CHAPTER 7: LANDSCAPE AND VISUAL

Figures

Figure 7.16a-c SNH Visualisations Viewpoint 9 - Ben Horn

Figure 7.17a-c SNH Visualisations Viewpoint 10 - Beinn Dhorain

Figure 7.18a-c SNH Visualisations Viewpoint 11 - Hope Hill

Figure 7.19a-c SNH Visualisations Viewpoint 12 - Track to Ben Armine Lodge

Figure 7.20a-c SNH Visualisations Viewpoint 13 - Creag nam Fiadh

Figure 7.21a-c SNH Visualisations Viewpoint 14 - Ben Bhraggie

Figure 7.22a-c SNH Visualisations Viewpoint 15 - Ben Armine

Volume 3B: Visualisations (THC Methodology)

Figure 7.23 THC Visualisation Viewpoint 3 - Brora to Rogart minor road, south of Killin

Figure 7.24 THC Visualisation Viewpoint 4 - Brora to Rogart minor road, north of Killin

Figure 7.25 THC Visualisation Viewpoint 5 - Strath Brora, near Balnacoil

Figure 7.26 THC Visualisation Viewpoint 6 - Brora to Rogart minor road, near Sciberscross

Figure 7.27 THC Visualisation Viewpoint 7 - Brora to Rogart minor road, near Dalreavoch

Figure 7.38 THC Visualisation Viewpoint 8 - Craggie Beg

Appendices

Appendix 7.1: Methodology for Landscape and Visual Impact Assessment

7. LANDSCAPE AND VISUAL

7.1 Executive Summary

7.1.1 The purpose of the Landscape and Visual Impact Assessment (LVIA) is to identify and record the potential significant effects of the Proposed Varied Development, resulting from the removal of four turbines from the Consented Development and the increase in turbine dimensions, with a proposed tip height of 149.9m and rotor diameter of 136m. The LVIA considers such effects on the physical elements of the landscape; landscape character; areas that have been designated for their scenic or landscape-related qualities; areas of wild land; and views from various locations such as settlements, routes, hilltops and other sensitive locations. The potential cumulative effects that may arise from the addition of the Proposed Varied Development to other wind farms are also considered.

7.1.2 In accordance with the 2017 EIA Regulations, a description of the main respects in which the likely significant environmental effects of the Proposed Varied Development would differ from those described in the 2015 ES and 2016 FEI Report (both of which were prepared in connection with the relevant section 36 consent) is provided.

7.1.3 This LVIA has reviewed the potential effects of the Proposed Varied Development in relation to those receptors that were assessed in detail in the 2015 ES and 2016 FEI Report. Following ZTV and wireline analysis, it has not been considered necessary to consider the inclusion of additional landscape and visual receptors or viewpoints.

7.1.4 The changes that have been proposed for the Consented Development, leading to the formulation of the Proposed Varied Development, would result in a minor decrease in the occurrence of significant effects, including cumulative effects. This is due to the removal of the four southernmost turbines from the Consented Development, which has reduced visibility, particularly from Strath Brora, and reduced the extent of the Proposed Varied Development across views.

7.1.5 The following effects which were assessed to be significant for the Consented Development, are now assessed to be not significant for the Proposed Varied Development:

- The area of *Strath (Strath Brora*): *eastern section* Landscape Character Type (LCT) around Killin Rock;
- The area of the Loch Fleet, Loch Brora and Glen Loth Special Landscape Area (SLA) around Killin Rock;
- Approximately 1km of the eastbound Brora - Rogart minor road, between Balnacoil and the graveyard;
- Approximately 1km of Core Path SU06.02 ('Loch Brora - West Track') as it passes the property at Kilbraur; and
- Approximately 100-150m of Core Path SU06.14 ('Doll Bridge – Loch Brora').

7.1.6 In addition to the effects of the Proposed Varied Development itself, the assessment has concluded that the following cumulative effects would become not significant:

- The cumulative effect at Viewpoint 13. Creag nam Fiadh; and
- The cumulative effect on the eastbound Brora - Rogart minor road, other than a stretch of approximately 2km between Sciberscross and Point.

7.1.7 The Proposed Varied Development would result in some significant effects on the landscape and visual resource within this study area, as described below. These significant effects were predicted to arise as a result of the Consented Development, and there are no instances of

additional significant effects, or an increase in the extent of significant effects arising as a result of the Proposed Varied Development.

7.1.8 The landscape character types that cover the site and its surroundings are likely to be subject to significant effects up to a maximum distance of around 6.5km away, although this would only be the case where there is notable visibility of the Proposed Varied Development and landform is orientated towards the Proposed Varied Development. Beyond approximately 6.5km, the Proposed Varied Development would be a relatively minor influence in the setting to landscape character types, and would not result in a significant effect. While some very limited parts of the Loch Fleet, Loch Brora and Glen Loth SLA (a minimum of 1.6km from the Proposed Varied Development) would have significant effects, there would be no significant effects on wild land areas (WLA) or National Scenic Areas (NSA). The extent of significant effects on landscape character is slightly reduced from that arising from the Consented Development, with the effect on small areas of Strath Brora becoming not significant due to the reduction in visibility of the turbines.

7.1.9 The assessment of effects on views is informed by a series of 17 viewpoints that were agreed for the 2015 ES with Scottish Natural Heritage (SNH) and The Highland Council (THC), to represent visibility from sensitive locations throughout the study area. SNH and THC have not requested the inclusion of any additional viewpoints in this Application, and this assessment therefore utilises the same 17 viewpoints. This visual assessment has found significant effects on two hilltop viewpoints (Beinn Smeorail and Ben Horn); intermittent significant effects on up to 2km of the minor road from Brora to Rogart, travelling eastwards; intermittent significant effects on approximately 4.6km of Core Path SU06.02 on the west side of Loch Brora; and a significant effect on a part of the access track to Ben Armine Lodge. There would be no significant effects on other routes, including the A9, A836, A839, A897, A949, national cycle routes, long distance walking routes and railway lines. As with landscape character, the extent of significant effects on views is reduced from that arising from the Consented Development, with the effect on views gained from stretches of the Brora to Rogart minor road and two core paths becoming not significant due to the reduction in visibility of the turbines.

7.1.10 As well as assessing the effect of the Proposed Varied Development itself, the LVIA assesses the cumulative effect that may arise when it is added to operational, consented and application stage wind farms. The cumulative assessment indicates that the addition of the Proposed Varied Development to operational and consented wind farms would result in significant cumulative effects on the landscape character of small areas of Strath Brora, including one very small part of the Loch Fleet, Loch Brora and Glen Loth SLA; and approximately 2km of the minor road from Brora to Rogart, travelling eastwards. The consideration of application stage wind farms does not lead to any additional significant cumulative effects. As with the effects of the Proposed Varied Development itself, the extent of significant cumulative effects is reduced from that arising from the Consented Development, with the cumulative effect on views experienced from all but approximately 2km of the Brora to Rogart minor road and from Viewpoint 13 (Creag nam Fiadh) becoming not significant.

7.1.11 In no case has the assessment of the Proposed Varied Development found an increase in magnitude of change that would result in a not significant effect becoming significant. Overall, the layout revisions would lead to reduced visibility of the Proposed Varied Development, a reduction in the extent of the Proposed Varied Development and, in some views, the removal of outlying and overlapping turbines. Of particular note are the reduction in visibility of the Proposed Varied Development from Strath Brora and the reduction in the extent of the Proposed Varied Development across the view as seen from areas to the west and north-west, when compared with the Consented Development.

