close to the edge of Gordonbush Wind Farm. The greatest extent of the WLA is to the west of this viewpoint, where it extends beyond Ben Klibreck.
- 7.12.157 The value of this view is **high**. While this is not a specific recognised viewpoint and there is no formal path to the trig point, the viewpoint lies within and overlooks the WLA and overlooks three SLAs (*Loch Fleet, Loch Brora and Glen Loth, Ben Klibreck and Loch Choire* and *Flow Country and Berriedale Coast*). The view also has value in its scenic qualities and sense of place.

## <u>Sensitivity</u>

- 7.12.158 The susceptibility to change at this viewpoint would be **medium-high**. People who gain the view would be walkers who are engaging in informal outdoor recreation and are likely to have a specific focus on the scenery and surrounding landscape, gained from a static viewpoint. The wildness characteristics (as implied by its location within the WLA) that are seen in the view also heighten susceptibility. The presence of operational wind farms both reduces and heightens susceptibility; the reduction in susceptibility occurs because wind turbines are part of the baseline visual amenity at this location and the Development will therefore not introduce an entirely new experience for the viewer, while the heightening in susceptibility occurs because of the potential for cumulative effects to arise as a result of the addition of the Development.
- 7.12.159 The combination of the **medium-high** susceptibility to change and the **high** value of the view results in a **high** sensitivity for the viewpoint.

# Magnitude of Change

- 7.12.160 Sixteen turbines (15 as hubs and one as a blade only) in the Development are seen in this view, a minimum of 8.88km (T1) away. The Development would extend across approximately 9-degrees of the view to the south-west (right) of the operational Gordonbush Wind Farm (which is a minimum of 7.44km away), with a small overlap.
- 7.12.161 There would be very limited visibility of site infrastructure due to landform screening, and the permanent meteorological mast would be the only long-term visible element. Tall cranes would be apparent during the construction and decommissioning phases.
- 7.12.162 The magnitude of change on this view would be **medium-low** for the following reasons:

- The visibility of additional turbines at reasonably close proximity to the viewpoint so that the presence of turbines is increased and wind farm influence at Gordonbush is emphasised;
- The increase in the extent of wind farm development around the viewpoint so that the combined Gordonbush development will cover approximately 27-degrees;
- The resulting reduction in the separation between the overall Gordonbush development and Kilbraur Wind Farm;
- The angle of the view and elevation of the viewpoint illustrate the lower elevation of the Development site and its increased proximity to Strath Brora in comparison with the operational Gordonbush Wind Farm site;
- The appearance of the Development bridging across the open skyline between Ben Smeorail and Cagar Feosaig, which reduces its cohesion with the operational Gordonbush Wind Farm and results in a varied backdrop; and
- The increase in the proportion of the WLA setting to the viewpoint that would be affected by visibility of turbines (9-degrees).

7.12.163 The factors that restrict the magnitude of change to a **medium-low** level are as follows:

- The baseline presence of turbines at Gordonbush, which ensures that the Development would not introduce a completely new characteristic into this aspect of the view;
- The level of integration of the Development with the operational Gordonbush Wind Farm in terms of proximity, visual and physical association, and the appearance of the Development as a natural downslope progression from the operational Gordonbush Wind Farm with no apparent separation;
- The screening of lower turbines by landform, which reduces the vertical impact of the Development;
- The limited increase in wind farm development in the 360-degree view (approximately 9-degrees) so that the majority of the outlook remains unaffected by wind farm development;
- The location of the Development between the operational Gordonbush Wind Farm and Kilbraur Wind Farm ensures that wind farm influence is not extended to an otherwise unaffected sector of the view, and clearly visible wind farm development (Gordonbush and Kilbraur) continues to be contained within a relatively small part (a total of approximately 45-degrees) of the southern outlook from the viewpoint;
- Wind farm development would therefore not affect additional aspects of the WLA setting outwith this 45-degree aspect;
- The dramatic mountainous skyline to the north and north-west would remain unaffected by wind farms;
- The Development lies at a greater distance from the viewpoint than the operational Gordonbush Wind Farm and would therefore not increase the proximity of turbines from the viewpoint; and
- The vast, simple and open setting within which the Development is seen reduces the perceived scale of the turbines and has the capacity to accommodate the turbines without uncomfortable scale comparisons arising.

## Significance of the Effect

7.12.164 The effect of the Development on this view would be **not significant**. This is due to a combination of the factors that lead to the **medium-low** magnitude of change on the view despite the **high** sensitivity of the viewpoint.

