

9. LANDSCAPE AND VISUAL IMPACT ASSESSMENT

9.1 Non-Technical Summary

- 9.1.1 The assessment of landscape and visual effects has been carried out to identify the significant effects that are likely to arise as a result of the Proposed Development. It has considered the effects on landscape and visual receptors during the short-term construction and long-term operational stages, as well as the cumulative effect of the Proposed Development in-conjunction and in-combination with other wind farm developments.
- 9.1.2 The Proposed Development comprises 9 wind turbines, each up to 133m in height to blade tip, which form a direct extension to an existing wind farm cluster. They are located to the north of the 17 operational Lochluichart Wind Farm turbines, 6 operational Lochluichart Wind Farm Extension turbines (thereafter known as the 'the Operational Schemes'), and 19 operational Corriemoillie Wind Farm turbines (thereafter known as 'Corriemoillie'), all of which are 125m in height to blade tip. The Operational Schemes and Corriemoillie (42 in total, hereafter known as the 'Operational Wind Farms') have an existing influence on landscape character and visual amenity within the study area.
- 9.1.3 The Proposed Development and the Operational Wind Farms occupy a part of the area of land that lies between Loch Glascarnoch to the north and Loch Luichart to the south, defined by the A835 and A832 roads respectively. It is relatively low-lying in contrast to the large scale *Rugged Mountain Massif* Landscape Character Type (LCT) to the immediate west and *Rounded Hills* LCT to the immediate east. Although also classified as part of the *Rounded Hills* LCT, the Proposed Development and Operational Wind Farms are located along the base of the low foothills which rise to the west, and into the undulating moorland and forest blocks to the east. This area is relatively low-lying amidst the context of larger hills and mountains.
- 9.1.4 The assessment has found significant effects on landscape character receptors will arise during the short-term construction stage but not the operational stage. The significant effects during the construction stage will arise across parts of three Landscape Character Units (LCUs), one within which the Proposed Development will be located and the other two adjacent to this. These effects will be contained within a 5km radius of the Proposed Development and occur only in relation to the construction stage.
- 9.1.5 The Proposed Development is not within an area covered by any national or regional landscape designations, which would otherwise denote special scenic value. The regional designation of Special Landscape Areas (SLAs) covers the more scenic landscapes surrounding the Site. There will be no significant effects on landscape designations as a result of the Proposed Development.
- 9.1.6 The Proposed Development is not within an area covered by a Wild Land Area (WLA), which would otherwise denote physical attributes and perceptual responses relating to wildness qualities. While WLAs cover landscapes around the Site, there will be no significant effects on these as a result of the Proposed Development.

- 9.1.7 The assessment has found significant effects on road-users on the A835 will arise over a section 1km to the west of Aultguish Inn and 3.3km to the east, during both the construction and operational stages. Significant effects will also arise in respect of residents and visitors to Aultguish Inn during the construction and operational stages. Walkers on the Old Drover's Road will undergo significant effects during the construction stage but not the operational stage. No other significant effects will arise in respect of all other visual receptors during both the construction and operational stages.
- 9.1.8 The assessment identifies that a significant in-conjunction cumulative effect will arise in respect of the views of visitors and residents at Aultguish Inn and road-users on the A835. Despite the presence of the Operational Wind Farms in the same sector of the view, the addition of the closer range proposed turbines will give rise to a significant cumulative effect.
- 9.1.9 No other visual receptors or representative viewpoints will undergo significant effects or significant in-conjunction cumulative effects, during the construction or operational stages of the Proposed Development.
- 9.1.10 All significant effects occur within an approximate 5 kilometre (km) radius of the Proposed Development. Beyond this it is unlikely that significant effects will arise.
- 9.1.11 The limited occurrence of significant effects during both the construction and operational stages relate to a combination of the following factors. Firstly, the location of the Proposed Development close to the Operational Wind Farms developments, will ensure it will appear as an integrated extension. Secondly, the similarities in appearance ensure the proposed turbines integrate with the operational turbines despite some small differences in height and blade length. Thirdly, the Proposed Development will be contained within the same landscape character type as the Operational Wind Farms. This forms a clear association between this type of development and this type of landscape and avoids spreading the influence into other surrounding landscapes. Fourthly, the landscape in which Proposed Development and Operational Wind Farms are located, is relatively low-lying amidst a wider upland landscape. This reduces the extent to which the Proposed Development will be visible and where visibility does occur, moderates the influence the Proposed Development will have on landscape and visual receptors. This is confirmed in the ZTV maps that support the LVIA.
- 9.1.12 To assist the decision maker, the assessment also provides an overview of the likely combined cumulative effects of the Proposed Development in-combination with the relevant Operational Wind Farms. The purpose of this is to consider whether the resulting pattern of development (including the Proposed Development) will result in the redefinition of landscape character or visual receptors.
- 9.1.13 The assessment has found that significant in-combination cumulative effects will arise across parts of the Lochluichart LCU, Inchbae LCU and Ben Wyvis LCU, all of the Rounded Hills LCT and the Aultguish LCU of the Undulating Moorland LCT. Significant effects on landscape character during the construction stage will be occur within a 12km radius of the Proposed Development. Significant in-combination cumulative effects will arise in respect of the designated Ben Wyvis SLA and the Rhiddoroch – Beinn Dearg – Ben Wyvis WLA, across those parts which coincide with where the Ben Wyvis and Inchbae LCUs will undergo

significant in-combination cumulative effects. Visual receptors associated with Aultguish Inn and the A835, the Old Drover's Road and the Ben Wyvis mountain range, will also undergo significant in-combination cumulative effects

- 9.1.14 Significant in-combination cumulative effects will arise across an approximate 10km radius of the Proposed Development. The in-combination cumulative effects will extend further than the solus effects or in-conjunction cumulative effects as the Proposed Development is being assessed in combination with the 42 turbines of the Operational Wind Farms rather than in addition to it. The extent of the combined effects is, however, also limited, despite the larger size of the combined developments, owing largely to the consolidated nature of the proposed and operational turbines, their location within a relatively low-lying area amidst rising hills and mountains and the notable reduction in visibility that occurs beyond the enclosing upland landscapes.
- 9.1.15 The assessment of in-combination cumulative effects has helped inform an understanding of how the Proposed Development will affect the pattern of wind farm development in this area, with consideration of the relationship between the landscape and the Operational Wind Farms, and the extent to which the Proposed Development in combination with the Operational Wind Farms will redefine landscape character.
- 9.1.16 The Proposed Development will reflect the existing pattern of wind farm development by extending a part of the northern edge of the existing consolidated group and containing this type of development within the same LCU. While there will be significant in-combination cumulative effects, as described above, the Proposed Development in combination with the Operational Wind Farms will not have a sufficient magnitude of change to redefine the character from a landscape with wind farms to a wind farm landscape.
- 9.1.17 In summary, the Proposed Development will give rise to a small number of significant landscape and visual effects, albeit all contained within a relatively close-range area and mostly relating to the short-term effects of the construction stage.

9.2 Introduction and Overview

9.2.1 This Landscape and Visual Impact Assessment (LVIA) chapter of the Environmental Impact Report (EIA Report) evaluates the potential landscape and visual effects of the Lochluichart Wind Farm Extension II (hereafter referred to as 'the Proposed Development'). It has been prepared by chartered Landscape Architects at Optimised Environments Limited (OPEN) on behalf of the Applicant. The LVIA has been undertaken between 2017 and 2018. It considers the effects of the Proposed Development on the fabric of the Site, on landscape character and visual amenity, and on the cumulative effects arising from the Proposed Development in-conjunction and in-combination with other wind farms.

9.2.2 This LVIA contains the following sections:

- Introduction;
- Methodology and Approach;
- Baseline Information;

- Design Evolution;
- Scope of the Assessment;
- Assessment of Effects on Landscape Receptors (including Wild Land);
- Assessment of Effects on Visual Receptors; and
- Summary of Assessment of Effects.

9.2.3 There is one technical appendix to this LVIA, included in **Volume 3** of the EIA Report, which should be read in conjunction with the LVIA.

- Appendix 9.A: Methodology, a detailed description of the methodology used in the landscape and visual assessment (a summary is provided in **Section 9.3** of this chapter).

Project description

9.2.4 **Chapter 3: Project Description** provides descriptions of the Proposed Development, the main components of the Proposed Development, the associated infrastructure and the stages of construction, operation and decommissioning.

9.2.5 The Proposed Development comprises nine wind turbines which will have a maximum blade tip height of up to 133m. In the visualisations the turbines are shown with a tower height of 76m and a rotor diameter of 114m, although the final dimensions of these components are yet to be determined. Access will be taken from the existing site entrance on the A835 and will connect to a network of existing and new tracks to the wind turbines. Other permanent infrastructure will include a sub-station, control building, battery storage facility. Temporary infrastructure will include two borrow pits and a construction compound. The Proposed Development Layout is shown in **Figure 3.1**.

9.2.6 The Proposed Development will be located to the north of the Operational Schemes and Corriemoillie. These developments comprise 17, 6 and 19 turbines, respectively, all of which have a maximum blade tip height of 125m, a tower height of 80m and a rotor diameter of 90m.

Project terminology

9.2.7 The terminology used in the LVIA is consistent with that set out in Chapter 1: Introduction of this EIA Report. It refers to 'the Proposed Development' for the Lochluichart Wind Farm Extension II and 'the Operational Schemes' for the operational Lochluichart Wind Farm and Lochluichart Wind Farm Extension and 'Corriemoillie' for the operational Corriemoillie Wind Farm. When both the Operational Schemes and Corriemoillie are referred to, they will be known as the 'Operational Wind Farms'. At points in the LVIA, it is necessary to refer to individual turbines or groups of turbines, in which case the terminology refers to the 'proposed turbines' for the Proposed Development turbines. The assessment uses the term 'turbines' when referring generally to wind turbines.

9.2.8 Where distances between receptors and the Proposed Development are used in this assessment, they refer to the distance from the closest edge of the receptor to the closest turbine of the Proposed Development, unless otherwise stated.

9.2.9 Where the landscape and visual effects of the Proposed Development are described, the future tense rather than the conditional tense is used to evaluate the effects predicted rather than to anticipate the outcome of the application process.

Project interactions

9.2.10 This LVIA has been carried out in conjunction with the design iteration of the Proposed Development as documented in **Chapter 3: Project Description** and has closely informed the final layout and design. This process is described in **Section 9.5: Design Evolution** in this chapter.

Study Area

9.2.11 The LVIA covers a Study Area of 40km radius, which follows guidance given in Scottish Natural Heritage's 'Visual Representation of Windfarms Version 2.2'. The 40km Study Area is measured beyond an 'enclosing circle' around the proposed turbines, as shown in **Figure 9.1**. Graphic information, including a Zone of Theoretical Visibility (ZTV) diagram, has been produced to cover the 40km Study Area, as shown in **Figures 9.6** and **9.7**. 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 the Proposed Development may have a significant landscape or visual effect. It is considered very unlikely for a significant effect to occur towards the edges of the Study Area and this is confirmed by the assessment undertaken.

9.2.12 Cumulative effects are assessed with other existing and proposed wind farms within a distance of up to 40km radius, in accordance with relevant cumulative assessment guidance. Cumulative Wind Farms are shown in **Figure 9.11**.

Consultation

9.2.13 The Highland Council (THC) and Scottish Natural Heritage (SNH) have been consulted in the process of the LVIA and have provided input in the following ways;

- Pre-application Advice Pack produced by THC and issued on 13th December 2016, incorporating LVIA comments from THC and SNH;
- Pre-application meetings between the Applicant, their consultants, THC and SNH on 23rd November 2016 and 14th August 2017; and
- Scoping opinion responses prepared by THC and SNH on 13th June 2017.

9.2.14 Consultation has led to agreement on the content of the viewpoint list, content of the cumulative wind farm list and the requirement for the graphic production, which is to follow THC's 'Visualisation Standards for Wind Energy Developments' (July 2016) and SNH's 'Visual Representation of Wind Farms Version 2.2' (February 2017). A summary of consultation responses relevant to this LVIA is shown in **Table 9.1**. Reference to the iterative layouts relates to the iterative design process which took place during this time, and which is described in more detail in **Section 9.5: Design Evolution** in this chapter.

Table 9.1 Consultee Responses

Consultation responses	Consultee comment	Action by OPEN
<p>Pre-Application Advice Pack: THC / SNH</p>	<p><i>'While the Council is yet to complete its work in relation to landscape sensitivity and strategic capacity, required to inform the Onshore Wind Energy Supplementary Guidance, experience from elsewhere indicates that capacity will likely be found through sensitive extension to existing schemes rather than identifying new areas. An extension to this scheme may therefore be acceptable in principle.'</i></p>	<p>The iterative design process has sought to keep the Proposed Development closely associated with the Operational Wind Farms.</p>
	<p><i>'...an extension within the area proposed is likely to undo a significant aspect of the mitigation secured with the amendments to the original scheme and raised again as an issue when Lochluichart Extension I was consented.'</i> <i>'...the impact is likely to focus within those areas / those receptors that the mitigation sought to resolve first time round; specifically Ben Wyvis (route to/from) and the A835; particularly heading west between Inchbea and Aultguish which is of concern.'</i></p>	<p>In Section 9.8 of this LVIA, a detailed assessment of Viewpoints 1 and 2 presents the potential effects on road-users on the A835 and Viewpoint 5 on hill walkers on the Ben Wyvis range.</p>
<p>Scoping Opinion Response: Scottish Government</p>	<p><i>'SNH – Scottish Ministers agree with SNH comments that "the applicants will need to examine the history of the currently consented schemes of Lochluichart and its extension and Corriemoillie, particularly the evolution of their design, associated mitigation and the discussions leading towards consents. The Environmental Statement should clearly illustrate whether or not this proposal would undermine the mitigation and design thinking that has been built into the consented schemes." Scottish Ministers expect to see this covered in the Environmental Statement submitted.'</i></p>	<p>Section 9.5 of this LVIA covers the issue of design evolution dating back to Lochluichart and its Extension. This highlights the sensitivity of the area to the north of the Operational Schemes to further development.</p>
<p>Scoping Opinion Response: THC</p>	<p><i>'The Council expects the ES to consider the visual impact of the development. This should include the expected impact of any on-site borrow pits, access roads and ancillary buildings/structures regardless of the fact that the principal structures will be the primary concern. It should be noted that the Council is not supportive of transformers being located externally to each turbine tower in the interests of minimising visual clutter. These should be excluded from the submission.'</i></p>	<p>The assessment of effects on visual receptors presented in Section 9.8 of this LVIA considers the visual impact of all infrastructure relating to the Proposed Development where it is visible and where its visibility will influence the assessment.</p>
	<p><i>'The Highland Council's stance on 'effects on specific views' are effects experienced by receptors of views from or to landmark locations. Judgement of value of views should take account of indicators such as those listed in GLVIA3. E.g. -</i></p> <ul style="list-style-type: none"> • relation to heritage assets • planning designations • appearance in guidebooks/tourist maps • through references in literature and art 	<p>The assessment of 'specific views' takes account of guidance set out in GLVIA3. Formal viewpoints carry more weight in the assessment of value as these are often points from which iconic or optimum views are experienced and which attract larger groups of viewers.</p>

	<p>Where views are from landmark locations, provision of facilities for their enjoyment eg parking and interpretive material will also be an indicator. However, where views are to the landmark no lack of value should be construed solely on the basis of absence of such features. By their nature landmarks may be appreciated for their constancy from a range of routes and locations, with no one spot being perceived as providing the essential view.'</p>	
	<p>'With regard to 'effects on general visual amenity' The Highland Council consider these to be effects experienced across an area as receptors move through and within the landscape. In practice, Visual Impact Assessments often focus on specific views with less emphasis on consideration of the general visual amenity experienced by people. GLVIA3 is clear on the need to identify:</p> <ul style="list-style-type: none"> • areas of visibility • groups of people affected and their susceptibility to change • nature and scale of visual effect • whether 'viewpoints' are representative, specific or illustrative <p>Again, we can break this down. Studies should establish:</p> <ul style="list-style-type: none"> • the area in which the development may be visible • the different groups of people who may experience views of the development • the viewpoints where they will be affected • the nature of the views at those points • the approximate or relative number of different groups of people who will be affected by changes in views or visual amenity.' 	<p>The assessment of effects on general visual amenity takes account of guidance set out in GLVIA3 and considers the criteria set out opposite.</p> <p>It must be noted that whilst the types of viewers experiencing views can be broadly predicted, there is no available information upon which to base a prediction of the number of viewers.</p>
	<p>'Developers and their consultants are encouraged to think about visual impact in a layered way including:</p> <ul style="list-style-type: none"> • experience of people as they move around the area- this might include looking at travel routes as 'typical journeys for receptor groups' rather than assessment of visibility of development over the entire length of a numbered route within the study area. • identification of any key valued views, recognising that these might be: <ul style="list-style-type: none"> - views from key locations - views to any key features' 	<p>Theoretical visibility shown in the ZTV (Figure 9.6) combined with site survey work show that actual visibility will only be experienced from a short section of the A835. More extensive visibility will occur over walking routes in the area and the sequential effect on these has been considered in the assessment.</p>
	<p>Generally:</p> <ul style="list-style-type: none"> • Methodology for the Assessment: must make clear what thresholds are defined for significance of impact. • Mitigation measures must be clearly identified and their effectiveness evaluated. <p>This applies to all aspects of the development, including tracks borrow pits, compounds, control buildings, lay-down areas etc.</p>	<p>Appendix 9.A sets out the Methodology for the LVIA including definition of the significance of effects.</p> <p>Section 9.5 describes how the Proposed Development, including associated infrastructure, have been designed with embedded mitigation.</p>
	<p>'The Visual Impact Assessment report should not be an esoteric document which can only be deciphered by Landscape and Planning professionals. Any member of the public who may be affected should be able to recognise themselves in the receptor descriptions and understand what impacts they are likely to experience. The assessment should be Receptor-led in preference to</p>	<p>The assessment of visual receptors has been designed to be receptor led rather than viewpoint led. This LVIA has been prepared to make it clear, easily accessible and transparent in its findings, whilst at the same time reflecting the technical requirements</p>

	<i>Viewpoint-led.'</i>	as set out in GLVIA3.
	<i>'The Council is pleased to see that the applicant intends to involve the Council in viewpoint selection. It should be noted that the requirements of SNH and the Council may differ, with the Council probably looking for more specific viewpoints based on known OS viewpoints or local landmarks where visual amenity may be the key issue as opposed to those 'representative' views that are more important to determine impact on landscape resource. The purpose of the selected and agreed viewpoints shall be clearly identified and stated in the supporting information. It should therefore be clear that the viewpoint has been chosen for the purpose of landscape assessment, visual impact assessment, cumulative assessment, sequential assessment, to demonstrate a representative view or for assessment of impact on designated sites, communities or individual properties.'</i>	The purpose of the selected and agreed viewpoints are set out in Section 9.6 in terms of the type of view, the visual receptors it is associated with and what part of the assessment it is informing.
	<i>'Given the potential scale of turbine viewpoints may need to be considered beyond the 35km radius.'</i>	The proposed turbines are up to 133m to blade tip and in line with SNH guidance a 40km radius Study Area has been applied. While the ZTV may show patches of theoretical visibility beyond 35km it will be highly unlikely for significant effects to arise from this range, especially when existing wind farm developments mark this location.
	<i>'Viewpoints within 5 kilometres of a development should be precisely identified on an A4 size Ordnance Survey extract at a scale of 1:25000. The position of the development and the proposed field of view of photography shall be shown on the map. Viewpoints located more than 5km from a development shall be identified on an A4 size Ordnance Survey extract at a scale of 1:50,000 and the development and the proposed field of view of photography shall be shown on the map. The Council may also specify on a large scale plan an exact viewpoint position that they wish to be used and provide a reference photograph.'</i>	Maps of the Proposed Development and viewpoints, as described, have been included in the LVIA figures.
	<i>'The Council expects visualisations provided as part of the ES to be undertaken in accordance with The Council's Visualisation Standards for Wind Energy Development.'</i>	Visualisations have been included in the LVIA figures which accord with THC visualisation standards.
Scoping Opinion Response: SNH	<i>'The applicants will need to examine the history of the currently consented schemes of Lochluichart and its extension and Corriemoillie, particularly the evolution of their design, associated mitigation and the discussions leading towards consents. The Environmental Statement should clearly illustrate whether or not this proposal would undermine the mitigation and design thinking that has been built in to the consented schemes.'</i>	Section 9.5 of this LVIA covers the issue of design evolution dating back to Lochluichart and its Extension. This highlights the sensitivity of the area to the north of the Operational Schemes to further development.
	<i>'We support the iterative approach which is proposed for the windfarm design and assessment. We recommend that the ES explains the design process used to select the final layout assessed within the ES, any alternatives considered and how landscape and visual mitigation has</i>	Section 9.5 Design Evolution of this LVIA presents the iterative design process undertaken and highlights how mitigation has been embedded into the design.

	<i>been incorporated.'</i>	
	<i>'In particular due cognisance should be taken of the proximity of the development to the tourist routes of the A835 and the A832 as well as summits of the popular hill walking routes in the area. Sequential viewpoints and an assessment should consider the network of main and secondary roads and other forms of transport including recreational routes within the study area and in particular any routes that are designated for tourist interest.'</i>	Theoretical visibility shown in the ZTV (Figure 9.6), combined with site survey work, show that actual visibility will only be experienced from a short section of the A835. Viewpoint 1 and 2 have been included to represent this section. More extensive visibility will occur over walking routes in the area and the sequential effect on these has been considered.
	<i>'We note the scoping report recognises the potential impacts of this proposal on a number of wild land areas and proposes to assess those impacts. We confirm that the current approach which should be taken is that detailed in our version of 'Assessing Impacts on Wild Land technical guidance' open for consultation between 26th January and 7th April. However, if there is to be a significant delay between this scoping advice and submission of an application and our final version of the guidance is published we can provide further advice.'</i>	The assessment of effects on Wild Land Areas follows the approach set out in SNH's 'Assessing Impacts on Wild Land technical guidance'. No further update to this guidance has been published on the SNH website.
	<i>'We agree with the reasoning provided in the scoping report in relation to the effects on Central Highlands WLA, Flowerdale, Shieldaig – Torridon WLA and Coulin and Ledgowan Forest WLA and that these areas are scoped out of the LVIA as significant effects on these areas are unlikely to occur.'</i>	Noted.
	<i>'The visual assessment and choice of viewpoint locations should be informed by initial ZTVs of the Lochluichart Wind farm, its first extension and Corriemoillie wind farm and modelled at a suitable scale (OS 1:50,000 base) extended out to a distance of 35kms (distance to be finalised on receipt of information regarding turbine heights).'</i>	The visual assessment and choice of viewpoints have been informed by LVIAs for the previous wind farm developments in this area.
	<i>'The visual and cumulative visual assessment should include an assessment from static receptors as well as sequential viewpoints taken along routes used by for example pedestrians and vehicles.'</i>	Static receptors are considered in the assessment.
	<i>'The site boundary of this scheme is immediately adjacent to three other schemes. There is the potential that the combined effect of further turbines would be to create a much larger single windfarm. We suggest in the analysis of alternatives consideration is given to the design compatibility with the adjacent schemes, to mitigate cumulative landscape and visual impacts. This should include consideration and analysis of the site capacity to accommodate further development. This would enable the Determining and Statutory Authorities and local community to fully understand the design development and cumulative impacts.'</i>	The potential cumulative effects of the Proposed Development in conjunction with the three neighbouring developments have formed the main consideration in the iterative design process.
	<i>'We support the wider assessment of potential cumulative landscape and visual impacts within the study, as outlined in Section 4.141 – 4.143. In particular</i>	Cumulative developments, as shown in Figure 9.11 , highlight the distinct absence of wind farm proposals in

	<p><i>from the number and location of existing, consented and projects in planning as we have concerns regarding the potential for significant cumulative effects and a subsequent significant erosion of the quality and extent of the wild land resource and regionally designated landscapes.'</i></p>	<p>this area. There is one consented site beyond 35km, no application sites, and scoping sites at or beyond 20km.</p>
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9.3 Methodology and Approach

9.3.1 This section provides a summary of the methodology used to carry out the LVIA, with the full methodology described in **Appendix 9.A**. This methodology has been specifically devised by OPEN for the assessment of wind farms and complies with "Guidelines for the Assessment of Landscape and Visual Impacts: Third Edition' (GLVIA3). In addition to GLVIA3, the following sources have been used in the formulation of the assessment methodology and the presentation of graphics:

- The Landscape Institute with the Institute of Environmental Management and Assessment (2013). Guidelines for Landscape and Visual Impact Assessment, Third Edition.
- Scottish Natural Heritage (2017). Visual Representation of Wind Farms Guidance – Version 2.2.
- Landscape Institute (2011). Landscape Institute Advice Note 01/11, Photography and photomontage in landscape and visual impact assessment.
- Visual representation of development proposals: Landscape Institute Technical Guidance Note 02/17 (31 March 2017).
- Scottish Natural Heritage (2012). Assessing the Cumulative Impact of Onshore Wind Energy Developments.
- Scottish Natural Heritage (2017). Scottish Natural Heritage consultation on draft guidance: Assessing impacts on Wild Land Areas – technical guidance.
- Scottish Natural Heritage (2017). Wild Land Area Descriptions.
- Scottish Natural Heritage (2014). Published on its web-site, updated map of Wild Land Areas for the whole of Scotland (<http://www.snh.gov.uk/docs/A1323225.pdf>)
- Land Use Consultants on behalf of SNH and the Countryside Agency (2002). Landscape Character Assessment: Guidance for England and Scotland; and
- Scottish Natural Heritage (2014). Siting and Designing of Windfarms in the Landscape: Version 2.

Effects to be assessed

9.3.2 The LVIA identifies the effects that the Proposed Development will have on landscape character and visual amenity. For the purpose of the assessment, the potential effects on landscape and visual receptors are grouped into the following five categories.

Effects on physical elements

- 9.3.3 Physical effects are restricted to the area within the Proposed Development site boundary and are the direct effects on the existing fabric of the Site, such as the removal of forestry and alteration to ground cover. This category of effects is made up of landscape elements, which are the components of the landscape, such as heather moorland, that may be directly and physically affected by the Proposed Development.

Effects on landscape character

- 9.3.4 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 Proposed 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 areas and planning related landscape designations.

Effects on wild land

- 9.3.5 The assessment of effects on wild land is allied closely to effects on landscape character and consists of two parts: firstly, the identification of the extent and condition of wild land in the vicinity of the Proposed Development based on SNH's published Wild Land Areas; and secondly, the assessment of the effect that the Proposed Development will have on the Wild Land Areas. The assessment of Wild Land Areas follows the methodology set out in Scottish Natural Heritage consultation on draft guidance: Assessing impacts on Wild Land Areas – technical guidance.

Effects on visual receptors

- 9.3.6 The assessment of effects on visual receptors is an assessment of how the introduction of the Proposed Development will affect the views of people throughout the Study Area. The assessment of effects on visual receptors considers the effects that the Proposed Development will have on people's views from notable settlements, roads, railways, paths and other features and attractions found throughout the Study Area. The assessment uses viewpoints to represent the wider visual amenity of residents, road and rail-users, walkers and workers.

Cumulative effects

- 9.3.7 Cumulative effects arise where the Study Areas for two or more wind farms overlap so that both of the wind farms 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 study areas. In SNH guidance, cumulative effects are described as follows '*Cumulative impacts can be defined as the additional changes caused by a proposed development in conjunction with other similar developments or as the combined effect of a set of developments taken together.*' In this LVIA, both in-conjunction and in-combination effects are assessed in respect of the cumulative context. When assessing in-conjunction

effects, it is the incremental effect of the addition of the Proposed Development to the cumulative situation that is being assessed. When assessing in-combination effects, it is the overall cumulative effect of wind farms including the Proposed Development that is being assessed.

- 9.3.8 In accordance with SNH Guidance, the cumulative assessment evaluates the likely effects that will arise from the addition of the Proposed Development in-conjunction and in-combination with the baseline windfarms and cumulative wind farm scenarios.
- 9.3.9 A significant cumulative effect will occur where the additional effect of the Proposed Development with other existing and/or proposed wind farms will result in a landscape character or view that is defined by the presence of more than one wind farm and is characterised primarily by wind farms. It should be noted that even if the Proposed Development itself is assessed to have a significant effect on a landscape or visual receptor, it does not necessarily follow that the cumulative effect will also be significant.
- 9.3.10 To assist the decision maker, the assessment also provides an overview of the likely combined cumulative effects of the Proposed Development in-combination with relevant operational and consented windfarms. The purpose of this is to consider whether the resulting pattern of development (including the Proposed Development) will result in the redefinition of landscape character or visual receptors. For example, if the existing landscape character displays a 'landscape with windfarms' characteristic, where windfarms are one of a number of defining characteristics, the assessment will consider whether this may be redefined as a 'wind farm landscape' when the Proposed Development is added in to the overall pattern, where wind turbines become the most prevalent defining characteristic of the landscape. Combined cumulative effects are linked closely to landscape and visual capacity and the assessment has regard to factors such as the relationship of the combination of wind farms to landscape character types and the overall influence of the ZTV, in reaching an informed opinion as to the extent and nature of any combined cumulative effects.

Significance of the effects

- 9.3.11 The objective of the assessment of the Proposed Development is to predict the significant effects on the landscape and visual resource. In accordance with the Environmental Impact Assessment (Scotland) Regulations 2011 and the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2000 as amended, the LVIA effects are assessed to be either significant or not significant. The LVIA does not define intermediate levels of significance as the Regulations do not provide for these.
- 9.3.12 The significance of effects is assessed through a combination of two considerations – the sensitivity of the landscape or visual receptor and the magnitude of change that will result from the Proposed Development. In accordance with the Landscape Institute's GLVIA3, OPEN's methodology requires the application of professional judgement. Although it is not reliant on the use of a matrix, the matrix presented in **Table 9.2** has been included to illustrate how combinations of the ratings for sensitivity and magnitude of change can give rise to significant effects, as well as to give an understanding of the threshold at which significant effects may arise.

Table 9.2 Illustrative Matrix of Significant Effects

Magnitude	High	Medium-High	Medium	Medium-Low	Low	Negligible
Sensitivity						
High	Significant	Significant	Significant	Significant or not significant	Not Significant	Not Significant
Medium-High	Significant	Significant	Significant or not significant	Significant or not significant	Not Significant	Not Significant
Medium	Significant	Significant or not significant	Significant or not significant	Not Significant	Not Significant	Not Significant
Medium-Low	Significant or not significant	Significant or not significant	Not Significant	Not Significant	Not Significant	Not Significant
Low	Significant or not significant	Not Significant	Not Significant	Not Significant	Not Significant	Not Significant

9.3.13 Effects that are assessed within the darker grey boxes in the matrix are significant in terms of the requirements of the EIA Regulations. Those effects that are assessed within the light grey boxes may be significant, or not significant, depending on the specific factors and effect that is assessed in respect of a particular landscape or visual receptor. Those effects that are assessed within the white boxes are not significant. 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.

Sensitivity

9.3.14 Sensitivity is an expression of the ability of a landscape or visual receptor to accommodate the Proposed Development. The sensitivity is determined through a combination of the value of the receptor, and the susceptibility of the receptor to the Proposed Development.

9.3.15 Levels of sensitivity - high, medium to high, medium, medium to low, low, and negligible, are applied in order that the judgement used in the process of assessment is made clear. The criteria used to determine sensitivity differ for the effects on landscape receptors and visual receptors, as well as the cumulative effects on both. These criteria are explained in full in **Appendix 9.A**.

Magnitude of change

9.3.16 Magnitude of change is an expression of the extent of the effect on the landscape and visual receptors that will result from the introduction of the Proposed Development. The magnitude of change is assessed in terms of the size and scale of the effect and the geographical extent of the area influenced.

9.3.17 Levels of magnitude of change - high, medium to high, medium, medium to low and low - are applied in order that the judgement used in the process of assessment is made clear. The criteria used to determine magnitude of change differ for the effects on landscape receptors and visual receptors, as well as the cumulative effects on both. These criteria are explained in full in **Appendix 9.A**.

Nature of the effects

- 9.3.18 In relation to many forms of development, the LVIA will identify 'beneficial' and 'adverse' effects by assessing these 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 the effects of wind farms can be measured as being categorically 'beneficial' or 'adverse'. In some disciplines, such as noise or ecology, it is possible to quantify the effect of a wind farm in numeric terms, by objectively identifying or quantifying the proportion of a receptor that is affected by the Proposed Development and assessing the nature of that effect in justifiable terms. However, this is not the case in relation to landscape and visual effects, where the approach combines quantitative and qualitative assessment.
- 9.3.19 It is evident from existing research and publications on public attitudes to wind farms, that public opinion nationally towards wind farms is diverse and that some observers perceive the visual effects of a wind farm as beneficial or neutral, while others may perceive the same effects as adverse. This varied perception often depends on the type of effect, the perception/opinion of the observer and whether the public attitudes surveyed are pre or post construction.
- 9.3.20 The attribution of 'beneficial' and 'adverse' nature of effects is used inconsistently by landscape professionals when preparing LVIA's for wind farms and there is not a consensus of opinion that supports its use for wind farm assessments. Generally, in the development of 'new' wind farms, a precautionary approach is adopted by OPEN, which assumes that significant landscape and visual effects will be weighed on the adverse side of the planning balance. Beneficial effects may, however, arise in certain situations. Judgements on the nature of effect are based on professional experience and reasoned opinion informed by best practice guidance. Unless it is stated otherwise, the effects considered in this assessment are considered to be adverse in order that a worst-case assessment is represented.