7.2 Introduction

7.2.1 This Chapter provides the Landscape and Visual Impact Assessment (LVIA) for the Proposed Varied Development, and has been undertaken by suitably qualified Landscape Architects at Optimised Environments Limited (OPEN). This assessment should be read in conjunction with Chapter 7 of the 2015 ES and Chapter 2 of the 2016 FEI Report (provided as supporting information to the variation application), which provide the LVIA for the original layout and Consented Development. A summary of the effects that were assessed to arise as a result of the Consented Development is also provided, together with responses to the s.36 application from key stakeholders, and relevant mitigation measures and Conditions of Consent. Section 7.4 of this Chapter sets out the turbine parameters of the Proposed Varied Development considered in this assessment, compared to those considered for the Consented Development.

7.2.2 This Chapter is accompanied by a series of figures, including ZTV diagrams. Wirelines and photomontages are included in Volumes 3A (SNH Methodology) and Volume 3B (THC Methodology).

7.3 Consented Development

Summary of Effects

7.3.1 The LVIA undertaken for the 2015 ES and 2016 FEI Report identified and recorded the potential significant effects that the Consented Development may have on physical elements of the landscape; landscape character; areas that have been designated for their scenic or landscape-related qualities; areas of wild land; and views from various sensitive locations such as settlements, routes and hilltops. The potential cumulative effects from the addition of the Consented Development to other wind farms were also considered.

7.3.2 The following likely significant effects were identified for the Consented Development:

- Landscape character types that cover the site and its surroundings up to a maximum distance of around 6.5km away, including:
  - *Inland loch: Loch Brora* LCT: intermittent significant effects on parts of the loch;
  - *Small farms and crofts* LCT (*fringe crofting and historic features* subtype): *Balnacoil area*: significant effect on the majority of the receptor;
  - *Strath (Strath Brora*) LCT: *eastern section*: intermittent significant effects on areas around Sciberscross and south of the graveyard, parts of the southern/western side of the strath; the ridge line of Cnoc a'Ghrianain, and very small areas above Oldtown and on Killin Rock;
  - *Moorland slopes and hills* LCT: significant effects on the site area and other areas within approximately 6.5km that gain a high level of visibility of the Consented Development;
  - *Sweeping moorland* LCT: significant effects on the site area and intermittently on other areas within approximately 6km that gain a high level of visibility of the Consented Development; and
  - Loch Fleet, Loch Brora and Glen Loth SLA: intermittent and localised significant effects on small parts of the SLA, including some parts of Loch Brora, the southern loch side around and to the south of Carroll Rock, very small elevated areas above Oldtown and on Killin Rock; and west-facing slopes that rise close to the eastern edge of the Consented Development.
- Two hilltop viewpoints, as seen in Viewpoint 1 (Beinn Smeorail) and Viewpoint 9 (Ben Horn);

- Parts of Strath Brora that people may visit for informal recreation, as seen in Viewpoint 2 (Loch Brora, south-west side) and Viewpoint 5 (Strath Brora near Balnacoil);
- Intermittent/very intermittent significant effect on up to 3km of the minor road from Brora to Rogart travelling eastwards only, as seen in Viewpoint 6 (Brora to Rogart minor road near Sciberscross);
- Intermittent significant effects on approximately 5.6km of Core Path SU06.02 on the west side of Loch Brora, as seen in Viewpoint 2 (Loch Brora, south-west side);
- Intermittent significant effects on approximately 100-150m of Core Path SU06.14 on the east side of Loch Brora; and
- A part of the access track to Ben Armine Lodge, as seen in Viewpoint 12 (Track to Ben Armine Lodge).

7.3.3 No significant effects were assessed for WLAs, NSAs, GDLs, or SLAs other than some parts of the Loch Fleet, Loch Brora and Glen Loth SLA. There were also no significant effects on views from settlements or routes (other than the minor Rogart – Brora road and the two local core paths) including the A9, A836, A839, A897, A949, national cycle routes, long distance walking routes and railway lines.

7.3.4 As well as assessing the effect of the Consented Development itself, the 2016 FEI assessed the cumulative effect that could arise when the Consented Development was added to operational, consented and application stage wind farms. The cumulative assessment indicated that the addition of the Consented Development to operational, consented and proposed wind farms would result in significant cumulative effects on the landscape character of small parts of *strath (Strath Brora)* LCT, including one very small part of the Loch Fleet, Loch Brora and Glen Loth SLA; a stretch of the minor road from Brora to Rogart, travelling eastwards and on the view from Creag nam Fiadh. These effects all arose from the addition of the Consented Development to the operational Kilbraur Wind Farm; no other wind farms were material to the cumulative assessment.

Consultation Responses

7.3.5 No objections to the application for consent for the Consented Development were received.

7.3.6 The Highland Council (THC) noted in its response to the 2015 ES that the project would result in an adverse visual impact from Strath Brora, conflicting with the special qualities of the Loch Fleet, Strath Brora and Glen Loth SLA and relevant planning policy. The Applicant accepted THC's analysis that the removal of Turbine Number 15 and the reduction in height of Turbine 11 from 130m to 115m in height would lessen the effect from the SLA and voluntarily offered those changes. In making those changes, and following assessment of such within the 2016 FEI Report, THC agreed that the effects of the development would be lessened to such a degree that the Council on balance 'consider[ed] the application acceptable overall'.

7.3.7 Scottish Natural Heritage (SNH) did not object to the Consented Development, but noted the potential impact of the proposal on the Ben Kilbreck – Armine Forest Wild Land Area.

Relevant Mitigation Measures and Conditions of Consent

7.3.8 The layout design of the Proposed Varied Development is a vital part of the assessment process and is the stage where the biggest contribution can be made to mitigate potential landscape and visual effects, creating a wind farm which is appropriate for the existing landscape character and visual features of an area. Landscape and visual objectives have driven the design of Gordonbush Extension Wind Farm from an early stage, while also allowing environmental constraints and technical and economic factors to be considered.

7.3.9 The following Conditions of Consent are relevant for Landscape and Visual matters.

Condition 7: Design and Operation of Wind Turbines

No development shall commence unless and until full details of the proposed wind turbines (including, but not limited to, the power rating and sound power levels, the size, type, and external finish and colour), the monitoring masts, any transformer units and all associated apparatus have been submitted to, and approved in writing by, the Relevant Planning Authority.

The overall height of the wind turbines shall not exceed 130 metres to the tip of the blades in a vertical position as measured from natural ground conditions immediately adjacent to the turbine base.

The wind turbines shall be constructed and operated in accordance with the approved details and maintained in the approved colour, free from external rust, staining or discolouration, until such time as the wind farm is decommissioned.

Reason: To ensure that the environmental impacts of the turbines forming part of the Development conform to the impacts assessed in the environmental statement and in the interests of the visual amenity of the area.

7.3.10 It is proposed to modify this Condition to reflect the changes as a result of the Proposed Varied Development (e.g. increase in tip height). The proposed changes are reflected below and in Appendix 1.2.

No development shall commence unless and until full details of the proposed wind turbines (including, but not limited to, the power rating and sound power levels, number, the size, type, and external finish and colour), the monitoring ~~masts~~LiDAR, ~~any transformer units~~ and all associated apparatus have been submitted to, and approved in writing by, the Relevant Planning Authority.

The overall height of the wind turbines shall not exceed ~~130~~ 149.9 metres to the tip of the blades in a vertical position as measured from natural ground conditions immediately adjacent to the turbine base.

The wind turbines shall be constructed and operated in accordance with the approved details and maintained in the approved colour, free from external rust, staining or discolouration, until such time as the wind farm is decommissioned.

Reason: To ensure that the environmental impacts of the turbines forming part of the Development conform to the impacts assessed in the environmental statement and in the interests of the visual amenity of the area.

Condition 12: Advertising

Unless there is a demonstrable health and safety or operational reason, none of the wind turbines substation buildings / enclosures or above ground fixed plant shall display any name, logo, sign or other advertisement without express advertisement consent having been granted on application to the Planning Authority.