## **Cumulative Effects**

- 7.12.165 There is baseline visibility of Gordonbush and Kilbraur Wind Farms from this viewpoint, as described above. Lairg is also theoretically visible, but at over 30km away and partly screened by landform, has a very limited influence on the view. There is also theoretical visibility of application sites at Braemore, Strathy South and West Garty. At 36.32km away, Braemore is seen from outwith its study area and would have a negligible influence on the view. Strathy South is seen as 11 turbine blades from 25.75km away and would also have a very limited influence on the view. West Garty is likely to have a higher level of visibility, seen on the prominent skyline to the south-east as a series of full turbines and blades, 15.48km away.
- 7.12.166 The addition of the Development to this situation would result in a **medium** cumulative magnitude of change for the following reasons:
  - The increased number of turbines and increased width of the overall Gordonbush development by approximately 9-degrees to 27-degrees;
  - The resultant reduction in the separation from Kilbraur Wind Farm from approximately 19-degrees to 11-degrees, so that some coalescence may be perceived.
- 7.12.167 The addition of the Development would lead to a **significant** cumulative effect on this viewpoint, due to the factors that lead to the **medium** cumulative magnitude of change and the **high** sensitivity of the viewpoint. This effect would arise in any cumulative scenario.

### Viewpoint 14: Ben Bhraggie

7.12.168 There is not potential for a significant effect (including cumulative effect) to arise at this viewpoint due to the limited visibility of the Development (all lower towers and the majority of hubs are screened by landform), its strong association with the operational Gordonbush Wind Farm, the very limited additional part of the full open view that would be affected (less than 4-degrees), the location of the Development in a relatively unremarkable aspect of the view, and the distance of the Development from the viewpoint.

### Viewpoint 15: Ben Armine

7.12.169 There is not potential for a significant effect (including cumulative effect) to arise at this viewpoint due to the distance of the Development from the viewpoint (19.62km) which ensures that it would affect a very small additional proportion (less than 6 degrees) of the 360-degree view and that the turbines would constitute minor components in the outlook. The association of the Development with the operational Gordonbush Wind Farm ensures that it would not introduce wind farm influence into a part of the view that currently displays remote, undeveloped characteristics and would not extend wind farm influence into a new aspect of the view. The separation that is retained between the overall

Gordonbush development and Kilbraur is also important, as this ensures that coalescence across the skyline would not occur.

## Viewpoint 16: Portmahomack

7.12.170 There is not potential for a significant effect (including cumulative effect) to arise at this viewpoint due primarily to the distance of the Development from the viewpoint (approximately 28.38km), which ensures both that it would affect a very small proportion (less than 4-degrees) of the full open view that is available, and that the turbines would constitute very minor components in the outlook. The enclosure of the Development on both sides by higher landform (including Beinn Smeorail to the east) also would reduce its influence on the view as this reduces the perceived height and prominence of the turbines.

## Viewpoint 17: Ben Griam Beg

7.12.171 There is not potential for a significant effect (including cumulative effect) to arise as a result of the Development due to the distance of the Development from the viewpoint (26.40km), which ensures both that it would affect a very small proportion (less than 5-degrees) of the 360-degree view, and that the turbines would constitute very minor components in the outlook. The considerable separation that is retained between the overall Gordonbush development and Kilbraur Wind Farm is also important, as this ensures that coalescence across the skyline would not occur.

## Brora to Rogart minor road

- 7.12.172 This minor road runs through Strath Brora from Brora in the east to Rogart in the west, passing a minimum of approximately 2.3km to the south of the nearest turbine in the Development. The section of the road included in the assessment is that which runs from the western side of Brora to the northern edge of Rogart, near the turn-off to Achnagarron. Viewpoints 3 (Brora to Rogart minor road south of Killin), 4 (Brora to Rogart minor road north of Killin), 5 (Strath Brora near Balnacoil), 6 (Brora to Rogart minor road near Sciberscross) and 7 (Brora to Rogart minor road near Dalreavoch) are located on this road, and each of these represents a stretch of visibility of the Development that may be gained by road-users.
- 7.12.173 This road runs largely through the landscape of *strath (Strath Brora): eastern section*, and views from the road show the typical enclosed valley landform of the strath, as described in the baseline descriptions for the viewpoints that are located on the road. There are also areas of *small farms and crofts* on the edge of Brora, *sweeping moorland* and *small farms and crofts* to the north of Rogart, and *coniferous plantation* in several locations.
- 7.12.174 There is intermittent visibility of the operational Gordonbush Wind Farm for eastbound road-users from several locations on this road, and none for westbound road-users. The most apparent visibility is gained from a stretch of the road to the south of Sciberscross, where Gordonbush Wind Farm is theoretically visible to eastbound travellers for around 2.3km. Much of this visibility is limited by landform and vegetation, and the most open and direct view is shown in Viewpoint 6 (Brora to Rogart minor road near Sciberscross). There is a further stretch of intermittent theoretical visibility covering approximately 1.5km near Dalreavoch, of which the most open view is shown in Viewpoint 7 (Brora to Rogart

minor road near Dalreavoch). There is a third short stretch (around 400m) of theoretical visibility as the road passes Balnacoil, but this is limited to several blade tips and is screened by woodland.