Duration and reversibility

- 9.3.21 The effects of the Proposed Development are of variable duration, and are assessed as short-term or long-term, and permanent or temporary/reversible. It is proposed that the operational life of the wind farm will be 25 years. The turbines and turbine foundations, site access tracks and substation will be apparent during this time. These effects are considered to be long-term.
- 9.3.22 Other infrastructure and operations such as the construction processes and plant, the construction compound and lay down areas will be apparent only during the initial period of the Proposed Development and are considered to be short-term effects. The borrow pit excavation and use will also be short-term. At the end of the construction process they will be restored, although the altered ground profile may remain evident in the long term.
- 9.3.23 The reversibility of effects is variable. While the major effects on the landscape and visual resource, which result from the presence of the turbines are long term, they are also reversible as the turbines will be removed on decommissioning. The effects that will occur during the construction period and decommissioning of the

Proposed Development, from the use of tall cranes and heavy machinery, are temporary.

9.3.24 Permanent effects include physical removal of landscape elements required for the development of the Proposed Development, and any residual effects that remain following decommissioning. Underground cabling will remain but will have no permanent landscape and visual effects. The access tracks may be retained at the request of the landowner or otherwise they will be re-graded and local vegetation reinstated from the seed bank material. Turbine foundations will be left in-situ, below ground, and have no residual landscape and visual effects following the restoration of ground cover during decommissioning. In order to avoid repetition, the duration and reversibility of effects are not reiterated throughout the assessment.

9.3.25 Scottish Planning Policy at paragraph 170 states '*Areas identified for wind farms should be suitable for use in perpetuity. Consents may be time-limited but wind farms should nevertheless be sited and designed to ensure impacts are minimised and to protect an acceptable level of amenity for adjacent communities.*' Despite the temporary nature of the consent being sought, the assessment has considered the effects of the Proposed Development as if the consent were in perpetuity.

Graphic Production

Zone of Theoretical Visibility (ZTV)

9.3.26 The ZTVs have been generated using GIS software (ESRI ArcGIS Version 10.5) to demonstrate the number of wind turbines that may theoretically be seen from any point in the study area. The hub height ZTV shows the number of wind turbine hubs of the Proposed Development theoretically visible in the study area. When used in conjunction with the blade tip ZTV, the hub height ZTV provides an indication of the degree to which the wind turbines may be visible.

- There are limitations in this theoretical production, and these should be considered in the interpretation and use of the ZTV:
- The ZTV illustrates the 'bare ground' situation, and does not take into account the screening effects of vegetation, buildings, or other local features that may prevent or reduce visibility;
- The ZTVs are based on theoretical visibility from 2 m above ground level;
- All ZTVs are based on Ordnance Survey (OS) Terrain 5 Digital Terrain Model (DTM). Due to the extensive size of the resulting dataset, and to ensure correlation with wireline outputs, the data has been interpolated to a 10m grid resolution;
- The Blade Tip ZTV does not indicate the decrease in visibility that occurs with increased distance from the Proposed Development. The nature of what is visible from 3 km away will differ markedly from what is visible from 10 km away, although both are indicated on the Blade Tip ZTV as having the same level of visibility; and
- 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 nine turbines may gain views of the smallest extremity of blade tips, or of nine full

turbines. This can make a considerable difference in the effects of the Proposed Development on that area. The hub height ZTV should be used in conjunction with the blade tip ZTV to provide an indication of the degree to which the wind turbines are visible.

- 9.3.27 These limitations mean that while the ZTVs are used as a starting point in the assessment, providing an indication of where the Proposed Development will theoretically be visible, the information drawn from the ZTV is checked with wirelines and in the field, to ensure that the assessment conclusions represent the visibility of the Proposed Development reasonably accurately.
- 9.3.28 The LVIA includes a Horizontal Angle ZTV. This has been generated using Arcmap 10.5 software and the same data as the other ZTVs. The Horizontal Angle ZTV shows the horizontal field of view (in degrees) that may be affected by views of the Proposed Development and serves to provide an indication of the degree to which the magnitude of potential impact may reduce with increased distance from the wind farm. There may be small discrepancies between the areas affected by theoretical visibility when compared with the Blade Tip ZTV. These occur around the edges of the plotted areas where the field of view that may be affected by theoretical visibility of one small blade tip in the ZTV is not picked up by the horizontal angle ZTV. This appears to be as a result of the different analytical processes used by the software to generate this information. This discrepancy is not considered material. As with the Blade Tip ZTV analysis, the Horizontal Angle ZTV is a helpful starting point for assessment.

Visualisations

- 9.3.29 The viewpoint assessment is illustrated by a range of visualisations, including photographs and photomontages, which accord with SNH's Visual Representation of Wind Farms Version 2.2 (SNH, 2017) and THC Visualisation Standards (THC, 2016). Visualisations of wind farms have a number of limitations when using them to form a judgement on a wind farm proposal. These include:
- A visualisation can never show exactly what the wind farm will look like in reality due to factors such as: different lighting, weather and seasonal conditions, which vary through time and the resolution of the image;
 - The images provided give a reasonable impression of the scale of the wind turbines and the distance to them, but can never be 100% accurate;
 - A static image cannot convey wind turbine movement, or lighting from the sun on the wind turbines blades as they move;
 - The viewpoints illustrated are representative of views in the area, but cannot represent visibility at all locations;
 - To form the best impression of the effects of the wind farm proposal these images are best viewed at the viewpoint location shown; and
 - The visualisations must be printed at the right size to be viewed properly (A1 width or as otherwise specified) and viewed at a comfortable viewing distance.
- 9.3.30 The photographs used to produce the photomontages have been taken using Canon EOS 5D and 6D Digital SLR cameras, with a fixed lens and a full-frame (35

- mm negative size) sensor. The photographs are taken on a tripod with a pano-head at a height of approximately 1.5m above ground.
- 9.3.31 To create the baseline panorama, the frames are individually cylindrically projected and then digitally joined to create a fully cylindrically projected panorama using PTGui software. This process avoids the wide-angle effect that would result should these frames be arranged in a perspective projection, whereby the image is not faceted to allow for the cylindrical nature of the full 360-degree view but appears essentially as a flat plane.
- 9.3.32 Tonal alterations are made using Adobe software to create an even range of tones across the photographs once joined.
- 9.3.33 Sections of these panoramas are then cropped and planar projected using PTGui software. These are used in the creation of the 53.5-degree field of view photomontages.
- 9.3.34 Wireline representations that illustrate the wind turbines set within a computer-generated image of the landform are used in the assessment to predict theoretical appearance of the wind turbines. These are produced with Resoft WindFarm software and are based on a terrain model with a OS Terrain 5. Where descriptions within the assessment identify the numbers of wind turbines visible this refers to the illustrations generated and therefore the reality may differ to a degree from these impressions.
- 9.3.35 Photomontages have been produced for a number of agreed viewpoints, again using Resoft WindFarm software, to provide a more realistic image of the appearance of the Proposed Development. Photomontages show the wind turbines.
- 9.3.36 The baseline photographs and cumulative wireline visualisations shown for each viewpoint cover a 90-degree field of view (or in some cases, up to 360-degree), which accords with SNH guidance. These are cylindrically projected images and provide landscape and visual context only.
- 9.3.37 The 53.5 and 63.5-degree field of view photographs, wirelines and photomontages are prepared using a planar projected image and should be viewed flat at a comfortable arm's length. These images are each printed on paper 841 x 297 mm (half A1), which provides for a relatively large scale image.
- 9.3.38 In the wirelines, the turbines are shown with the central wind turbines facing the viewer directly, with the full rotor diameter visible at its tallest extent. In the photomontages, the wind turbine rotors are shown with a random appearance with the central wind turbines facing the viewer directly.
- 9.3.39 Single frame images have been prepared for some viewpoints at the request of THC. These show a photograph and wireline or a photomontage. The photographs and photomontages are produced at a standard size from a single 50mm fixed lens photographic image (39.6-degree field of view) recalibrated to show a 75mm focal length (27-degree field of view) image. The wirelines have been generated to match this size.
- 9.3.40 For a number of viewpoints THC has requested planar panoramas for use in its single frame panoramic viewer. These have a vertical field of view of a focal length of 75 mm (18 degrees field of view), based on a recalibration of the 50mm single frame.

- 9.3.41 The photographs and other graphic material such as wirelines and photomontages used in this 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 assessments are carried out from observations in the field and therefore may include elements that are not visible in the photographs.

9.4 Baseline Information

- 9.4.1 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, what its important components or characteristics are, and how it is changing prior to the introduction of the Proposed Development.
- 9.4.2 The baseline conditions are presented under the following headings:
- Landscape character;
 - Landscape related planning policies and designations;
 - Visual receptors and views; and
 - Cumulative wind farm developments.
- 9.4.3 Operational and under construction wind farms are regarded as part of the baseline landscape character and visual amenity of the area, such that any changes resulting from the Proposed Development are assessed within this context.

Site Context

- 9.4.4 The Site comprises the east facing slopes of Meallan Teth (465m AOD) in the north, Beinn Liath Bheag (608m AOD) and Meallan Caoruinn (499m AOD) in the south, as well as the low afforested hill of Socach Allt Giubhais to the east. The Site is set below a higher and craggier ridge of hills to the west, which extend from the north to the south through the high points of Meall na Speireig (676m AOD), Beinn Liath Bheag (609m AOD), Meall nan Caorach (604m AOD) and Meall Mhic Iomhair (607m AOD). The landform rises around to become more mountainous, with the Sgurr Mor range to the west, and the Ben Wyvis range to the east. The ZTV in **Figures 9.9a** and **9.9b**, shows how these mountain landscapes contain the extent of theoretical visibility across the wider study area.
- 9.4.5 To the east of the Proposed Development lies Corriemoillie Forest. This forms an almost continuous broad band of forestry from Loch Glascarnoch in the north, to Loch Luichart in the south. Loch Glascarnoch lies approximately 1.8km to the north of the nearest proposed turbine and Loch Luichart, 3.8km to the south. Loch Fannich lies approximately 6.1km to the south-west, set in the massif of the Fannich Hills. All these lochs are man-made with large hydro dams at the south-eastern or eastern ends.
- 9.4.6 The site and its immediate surroundings are characterised by an upland landscape of predominantly open moorland with large forestry blocks across the more marginal lower slopes. Land use is broadly limited to wind farm development, hill sheep farming and forestry. There is a distinct lack of settlement or infrastructure

across these hills. Vehicular tracks access the wind farms and parts of the forestry and moorland, while a few rough paths extend deeper into the surrounding higher hills.

- 9.4.7 There are two roads in this area; the A835, which is the main road between Tore and Ullapool; and the A832, which forms a more circuitous loop around from the A835 via Gairloch and Poolewe on the west coast. These roads typically lie within the straths and along the shorelines of the lochs. Neither of these roads is designated as part of Scotland's 12 National Tourist Routes, although both are important routes in respect of tourism, the A832 forming part of the North Coast 500 route, popular with motorists and cyclists.
- 9.4.8 Settlement is sparse with development concentrated in very intermittent small villages along the main roads. The closest settlements to the Proposed Development are Lochluichart, approximately 3.7km to the south of the nearest proposed turbine and Gorstan, approximately 6.9km to the south-east.
- 9.4.9 The site lies to the immediate north of the Operational Wind Farms . All 42 turbines are 125m in height to blade tip. 17 of these turbines belong to Lochluichart Wind Farm, six to Lochluichart Wind Farm Extension and 19 to Corriemoillie. The close proximity of these developments to each other makes them appear as a single development.

Landscape Character

Landscape Character Assessments

- 9.4.10 The assessment of landscape character is based on the classification system identified in a series of SNH publications referred to as Landscape Character Assessments (LCAs). Collectively, these classify all of Scotland's landscapes into different character types (LCT) or units (LCU). **Section 9.7:** The Assessment of Effects on Landscape Character, considers the effects of the Proposed Development on the specific characteristics of each landscape character type or unit. The Site and the majority of the Study Area are covered by the following LCAs:
- Scottish Natural Heritage (1999). The Ross and Cromarty Landscape Character Assessment. Review No.119.
 - Scottish Natural Heritage (1999). Inverness District Landscape Character Assessment. Review No.114.
 - Scottish Natural Heritage (1997). Inner Moray Firth Landscape Character Assessment. Review No.102.
 - Scottish Natural Heritage (1997). Caithness and Sutherland Landscape Character Assessment. Review No.101.
- 9.4.11 The Proposed Development is situated in the area covered by the Ross and Cromarty Landscape Character Assessment, which also covers the majority of the Study Area. The distribution of landscape character types (LCTs) within these (LCAs) is shown in **Figure 9.2** and in conjunction with the ZTV in **Figure 9.9**. The Landscape Character Assessments refer to LCTs which are defined as:

"tracts of countryside...which have a unity of character due to particular combinations of landform and landcover and a consistent and distinct pattern of constituent elements".

- 9.4.12 Each LCT shares distinct characteristics that are typical of that landscape. Because the LCTs often occur more than once or are especially wide-ranging, they are given names that associate them with their local geographical location. These areas are referred to as Landscape Character Units (LCUs) of that type. For example, where many separate areas of the *Rounded Hills* LCT occur across the Study Area, these are distinguished by adding their geographical name to each LCU. Where wide-ranging areas of the *Rounded Hills* LCT occur, these have been subdivided using logical geographical boundaries. This approach ensures the assessment focuses on the specific attributes of the local landscape character.
- 9.4.13 The landscape character assessments outlined in the SNH publications have been used as a basis for further, refined, studies of landscape character.
- 9.4.14 The LCAs provide a description of the landscape resource within the Study Area and describe a hierarchy of landscape classification. The aim of these documents is to provide a detailed description and analysis of the different LCTs in the area. They also assess the sensitivity of these landscapes against existing and future pressures and opportunities for change, with guidelines provided as to how these changes can be accommodated and how the different landscapes can be conserved, enhanced, improved or restructured as appropriate.
- 9.4.15 The Site lies within the *Rounded Hills* LCT as identified in the Ross and Cromarty LCA and in which the Operational Wind Farms are located. The *Rounded Hills* LCT comprises hills which are typically large in scale, with steeply sloping sides and gently rounded tops of similar height, so that collectively they form an upland mass with few distinctive features. The hills are generally open and characterised by blanket moorland vegetation, albeit with blocks of coniferous woodland plantation covering many of the lower hill slopes.
- 9.4.16 The *Rounded Hills* LCT covers an extensive band of land from Strath Bran in the south-west, across Ben Wyvis in the centre, to Beinn Tharsuinn in the north-east, thus characterising much of the study area. For the purposes of the assessment, this wide-ranging LCT has been subdivided into the Ben Wyvis LCU, Inchbae LCU and Lochluichart LCU. The subdivisions reflect local changes in character and enable a more focussed assessment of the effects on landscape character.
- 9.4.17 The surrounding landscape comprises a mix of smaller LUCs of the *Undulating Moorland* and *Rocky Moorland* LCTs. The *Undulating Moorland* LCTs are made distinct by their lower, irregularly shaped and predominantly horizontal landform, albeit with some occasional rock outcrops. The *Rocky Moorland* LCTs are characterised by rocky and irregular landform with scattered rocks and outcrops. Where occasional narrow glens occur, these often accommodate communication routes and services. The majority of the *Rocky Moorland* LCT is typically uninhabited, and this creates a sense of remoteness.
- 9.4.18 The *Rugged Mountain Massif* LCT is one of the most influential LCTs within the Study Area owing to the scale and mass of the mountains and their dramatic peaks and ridges. These mountains form key foci in views of this area owing to the angular and jagged skyline they create and their distinct glacial features. The contrast between the elevated peaks and ridges and low-lying glens and straths

creates extremes of exposure and enclosure. While some settlement and roads occur in the low-lying parts, the majority of this LCT is uninhabited and remote.

9.4.19 LCTs are subject to change over time and new landscape types may be created where significant development or land use change takes place, such that the key characteristics of the landscape become defined by new elements or features. These changes may result in the creation of an entirely new LCT, the creation of sub-sets of the same LCT, where they share similar underlying characteristics, or the creation of a new LCT within a discrete geographical area.

9.4.20 While the LCTs have been used as the basis of the assessment, the detailed assessment has drawn information from the field work that has been carried out across the Study Area. This describes the LCTs in more detail and reflects more recent changes which have occurred in the LCTs since the reviews were written, especially in respect of the influence of wind farm developments in the *Rounded Hills* LCT.

Landscape Designations

9.4.21 A designated landscape is an area of landscape identified as being of importance at international, national or regional level, either defined by statute or identified in development plans or other documents. The landscapes are designated in relation to their special qualities or features which warrant protection through the planning system. National and regional designations occur across the Study Area and are designated at a national level by SNH and at a regional level by the Planning Authority.

9.4.22 There are three ways in which such designations are relevant to the LVIA:

- The presence of a designation can indicate a recognised value that may increase the sensitivity of a landscape character receptor 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 Proposed Development on the special qualities, which have merited designation, can be specifically assessed.

9.4.23 Landscape designations are used, along with LCTs, in the assessment of effects on landscape character. Those landscape designations which occur in the Study Area include National Scenic Areas (NSAs), Special Landscape Areas (SLAs) and Gardens and Designed Landscapes (GDLs). There are a number of documents which provide justification for these designated areas, as well as descriptions of their special characteristics, and these are referenced in the following sections. The Site of the Proposed Development is not covered by any known international, national or regional landscape-related planning designations.

9.4.24 The location and extent of the designated landscapes are illustrated in **Figure 9.3** and in conjunction with the ZTV in **Figure 9.10**.

National Scenic Areas Policy and Guidance

9.4.25 National Scenic Areas (NSAs) are areas of land considered to be important on a national level. Paragraph 212 of Scottish Planning Policy (SPP) (Scottish Government, 2014) states that:

"Proposed 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."*

9.4.26 There are no NSAs within a 15km radius of the Proposed Development. The nearest NSA in the wider 40km study area is Wester Ross NSA at 20km to the west. Two other NSAs occur, Glen Strathfarrar NSA at 25km to the south and Dornoch Firth NSA at 35km to the north-east. The NSAs are shown in **Figure 9.3** with the limited extent of theoretical visibility across these designated areas shown in **Figure 9.10**.

Special Landscape Areas Policy and Guidance

9.4.27 Special Landscape Areas (SLAs) are areas designated by THC for their importance at the regional level. They are protected through policy contained in the Highland wide Local Development Plan (2012) which in respect of SLAs states *"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"*.

9.4.28 The 'Assessment of Highland Special Landscape Areas' provides detailed citations for each of the 27 SLAs which occur across Highland Region, for each SLA summarising *"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"*. It is the effect of the Proposed Development on these factors which is considered in the assessment.

9.4.29 Three SLAs occur in the study area; Fannichs, Beinn Dearg and Glen Calvie SLA to the north and west at a minimum distance of 5.3km; Ben Wyvis SLA to the east at a minimum distance of 9.1km; and Strathconan, Monar and Mullardoch SLA at a minimum distance of 10.3km to the south. These SLAs are shown in **Figure 9.3** with the extent of theoretical visibility across these areas shown in **Figure 9.10**.

Gardens and Designed Landscapes Policy and Guidance

9.4.30 Historic Scotland is responsible for designating Gardens and Designed Landscapes (GDLs). These are contained in an Inventory which can be accessed at <http://www.historic-scotland.gov.uk/gardens>. The descriptions contained in the Inventory identify the special qualities which merit the designation of each GDL.

9.4.31 The protection which historic assets, including GDLs, are afforded is described in paragraph 137 of SPP:

'The planning system should:

- promote the care and protection of the designated and non-designated historic environment (including individual assets, related settings and the wider cultural landscape) and its contribution to sense of place, cultural identity, social well-being, economic growth, civic participation and lifelong learning; and*
- enable positive change in the historic environment which is informed by a clear understanding of the importance of the heritage assets affected and ensure their future use.*

Change should be sensitively managed to avoid or minimise adverse impacts on the fabric and setting of the asset, and ensure that its special characteristics are protected, conserved or enhanced.'

9.4.32 There are nine Gardens and Designed Landscapes in the Study Area as shown in **Figure 9.3**. These are typically set in the lower-lying landscapes of the more enclosed straths and glens, where often mature tree cover restricts visibility of the wider landscape. **Figure 9.10** shows that only Fairburn House GDL will be subject to theoretical visibility, although the enclosure of this GDL by mature tree cover will limit actual visibility. Viewpoint 9 is representative of the visibility that could arise from along the approach to Fairburn House.

Wild Land Areas Policy and Guidance

9.4.33 SPP makes the following statement with regard to Wild Land in paragraph 215; *'In areas of wild land (see paragraph 200), development may be appropriate in some circumstances. Further consideration will be required to demonstrate that any significant effects on the qualities of these areas can be substantially overcome by siting, design or other mitigation.'* The Site is not located in a Wild Land Area, and while it is recognised in this assessment that there is the potential for indirect effects to occur within the WLA as a result of the Proposed Development, policy at the national and regional level does not provide guidance on the issue of development impacts on the setting of WLAs.

9.4.34 In 2017, SNH published a consultation draft version of 'Assessing Impacts on Wild Land technical guidance', which was open for consultation between 26th January and 7th April 2017. Some 140 responses have been received by SNH. This document sets out guidance for those assessing the impact of development on WLAs. Wild Land descriptions or citations have also been published by SNH, which describe the key attributes and qualities of each of the 42 WLAs in Scotland. Following current advice on the SNH website, and in the absence of any updates to the draft version, the 2017 guidance has been followed in the assessment of effects on the WLAs, noting that the guidance may change in the finally issued version. Reference is also made to the citations for the WLAs.

9.4.35 While no part of the application site is located within a Wild Land Area (WLA), there are five WLA's within the study area, two of which are in proximity to the Proposed Development. The closest WLA is the Fisherfield, Letterewe, Fannichs WLA which lies less than 1km to the west. This WLA covers the mountainous landscapes extending from the interior to the west coast.

9.4.36 Rhiddoroch, Beinn Dearg and Ben Wyvis WLA wraps round the Proposed Development to the north, north-east and east, with the northern boundary being the closest at approximately 3.6km from the nearest proposed turbine. This WLA

covers the mountainous landscapes extending from close to the east coast to the west coast.

- 9.4.37 Central Highlands WLA lies to the south, associated with the landscapes of the Strathconon, Monar and Mullardoch SLA at the greater range of approximately 12.6km to the south of the Proposed Development. Flowerdale, Shieldaig and Torridon WLA, and Coulin and Ledgowan Forest WLA lie to the west of the study area at distances beyond 24km and 30km respectively.

Visual Receptors

- 9.4.38 Visual receptors include people living in settlements, travelling along roads, railways or paths or visiting attractions in the Study Area. The views these people experience have been considered in the assessment as they may be affected by the Proposed Development. It is not possible to consider every potential visual receptor in the Study Area due to the geographical extent that it covers. The assessment therefore concentrates on 'principal visual receptors' from which a concentration of people may gain visibility of the Proposed Development. The principal visual receptors are shown in **Figure 9.5** and in conjunction with the ZTV in **Figure 9.10**.
- 9.4.39 The landscape that extends from the west to the north of the Study Area is predominantly upland with few principal visual receptors other than the few main roads and small settlements located in the straths and glens, and the mountain and hill summits enjoyed predominantly by walkers. The increase in road infrastructure along the straths and in the lower lying landscapes to the south-east of the Study Area gives rise to a concentration of principal visual receptors in the form of small settlements and roads. The principal visual receptors in close proximity to the Proposed Development have the greatest potential for significant effects to arise. These include the A835 which wraps around the site to the east and north, and walking routes providing access into the Ben Wyvis range.

Settlements and Residents

- 9.4.40 Due to the relatively isolated location of the Proposed Development, the settlements in the study area are limited in terms of occurrence and extent, and the settlement pattern more often comprises isolated properties. There are few rural properties with potential to be affected by the Proposed Development, the nearest being Aultguish Inn, set to the south-east of the Loch Glascarnoch dam and 2.5km to the north of the nearest proposed turbine.
- 9.4.41 Villages and rural clusters occur most frequently within the valleys and along loch shores, where road access occurs. The four small settlements that occur within a 10km radius of the Proposed Development, include Lochluichart, Grudie, Gorstan and Garve. Lochluichart lies approximately 5km south of the Proposed Development, on the northern shoreline of Lochluichart and comprises a small cluster of residential properties. Grudie lies further west of Lochluichart, while Gorstan lies further east, all located along the A832. Garve is a slightly bigger settlement, with a small school and hotel, and this lies on the A835, 9km south-east of the Proposed Development.
- 9.4.42 More settlements occur at a greater distance to the south-east and although some are located fully or partly within the ZTV, the effect of the Proposed Development on these settlements will be limited by the separation distance, the low levels of

visibility that typically occur, the extent of intervening tree cover or forestry and the location of the Proposed Development set behind the existing turbines when seen from this south-easterly direction.

Routes

- 9.4.43 There are relatively few routes in the Study Area due to the upland nature of much of the terrain. The routes tend to follow the river valleys or loch shorelines, and their low-lying locations often limits the potential for visibility of the Proposed Development due to intervening, higher landform or roadside forestry.
- 9.4.44 Routes include roads, railway lines, cycle routes and walking routes, occurring in the Study Area, and some of these require to be considered in the LVIA as views from them may be affected by the Proposed Development. The key routes to be considered are shown in **Figure 9.5** and described below.
- 9.4.45 The Proposed Development lies within an upland landscape with mountains to the west and east, and lower lying straths and lochs wrapping around the north, east, and south. In the 10km radius around the site, there are only two roads, both of which are mostly contained within straths. The A835 is located approximately 1.8km to the north, and the A832 is located approximately 3.7km to the south of the Proposed Development, at their closest points.
- 9.4.46 The A835 is the main road linking the A9 on the Black Isle with Ullapool on the west coast. It follows the shorelines of Loch Garve, Loch Glascarnoch and Loch Broom. The A832 forms a loop from the A835, between north of Garve and the Falls of Measach, via Kinlochewe, Gairloch and Poolewe on the west coast. It follows the northern shore of Lochluichart and Strath Bran to the west. It forms part of the celebrated North Coast 500 Route (NC500) loop around the highlands.
- 9.4.47 There are two rail routes through the study area; one connecting Inverness with Wick and Thurso, via Muir of Ord and Dingwall, and the other connecting Inverness with Kyle of Lochalsh. The latter comes within 6km of the Proposed Development in the section between Garve and Lochluichart.
- 9.4.48 There is one cycle route in the study area; National Cycle Route 1 which is concentrated in the south-east of the study area, where it follows a course often parallel to that of the A9.

Walking Routes

- 9.4.49 Core Paths within the study area are concentrated around settlements. The closest core paths to the Proposed Development are concentrated around Garve. Other walking routes, not defined as core paths, occur in the more mountainous parts of the study area. The high tops are an attraction to hill walkers. In particular Ben Wyvis, Beinn Dearg and Sgurr Mor are popular Munros for walkers. These tops are covered by representative viewpoints and the effect of the Proposed Development across the wider mountain area is considered in the LVIA.

Attractions and Visitor Facilities

- 9.4.50 There are a number of attractions and facilities available for visitors across the Study Area. The main attraction in the upland areas is hill walking, with Ben Wyvis providing the most popular mountain range, while Beinn Dearg and Sgurr Mor are also popular with walkers. Facilities for visitors in the upland areas are limited,

with some provision of accommodation, shops and restaurants available in the small settlements. Aultguish Inn provides an example of a visitor facility in a semi-remote area.

- 9.4.51 In the lowlands, to the south-east of the Study Area, there is greater provision for visitors, with Inverness acting as an important base for tourism. There are also a number of visitor attractions in the city and along the more settled and accessible east coast, including a number of historic houses and castles which are promoted in local tourist guides.
- 9.4.52 Strathpeffer, which lies approximately 18km south-east of the Proposed Development, is also a popular centre for tourists. It's importance dates back to Victorian times when it was developed as a spa resort. Today it provides tourist information, accommodation, shops and restaurants.

Cumulative Baseline and Predicted Baseline

- 9.4.53 SNH guidance in 'Assessing the Impact of Onshore Wind Energy Developments' (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". For consistency, a 40km radius Study Area has been used for this LVIA in accordance with guidance set out in SNH's 'Visual Representation of Wind Farms Version 2.2'. Wind farm sites outwith the 40km radius may be included where, for example, a more distant wind farm would be seen from the same route as the Proposed Development and the visibility of both sites could lead to significant cumulative effects. In the case of the Proposed Development, the preliminary cumulative assessment has indicated that there are no wind farms outwith the 40km radius that may be relevant to the cumulative assessment, and these are therefore discounted from the assessment.
- 9.4.54 SNH's Guidance on cumulative wind farm assessment also states the following:
"The level of information generated can distract attention from the most significant cumulative effects which are likely to influence the consenting decision. Assessments should therefore focus on the most significant cumulative effects and conclude with a clear assessment of those which are likely to influence decision making".
- 9.4.55 **Table 9.3** lists the operational, under construction, consented, application stage and scoping stage wind farms that lie within 40km of the Proposed Development. Scoping stage wind farms are generally not included, unless they are in close proximity to the Proposed Development and therefore of notable relevance. In this case, no scoping sites are considered to be relevant for inclusion in the cumulative assessment. Cumulative wind farms are shown in **Figure 9.11**.

Table 9.3 Cumulative Wind Farms

Wind Farm	Status	No. of turbines	Blade tip height (m)	Distance and direction from nearest Lochluichart Wind Farm Extension II

				turbine
Coire na Cloiche	Under construction	13	99.5	27km NE
Achany	Operational	19	100	38km NNE
Auchmore	Operational	1	79	24km SE
Auchmore 2 (Gaoth)	Operational	1	79	24km SE
Beinn Tharsuinn	Operational	17	93	29km NE
Beinn Tharsuinn Extension (Beinn nan Oighrean)	Operational	2	99.5	29km NE
Corriemoillie	Operational	19	125	0km SE
Fairburn	Operational	20	100	17km SSE
Foulis Farm (Yellow Wells)	Operational	1	67	24km E
Lochluichart Wind Farm	Operational	17	125	1km S
Lochluichart Wind Farm Extension	Operational	6	125	0km S
Novar	Operational	34	55.5	20km ENE
Novar (Meall an Tuirc) Extension	Operational	16	99.5	20km ENE
Rosehall	Operational	19	90	37km NNE
Braemore	Consented	18	126	37km NNE
Belladrum	Consented	1	54	33km SE
Bonar Bridge	Scoping	1	67	38km NE
Clare	Scoping	21	132	18km E
Cnoc Ceislein	Scoping	6	150	23km E
Edderton	Scoping	1	67	38km NE
Meall Buidhe (Croick Estate)	Scoping	21	120	28km NNE

Westermoy	Scoping	1	72	19km SE
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- 9.4.56 October 2018 has been used as the cut-off date for this cumulative assessment, and any changes in the cumulative situation after this date are not incorporated in the assessment.
- 9.4.57 The cumulative assessment is assessing the effects that will result from the Proposed Development in-conjunction with the cumulative developments, assuming some, or all of the other wind farms are built. This is included in Section 9.7 in respect of landscape receptors and Section 9.8 in respect of visual receptors. In Section 9.9, an assessment of the in-combination effects is presented which considers the relationship of the Proposed Development in-combination with the cumulative developments and the extent to which this in-combination effect may alter the pattern of wind farm developments in this area and in so doing, redefine the character of the landscape or visual receptors.
- 9.4.58 SNH guidance in Paragraph 33 of 'Assessing the Cumulative Impact of Onshore Wind Energy Developments' (2012), states the guiding principle in preparing the cumulative assessment is to "*focus on the likely significant effects and in particular those which are likely to influence the outcome of the consenting process*". In accordance with this guiding principle, the cumulative assessment focuses primarily on the effects of the Proposed Development with the Operational Wind Farms which lie within close proximity.
- 9.4.59 Those developments of particular relevance to the cumulative assessment include Lochluichart Wind Farm, Lochluichart Wind Farm Extension and Corriemoillie, collectively referred to in this LVIA as the Operational Wind Farms. While **Figure 9.13** and **Figure 9.14** show that theoretical visibility of Fairburn, Novar and Novar Extension Wind Farms, coincides with visibility of the Proposed Development, the separation distance between the Proposed Development and these other cumulative developments will reduce their influence on the cumulative baseline. The cumulative assessment, therefore, largely focuses on the effects in-conjunction and in-combination of the Proposed Development with the Operational Wind Farms.

9.5 Design Evolution

The Operational Wind Farms

- 9.5.1 An iterative design approach was adopted in the design evolution of Lochluichart Wind Farm in 2006 and Lochluichart Wind Farm Extension in 2010. This approach involved consultation with SNH and THC during the pre-application stage, in order to develop proposals that would be considered acceptable.
- 9.5.2 The initial layout for Lochluichart Wind Farm comprised 43 turbines. Through pre-application consultation, SNH advised that the layout be reduced to 22 turbines, removing all the turbines in the northern half of the site. THC then advised that a further five turbines be removed in the south to reduce visibility from the A832. The final scheme that was approved comprised 17 turbines.