Reason: To ensure that the turbines are not used for advertising, in the interests of visual amenity.

7.3.11 No changes are proposed to the above condition.

Condition 13: Buildings and other Facilities

No development shall commence until full details of the location, layout, external appearance, dimensions and surface materials of all additional buildings, compounds and parking areas, as well as any external lighting, fuel storage, fencing, walls, paths and any other ancillary elements of the development, have been submitted to, and approved in writing by, the Planning Authority (in consultation with SEPA, as necessary). Thereafter, development shall progress in accordance with these approved details.

Reason: To ensure that all ancillary elements of the development are acceptable in terms of visual, landscape noise and environmental impact considerations.

7.3.12 No changes are proposed to the above condition.

Condition 23: Construction and Environmental Management Plan

There shall be no Commencement of Development unless a Construction Environmental Management Plan ("CEMP") outlining the specific details of all on-site construction works, post-construction reinstatement, drainage and mitigation, together with details of the timetabling, has been submitted to and approved in writing by the Planning Authority in consultation with SNH and SEPA.

The CEMP shall include (but shall not be limited to):

a) A site waste management plan (dealing with all aspects of waste produced during the construction period (other than peat), including details of contingency planning in the event of accidental release of materials which could cause harm to the environment

b) Details of the formation of the construction compound, welfare facilities, any areas of hardstanding, turning areas, internal access tracks, car parking, materials stockpiles, oil storage, lighting columns, and any construction compound boundary fencing;

c) A dust management plan;

d) Site specific details for management and operation of any concrete batching plant (including disposal of pH rich waste water and substances);

e) Details of measures to be taken to prevent loose or deleterious materials being deposited on the local road network including wheel cleaning and lorry sheeting facilities, and measures to clean the site entrances and the adjacent location road network;

f) A pollution prevention and control method statement, including arrangements for the storage and management of oil and fuel on the site;

g) Soil storage and management;

h) A peat management plan, to include details of vegetated turf stripping and storage, peat excavation (including volumes), handling, storage and re-use;

i) A drainage management strategy, demonstrating how all surface and waste water arising during and after development be managed and prevented from polluting any watercourses or sources;

j) A surface water and groundwater management and treatment plan, including details of the separation of clean and dirty water drains, and locations of settlement lagoons for silt laden water;

k) Sewage treatment and disposal;

l) Temporary site illumination;

m) The construction of the access into the site and the creation and maintenance of associated visibility splays;

n) The methods of construction of crane pads;

o) The methods of construction of turbine foundations;

p) The methods of working cable trenches;

q) The methods of construction and erection of the wind turbines and meteorological masts;

r) Details of watercourse crossings;

s) Post construction restoration / reinstatement of the working areas not required during the operation of the Development, including construction access tracks, borrow pits construction compound, storage areas, laydown areas, access tracks, passing places and other construction areas.

The development shall be implemented thereafter in accordance with the approved CEMP unless otherwise approved in advance in writing by the Planning Authority in consultation with SNH and SEPA.

Reason: To ensure that all construction operations are carried out in a manner that minimises their impact on road safety, amenity and the environment, and that the mitigation measures contained in the Environmental Statement accompanying the application, or as otherwise agreed, are fully implemented.

7.3.13 Minor changes to the wording of this Condition are proposed to clarify wording in relation to specific requirements of the CEMP. The proposed changes are reflected below and in Appendix 1.2.

There shall be no Commencement of Development unless a Construction Environmental Management Plan ("CEMP") outlining the specific details of all on-site construction works, post-construction reinstatement, drainage and mitigation, together with details of the timetabling, has been submitted to and approved in writing by the Planning Authority in consultation with SNH and SEPA.

The CEMP shall include (but shall not be limited to):

a) A site waste management plan (dealing with all aspects of waste produced during the construction period (other than peat)~~, including details of contingency planning in the event of accidental release of materials which could cause harm to the environment~~;

b) Details of the formation of the construction compound, welfare facilities, any areas of hardstanding, turning areas, internal access tracks, car parking, materials stockpiles, oil storage, lighting columns, and any construction compound boundary fencing;

c) A dust management plan;

d) Site specific details for management and operation of any concrete batching plant (including disposal of pH rich waste water and substances);

e) Details of measures to be taken to prevent loose or deleterious materials being deposited on the local road network including wheel cleaning and lorry sheeting facilities, and measures to clean the site entrances and the adjacent location road network;

f) A pollution prevention and control method statement, including arrangements for the storage and management of oil and fuel on the site;

g) Soil storage and management;

h) A peat management plan, to include details of vegetated turf stripping and storage, peat excavation (including volumes), handling, storage and re-use;

i) A drainage management strategy, demonstrating how all surface and waste water arising during and after development be managed and prevented from polluting any watercourses or sources;

j) A surface water and groundwater management and treatment plan, including details of the separation of clean and dirty water drains, and locations of settlement lagoons for silt laden water;

k) Sewage treatment and disposal;

l) Temporary site illumination;

m) The construction of the access into the site and the creation and maintenance of associated visibility splays;

n) The methods of construction of crane pads;

o) The methods of construction of turbine foundations;

p) The methods of working cable trenches;

q) The methods of construction and erection of the wind turbines and meteorological masts;

r) Details of watercourse crossings;

s) Post construction restoration / reinstatement of the working areas not required during the operation of the Development, including ~~construction access tracks,~~ borrow pits construction compound, storage areas and~~,~~ laydown areas~~, access tracks, passing places and other construction areas.~~;

t) Environmental Incident and Emergency Plan including details of contingency planning in the event of accidental release of materials which could cause harm to the environment; and

~~s)~~u) Details of species and habitat protection measures to be implemented for the construction period and details of appropriate relevant reporting and monitoring programmes.

The development shall be implemented thereafter in accordance with the approved CEMP unless otherwise approved in advance in writing by the Planning Authority in consultation with SNH and SEPA.

Reason: To ensure that all construction operations are carried out in a manner that minimises their impact on road safety, amenity and the environment, and that the mitigation measures contained in the Environmental Statement accompanying the application, or as otherwise agreed, are fully implemented.

7.4 Scope of Assessment

The Proposed Varied Development

7.4.1 This assessment covers the construction, operational phase and decommissioning of the Proposed Varied Development. The Proposed Varied Development is an extension to the operational Gordonbush Wind Farm and consists of 11 turbines with associated infrastructure, including access tracks, LiDAR, temporary borrow pits and temporary batching plant as described in Chapter 4 (Description of Development). The Proposed Varied Development is intended as an alternative to the Consented Development at Gordonbush Extension, which was consented in September 2017.

7.4.2 The LVIA for the Proposed Varied Development is based on a layout of 11 turbines which are 149.9m to blade tip (assumed 81.9m hub height and 136m rotor diameter). The Consented Development consists of 15 turbines, with 12 turbines of 130m blade tip height (77.5m hub height and 105m rotor diameter) and three turbines of 115m blade tip height (68.5m hub height and 93m rotor diameter).

7.4.3 The turbines in the operational Gordonbush Wind Farm are 110m to blade tip (69m hub height and 82m rotor diameter).

Study Area

7.4.4 A 40km radius study area has been used for this assessment. This is in accordance with guidance developed by Scottish Natural Heritage (SNH) (Visual Representation of Wind Farms Version 2.2,

February 2017), which indicates that an area with a radius of 40km from the nearest turbine is appropriate for turbines of the size proposed at the Proposed Varied Development.

7.4.5 Zone of Theoretical Visibility (ZTV) analysis has been carried out for this area, as has mapping of landscape character, landscape related designations, wild land areas and principal visual receptors.

7.4.6 The study area is not intended to provide a boundary beyond which the Proposed Varied Development would not be seen, but rather to define the area within which it may have a significant landscape or visual effect. A significant effect is, in reality, very unlikely to occur towards the outer edges of the study area.