- 7.12.175 Kilbraur Wind Farm has a higher level of visibility, being seen from extensive parts of the road. The principal visibility of this wind farm is seen in three areas, described below as if travelling in an east to west direction:
  - A 3km stretch between Gordonbush and Ascoile where there is fairly consistent visibility (with intermittent screening by roadside woodland) from a minimum of 2.7km away;
  - A 4km stretch between Point and 1.2km west of Sciberscross, where there is fairly consistent high visibility (with intermittent filtering by roadside woodland) from a minimum of 1.8km away (as seen in Viewpoint 6, Brora to Rogart minor road near Sciberscross); and
  - A 2.2km stretch between the Knockarthur turn-off and the Achnagarron turn-off, where there is intermittent visibility (with further intermittent filtering by roadside vegetation) from a minimum of 3.5km away.
- 7.12.176 There are smaller areas of theoretical visibility of Kilbraur outwith these stretches where the level of visibility is not sufficient to contribute to a notable effect on views.
- 7.12.177 Achany, Lairg and Rosehall have some very limited visibility from the stretch of the road just to the north of Rogart from over 20km, 12km and 25km away respectively, where they have a negligible influence on views from the road due to a combination of limited visibility, the right-angled nature of views, and distance from the road.
- 7.12.178 The value of views gained from this receptor is **medium-high**. The road is partially within the *Loch Fleet, Loch Brora and Glen Loth SLA* and the views gained from the route have strong scenic qualities across Loch Brora and along Strath Brora. The route is, however, a minor road where facilities are not provided for the enjoyment of views.

# <u>Sensitivity</u>

- 7.12.179 The susceptibility to change of road-users on this route would be **medium-high**. While the majority of people who gain the view would be driving along the road, which is not a recognised or signposted scenic route and thus of a generally lower susceptibility, however, a number of these road-users are likely to have an awareness of the scenery and surrounding landscape due to the scenic setting of the road. The relatively small-scale and enclosed landscape characteristics of the strath that are seen in views also heighten susceptibility.
- 7.12.180 The combination of the **medium-high** susceptibility to change of viewers and the **medium-high** value of the route results in a **medium-high** sensitivity for this minor road.

### Magnitude of Change

7.12.181 The magnitude of change would vary for east and westbound travellers, as described below.

## Eastbound

- 7.12.182 The first visibility of the Development gained by eastbound travellers is near Dalreavoch, where a stretch of approximately 600m of the road is shown on ZTV (Figures 7.8a and b and 7.9a and b) to gain visibility of the Development. The maximum level of visibility on this stretch is similar to that seen in Viewpoint 7 (Brora to Rogart minor road near Dalreavoch), which is assessed to not have potential to undergo a significant effect due to limited visibility of the Development, its association with the operational Gordonbush Wind Farm, the moving nature of the viewer, and the angled nature of the view, and this would also apply to views from this stretch of the road.
- 7.12.183 The next stretch of visibility is between Sciberscross and Point, covering approximately 2.7km in total. The first 1.8km of this stretch gains high theoretical visibility of the Development (always in conjunction with the operational Gordonbush Wind Farm) in the orientation of the outlook from the road, although actual visibility is intermittent due to screening and filtering by woodland along the road. Viewpoint 6 (Brora to Rogart minor road near Sciberscross) is located on this stretch and illustrates the type of visibility that would be gained. The magnitude of change on this viewpoint is assessed to be **medium**, and this would also apply to views gained from the more open points on this stretch from where clear visibility of the Development would be available. Woodland along this stretch of the road appears to be naturalised deciduous woodland rather than a commercial crop, and is therefore unlikely to be felled or removed during the lifetime of the Development.
- 7.12.184 After the first 1.8km of this stretch, visibility of the Development reduces as the road drops down to the lower floor of Strath Brora and the magnitude of change would reduce to a **medium-low** and then **low** level, with intermittent screening by woodland still apparent. The final part (approximately 400m) of the stretch gains negligible visibility of several blade tips.
- 7.12.185 The final stretch of theoretical visibility for eastbound travellers is between Balnacoil and Ascoile, covering around 1.5km. The majority of visibility from this stretch is currently screened by woodland beside the road and forestry on the skyline, although it is possible that glimpse views of the Development may be available. If this was the case, the magnitude of change would likely have a maximum **medium** level due to the very limited visibility of the Development, albeit it seen at the relatively close proximity a minimum of 2.5km away. Should the forestry on the skyline be felled, the magnitude of change over this stretch may increase to a maximum **medium-high** level due to the increased visibility of the Development seen at this proximity.
- 7.12.186 The final few hundred metres of this stretch gains very limited visibility, and the Development would have a **low** to **negligible** magnitude of change. As the road approaches and passes the Ascoile access, theoretical visibility of the Development ceases and there would be no further visibility as the Development would lie behind the outlook of the eastbound traveller.