- 9.5.3 The initial layout for Lochluichart Wind Farm Extension comprised 15 turbines. These were located in the northern half of the original Lochluichart Wind Farm site. The layout was reduced to 12 turbines by the applicant to improve the appearance of the layout, especially in views from the A835 and Ben Wyvis, and to ensure better integration with Corriemoillie Wind Farm, which was emerging as a proposed development at that time.
- 9.5.4 Following a pre-application meeting with SNH and THC, the layout for Lochluichart Wind Farm Extension, was reduced from 12 to six turbines. THC was of the opinion that the six most northern turbines appeared a group of outliers when viewed from the A835 at Black Bridge and from Ben Wyvis and these were subsequently removed to create a more compact layout. The final scheme that was approved comprised six turbines.
- 9.5.5 The Proposed Development comprises nine additional turbines to the north of Lochluichart Wind Farm Extension. The sensitivity of this area to the potential landscape and visual effects of wind farm development is recognised. As a result, a rigorous and lengthy iterative design process has been undertaken to ensure that the Proposed Development will minimise the potential effects through successful integration with landscape character and the layout and appearance of the Operational Wind Farms. This process has highlighted the remaining capacity for wind farm development in the area to the north of the Operational Wind Farms.

The Proposed Development

- 9.5.6 The principal action in the mitigation of the potential effects has been carried out through the iterative design of the layout. This involved identifying the key visual receptors across the Study Area that would be especially sensitive to the appearance of the Proposed Development. These locations were used to test subsequent iterations at a Design Workshop held on 11 August 2017 to ensure effects were being mitigated as best as was practically possible, having regard to other environmental, technical and performance constraints.
- 9.5.7 The most sensitive visual receptors were considered to be represented by the following viewpoints.
- Viewpoint 1: A835, Aultguish Inn;
 - Viewpoint 2: A835, Black Bridge;
 - Viewpoint 3: Old Drover's Road, Corriemoillie;
 - Viewpoint 5: Ben Wyvis; and
 - Viewpoint 8: Beinn a Chaisteil.
- 9.5.8 A large number of iterations were made to the layout during and after the design workshop, each seeking to improve on the previous one in terms of reducing the potential landscape and visual impact whilst at the same time respecting the technical and environmental constraints of the Site. **Chapter 3: Project Description** documents this process in detail.
- 9.5.9 The key principles guiding this iterative process are outlined below:

- Identify those visual receptors that are key to the assessment and understand the extent of the area over which potential effects may occur, so that when testing iterations, the full extent of the area is being tested.
- Consider the cumulative effects with the adjacent Operational Wind Farms, with the aim to achieve consistency in appearance through the use of similar sized and proportioned turbines, arranged following a similar layout and contained in the same landscape.
- Ensure the Proposed Development fits as an extension to the existing group, avoiding incidents of overlap and cluttering between the existing and proposed turbines, reducing the occurrence of outliers and ensuring an even appearance in terms of the horizontal spacing and vertical elevation of the turbines.
- Ensure the Proposed Development follows the pattern set by the Operational Wind Farms and remains contained in the Lochluichart LCU of the *Rounded Hills* LCT that lies between the A832 to the south and the A835 to the north.
- Consider the effects on the sensitive landscapes surrounding the Site. Special consideration has been given to reduce the potential effects on the landscape and visual receptors representing the Ben Wyvis SLA and Fannichs, Beinn Dearg and Glen Calvie SLA, as well as the Rhiddoroch-Beinn Dearg-Ben Wyvis WLA and Fisherfield-Letterewe-Fannichs WLA. The location of the turbines to the north, rather than the west of the Operational Wind Farms has prevented visibility extending further across the sensitive Sgurr Mor range to the west.
- Reduce the potential effects of infrastructure. While the effects of the turbines have been the primary concern in the design process, the effects of infrastructure have also been considered, in particular, the effects of the tracks which can be highly visible over long distances. Attempts have been made to route the tracks in the more discreet parts of the landscape, avoiding more visible exposed slopes and using the screening effect of the surrounding landform and enclosing forestry where possible. In addition, sections of existing tracks have been utilised and while these will need to be widened, they will not be seen as new features in the landscape. The visual influence of the new tracks across the slopes of Meallan Teth and Meallan Caorunn will be contained owing to the east facing orientation of the landform, while the other new tracks will be contained with the forestry, albeit low and scrubby. The northern borrow pit, substation and control building will also be contained in the scrubby forestry while the southern borrow pit will benefit from the enclosure of the valley landform and screen of scrubby forestry to the immediate north.

9.6 Scope of the Assessment

9.6.1 The purpose of this section of the LVIA is to refine the scope of the assessment in the following ways:

- Identify those aspects of the Proposed Development at the construction and operational stages which may contribute to significant effects;

- Identify those landscape and visual receptors with potential to undergo significant effects as a result of the Proposed Development; and
- Identify those aspects of the cumulative baseline and predicted cumulative baseline which may contribute to significant cumulative effects.

9.6.2 This process makes for a more efficient and focussed LVIA by eliminating from detailed consideration those receptors that do not have the potential to experience significant effects, following initial review.

9.6.3 While the solus assessment and the in-conjunction cumulative assessment both consider the additional effect of the Proposed Development in-conjunction with the Operational Wind Farms, the in-combination cumulative assessment considers the effect of the Proposed Development and the Operational Wind Farms as a whole. In light of this difference, it is recognised that the extent of the potentially significant effects will be wider in respect of the in-combination cumulative assessment, and thus a greater number of receptors will have potential to be significantly affected. The consideration of a wider area is, therefore, presented in Section 9.9, while the Scope of the Assessment presented in this section identifies those landscape and visual receptors of relevance to the solus and in-conjunction assessments.

Description of the Proposed Development

9.6.4 **Chapter 3: Project Description** provides descriptions of the Site, the main components of the development, the associated infrastructure and the stages of construction, operation and decommissioning.

9.6.5 The Proposed Development comprises nine wind turbines with a maximum blade tip height of up to 133m. In the visualisations the tower heights are shown as 76m with a 114m rotor diameter. The existing wind farm site entrance on the A835, near Loch Glascarnoch, will be used and will connect to a network of existing and new access tracks to the turbines. Other permanent infrastructure will include a sub-station and control building. Temporary infrastructure will include a borrow pit and construction compound. The Site Layout is shown in Figure 3.1.

9.6.6 Each turbine will require a circular concrete foundation, typically 19m in diameter and 3m deep, as well as an area of hard-standing for the crane during the construction period. The hard-standings will largely remain during the operational life of the Proposed Development and then will be removed during decommissioning.

9.6.7 Access will be taken from the A835, using the existing track that provides the northern access to the Operational Schemes. This forms the 'spine road' from which proposed access tracks will be constructed to access the proposed turbines. To the east of the existing track, the proposed track arcs around to the north to connect T5, T4, T3 and T2, while to the west the track branches north to connect T7 and T10, with further spurs to connect T6, T8 and T9. The proposed tracks will be 5m wide, widening to a maximum of 13m on localised bends. The location of the proposed tracks has sought to avoid steep gradients and work with the existing contours of the hill slopes. The existing and proposed tracks will not be widely visible from the A835 to the north but will be apparent from the elevated hills around.

9.6.8 The proposed permanent sub-station, control building, battery storage facility and temporary construction compound will be located approximately 1.5km from the A835 to the north. Their location within the existing forestry plantation will offer some limited screening of these components of the Proposed Development from the A835 and other more elevated surrounding receptors. **Figure 3.1: Site Layout** shows a small variation in the proposed tracks to the turbines to the south of the forestry plantation. The variable section shown in these options will not be readily visible from the A835 and both options will have a similar impact.

9.6.9 Borrow Pit 1 will be located in the northern part of this woodland block and will similarly be partially screened from surrounding receptors. Borrow Pit 2 will be located to the south-west of the forestry block, and although set in the open, will benefit from the partial enclosure of forestry to the east and rising landform to the west.

Life Cycle of the Proposed Development

9.6.10 The Proposed Development has three stages during which impacts on the landscape and visual resource will occur: construction, operation and decommissioning. The key operations and potential impacts that may occur during these stages are outlined in **Table 9.4** below.

Table 9.4: Potential effects of construction, operation and decommissioning

Activity / Potential Effects	Specific Element	Potential of Receptors to be Affected
<p>Construction Short-term physical effects on landscape elements, landscape character and visual receptors. Short-term cumulative effects.</p>	<p>Construction plant; Temporary construction facilities; Tree felling; Construction / upgrading of access tracks; Construction of turbine foundations / crane pads; Presence and activity of cranes; Presence of emerging wind turbines; Earthworks for infrastructure; Excavation of borrow pits; and Movement of associated traffic.</p>	<p>Heather moorland / forestry removed or altered where construction plant and facilities will be located and where tracks, foundations and crane pads will be constructed. Landscape character of immediate and surrounding LCTs potentially affected by the addition of construction facilities and plant, the presence and activity of the cranes and emergence of wind turbines. Visual receptors potentially affected by the addition of construction facilities and plant, the presence and activity of the cranes and emergence of wind turbines.</p>
<p>Operation Long term effects on landscape character, and visual receptors. Long term</p>	<p>Wind turbines; Access tracks; Substation; Construction compounds; and</p>	<p>Landscape character potentially affected by the presence of wind turbines and tracks. Visual receptors potentially affected by the presence of wind turbines and</p>

cumulative effects with other wind farms.	Earthworks.	tracks. Landscape and visual receptors potentially cumulatively affected by presence of wind turbines and tracks in conjunction with other wind farm developments.
Decommissioning Short-term physical effects on landscape fabric. Short-term effects on landscape character and visual receptors.	Decommissioning plant; Temporary construction facilities; Presence and activity of cranes; and Presence of dismantled wind turbines.	Heather moorland removed or altered where decommissioning plant and facilities will be located. Landscape character of immediate and surrounding LCTs potentially affected by the addition of decommissioning facilities and plant, the presence and activity of the cranes and deconstruction of wind turbines. Visual receptors potentially affected by the addition of decommissioning facilities and plant, the presence and activity of the cranes and deconstruction of wind turbines.

- 9.6.11 It is anticipated that construction and decommissioning of the Proposed Development will be undertaken in stages as described in **Chapter 3: Project Description** of this EIA Report. The construction effects assessed in this section are therefore predicted to occur during this period and end at the start of the operational stage. It is anticipated that the Proposed Development will be in operation for approximately 25 years . On completion of its operational life, the Proposed Development will either be replaced, having obtained the necessary planning consents, or be decommissioned and removed. The grid connection will be subject to a separate application.
- 9.6.12 The construction, operation and decommissioning of the Proposed Development may affect the landscape and visual resource in four ways:
- The direct physical effect on the fabric of the Site;
 - The effect on the landscape character of the Site and Study Area;
 - The effect on viewpoints located throughout the Study Area; and
 - The cumulative effects that may arise from the addition of the Proposed Development with respect to other wind farms in the area.
- 9.6.13 The physical effects of the Proposed Development may occur during the construction and decommissioning stages, but can have longer term effects, and will be restricted to the area within the Site. They are the direct effects on the fabric of the Site and will mostly relate to the removal or alteration of the heather moorland ground cover and small areas of plantation forestry.
- 9.6.14 Effects on landscape character will arise through the introduction of new elements during the construction, operational and decommissioning stage, that alter the distinct and recognisable pattern of elements in a particular type of landscape.

Direct effects will occur in the LCTs where the Proposed Development is located but may also alter the character of surrounding LCTs which are influenced by the LCTs where the Proposed Development is located and where there is a special sensitivity. The Lochluichart LCU of the *Rounded Hills* LCT has the potential to undergo direct effects.

- 9.6.15 Effects on visual receptors are the changes to the views of people that will result during the construction, operation and decommissioning of the Proposed Development. The most visible components of the construction and decommissioning stages will be the presence and activity of the cranes and the presence of the wind turbines as they are constructed and deconstructed. The construction of the new tracks and upgraded existing tracks, will also form apparent features from elevated viewpoints such as hill tops. During operation, it will be the presence and movement of the turbines that will have the greatest visual effect, especially from the closer range viewpoints where the turbines will appear large in scale, such as the A835 to the north, and medium range viewpoints, such as hill top locations.
- 9.6.16 The cumulative effects will relate to the landscape and visual effects of the construction, operational and decommissioning stages as described above, in-conjunction with the cumulative developments. In respect of this assessment, the cumulative effects will relate principally to the Operational Wind Farms which are located in close proximity to the Proposed Development.
- 9.6.17 Mitigation measures have been incorporated through the iterative design of the Proposed Development in order to prevent, reduce or offset potential landscape and visual effects. The residual effects of the Proposed Development, those effects remaining after mitigation that will materialise when the Proposed Development is under construction or operation are assessed in **Section 9.7 and 9.8.**
- 9.6.18 The effects during the decommissioning stage will be similar to those during the construction stage. The assessment of the construction stage in respect of each receptor is, therefore, representative of the effects that will occur during the decommissioning stage. A separate assessment for the decommissioning effects is therefore not included.

Landscape Receptors to be Assessed

- 9.6.19 The landscape and visual receptors that have potential to undergo significant effects, including significant cumulative effects, are identified through a two-stage filtering process.
- 9.6.20 Firstly, ZTV mapping is used to identify those receptors that will gain theoretical visibility of the Proposed Development. Although the use of ZTV mapping has limitations, in that it illustrates theoretical and not actual visibility, i.e. it does not take into account the screening effect of elements such as forestry, buildings and localised landform, it does provide a useful starting point to identify those receptors from where the Proposed Development may be visible. A combination of wirelines, aerial photography and site visits are used to establish a better understanding of actual visibility where uncertainty exists.
- 9.6.21 Secondly, all of the receptors that are shown in the first stage to gain some visibility of the Proposed Development, are subject to a preliminary assessment to

ascertain if they have the 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 Proposed Development, and the level of visibility and influence of cumulative wind farms (as described in the methodology in **Appendix 9.A**). Various methods of verification are used in this second stage, including site visits, ZTVs, GIS mapping, wirelines and aerial photography.

- 9.6.22 In the case of some receptors, the 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 Proposed Development, despite gaining visibility of it. This is most frequently due to the limited predicted level of visibility and influence of the Proposed Development, and/or the limited existing influence of the operational wind farms in the area, 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 detailed solus assessment and in-conjunction cumulative assessment.
- 9.6.23 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 Proposed Development, a precautionary approach is adopted, and this is assessed in detail subsequently in this chapter.

General visibility of the Proposed Development

- 9.6.24 The pattern of theoretical visibility on the ZTV in **Figures 9.6a** and **9.6b** shows that close range and more distant landform has a notable influence, markedly restricting theoretical visibility of the Proposed Development. The Proposed Development will be sited on a moderate sized hill next to a higher ridge that lies to the west. This generally contains visibility in this direction apart from on the higher summits and ridges to the west.
- 9.6.25 To the north and east, visibility of the Proposed Development extends across the facing slopes of Beinn Dearg and Ben Wyvis. These broad mountain ranges largely prevent visibility from extending further north and east into the wider upland landscape. To the south and south-west, the hill ridge that occurs between Strath Bran and Strath Conon, reduces the extent of visibility across the tiers of uplands in these directions. To the south-east, visibility extends across the lower-lying straths to form a channelled band from Loch Garve and Loch Luichart to the Beaully Firth. Where visibility is shown to occur along the shores of Loch Glascarnoch and Loch Luichart, this is also shown to be of lower levels.
- 9.6.26 Visibility is shown to be largely contained within a radius of 15km. Outwith this area, visibility is generally from higher elevated areas where there are few visual receptors, or from lower elevated areas where levels of visibility are low and more likely to be reduced by intervening tree cover and forestry.

Landscape Character Types and Units to be Assessed

- 9.6.27 The ZTV in conjunction with Landscape Character Types and Units, shown in **Figure 9.9a**, highlights the limited extent to which LCTs and LCUs will be affected across the 40km Study Area. Theoretical visibility is shown to be largely contained within the first 5km to 10km owing to the relatively low level of the Site, especially in contrast with the pronounced elevation of the surrounding hills.

- 9.6.28 For many of the LCTs and LCUs beyond 15km, where no theoretical visibility will occur, there will be no effect. In the LCTs and LCUs where the ZTV shows some patches of visibility from distances beyond 15km, the distance combined with the existing influence of the Operational Wind Farms in this location, will ensure there will be a sufficiently low or negligible magnitude of change, that the solus or in-conjunction cumulative effects will be not significant.
- 9.6.29 The Scoping Report for Lochluichart Wind Farm Extension II scopes out of the assessment those LCTs and LCUs which lie beyond 15km. In the Scoping Opinion Report, no objections were raised in respect of this proposed approach and therefore this preliminary assessment focuses on those LCTs and LCUs within a 15km radius.
- 9.6.30 Those LCTs and LCUs that occur within the 15km radius of the Proposed Development are listed in **Table 9.5** below, along with a preliminary assessment of the potential effect as a result of the Proposed Development. This has been used to define the scope of the assessment by highlighting those landscape receptors with potential to undergo significant effects and which, therefore, require detailed assessment.

Table 9.5: Landscape Character Types / Units to be Assessed

Landscape Character Type / Unit	Theoretical Visibility	To be included in detailed assessment?
Rounded Hills LCT: Ben Wyvis LCU	The ZTV shows that visibility occurs across this sensitive LCU from approximately 8km to 13km, albeit patchy in coverage.	Yes, there is potential for indirect significant effects to arise as a result of the close proximity of the Proposed Development to this LCU.
Rounded Hills LCT: Lochluichart LCU	The Proposed Development is located in this LCU.	Yes, there is potential for indirect significant effects to arise as a result of the close proximity of the Proposed Development to this LCU.
Rounded Hills LCT: Inchbae LCU	The ZTV shows that visibility occurs from approximately 1km to 13km, albeit patchy in coverage.	Yes, there is potential for direct and indirect significant effects to arise as a result of the location of the Proposed Development in this LCU.
Undulating Moorland LCT: Aultguish LCU	The ZTV shows that visibility is almost continuous across this LCU from approximately 1 to 4km.	Yes, there is potential for indirect significant effects to arise as a result of the close proximity of the Proposed Development to this LCU.
Undulating Moorland LCT: Inchbae LCU	The ZTV shows that visibility is very limited in extent across this LCU located approximately 10 to 16km to the north-east.	No, this LCU sits behind the Ben Wyvis range limiting the extent of visibility and the potential for a significant effect to arise.
Undulating Moorland LCT: Strath Bran LCU	The ZTV shows that although visibility occurs in relatively large patches across the southern half of the LCU, it will mostly comprise 1 to 3 turbines seen at distances	No, the extent to which the Proposed Development will be visible from this LCU will be limited by intervening landform and the effect moderated by the position of the few proposed

	of 7 to 15km. This small number of additional turbines will be seen set behind the larger group of operational turbines.	turbines visible behind the existing operational turbines.
Undulating Moorland LCT: Fannich LCU	The ZTV shows that visibility is very limited in extent across this LCU located approximately 13 to 17km to the south-west with levels of visibility typically limited to 1 to 3 turbines.	No, the extent to which the Proposed Development will be visible from this LCU will be limited by intervening landform and the effect moderated by the position of the few proposed turbines visible behind the existing operational turbines.
Rugged Mountain Massif LCT: Beinn Dearg LCU	The ZTV shows that visibility of the Proposed Development will occur across the summits, ridges and south-facing slopes of this LCU to the north at approximately 10 to 15km and that typically visibility will be of 7 to 9 turbines.	No, despite the high levels of visibility across the main parts of the LCU, the separation distance of 10km and beyond, the existing influence of the operational turbines and the relatively small number of additional turbines makes it unlikely for a significant effect to occur on the character of this LCU.
Rugged Mountain Massif LCT: Sgurr Mor LCU	The ZTV shows that visibility of the Proposed Development will occur as small patches across the summits, ridges and upper east-facing slopes of this LCU to the west at approximately 8 to 12km and that typically visibility will be of 1 to 3 turbines, apart from summits and elevated slopes where higher levels will occur.	No, the limited extent of the LCU which will be affected by visibility of the Proposed Development and the relatively low levels of visibility caused by intervening landform makes it unlikely for a significant effect to occur on the character of this LCU.
Rocky Moorland LCT: Lochluichart LCU	The ZTV shows that visibility is patchy across this large LCU to the south and south-east from 2km to 17km. Visibility will occur across the north-facing slopes to the south-side of Lochluichart, albeit with the nine proposed turbines set to the rear of the 42 operational turbines. Patches of visibility will also occur at the close range to the south-east although here also the closer range operational turbines have an existing influence that will moderate the additional influence of the proposed turbines.	No, despite the high levels of some of the close-range patches of visibility, the larger number and closer range of the operational turbines will moderate the additional influence of the proposed turbines such that they will be unlikely to give rise to a significant effect on the character of this LCU.

Landscape Designations to be Assessed

9.6.31 There are three NSAs in the Study Area, namely, Wester Ross NSA at 20km to the west, Glen Strathfarrar NSA at 25km to the south and Dornoch Firth NSA at 35km to the north-east, and three SLAs in the Study Area, namely, Fannichs, Beinn Dearg and Glen Calvie SLA to the north and west at a minimum distance of 5.3km; Ben Wyvis SLA to the east at a minimum distance of 9.1km; and Strathconan, Monar and Mullardoch SLA at a minimum distance of 10.3km to the

south. There are also 12 GDLS in the Study Area, mostly located in the settled landscapes to the south-east. Landscape designations are shown in **Figure 9.3**.

- 9.6.32 The ZTV in-conjunction with Landscape Designations, shown in **Figure 9.10**, highlights the limited extent to which NSAs will be affected across the 40km Study Area and the localised extent of theoretical visibility that will occur across the closer range SLAs.
- 9.6.33 The Scoping Report sets out an approach to discount the three NSAs and 12 GDLS in the Study Area, owing to the limited extent to which the Proposed Development will be visible and the distance of the designated areas from the Proposed Development.
- 9.6.34 In respect of SLAs, the Scoping Report proposes to assess the two closest SLAs in detail, namely Ben Wyvis SLA and Fannichs-Beinn Dearg-Glen Calvie SLA but discount Strathconon, Monar and Mullardoch SLA owing to its greater distance from the Proposed Development and its more limited extent of visibility, as shown in the ZTV in **Figure 9.10**.
- 9.6.35 No objections regarding the approach presented in the Scoping Report in relation to designated landscapes were raised. As such, this LVIA has discounted the designated landscapes with the exception of the Ben Wyvis SLA and Fannichs-Beinn Dearg-Glen Calvie SLA. While there is potential for in-combination significant effects to arise in respect of the Fannichs-Benn Dearg-Glen Calvie SLA, there is limited potential for significant effects to arise in relation to the solus assessment and the in-conjunction cumulative assessment for this designated area. This finding relates principally to the very limited influence of the Proposed Development on this SLA, as shown in **Figure 9.10**, and the greater influence of the Operational Wind Farms. The in-combination cumulative effects on the Fannichs-Benn Dearg-Glen Calvie SLA are considered in Section 9.9.

Wild Land Areas to be Assessed

- 9.6.36 There are five WLA's within the study area, two of which are in proximity to the Proposed Development. The closest WLA is the Fisherfield, Letterewe, Fannichs WLA which lies less than 1km to the west. The Rhiddoroch, Beinn Dearg and Ben Wyvis WLA wraps round the Proposed Development to the north, north-east and east, with the northern boundary being the closest at approximately 3.6km from the nearest proposed turbine.
- 9.6.37 Central Highlands WLA lies to the south, associated with the landscapes of the Strathconon, Monar and Mullardoch WLA at the greater distance of approximately 12.6km. Visibility is limited in this WLA to the upper north facing slopes and ridges, from where the nine turbines of the Proposed Development will be seen set behind the closer range 42 turbines of the Operational Wind Farms, thus moderating the additional impact.
- 9.6.38 Flowerdale, Shieldaig – Torridon WLA and Coulin and Ledgowan Forest WLA lie to the west of the study area at distances beyond 24km and 30km respectively and with very limited theoretical visibility as shown in **Figure 9.10**.
- 9.6.39 No objections regarding the scoping in and scoping out of WLAs were raised in the Scoping Opinion Report. This proposed to include the Rhiddoroch-Beinn Dearg-Ben Wyvis WLA and Fisherfield-Letterewe-Fannichs WLA and discount the other three WLAs. Preliminary assessment carried out since scoping, regarding

Fisherfield-Letterewe-Fannichs WLA, has concluded that the potential for significant effects to arise will be limited to in-combination effects.

- 9.6.40 The preliminary assessment has been informed by ZTVs, the viewpoints in this WLA and site work. The ZTV in **Figure 9.10** shows that despite the close proximity of the Fisherfield-Letterewe-Fannichs WLA, the extent and levels of visibility across this area will be limited. The foothills that lie between the Proposed Development and the WLA screen visibility from much of this area and where visibility does occur it typically comprises 1 to 3 turbines, with 4 to 6 turbines visible from the summits and upper slopes and 7 to 9 turbines visible only from the highest summit of Sgurr Mor. Viewpoint 6 An Coileachan and Viewpoint 7 Sgurr Mor, illustrate how the intervening foothills screen the extent to which the Proposed Development will be visible. They also show how much more visible the Operational Wind Farms are in this area, which further reduces the additional effect of the Proposed Development. In summary, the addition of the Proposed Development will not have sufficient additional magnitude to redefine the wildness qualities of the WLA, or parts of it, and for this reason it has been discounted from the detailed solus assessment and in-conjunction cumulative assessment.
- 9.6.41 An in-combination cumulative assessment is presented in Section 9.9 which considers the potential for a significant effect to arise in respect of the Proposed Development in-combination with the Operational Wind Farms.

Visual Receptors to be Assessed

- 9.6.42 The ZTV in **Figure 9.10** shows that none of the settlements within the first 15km of the Study Area will be affected by the Proposed Development, with the exception of Garve, which shows very low levels and a marginal extent of visibility. Viewpoints from Garve have been tested but discounted owing to the limited visibility that will occur.
- 9.6.43 More settlements occur to the south-east, at distances beyond 15km and although some are located fully or partly within the ZTV, the effect of the Proposed Development on these settlements will be limited by the separation distance, the low levels of visibility that typically occur, the extent of intervening tree cover or forestry and the location of the Proposed Development set behind the operational turbines when seen from this south-easterly direction.
- 9.6.44 The only viewpoint representative of residential visual amenity is Viewpoint 1: Aultguish Inn, although this is a single development and not a settlement. All settlements in the Study Area have been scoped out of this assessment.
- 9.6.45 The A835 follows the shorelines of Loch Garve, Loch Glascarnoch and Loch Broom through the Study Area. Its relatively low-lying location means visibility of the Proposed Development will be limited, as indicated on the ZTV in **Figure 9.10**. Visibility will, however arise within a 5km radius in the section to the north-east and this is represented by Viewpoint 1: A835, Aultguish Inn and Viewpoint 2: A835, Black Bridge. A smaller extent of visibility will occur also at the greater distance of approximately 13km and this is represented by Viewpoint 3: Garve Bridge.
- 9.6.46 There will be no or very limited visibility from the A832. The A835 and A832 are the only main roads within the first 20km radius of the Proposed Development.

While the ZTV in **Figure 9.10** shows some visibility on roads beyond 20km it is unlikely that significant effects will arise, owing partly to the separation distance but also the location of the proposed turbines beyond, and often behind, the existing 42 turbines. The only other road-based viewpoint is Viewpoint 9: Avenue of Fairburn Estate, which is representative of the views from this minor road at a range of approximately 21km.

9.6.47 The remaining eight viewpoints are representative of the views from the upland landscape as experienced principally by hill-walkers and other recreational users of the mountains and hills. The closest range of these is Viewpoint 4: Old Drover’s Route, Corriemoillie, which passes within 5km of the Proposed Development. The other seven viewpoints are located on the summits of the most popular surrounding hills and mountains and provide a range of directions and distances around the Proposed Development. These include Viewpoint 5: Ben Wyvis, Viewpoint 6: An Coileachan, Viewpoint 7: Sgurr Mor, Viewpoint 8: Beinn a Chaisteil, Viewpoint 10: Sgurr a Mhuilinn, Viewpoint 11: Sgurr a Choire Ghlais and Viewpoint 12: Beinn Dearg.

9.6.48 The viewpoint list is shown in **Table 9.6** below. The locations of the viewpoints are shown in **Figure 9.6a**. This list has been derived from the viewpoints used in the Lochluichart Wind Farm Extension LVIA with some amendments to make it more suited to the assessment of the Proposed Development. The final list has been prepared in agreement with THC and SNH. The viewpoints are selected to represent sensitive visual receptors with the potential to undergo significant effects. They are also selected to represent landscape receptors and with consideration of the potential for cumulative effects to arise.

Table 9.6 Representative Viewpoints

No	Viewpoint	Grid reference	Distance/ Viewpoint location km	Representative
1	A835 Aultguish Inn	235166 / 870394	1.56	Representative of road-users on the A835 and residential amenity to north-east of the Proposed Development.
2	A835 Black Bridge Road	237349/ 870830	3.65	Representative of road-users on the A835 to north-east of the Proposed Development.
3	Garve Bridge	242483 / 858975	12.95	Representative of road-users on the A835 to south-east of the Proposed Development.
4	Old Drover’s Road, Corriemoillie	237546 / 867006	3.95	Representative of walkers on rural track through forestry and moorland.
5	Ben Wyvis (Glas Leathad Mor)	246294 / 868370	12.29	Representative of hill walkers in the Ben Wyvis range.
6	Coileachan	224170/ 868030	8.07	Representative of hill walkers in the Sgurr Mor range.

7	Sgurr Mor	220317 / 871814	12.08	Representative of hill walkers in the Sgurr Mor range.
8	Beinn a Chaisteil	236550 / 877594	8.46	Representative of hill walkers in the Rounded Hills to the north.
9	Avenue of Fairburn Estate	247586 / 853031	20.78	Representative of residents, workers and road-users in this rural farmed area.
10	Sgurr a Mhuilinn	227711 / 853921	14.27	Representative of hill walkers in the Strathconon range.
11	Sgurr a Choire Ghlais	225881 / 843024	26.46	Representative of hill walkers in the Strathfarrar range.
12	Beinn Dearg	225962 / 881147	13.30	Representative of hill walkers in the Beinn Dearg range.

9.6.49 The process of identifying viewpoints has involved extensive investigation to ensure that the final viewpoints are representative of levels of visibility around the Study Area, and that they clearly illustrate the predicted visibility of the Proposed Development. Additional potential viewpoints were also investigated, where they were suggested by the statutory consultees or correspond with viewpoints used in previously submitted LVIAs for other wind farm developments.

Scope of Cumulative Assessment

9.6.50 The most relevant wind farms to this assessment are the Operational Wind Farms, comprising Lochluichart, Lochluichart Extension and Corriemoillie. As these are all operational, they form part of the baseline context, which is considered as part of the solus assessment in Sections 9.7 and 9.8.

9.6.51 The in-conjunction cumulative assessment also considers the addition of the Proposed Development in respect of the baseline comprising the Operational Wind Farms. The in-conjunction cumulative assessment is included in Sections 9.7 and 9.8 to focus more specifically on the additional effect of the Proposed Development in-conjunction with the Operational Wind Farms.

9.6.52 An in-combination cumulative assessment is presented in Section 9.9. This considers the overall effect of the Proposed Development and the Operational Wind Farms on the existing pattern of wind farm development in this area. As the potential effects of the in-combination assessment are likely to cover a wider extent, certain landscape and visual receptors that are not assessed in the solus or in-conjunction cumulative assessment, are included in the in-combination assessment.

9.7 Assessment of Effects on Landscape

Assessment of physical effects

- 9.7.1 The first category of effects covered in the assessment of landscape effects is physical effects, which are direct effects on the fabric of the Site, such as the removal of ground cover vegetation to facilitate construction of the access tracks and crane pads. Physical effects can only occur on the Site, where existing landscape elements may be removed or altered by the Proposed Development. This category of effects is made up of landscape elements, and in this case there are two elements involved; heather moorland and coniferous forestry. The methodology for the assessment of physical effects is described in full in **Appendix 9.A**.

Heather Moorland

Baseline Condition

- 9.7.2 Heather moorland is the predominant landcover across the western and southern parts of the Site. It comprises heathers and rough grasses, which grow from soil that tends to be peat based and often waterlogged, albeit with drier upper slopes and summits. This type of landcover is typical throughout much of the Highlands and the wider Scottish Uplands and is often associated with, and managed for, grouse and game shooting. It contributes to the open and exposed character of the upland landscapes, and while ecological diversity occurs at a detailed scale, the general appearance is of a homogenous landcover.

Sensitivity

- 9.7.3 As the dominant landcover across the site the heather moorlands contribute to the rough and less modified character of the landscape. While it is a relatively abundant landscape element that is not rare or recognised for its value, within the diversity at the detailed scale there are landscape elements within it which are of greater value owing to the importance of the flora and fauna. The value of the heather moorland is medium.
- 9.7.4 The susceptibility of the heather moorland is low as it occurs in abundance across the Highlands. Furthermore, the grass and heather species are sufficiently invasive to enable them to re-colonise disturbed areas.
- 9.7.5 The combination of these factors results in a **medium** sensitivity being attributed to the heather moorland on the Site.

Magnitude of Change

- 9.7.6 Changes to the heather moorland landscape element will result as a consequence of the removal of soil and vegetation from the routes of the new access tracks, and along the edge of the upgraded access tracks where widening is required, in the areas of the temporary construction compound and the longer term sub-station, control buildings, crane pads, turbine foundations and borrow pits.
- 9.7.7 The magnitude of change on the heather moorland element will be **low** as the Proposed Development will result in the removal of relatively small areas, which constitute a small proportion of this extensive landscape element. This rating has also taken into account the relative ease with which this vegetation type can re-

colonise. The location of the turbines, tracks and other associated infrastructure have been carefully located to avoid the more sensitive habitats within this landscape element.