Wild Land Assessment

7.4.7 The preliminary assessment in the 2015 ES ascertained that there was one WLA that may be significantly affected by the Development; Ben Klibreck - Armine Forest WLA (Area 35). The 2015 ES included an assessment of effects on this WLA, carried out in accordance with 'Advice Note - Assessing the Impacts on Wild Land' (SNH, 2007 with note added October 2014). This assessment concluded that the effect on the WLA would be not significant.

7.4.8 The 2016 FEI Report assessed the effects of the Consented Development on the WLA and concluded that the change from the 2015 ES would be negligible, with the effect remaining not significant.

7.4.9 Since the production of the 2016 FEI Report, SNH has produced draft guidance 'Assessing impacts on Wild Land Areas – technical guidance'. This draft guidance was open to public consultation in the early part of 2017 and has not yet been finalised. In the meantime, SNH advises on its website that "*You should apply the consultative draft guidance in place of the 2007 guidance while we consider responses*".

7.4.10 However, given that the effects of the Consented Development on the WLA were assessed as not significant, and considering the nature of the proposed variation to the Consented Development and the findings of the updated LVIA that is contained within this Chapter, it was not considered appropriate to carry out a new detailed assessment of effects on wild land using the 2017 draft methodology. It was considered that a review of the likely effects on the WLA and an update of the assessment that was previously carried out is the most appropriate method to assess the effects of the Proposed Varied Development on the WLA. In addition this avoids duplication of assessment per Regulation 5(4) of the EIA Regulations (see Chapter 2: EIA Process).

7.4.11 This approach was suggested to THC and SNH in an email (6th September 2018), and neither THC nor SNH has raised any concern with this.

7.4.12 A new wild land assessment that uses the draft guidance (SNH, 2017) has therefore not been produced for the Proposed Varied Development. Instead, the 2015 ES and 2016 FEI Report assessments have been reviewed in light of the Proposed Varied Development.

Scope of Assessment

7.4.13 The comparative ZTV for the Proposed Varied Development and Consented Development (Figure 7.1c) indicates that theoretical visibility of the Proposed Varied Development is generally very similar to that of the Consented Development. There are some minor variations in the level and extent of visibility of the wind farm as can be seen on Figure 7.1c, which shows the areas from where the Consented Development is visible but the Proposed Varied Development is not, and vice-versa, as well as areas from where both the Consented and Proposed Varied Development layouts can be seen.

7.4.14 This ZTV indicates that the removal of four turbines in the Proposed Varied Development would lead to a reduction in visibility in some areas, most importantly in parts of Strath Brora, while the proposed new turbine height would increase visibility in other areas, primarily to the north and north-west of the site.

7.4.15 The ZTV for the Proposed Varied Development, shown on Figure 7.1a (A3) and 7.1b (A1), indicates that in the areas of 'new' visibility (i.e. where the Proposed Varied Development is theoretically visible but the Consented Development is not), visibility of the Proposed Varied Development is limited to a maximum of four turbines - yellow or orange colouring, as shown on the ZTV legend. Furthermore, the visibility of the Proposed Varied Development in these areas would be a maximum of 19.9m of blade length, given the 19.9m increase in the overall tip height between the consented and proposed turbines.

7.4.16 The maximum theoretical visibility of the Proposed Varied Development in areas of 'new' visibility would therefore be up to 19.9m of up to four turbines.

7.4.17 The viewpoint wirelines (Figures 7.8 to 7.22) provide further illustration of the comparison between the Proposed Varied Development and Consented Development. These views indicate that the removal of four turbines would reduce the effect arising from the Proposed Varied Development in a number of respects; reducing the horizontal extent of the Proposed Varied Development across the view, reducing the overall level of visibility (particularly in views from Strath Brora), and reducing clustering and overlapping of turbines. The wirelines also show that visibility of the 11 turbines in the Proposed Varied Development would be increased due to their height and, in closer-proximity views, their comparison with the operational Gordonbush Wind Farm turbines.

7.4.18 Overall, it is considered that the Proposed Varied Development would result in effects that are similar to those of the Consented Development in terms of both geographical extent and potential for significant effects arising. As a result, this LVIA includes an assessment of effects on those landscape and visual receptors that were assessed in detail in the 2015 ES, and it has not been considered necessary to consider the inclusion of additional landscape and visual receptors or viewpoints.

Graphic Representation and Visualisations

7.4.19 The list of graphics (i.e. ZTV diagrams) and visualisations (i.e. wirelines and photomontages) to be included in the Application has been agreed with THC and SNH by email on 21st September 2018 and 20th September 2018 respectively (see Appendix 7.1).

Consultations

7.4.20 THC and SNH have been consulted on various aspects of the assessment process for the Proposed Varied Development, including production of visualisation information and the approach to the assessment. Table 7.1 summarises this consultation and describes how issues raised by these consultees have been addressed.

Table 7.1 Summary of Consultation

Consultee	Summary Response	Comment/Action Taken
The Highland Council: pre-application advice pack (25/09/18)	Section 7. Development Plan Designation and Planning Policy Appraisal	
	Visualisations should accord with the Council's latest Visualisation Standards for Wind Energy Developments.	The methodology for the production of visualisations is set out in Appendix 7.1, in the form of email correspondence between the Applicant's project landscape architects, ECU, THC and SNH.
	Assessments should cover impacts of all	All elements of the development were

Consultee	Summary Response	Comment/Action Taken
	elements of the development, not just the turbines, where they are not covered under a separate application.	considered in the 2015 ES and the 2016 FEI Report. Consideration has been given to these where notable changes may arise as a result of the Proposed Varied Development.
	Landscape Sensitivity: Pages 18-20 of SG list 10 landscape and visual criteria that the Council use for assessing proposals. The most notable in this case include Criteria 1, 2, 4, 5, 6, 7, 8, and 9. The applicant should outline if the new scheme will have a positive or negative impact on these compared to the consented scheme.	The Planning Statement includes an assessment of the Proposed Varied Development against these criteria.
	A key consideration will be whether the proposal will undo mitigation of existing schemes. This will require consideration given the turbine height in relation to existing Gordonbush (110m to blade tip) and Kilbraur (125m to blade tip).	This matter is considered in the assessment of effects and discussed in relation to the SG in the Planning Statement (Appendix 5).
	THC is working on an appraisal of the landscape capacity of this area. In the interim, criteria outlined in the SG should be utilised when assessing likely impacts.	The Planning Statement includes an assessment of the Proposed Varied Development against these criteria.
	Residential properties are sensitive to wind energy development. Mitigation of impacts on properties within 2km of the proposal should be demonstrated. SG section on Safety and Amenity at Sensitive Locations (page 20-21) is particularly relevant.	There are no properties within 2km of the Proposed Varied Development.
	Proposals must have regard to the SLA citations. These citations will be used to assess impacts of proposals where relevant.	The 2015 ES described the effects of the Proposed Varied Development with regard to the citation for the Loch Fleet, Loch Brora and Glen Loth SLA, and this LVIA has reviewed the assessment of effects as carried out in that ES.
	Section 9. Natural Heritage	