### Westbound

- 7.12.187 Visibility gained by westbound travellers is limited to one stretch of the road approximately 2.6km long, between Killin Rock and Carroll Rock. The operational Gordonbush Wind Farm is not visible from this stretch of the road. The first part of this stretch has very limited visibility due to screening by landform and woodland, and it is only as the road passes round the western shoulder of Killin Rock that it straightens out and opens up. Viewpoint 3 (Brora to Rogart minor road south of Killin) is located close to the start of this stretch of more open and direct visibility, and this type of outlook continues over approximately 1.4km until just past Killin. The magnitude of change on this viewpoint is assessed to be **medium**, and this level of change would also apply to this approximately 1.4km long stretch of the road, other than one short section where landform screens views for around 150m.
- 7.12.188 Just past Killin, visibility reduces as seen in Viewpoint 4 (Brora to Rogart minor road north of Killin) and the magnitude of change accordingly drops to **low/medium-low** with baseline forestry in place and **medium** if forestry is felled, as assessed for this viewpoint. This type of visibility continues for several hundred metres before reducing to a **low-negligible** level and then dropping out of sight. There would be no further visibility as the Development lies behind the outlook of the westbound traveller.

### Significance of the Effect

- 7.12.189 The effect of the Development on views from the minor road between Brora and Rogart would be **not significant** for the majority of the route. There are, however, several stretches for eastbound and westbound travellers where **significant** transient effects are likely to arise.
- 7.12.190 For eastbound travellers, an intermittent **significant** effect would arise on approximately 2km of the road between Sciberscross and Point (as seen in Viewpoint 6, Brora to Rogart minor road near Sciberscross) where the magnitude of change is **medium** or **medium-low**. There is then potential for very intermittent **significant** effects in glimpse views of the Development from a stretch of the road approximately 1km long between Balnacoil and the graveyard that lies to the north of the road. This stretch of the road is wooded and views of the Development would be gained at an angle to the main direction of travel, but it is possible that there may be visibility with a **medium** magnitude of change. Should forestry on the skyline be felled, the level of visibility would be likely to increase to a very intermittent **medium-high** magnitude of change.
- 7.12.191 For westbound travellers, a **significant** effect is likely to arise on the majority of a stretch of the road approximately 1.4km long, between a point just south of Viewpoint 3 and a point just north of Killin. The operational Gordonbush Wind Farm is not visible from this stretch. There are several locations on this stretch where screening by landform and vegetation reduces visibility. Immediately to the north of this stretch (just north of Killin) the effect would become **not significant**, although there is potential for a **significant** effect to arise on a further several hundred metres of the road if forestry on the skyline is felled, as seen in Viewpoint 4.

### **Cumulative Effects**

- 7.12.192 There is baseline visibility of Gordonbush and Kilbraur Wind Farms from this route, as described above. Achany, Lairg and Rosehall also have some very limited theoretical visibility but have been discounted from the cumulative assessment due to their negligible influence on views from the road. There is a very small area of theoretical visibility of the application site at West Garty from the eastern end of the road, as it leaves Brora, but this too has been discounted due to the limited and relatively distant (11km away) visibility and roadside screening. The operational wind farm at Kilbraur, and to a lesser extent Gordonbush, are therefore the relevant sites for inclusion in the cumulative assessment.
- 7.12.193 The addition of the Development to this situation would result in an intermittent **medium** cumulative magnitude of change. This arises from two principal factors:
- 7.12.194 The addition of intermittent significant visibility of wind farms on stretches of the road where there is currently no notable wind farm influence; for eastbound travellers over approximately 1km between Balnacoil and the graveyard, and for westbound travellers over approximately 1.4km (and potentially an additional several hundred metres if forestry is felled) between a point just south of Viewpoint 3 (Brora to Rogart minor road south of Killin) and a point just north of Killin. When combined with the high level of visibility of Kilbraur that is gained from other stretches of the road by both east and westbound travellers, this level of visibility will lead to notable sequential effects on views from the road. This effect is emphasised by the location of the Development to the north of Strath Brora while Kilbraur lies to the south of Strath Brora, as wind farms will be sequentially visible on both sides of the road.
- 7.12.195 As a result of the addition of this wind farm visibility, views from the majority of the stretch of the road that runs between a point just to the south of Viewpoint 3 (Brora to Rogart minor road south of Killin) and a point approximately 1.2km west of Sciberscross (a length of approximately 13km) would be affected by intermittent significant visibility of wind farms. One stretch of approximately 2km between Killin and Oldtown would remain unaffected by any wind farm visibility. While the majority of this significant visibility arises from Kilbraur Wind Farm, the Development would contribute to significant effects on short stretches, and to the overall cumulative scenario.
- 7.12.196 The introduction of intermittent significant additional wind farm influence on a stretch of the road that is already affected by the operational Gordonbush Wind Farm; for eastbound travellers only, over approximately 2km of the road between Sciberscross and Point (as seen in Viewpoint 6, Brora to Rogart minor road near Sciberscross). Kilbraur Wind Farm is also clearly visible over the majority of this stretch.
- 7.12.197 The **medium** cumulative magnitude of change would extend over the stretch of road between a point just to the south of Viewpoint 3 (Brora to Rogart minor road south of Killin) and a point approximately 1.2km west of Sciberscross (a length of approximately 13km). This is the stretch over which the additional effects of the Development would be most apparent when combined with the baseline effects of the operational Gordonbush and Kilbraur Wind Farms. This stretch of the road is also differentiated from other parts of the road in terms of character due to its distinctive enclosed route through Strath Brora, whereas the western stretch of the road, from Dalreavoch onwards, has a quite different, more elevated upland character.