Significance of Effect

- 9.7.8 The physical effect of the Proposed Development on the heather moorland will be **not significant**. This is primarily due to the medium sensitivity of the landscape element, the limited proportion of the landscape element that will be affected, and the high potential for the visual mitigation of any direct effects through reinstatement of the heather moorland ground cover. Although the effect will be not significant, the nature of the effect will be adverse.

Coniferous Forestry

Baseline

- 9.7.9 Commercial forestry covers the area to the north-east of the Site, set across the strath sides to Allt Giubhas Mor and hill sides of Socach Allt Giubhais (359m AOD). It is a commercial forest of predominantly coniferous species with the crop being largely of the same age and maturity. The edges of the forest blocks are geometric and do not correspond with the more organic shape of the landform, denoting the human influence in their cultivation and management. Existing forest tracks provide access through the strath and across the hill slope to enable the management of the forest. The absence of car parking, signage or recognised routes discourages recreation within this forest.

Sensitivity

- 9.7.10 Coniferous forestry is a common feature in this landscape. The most important consideration that reduces its sensitivity to change is the fact that the forestry has been planted as a commercial crop, with the intention that it will eventually be felled. It is not indigenous or naturalised woodland and does not contribute to the integrity of the landscape or typify its inherent character. This is evident from the use of single species, the geometric layout of the plantations and the rotational systems of planting and clear felling which mean large areas are the same age and are likely to be felled at the same time. There is also a high potential for mitigation as the replanting of forestry is straightforward and part of standard forestry management. The coniferous forestry does, however, form a notable characteristic of the Highland landscape and provides contrast to the open moorlands on the hills.
- 9.7.11 The value of the coniferous forestry is low on account of its cultivated origins as a crop and contrived appearance and its susceptibility is low due to the relative ease with which it can be reinstated. The combination of these factors results in a **low** sensitivity being attributed to the coniferous forestry on the Site.

Magnitude of Change

- 9.7.12 Three of the nine turbines will be located in the forestry areas onsite. These will broadly align, north to south, along the ridgeline of Socach Allt Giubhais, with the central turbine being close to the summit of this low hill. The access track will follow the north to south alignment and tree felling will occur to clear a 15m corridor where the track will be routed. 'Keyholes' will be cleared within the forest

cover where the three turbines will be located. It is anticipated that these will be 50m in radius. These areas will not be replanted during the operational life of the Proposed Development.

- 9.7.13 The removal of those areas of forestry required to be felled, will create only narrow strips and small areas of new break in the forest and the visual effect will be minimal. The proportion of the forest that will be removed to accommodate the Proposed Development with respect to the wider forestry will be small. In addition, the cleared areas will not be readily visible from the surrounding low-lying landscape. Where visibility will occur from the upland landscape, the separation distance will reduce the scale of these changes and moderate the overall effect. The magnitude of change on the physical element of coniferous forestry will be **low**.

Significance of Effect

- 9.7.14 The physical effect of the Proposed Development on the coniferous forestry will be **not significant**. This is primarily due to the low sensitivity of the landscape element, the limited proportion of the landscape element that will be affected, and the high potential for the mitigation of any direct effects. Although the effect will be not significant, the nature of the effect will be adverse.

Summary of Physical Effects

- 9.7.15 The principal physical effects that the Proposed Development will have on the landscape fabric of the Site are the removal of relatively small areas of heather moorland and coniferous forestry. These effects have been assessed as not significant.

Assessment of Effects on Landscape Character

- 9.7.16 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 site, where the pattern of elements that characterises the landscape will be directly altered by the addition of the Proposed Development to the landscape; and off site, within the Study Area, where visibility of the Proposed Development may alter the way in which this pattern of elements is perceived. For example, if the Proposed Development is visible from the Ben Wyvis LCU of *Rounded Hills*, the perceived experience of this area may be altered as visibility of the Proposed Development introduces different contextual characteristics despite its physical location in a different and separate LCU.
- 9.7.17 The detailed methodology for the assessment of effects on landscape character is described in **Appendix 9.A** and the scope of the assessment of effects on landscape character is presented in **Section 9.6**.
- 9.7.18 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 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 will also undergo a medium-high magnitude of change, but may undergo a medium magnitude of change instead, for example.

- 9.7.19 This is because the effects on viewpoints are assessed within the context of a specific outlook towards the Site and are usually, specifically, selected to gain a direct view over the Site. The Proposed Development is the principal consideration in the viewpoint assessment, and influences that lie in other areas of the view are considered to a lesser degree. The landscape character of a receptor is not, however, determined so specifically by the outlook over the Proposed Development, and there are many other considerations, both visual and perceptual, that combine to give an area its landscape character. This means that the degree of influence of the Proposed Development may be slightly less on landscape character than on a specific view. Viewpoints are referred to in this assessment as they do provide a useful indication of the appearance of the Proposed Development from the landscape areas, but the level of magnitude of change may vary between the viewpoint assessment and the landscape character assessment.
- 9.7.20 This is particularly true of areas that lie slightly further away from the Site. In the immediate vicinity of the Site, up to approximately 2km– 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 usually found to diminish more rapidly as the influence of turbines are subsumed in the many other influences on landscape character.

Assessment of Effects on Landscape Character Types / Units

- 9.7.21 The first group of receptors covered in the assessment of effects on the landscape character is the LCTs that cover the Study Area as shown in **Figure 9.2** and shown in conjunction with the ZTV presented in **Figures 9.9a** and **9.9b**.
- 9.7.22 It should be noted that many of the LCTs included in the assessment cover several areas that are geographically separate, and the effects of the Proposed Development can therefore vary widely across each LCU, as subsets of the wider LCT. The distinction within single LCUs, where effects may be significant and where effects will not be significant, is of particular importance in the assessment, and where this is the case, the assessment describes in detail the boundaries which separate these areas.
- 9.7.23 **Section 9.6:** Scope of the Assessment identifies those LCUs that require detailed assessment. This judgement has been based on information presented in the Scoping Report, information shown on the ZTV in **Figure 9.9a** and **9.9b**, wirelines and site work. The potential for significant landscape effects is reduced by the presence and characterising influence of the 42 operational turbines located on adjacent sites, especially with respect to the potential effects on middle to distant range receptors.
- 9.7.24 The conclusion from **Section 9.6** is that four LCUs have potential to undergo significant effects as a result of the Proposed Development. These are:
- Rounded Hills: Ben Wyvis LCU;
 - Rounded Hills: Lochluichart LCU;
 - Rounded Hills: Inchbae LCU; and
 - Undulating Moorland: Aultguish LCU.

- 9.7.25 The effect on each of these LCUs is assessed below. The other LCTs and LCUs that cover the Study Area were found through the preliminary assessment to not have the potential to undergo a significant effect and have therefore not been assessed in any further detail.

Rounded Hills LCT

Baseline

- 9.7.26 *Rounded Hills* is one of the most extensive LCTs in the Study Area. The Proposed Development and the Operational Wind Farms are all located in this LCT. The key characteristics of this LCT, as set out in the LCA, are as follows:
- Large scale hills with broad convex summits and upper slopes and steep convex lower slopes;
 - The broad bases of the hills relative to their height, gives them an appearance of bulk and mass;
 - The hills often appear as a range owing to their similar form and merging ridgelines, despite variation in the height of individual summits;
 - Heather ground cover adds to the smooth profile of the hills and emphasises their simple form;
 - The rounded hills often merge with the intermittent broad straths and reservoirs which often occupy them;
 - Roads are routed along the base of the hills; and
 - Coniferous woodland plantations occur on many of the lower slopes, close to the roads.
- 9.7.27 In order to assist the assessment process, the following three LCUs have been identified as sub-sets of the wider LCT; Ben Wyvis, Lochluichart and Inchbae.

Rounded Hills LCT – Ben Wyvis LCU

Baseline

- 9.7.28 The Ben Wyvis LCU of the *Rounded Hills* LCT comprises the highest summits of this LCT in the Study Area. The LCU sits to the east of the Proposed Development and while the LCU extends further east to the Cromarty Firth, it is the high ridgeline through Tom a Choinnich (953m AOD), Ben Wyvis (1046m AOD), An Cabar (946m AOD), Little Wyvis (764m AOD) and the hill slopes to the north-west of this ridgeline, that are of relevance to this assessment.
- 9.7.29 The Ben Wyvis LCU is generally representative of the baseline characteristics of the *Rounded Hills* LCT listed above. The hills are large in scale and mass, and collectively form a range that is characterised by a long and convex ridgeline aligned north-east to south-west. The summit is covered by a rare and fragile carpet of moss which is susceptible to erosion by the thousands of hill walkers who climb this range each year. Heather moorland forms a blanket covering across the hill slopes, with geometric blocks of coniferous plantation clothing the lower slopes and burns incising narrow glens down the hill sides.

- 9.7.30 The height, breadth and openness of these hills, increases the extent to which the surrounding landscapes influence the character of this landscape and vice versa. The ridgeline forms a very prominent feature across the wider landscape and Ben Wyvis is an iconic landmark hill, especially in views from the Black Isle and Inverness area to the south-east.
- 9.7.31 While there are no wind farm developments in the Ben Wyvis LCU of the *Rounded Hills* LCT, Novar Wind Farm is located in the adjacent LCU of the *Rounded Hills* LCT, to the east of Loch Glass. Although also outwith this LCU, the Operational Wind Farms a notable indirect influence on the character of the Ben Wyvis LCU. Seen between a range of 8km and 12km, these developments are set in the relatively low-lying landscape between the Sgurr Mor range to the west and the Ben Wyvis range to the east. These developments comprise 42 turbines in total, which collectively appear as a single large scale wind farm.
- 9.7.32 Other than the A835, which follows the narrow valley of the Black Water at the western base of Ben Wyvis, access into this LCU is limited to tracks. Forest tracks extend up the western slopes with a single track leading to the summit of Little Wyvis (763m AOD) and another leading to the telecommunications mast on Meall Ruighe an Fhirich (432m AOD). Well defined paths provide access onto the Ben Wyvis ridge, while north and north-east of this threshold, there is a greater sense of remoteness.
- 9.7.33 Settlement in the LCU is very sparse with isolated farms and small clusters of houses occurring adjacent to roads in sheltered valleys. Most settlement is located in the adjoining *Narrow Farmed Strath* to the south, while the majority of the wider upland area is uninhabited. From the Ben Wyvis ridge, the developed character of the Cromarty Firth area is evident, most notably owing to the presence of oil rigs and platforms in the firth, as well as small dispersed settlements over the Black Isle.

Sensitivity

- 9.7.34 The value of this LCU is medium to high. Although it is not covered by any national landscape designations, it lies within the Ben Wyvis SLA which signifies the regional value of the hills. The scale of the Ben Wyvis range, combined with its association with the mountain ranges to the north and west, adds to the value of this landscape.
- 9.7.35 The susceptibility of this LCU to the Proposed Development is medium. While there are no wind farm developments in this LCU, there are wind farm developments in the wider *Rounded Hills* LCT to the east and the west, with the cluster of the Operational Wind Farms to the west having a notable indirect influence on the landscape character of parts of the Ben Wyvis LCU. The presence of these turbines makes wind farm development an established part of the baseline context. Furthermore, the presence of oil rigs and platforms in the Cromarty Firth also has an influence on landscape character, by adding to the extent of human artefacts surrounding this landscape.
- 9.7.36 The combination of the value and the susceptibility of the Ben Wyvis LCU, leads to an overall **medium to high** sensitivity.

Magnitude of change

- 9.7.37 The ZTV in **Figure 9.9b** shows that theoretical visibility of the Proposed Development from the Ben Wyvis LCU will be concentrated in two patches across the west of the LCU; a northern patch centring on Ben Wyvis and a southern patch centring on Little Wyvis. The eastern extent of visibility will be marked by the ridgeline through the summits, with visibility then extending down the north-west facing slopes of both Ben Wyvis and Little Wyvis. The ZTV and wirelines indicate that all nine proposed turbines will be visible from the middle to upper slopes of the LCU, while fewer turbines will be visible from the lower slopes. As shown in **Figure 9.12b**, these nine turbines will be seen in conjunction with the Operational Wind Farms.
- 9.7.38 The turbines will be located 12km from the ridgeline and 8km from the lower slopes of the Ben Wyvis LCU, although actual visibility across the lower slopes will be reduced by the enclosure of commercial forestry. The nine turbines will be sited to the north of the Operational Wind Farms in the Lochluichart LCU of the *Rounded Hills* LCT. They will be set within the same undulating moorland as the Operational Wind Farms, where the level and shape of the landform and the landcover appear continuous. Their vertical extents will be contained by the backdrop of the foothills to the west and set well below the dramatic skyline of the Sgurr Mor range further west. These factors will moderate the magnitude of change.
- 9.7.39 The Proposed Development will give rise to an increase in the horizontal extent of turbines, although this increase will be accommodated within the same LCU as the Operational Wind Farms. This will reinforce the existing association between the Lochluichart LCU and wind farm development and will prevent the spread of this type of development into other LCUs. From the elevated Ben Wyvis LCU, the proposed turbines will mostly be seen at their full heights, and although the blade lengths will be 12m longer than those of the operational turbines, from this distance of 8 to 13km, this difference will not be notable.
- 9.7.40 The close proximity, similar scale and similar arrangement of the proposed turbines will identify them as an extension to the Operational Wind Farms and the continuity in appearance will moderate the indirect influence that the Proposed Development will have on the landscape character of the Ben Wyvis LCU.
- 9.7.41 The magnitude of change during the operational stage will be **medium to low**. The Proposed Development will occur in a LCU where wind farm development already occurs and, therefore, will only add to the existing and indirect influence that the Operational Wind Farms have on the baseline character of the Ben Wyvis LCU. The design of the Proposed Development ensures it remains contained within the Lochluichart LCU, with well-spaced turbines, in a layout that appears well integrated with the operational turbines. Furthermore, the small number of additional turbines in proportion to the large number of operational turbines will limit the effect.
- 9.7.42 The magnitude of change during the construction stage will be **medium to low**. While the presence and activity of tall cranes and emerging turbines will form a notable feature, the separation distance between the Proposed Development and the middle to upper slopes of the LCU, from where visibility will occur, combined with the existing influence of the operational turbines, will moderate the

magnitude of change. The Proposed Development would appear as a relatively small-scale feature, seen set in a context where 42 operational turbines have an existing influence.

Significance of effect

- 9.7.43 The effect of the Proposed Development will be **not significant** during the short-term construction stage and during the long-term operational stage. The not significant effect will relate to the magnitude of change, which, during the operational stage will be limited principally by the separation distance, as well as the relatively small number of additional turbines and their association with the operational turbines, which already have an indirect influence on the baseline character of the Ben Wyvis LCU. During the construction stage, while the presence and activity of tall cranes and the emergence of the turbines will form an apparent feature, they will not redefine the character of the Ben Wyvis LCU, owing largely to the separation distance and the influence of the Operational Wind Farms. The nature of all effects will be adverse.

Significance of the in- conjunction cumulative effect

- 9.7.44 Cumulative effects will relate to the Proposed Development in conjunction with the Operational Wind Farms. The plan of Cumulative Wind Farms in **Figure 9.11** and Cumulative ZTVs in **Figures 9.12 to 9.20**, show that other than the Operational Wind Farms, no other wind farms will have a notable influence on the cumulative effect experienced from the Ben Wyvis LCU. While operational wind farms, Novar, Novar Extension and Fairburn will have inter-visibility with the Proposed Development, the separation distances of these wind farms from the Proposed Development limits their influence on the cumulative baseline.
- 9.7.45 The Cumulative ZTV in **Figure 9.12b** shows the extent to which visibility of the Proposed Development coincides with visibility of the Operational Wind Farms. The Proposed Development will add visibility of wind farm development to very small localised areas, the most notable being an additional band across Garbat Forest where the enclosure of the trees will prevent any indirect influence on landscape character. Where the Proposed Development will add to visibility of the Operational Wind Farms, it will be seen to increase the horizontal extent of turbines to the north, albeit by a small proportion of the existing horizontal extent. The horizontal angle ZTV in **Figure 9.8b** shows that the Proposed Development will typically occupy 5 to 10 degrees of the full 360-degree context. Located 8 to 13km from the Proposed Development, the cumulative magnitude of change will be **medium to low** and the in-conjunction cumulative effect will be **not significant**.

Rounded Hills LCT – Lochluichart LCU

Baseline

- 9.7.46 The Lochluichart LCU of the *Rounded Hills* LCT comprises the group of hills to the west of the Ben Wyvis LCU of the *Rounded Hills* LCT, to the east of the Sgurr Mor LCU of the *Rugged Mountain Massif* LCT, to the south of Loch Glascarnoch and to the north of Loch Luichart. The hills are substantially lower than those to the west and east, with heights rising from Creag Mhor (384m AOD) in the south-east to Beinn Liath Mhor (766m AOD) in the north-west. The site lies within the

watershed of Loch Glascarnoch to the north, while the remainder of the LCU drains towards Loch Fannich to the west or Loch Luichart to the south.

- 9.7.47 The lower lying and less steeply sloping nature of the undulating landform in the east of this LCU has led to the wider establishment of commercial forestry plantations, replacing parts of the open heather moorland with enclosed coniferous plantations. In contrast, open heather moorland landscapes prevail across the centre and west of the LCU. These areas have been partly developed for the Operational Schemes, while Corriemoillie has been developed within the largest central block of forestry to the east. Collectively, the 42 turbines form a prominent and influential feature in the centre of this LCU. Both forestry and wind farm developments have increased the extent of access tracks in this area, the tracks across the open heather moorland forming notable features, especially when experienced from surrounding uplands.
- 9.7.48 While the local area is directly and indirectly influenced by the presence of the Operational Wind Farms, by contrast, the wider landscape presents a largely undeveloped context. There is enclosure from the foothills to the immediate west of the Site and the jagged skyline of the Rugged *Mountain Massif* LCT that sits behind these, and enclosure from the smooth skyline of the *Rounded Hills* LCT to the east. These hills visually contain this area and create an attractive upland setting to what often appears as a 'lowland bowl'.

Sensitivity

- 9.7.49 The value of this LCU is medium. This LCU of the *Rounded Hills* LCT is not subject to any regional or national landscape designations, which would otherwise denote a recognised scenic value. In the context of larger scale, less modified and more impressive hills and mountains, this lower-lying and partly afforested LCU has a comparatively lesser value.
- 9.7.50 The susceptibility of this LCU to the Proposed Development is medium to low. The Operational Wind Farms already have a direct and indirect influence on landscape character owing to their location in this LCU. The presence of these developments moderates the susceptibility of the LCU to the Proposed Development by establishing wind farm development as a part of the baseline character.
- 9.7.51 The combination of the medium value and the medium susceptibility gives rise to an overall **medium** sensitivity.

Magnitude of change

- 9.7.52 The ZTV shows visibility of the Proposed Development will largely be concentrated as a patch on the eastern edge of the LCU where the operational and proposed turbines are located. This patch extends from Loch Glascarnoch in the north to the ridgeline to the north of Loch Luichart formed by Creag Mhor (384m AOD) and Beinn a Bhric (442m AOD), albeit with a patch of no visibility centred around the location of the Operational Schemes. Where visibility occurs, it mostly comprises all nine proposed turbines, with some small patches occurring where fewer turbines will be visible, especially to the north-west and south-west of the LCU.
- 9.7.53 The comparative ZTV in **Figure 9.12b** shows where visibility of the Proposed Development is being introduced and where visibility of the Operational Wind Farms already occurs. The exceptions to this pattern of combined visibility occur

around the Operational Schemes, where no visibility of the Proposed Development occurs, and along the southern shore of Loch Glascarnoch, where visibility of only the proposed turbines occurs. The ZTV in **Figure 9.6b**, shows that visibility from the southern shore will typically comprise 1 to 3 turbines and these will be set behind intervening landform.

- 9.7.54 As shown in **Figure 9.10**, the northern part of the patch of visibility coincides with where the proposed turbines will be located. Although the effect on this part of the Lochluichart LCU will be direct, the existing influence of operational turbines to the immediate south means there is already a close-range influence from wind farm development. This existing influence, combined with the relatively small number of turbines being added and the similarities in their scale, location and appearance, will moderate the magnitude of change, such that, during the operational stage, it will not rise above **medium**.
- 9.7.55 The Operational Wind Farms are located in the southern part of the patch of visibility, such that they already have a notable influence on landscape character. The Proposed Development will be located to the north, such that it will have an indirect effect on this part of the Lochluichart LCU. The Proposed Development will be set behind the closer range, and therefore, comparatively larger scale turbines of the Operational Wind Farms. Whilst it will add to the extent of wind farm development, the indirect effect of the Proposed Development, compared to the direct effect of the Operational Wind Farms, will moderate the magnitude of change in this southern part of the patch of visibility, such that the rating will be **medium to low**.
- 9.7.56 During the construction stage, the magnitude of change will be higher than during the operational stage, owing to the additional impact of tall cranes, as well as the presence and activity associated with the emerging wind turbines, tracks, borrow pits, substation and control building, all to be located within this LCU. Despite these artefacts already existing within this eastern part of the LCU, their extension into the north-east corner, where the effects will be direct, will give rise to **medium to high** magnitude of change.
- 9.7.57 The magnitude of change across the close range south-eastern part of the LCU, where visibility will arise, will be **medium**. This is because in these areas there will be a greater existing influence from the Operational Wind Farms and the effects of construction will be indirect.
- 9.7.58 These construction and operational effects will be concentrated in the eastern part of this LCU, while the effects across the wider extent of the LCU to the west will be low or negligible owing to a combination of the very limited extent of visibility as shown in **Figure 9.9b** and the existing influence of the Operational Wind Farms, where visibility does arise.

Significance of effect

- 9.7.59 The effect of the Proposed Development on the character of the Lochluichart LCU of the *Rounded Hills* LCT will be **significant** during the construction stage and **not significant** during the operational stage. During the construction stage the direct effects on the north-eastern part of the LCU where the construction will occur will give rise to significant effects, albeit for the short-term of the construction stage. During the operational stage, the lesser effect of the Proposed Development, combined with the existing influence of the Operational Wind Farms will moderate

the overall effect and prevent a significant effect from arising. The nature of all effects will be adverse.

Significance of the in-conjunction cumulative effect

- 9.7.60 Cumulative effects will relate principally to the Proposed Development in-conjunction with the Operational Wind Farms. The plan of Cumulative Wind Farms presented in **Figure 9.11** and the Cumulative ZTVs in **Figures 9.12 to 9.20** show that other than the Operational Wind Farms, no other wind farms will have a notable influence on the cumulative effect experienced from the Lochluichart LCU.
- 9.7.61 The Cumulative ZTV in **Figure 9.12b** shows the extent to which visibility of the Proposed Development coincides with visibility of the Operational Wind Farms. Across the majority of the Lochluichart LCU, visibility of the Proposed Development will not only be seen in-conjunction with one or more of the Operational Wind Farms, but their influence will also be close range with the turbines appearing large in scale. The exception will occur across small patches to the north-west of the Proposed Development, on the southern side of Loch Glascarnoch. Reference to the ZTV in **Figure 9.6b** indicates that these small areas of additional visibility will comprise only a small number of turbines and this will moderate the additional effect.
- 9.7.62 The cumulative magnitude of change will be **medium to low** as the Proposed Development will have an influence across a similar extent to where an existing influence from the Operational Wind Farms occurs. In those areas of additional visibility, the extent to which the Proposed Development will be visible will be limited. Although the Proposed Development will increase the extent of wind farm development in this LCU, the design of the Proposed Development to ensure it integrates well with the landscape and the Operational Wind Farms, as well as the existing influence of the Operational Wind Farms, will moderate the cumulative effect, such that the addition will lead to a **not significant** cumulative effect.

Rounded Hills – Inchbae LCU

Baseline

- 9.7.63 The *Inchbae* LCU of the *Rounded Hills* LCT lies to the north, north-east and north-west of the Proposed Development. It comprises a series of hill ridges and straths aligning north to south, with Strath Vaich to the west and Strath Rannoch to the east. The central hill ridge is also the biggest in this LCU, formed between Beinn a Chaisteil (787m AOD) (Viewpoint 8) to the north and Meall a Ghrianain (772m AOD) to the south. These hills are steeply sloping and form a strong enclosure to Loch Vaich to the west. In contrast, the hills to the east drop down in height and the contours widen to create a water shed that feeds east into Abhainn na Glass.
- 9.7.64 To the west of Strath Vaich and the north of Loch Glascarnoch, the rounded hills are open and their height ranges from approximately 400m to 750m. To the north, the height of the land continues to build from approximately 750m to 950m and these steeply sided hills form the eastern foothills to Beinn Dearg, with the ridge between Meallan Ban (882m AOD), Am Faochagach (954m AOD) and Meall Gorm (885m AOD) forming the highest points.
- 9.7.65 Whilst not as iconic or popular for walking as the Ben Wyvis range to the south-east or Beinn Dearg range to the north-west, there is a broad extent of land in

this area which is mostly unmodified and largely remote. Access tracks extend from the A835 in the south, through Strath Rannoch and Strath Vaich, with the latter extending north-east through the hill range to connect with Glen Calvie 20km further on, on the opposite side.

- 9.7.66 In Strath Rannoch and Strath Vaich, the influences on character are mostly contained within the straths by the steep hill sides. With elevation, the extent of the associations with other landscapes increases, and whilst these hills are not the most scenic in the area, their landscape character is influenced by the presence of Beinn Dearg to the north, Ben Wyvis to the south-east and Sgurr Mor to the west, which collectively form an impressive mountain setting around these hills.
- 9.7.67 Present to the south and south-west are the Operational Wind Farms. These appear associated with the lower lying hills to the south of Loch Glascarnoch and this reduces their prominence in the wider landscape. The 42 turbines appear as one large wind farm and form one of the most notable modern artefacts present in this largely undeveloped upland landscape, noting the manmade appearance of Glascarnoch Dam and commercial forestry plantations.

Sensitivity

- 9.7.68 The value of this LCU is medium to high. Although the area around Strath Rannoch is excluded from SLA designation, the Fannichs, Beinn Dearg and Glencalvie SLA extends far enough south-east to cover most of Strath Vaich. It is an area where the landscape has remained largely unmodified apart from the loss of native woodland in the straths, the introduction of the Loch Vaich dam and the presence of occasional access tracks.
- 9.7.69 The susceptibility of this LCU to the Proposed Development ranges from medium, along the closer-range southern edge, to medium to low, in the interior of this hill group. The hills along the southern edge have a closer association with the hills to the south, where the Proposed Development will be located, owing to the orientation of the southern slopes in this direction. The hills to the north are further removed from Loch Glascarnoch and the low hills to the south and are more closely associated with the intermediate straths and surrounding upland areas.
- 9.7.70 The value of the LCU and its susceptibility to the Proposed Development, leads to an overall sensitivity which is **medium to high** in the south of the LCU and **medium** in the north.

Magnitude of change

- 9.7.71 The ZTV shows that visibility will be concentrated along the south-western edge of the LCU adjacent to the northern shore of Loch Glascarnoch. There will also be a broad band of visibility extending over the lower hills to the east of the LCU and a narrow band extending along the higher central hill ridge which extends north to Beinn a Chaisteil. The comparative ZTV in **Figure 9.12** highlights that visibility of the Proposed Development largely coincides with the extent to which the operational turbines are already visible.
- 9.7.72 Theoretical visibility of all nine turbines is shown on the ZTV in **Figure 9.9b** to occur along the northern edge of the A835 and Loch Glascarnoch. This will be relatively close range in parts, with the Proposed Development situated between 2

and 13km. The nine additional turbines will be located to the north of the existing turbines, making them closer to the Inchbae LCU, albeit seen as an extension to the existing group and associated through their similar height and appearance.

- 9.7.73 The magnitude of change along this southern edge of the LCU from Meall an Torcain (536m AOD) to Black Bridge in the east, will be **medium to low** during the operational stage. During the construction stage, when tall cranes and other heavy plant will be visible, along with the emergence of the turbines, the magnitude of change will be heightened to **medium**. These ratings apply to the first tier of hills along the southern edge of the LCU, which have a closer association with the hills to the south where the site is located.
- 9.7.74 Beyond the first tier of hills, the influence on landscape character is derived primarily from the interior of this LCU, with the lower hills to the south forming more of a background feature. The ZTV shows how there will be no visibility of the Proposed Development from the straths but shows how visibility will extend over the lower hills to the east of the LCU and higher central ridgeline.
- 9.7.75 During the operational stage, the magnitude of change in the interior of the LCU will be **low** for the following reasons. Firstly, the Proposed Development will be located beyond 5km and this will reduce its scale in the landscape. Secondly, the predominant north to south alignment of the landscape means the hill ridges associate more closely with the landscapes to the west and east, rather than the south where the Proposed Development will be located. Thirdly, the Proposed Development will be located in the same sector and immediately adjacent to the Operational Wind Farms and this will mean it will only add to an existing influence of wind farm development and not create a new influence.
- 9.7.76 During the construction stage, the magnitude of change in the interior of the LCU will be **medium to low**. Despite the separation distance and the existing influence of the operational turbines, the location of the construction works on the northern side will place it to the fore of the operational turbines.

Significance of effect

- 9.7.77 The effect of the Proposed Development on the Inchbae LCU of the *Rounded Hills* LCT will be **significant** along the southern edge of the LCU during the construction stage and **not significant** for all remaining parts during both the construction and operational stages. This finding relates to the close proximity of the southern edge of the LCU to the proposed turbines and how their location to the north of the existing turbines will bring wind farm development closer to the LCU. Beyond the southern edge, the greater distance from the proposed turbines, combined with weaker association with the lower hills where the Proposed Development will be located, reduces the effect. The nature of all effects will be adverse.

Significance of the in-conjunction cumulative effect

- 9.7.78 Cumulative effects will relate to the Proposed Development in-conjunction with the Operational Wind Farms. The plan of Cumulative Wind Farms presented in **Figure 9.11** and Cumulative ZTVs presented in **Figures 9.12 to 9.20** show that other than the Operational Wind Farms, no other wind farms will have a notable influence on the cumulative effect experienced from the Inchbae LCU.

- 9.7.79 The Cumulative ZTV in **Figure 9.12b** shows the extent to which visibility of the Proposed Development coincides with visibility of the Operational Wind Farms. The Proposed Development will add visibility of wind farm development to a small patch midway along Strath Vaich and to a more notable band across Loch Glascarnoch. Reference to the ZTV in **Figure 9.9b** shows that in both these examples, the additional visibility is typically of a small number of the proposed turbines, furthermore, wirelines from these areas indicate that these turbines will not be seen to their full extent. Where the Proposed Development will add to visibility of the Operational Wind Farms, it will be seen to occupy much the same horizontal extent as the operational turbines. These factors moderate the cumulative magnitude of change.
- 9.7.80 The cumulative magnitude of change will be **medium to low** as the Proposed Development will have an influence across a similar extent to where an existing influence from the Operational Wind Farms occurs. While the Proposed Development will marginally increase the proximity of wind farm relative to the Inchbae LCU, this addition will lead to a **not significant** cumulative effect.

Undulating Moorland – Aultguish LCU

Baseline

- 9.7.81 The *Aultguish* LCU of the *Undulating Moorland* LCT comprises a small pocket of land to the immediate east of the Proposed Development. The LCU is bounded by the A835 and River Glascarnoch to the north, the extension of the *Inchbae* LCU of the *Rounded Hills* LCT to the east, the *Lochluichart* LCU of the *Rocky Moorland* LCT to the south and the *Lochluichart* LCU of the *Rounded Hills* to the west. This area is subtly distinct from its surroundings by its lower and more gently undulating landform. It comprises mostly open moorland, with broad coniferous plantations around the margins and an area of mixed woodland to the east of the low hill Sithean nan Cearc.
- 9.7.82 An old Drover's Route crosses this landscape, extending from Aultguish Inn in the north, to Strath Garve in the south (as represented by Viewpoint 4). Apart from this track and the forestry, there are few other modifications evident in this LCU. Whilst the landform of this LCU is unremarkable in comparison to the surrounding hills and mountain ranges, it nonetheless, forms a part of the setting to these surrounding upland landscapes.
- 9.7.83 While the Operational Wind Farms do not extend into this LCU, they occur close to the western boundary, with Corriemoillie located especially close to the south-west of the LCU. There is, therefore, an existing influence on landscape character across much of this LCU owing to these close range operational turbines.

Sensitivity

- 9.7.84 The value of this LCU is medium. It is not covered by any regional or national landscape related designations, although it does lie west of the Ben Wyvis SLA, and south and west of the Fannichs, Beinn Dearg and Glencalvie SLA.
- 9.7.85 The susceptibility of this LCU to the Proposed Development is medium. The Comparative ZTV in **Figure 9.12** shows that there is already visibility of the operational turbines across much of this LCU and this reduces the susceptibility of the landscape character to the proposed turbines. The LCU is, nonetheless, in

close proximity to the Proposed Development, and the low landform increases the susceptibility of the Aultguish LCU to be influenced by the indirect effects of the Proposed Development.

- 9.7.86 The value of the LCU and its susceptibility to the Proposed Development, leads to an overall **medium** sensitivity.

Magnitude of change

- 9.7.87 The ZTV in **Figure 9.9b** shows theoretical visibility of the Proposed Development covers much of this small LCU with the exception of some small patches where dips in landform occur. Actual visibility will largely correlate with theoretical visibility apart from where the area of mixed woodland occurs and views will be enclosed. It shows that visibility will mostly be of all nine turbines and these will be visible at a range of approximately 1km to 4.5km.