Consultee	Summary Response	Comment/Action Taken
	THC's SG sets out key L&V criteria which the council will use as a framework for assessing proposals. The most relevant criteria are set out as follows: 6. The existing pattern of Wind Energy Development is respected. The scale of the proposed turbines may reduce visual continuity with the operational Gordonbush, particularly where the extension is seen in front of it. 8. The perception of landscape scale and distance is respected. The increase in scale risks affecting perception of landscape scale/distance if it appears that the difference in 'apparent' size of turbines is due to distance. This may affect viewers' understanding of distance/perspective in the landscape. Effects on the perceived scale of hills within the SLA are to be avoided. 9. Landscape setting of nearby wind energy developments is respected. Where Kilbraur and Gordonbush extension are both seen, consideration should be given to the effect of increased height and rotor diameter on the balance between the two sites.	The Planning Statement includes an assessment of the Proposed Varied Development against these criteria.
The Highland Council: pre-application consultation	Email 16/10/18 THC agreed a cumulative assessment cut-off date of 30th September 2018. THC agreed the approach that no additional sites need be considered in the cumulative assessment, with the cumulative scenario remaining as it was in the 2015 ES.	Noted
Scottish Natural Heritage: pre-application advice pack (25/09/18)	Wild Land: This proposal is likely to result in additional adverse effects, but these are not considered to exceed that of the existing wind farm scheme.	Noted. See paragraphs 7.9.75 to 7.9.81 of this Chapter.
	If the applicant wishes to deviate from any best practice guidance, they should provide justification for doing so well in advance of final submission.	Noted. See Appendix 7.1. The approach to this LVIA has been agreed with THC and SNH.
Scottish Natural Heritage: pre-application consultation	Email 20/09/18 We consider the [pre-application] visual material provided is of good quality which helps us to be able to provide timely advice to allow this proposal to progress through the planning system. We also advise that the EIA Report assessment is focused on the areas more likely to result in "likely significant effects" rather than all the effects.	Noted. This Chapter has focussed on the likely significant effects, having regard to previous assessments and professional judgement, as outlined in this Chapter, rather than all potential effects.

7.5 Methodology

7.5.1 The methodology used for the assessment of the Proposed Varied Development is consistent with that used in the 2015 ES and the 2016 FEI Report, as described in full in Appendix 7.1 of the 2015 ES and summarised below. The assessment in this Chapter is focussed on the identification of those likely significant effects that differ from the findings of the LVIA for the Consented Development.

Categories of Effects

7.5.2 In accordance with the 2015 ES, this assessment of the Proposed Varied Development is presented in five categories of effects: physical effects, effects on landscape character, effects on wild land, effects on views, and cumulative effects.

7.5.3 **Physical effects** are restricted to the area within the Proposed Varied Development site boundary and are the direct effects on the existing fabric of the site, such as alteration to ground cover. This category of effects is made up of landscape elements.

7.5.4 **Effects on landscape character** arise either through the introduction of new elements that physically alter the pattern of elements that make up the landscape, or through visibility of the Proposed Varied Development, which may alter the way in which the pattern of elements is perceived. This category is made up of two groups of landscape character receptors; landscape character types and landscape-related designated areas.

7.5.5 **Effects on wild land areas**: the assessment of effects on wild land areas (WLAs) is carried out in accordance with SNH guidance ('Assessing the Impacts on Wild Land-Interim Guidance Note February 2007 with note added October 2014').

7.5.6 **Effects on views**: the assessment of effects on views assesses how the introduction of the Proposed Varied Development would affect views throughout the study area, and is carried out in two parts:

- An assessment of the effects that the Proposed Varied Development would have on a series of viewpoints around the study area; and
- An assessment of the effects that the Proposed Varied Development would have on views from principal visual receptors, which are relevant settlements and routes found throughout the study area.

7.5.7 **Cumulative effects** arise where the study areas for two or more wind farms overlap so that both of the wind farms are experienced at a proximity where they may have a greater incremental effect, or where wind farms may combine to have a sequential effect.

Assessment of Effects

7.5.8 The broad principles used in the assessment of significance of these categories of effects, other than the assessment of effects on wild land areas, are the same and are summarised below. The detailed methodology for the assessment of significance does, however, vary for each category, and the specific criteria used are described in Appendix 7.1.

7.5.9 The objective of the assessment is to predict the likely significant effects on the landscape and visual resource. In accordance with the EIA Regulations, LVIA effects are assessed to be either **significant** or **not significant**. The LVIA does not define intermediate levels of significance as the EIA Regulations do not provide for these.

7.5.10 The significance of effects is assessed through a combination of two considerations; the **sensitivity** of the landscape receptor or view and the **magnitude of change** that would result from the addition of the Proposed Varied Development.

Sensitivity

7.5.11 Sensitivity is an expression of the ability of a landscape receptor or view to accommodate the Proposed Varied Development. Sensitivity is determined through a combination of the value of the receptor and its susceptibility to the Proposed Varied Development. The factors that determine these criteria are described in Appendix 7.1.

7.5.12 Levels of sensitivity - high, medium-high, medium, medium-low and low - are applied in order that the judgement used in the process of assessment is apparent.

Magnitude of Change

7.5.13 Magnitude of change is an expression of the extent of the effect on landscape receptors and views that would result from the introduction of the Proposed Varied Development. The factors that determine magnitude of change are described in Appendix 7.1.

7.5.14 Levels of magnitude of change - high, medium-high, medium, medium-low, low and negligible - are applied in order that the judgement used in the process of assessment is apparent.

Assessment of Significance

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

Table 7.2: Illustrative Significance Matrix

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

7.5.16 Effects within the dark grey boxes in the matrix are considered to be significant. Effects within the light grey boxes may be significant or not significant depending on the specific relevant factors that arise at a particular landscape or visual receptor. In accordance with GLVIA3, experienced professional judgement is applied to the assessment of all effects and reasoned justification is presented in respect of the findings of each case.

7.5.17 A significant effect occurs where the Proposed Varied Development will provide a defining influence on a landscape element, landscape character receptor or view. A not significant effect occurs where the effect of the Proposed Varied Development is not material, and the baseline

characteristics of the landscape element, landscape character receptor, view or visual receptor continue to provide the definitive influence. In this instance the Proposed Varied Development may have an influence but this influence will not be definitive.

7.5.18 Significant cumulative landscape and visual effects arise where the addition of the Proposed Varied Development to other wind farms leads to wind farms becoming a prevailing landscape and visual characteristic.

7.5.19 It is important to remember that the objective of the cumulative assessment is different from the assessment of effects of the Proposed Varied Development itself. The assessment of the Proposed Varied Development itself focusses on the effect that it will have on the viewpoints, principal visual receptors and landscape character receptors, taking baseline wind farms into consideration but not assessing the contribution of the Proposed Varied Development to the cumulative situation.

7.5.20 In the cumulative assessment, the intention is to establish whether or not the addition of the Proposed Varied Development, in combination with other relevant existing and proposed wind farms, may lead to a landscape character or view that is characterised primarily by wind farms so that other patterns and components are no longer definitive.

7.5.21 Baseline (operational, under construction and consented) cumulative wind farms are taken into consideration in both the assessment of the Proposed Varied Development itself and the cumulative assessment, while application-stage wind farms are considered only in the cumulative assessment.

Nature of Effects

7.5.22 The 'nature of effects' relates to whether the effects of the Proposed Varied Development are positive/ beneficial or negative/adverse. Guidance provided in GLVIA3 states that "*thought must be given to whether the likely significant landscape and visual effects are judged to be positive (beneficial) or negative (adverse) in their consequences for landscape or for views and visual amenity*" but does not provide an indication as to how that may be established in practice. The nature of effect is therefore one that requires interpretation and reasoned professional opinion.

7.5.23 In relation to many forms of development, the EIA Report will identify positive and negative effects under the term nature of effect. The landscape and visual effects of wind farms are difficult to categorise in either of these brackets as, unlike other disciplines, there are no definitive criteria by which these effects can be measured as being categorically positive and negative.

7.5.24 In this assessment, a precautionary approach has been adopted which assumes that significant landscape and visual effects will be weighed on the negative side of the planning balance, although positive or neutral effects may arise in certain situations. Unless it is stated otherwise, the effects of the Proposed Varied Development are considered to be adverse.