7.12.198 The addition of the Development would lead to a **significant** cumulative effect on a 13km stretch of the minor road from Brora to Rogart, due to the factors that lead to the **medium** cumulative magnitude of change and the **medium-high** sensitivity of the route. It should be noted that the Development would not be visible from the majority of this stretch of the road, and the cumulative effect arises as a result of the addition of the Development to visibility of Kilbraur Wind Farm, which has a considerably greater level of visibility from this section of the road.

### SU06.02 ('Loch Brora - West Track')

### Baseline Description

- 7.12.199 This core path runs along the western side of Loch Brora from Doll Bridge in the east to Ascoile in the west, where it terminates approximately 2.6km to the south of the nearest turbine in the Development. Viewpoint 2, Loch Brora (south-west side), is located on the route.
- 7.12.200 This path runs through the landscape of *strath (Strath Brora): eastern section* other than a short eastern section that passes through *coniferous forestry plantation*, and views show the typical enclosed and relatively small-scale valley landform of the strath, as described in the baseline description for Viewpoint 2 (Loch Brora (west side)).
- 7.12.201 There is intermittent theoretical visibility of the operational Gordonbush Wind Farm from approximately 4.2km of the path. The majority of this visibility is very limited and the operational turbines are clearly visible from approximately 1km of the route as it passes to the north of Carroll Rock (where there would also be visibility of the Development). Kilbraur Wind Farm is intermittently visible from approximately 1.5km at the western end of the path, which passes a minimum of 2km from the nearest turbine in Kilbraur Wind Farm. There is no visibility of Achany, Lairg and Rosehall Wind Farms.
- 7.12.202 The value of views gained from this receptor is **high**. This is a signposted core path that lies largely within the *Loch Fleet, Loch Brora and Glen Loth SLA* (which also covers much of the setting to views) and has strong scenic qualities across Loch Brora and along Strath Brora.

### <u>Sensitivity</u>

- 7.12.203 The susceptibility to change of users of this path would be **high**. People who gain views would be walkers who are engaging in outdoor recreation and are likely to have a specific focus on the scenery and surrounding landscape. The relatively small-scale and complex landscape characteristics of the strath that are seen in views from the path also heighten susceptibility.
- 7.12.204 The combination of the **high** susceptibility to change of viewers and the **high** value of the route results in a **high** sensitivity for this core path.

### Magnitude of Change

7.12.205 The type of view gained by eastbound and westbound walkers on the path would vary. However, as walkers may stop and look at the view around them rather than looking only in the principal direction of travel, this section describes visibility that may be gained in either direction, starting in the east and travelling westwards.

- 7.12.206 Theoretical visibility is gained from approximately 7km of this path route. This is divided into two stretches; one of 5.5km, passing along the southern part of Loch Brora, and the other of 1.5km at the western end of the path, around Kilbraur. Travelling westwards, the Development first comes into theoretical view within the coniferous forestry, some 1.1km to the west of Doll Bridge. Visibility would be screened by the forestry for around 300m, whereupon the path exits the forestry and the view towards the Development opens up.
- 7.12.207 From this point, the Development theoretically remains fairly consistently in view for around 4.6km (until the path reaches a point that is midway between Gordonbush and Oldtown, on the other side of the loch), seen from between 7.7km and 3.5km away, with no notable visibility of the operational Gordonbush Wind Farm. The level of visibility varies from 16 hubs to several hubs and blades. Over this stretch of visibility, the Development would lie in the line of view for westbound walkers but would be behind eastbound walkers and so would not be seen by people walking in this direction unless they stop and look to the north-west. Visibility is open and clear for the first 2.5km, but as the path passes Carroll (where it leaves the vehicular route to Carroll and becomes a much narrower and less formal route, with no signposting) it would begin to be filtered by vegetation. Beyond Carroll, as the path approaches and follows the edge of the loch, visibility becomes more intermittent due to woodland and scrub growth along the loch shore, so that visibility would be less consistent. Viewpoint 2 (Loch Brora (west side)) is located on this loch edge, on a stretch of the path where vegetation is lower and an open view is therefore available.
- 7.12.208 Over this 4.6km stretch of the path, the magnitude of change would be intermittently **medium-low** and **medium/medium-high**, dependent on the level of visibility of the Development and its distance from the path. In some areas, particularly along the loch edge, the Development would be filtered and screened by vegetation and there would be considerably less visibility. This level of change would apply particularly to westbound walkers, who gain more direct views towards the Development.
- 7.12.209 After this 4.6km stretch, visibility of the Development decreases over the next 600m while visibility of the operational Gordonbush Wind Farm increases, and the magnitude of change would reduce to a **low/medium-low level**. Visibility then ceases altogether as the development drops out of sight for 1.3km.
- 7.12.210 Visibility of the Development would recommence some 600m to the east of Kilbraur, but would be limited to several blade tips for the first 500m. Just to the east of Kilbraur, visibility would increase to a number of hubs and blades, and this would continue for around 1km with no visibility of the operational Gordonbush Wind Farm, although Kilbraur Wind Farm is visible. The magnitude of change here would be **medium** due to the level of visibility and proximity to the Development (a minimum of around 3km). Approximately 150m before the end of the path, to the south of the minor road, this would reduce again to several blades, and this type of visibility, with a **low** or **negligible** magnitude of change, continues as far as the end of the path.