- 9.7.88 During the construction stage, the presence of tall cranes and other heavy plant, combined with the presence of the emerging turbines, construction compounds and the movement of transporters on and off the site, will lead to a **medium** magnitude of change across the LCU. The construction works will be located in close proximity to the development of the Operational Wind Farms, and while this association will moderate the effect, from the close ranges of approximately 1km to 4.5km, the presence and activity of the tall cranes and emerging turbines in an otherwise undeveloped wider landscape, will add to the influence of development over the Aultguish LCU.

- 9.7.89 During the operational stage, once the construction of the turbines and associated infrastructure is complete, the prominence of the Proposed Development will be reduced. It will no longer appear distinct from the Operational Wind Farms, but instead will appear as an integral part. Consistency in appearance will be achieved by the similarities in the scale and layout of the proposed and operational turbines, such that collectively they will appear as one wind farm. While the overall extent of the group will be increased, the additional extent will form a small proportion of the overall group and this will reduce the magnitude of change to **medium to low**.

Significance of effect

- 9.7.90 The effect of the Proposed Development on the character of the Aultguish LCU will be **significant** over the short term of the construction stage, owing largely to the proximity of the construction works and **not significant** over the long term of the operational stage, owing to the integration of the proposed turbines with the operational turbines. The nature of both the significant and not significant effects will be adverse.

Significance of the in-conjunction cumulative effect

- 9.7.91 The three closest range wind farms to this LCU are the Operational Wind Farms. These wind farms form a cluster that gives the appearance of a single development, comprising 42 turbines, all 125m in height to blade tip. The addition of the nine proposed turbines to the immediate north of the group will appear as an extension from this LCU and increase the horizontal extent of the collective group. The Proposed Development will contain wind farm development within a landscape where wind farm development is already a characterising feature and

where the northern extent provides sufficient capacity to accommodate the additional turbines.

- 9.7.92 Taking these factors into account, the cumulative magnitude of change on the Aultguish LCU will be **medium to low** and the cumulative effect will be **not significant**. The addition of the Proposed Development will not notably alter the landscape character of the Aultguish LCU when considered within the cumulative context.

Assessment of Effects on Designated Landscapes and Wild Land Areas

- 9.7.93 The second group of receptors covered in the assessment of effects on landscape character includes designated landscapes and Wild Land Areas that occur in the Study Area, as shown in **Figure 9.4** and shown in conjunction with the ZTV in **Figure 9.10**.
- 9.7.94 The Scope of the Assessment, as set out in **Section 9.6**, identifies those designated landscapes and Wild Land Areas that require detailed assessment.
- Ben Wyvis SLA; and
 - Rhiddoroch, Beinn Dearg and Ben Wyvis WLA.

Ben Wyvis SLA

Baseline

- 9.7.95 Ben Wyvis SLA is a relatively small SLA, centred on the rounded summits and foothills of the Ben Wyvis mountain range, extending from Loch Glass in the north-east to Little Wyvis in the south-west. The SLA excludes the lower western flanks of the hills on account of the presence and influence of commercial forestry, although it is noted in the citation that improvements to the structure and amenity value of these forests could lead to a future enlargement of the SLA through their inclusion.
- 9.7.96 The Ben Wyvis SLA comprises an area of largely undeveloped and unmodified land. The boundaries have been drawn to exclude the peripheral forestry plantations, as well as the mast on Meall Ruighe an Fhirich (432m AOD) to the south-west. Human modifications are limited to occasional tracks, shielings and ownership boundaries.
- 9.7.97 While there are few direct human influences on the character of the Ben Wyvis SLA, there are a number of indirect influences, the most obvious being the Operational Wind Farms to the west, Novar and its Extension to the east and Fairburn to the south-east. The cluster created by the wind farms to the west is located approximately 11km to 12km from the high ridgeline in the Ben Wyvis SLA and as such forms a notable, albeit indirect influence on the character of this designated landscape. There is also an influence on the character of the Ben Wyvis SLA from developments evident in the settled landscapes to the east, most notably the dormant oil rigs that currently occupy Cromarty Firth.
- 9.7.98 The citation in THC's '*Assessment of Highland Special Landscape Areas*', describes the '*Key Landscape and Visual Characteristics*' of the Ben Wyvis SLA. These are presented in **Table 9.7** below.

Sensitivity

- 9.7.99 The value of the Ben Wyvis SLA is medium to high. While the SLA designation denotes the regional value of this landscape, the absence of an NSA designation denotes this landscape is not of national value. A high value rating is preserved for landscapes recognised for their national importance.
- 9.7.100 The susceptibility of the Ben Wyvis SLA to the Proposed Development is medium. While there is a general lack of development in the SLA, there are existing developments outwith the SLA which have notable, albeit indirect effects on its character. The closest of these comprises the Operational Wind Farms. The Proposed Development will form a direct extension to these developments and therefore will be seen at a similar range, in a similar location and will be of a similar appearance. These continuities will moderate the potential impact.
- 9.7.101 The combination of the value of the Ben Wyvis SLA and its susceptibility to the Proposed Development leads to an overall sensitivity of **medium to high**.

Magnitude of change

- 9.7.102 The ZTV in **9.10** shows that the Proposed Development will be visible from the western and north-western side of the SLA. The eastward extent of visibility will be defined by the ridgeline through Tom a Choinnich (953m AOD), Glas Leathad Mor (1046m AOD) and An Cabar (946m AOD), and the lower ridgeline to the south, through Little Wyvis (764m AOD) and Carn Gorm (556m AOD). While visibility will be almost continuous across the western hill slopes of these ridgelines and typically comprise nine turbines, where Allt a Bhealaich Mor occurs there be lower levels or no visibility, and this separates the northern patch of visibility from the southern patch.
- 9.7.103 The nine turbines will be located to the north of the existing 42 turbines associated with the Operational Wind Farms. The map of LCTs in **Figure 9.2** shows that the proposed turbines will be located within the same Lochluichart LCU of the *Rounded Hills* LCT as the operational turbines, with separation space between the proposed turbines and Loch Glascarnoch to the north. This will contain wind farm development within this already developed landscape and avoid development spreading into new landscapes. The comparatively small number of turbines will further moderate the magnitude of change, as the extension will form a small proportion of the overall existing number of turbines.
- 9.7.104 The additional turbines will increase the extent of wind farm development in this area, forming a wider horizontal extent as experienced from the Ben Wyvis SLA. The proposed turbines will be seen to the fore of the Sgurr Mor mountain range, as are some of the existing operational turbines, although all set below the foothills and set well below the dramatic skyline of the mountains. They will be seen as an extension to the Operational Wind Farms owing to compatibility in their size, location and appearance.
- 9.7.105 **Table 9.7** below presents an assessment of the magnitude of change in respect of the special qualities set out in the Ben Wyvis citation contained in THC's Assessment of Highland Special Landscape Areas.

Table 9.7: Potential effects on Ben Wyvis SLA Key Landscape and Visual Characteristics / Special Qualities

Key Landscape and Visual Characteristics	Magnitude of change
<p><i>Ben Wyvis stands in an isolated position, forming a dominant 'whaleback'-shaped landmark in the landscape, especially when viewed from the south. The broad ridge and gently ascending upper slopes surmount the very steep middle slopes of Ben Wyvis. The nature of these slopes means that the summit of the mountain is concealed from view from locations at or near its base.</i></p>	<p>The Proposed Development will not affect views from the south. The Proposed Development will theoretically be seen in views of Ben Wyvis from the east, although the ZTV in Figure 9.9 shows that visibility from this direction is largely precluded owing to intervening landform. Small patches of visibility will occur from high points although within these views the Proposed Development will be seen set well below the Ben Wyvis ridge and as an extension to an existing group.</p>
<p><i>From the west, Ben Wyvis appears as a flat-topped mountain with unbroken uniform grassy slopes falling steeply to dense forest plantations. From the east, its character is defined by a series of high, deep, craggy corries extending into the upper slopes and containing lochans and fast flowing rocky burns.</i></p>	<p>The relatively low elevation of the Proposed Development means that it will sit below the skyline of Ben Wyvis in views from the west, the extent of which will be very limited as shown on the ZTV in Figure 9.9. The Proposed Development will not affect views from the east.</p>
<p><i>The flat open summit is carpeted in yellow-green woolly hair moss, forming one of the largest continuous expanses in the country and producing a distinctive character to the summit plateau. On the lower slopes, uniform blankets of heather, grassland and heath emphasise the simple, rounded profile of the mountain.</i></p>	<p>The Proposed Development will have no effect on the landcover of the SLA.</p>
<p><i>Existing plantations appear incongruous in the surrounding landscape, especially when seen from the mountain top, due to their contrast of colour, shape, line and texture. Collectively, these seem to almost encircle the mountain.</i></p>	<p>The Proposed Development will have no effect on the plantations around the SLA.</p>
Special Qualities	Magnitude of change
<p><i>Standing well above a surrounding range of much lower foothills, Ben Wyvis has a commanding presence with its broad and fairly level summit ridge stretching more than 7kms from Garbat to Loch Glass. It is a dominant landmark feature from many locations, most notably from the south and</i></p>	<p>The Proposed Development will not align with Ben Wyvis in views from the north-west.</p>

<p><i>northwest, including Inverness and the Black Isle. Little Wyvis also appears prominent at a local level.</i></p>	
<p><i>The summit of Ben Wyvis provides some of the most extensive panoramas in Scotland. These include the wild and dramatic mountain profiles of Wester Ross and Sutherland to the north and west, the indented coastline and settled, fertile lowlands of Easter Ross and the Black Isle to the east, and the distant summits of the Cairngorms and Ben Nevis to the south.</i></p>	<p>The Proposed Development will be visible in views westwards from Ben Wyvis to Wester Ross. It will be located at a relatively low elevation such that it will be well back-clothed and not interrupt the skyline. It will be seen in close conjunction with the Operational Wind Farms in this area, which have an existing influence on these views.</p>
<p><i>Views of the top and the overall profile of the mountain are limited from the immediate surroundings, due to its massive scale and convex upper slopes. The form of the mountain is most clearly appreciated when viewed from a distance, for example from Inverness and the Black Isle.</i></p>	<p>The Proposed Development will not affect views from the south and south-east.</p>
<p><i>Ben Wyvis is a popular Munro due in part to its proximity to Inverness but also because it is a relatively straightforward walk with a broad, easy ridge from which the panoramic views can be appreciated. It is also popular for cross-country skiing.</i></p>	<p>While the Proposed Development will have an effect on the views of hill walkers on Ben Wyvis, this will occur in the context of the existing influence from the Operational Wind Farms.</p>
<p><i>With the exception of Wyvis Lodge, the odd shieling hut, and the very occasional boundary.</i></p>	<p>The Proposed Development will be located outwith the SLA and therefore will not occur as a development within the SLA, although it will have indirect effects on its landscape character.</p>

- 9.7.106 The effect of the Proposed Development on the 'Key Landscape and Visual Characteristics' and 'Special Qualities' of the Ben Wyvis SLA will be limited by the location of the Proposed Development outwith the designated area, which means there will be no direct effects on the 'Special Qualities', and effects will only occur indirectly. It will not affect the key views of Ben Wyvis SLA from the south, south-east or north-west, and while it will have potential to affect views from the west, visibility from this direction will be very limited and the Proposed Development will be seen set well below the skyline of Ben Wyvis and in the context of a larger number of existing turbines. There will also be some effect on views from Ben Wyvis, westwards to Wester Ross, although again the Proposed Development will be seen to add a small proportion of turbines to larger wind farm developments and in a lower elevated location which will be set well below the skyline. During the operational stage, the magnitude of change will be **medium to low**.
- 9.7.107 During the construction stage, while the presence of tall cranes and emerging turbines will make the Proposed Development more prominent than during the operational stage, their separation distance from the SLA of more than 10km,

combined with the baseline influence of the Operational Wind Farms in this location, will prevent the effect from rising above **medium to low**.

Significance of the effect

- 9.7.108 The effect of the Proposed Development on the Ben Wyvis SLA, taking into account the Special Qualities that have contributed to the designation of this area, will be **not significant** during both the construction and operational stages. This finding relates to a combination of the separation distance between the Proposed Development and the SLA, the low elevation of the Proposed Development in respect of the views towards and from Ben Wyvis and the existing influence of the Operational Wind Farms on the baseline character of the SLA. The nature of the effect will be adverse.

Significance of the in-conjunction cumulative effect

- 9.7.109 Cumulative effects will relate to the Proposed Development in-conjunction with the Operational Schemes, Corriemoillie, Novar and Fairburn Wind Farms. The plan of Cumulative Wind Farms in **Figure 9.11** and Cumulative ZTVs in **Figures 9.12 to 9.20**, show that other than the operational wind farms listed above, no other wind farms will have a notable influence on the cumulative effect experienced from the Ben Wyvis SLA.
- 9.7.110 The Cumulative ZTV in **Figure 9.12b** shows that visibility of the Proposed Development largely coincides with visibility of the Operational Wind Farms. The Proposed Development will add visibility of wind farm development to a very narrow band along the Bealach Mor, between An Cabar to the north and Tom na Caillich (705m AOD) to the south. While this will increase the extent to which the Proposed Development will be visible, the additional visibility will occur beyond 10km and typically comprise 1 to 3 turbines, partially screened by intervening landform.
- 9.7.111 Where the Proposed Development will add to existing visibility of the Operational Wind Farms, it will be seen to increase the horizontal extent of wind farm development to the north. This will, however, form a small proportion of the existing horizontal extent and be seen contained within the same landscape character. The effect on views west towards Wester Ross will be incremental with the proposed turbines seen set to the fore of the Sgurr Mor range and, similar to the existing turbines, set well below the skyline. Similarly, the views from the Sgurr Mor range east, will include the proposed turbines to the fore of the Ben Wyvis range also set well below the skyline. Despite the sensitivity of these views, the Proposed Development will not make a notable increase in terms of the cumulative effect.
- 9.7.112 The cumulative magnitude of change will be **medium to low**. The minimum distance of this influence at beyond 10km will reduce the influence of the Operational Wind Farms on the cumulative context and the influence of the Proposed Development on the cumulative effect. The Proposed Development will be seen as an extension to the Operational Wind Farms and the consistency in appearance will moderate the cumulative magnitude of change. While the Proposed Development will add to the extent of wind farm development visible to the west of the Ben Wyvis SLA, this addition will lead to a **not significant** cumulative effect.

Assessment of Effects on Wild Land

- 9.7.113 Wild Land effects are considered in the LVIA in respect of the Rhiddoroch – Beinn Dearg – Ben Wyvis WLA. The following assessment follows guidance set out in SNH’s draft version of ‘Assessing Impacts on Wild Land technical guidance’ (2017) with reference to SNH’s ‘Description of Wild Land Areas’ (2017) for both WLAs.

Methodology

- 9.7.114 A summary of ‘Assessing Impacts on Wild Land technical guidance’ is presented below, in order to establish the status of WLAs, set out the expected scope of a WLA assessment and understand the extent to which wind farms can affect WLAs.
- 9.7.115 The status of WLAs is clearly set out in Para 8. *‘WLAs have not been identified on scenic grounds and are not a statutory designation.’*
- 9.7.116 There is also an acceptance that WLAs are not ‘wilderness’ and that human influences do form part of their baseline character. This is expressed in the response to question 4 in Annex 1, *‘...they contain some evidence of past occupation, contemporary use and/or land management. This can include among other things, buildings (derelict and still used), tracks, hydro-electricity, infrastructure, and evidence of sporting and grazing management. Similarly, some development outwith WLAs can be seen from parts of the WLAs. Despite the evidence of these developments (either within or outwith a WLA), it is sufficiently light and of limited extent that the range of strength of wild land qualities remains well expressed within the WLAs.’*
- 9.7.117 The key phrase is ‘sufficiently light and of limited extent’ as this presents a measure with which to assess the existing influence of the Operational Wind Farms on the WLA. In considering the Ben Wyvis WLA, existing wind farms are visible from substantial parts of the WLA. It is assumed that these are sufficiently light as not to impact upon the wildness qualities, as there is no reference to them in the Ben Wyvis WLA Description.
- 9.7.118 Whether a WLA assessment is needed at all is discussed in paragraph 5, with the need considered to be highly likely where the Proposed Development falls wholly or partly within a WLA, whilst where the Proposed Development falls outwith the WLA *‘...the need for an assessment will be more the exception and may only be necessary where significant effects on WLA qualities are likely.’* In respect of the Proposed Development, the Rhiddoroch–Beinn Dearg–Ben Wyvis WLA has been scoped in, despite the location of the Proposed Development outwith this WLA and more than 3km beyond its boundary. The Fisherfield–Letterewe–Fannichs WLA has been scoped out, despite its closer proximity of 1km to the Proposed Development but owing principally to the limited visibility across the WLA.
- 9.7.119 Another point made in terms of the potential scope of the assessment relates to the fact that effects on WLAs can only be experienced within WLAs and not on the area surrounding them. Paragraph 21: *“The impact of development outwith a WLA will require careful justification and consideration. A wild land assessment should only consider effects on the qualities of the WLA as they are experienced within it, not from outwith it. This is in contrast to a scenic or landscape designation, whose appreciation from outwith is part of the standard LVIA approach.”*

- 9.7.120 The draft Guidance also notes the following in Paragraph 1; '*As perceptual responses cannot be mapped, physical attributes were used to inform the preparation of the 2014 map of wild land areas.*' And in Paragraph 2: '*Development outwith WLAs may only impact on perceptual responses.*'
- 9.7.121 In considering the two comments above, the logical conclusion is that if a development is located outwith a WLA it cannot impact on the physical attributes, only the perceptual responses.
- 9.7.122 The Proposed Development can, therefore, only indirectly affect the perceptual responses of the adjacent Ben Wyvis WLA and not directly affect the physical attributes or characteristics of the landscape within the boundary. The assessment of perceptual responses has been conducted through site work.
- 9.7.123 The methodology discusses the subjectivity involved in the assessment of perceptual responses. Paragraph 23. '*The subjective nature of wildness underlines the need for judgements on effects to be transparent and understandable, so that the underlying assumptions and reasoning can be understood by others. When evaluating the significance of effects, the subjective nature of perceptual responses should be taken into account.*' The acceptance of the subjectivity involved in the assessment of perceptual responses suggests that different assessors may conclude different findings.
- 9.7.124 In terms of the susceptibility of a WLA to the effects from a proposed development outwith its boundary, the following comment in paragraph 25 would suggest that this is limited. '*The protection of wild land qualities as set out in SPP, means that only in exceptional circumstances relating to scale, siting or design will development outwith WLAs have a significant effect.*'

Rhiddoroch - Beinn Dearg - Ben Wyvis WLA

Step 1 – Define the study area and the scope of the assessment

- 9.7.125 '*The study area should reflect the extent of the likely effects on WLAs, including any cumulative effects.*' As it is stated in paragraph 21 that effects on WLAs can only occur within the WLA boundary, the study area will be either the whole, or part, of the WLA.
- 9.7.126 In considering the appropriate extent of the study area for the Proposed Development, the guidance sets out the following five criteria to consider.
- 9.7.127 '*The scale of development and extent of effects.*' The relatively small scale of the Proposed Development, its location beyond 5km from the closest Ben Wyvis WLA boundary and its position next to the operational turbines of the Operational Wind Farms, means that the potential for significant effects will be limited to the closer range parts of the WLA.
- 9.7.128 '*The extent of visibility.*' The ZTV in **Figure 9.10** shows visibility comprises two main patches concentrated in the south-west of the WLA; one to the north of Loch Glascarnoch and one to the west of the Ben Wyvis ridgeline. The remainder of the WLA will remain unaffected with the exception of localised high points at greater distances, the most notable of these being the summits in the centre of the WLA. This finding coincides with the finding presented above, that it will be most likely for significant effects to arise in the closer range parts of the WLA.

- 9.7.129 *'Routes and movement through the WLA. The assessment should take account of key locations, and routes within the WLA.'* The key location in the WLA is the Ben Wyvis ridgeline and the summits along its length. The ZTV shows that visibility will occur along this ridgeline as well as much of the route up to it, leading in from the west.
- 9.7.130 *'The wild land qualities likely to be affected should be the focus of the assessment.'* As the Proposed Development will lie beyond 5km of the Ben Wyvis WLA, it will not have any effect on its physical attributes, only effects on the perceptual responses experienced in the WLA. From the Description, these responses will appear to relate to a strong sense of remoteness and sanctuary.
- 9.7.131 *'The potential for cumulative effects.'* There is an existing influence on the perceptual responses experienced in the Ben Wyvis WLA as a result of the Operational Wind Farms. The potential for the Proposed Development to give rise to cumulative effects will relate to its relationship with these existing developments.
- 9.7.132 Step 1 conclusion is to establish a study area that covers the south-western part of the Ben Wyvis WLA where there is the potential for significant effects and significant cumulative effects to arise. This will encompass those parts within 15km of the Proposed Development. There will be a negligible or no effect on the remaining parts of the WLA. Expressed as a proportion of the whole WLA, the areas with ZTV shading which relates only to the Proposed Development represents a relatively small percentage of the 'whole'. This ZTV shading substantially coincides with existing visibility of the Operational Wind Farms.

Step 2 – Establish the baseline

- 9.7.133 This step is based on a review of the *'Descriptions of Wild Land Areas'* produced by SNH which are considered to be the starting point for the assessment. Paragraph 16 states *'...the strength of attributes and responses and their contribution to the wild land qualities of the area should be confirmed, taking into account any changes that may have occurred either within or outwith the WLA since the mapping and descriptions were produced.'*
- 9.7.134 This approach does not provide much scope to deviate from the Ben Wyvis description, other than if a major change to the baseline has occurred, as described in paragraph 16 – *'Changes should only be referenced if individually or collectively they affect the appreciation of wild land qualities.'* The most notable omission in the description is the absence of any reference to the Operational Wind Farms. These were all present prior to the publication of the WLA Descriptions in 2017 and yet no specific reference is made to their influence on the WLA. This possibly denotes the 'lightness' of their influence.
- 9.7.135 As advised in the technical guidance, the physical attributes may not be affected as the Proposed Development lies wholly outwith the WLA. In terms of the perceptual responses, these are covered by the special quality described as follows; *'A very large interior with a strong sense of remoteness and sanctuary that seems even more extensive where appearing to continue into neighbouring wild land areas.'* These perceptual responses are associated with the interior of the WLA, from where human influences are not always apparent, and from where the upland landscape connects visually with the wider upland landscapes, giving the perception of a much wider WLA.

- 9.7.136 From the south-west of the WLA, the Cumulative ZTV in **Figure 9.12b** shows that the operational wind farms to the west of the WLA already have a visual influence on this part of the WLA.
- 9.7.137 Generic reference is made to human influences around the peripheries of the WLAs, *'...extensive areas of human elements and contemporary land use can be seen around the outside edge of the WLA in all directions except to the north west, including main roads, hydro-electric development and conifer plantations. These elements indicate the edge of the area, but their effects on wild land qualities within the WLA itself are limited where they appear concentrated within neighbouring low-lying strath floors.'* It is the presence of conifer plantations and the A835 that have limited the extent of the Ben Wyvis WLA in the south-west, although these are largely screened from the WLA by their locations in the straths.
- 9.7.138 *'Conversely, elements that extend up onto elevated slopes or tops are more prominent and can appear to encroach more directly upon the experience of the WLA where intervening development within the strath is screened. This may be the case even if the elements themselves lie outside the WLA; for example, wind farms, masts, conifer plantations and fences. If cumulative effects occur, these may also appear more encroaching, especially if they seem to collectively encircle part of the wild land area.'*
- 9.7.139 This part of the description is relevant to the Operational Wind Farms and the Proposed Development, although they are not located in the low-lying strath, neither are they located on elevated slopes or tops. The location of both operational and proposed turbines is relatively low-lying within a localised area of low to medium scale hills. This reduces their prominence in the wider landscape and in views from Ben Wyvis they are typically seen set well below the larger scale Sgurr Mor range to the west.
- 9.7.140 In terms of cumulative effects, the Proposed Development has the opposite effect of what the WLA Description warns against. Instead of encircling the WLA, the Proposed Development form a group with the operational turbines to reduce the spread of influence that wind farm development might otherwise have across the wider surrounding area.
- 9.7.141 Step 2 conclusion is that the WLA Description highlights the sense of remoteness and sanctuary experienced in the interior of the WLA as the perceptual response susceptible to the effects of the Proposed Development. While the WLA Description does not specifically identify the Operational Wind Farms as existing influences on the character of the WLA, there are generic comments referring to the influence these types of development can have on the WLA, especially when located on elevated landform.

Step 3 – Assess the sensitivity of the study area

- 9.7.142 The assessment of sensitivity is to be informed by the WLA Description and fieldwork, and as set out in paragraph 19, *'should take into account any evidence of past or current use. This does not automatically make them more or less sensitive to development and assessments should consider this on a case by case basis.'*
- 9.7.143 SNH cite GLVIA3 as the overarching guidance to be applied in the assessment. Following this guidance, the sensitivity of the study area will be derived from

assessments of a combination of 'value' and 'susceptibility'. The WLA is not a statutory designation, nor does it reflect scenic value. Although there are no national designations covering the Ben Wyvis WLA, the SLA designations denote that parts of the WLA have formally recognised regional scenic value. Taking these factors into account the value rating of the WLA is medium to high. This accords with the relative value attributed to WLA in SPP Table 1 on Page 39, where they are identified as a Group 2 consideration, separate from NSAs which are within Group 1.

9.7.144 The susceptibility to the Proposed Development varies across the WLA, being lower where existing human influences are evident and higher where these influences are less evident. This creates a pattern in which susceptibility is high in the interior where wind farm and other developments are not readily apparent, and medium to low in the south-western part where the Operational Wind Farms are readily apparent influences.

9.7.145 By combining value and susceptibility, the interior of the WLA will rate **medium to high** in terms of sensitivity and the south-western parts will rate **medium**.

Step 4 – Assess the effects

9.7.146 *'An assessment of the effects on the wild land qualities should be undertaken in line with GLVIA. This sets out how to assess effects in terms of the size or scale of change, geographical extent of the area influenced, and their duration and reversibility.'*

9.7.147 The Proposed Development will be located approximately 3.5km from the closest boundary of the Rhiddoroch - Beinn Dearg - Ben Wyvis WLA. This occurs where there is an indentation to the boundary to the north of Loch Glascarnoch. The remainder of the WLA occurs at distances beyond 6km to the north-east and 8km to the east. The ZTV shows that there will be no visibility from the vast majority of the WLA, and that it will only be from the south-west margins and localised summits that visibility will occur.

9.7.148 The Cumulative ZTV in **Figure 9.12** shows that there is already visibility of the Operational Wind Farms across those areas where the Proposed Development will occur, with only very marginal areas of additional visibility. This means the perceptual responses of a sense of remoteness and sanctuary are already compromised by the Operational Wind Farms. The extent to which the Proposed Development will increase the influence of wind farm developments on these perceptual responses will be limited by its location immediately adjacent to the existing developments, the relatively small number of nine turbines being added to the existing group of 42 turbines and their containment within the same low-lying undulating landscape. The magnitude of change on the remoteness and sanctuary experienced in the south-western part of the WLA during the operational stage will be **medium to low**.

9.7.149 During the construction stage, while the presence of tall cranes and emerging turbines will make the Proposed Development more prominent than during the operational stage, their separation distance from the WLA, combined with the baseline influence of the Operational Wind Farms in this location, will prevent the effect from rising above **medium to low**.

Step 5 – Judgement of the significance of effect

9.7.150 The effect of the Proposed Development on the wildness qualities of the Ben Wyvis WLA will be **not significant** during both the short-term construction stage and long-term operational stage. The Operational Wind Farms in this area already have an influence on the perceptual responses and wildness qualities experienced in the closest south-west corner of the WLA, and this will moderate the additional effect of the nine proposed turbines. All effects will be adverse.

Summary of Effects on Landscape Receptors

9.7.151 The effects of the Proposed Development on the two landscape elements, four Landscape Character Units, one landscape designation and one Wild Land Area that were assessed in detail are summarised in **Table 9.8** below. Please refer to the assessments above in this section for the detailed extents applied to the different ratings and effects.

Table 9.8 Summary of effects on landscape receptors

Landscape Receptor	Sensitivity	Magnitude of change (const.)	Significance of the effect (const.)	Magnitude of change (operation)	Significance of the effect (operation)	Significance of the in-conjunction cumulative effect
<i>Heather Moorland</i>	medium	low	not significant	N/A	N/A	N/A
<i>Coniferous Forestry</i>	low	low	not significant	N/A	N/A	N/A
Rounded Hills: Ben Wyvis LCU	medium to high	medium to low	not significant	medium to low	not significant	not significant
Rounded Hills: Lochluichart LCU	medium	medium to high in the north medium in the south	significant	medium in the north medium to low in the south	not significant	not significant
Rounded Hills: Inchbae LCU	medium	medium in the south medium to low in the north	significant in the south not significant in the north	medium to low in the south low in the north	not significant	not significant
Undulating Moorland: Aultguish LCU	medium	medium	significant	medium to low	not significant	not significant
Ben Wyvis SLA	medium to high	medium to low	not significant	medium to low	not significant	not significant
Rhiddoroch – Beinn Dearg –	medium to high	medium to low	not significant	medium to low	not significant	not significant

Ben Wyvis WLA	medium in the south-west					
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9.8 Assessment of Effects on Visual Receptors

- 9.8.1 Effects on visual receptors are the changes to people’s views that will result from the introduction of the Proposed Development. The assessment of effects on visual receptors is supported by an assessment of effects on a series of viewpoints. These have been selected to represent visibility of the Proposed Development from principal visual receptors, such as settlements, routes, hilltops and other attractions around the Study Area.
- 9.8.2 The assessment of effects on views has been carried out through comprehensive site surveys along with the use of wirelines, photomontages and ZTVs, following the full methodology described in **Appendix 9.A**.
- 9.8.3 The viewpoint locations are shown in conjunction with the ZTV in **Figure 9.6**. The viewpoints are illustrated in **Figures 9.21 to 9.32** where a photograph of each view is accompanied by a computer-generated wireline and a photomontage for the Proposed Development. In the wirelines, the Proposed Development is shown in red and Operational Wind Farms are shown in black.
- 9.8.4 **Section 9.6: Scope of the Assessment**, identifies those visual receptors which have the potential to undergo significant effects. These visual receptors are represented by viewpoints and the effects of the Proposed Development on these visual receptors are assessed in detail below.

A835

- 9.8.5 The A835 is one of the very few roads that occur within a 15km radius of the Proposed Development and the only road from which road-users have potential to be significantly affected. It is represented by three viewpoints; Viewpoint 1 at Aultguish Inn and Viewpoint 2 at Black Bridge, both to the north-east and within 5km of the Proposed Development; and Viewpoint 3 at Garve Bridge, to the south-east at approximately 14km from the Proposed Development. Viewpoint 1 represents the section of the A835 approximately 1.5km to the west and 1km to the east of Aultguish Inn. Viewpoint 2 represents the section of the A835 approximately 1.5km to the west and 1km to the east of Black Bridge. Together, Viewpoint 1 and 2 represent a 5km section of the A835 from where the ZTV in **Figure 9.6b** indicates there will be high levels of visibility.

Viewpoint 1 – A835, Aultguish Inn (Figure 9.21)

Baseline

- 9.8.6 This viewpoint is located on the A835, adjacent to Aultguish Inn, and to the immediate east of Loch Glascarnoch. It is located approximately 1.56km to the north of the nearest turbine and the view is orientated south-west across an area of undulating and open moorland, towards the site. The viewpoint is representative of the views of road-users on the A835, and residents and visitors at Aultguish Inn. The view is relatively open around 360 degrees, and while views

of road-users are generally channelled either north-west or east along the course of the road, the views of residents and visitors in the principal rooms at Aultguish Inn are orientated south-south-west.

- 9.8.7 This section of the A835 is routed close to the course of the Glascarnoch River from where it leaves the dam, at approximately 0.5km to the north-west, to where it joins the Black Water at approximately 2.5km to the east (as represented by Viewpoint 2). The *Rounded Hills* LCT lies to the north and south-west of the river valley, while to the south and south-east there is a small pocket of the *Undulating Moorland* LCT. The *Undulating Moorland* LCT is lower lying than the surrounding *Rounded Hills* LCT and while the depth of the view is contained by the undulating landform, its relatively low elevation means that some of the Operational Wind Farms are visible beyond the enclosing ridgeline.
- 9.8.8 In the context of the wider landscape, which is principally defined by open landform and is largely devoid of point features or human artefacts, this area of the view represented by Viewpoint 1 contains a cluster of developments. In addition to the operational turbines seen to occupy open moorland to the south of the A835, there is also the concrete dam that holds the eastern end of Loch Glascarnoch, the A835, which provides the only access through this area, and Aultguish Inn, one of the few stopping points along this section of the A835. Pole mounted telephone wires follow the course of the road and the modification of the landscape through farming and forestry is evident through the presence of post and wire fences, and geometric edged, woodland plantations.
- 9.8.9 The Operational Wind Farms are all partly visible from this viewpoint at distances of 3.97km, 3.28km and 2.25km respectively. Collectively, 21 operational turbines are shown to be theoretically visible on the wireline in **Figure 9.21**. The turbines mostly sit behind the low ridgeline, such that the majority are partly concealed by the intervening landform. Four are seen as blade tips and four as blades, making them notably less prominent than the other turbines in the view, of which seven are seen with their towers and six to just below the nacelle. Actual visibility, as shown in the photograph, is reduced by the presence of forestry along the crest of the ridge, especially in respect of the blades and tips.
- 9.8.10 The turbines establish wind farm development as a feature of the baseline views of road-users on the A835 and visitors to Aultguish Inn. The Proposed Development will be seen associated with the lower undulating landform to the south of the A835, which forms a simple setting for this type of development.