Duration and Reversibility of Effects

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

7.5.26 Other infrastructure and operations such as the construction processes and plant (including tall cranes for turbine erection) and construction and storage compounds would be apparent only during the initial construction period of the Proposed Varied Development and are considered to be short-term effects. Borrow pit excavation would also be short-term as borrow pits would

be restored at the end of the construction process, although a permanently altered ground profile may remain evident.

7.5.27 The reversibility of effects is variable. The most apparent effects on the landscape and visual resource, which arise from the presence of the turbines, are reversible as the turbines would be removed on decommissioning, as would the LiDAR. The effects of the tall cranes and heavy machinery used during the construction and decommissioning periods are also reversible.

7.5.28 It is anticipated that access tracks would remain at decommissioning. Turbine foundations and underground cabling would be left in-situ below ground with no residual landscape and visual effects.

7.5.29 In order to avoid repetition, the duration and reversibility of effects are not reiterated throughout the assessment.

7.6 Baseline

7.6.1 Baseline conditions are described in detail in Section 7.6 of the 2015 ES and summarised below.

The Site

7.6.2 The Proposed Varied Development site consists of a single slope of moorland that falls from approximately 330m AOD in the north-east to approximately 150m AOD in the south-west. All sides of the site other than the west and south-west are surrounded by higher landform; to the west and south-west, the slope of the site continues to fall into the valley of the Allt a' Mhuilinn before rising gently again into a series of cnocans.

7.6.3 To the north-east of the site, the moorland continues to rise up to Cnoc a' Chrubaich Mhoir, and on this slope, above the site, is the operational Gordonbush Wind Farm. Access to the operational Gordonbush Wind Farm is gained by a track that runs from the public road in Strath Brora at Ascoile, across the southern edge and up the eastern side of the Proposed Varied Development site.

7.6.4 To the south of the site is Strath Brora, which is particularly enclosed at this point. Loch Brora lies within the strath due south of the site. The minor road that links Brora to Rogart also runs through Strath Brora at this point, passing to the south of the site in a narrow corridor between Loch Brora and the landform of Cnoc a' Ghrianain. There is scattered settlement in this part of Strath Brora, largely to the north of the road, loch and river. Deciduous woodland is found along the banks of Loch Brora and is a notable characteristic of the enclosed strath landscape. Around 5km to the south of the site, on the north-west-facing slopes of Meall Horn and Meall Odhar, is the operational Kilbraur Wind Farm.

7.6.5 Immediately to the west of the site, east of the Allt a' Mhuilinn, is a 275kV transmission line which runs north-south through the northern part of the study area before diverting westwards around the Dornoch Firth in the southern part of the study area.

Landscape Character

7.6.6 Landscape character information for the study area is based on the relevant SNH Landscape Character Assessment (LCA) reviews. The SNH reviews divide the landscape into tracts that are referred to as landscape character types (LCTs). The LCTs that cover the study area are shown in relation to the blade tip ZTV for the Proposed Varied Development on Figures 7.3a (40km radius) and 7.3b (10km radius).

7.6.7 The LCTs described below are those that cover the site or lie in closer proximity to the site and were considered in the 2015 ES to have potential to be significantly affected by the Development. The other LCTs in the study area are not described in detail as they do not have potential to be significantly affected by the Proposed Varied Development, largely due to a

combination of lack of, or very limited visibility, of the Proposed Varied Development and distance from the Proposed Varied Development (see Figures 7.3a and 7.3b for LCTs in relation to the ZTV).

Site Landscape Character

7.6.8 The site lies on the cusp of two LCTs as identified in the Caithness and Sutherland LCA; *sweeping moorland* LCT (the western part of the site) and *moorland slopes and hills* LCT (the eastern part). This boundary is not clearly defined and the site as a whole is covered by a transitional landscape that displays characteristics of both types. The operational Gordonbush Wind Farm has a similar relationship with these two LCTs, lying within both *sweeping moorland* and *moorland slopes and hills*.

7.6.9 *Sweeping moorland* and *moorland slopes and hills* are both characterised by open moorland with a sense of vast openness and remoteness. As described in the LCA, the most notable difference between these landscape types is the underlying landform and topography; *sweeping moorland* has a gently undulating and less distinctive topography, whereas *moorland slopes and hills* is more variable and includes locally distinctive landforms such as Beinn Smeorail, Ben Horn and Carroll Rock.

7.6.10 The landscape of the site may therefore be described as a transitional zone of sloping open moorland that lies on the periphery of a group of more distinctive hills.

7.6.11 The innate character of both *sweeping moorland* and *moorland slopes and hills,* as described in the Caithness and Sutherland LCA, has been altered in the vicinity of the site by the addition of the operational Gordonbush Wind Farm and, to a lesser degree, the 275kV transmission line that runs immediately to the west of the site.

Landscape Character around the Study Area

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

7.6.13 *Lone mountains* and *flat peatland* are found in the northern part of the study area, with very limited occurrence within 20km of the site. There are, however, several *strath* landscapes that extend inland from the coast and are in closer proximity to the Proposed Varied Development; most importantly, to the south of the site is Strath Brora, which runs from Dalnessie in the west to Brora in the east, a minimum of around 1km from the site. Strath Brora is covered by two LCTs: *strath* and *inland loch.*

7.6.14 Strath Brora falls into two distinctive sections; the western section, which runs between Dalnessie and Dalreavoch, and the eastern section, divided from the western section by a block of coniferous woodland plantation, which runs from near Sciberscross to the western side of Brora. The western section of Strath Brora is a relatively straight, narrow, enclosed strath that is almost completely inaccessible by vehicle other than at Dalreavoch, where the Brora – Rogart road crosses the strath, and has very little settlement or woodland.

7.6.15 In contrast, the eastern section of Strath Brora is sinuous, following a notable crescent shape as it follows the River Brora and Loch Brora, and is relatively developed, containing the Brora to Rogart road and a number of occupied houses including the estate buildings and lodges of Gordonbush and Balnacoil.

7.6.16 The majority of both the eastern and western sections of Strath Brora is surrounded by *moorland slopes and hills*, with some smaller areas of *sweeping moorland*. There are also

several small pockets of the *small farms and crofts* LCT and its sub-types adjacent to the strath at Balnacoil, Sciberscross, and Knockarthur/Rhilochan.

Landscape Character Units

7.6.17 Many of the LCTs that cover the study area are extensive, sometimes covering several areas that are geographically separate, and effects can vary widely across a single LCT. The 2015 ES therefore divided several of the LCTs into 'units' (shown on Figures 7.3a and 7.3b) as described below:

7.6.18 Four units of *moorland slopes and hills* LCT were identified:

- Unit A covers the eastern part of the site and the eastern part of the operational Gordonbush Wind Farm;
- Unit B extends from the Allt Smeorail valley to a maximum of approximately 5km from the nearest turbine on the eastern side of the Proposed Varied Development site. The distinctive landform of Beinn Smeorail (Viewpoint 1) is within this unit;
- Unit C lies to the south of the site, separated from units A and B by Strath Brora, and covers distinctive landform such as Carroll Rock, Ben Horn (Viewpoint 9) and Kilbraur Hill. Kilbraur Wind Farm lies within this receptor; and
- Unit D covers two areas to the west of the site: firstly, the southern part of the Black Water, Dailbane Hill and Meall na Gaoithe, and secondly, the hills of Cnoc Leamhnachd and Cnoc a' Garbh-leathaid, to the west of Sciberscross.

7.6.19 Three units of *sweeping moorland* LCT were identified:

- Unit A covers the western part of the site and the western part of the operational Gordonbush Wind Farm;
- Unit B covers the expansive area of *sweeping moorland* that extends from the Allt Mhuilinn and 275kV transmission line to a maximum of approximately 11km from the nearest turbine on the western side of the site; and
- Unit C covers an area of *sweeping moorland* that lies to the west of the Black Water and north of Strath Brora.