# Significance of the Effect

7.12.211 The Development would have a significant effect on views from two stretches of SU06.02 (Loch Brora - West Track'). The first of these is over approximately 4.6km of the path, starting at the edge of the coniferous forestry in the east and proceeding around Carroll Rock, where the magnitude of change would be between medium/medium-high and

**medium-low**. The significant effect on the western part of this stretch would be intermittent as vegetation along the loch edge screens and filters visibility. This significant effect would be gained primarily by westbound walkers, although eastbound walkers may also gain views if they stop and look around. The second stretch where the effect would be **significant** covers approximately 1km near the western end of the path as it passes Kilbraur, and would also be gained primarily by westbound walkers.

## Cumulative Effects

- 7.12.212 There is baseline visibility of Gordonbush and Kilbraur Wind Farms from this route, as described above. There is no visibility of any other operational, consented, or application stage sites.
- 7.12.213 The addition of the Development to the operational Gordonbush and Kilbraur Wind Farms would have some cumulative effect on views from the route due to the addition of wind farm visibility to sections that are not notably affected by the presence of baseline wind farms; the addition of wind farm visibility to the very limited section (intermittently over approximately 1.5km) that is affected by visibility of Kilbraur Wind Farm; and the addition of wind farm visibility to the very limited section (approximately 1km) that is affected by notable visibility of the operational Gordonbush Wind Farm.
- 7.12.214 However, this cumulative effect is limited by the very limited visibility of baseline wind farms, and the high level of integration between the Development and the operational Gordonbush Wind Farm (when it is visible). These factors ensure that the addition of the Development would not result in an impression that views from the path are characterised by multiple wind farms, and the cumulative effect would be **not significant**.

# SU06.14 ('Doll Bridge – Loch Brora')

- 7.12.215 This core path runs along the eastern side of the River Brora and Loch Brora from Doll Bridge in the east to Killin Rock in the west, where it terminates on the minor Brora to Rogart road. Viewpoint 3 (Brora to Rogart minor road south of Killin) is located close to the western end of the route. This path runs through the landscape of *strath (Strath Brora): eastern section* and *coniferous forestry plantation*. Views from much of this route are enclosed by woodland and forestry, with more focus to the south, over the loch, and therefore lack the open aspect across the open strath and surrounding *moorland slopes and hills* that is seen in the representative viewpoints in Strath Brora. The outlook seen in Viewpoint 3 is therefore not representative of views from the majority of the path, although a similar view is gained from its western end.
- 7.12.216 There is no visibility of operational wind farms from the path.
- 7.12.217 The value of views gained from this receptor is **high**. This is a signposted core path that lies partly within the *Loch Fleet, Loch Brora and Glen Loth SLA* (which also covers much of the setting to views) and has strong scenic qualities across Loch Brora and along Strath Brora.

### <u>Sensitivity</u>

- 7.12.218 The susceptibility to change of users of this path would be **high**. People who gain views would be walkers who are engaging in outdoor recreation and are likely to have a specific focus on the scenery and surrounding landscape. The relatively small-scale and complex landscape characteristics of the strath that are seen in views from the path also heighten susceptibility.
- 7.12.219 The combination of the **high** susceptibility to change of viewers and the **high** value of the route results in a **high** sensitivity for this core path.

### Magnitude of Change

- 7.12.220 The type of view gained by northbound and southbound walkers on the path would vary. However, as walkers may stop and look at the view around them rather than looking only in the principal direction of travel, this section describes visibility that may be gained in either direction, starting in the south and travelling northwards.
- 7.12.221 Theoretical visibility is gained from the northern stretch of this path route, covering approximately 700m. Travelling northwards, the Development first comes into view approximately 800m to the south of Viewpoint 3 (Brora to Rogart minor road south of Killin), and remains theoretically visible until the end of the path, on the minor Brora to Rogart road. For the first 200m of this 800m stretch, visibility is limited to several blade tips and the magnitude of change would be **low**. Theoretical visibility then increases but is in fact screened by woodland along the path, and clear visibility is gained only on the final stretch (approximately 300m long) of the path before it terminates at the minor road. Over this 300m stretch, visibility would be similar to that seen in Viewpoint 3 (Brora to Rogart minor road south of Killin). The magnitude of change on this viewpoint is be assessed to be **medium** (with or without baseline forestry in place), and the same principle would apply broadly to views from this 300m stretch of the path. These views would be gained primarily by northbound walkers, but may also be gained by those travelling southwards.