Sensitivity

- 9.8.11 The landscape surrounding this section of the A835 is not covered by any regional or national landscape designations which would otherwise denote a special scenic value. Aultguish Inn does, however, provide one of the few visitor facilities along this section of the A835, which encourages visitors to stop and, in so doing, are more likely to observe their surroundings. While scenic interest along this particular section of the A835 is limited, it is part of a longer route where scenic value occurs, for example in relation to views of Beinn Dearg and Ben Wyvis further north and further south. The value of the view is medium.
- 9.8.12 The majority of viewers will be road-users whose susceptibility will be moderated by experiencing the view whilst in transit and at speeds typically between 30 and 60mph. For those travelling west-bound, the alignment of parts of the road

towards the Proposed Development will accentuate the presence of the turbines, while for those travelling east-bound, the Proposed Development will occur at an oblique angle to the direction of travel. The duration of the view will occur along a section of approximately 5km, albeit with intermittent screening by road-side landform and with the context of the visibility of existing turbines along most parts. The susceptibility of road-users is medium.

9.8.13 For residents and visitors at Aultguish Inn, their susceptibility to the Proposed Development is medium to high. The inn is orientated south-south-west, and although the Proposed Development is located to the south-west, it is likely it will feature in views from the inn. This will raise the prominence of the Proposed Development in views of residents and visitors, although operational wind turbines are already visible in this sector of the view.

9.8.14 The combination of the value of the view and its susceptibility to the Proposed Development results in a **medium** sensitivity for road-users on the A835 and **medium to high** sensitivity for residents and visitors at Aultguish Inn.

Magnitude of change

9.8.15 The Proposed Development will be seen at a minimum distance of 1.56km from the viewpoint. The Proposed Development will be seen as an extension to the Operational Wind Farms owing to its close proximity to the north of these developments. From the section of the A835 from Aultguish Inn eastwards, the Proposed Development will be seen to overlap with the operational turbines, which occur on the right of the existing group, and increase the horizontal extent further to the right by approximately an additional third.

9.8.16 While the 8m difference between the height of the proposed turbines (133m) and the operational turbines (125m) may not be readily discernible, the 12m difference in blade length (57m as opposed to 45m) may be evident from this relatively close range, although in views from the A835 the closer proximity of the proposed turbines will possibly perceptually account for the actual difference in scale. Turbines T2 and T3 of the Proposed Development are the closest and most prominent turbines in the group and while they will increase the influence of wind farm development from this view, they will be seen set well back from the A835 and contained within the forest fringe along the ridgeline.

9.8.17 In the section of the A835 adjacent to Loch Glascarnoch, the road-side cutting and rising landform to the south, will screen visibility of the Proposed Development and Operational Wind Farms. On approach to the dam and over the descent from the dam to Aultguish Inn, the extent of the proposed turbines will become more visible, as will the operational turbines. At a minimum distance of 1km they will be seen as relatively large scale elements, albeit in the context of the existing turbines.

9.8.18 During the operational stage the magnitude of change will be **medium**. There is already a baseline influence from the Operational Wind Farms, which means the Proposed Development will not be introducing a new feature, but instead will be extending an existing feature. It's location in the same landscape defined by its lower-lying landform and location below the foothills further west, will help to contain the source of this influence. The effect is, however, increased by the closer proximity of the turbines to visual receptors associated with the A835 and

Aultguish Inn, whereby the proposed turbines will be notably more prominent than the operational turbines.

- 9.8.19 During the construction stage, the magnitude of change will be **medium to high**. Although the presence of the operational turbines presents a context that will moderate the impact of the construction works, the presence and activity of tall cranes and other heavy plant, as well as the emergence of the turbines, will form a more eye-catching feature compared to the completed scheme assessed during the operational stage.

Significance of the effect

- 9.8.20 The effect of the Proposed Development on road-users on the A835 will be **significant** during the short-term construction stage, over the approximate 1km section to the west and 1km section to the east of Aultguish Inn and also will be **significant** during the long term operational stage, albeit that the significant effects identified will be moderated by the existing influence of the Operational Wind Farms. The effect on residents and visitors at Aultguish Inn will also be **significant** during the short-term construction stage and the long term operational stage. This relates principally to the orientation of Aultguish Inn broadly towards the Proposed Development and the closer proximity of the proposed turbines compared to the operational turbines. The nature of all effects will be adverse. (The section of the A835 to the east is assessed under Viewpoint 2).

Significance of the in-conjunction cumulative effect

- 9.8.21 The cumulative effect of the Proposed Development in-conjunction with the Operational Wind Farms will be **significant**. The proximity of the Operational Wind Farms establishes a notable influence in respect of the cumulative baseline. The addition of the Proposed Development, at closer proximity, will form a prominent feature and give rise to a **medium** cumulative magnitude of change and a **significant** cumulative effect. The wind farm developments will define the character of the views, owing to their close proximity and despite being contained within the southerly sector of the view.

Viewpoint 2 – A835, Black Water Bridge (Figure 9.22)

Baseline

- 9.8.22 This viewpoint is taken from the A835 where it crosses Black Water, approximately 2.5km to the east of Viewpoint 1 – Aultguish Inn. It is located 3.65km to the north-east of the nearest turbine and the view looks south-west across an area of undulating and open moorland, towards the Proposed Development. The viewpoint is representative of the views of west-bound road-users on the A835 and occasional walkers who park here to access Strath Vaich and its surrounding hills. The view is relatively open around 360 degrees, and there is no strong draw other than the channelling effect along the road corridor to the west and south-east.
- 9.8.23 The viewpoint is located in the narrow strath where Glascarnoch River joins the Black Water. This low-lying valley location is enclosed by rising landform, most notably where the *Rounded Hills* LCT occurs to the north. In contrast, the *Undulating Moorland* LCT to the south forms a lower scale of enclosure and this

allows visibility of the operational turbines to occur. They occupy the relatively low-lying landform, enclosed by the hill ridge to the west comprising Beinn Laith Bheag (609m AOD) and Meall Mhic Lomhair (607m AOD).

- 9.8.24 The Operational Wind Farms are all partly visible from this viewpoint at distances of 5.71km, 5.33km and 3.76km respectively. Lochluichart Phase I Extension is the most visible, the turbines seen at their full extents on the right of the group, while the Operational Wind Farms are largely screened by the intervening landform such that most are seen only from the nacelle up. In total 20 operational turbines are shown on the wireline in **Figure 9.22**, although the five turbines which show as blades or tips are indiscernible in the photograph.
- 9.8.25 The Operational Wind Farms are perceived as one group owing to their close proximity and scale. They establish wind farm development as a feature of the baseline views of road-users on the A835 and are seen associated with the lower undulating landform to the south of the A835, which forms a simple setting for this type of development.

Sensitivity

- 9.8.26 The landscape surrounding this section of the A835 is not covered by any regional or national landscape designations which would otherwise denote a special scenic value. Although not a formal stopping point, there is space at this bridging point for cars to park and this is used by walkers accessing the hills to the north. While scenic interest along this section of the A835 is limited, it is part of a longer route where scenic value occurs, mostly relating to views of Ben Wyvis and Beinn Dearg further north and south. The value of the view is medium.
- 9.8.27 The majority of viewers will be road-users whose susceptibility will be moderated by experiencing the view whilst in transit and at speeds typically between 30 and 60mph. For those travelling west-bound, the alignment of parts of the road towards the Proposed Development will emphasise the presence of the turbines, while for those travelling east-bound, views will be to the rear of the direction of travel. The duration of the view occurs for west-bound road-users, along a section of approximately 5km, albeit with intermittent screening by road-side landform and with visibility of operational turbines along most parts. The susceptibility of road-users is medium.
- 9.8.28 The combination of the value of the view and its susceptibility to the Proposed Development results in a **medium** sensitivity for road-users on this section of the A835.

Magnitude of change

- 9.8.29 The Proposed Development will be seen at a minimum distance of 3.65km from the viewpoint as an extension owing to its close proximity to the north of the Operational Wind Farm. From this section of the A835, the Proposed Development will be seen to overlap with operational turbines, which occur on the right of the existing group, and will increase the horizontal extent further to the right by approximately an additional third.
- 9.8.30 While the 8m difference between the height of the proposed turbines (133m) and the operational turbines (125m) may not be readily discernible, the 12m difference in blade length may be evident owing to the difference in proportioning,

although in views from the A835 the closer proximity of the proposed turbines will possibly perceptually account for the actual difference in scale. The Proposed Development will be seen to extend wind farm development across the extent of the middle-ground landscape, framed by the closer range landform in the left and right of the photograph. The proposed turbines will be seen set to the fore of the enclosing hill ridge and while the turbines will be partly back-clothed, blades will extend above the skyline.

- 9.8.31 During the operational stage the magnitude of change will be **medium**, although this is considered to represent a cautious assessment. There is already a baseline influence from the Operational Wind Farms, which means the Proposed Development will not be introducing a new feature, but instead will be extending an existing feature further across the available views. It's location in the same landscape and in the same sector of the view helps to contain the source of this influence. The effect is, however, increased by the enlarged horizontal extent across the middle-ground and the slightly larger perceived scale owing to the closer proximity of the turbines. Furthermore, the alignment of the road towards the Proposed Development will accentuate its prominence in views from the road at this location.
- 9.8.32 During the construction stage, the magnitude of change will also be **medium**. Although the presence of the operational turbines presents a context that will moderate the impact of the construction works, the presence and activity of tall cranes and other heavy plant, as well as the emergence of the turbines, will form a more eye-catching feature compared to the completed scheme assessed during the operational stage.

Significance of the effect

- 9.8.33 The effect of the Proposed Development on west-bound road-users on the A835 will be **significant** during the short-term construction stage, over the section approximately 1.5km to the west and 0.8km to the east of Black Water Bridge and also **significant** during the long-term operational stage, albeit that this is considered to represent a cautious or borderline assessment of significance which reflects a precautionary approach. The effect on east-bound road-users and west-bound road-users on all remaining sections will be not significant during the short-term construction and long term operational stages. The nature of all effects will be adverse.
- 9.8.34 Although the Proposed Development will make wind farm development a more prominent feature in views from the A835 along this stretch of road, it will not redefine the character of these views as there is already a notable baseline influence from the existing turbines.

Significance of the in-conjunction cumulative effect

- 9.8.35 The cumulative effect of the Proposed Development in-conjunction with the Operational Wind Farms will be **not significant**. The influence of the Operational Wind Farms on the cumulative context is limited by the relatively small number of operational turbines visible and their partial containment behind intervening landform. While the Proposed Development forms a notable influence on views from this section of the A835, the effects relate principally to its own influence rather than its in-conjunction influence with the Operational Wind Farms. The

Proposed Development and the Operational Wind Farms are seen at a greater separation distance from this viewpoint, compared to Viewpoint 1, and this reduces the influence of both the proposed and operational turbines. Taking all these factors into account gives rise to a **medium to low** cumulative magnitude of change.

- 9.8.36 The Cumulative ZTV in **Figure 9.12** shows that theoretical visibility of the Proposed Development will largely coincide with theoretical visibility of the existing wind farms in this area. The closer proximity of the proposed turbines, will, however, make them a more apparent and notable feature from the area represented by this viewpoint. The containment of the turbines within the same undulating moorland associated with the existing developments and enclosed by the background ridge, helps to reduce the cumulative magnitude of change, by concentrating this influence in one area.

Viewpoint 3 – Garve Bridge (Figure 9.23)

Baseline

- 9.8.37 This viewpoint is located on the A835 to the south of Garve and south-east of Loch Garve. The view looks north-west over Loch Garve towards the distant hills where the Operational Wind Farms are visible as small-scale features. The nearest turbine of the Proposed Development will be located approximately 12.94km from this viewpoint. The viewpoint has been selected to represent the views of road-users on the section of the A835 between Rogie Falls and Loch Garve. Visibility along this section is intermittent with tree cover forming a partial or full screen along the northern road-side. The views for west-bound road-users occur at an angle obliquely north-west in relation to the westerly direction of travel, while the views for east-bound road-users occur mostly to the rear of the direction of travel and are therefore not as apparent.
- 9.8.38 The viewpoint is located in the *Rocky Moorland* LCT and it is this landscape which characterises the view, with the *Rounded Hills* LCT forming a background feature to the north. The foreground features mixed woodland cover over the strath sides of the Black Water; these trees largely obscuring the route of the Inverness to Kyle of Lochalsh railway line. In the middle ground, Loch Garve is surrounded by the hills of the *Rocky Moorland* LCT to form a scenic composition. At the north end of the loch, the hill sides fold in to frame the *Rounded Hills* LCT in the distance and this accentuates the prominence of these more distant hills in the view. These hills are marked by the presence of the operational turbines, albeit seen as distant and relatively small-scale elements. More readily apparent human artefacts include the electricity transmission line, traversing the western hill slopes, as seen to the rear of Loch Garve and the telecommunication mast on the eastern hill.
- 9.8.39 The view is defined by the scenic composition of the hills and the loch; an attractive scene, albeit with human artefacts and influences evident. The presence of the A835, railway line, intermittent settlements and other dispersed road-side developments denote the settled character of this strath and reduce any sense of remoteness. While the hills appear relatively undeveloped, the presence of forestry plantations, the electricity transmission line, operational turbines and mast denote the spread of development in this landscape.

- 9.8.40 The Operational Wind Farms are all partly visible from this viewpoint at distances of 11.77km, 12.93km and 10.59km respectively. They are seen as a group of small-scale elements in a wider view, and back-clothed by the enclosing hill ridge. In total 17 operational turbines are shown on the wireline in **Figure 9.23**, although blades and tips are mostly indiscernible in the photograph.

Sensitivity

- 9.8.41 The view is not taken from a formal viewpoint and there are no references to suggest that views from this road are of a particular scenic value. Although a popular connecting route to Ullapool and the north-west Highlands, the A835(T) is not a National Tourist Route. The viewpoint, and most of the view, is not covered by any landscape designations, although Little Wyvis, which is seen as a background hill, is covered by the Ben Wyvis SLA. While there is no formal recognition of the value of the view, it does present the first views, for north-bound road-users, of the upland landscape in the transition from lowlands to uplands. Taking all these factors into account the value of the view is medium.
- 9.8.42 The majority of viewers will be road-users whose susceptibility will be moderated by experiencing the view whilst in transit and at speeds typically between 30 and 60mph. For those travelling west-bound, the Proposed Development will be seen at an angle oblique to the direction of travel, while for those travelling south-east-bound, views will be to the rear of the direction of travel. The duration of the view occurs for west-bound road-users, along a section of approximately 2km, albeit with intermittent screening by road-side planting and with visibility of existing turbines along this section. The susceptibility of road-users is medium.
- 9.8.43 The combination of the value of the view and its susceptibility to the Proposed Development results in a **medium** sensitivity for road-users on the A835.

Magnitude of change

- 9.8.44 The Proposed Development will be seen at a minimum distance of 12.94km from the viewpoint. The wireline in **Figure 9.23** shows that two turbines and two tips will be theoretically visible, although from this range the tips will not be discernible. The proximity of T8 and T6 to the existing turbines will ensure that the increased horizontal extent will be very limited and that the proposed turbines will appear as an extension to the Operational Wind Farms. While T8 and T6 may in some conditions appear more prominent than the operational turbines owing to their position above, rather than below, the skyline, their scale will appear comparable to the existing turbines, an effect enhanced by their comparatively more distant range from the viewpoint.
- 9.8.45 During the operational stage the magnitude of change will be **low**. Only two additional turbines will be visible and at a range of 12.94km, these will be seen as small-scale elements. Furthermore, they will be closely associated with an existing cluster, thus containing the influence of this type of development within one restricted area. The effect will be moderated by the experience of road-users, whereby they will see the turbines whilst travelling at speeds of 30 to 60mph, at an oblique angle to the direction of travel and with views often filtered by intervening tree cover.
- 9.8.46 During the construction stage, the magnitude of change will be **low**. While the presence of tall cranes and emerging turbines may form an apparent feature on

the skyline, the separation distance from the viewpoint will ensure that this feature will appear relatively small in scale. Furthermore, the small number of turbines visible from this viewpoint combined with the existing influence of the Operational Wind Farms in the same part of the view, will further moderate the effect.

Significance of the effect

- 9.8.47 The effect of the Proposed Development on road-users on the A835 between Rogie Falls and Loch Garve will be **not significant** during both the construction and operational stages. The not significant effect relates principally to the distance between this section of the A835 and the Proposed Development, the small extent of the Proposed Development that will be visible and the existing influence of wind farm development in this location. The nature of the effect will be adverse.

Significance of the in-conjunction cumulative effect

- 9.8.48 The cumulative effect of the Proposed Development in-conjunction with the Operational Wind Farms will be **not significant** during both the construction and operational stages. While the Proposed Development will add two turbines and two tips to the existing group, the in-conjunction cumulative magnitude of change will be **low**. The proposed turbines will form a small scale addition to the operational turbines, with all turbines seen as distant and small scale features.

Viewpoint 4 – Old Drover’s Road, Corriemoillie (Figure 9.24)

Baseline

- 9.8.49 This viewpoint is taken from the Old Drover’s Road, which connects Aultguish Inn on the A835 to the north, with Garve on the A835 to the south-east. It comprises a rough path which passes over the low hills to the east of Corriemoillie Forest. The viewpoint is located approximately half way along the route, at a localised high point from which some of the turbines of the Operational Wind Farms can be seen behind the intervening landform. The view looks north-west towards the Proposed Development, with the nearest turbine at 3.95km. The viewpoint has been selected to represent the views of walkers using this route. There is no information to indicate how many walkers use this route annually.
- 9.8.50 The viewpoint is situated in the *Rocky Moorlands* LCT and is characterised by the surrounding low hills with their irregular landform, rocky outcrops, heather moorland and rough grasses. The viewpoint is located on the western flank of Carn na Dubh Choille (479m AOD) with Beinn nan Cabag (474m AOD) to the west. Despite the comparatively low elevation of these hills, they create a sense of enclosure around this viewpoint and screen much of the Operational Wind Farms further to the west. While the view is enclosed to the east by the rising hillside, more extensive views to the high tops of Beinn Dearg occur to the north. A group of operational turbines are visible to the west, although the full extent of the development is partly screened by the intervening landform.
- 9.8.51 The modifications evident in this landscape are limited to the presence of the surrounding forestry blocks and the operational turbines to the west. Lochluichart Wind Farm is visible at a range of 4.29km, Lochluichart Wind Farm Extension at 4.79km and Corriemoillie Wind Farm at 2.34km. Despite the presence of these features, the landscape retains some sense of remoteness and seclusion.

Sensitivity

- 9.8.52 The viewpoint and the content of much of the view, are not covered by any regional or national landscape designations which would otherwise denote a special scenic value. The Old Drovers' Road is marked on OS mapping as a path, and appears to be used by walkers, most likely walking through the open landscape from Aultguish Inn in the north, rather than through the forest plantations from Garve in the south. The Old Drovers' Road is of historic value as it marks out the route used by Drovers' over past centuries. The value is medium to high. It is uncertain how many walkers use this route. During two site visits no other walkers were seen. Whilst evidently not as popular as Munro's such as Ben Wyvis, this route may offer an easier alternative for walkers, at a lower elevation.
- 9.8.53 The majority of viewers are walkers who will typically have a heightened awareness of their surroundings and time to appreciate the views. The baseline views from this route already contain intermittent visibility of the Operational Wind Farms. This moderates the susceptibility of walkers to the Proposed Development as the proposed turbines will not be introducing a new feature in this landscape. The duration of the view occurs for walkers along a section of approximately 2.6km in the north and 1.3km in the south, albeit with intermittent screening by intervening landform and with visibility of operational turbines along most parts. The susceptibility of walkers is medium.
- 9.8.54 The combination of the value of the view and the susceptibility of walkers to the Proposed Development results in a **medium** sensitivity.

Magnitude of change

- 9.8.55 The Proposed Development will be seen at a minimum distance of 3.95km from the viewpoint. The wireline in **Figure 9.24** shows that all nine of the proposed turbines will be visible, all seen to below their nacelles with the exception of one seen just as a blade. From this viewpoint, the Proposed Development will make a notable addition owing to its much fuller visibility. The operational turbines are largely screened by the intervening landform of Beinn nan Cabag (474m AOD) such that only eight blades and two turbines are visible from the overall group of 42 turbines. The sequential nature of views from this route, means that from other sections, the operational turbines are visible to fuller extents than the proposed turbines, as the effects of intervening landform change. This viewpoint has been selected to represent fuller visibility of the Proposed Development.
- 9.8.56 The Proposed Development will be seen as an extension owing to its close proximity to the north of the Operational Wind Farms but will also be seen as a notable increase in the horizontal extent relative to visibility of the operational turbines. In terms of scale, the proposed turbines will appear comparable, despite the blade lengths being 12m longer, this favourable comparison arising as a result of the closer range of the operational Corriemoillie turbines.
- 9.8.57 From the northern section of the path, between Aultguish Inn and the block of mixed woodland, the distance of the proposed turbines, at just over 1km, will make them appear large in scale, although seen within the context of the larger group of operational turbines. Similar to the Corriemoillie turbines, the proposed turbines will be seen set within the forest cover and this will provide continuity in appearance.

9.8.58 During the operational stage, the magnitude of change will be **medium to low**. There is already a baseline influence from the Operational Wind Farms, which means the Proposed Development will not be introducing a new feature, but instead will be extending an existing feature. It's location in the same landscape and in the same sector of the view helps to contain the source of this influence. The effect is, however, increased by the increased horizontal extent evident from certain sections, although moderated by those sections where no or lower levels of visibility of the Proposed Development occur.

9.8.59 During the construction stage, the magnitude of change will be **medium**. Although the presence of the operational turbines presents a context that will moderate the impact of the construction works, the presence and activity of tall cranes and other heavy plant, as well as the emergence of the turbines during their construction, will form a more eye-catching feature compared to the completed scheme evident during the operational stage.

Significance of the effect

9.8.60 The effect of the Proposed Development on walkers on the Old Drovers' Road will be **significant** during the short-term construction stage and **not significant** during the long-term operational stage. Although there is already a visual influence from the operational turbines, the presence of tall cranes and emerging turbines during the construction stage will make a notable addition to the visual effects.

Significance of the in-conjunction cumulative effect

9.8.61 The cumulative effect of the Proposed Development in-conjunction with the Operational Wind Farms will be **not significant**. While the Proposed Development will add to the extent of wind farm development visible in views from the route, its proximity to the Operational Wind Farms will mean that it will be clearly associated as an extension to these developments and the similarities in scale and appearance will ensure a good level of integration. Furthermore, the Proposed Development will be accommodated within the same LCU as the Operational Wind Farms and this will help to contain the in-conjunction cumulative effect.

9.8.62 The Cumulative ZTV in **Figure 9.12** shows that theoretical visibility of the Proposed Development will completely coincide with theoretical visibility of the existing wind farms in this area. Furthermore, there are some areas where the Operational Wind Farms are visible, but the Proposed Development will not be visible. The location of Corriemoillie on the right of the group makes it the closer development to walkers in the central and southern section of the route, while the Proposed Development will be more prominent in the northern section. Overall, the proposed and existing turbines will appear contained within this transitional landscape between the *Undulating Moorland* LCT and *Rounded Hills* LCT.

Viewpoint 5 – Ben Wyvis (Figure 9.25)

Baseline

9.8.63 The viewpoint is located on Glas Leathad Mor. At 1046m AOD it is the highest summit on the Ben Wyvis range and typical of part of the panoramic view walkers will experience from this high point. The ZTV in **Figure 9.6b** shows that theoretical visibility extends up the western slopes of the range as far as the

ridgeline through the high tops, with the eastern slopes screened from visibility. For a large part of the year the Ben Wyvis range can be subject to a cloud cap over its summit. This is because it is the first large mountain mass that easterly and south-easterly winds meet as they come in off the North Sea and as a result of warm sea air rising and cooling, cloud tends to collect around the summit.

- 9.8.64 The view from the Munro of Glas Leathad Mor is impressive. The view encompasses a 360-degree panorama, taking in some of Scotland's finest mountain scenery. To the north-west, the distinctive profile of Beinn Dearg forms the main feature, with tiers of peaks extending beyond towards the west coast. The scale of the hill ranges is accentuated by the low-lying lochs which occur intermittently between, with Loch Luichart to the west and Loch Glascarnoch to the north-west. Views north and east are characterised by the broader extent of the Ben Wyvis range with Tom a Choinnich at 953m AOD extending the ridge to the north and An t-Socach at 1006m AOD forming a spur to the east. To the south-east, the view extends out towards the Cromarty Firth to feature a different type of landscape - one which is predominantly low and settled with land uses of farming and forestry occurring extensively with oil rigs visible in the firth. The view to the south is also largely characterised by the extension of the Ben Wyvis ridgeline which curves around and gently down to An Cabar (946m AOD).
- 9.8.65 To the west, the view extends towards the Sgurr Mor *Rugged Mountain Massif* LCT, where the steep and rocky hills form a dramatic skyline. In the foreground to these hills lies an area of *Rounded Hills* LCT and *Rocky Moorland* LCT, made distinct by their lower elevation and characterised by the presence of the Operational Wind Farms.
- 9.8.66 The rounded ridge of Ben Wyvis means that much of the foreground features the immediate landform with its characteristic woolly grass cover which obscures the straths and glens which surround the Ben Wyvis range. Instead views carry over to the surrounding uplands with little evidence of the settled landscapes which occupy the surrounding lowlands. Development is evident in the upland landscape in the form of wind farm development. As well as Fairburn Windfarm, visible to the south, the Operational Wind Farms are evident in the view to the west, seen to occupy the lower moorland and forestry set below the dramatic skyline of Sgurr Mor.
- 9.8.67 The wireline in **Figure 9.25** shows that the Operational Wind Farms are all visible from this viewpoint at ranges of 13.14km, 13.53km and 11.08km respectively, with a total of 40 turbines visible. These turbines are seen set within the relatively low-lying area of the Undulating Moorland, with the backdrop of the Low Foothills and the Sgurr Mor Rugged Mountain Massif to the west.

Sensitivity

- 9.8.68 Although the summit of the hill is not marked as a formal viewpoint on OS maps, for walkers it essentially serves this purpose, as this is likely to be the point where walkers would stop and take time to enjoy the view (assuming favourable weather conditions). A truncated trig point marks the summit. The viewpoint and much of the upland landscape in the fore and middle ground of the view are subject to the Ben Wyvis SLA designation which denotes a special scenic value. Glas Leathad Mor is a popular Munro with walkers, owing to its proximity to Inverness, good accessibility via a track and the expansive views which can be experienced from

the summit. The value of the view from Glas Leathad Mor is high, despite being representative of a regionally rather than a nationally designated area, owing to its scenic value and popularity.

- 9.8.69 Assuming clear weather conditions, the susceptibility of walkers will be medium. An important incentive in walking up a big hill like Glas Leathad Mor is the enjoyment of the views, especially from the summit, where the full extent of the panorama can be experienced. Walkers have an awareness of their surroundings, often relating to their need to navigate through the landscape, although in the case of Glas Leathad Mor where there is a track to the top, this awareness may be reduced. The susceptibility of walkers is moderated by the fact that operational turbines are already visible in the sector of the view where the Proposed Development will be located.
- 9.8.70 Through the combination of the value of the view and the susceptibility of walkers to changes in the view, the overall sensitivity is considered to be **medium to high**.

Magnitude of change

- 9.8.71 The Proposed Development will be seen at a minimum distance of 12.29km from the viewpoint. All nine of the proposed turbines will be seen set within the relatively low-lying area of undulating moorland. There is sufficient continuity between the proposed and the operational turbines of the adjacent wind farms to ensure that the Proposed Development appears as a well-integrated extension. The location of the proposed turbines to the immediate north of the Operational Wind Farms forms an immediate association, despite the slightly broader spacing of the proposed turbines. Furthermore, the turbines appear similar in appearance and although the proposed turbines will have slightly longer blades, from the range of 12.29km these differences will not be readily discernible.
- 9.8.72 The effect during the operational stage will relate principally to the increased horizontal extent of the wind farm development to the north by almost a third. While this will bring the group closer to Loch Glascarnoch, all the turbines will be seen contained within the same landscape character type. In terms of their relationship with the landscape to the rear, the operational turbines already sit to the fore of the Sgurr Mor range, such that the existing turbines will increase the extent of these turbines across a wider part of the foreground but not impinge vertically on the mountain backdrop. Taking all these factors into account, the magnitude of change during the operational stage will be **medium to low**.
- 9.8.73 During the construction stage, the magnitude of change will also be **medium to low**. While the presence of tall cranes and emerging turbines will form an apparent feature, the distance of this feature from the viewpoint, the existing influence of the Operational Wind Farms, and the location of this feature set well below the skyline will moderate this effect and prevent it from redefining the character of the view.

Significance of the effect

- 9.8.74 The effect of the Proposed Development on walkers on Ben Wyvis will be **not significant** during the construction and operational stages. This finding relates to the separation distance from the viewpoint and the baseline influence from the Operational Wind Farms.

Significance of the in-conjunction cumulative effect

- 9.8.75 The cumulative effect of the Proposed Development in-conjunction with the Operational Wind Farms will be **not significant** on the views of walkers on the Ben Wyvis range. While the Proposed Development will add nine turbines to the existing group, the following factors will limit the cumulative magnitude of change to **medium to low**. The location of the Proposed Development will ensure it appears as an extension to the Operational Wind Farms and will contain this type of development within a defined sector of the view, as well as a defined landscape character type. This prevents the Proposed Development from spilling across wider sectors or into different landscapes, which would otherwise give rise to a greater magnitude of change.
- 9.8.76 The Cumulative ZTV in **Figure 9.12** shows that theoretical visibility of the Proposed Development will largely coincide with theoretical visibility of the existing wind farms, as seen from the path on the western slopes and the Ben Wyvis ridgeline. While the most notable cumulative effect will relate to the increased horizontal extent that will arise as a result of the Proposed Development in-conjunction with the Operational Wind Farms, this will not be of a sufficient magnitude to give rise to a significant in-conjunction cumulative effect.

Viewpoint 6 – An Coileachan (Figure 9.26)

Baseline

- 9.8.77 This viewpoint is located on the summit of An Coileachan (923m AOD) which occupies the south-east corner of the *Rugged Mountain Massif* LCT, to the west of the Proposed Development. The viewpoint is representative of the views of walkers on this hill. In many of the recommended circular routes around the Sgurr Mor range, the summit of An Coileachan is included as the south-east point. The ZTV in **Figure 9.12** shows that visibility across the Sgurr Mor range is limited, owing to the screening effect of the intervening foothills between the Proposed Development and the mountains, however visibility will occur from the summits and the eastern facing upper slopes.
- 9.8.78 An Coileachan is steep sided and evenly contoured to form a smooth conical hill, albeit with some irregular slope profiles and rock outcrops to the north and east. The smoothness of the landform is accentuated by the simple and homogenous land cover of heather moorland and rough grasses, and with the distinct absence of trees, even at the lower levels, the landscape has an open and exposed character. The view from the hill top is panoramic and expansive, revealing tiers of hills at various ranges. The most prominent feature is the whale-back ridge that extends north-west, drawing the focus to the distinct crescent shaped peak of Sgurr Mor. The jagged hills of the wider Sgurr Mor range characterise this view and form the main attraction in the views of walkers.
- 9.8.79 Although of a comparable scale, the Ben Wyvis range to the east lacks the presence or stature of the Sgurr Mor range from this viewpoint, partly owing to its distance, but also its much flatter ridgeline and gently rounded hill sides. It is in this least remarkable sector of the wider view that the Proposed Development will be visible at a range of 8.07km. The Operational Wind Farms are already visible on the lower *Rounded Hills* LCT and *Rocky Moorland* LCT to the fore of the Ben Wyvis Range.

- 9.8.80 Lochluichart Wind Farm is the most apparent of the three developments, seen exposed between the lower foothills to the south, while Lochluichart Wind Farm Extension to the north and Corriemoillie to the rear, are more heavily screened by intervening landform. At ranges of 7.89km, 8.1km and 9.06km respectively the Operational Wind Farms occur as relatively small-scale elements within a much wider panorama.
- 9.8.81 There are very few human interventions evident in this landscape and this gives rise to a sense of remoteness and isolation. The surrounding upland area especially, is characterised by the simplicity of the landscape, with its homogenous land cover and absence of point features. The wind turbines in the landscape to the east form one of the few apparent modern artefacts, although seen from a sufficient distance to avoid a sense of impingement.

Sensitivity

- 9.8.82 The summit of An Coileachan is a location people will visit with the specific purpose of enjoying the view, and this raises the value of the viewpoint. The viewpoint and the landscape which occupies much of the view are subject to the landscape designation of the Fannichs-Beinn Dearg-Glen Calvie SLA, which reflects the regional importance of this landscape. Taking these factors into account, the value of the view is assessed as being medium to high.
- 9.8.83 The susceptibility of hill walkers to the Proposed Development relates principally to their expectation to enjoy panoramic and scenic views. Development can detract from this enjoyment, particularly when the expectation is to experience an undeveloped or remote landscape. The existing presence of wind farm development in the sector of the view to the east, establishes this type of development as a component of the baseline. Although to some extent this reduces the susceptibility of walkers to the introduction of the Proposed Development, the largely undeveloped nature of the wider views prevails, and this maintains a degree of susceptibility. Taking these factors into account, the susceptibility of hill walkers will be medium to high.
- 9.8.84 The combination of the value of the view and its susceptibility to the Proposed Development results in a **medium to high** sensitivity.