Landscape Planning Designations

7.6.20 The site itself is not covered by any known international, national, regional or local landscape-related planning designations. Various designated areas are, however, found elsewhere in the study area and these have been considered in the assessment. These are shown in conjunction with the blade tip ZTV of the Proposed Varied Development on Figure 7.4.

7.6.21 There are two **National Scenic Areas** (NSA) within the study area; the Dornoch Firth NSA, which lies a minimum of approximately 23km to the south of the Proposed Varied Development, and the Kyle of Tongue NSA, which is over 35km away to the north-west of the Proposed Varied Development. The ZTV indicates some limited visibility of the Proposed Varied Development from the eastern end of the Dornoch Firth NSA, and very limited visibility of the Kyle of Tongue NSA. The NSAs have been discounted from the assessment due to the low level of visibility and distance from the site.

7.6.22 There are seven **Gardens and Designed Landscapes** (GDL) in the study area. There is no visibility of the Proposed Varied Development from Balnagown Castle, Dunbeath Castle, Kildonan Lodge, Langwell Lodge or Skibo Castle; some limited visibility from the wooded eastern extremity of Dunrobin Castle, a minimum of approximately 10km away; and some visibility from House of the Geanies from over 33km away. The GDLs have been discounted from the assessment due to the low level of visibility and distance from the site.

7.6.23 It should be noted that Tarbat House, a former GDL that lay just within the south-eastern boundary of the study area, was removed from the Inventory of Gardens and Designed Landscapes in 2016.

7.6.24 **Special Landscape Areas** (SLAs) are areas of land considered to be important at a regional level, as designated by THC and protected through Development Plan Policy. Detailed citations for each of the 27 SLAs that lie within THC administrative area are provided in 'Assessment of Highland Special Landscape Areas' (THC in partnership with SNH, 2011). These citations describe each SLA in terms of its "key landscape and visual characteristics, the special qualities for which it is valued, its key sensitivities to landscape change, and possible measures for its enhancement."

7.6.25 There are five SLAs in the 40km study area:

- Ben Griam and Loch Nan Clar;
- Ben Klibreck and Loch Choire;
- Flow Country and Berriedale Coast;
- Loch Fleet, Loch Brora and Glen Loth; and
- Sutors of Cromarty, Rosemarkie and Fort George.

7.6.26 The closest SLA to the Proposed Varied Development is Loch Fleet, Loch Brora and Glen Loth SLA, which is a minimum of 1.6km to the east of the nearest turbine. Visibility of the Proposed Varied Development from this SLA is not widespread, but there is visibility from the areas that lie closer to the site, and this SLA is included in the assessment.

7.6.27 The Ben Griam and Loch Nan Clar SLA, Flow Country and Berriedale Coast SLA and Sutors of Cromarty, Rosemarkie and Fort George SLA have very limited, intermittent and/or distant visibility from a minimum distance of around 18km, 13km and 38km respectively. There is some intermittent visibility of the Proposed Varied Development from the high points and eastern end of the Ben Klibreck and Loch Choire SLA, a minimum of around 14.5km away. These SLAs have been discounted from the assessment due to the low level of visibility and distance from the site.

Wild Land Areas

7.6.28 In June 2014 SNH published its map of 'Wild Land Areas' (WLA). WLA are not planning designations. SPP recommends they are identified and their character safeguarded (para.200) but that development within or with effects on WLAs may be appropriate in some circumstances (para.214). There are seven WLAs within or partially within the 40km radius study area:

- Ben Klibreck - Armine Forest WLA (Area 35);
- Ben Hope – Ben Loyal (Area 38);
- Causeymire – Knockfin Flows (Area 36);
- East Halladale Flows (Area 39);
- Foinaven – Ben Hee (Area 37);
- Reay – Cassley (Area 34); and
- Rhiddoroch - Beinn Dearg - Ben Wyvis (Area 29).

7.6.29 These are shown in conjunction with the ZTV for the Proposed Varied Development in Figure 7.5a, in conjunction with the comparative ZTV for the Proposed Varied Development and Consented Development in Figure 7.5b, and in conjunction with the comparative ZTV for the Proposed Varied Development and operational Gordonbush Wind Farm in Figure 7.5c.

7.6.30 The closest WLA to the Proposed Varied Development is Ben Klibreck - Armine Forest, which is a minimum of 200m to the west of the nearest turbine. This WLA boundary is marked by the 275kV overhead transmission line that runs down the western side of the site. This WLA is included in the assessment.

7.6.31 The parts of the East Halladale Flows WLA and Foinaven – Ben Hee WLA that lie within the study area have no visibility of the Proposed Varied Development. The Ben Hope – Ben Loyal WLA, Reay – Cassley WLA and Rhiddoroch - Beinn Dearg - Ben Wyvis have intermittent visibility from a minimum of around 31km, 39km and 37km away respectively. The Causeymire – Knockfin Flows WLA has limited and very intermittent visibility of the Proposed Varied Development from a minimum of around 13km. It is notable that the Proposed Varied Development would be seen behind the operational Gordonbush Wind Farm in these views, and the additional wind farm influence arising from the Proposed Varied Development would be very limited. These WLAs have been discounted from the assessment due to the low level of visibility and distance from the site.

Principal Visual Receptors

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

Settlements

7.6.33 The majority of the study area comprises sparsely populated upland landscapes with only a few towns and villages, which are found in sheltered, low-lying coastal and strath locations. The larger settlements include Dornoch, Tain, Golspie, Brora, Helmsdale and Dunbeath, all of which are ranged up the Moray Firth coastline. The largest inland settlement is Lairg, which lies within a crofting landscape at the western end of Strath Brora. Other than these local centres, settlement is generally limited to small village communities such as Portmahomack, Ardgay and Bonar Bridge, and small clusters of houses within low-lying, more accessible and sheltered straths and on the Moray Firth coast. Isolated farms and estate buildings are also found in the upland interior areas. The closest settlement to the Proposed Varied Development is Brora, which is around 9.5km to the south-east.

7.6.34 The settlements included in the assessment are those that are classified as 'settlements' in THC Development Plan Mapping. Of these settlements, the majority are shown on the ZTV to gain no visibility of the Proposed Varied Development, including the closest settlements of Brora and Golspie. The settlements that are shown on the ZTV to gain visibility (ranging from negligible to a high theoretical level) are all located at the southern extremity of the study area, and include Portmahomack, Rockfield, Inver, and Hill of Fearn. These settlements all lie a minimum of 28.5km from the Proposed Varied Development.

7.6.35 Settlements have been discounted from the assessment due to a combination of the low level of visibility gained from them and/or distance from the site.

Routes

7.6.36 Routes include roads, walking routes, railways, and cycle routes.

7.6.37 The location and extent of **roads** in the study area reflects the settlement pattern, as they follow the more accessible coastline and low-lying straths. Interior areas are considerably less accessible by road. The roads in the study area that are considered as principal visual receptors,

due to various combinations of the criteria listed above, are the A9, A836, A839, A897, A949, and the minor road that links Brora and Rogart, passing approximately 2.3km to the south of the Proposed Varied Development.

7.6.38 Of these roads, the A9, A836, A897, A949 are shown on the ZTV to gain no or negligible visibility of the Development. The A839 has a 1.5km stretch of very limited and intermittent visibility between Rosehall and Lairg, a minimum of 31.5km away. These roads are discounted from the assessment due to lack of/very limited visibility.

7.6.39 The minor road that links Brora and Rogart, running to the south of the Proposed Varied Development, does, however, gain visibility as shown on the ZTV and there is potential for a significant effect to arise on views from this road.

7.6.40 There is one **railway line** in the study area - the main line from Inverness to Wick and Thurso - which runs between Fearn on the southern edge of the study area and Altnabreac on the north-eastern edge of the study area. This railway line is shown on the ZTV to gain negligible visibility of the Proposed Varied Development and is therefore discounted from the assessment.