### Significance of the Effect

7.12.222 The effect of the Development on views from the majority of SU06.14 ('Doll Bridge – Loch Brora') would be **not significant**. There is, however, a stretch of approximately 300m at the northern end of the path where a **significant** effect would likely arise due to the factors that contribute to a **medium** magnitude of change, combined with the high sensitivity of the route. This significant effect would be gained primarily by northbound walkers, although southbound walkers may also gain views if they stop and look around.

### **Cumulative Effects**

7.12.223 No operational, consented or application stage wind farms are seen from this route and the addition of the Development would therefore not lead to any cumulative effects.

# **Summary of Effects on Views**

7.12.224 Table 7.11 provides a summary of the effects on views as assessed in the previous sections of this Chapter.

Viewpoint/ Visual Receptor	Sensitivity	Magnitude of Change	Significance of Effect	Significance of Cumulative Effect		
1. Beinn Smeorail	Medium-high	High	Significant	Not significant		
2. Loch Brora (south-west side)	High	Medium	Significant	Not significant		
3. Brora - Rogart minor road south of Killin	High	Medium	Significant	Not significant		
4. Brora - Rogart minor road north of Killin	High	Low/medium-low (with forestry)	Not significant (with forestry)	Not significant		
		Medium (without forestry)	Significant (without forestry)			
5. Strath Brora near Balnacoil	High	Medium-high	Significant	Not significant		
6. Brora - Rogart minor road near Sciberscross	Medium-high	Medium	Significant	Not significant		
7. Brora - Rogart minor road near Dalreavoch	This viewpoint does not have potential to undergo a significant effect as a result of the Development and has therefore not been assessed in detail.					
8. Craggie Beg	High	Low/medium-low	Not significant	Not significant		
9. Ben Horn	Medium-high	Medium	Significant	Not significant		
10. Beinn Dhorain	This viewpoint does not have potential to undergo a significant effect as a result of the Development and has therefore not been assessed in detail.					
11. Hope Hill	High	Medium - Low	Not significant	Not significant		
12. Track to Ben Armine Lodge	Medium-high	Medium	Significant	Not significant		
13. Creag nam Fiadh	High	Medium-low	Not significant	Significant		
14. Ben Bhraggie	This viewpoint does not have potential to undergo a significant effect as a result of the Development and has therefore not been assessed in detail.					
15. Ben Armine	This viewpoint does not have potential to undergo a significant effect as a result of the Development and has therefore not been assessed in detail.					
16. Port- mahomack	This viewpoint does not have potential to undergo a significant effect as a result of the Development and has therefore not been assessed in detail.					
17. Ben Griam Beg	This viewpoint does not have potential to undergo a significant effect as a result of the Development and has therefore not been assessed in detail.					
Brora - Rogart minor road	Medium-high	Eastbound: maximum: medium with forestry and medium-high without forestry <u>Westbound:</u> maximum: medium with forestry and medium/medium-high without forestry	Eastbound: intermittent significant effect on approximately 2km between Sciberscross and Point and very intermittent significant effect on approximately 1km between Balnacoil and graveyard. Westbound: significant effect on approximately	Significant cumulative effect on a 13km stretch between a point just to the south of Viewpoint 3 and a point approximately 1.2km west of		

# Table 7.11: Summary of Effects on Views

Viewpoint/ Visual Receptor	Sensitivity	Magnitude of Change	Significance of Effect	Significance of Cumulative Effect
			1.4km between just south of Viewpoint 3 and just north of Killin. Potential for significant effect on a further several hundred metres to the north if forestry on the skyline is felled.	Sciberscross
SU06.02 (Loch Brora - West Track').	High	Maximum: medium/ medium-high	<ul> <li>Significant effect on:</li> <li>Approximately 4.6km (partly intermittent) of the path, between the coniferous forestry in the east and extending around Carroll Rock;</li> <li>Approximately 1km near the western end of the path as it passes Kilbraur.</li> </ul>	Not significant
SU06.14 ('Doll Bridge – Loch Brora')	High	Maximum: medium	Significant effect on approximately 300m at the northern end of the path.	Not significant