Magnitude of change

- 9.8.85 The Proposed Development will be seen at a minimum distance of 8.07km from the viewpoint. The wireline in **Figure 9.26** shows the extent to which the Proposed Development will be visible, with three blades and three tips seen set behind the intervening ridge of the foothills. The two tips to the left will be largely indiscernible, and this will shorten the additional horizontal extent of visible development. While the three blades will make an apparent extension to the north, they will form only a small proportion of the wider extent of operational turbines. Their location behind the intervening landform will reduce their overall prominence in the group and their scale will appear closely comparable to that of the operational turbines.
- 9.8.86 The magnitude of change during the operational stage will be **low**. This relates principally to the small number of turbines visible, the limited extent to which they are visible and the greater extent to which the operational turbines are visible. The continuity in location and appearance will also moderate the effect of the

proposed turbines, as their proximity to the existing turbines and their similar scale and proportions will clearly mark this development as an extension and ensure the proposed turbines will appear integrated within the wider group.

9.8.87 Similar to the operational turbines, the proposed turbines will sit well below the skyline of the Ben Wyvis range and be seen to the fore of the northern ridgeline where it descends through Carn Gorm (742m AOD). The operational turbines already occupy the foreground to this view and the addition of the proposed turbines will form only an incremental change. The more dramatic mountain scenery in the other sectors of the view will remain unaffected.

9.8.88 During the construction stage, the magnitude of change will be **medium to low**. While the presence of tall cranes and emerging turbines may form an apparent feature, the distance of this feature from the viewpoint, the existing influence of the Operational Wind Farms, and the location of this feature set well below the skyline will moderate this effect and prevent it from redefining the character of the view.

Significance of the effect

9.8.89 The effect of the Proposed Development on walkers on An Coileachan will be **not significant** during the construction and operational stages. This finding relates to the limited extent to which the Proposed Development will be visible, the separation distance from the viewpoint and the existing influence of the Operational Wind Farms.

Significance of the in-conjunction cumulative effect

9.8.90 The cumulative effect of the Proposed Development in-conjunction with the Operational Wind Farms will be **not significant**. The extent to which the Operational Wind Farms are visible from this viewpoint, gives rise to a notable influence on the cumulative context. In contrast, the limited extent to which the Proposed Development will be visible, limits the in-conjunction cumulative magnitude of change to **low**.

9.8.91 The Cumulative ZTV in **Figure 9.12** shows that theoretical visibility of the Proposed Development will largely coincide with theoretical visibility of the Operational Wind Farms as seen from the summit and east-facing upper slopes of An Coileachan, indicating that the Proposed Development will not introduce notable new areas of visibility in respect of the cumulative context. As the wireline in **Figure 9.26** shows, Lochluichart Wind Farm will continue to be the most visible of the Operational Wind Farms, with visibility of the Proposed Development forming only an incremental increase.

Viewpoint 7 – Sgurr Mor (Figure 9.27)

Baseline

9.8.92 This view is taken from the summit of Sgurr Mor (1110m AOD) in the Fannich Mountains to the north-west of the Proposed Development. Sgurr Mor is the highest summit in this range, which includes several Munros and is very popular with hill walkers. The viewpoint has been selected to represent the views of walkers in the Fannich Mountains, where there are a number of long distance

routes connecting different combinations of the several Munros which occur in this range.

- 9.8.93 The viewpoint affords expansive and panoramic views in all directions. The landform is true to its landscape character type of *Rugged Mountain Massif* with large scale mountains characterised by peaks, arêtes, corries and tarns. These glacial landform features surround and characterise the Sgurr Mor range, holding the attention of viewers within the fore to middle range, while the more distant hills and mountains add depth to the scenic interest across the wider panorama.
- 9.8.94 The view west looks out towards the peak of Sgurr nan Clach Geala (1093m AOD). Tiers of hill ridges and peaks can be seen all the way beyond to Wester Ross and the west coast. This landscape appears wild and remote, with few visible human artefacts other than the A832, carving its route north-west through the moorland landform. The view north looks out towards Beinn Dearg which is also characteristic of the *Rugged Mountain Massif* LCT. These mountains appear devoid of human intervention and add to the perception of a wider remote mountain landscape. The view south looks out across Loch Fannich to the tiers of hills that occur between Strathconon, Glen Orrin and Glen Strathfarrar, all following the predominant west to east alignment. Other than forestry plantations evident on the lower slopes, this aspect is also largely devoid of human intervention.
- 9.8.95 The view south-east is characterised by the mountain ridge that extends from close range Meall nam Peithirean (974m AOD) to An Coileachan (923m AOD) with its whale-back ridge and craggy slopes. In comparison, the foothills to the east become lower and more rounded, presenting a contrast to the dramatic scenery that surrounds Sgurr Mor. While the mass of Ben Wyvis is evident from this range, its flat-topped profile reduces its prominence in the wider view.
- 9.8.96 The Operational Wind Farms are visible in this easterly sector of the view, seen set behind the intervening foothills such that most turbines are partially screened apart from a few seen more fully through the troughs. The wireline in **Figure 9.27** shows 30 turbines, and while a few of these occur as tips, the majority are seen with nacelles or as blades. They are set well below the skyline of the Ben Wyvis range and at a distance of approximately 12 to 14km from relatively small-scale features in the wider view.

Sensitivity

- 9.8.97 The viewpoint and the surrounding landscape form the south-western part of the Fannichs-Beinn Dearg-Glen Calvie SLA and this denotes a regional value to the landscape visible in the fore to middle ground of the view. While the viewpoint is not marked as a formal viewpoint on OS maps it is a place people visit with the purpose of enjoying the view, and this raises its value. Overall the value of the view is considered to be medium to high.
- 9.8.98 The susceptibility of hill walkers to the Proposed Development relates principally to their expectation to enjoy panoramic and scenic views. Development can detract from this enjoyment, particularly when the expectation is to experience an undeveloped or rural landscape. The existing presence of wind farm development in the eastern sector of the view, establishes this type of development as a component of the baseline. Although to some extent this reduces the susceptibility of walkers to the introduction of the Proposed Development, the largely undeveloped nature of the wider views prevails, and this maintains a degree of

susceptibility. Taking these factors into account, the susceptibility of hill walkers will be medium.

- 9.8.99 The combination of the value of the view and its susceptibility to the Proposed Development results in a **medium to high** sensitivity.

Magnitude of change

- 9.8.100 The wireline in **Figure 9.27** shows the Proposed Development partly visible behind the intervening landform of Meall na Speiraig (676m AOD) and Beinn Liath Bheag (609m AOD). While seven turbines are shown to be visible, three are visible to just below the nacelle, three are visible as blades, while the tip in the centre will be largely indiscernible from this range. The Proposed Development will be seen at a minimum distance of 12.08km from the viewpoint. This distance, combined with the limited extent to which the turbines will be visible, will ensure that the turbines appear as relatively small-scale features in the view. While the rotor diameters of the proposed turbines are marginally longer than the existing turbines, these differences will not have a notable effect from this range.
- 9.8.101 The location of the proposed turbines to the immediate north of the operational turbines means they will be evident as an extension. They will be seen associated with the same group of foothills as the operational turbines, avoiding appearing on the edge or spilling into a different landscape type. In respect of views towards Ben Wyvis, while the Proposed Development will be seen to extend the horizontal spread further in-line with An Cabar (946m AOD) and the main Ben Wyvis ridge, the importance of this feature from Sgurr Mor is moderated by the influence of much more dramatic mountain skylines in all other directions.
- 9.8.102 The magnitude of change during the operational stage will be **low**. This relates principally to the small number of turbines visible, the limited extent to which they are visible and the greater extent to which the operational turbines are visible. It also takes into account the influence of the immediate landform around the summit of Sgurr Mor and wider panorama of impressive mountain scenery, which together form the primary features in the view and in respect of which the Proposed Development and Ben Wyvis form secondary features. The effect will also be moderated by the similarities in appearance between the proposed and operational turbines which ensures they will appear as an integrated extension.
- 9.8.103 During the construction stage, the magnitude of change will be **medium to low**. While the presence of tall cranes and emerging turbines may form an apparent feature, the distance of this feature from the viewpoint, the existing influence of the Operational Wind Farms, and the location of this feature set well below the skyline will moderate this effect and prevent it from redefining the character of the view.

Significance of the effect

- 9.8.104 The effect of the Proposed Development on walkers on Sgurr Mor will be **not significant** during the construction and operational stages. This finding relates to the limited extent to which the Proposed Development will be visible, the separation distance from the viewpoint and the existing influence from the operational turbines.

Significance of the in-conjunction cumulative effect

- 9.8.105 The cumulative effect of the Proposed Development in-conjunction with the Operational Wind Farms will be **not significant**. The extent to which the Operational Wind Farms are visible from this viewpoint, gives rise to a notable influence on the cumulative context. In contrast, the limited extent to which the Proposed Development will be visible, limits the in-conjunction cumulative magnitude of change to **low**.
- 9.8.106 The Cumulative ZTV in **Figure 9.12** shows that theoretical visibility of the Proposed Development will largely coincide with theoretical visibility of the existing wind farms as seen from the summit and east-facing upper slopes of Sgurr Mor, indicating that the Proposed Development will not introduce notable new areas of visibility in respect of the cumulative context. As the wireline in **Figure 9.27** shows, Lochluichart Wind Farm will continue to be the most fully visible of the Operational Wind Farms, with visibility of the Proposed Development forming only an incremental increase.

Viewpoint 8 – Beinn a Chaisteil (Figure 9.28)

Baseline

- 9.8.107 This view is taken from the summit of Beinn a Chaisteil (787m AOD), a popular Corbett situated between Strath Vaich to the west and Strath Rannoch to the east. The view is orientated south-south-west, looking down through Strath Vaich to the lower part of the *Rounded Hills* LCT where the Proposed Development will be located at approximately 8.46km. The viewpoint has been selected to represent the views of hill walkers. Beinn a Chaisteil is accessed by walkers via the long track adjacent to Black Water in the southern part, and Loch Vaich in the northern part, followed by a steep and track-less ascent to the summit.
- 9.8.108 The view from Beinn a Chaisteil is characterised by the surrounding upland landscape. The main attraction of the view is west towards the mountain massif of Beinn Dearg, characterised by its large scale and breadth. The open moorland landcover and absence of human artefacts, mark this landscape as being remote with some sense of isolation. The upland landscape wraps around Beinn a Chaisteil to the north and west, and although the hills are not as large as Beinn Dearg, there is still an absence of visible human artefacts or interventions.
- 9.8.109 In contrast, the landscape through Strath Vaich towards the site, falls away in elevation and human artefacts are visible, most notably in the form of the Operational Wind Farms, as well as the hunting lodges visible in the strath and the modification of forestry across parts of the lower slopes. The majority of the 37 visible operational turbines are seen at their full height with the more distant southern turbines partially screened by intervening landform. At a range of approximately 9.5 to 12km, they are seen stretching across the undulating moorland that lies between the Ben Wyvis range to the east and the Sgurr Mor range to the west and set well below the skyline of the distant hills around Strathconon and Strathfarrar to the south.

Sensitivity

- 9.8.110 While the summit of Beinn a Chaisteil is not shown as a formal viewpoint on OS maps, it is a location people visit with the specific purpose of enjoying the view.

The viewpoint is located within the southern boundary of the Fannichs-Beinn Dearg-Glen Calvie SLA and this raises its value, although the Proposed Development and the majority of the view to the south, lie outwith the designated area. Taking these factors into account, the value of the view is assessed as being medium to high.

- 9.8.111 The susceptibility of hill walkers to the Proposed Development relates principally to their expectation to enjoy panoramic and scenic views. Development can detract from this enjoyment, particularly when the expectation is to experience an undeveloped or rural landscape.
- 9.8.112 The existing presence of wind farm development, most notably in the southern sector and adjacent to the proposed site, establishes this type of development as a component of the baseline and reduces the susceptibility of walkers to the introduction of the Proposed Development. Similarly, the extent of modification by rural land use practices seen in the southern sector, detracts from the sense of remoteness. Taking these factors into account, the susceptibility of hill walkers is medium.
- 9.8.113 The combination of the value of the view and the susceptibility of walkers to the Proposed Development results in a **medium to high** sensitivity.

Magnitude of change

- 9.8.114 The Proposed Development will be seen at a minimum distance of 8.46km from the viewpoint. All nine turbines will be seen to their full height and set to the fore of the operational turbines. Six of the proposed turbines will sit within the current horizontal extent of the operational turbines, while three to the west will increase the extent to the right in this view. While the scale of the proposed turbines will be broadly comparable to the operational turbines, their closer distance may make them appear slightly larger even from this range of 8.46km.
- 9.8.115 The magnitude of change during the operational stage will be **medium to low**, despite the turbines and associated tracks appearing at a slightly closer range than the Operational Wind Farms. From the range of 8.46km, the proposed turbines will be seen as relatively small-scale elements and owing to the extent of overlap with the operational turbines, the increase in horizontal extent will be limited. The Proposed Development will sit well below the skyline and furthermore, the proposed turbines on the left will sit below the operational turbines. Their location in a sector of the view already featuring wind farm development, will ensure the wider extent of the panorama will remain undeveloped and the views to the west will continue to act as the main attraction. These factors will reduce the prominence of the proposed turbines in views from Beinn a Chaisteil.
- 9.8.116 The magnitude of change during the construction stage will be **medium to low**. The presence and activity of tall cranes combined with the presence of emerging turbines and tracks will add to the prominence of the Proposed Development during the construction especially as these features will be apparent on the closer northern edge.

Significance of the effect

- 9.8.117 The effect of the Proposed Development on hill walkers on Beinn a Chaisteil will be **not significant**. This finding relates chiefly to the location of the Proposed Development largely overlapping with the Operational Wind Farms in a sector of the view where wind farm development already forms a notable feature. The prominence of the Proposed Development will be moderated by the separation distance from the viewpoint and its location in a less remarkable sector of the wider panoramic view, characterised by large scale upland scenery.

Significance of the in-conjunction cumulative effect

- 9.8.118 The cumulative effect on walkers as a result of the Proposed Development in-conjunction with the Operational Wind Farms will be **not significant** during the construction and operational stages. This relates to the limited additional influence that the Proposed Development will have in a cumulative context already defined by the presence of the Operational Wind Farms. In this middle range view from the north, the proposed turbines will be seen to largely coincide with the existing turbines, albeit with a slight extension to the west and encroachment north. The magnitude of this change in respect of the cumulative context will be **low**.
- 9.8.119 The Cumulative ZTV in **Figure 9.12** shows that theoretical visibility of the Proposed Development will largely coincide with theoretical visibility of the existing wind farms as seen from the summit and east-facing upper slopes of Beinn a Chaisteil. The Proposed Development will, therefore, be seen as an addition to the Operational Wind Farms, rather than a new feature.

Viewpoint 9 – Fairburn Estate (Figure 9.29)

Baseline

- 9.8.120 This viewpoint is taken from the minor road that connects the village of Marybank with Fairburn Estate. The road traverses the southern valley side of the River Conan, affording expansive views northwards towards the Ben Wyvis range. The road is delineated by an avenue of mature deciduous trees and whilst this forms enclosure to the road, sufficient gaps occur to allow views across the landscape to the north. The view is representative of the views of road-users travelling along this minor road, although it only accesses Fairburn Estate and traffic flows are low. This viewpoint has been selected, because as shown on the ZTV in Figure 9.12, there will be no visibility from the Strathconon Minor Road to the north and very limited visibility from the village of Marybank to the north-east.
- 9.8.121 Although only gently sloping, the natural orientation of views from this location follow the fall of the landform northwards across the relatively open aspect of the valley. While the main focus of the view is the broad whale-back ridge of Ben Wyvis to the north, offset to the north-west is Tor Achilty, which, although only 252m in height, is prominent owing to its distinct tree-fringed outline and contrast with the flat flood plain of the immediately adjacent River Conan.
- 9.8.122 The view is made up of tiers, each defined by a combination of landform and landuse. From the foreground into the middle ground, the relatively level valley landform is characterised by farming practices with a distinct pattern of large open fields, intermittent farmsteads, and belts and clusters of deciduous trees, especially concentrated along the riverbanks. Where the land rises steeply on the

edge of the valley, farming is replaced by forestry and a narrow band of dark green coniferous forestry marks the transition across the higher and more undulating landform. The background is characterised by the large *Rounded Hills* of the Ben Wyvis range which add scale and identity to this lowland view. The *Rocky Moorland* hills sit in as the foothills to the larger *Rounded Hills*, appearing smaller in scale and less distinct as a feature of the view.

- 9.8.123 While the modification of the landscape through farming and forestry practices is evident across the fore and middle ground of the view, the hills in the background appear largely undeveloped with the small exception of the telecommunication mast set on the *Rocky Moorlands* LCT to the left. Although Fairburn Wind Farm is situated to the west and theoretically visible from this viewpoint, tree cover and hedgerows often screen visibility from this minor road. The cluster of the Operational Wind Farms are visible to the north-west, on the distant hill ridge to the immediate right of Tor Achilty. These wind farms form a relatively compact group, seen set below the ridgeline and at a minimum distance of approximately 18 to 21km appear as relatively small scale elements in the wider view.

Sensitivity

- 9.8.124 The viewpoint is not formally recognised and is representative of views from a minor road that are experienced incidentally by road-users. While the viewpoint and much of the content of the view are not subject to any national or regional landscape designation, Little Wyvis and Ben Wyvis are subject to the regional Ben Wyvis SLA and this denotes a special value to these features in the view. The value of the view is medium.
- 9.8.125 The susceptibility of road-users to the Proposed Development is also medium. While the natural draw of the view is north towards Ben Wyvis, the enclosure of the avenue trees does partially screen views in this direction. The Proposed Development will be visible to the north-west, placing it more within the visible range of west-bound, rather than east-bound road-users. While the Operational Wind Farms are visible from this minor road, at a minimum distance of 18.38km, they form a very small scale feature. The location of the Proposed Development next to these Operational Wind Farms will reduce the susceptibility of viewers, as the Proposed Development will be seen in the context of an existing wind farm influence.
- 9.8.126 The combination of the value of the view and the susceptibility of viewers to the Proposed Development results in a **medium** sensitivity for road-users.

Magnitude of change

- 9.8.127 The Proposed Development will be seen at a minimum distance of 20.78km from the viewpoint. The wireline in **Figure 9.29** shows that four turbines will be visible as a small group overlapping with the right extent of the existing turbines of the Operational Wind Farms. A tip is also shown on the ridgeline further to the right which will be indiscernible from this range. Although located along a relatively discreet section of the upland skyline, the proximity of the proposed turbines to the local focal feature of Tor Achilty may make them more of a feature than they otherwise would be. Furthermore, while the scale of the proposed turbines will appear comparable to the scale of the existing turbines, their position above the

skyline may make them appear slightly more prominent than the existing turbines.

- 9.8.128 While these features may raise the prominence of the proposed turbines, the overall magnitude of change will be moderated by the following factors. Firstly, the distance between the viewpoint and the Proposed Development means they will appear as small-scale features within a wider upland landscape. Secondly, their location to the north-west means that they will not impinge on the main focal feature of Ben Wyvis. Thirdly, they will be seen as a small number of additional turbines with compatibility in terms of scale, location and appearance.
- 9.8.129 Taking all these factors into account, the Proposed Development will lead to a **low** magnitude of change. This assessment applies to both the construction and operational stages. Although the Proposed Development may be marginally more prominent owing to the use of tall cranes during construction, from this distance of 20.78km, this will not redefine the character of the view.

Significance of the effect

- 9.8.130 The effect of the Proposed Development on road-users on the Avenue to Fairburn Estate will be **not significant** during both the construction and operational stages of the Proposed Development. This finding relates principally to the separation distance between the visual receptors and the Proposed Development, as well as the small number of additional turbines visible and the existing influence of the operational turbines.

Significance of the in-conjunction cumulative effect

- 9.8.131 The cumulative effect of the Proposed Development in-conjunction with the Operational Wind Farms will be **not significant**. Although the Operational Wind Farms are visible to a greater extent than the Proposed Development will be, their separation distance from the viewpoint means that the Operational Wind Farms will have a limited influence on the cumulative context and the addition of the Proposed Development will have an in-conjunction cumulative magnitude of change that will be **low**.
- 9.8.132 The Cumulative ZTV in **Figure 9.12** shows that theoretical visibility of the Proposed Development will coincide with theoretical visibility of the existing wind farms as seen from this section of the Avenue to the Fairburn Estate. This means that the Proposed Development would always be seen in conjunction with the Operational Wind Farms and would not introduce visibility of wind farm development into new areas.

Viewpoint 10 – Sgurr a Mhuilinn (Figure 9.30)

Baseline

- 9.8.133 This view is taken from the summit of Sgurr a Mhuilinn (879m AOD), the highest top in a group of Corbetts and Grahams to the north of Strathconon. It is accessed from the minor road that extends west from the A832 at Marybank, along Strathconon. The starting point for the walk is at Strathanmore, from where there is a steep ascent over the hill slopes to the west and north-west. A popular circular route takes in the summit of Meallan nan Uan (838m AOD) to the south of

the Sgurr a Mhuilinn. The viewpoint has been selected to represent the views of hill walkers in this area. The ZTV shows that visibility will occur along the ridgeline between Creag Ruadh (734m AOD) and Meallan nan Uan, and more extensively across the north-east facing slopes of Sgurr a Mhuilinn.

- 9.8.134 To the south of the viewpoint, the view is characterised by the tiers of summits and hill ridges of Strathconon, Monar and Mullardoch, extending over a substantial distance and with intermittent straths and glens well concealed. In contrast, to the north, views open up across a lower-lying area around which larger mountain ranges occur. The lower-lying area comprises the *Undulating Moorland* LCT of Strath Bran, with its low hills and marshy ground cover. These fall in towards the *Wide Farmed Strath* LCT of the River Bran and the series of lochs this river feeds into, the largest being Loch Luichart to the north-east. On the northern side of the lochs, isolated or small clusters of properties appear dispersed along the shoreline, while tracts of commercial forestry occur across lower hill slopes.
- 9.8.135 The view extends out to the Sgurr Mor range to the north and the Ben Wyvis range to the east, with the Operational Wind Farms seen located in a lower lying area of the *Rounded Hills* LCT in between, albeit set on what appears as a plateau, above the lochs of Strath Bran. The Operational Wind Farms, collectively form a large group of turbines in an otherwise, largely undeveloped upland landscape. From this distance of approximately 12.5 to 15km they appear as relatively small scale elements.

Sensitivity

- 9.8.136 While the summit of Sgurr a Mhuilinn is not shown as a formal viewpoint on OS maps, it is a location hill walkers will visit with the specific purpose of enjoying the view, and this raises the value of the viewpoint. The viewpoint is located within the north-east corner of the Strathconon, Monar and Mullardoch SLA which adds to its value, although most of the view to the north lies outwith this designated area. These factors contribute to the value of the view, which is assessed as being medium to high.
- 9.8.137 The susceptibility of hill walkers to the Proposed Development relates principally to their expectation to enjoy panoramic and scenic views. Development can detract from this enjoyment, particularly when the expectation is to experience an undeveloped or rural landscape. While to the south, the upland landscape appears to be devoid of human artefacts, in contrast, the view to the north features Operational Wind Farms, as well as settlement along the strath, and commercial forestry on the lower slopes. The influence of these developments has the effect of reducing the susceptibility of hill walkers to the effects of the Proposed Development, especially in respect of the Operational Wind Farms which establish this type of development as a feature of the baseline view. The susceptibility of hill walkers is medium.
- 9.8.138 The combination of the value of the view and its susceptibility to the Proposed Development results in a **medium to high** sensitivity.

Magnitude of change

- 9.8.139 The Proposed Development will be seen at a minimum distance of 14.27km from the viewpoint. While all nine proposed turbines are shown on the wireline in **Figure 9.30** to be visible, none are seen to their full extent and most are partly

screened by the intervening landform of Meallan Caoruinn (499m AOD), such that the group is seen as one tip, one blade, five turbines visible to just below the nacelle, and two turbines visible to below the nacelle. While the proposed turbines increase the horizontal extent of wind farm development to the west by a third, the limited prominence of the turbines on this left side of the group will limit the effect.

- 9.8.140 The magnitude of change during the operational stage will be **low**. This relates to a combination of the following factors. Firstly, the separation between the viewpoint and the Proposed Development which will ensure the proposed turbines appear as relatively small-scale features. Secondly, the location of the proposed turbines to the north of the operational turbines mean that they will appear less prominent and largely set within the existing extent of development. Thirdly, the screening effect of the intervening landform reduces the prominence of the proposed turbines. Fourthly, the existing presence of the operational turbines and the appearance of the proposed turbines as an extension ensures the Proposed Development will appear integrated with the baseline context.
- 9.8.141 The magnitude of change during the construction stage will be **low**. Despite the additional effect relating to the presence and activity of tall cranes and the unusual appearance of the emerging turbines as they are constructed, the factors listed above, will moderate the effects of the construction stage, most notably the distance from the viewpoint, the location of the turbines to the rear of the operational turbines and the existing influence of the operational turbines.

Significance of the effect

- 9.8.142 The effect of the Proposed Development on hill walkers on Sgurr nan Mhuilinn will be **not significant**. Despite the medium to high sensitivity attributed to viewer's experiencing the view, there will be a low magnitude of change during the construction and operational stages, principally owing to the distant and small-scale appearance of the Proposed Development in a context where the Operational Wind Farms already have an influence.

Significance of the in-conjunction cumulative effect

- 9.8.143 The cumulative effect of the Proposed Development in-conjunction with the Operational Wind Farms will be **not significant**. Although the Operational Wind Farms are visible to a greater extent than the Proposed Development will be, their separation distance from the viewpoint means that the Operational Wind Farms will have a limited influence on the cumulative context and the addition of the Proposed Development will have an in-conjunction cumulative magnitude of change that will be **low**.
- 9.8.144 The Cumulative ZTV in **Figure 9.12** shows that theoretical visibility of the Proposed Development will coincide with theoretical visibility of the existing wind farms as seen from Sgurr a Mhuilinn. This means that the Proposed Development will always be seen in conjunction with the Operational Wind Farms and would not introduce visibility of wind farm development into new areas.

Viewpoint 11 – Sgurr a Choire Ghlais (Figure 9.31)

Baseline

- 9.8.145 This viewpoint is taken from the summit of Sgurr a Choire Ghlais (1083m AOD), the highest top in the area of *Rugged Massif* LCT that lies between Glen Orrin to the north and Glen Strathfarrar to the south. The route, most frequently used by walkers, follows the Glen Strathfarrar track from Struy Bridge on the A831 along a distance of approximately 14km to Deanie Power Station, from where a steep ascent to the north over approximately 5km, leads to the summit. With the main approach being from the south, views of the Proposed Development on approach will largely be screened by intervening landform and, therefore, the viewpoint is representative of the view walkers experience from the top of this Munro. Sgurr a Choire Ghlais is one of four Munros in this range, the other three summits set to the north-west and collectively forming a popular circular route for walkers.
- 9.8.146 The viewpoint and surrounding area lies within the Strathconon, Monar and Mullardoch SLA and the Central Highlands WLA, while the Glen Strathfarrar NSA lies to the south-east. These designations denote the value attached to this area. In terms of landscape classification, the viewpoint lies within the *Rugged Massif* LCT and looks north across the *Rocky Moorland* LCT and *Rounded Hills* LCT giving a predominantly upland character to the view.
- 9.8.147 Although Glen Strathfarrar is characterised by the human artefacts of the power station, transmission line, dam and lodges, and the human modifications of the farming and forestry, in contrast the upland landscape is largely devoid of development and this in combination with the depth of this mountain range, gives rise to a sense of remoteness from within the interior.
- 9.8.148 There is no visible wind farm development in the sectors of the view from the north-west through to the south. Fairburn is the closest wind farm at a range of approximately 17km to the north-east, seen set on the lower hills at the eastern end of Strathconon. The wireline on **Figure 9.31** shows that Novar Wind Farm and Extension is visible to the left of Fairburn Wind Farm, although at the more distant range of 38km it is not readily discernible in the field. At approximately 23km to the north, the cluster formed by the Operational Wind Farms is more readily evident, with almost all 42 turbines visible and the majority seen at their full height. This group is seen associated with the relatively low-lying area to the fore of the Ben Wyvis range and the east of the Sgurr Mor range. In the absence of other human artefacts it forms a notable feature in this northerly view.

Sensitivity

- 9.8.149 While the summit of Sgurr a Choire Ghlais is not shown as a formal viewpoint on OS mapping, it is a location hill walkers will visit with the specific purpose of enjoying the view, and this raises the value of the viewpoint. The viewpoint lies in the Strathconon, Monar and Mullardoch SLA and the Central Highlands WLA, which cover the close range parts of the view. These factors all contribute to the value of the view, which is assessed as being medium to high.
- 9.8.150 The susceptibility of hill walkers to the Proposed Development relates principally to their expectation to enjoy panoramic and scenic views. Development can detract from this enjoyment, particularly when the expectation is to experience an undeveloped or rural landscape.

- 9.8.151 While there is visibility of wind farm development evident in the view to the north and north-east, these are relatively distant features seen in the context of the wider view where there is no wind farm development, and this moderates the overall influence that wind farm development has on the character of the view. The largely undeveloped and unmodified nature of the landscape in the view raises the susceptibility of hill walkers to the Proposed Development and this is assessed as medium to high.
- 9.8.152 The combination of the value of the view and its susceptibility to the Proposed Development results in a **medium to high** sensitivity.

Magnitude of change

- 9.8.153 The Proposed Development will be seen at a minimum distance of 26.46km from the viewpoint. The Proposed Development will be seen set behind the 40 visible operational turbines, and although the wireline on **Figure 9.31** shows two proposed turbines will increase the horizontal extent to the left, the screening effect of the intervening landform means that these two turbines will only be visible as blades and therefore will not form a notable addition. The towers of the remaining seven proposed turbines will also be partially screened, while the operational turbines are seen to the fore of the intervening landform.
- 9.8.154 The distant range of 26.46km will make the turbines appear as relatively small scale elements occupying a small proportion of a much wider view. Furthermore, the operational turbines already have an existing influence on this view and the location of the proposed turbines to the rear of these, moderates their additional influence. The magnitude of change of the Proposed Development during the operational stage will be **low**. The proposed turbines will be seen as an extension to the Operational Wind Farms and owing to their distant range, the small number of additional turbines and their location to the rear of the operational turbines, the additional influence will be limited.
- 9.8.155 During the construction stage, despite the presence and activity of tall cranes and the emergence of turbines as they are constructed, the separation distance between the viewpoint and the Proposed Development, combined with the location of the construction works to the rear of the operational turbines, means that the magnitude of change will be **low**.

Significance of the effect

- 9.8.156 The effect of the Proposed Development on hill walkers on Sgurr a Choire Ghlais will be **not significant**. This assessment relates principally to the distance between the viewpoint and the Proposed Development, combined with the limited extent added by the proposed turbines, and seen in the context of the Operational Wind Farms. The Proposed Development will be located in a relatively low-lying area surrounded by large mountain ranges, where the landscape is able to accommodate these additional turbines without further compromising the setting to the wider upland landscape.

Significance of the in-conjunction cumulative effect

- 9.8.157 The Cumulative ZTV on **Figure 9.12b** shows that theoretical visibility of the Proposed Development will coincide with theoretical visibility of the existing wind farms as seen from the summit and north-facing slopes of Sgurr a Choire Ghlais.

This means that the Proposed Development will always be seen in conjunction with the Operational Wind Farms and would not introduce visibility of wind farm development into new areas.

- 9.8.158 The cumulative effect on walkers as a result of the addition of the Proposed Development will be **not significant**. This relates to the limited additional influence that the Proposed Development will have in a cumulative context already defined by the presence of the Operational Wind Farms. In this distant range view from the south, the proposed turbines will be seen to largely coincide with the existing turbines, with the increase to the left likely to be indiscernible. The magnitude of this change in respect of the cumulative context will be **low**.

Viewpoint 12 – Beinn Dearg (Figure 9.32)

Baseline

- 9.8.159 This view is from the summit of Beinn Dearg (1084m AOD). This is the highest of the four Munros in this range of the *Rugged Mountain Massif* LCT and is characterised by its dome shaped summit rising above steep cliffs and deep corries. The most frequently used route by walkers follows a long walk-in, alongside River Lael, starting at the southern end of Loch Broom, to the north-west of the mountain. The path leads as far as the pass between Beinn Dearg and Meall nan Ceapraichean (977m AOD), from where a steep ascent is made up to the summit. This viewpoint is representative of views hill walkers experience in this area, although the view of the Proposed Development will be screened by intervening landform until the summit of the Beinn Dearg walk.
- 9.8.160 The viewpoint and much of the view are subject to the Fannichs-Beinn Dearg-Glen Calvie SLA and this denotes the regional importance of the landscape. In terms of classification, the viewpoint is located in *Rugged Mountain Massif* LCT and looks south across the *Rounded Hills* LCT to where the Proposed Development will be located.
- 9.8.161 The view is very much dominated by mountains, with the Beinn Dearg range surrounding the viewpoint, the Ben Wyvis range to the south-east, Sgurr Mor range to the south-west and Freevater range to the north-east. From the viewpoint, the rounded summit precludes views into the depths of the surrounding straths and instead views carry over to neighbouring summits and ridges. Views of more distant straths and coastal edges occur where openings in the enclosing hills occur.
- 9.8.162 Although no wind farm developments occur within close range, the panoramic nature of the view means that some are visible from this location. The cluster formed by the Operational Wind Farms at approximately 14km to the south-south-east, are the closest wind farm developments. The wireline in **Figure 9.32** shows that 29 of the 42 turbines are theoretically visible, although blades and tips are not readily discernible in the photography. These operational turbines are seen set on or behind the eastern flank of Beinn Liath Bheag (609m AOD). At the range of approximately 14km, they form relatively small scale elements within a wider upland landscape.
- 9.8.163 Fairburn Wind Farm occurs in the same south-south-east sector at approximately 31km and Novar Wind Farm and Extension occurs to the south-east at

approximately 29km. Both are discernible in good conditions as distant and small scale features.