### 7.13 Conclusions and Statement of Significance

- 7.13.1 The LVIA has indicated that the Development would result in some significant effects on the landscape and visual resource within the 35km radius study area.
- 7.13.2 The landscape character types that cover the site and its surroundings are likely to be subject to significant effects up to a maximum distance of around 6.5km away, although this would only be the case where there is notable visibility of the Development; extensive areas gain no or limited visibility, and the effect on these areas would be not significant. The extent of these effects also depends to a considerable degree on the type of visibility of the Development; effects tend to be greater when it is seen without the operational Gordonbush Wind Farm, or where it has a notable effect in addition to the operational Gordonbush Wind Farm due to an increased extent across the skyline, for example.
- 7.13.3 The landscape character receptors that would be significantly affected are as follows:
  - Inland loch: Loch Brora: intermittent significant effects on parts of the loch;
  - Small farms and crofts (fringe crofting and historic features subtype): Balnacoil area: significant effect on the majority of this small receptor;
  - Strath (Strath Brora): eastern section: intermittent significant effects on areas around Sciberscross and south of the graveyard, parts of the southern/western side of the strath; the ridge line of Cnoc a'Ghrianain, and very small areas above Oldtown and on Killin Rock;
  - *Moorland slopes and hills*: significant effects on the site area and other areas within approximately 6.5km that gain a high level of visibility of the Development;

- *Sweeping moorland:* significant effects on the site area and other areas within approximately 6km that gain a high level of visibility of the Development; and
- Loch Fleet, Loch Brora and Glen Loth SLA: significant effects on small parts of the SLA, including some parts of Loch Brora, the southern loch side around and to the south of Carroll Rock, very small elevated areas above Oldtown and on Killin Rock; and west-facing slopes that rise close to the eastern edge of the Development.
- 7.13.4 There will be no significant effects on National Scenic Areas, GDLs, or SLAs other than some parts of the *Loch Fleet, Loch Brora and Glen Loth SLA*. There will also be no significant effects on wild land areas, including the Ben Klibreck Armine Forest WLA. This is due largely to the baseline presence of the operational Gordonbush Wind Farm and the 275kV transmission line adjacent to the same part of the WLA that would be affected by the Development and the similarity in the ZTVs for the operational Gordonbush Wind Farm and the Development.
- 7.13.5 The assessment of effects on views is informed by a series of 17 viewpoints that have been selected, in agreement with SNH and The Highland Council, to represent visibility from sensitive locations throughout the study area. This visual assessment has found significant effects at some locations, and as with effects on landscape character, the extent of significant visual effects depends to a considerable degree on the type of visibility of the Development. Effects tend to be greater when the Development is seen without the operational Gordonbush Wind Farm, or where it has a notable effect in addition to the operational Gordonbush Wind Farm due to an increased extent across the skyline, for example. The significant visual effects are as follows:
  - Two hilltop viewpoints, as seen in Viewpoint 1 (Beinn Smeorail) and Viewpoint 9 (Ben Horn);
  - Parts of Strath Brora that people may visit for informal recreation, as seen in Viewpoints 2 and 5;
  - Intermittent significant effect on up to 3km of the minor road from Brora to Rogart travelling eastwards, as seen in Viewpoint 6 (Brora to Rogart minor road near Sciberscross), and approximately 1.4km travelling westwards, as seen in Viewpoint 3 (Brora to Rogart minor road south of Killin), with potential for an additional several hundred metres if forestry is felled, as seen in Viewpoint 4 (Brora to Rogart minor road north of Killin);
  - Intermittent significant effects on approximately 5.6km of core path SU06.02 on the west side of Loch Brora, as seen in Viewpoint 2 (Loch Brora (south-west side));
  - Significant effects on approximately 300m of core path SU06.14 on the east side of Loch Brora, with some views similar to that seen in Viewpoint 3 (Brora to Rogart minor road south of Killin); and
  - Significant effect on a part of the access track to Ben Armine Lodge, as seen in Viewpoint 12 (Track to Ben Armine Lodge).
- 7.13.6 There will be no significant effects on other routes, including the A9, A836, A839, A897, A949, national cycle routes, long distance walking routes and railway lines.
- 7.13.7 As well as assessing the effect of the Development itself, the LVIA assesses the cumulative effect that may arise when it is added to operational, consented and application stage wind

farms. The cumulative assessment indicates that the addition of the Development to operational and consented wind farms would result in significant cumulative effects on the landscape character of small parts of Strath Brora, including one very small part of the *Loch Fleet, Loch Brora and Glen Loth SLA*; the minor road from Brora to Rogart, travelling in either direction; and on the view from Creag nam Fiadh. The consideration of application stage wind farms does not lead to any additional significant cumulative effects.

7.13.8 The design process for the Development has been fundamental in the mitigation of potential significant effects, with the scoping layout of 20 turbines being reduced to the concentrated group of 16 turbines that is seen in the final layout. The key effect of this reduction was to pull turbines northwards away from Strath Brora, thus reducing the potential for significant effects to arise within and to the south of the strath. The layout design has also achieved a high level of integration with the operational Gordonbush Wind Farm, and this has been fundamental in the avoidance and reduction of effects on the landscape and visual resource.

### 7.14 References

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