Sensitivity

- 9.8.164 Beinn Dearg is a popular Munro which is relatively easy to access, albeit with a long walk-in. The summit is a location which walkers visit with the specific purpose of enjoying the view. The viewpoint and the landscape which occupies much of the view are subject to the landscape designation of the Fannichs-Beinn Dearg-Glen Calvie SLA, which reflects the regional scenic importance of this landscape, and the Rhiddoroch, Beinn Dearg and Ben Wyvis WLA, which reflects the wild land qualities. Taking these factors into account, the value of the view is assessed as being medium to high.
- 9.8.165 The susceptibility of hill walkers to the Proposed Development relates principally to their expectation to enjoy panoramic and scenic views. Development can detract from this enjoyment, particularly when the expectation is to experience an undeveloped or rural landscape. While the presence of small scale development along the coastal edge and in some of the straths denotes the settled nature of marginal parts of the wider landscape, these influences are limited owing to distance and scale, and the view remains characterised by largely undeveloped and remote upland landscapes. In terms of development in the uplands and more specifically wind farm development, the close range uplands appear largely undeveloped, although wind farms are visible in the middle to distant ranges to the north-east, south-east and south. These form an established feature of the view and this reduces the susceptibility of walkers to this type of development. Taking these factors into account, the susceptibility of hill walkers is medium to high.
- 9.8.166 The combination of the value of the view and its susceptibility to the Proposed Development results in a **medium to high** sensitivity.

Magnitude of change

- 9.8.167 The Proposed Development will be seen at a minimum distance of 13.30km from the viewpoint. Its horizontal extent will largely sit within the horizontal extent of the cluster of Operational Wind Farms, such that there will be no increase to the spread of development. From the range of approximately 13km, the proposed turbines will possibly be seen to be slightly larger in scale, although this will possibly be attributed to their slightly closer location, evident by their location over the ridgeline, rather than on or behind it as the operational turbines are.
- 9.8.168 The horizontal angle ZTV in **Figure 9.8b** shows that from Beinn Dearg, the Proposed Development will occupy only 10 to 20 degrees of the full 360 degree view. Not only will the Proposed Development occupy a small proportion of the wider view, its influence will be moderated by its location where there is already an influence of this type of development. Furthermore, the Proposed Development will be seen set within a relatively low-lying sector of the view, which lacks the attraction of the many mountain ranges visible in other sectors from the Beinn Dearg summit.
- 9.8.169 The magnitude of change during the operational stage will be **medium to low**. The medium part of the rating relates to the increase that the Proposed Development will make to the northern extent of the Operational Wind Farms, as

evident from this northerly direction. The proposed turbines will be seen to extend onto the ridgeline, whereas the operational turbines are mostly seen contained behind it. The low part of the rating relates to the distance of 13.30km to the nearest turbine which means the turbines will appear as relatively small scale elements within a much wider and more scenic view. Their location within the horizontal extent of the operational turbines will further moderate their effect as there will be no visible spread to the development although there will be a slight increase in the depth and density of the turbines.

- 9.8.170 During the construction stage, despite the presence and activity of tall cranes and the emergence of turbines as they are constructed, the separation distance between the viewpoint and the Proposed Development, combined with the presence of the operational turbines on the adjacent site, means that the magnitude of change will be **medium to low**.

Significance of the effect

- 9.8.171 The effect of the Proposed Development on hill walkers on Beinn Dearg will be **not significant**. This assessment relates principally to the distance between the viewpoint and the Proposed Development, combined with the limited extent added by the proposed turbines, in the context of an existing large scale development. The Proposed Development will be located in a relatively low-lying area surrounded by large mountain ranges, where the landscape has capacity for these additional turbines without further compromising the setting to the wider upland landscape.

Significance of the in-conjunction cumulative effect

- 9.8.172 The Cumulative ZTV in **Figure 9.12b** shows that theoretical visibility of the Proposed Development will coincide with theoretical visibility of the existing wind farms as seen from the summit and south-facing slopes of Beinn Dearg. This means that the Proposed Development will always be seen in conjunction with the Operational Wind Farms and would not introduce visibility of wind farm development into new areas.
- 9.8.173 The in-conjunction cumulative effect on walkers as a result of the addition of the Proposed Development will be **not significant**. This relates to the limited additional influence that the Proposed Development will have in a cumulative context already defined by the presence of the Operational Wind Farms. In this middle range view from the north, the proposed turbines will be seen to largely coincide with the existing turbines, albeit with a slight encroachment northwards. The cumulative magnitude of this change in respect of the cumulative context will be **low**.

Summary of Effects on Visual Receptors

- 9.8.174 Detailed assessment has been carried out for 12 viewpoints, which are representative of the experience of viewers on one main road, one minor road, one path and seven hill summits. Significant effects were found to occur in relation to three of the viewpoints, representing a 4.3km section of the A835 and Aultguish Inn. All three of these viewpoints were found to undergo significant effects during the construction stage while only Aultguish Inn was found to undergo significant effects during the operational stage. No significant cumulative

effects were found in relation to the 12 viewpoints. These findings are listed below in **Table 9.9**.

Table 9.9 Summary of effects on views

Viewpoint	Sensitivity	Magnitude of change (const.)	Significance of the effect (const.)	Magnitude of change (operation)	Significance of the effect (operation)	Significance of the cumulative effect
1. A835 Aultguish Inn	medium – road-users medium / high - residents	medium to high	significant – road-users and residents	medium	significant - residents and road-users	significant
2. A835 Black Bridge Road	medium	medium	significant	medium	significant	not significant
3. Garve Bridge	medium	low	not significant	low	not significant	not significant
4. Old Drover's Road, Corriemoillie	medium	medium	significant	medium to low	not significant	not significant
5. Ben Wyvis	medium to high	medium to low	not significant	medium to low	not significant	not significant
6. An Coileachan	medium to high	medium to low	not significant	low	not significant	not significant
7. Sgurr Mor	medium to high	medium to low	not significant	low	not significant	not significant
8. Beinn a Chaisteil	medium to high	medium to low	not significant	medium to low	not significant	not significant
9. Avenue of Fairburn Estate	medium	low	not significant	low	not significant	not significant
10. Sgurr a Mhuilinn	medium to high	low	not significant	low	not significant	not significant
11. Sgurr a Choire Ghlais	medium to high	low	not significant	low	not significant	not significant
12. Beinn Dearg	medium to high	medium to low	not significant	medium to low	not significant	not significant

9.9 Assessment of In-Combination Cumulative Effects

- 9.9.1 This Section considers the effects of the Proposed Development in-combination with the other cumulative developments. This differs from the in-conjunction cumulative assessment presented in Section 9.7 and Section 9.8, as it considers how the Proposed Development in-combination with the cumulative developments will affect the broader pattern of wind farm development and its influence across the Study Area.
- 9.9.2 This Section will assess the in-combination effects of the Proposed Development in respect of the following considerations;
- The extent to which the relationship between wind farm development and the landscape will be altered;
 - The effect on the pattern of wind farm development within the local and wider landscape; and
 - The extent to which landscape character and the visual amenity will be redefined by the in-combination effects.
- 9.9.3 As with the in-conjunction cumulative assessment, in Sections 9.7 and 9.8, this in-combination cumulative assessment considers the Operational Wind Farms to be the most relevant cumulative developments to the assessment. These comprise Lochluichart, Lochluichart Extension and Corriemoillie Wind Farms which collectively form a 42 turbine wind farm, located in a relatively low-lying bowl amidst a broader upland landscape.

In-Combination Cumulative Baseline

- 9.9.4 The existing pattern of wind farm development is defined by the concentration of the Operational Wind Farms in one distinct area. This area is defined principally by landscape character, but also the communication corridors which have been routed to fit within the landscape. The Operational Wind Farms are all located within the Lochluichart LCU of the *Rounded Hills* LCT, with the exception of two Corriemoillie turbines which encroach into the Aultguish LCU of the *Undulating Moorland* LCT to the east. Furthermore, the Operational Wind Farms occupy the eastern margins of the Lochluichart LCU where the landscape transitions with the adjacent Aultguish LCU of the *Undulating Moorland* LCT. This area forms a distinct sub-area of the wider LCU and leads to an association between the Operational Wind Farms and this sub-area, which is more specific and localised than the association with the wider LCU, across which the landscape character is more varied.
- 9.9.5 The definition of the sub-area where the Operational Wind Farms are located, is further accentuated by contrasts in scale with the surrounding landscapes. The sub-area is located in a relatively low-lying bowl, where the landform is relatively low and gently undulating. In all surrounding directions, the scale of the landform rises to form hill and mountain ranges. While the landform of the eastern margins of the Lochluichart LCU rises slightly towards the north, this area still reads as part of the same sub-area where the Operational Wind Farms are located.
- 9.9.6 The definition of this contrastingly low-lying area comprising the eastern margins of the Lochluichart LCU and the Aultguish LCU of the *Undulating Moorland* LCT, is also marked by the A835 which wraps around the eastern and northern sides of

this area and the A832 which passes around the southern side. These roads are routed along the shores of Loch Glascarnoch and Loch Luichart, respectively. While there is very limited visibility from the A832, the A835 is an important visual receptor, especially in respect of the Proposed Development.

- 9.9.7 The Operational Wind Farms are seen collectively as a wind farm within a landscape setting, with the following factors preventing a wind farm landscape from arising. The 42 turbines are all concentrated within the one area, such that collectively they appear as one relatively large windfarm. This wind farm appears as a consolidated feature within a wider landscape setting, which is contrary to the characteristics of a wind farm landscape, where typically the turbines will spread across many areas and be seen in many different directions.

In-Combination Cumulative Effects

- 9.9.8 In respect of this baseline context, the addition of the Proposed Development will be contained within the Lochluichart LCU of the *Rounded Hills* LCT, as are the Operational Wind Farms. Furthermore, it will also occupy the eastern margins of the Lochluichart LCU, where the Operational Wind Farms are located and which forms a distinct sub-area of relatively low-lying landform, albeit rising slightly across the landform of the Site towards the north. The combined 51 turbines will all be contained within the distinct sub-area in the eastern margins of the LCU. The combined effect of the Proposed Development and the Operational Wind Farms will not alter the relationship between the landscape and the wind farm developments, although there will be a significant in-combination cumulative effect on local landscape character.
- 9.9.9 As shown in **Figure 9.9b**, the nine additional turbines are well recessed from the northern edge of the LCU, with a separation distance of approximately 1.5km. The sense of impingement that occurs, does not relate to landscape character, but to visual amenity, whereby visual receptors associated with the A835 and Aultguish Inn will experience the combined effect of the Proposed Development and the Operational Wind Farms. In terms of landscape character, there are no such distinct lines to mark the boundaries and sufficient space occurs to the north to accommodate the Proposed Development without any encroachment into transitional landscapes. In considering the combined effect of the Proposed Development and the Operational Wind Farms, the landscape has capacity to accommodate the combined developments.
- 9.9.10 The Operational Wind Farms define the baseline character of the local landscape and local views, and the overall effect can be described as a landscape with wind farms. The in-combination effect of the Proposed Development and the Operational Wind Farms will not alter the overall effect which will remain as a landscape with wind farms. While, collectively, the 51 turbines will appear as a large wind farm, their consolidation within one well-defined sub-area of the Lochluichart LCU will prevent the effect of a wind farm landscape arising, in which wind turbines extend across a range of landscapes with influence across a much wider area. The Cumulative ZTV in Figure 9.12, shows how the visual influence of the combined developments is largely contained within the first 10km of the Study Area.
- 9.9.11 While consideration of the relationship between the combined developments and the landscape, the capacity of the landscape to accommodate the combined

developments and the extent to which the combined developments will redefine landscape character and views, has formed a broad overview of the potential in-combination cumulative effects, **Table 9.10** below presents an assessment of the in-combination cumulative effects in respect of the relevant landscape and visual receptors.

Table 9.10 Assessment of In-Combination Cumulative Effects

Receptor	Sensitivity	In-combination magnitude of change	Significance of the in-combination cumulative effect
Rounded Hills: Ben Wyvis LCU	medium to high	Figure 9.12b shows almost continuous combined visibility across the western slopes of the Ben Wyvis LCU and practically no visibility, either combined or solus, across the remainder of the LCU. Despite the separation distance being between 8km and 13km, the combined effect of the 51 turbines on this LCU will be medium , as the proposed and operational turbines together, will form a notable, albeit indirect influence.	The cumulative effect of the Proposed Development in combination with the Operational Wind Farms will be significant across the western part of the Ben Wyvis LCU where combined visibility occurs and not significant in all remaining parts of the LCU.
Rounded Hills: Lochluichart LCU	medium	The Proposed Development and the majority of the turbines of the Operational Wind Farms will occur within this LCU giving rise to direct and indirect effects. The large number and scale of the turbines within such close proximity will give rise to a high in-combination cumulative magnitude of change across the eastern parts of the LCU where combined visibility occurs.	The cumulative effect of the Proposed Development in combination with the Operational Wind Farms will be significant across the eastern part of the Lochluichart LCU where combined visibility occurs and not significant in all remaining parts of the LCU.
Rounded Hills: Inchbae LCU	medium	Figure 9.12b shows broad bands of combined visibility across the LCU at distances between 2km and 14km. The combined effect of the 51 turbines on this LCU will be medium to high in the southern part of the LCU owing to the close proximity, and medium across the central and northern parts where there is less of an association with the Lochluichart LCU, where the combined developments will be located.	The cumulative effect of the Proposed Development in combination with the Operational Wind Farms will be significant across the southern part of the Inchbae LCU where combined visibility occurs and not significant in all remaining parts of the LCU.
Undulating Moorland: Aultguish LCU	medium	Figure 9.12b shows almost continuous visibility across the Aultguish LCU which lies to the east of the Lochluichart LCU. The combined effect of the 51 turbines on this LCU will be medium to high owing to the close proximity.	The cumulative effect of the Proposed Development in combination with the Operational Wind Farms will be significant across the Aultguish LCU.
Ben Wyvis SLA	medium to high	Almost continuous combined visibility will occur across the western slopes of the Ben Wyvis SLA and practically no visibility, either combined or solus, across the remainder of the SLA. Despite the separation distance being between 8km and 13km, the combined effect of the 51 turbines on this SLA will be medium , as the proposed and operational turbines together, will form a	The cumulative effect of the Proposed Development in combination with the Operational Wind Farms will be significant across the western part of the Ben Wyvis SLA where combined visibility occurs and not significant in all remaining parts

		notable, albeit indirect influence on the character of the SLA.	of the SLA.
Fannichs, Beinn Dearg and Glen Calvie SLA	medium to high	Visibility of the Proposed Development in combination with the Operational Wind Farms occurs across the higher summits and east facing slopes in the central part of the SLA at a distance of 6km to 18km. Visibility is shown on Figure 9.12b to be limited in extent and low in level. Wirelines of Viewpoint 6 and Viewpoint 7, located in the SLA, show how visibility of the combined developments will be partly screened by intervening landform. Furthermore, the more scenic views occur to the north and west. The in-combination cumulative magnitude of change would be low .	The cumulative effect of the Proposed Development in combination with the Operational Wind Farms will be not significant across the Fannichs, Beinn Dearg and Glen Calvie SLA.
Rhiddoroch – Beinn Dearg – Ben Wyvis WLA	medium to high medium in the south-west	Figure 9.12b shows almost continuous combined visibility concentrated across the southern edges of the WLA boundary, including the western slopes of the Ben Wyvis range, the southern hills around Strath Vaich and the hills to the north of Loch Glascarnoch, with visibility further east and north reducing down to small patches on high summits and facing slopes. The in-combination cumulative magnitude of change in these southern margins would be medium , largely owing to the short to medium separation distance from the combined developments. In all remaining parts of the WLA the in-combination cumulative magnitude of change would be low or no effect .	The cumulative effect of the Proposed Development in combination with the Operational Wind Farms will be significant across the southern parts of the Rhiddoroch – Beinn Dearg – Ben Wyvis WLA where combined visibility occurs and not significant in all remaining parts of the WLA.
Fisherfield – Letterewe – Fannichs WLA	medium to high	Figure 9.12b shows that although the Operational Wind Farms are readily visible from substantial parts on the eastern edge of this WLA, visibility of the Proposed Development will be limited to very small patches of low levels of visibility from localised high points and east facing slopes. The cumulative magnitude of change of the in-combination effect will, therefore, be low .	The cumulative effect of the Proposed Development in combination with the Operational Wind Farms will be not significant across the Fisherfield – Letterewe – Fannichs WLA.
1. A835 Aultguish Inn	medium – road-users medium / high - residents	Figure 9.21c shows how all the turbines of the Proposed Development will be visible in combination with 22 of the operational turbines. The combined effect on road-users and residents associated with this viewpoint will give rise to a medium to high cumulative magnitude of change.	The cumulative effect of the Proposed Development in combination with the Operational Wind Farms will be significant as experienced by residents at Aultguish Inn and road-users on the A835 approximately 1km to the west and to the east.
2. A835 Black Bridge Road	medium	Figure 9.22b shows how all the turbines of the Proposed Development will be visible in combination with 17 of the operational turbines. The combined effect on road-users associated with this viewpoint will give rise to a medium cumulative magnitude of change.	The cumulative effect of the Proposed Development in combination with the Operational Wind Farms will be significant as experienced by road-users on the A835 approximately 1.5km to the west and 0.8km to the east.
3. Garve	medium	Figure 9.23b shows how collectively the	The cumulative effect of the

Bridge		proposed and operational turbines, will occupy the most distant hill side in the view. The combined effect on road-users associated with this viewpoint will give rise to a low cumulative magnitude of change, chiefly owing to the separation distance of 12.94km and the intermittent occurrence of visibility.	Proposed Development in combination with the Operational Wind Farms will be not significant as experienced by road-users on the A835 near Garve Bridge.
4. Old Drover's Road, Corriemoillie	medium	Figure 9.24b shows how collectively the proposed and operational turbines will occupy the low-lying bowl at the core of this landscape. The combined effect on walkers associated with this viewpoint will give rise to a medium to high cumulative magnitude of change, chiefly owing to the relatively close proximity.	The cumulative effect of the Proposed Development in combination with the Operational Wind Farms will be significant as experienced by walkers on the Old Drover's Road.
5. Ben Wyvis	medium to high	Figure 9.25b shows how collectively the proposed and operational turbines will occupy the low-lying land to the fore of Sgurr Mor. The combined effect on walkers associated with this viewpoint will give rise to a medium cumulative magnitude of change, chiefly owing to the overall horizontal scale, despite the vertical scale being contained below the adjacent foothills.	The cumulative effect of the Proposed Development in combination with the Operational Wind Farms will be significant as experienced by walkers on the Ben Wyvis range.
6. An Coileachan	medium to high	Figure 9.26b shows how collectively the proposed and operational turbines will occupy the low-lying land to the fore of Ben Wyvis. The combined effect on walkers associated with this viewpoint will give rise to a medium to low cumulative magnitude of change, chiefly owing to the intervening foothills which partially obscure visibility of the combined developments. Furthermore, the combined developments will be seen in the less scenic sector of the wider view.	The cumulative effect of the Proposed Development in combination with the Operational Wind Farms will be not significant as experienced by walkers on the Sgurr Mor range.
7. Sgurr Mor	medium to high	Figure 9.27b shows how collectively the proposed and operational turbines will occupy the low-lying land to the fore of Ben Wyvis. The combined effect on walkers associated with this viewpoint will give rise to a medium to low cumulative magnitude of change, chiefly owing to the intervening foothills which partially obscure visibility of the combined developments. Furthermore, the combined developments will be seen in the less scenic sector of the wider view.	The cumulative effect of the Proposed Development in combination with the Operational Wind Farms will be not significant as experienced by walkers on the Sgurr Mor range.
8. Beinn a Chaisteil	medium to high	Figure 9.28b shows how collectively the proposed and operational turbines will form a relatively large wind farm seen to occupy the foothills to the south of Loch Glascarnoch. The combined effect on walkers associated with this viewpoint will give rise to a medium to low cumulative magnitude of change, chiefly owing to the separation distance, the containment of the turbines with one sector and the more impressive views to the west.	The cumulative effect of the Proposed Development in combination with the Operational Wind Farms will be not significant as experienced by walkers on Beinn a Chaisteil.

9. Avenue of Fairburn Estate	medium	Figure 9.29b shows how collectively the proposed and operational turbines, will occupy a distant hill side in the background of the view. The combined effect on road-users associated with this viewpoint will give rise to a low cumulative magnitude of change, chiefly owing to the separation distance of 20.78km and the intermittent occurrence of visibility.	The cumulative effect of the Proposed Development in combination with the Operational Wind Farms will be not significant as experienced by road-users on the Avenue of Fairburn Estate.
10. Sgurr a Mhuilinn	medium to high	Figure 9.30b shows how collectively the proposed and operational turbines will occupy the foothills above Loch Luichart. The combined effect on walkers associated with this viewpoint will give rise to a medium to low cumulative magnitude of change, chiefly owing to the separation distance of 14.27km, the containment of the turbines within one sector and the more impressive views to the north and west.	The cumulative effect of the Proposed Development in combination with the Operational Wind Farms will be not significant as experienced by walkers on Sgurr a Mhuilinn.
11. Sgurr a Choire Ghlais	medium to high	Figure 9.31b shows how collectively the proposed and operational turbines will occupy the foothills above Loch Luichart. The combined effect on walkers associated with this viewpoint will give rise to a low cumulative magnitude of change, chiefly owing to the separation distance of 26.48km, the containment of the turbines within one sector and the more impressive views to the north and west.	The cumulative effect of the Proposed Development in combination with the Operational Wind Farms will be not significant as experienced by walkers on Sgurr a Choire Ghlais .
12. Beinn Dearg	medium to high	Figure 9.32b shows how collectively the proposed and operational turbines will occupy the foothills to the east of the Sgurr Mor range. The combined effect on walkers associated with this viewpoint will give rise to a medium to low cumulative magnitude of change, chiefly owing to the separation distance of 13.30km, the containment of the turbines within one sector and the more impressive views to the north and west.	The cumulative effect of the Proposed Development in combination with the Operational Wind Farms will be not significant as experienced by walkers on Beinn Dearg.

9.9.12 In terms of landscape character and landscape designations, the Proposed Development, in combination with the Operational Wind Farms, will have a significant cumulative effect on the local landscapes out to a distance of approximately 5km to 10km to the north, east and south. This will relate chiefly to the large number of turbines concentrated in the eastern margins of the Lochluichart LCU and the visibility of these turbines from the surrounding local landscapes.

9.9.13 In terms of visual amenity, the Proposed Development, in combination with the Operational Wind Farms, will have a significant cumulative effect on the views of road-users along the A835 and walkers across the low-level Old Drover's Road, both within 5km of the combined developments, and walkers across the high level Ben Wyvis range, within 10km of the combined developments.

9.9.14 **It is important to note that the assessment of the in-combination cumulative effect has been included to demonstrate the potential effect of the Proposed Development in combination with the Operational Wind**

Farms. The Operational Wind Farms have been consented and constructed and now, as operational developments, form an established part of the baseline context.

9.10 Summary of Assessment of Effects

- 9.10.1 The purpose of the LVIA is to identify the effects that the Proposed Development will have on the landscape and visual resource of the Study Area, during the short-term construction and long-term operational stages, and to assess which of these are likely to be significant. The assessment covers three categories of potential effects:
- effects on landscape, which includes physical elements; landscape character types, designated areas, and wild land areas all of which are termed landscape receptors;
 - effects on views, which includes 12 representative viewpoints around the Study Area representing views of people from principal visual receptors; and
 - cumulative effects, which covers the potential cumulative effects on landscape character and visual receptors.
- 9.10.2 The Proposed Development comprises nine turbines, each up to a maximum 133m in height to blade tip. They are located to the north of the 17 operational Lochluichart Wind Farm turbines, six operational Lochluichart Wind Farm Extension turbines, and 19 operational Corriemoillie turbines, all of which are 125m in height to blade tip. The operational turbines have an existing influence on landscape character and visual amenity within the study area.
- 9.10.3 The Proposed Development and the Operational Wind Farms occupy the area of land that lies between Loch Glascarnoch to the north and Loch Luichart to the south. It is relatively low-lying in contrast to the large scale *Rugged Mountain Massif* LCT to the immediate west and *Rounded Hills* LCT to the immediate east. Although also classified as part of *Rounded Hills* LCT, the Proposed Development and Operational Wind Farms are located along the base of the low foothills, which lie to the west, and into the undulating moorland and forest blocks, which lie to the east. This area is relatively low-lying amidst the context of larger hills and mountains.
- 9.10.4 In terms of physical effects on landscape elements, the assessment found no significant effects in respect of the removal of heather moorland and coniferous forestry land cover that will be required during the construction stage of the Proposed Development. This finding relates to the abundance of these landscape elements across the Study Area, the proportionally small areas that will be removed and the relative ease with which these landscape elements can be reinstated.
- 9.10.5 The assessment has found significant effects on landscape character receptors will arise during the short-term construction stage but not the operational stage. The significant effects during the construction stage will arise across parts of the Lochluichart LCU and Inchbae LCU both of the *Rounded Hills* LCT, and the Aultguish LCU of the *Undulating Moorland* LCT. Significant effects on landscape character during the construction stage will be contained within a 5km radius of

the Proposed Development. The presence and activity of tall cranes combined with the construction of the turbines and tracks will raise the prominence of the Proposed Development within a localised area during the construction stage. Once operational, the prominence of the Proposed Development will be reduced as it will appear as an integral part of the Operational Wind Farms in this area.

- 9.10.6 The Proposed Development is not within an area covered by any national or regional landscape designations, which would otherwise denote special scenic value. The regional designation of Special Landscape Areas (SLAs) covers the more scenic upland landscapes surrounding the Site. Ben Wyvis SLA is located approximately 8.0km to the east of the Site and Fannichs-Beinn Dearg-Glen Calvie is located 5.3km to the west and north. There will be no significant effects on landscape designations during the construction and operational stages as a result of the Proposed Development. This finding relates to the separation distance between the Proposed Development and the regional designated landscapes, as well as the relatively small number of additional turbines and the existing influence of the adjacent Operational Wind Farms.
- 9.10.7 The Proposed Development is not within an area covered by a Wild Land Area (WLA), which would otherwise denote physical attributes and perceptual responses relating to wildness. Rhiddoroch, Beinn Dearg and Ben Wyvis WLA occurs to the north and east at approximately 3.6km and 7km respectively, and Fisherfield-Letterewe-Fannichs WLA occurs to the west at less than 1km. Despite the close proximity of Fisherfield - Letterewe - Fannichs WLA at less than 1km to the west of the Site, the very limited extent of visibility has meant that there will be no significant effect on its wildness qualities as a result of the Proposed Development. The effects on Rhiddoroch, Beinn Dearg and Ben Wyvis WLA have been assessed following recent guidance set out in SNH's draft '*Assessing impacts on Wild Land Areas – technical guidance*'. The finding of this assessment has been that the Proposed Development will not give rise to significant effects on the wildness qualities of the WLA during the construction and operational stages of the Proposed Development. This finding relates to the location of the Proposed Development outwith the WLA and the limited additional influence it will have on perceptual responses experienced in the WLA owing to the existing influence of the Operational Wind Farms in this area.
- 9.10.8 The assessment has found significant effects on visual receptors will arise during the short-term construction stage from Aultguish Inn and the adjacent 4.3km section of the A835 to the north and north-east of the Proposed Development (Viewpoints 1 and 2), as well as from the Old Drover's Road (Viewpoint 4). These findings relate to the prominence of the tall cranes and emerging turbines owing to their closer position, on the north-side of the existing group, to the A835 and Aultguish Inn and in close proximity to the Old Drover's Road.
- 9.10.9 Significant effects will arise in respect of the views of visitors and residents at Aultguish Inn and road-users on the A835 during the long-term operational stage. This finding relates to the orientation of the inn broadly towards the Proposed Development and the additional influence the closer range turbines will have on this property and the A835 despite the existing influence from the Operational Wind Farms in the same sector of the view.
- 9.10.10 The assessment identifies that a significant in-conjunction cumulative effect will arise in respect of the views of visitors and residents at Aultguish Inn and road-

- users on the A835. Despite the presence of the Operational Wind Farms in the same sector of the view, the addition of the closer range proposed turbines will give rise to a significant cumulative effect.
- 9.10.11 No other visual receptors or representative viewpoints will undergo significant effects or significant in-conjunction cumulative effects, during the construction or operational stages of the Proposed Development.
- 9.10.12 All significant effects during the construction and operational stages will occur within an approximate 5km radius of the Proposed Development. Beyond this it is unlikely that significant effects will arise.
- 9.10.13 The limited occurrence of significant effects during both the construction and operational stages and limited occurrence of significant in-conjunction cumulative effects relates to a combination of the following factors.
- 9.10.14 Firstly, the integrated relationship of the Proposed Development with the Operational Wind Farms ensures it will appear as a direct extension. The Proposed Development will be located to the immediate north of the Operational Wind Farms so ultimately it will appear as part of the collective group. This avoids the greater effect that would have arisen if a new and separate development was introduced into this area.
- 9.10.15 Secondly, the effect of the Proposed Development is reduced by the comparatively small number of turbines being added. Nine proposed turbines will sit to the north of 42 existing turbines, which means they form a small additional proportion of the existing group, integrating the proposed turbines with the operational turbines.
- 9.10.16 Thirdly, the Proposed Development will be contained within the same landscape as the Operational Wind Farms. The proposed turbines will sit on the eastern flank of the foothills to the Sgurr Mor range to the west. While the landform rises gradually between Loch Luichart in the south and Loch Glascarnoch in the north, it still appears as one well-defined area, within which the wind farm developments will appear contained. This also avoids spreading the influence of wind farm development into other surrounding landscapes.
- 9.10.17 Fourthly, the landscape in which Proposed Development and Operational Wind Farms are located, is relatively low-lying amidst a wider upland landscape. This reduces the extent to which the Proposed Development will be visible and where visibility does occur, it moderates the influence the Proposed Development will have on surrounding landscape and visual receptors.
- 9.10.18 Fifthly, the similarities in the appearance of the proposed and operational turbines will assist their integration. The height and proportioning of the proposed turbines is broadly similar to that of the operational turbines, albeit with an 8m increase in height and a slightly lower hub height but longer blade length. While these differences may be apparent from close range receptors, there is enough continuity in appearances that they will appear as a single group.
- 9.10.19 To assist the decision maker, the assessment also provides an overview of the likely combined cumulative effects of the Proposed Development in-combination with the relevant Operational Wind Farms. The purpose of this is to consider whether the resulting pattern of development (including the Proposed

- Development) will result in the redefinition of landscape character or visual receptors.
- 9.10.20 The assessment has found that significant in-combination cumulative effects will arise across parts of the Lochluichart LCU, Inchbae LCU and Ben Wyvis LCU, all of the *Rounded Hills* LCT and the Aultguish LCU of the *Undulating Moorland* LCT. Significant effects on landscape character during the construction stage will be occur within a 12km radius of the Proposed Development. Significant in-combination cumulative effects will arise in respect of the designated Ben Wyvis SLA and the Rhiddoroch – Beinn Dearg – Ben Wyvis WLA, across those parts which coincide with where the Ben Wyvis and Inchbae LCUs will undergo significant in-combination cumulative effects. Visual receptors associated with Aultguish Inn and the A835, the Old Drover’s Road and the Ben Wyvis mountain range, will also undergo significant in-combination cumulative effects
- 9.10.21 Significant in-combination cumulative effects will arise across an approximate 10km radius of the Proposed Development. The in-combination cumulative effects will extend further than the solus effects or in-conjunction cumulative effects as the Proposed Development is being assessed in combination with the 42 turbines of the Operational Wind Farms rather than in conjunction. The extent of the combined effects is, however, also limited, despite the larger size of the combined developments, owing largely to the consolidated nature of the proposed and operational turbines, their location within a relatively low-lying area amidst rising hills and mountains and the notable reduction in visibility that occurs beyond the enclosing upland landscapes.
- 9.10.22 The assessment of in-combination cumulative effects has helped inform an understanding of how the Proposed Development will affect the pattern of wind farm development in this area, with consideration of the relationship between the landscape and the Operational Wind Farms, and the extent to which the Proposed Development in combination with the Operational Wind Farms will redefine landscape character.
- 9.10.23 The Proposed Development will reflect the existing pattern of wind farm development by extending a part of the northern edge of the existing consolidated group but containing this type of development within the same LCU. While there will be significant in-combination cumulative effects, as described above, the Proposed Development in combination with the Operational Wind Farms will not have a sufficient magnitude of change to redefine the character from a landscape with wind farms to a wind farm landscape.
- 9.10.24 In summary, the Proposed Development will give rise to a small number of significant effects on landscape and visual receptors, albeit all contained within a relatively close-range area and mostly occurring during the short-term construction stage.

9.11 References

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