7.6.41 There is one **National Cycle Route** (NCR) in the study area; NCR 1. This route is shown on the ZTV to gain a short stretch of very limited visibility from over 30km away, at the southern extremity of the study area. It is therefore discounted from the assessment.

7.6.42 There are no recognised **long-distance walking routes** in the study area. There are, however, a number of core paths in the study area, as designated by THC. These are not all individually considered in the assessment due to the number of routes and the limited relevance of the majority of these to the Development. However, **core paths** that lie within 10km of the Proposed Varied Development are considered due to the potential for the Proposed Varied Development to lead to effects on views from these nearby locations.

7.6.43 Core paths within 10km are shown in conjunction with the blade tip ZTV on Figure 7.7. The majority of core paths are discounted from the assessment due to lack of or very limited visibility and distance from the site. There is, however, visibility of the Proposed Varied Development from paths SU06.02 ('Loch Brora - West Track', which runs along the western side of Loch Brora) and SU06.14 ('Doll Bridge – Loch Brora', which runs along the eastern bank of the River Brora and the south-eastern side of Loch Brora) and these are included in the assessment.

Cumulative Baseline

7.6.44 The 2015 ES included a full cumulative assessment of effects that may arise through the addition of the Development to other wind farms. The cumulative assessment was revisited in the 2016 FEI Report in light of the revisions to the Development, although the baseline cumulative wind farm information was not updated, in agreement with SNH and THC. The cumulative baseline has been reviewed in relation to the Proposed Varied Development, and this review has confirmed that there have been no changes to the cumulative situation that would materially affect the cumulative effects arising from the Proposed Varied Development. The relevant cumulative scenario used for the revised cumulative assessment in this Chapter therefore adopts that used in the 2015 ES. A cut-off date of 30th September 2018 has been set for the establishment of the cumulative scenario, as agreed with THC, and changes to the cumulative situation after that date have not been considered in this assessment.

7.6.45 It is noted that the proposed West Garty Wind Farm, which was at application stage at the time of the 2015 ES and the 2016 FEI, was refused in 19 October 2018, subsequent to the cut-off date.

7.7 Potential Effects

7.7.1 The potential effects on the landscape and visual resource are those which could result from the construction, operation and decommissioning of the Proposed Varied Development. Table 7.3 describes the typical landscape and visual effects that can arise from the construction, operation and decommissioning of a wind farm; it should be noted that their inclusion does not imply that they will occur, or be significant, in the case of the Proposed Varied Development.

7.7.2 A variety of landscape and visual mitigation measures have been incorporated through the iterative design of the Proposed Varied Development in order to prevent, reduce or offset potential landscape and visual effects. The residual effects of the Proposed Varied Development i.e. those effects remaining after mitigation that will arise when the Proposed Varied Development is under construction, operation or decommissioning, are assessed in Section 7.9 of this Chapter.

Table 7.3: Potential Landscape and Visual Effects

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

7.7.3 The effects of the construction, operation and decommissioning of the Proposed Varied Development on the landscape and visual resource will arise principally from the construction, operation and decommissioning of the turbines and access tracks. The temporary construction facilities, such as cranes, construction vehicles, borrow pits, construction compounds and delivery vehicles required during the construction will also have effects on the landscape and visual resource. It is anticipated that construction of the Proposed Varied Development would take approximately 13 months, therefore the construction effects identified are therefore predicted to occur during this period and end at the start of the operational stage.

7.8 Mitigation Measures

7.8.1 The layout design of the Proposed Varied Development is a vital part of the assessment process and is the stage where the biggest contribution can be made to mitigate potential landscape and visual effects, creating a wind farm which is appropriate for the existing landscape character and visual features of an area. Landscape and visual objectives have driven the design of Gordonbush Extension Wind Farm from an early stage, while also allowing environmental constraints and technical and economic factors to be considered.

7.8.2 The appearance of the Proposed Varied Development has closely informed its final layout and design, with consultants' advice being sought by the Applicant prior to any changes to the layout and turbine dimensions of the Consented Development. The key mitigation of effects in the Proposed Varied Development arises from the removal of four turbines from the Consented Development, which has the following implications:

- Reduction in visibility of the turbines from Strath Brora, including the minor Brora to Rogart road and other recreational locations such as core paths;
- Reduction in the perception of encroachment of turbines down into the landscape character of Strath Brora;
- Increase in the distance of the turbines from a number of viewpoints, particularly those in Strath Brora;
- Reduction in the extent of the Proposed Varied Development across views as seen at the majority of viewpoints, most notably those to the north-west and west; and
- Reduction in clustering and overlapping of turbines due to the lower number of turbines in the Proposed Varied Development.

7.8.3 The increase in turbine height and rotor diameter would be apparent or discernible in some closer views, as would the contrast between the turbine dimensions of the Proposed Varied Development and the operational Gordonbush Wind Farm in those views where the operational wind farm is clearly visible. Overall, however, it is considered that the effects of these changes in the Proposed Varied Development would be balanced by the mitigation listed above, and that the Proposed Varied Development presents a favourable option in landscape and visual terms for the development of a Wind Farm Extension at Gordonbush.

Additional Mitigation Measures Relevant to Proposed Varied Development

7.8.4 There are no additional mitigation measures proposed as a result of the Proposed Varied Development.

7.9 Residual Effects

7.9.1 The assessment of effects for the Proposed Varied Development is carried out in four parts as described in Section 7.5 of this report: physical effects, effects on landscape character, effects on wild land, and effects on views. The assessment of cumulative effects is embedded within each of these categories.

Assessment of Physical Effects

7.9.2 Physical effects are direct effects on the landscape elements that comprise the fabric of the site, such as changes to ground cover. Physical effects are found only on the site, where existing landscape elements may be removed or altered by the Proposed Varied Development. One landscape element was considered to be affected by the Consented Development - rough grassland/moorland ground cover – and this is also the case for the Proposed Varied Development.

7.9.3 The 2016 FEI Report assessed the Consented Development to have a not significant effect on this landscape element.

7.9.4 The sensitivity of this landscape element will remain **medium**, as assessed in the 2015 ES.

7.9.5 The implications of the Proposed Varied Development on this landscape element are as follows:

- The removal of four turbines and their associated infrastructure (including tracks) would result in a reduction in the area of vegetation affected; and
- The area of vegetation to be removed around the base of each turbine would remain the same.

7.9.6 These factors will lead to a slight reduction in the magnitude of change as assessed for the Consented Development as the overall affected area of rough grassland/ moorland ground cover would be reduced. This reduction would not, however, be sufficient to reduce the level of magnitude of change, and this would remain as **medium-low**.

7.9.7 The effect of the Proposed Varied Development on rough grassland/moorland ground cover would remain **not significant**.

Assessment of Effects on Landscape Character

7.9.8 Landscape character is the distinct and recognisable pattern of elements that occurs consistently in a particular type of landscape, and the way that this pattern is perceived. Effects on landscape character occur both on the site, where the pattern of elements that characterises the landscape will be directly altered by the addition of the Proposed Varied Development to the landscape; and off-site, around the study area, where visibility of the Proposed Varied Development may alter the way in which this pattern of elements is perceived. The assessment of effects on landscape character covers two groups of receptors; landscape character types/units and landscape planning designations.

7.9.9 The following sections update the assessment of the Consented Development in relation to the Proposed Varied Development. The landscape character receptors that are included are those that were considered in the 2015 ES and 2016 FEI to have potential to undergo a significant effect as a result of the Development, as outlined in the *Scope of Assessment* in Section 7.2 of this report. These are:

- *Inland loch* LCT*: Loch Brora*
- *Small farms and crofts* LCT *(fringe crofting and historic features* subtype): Balnacoil area
- *Strath (Strath Brora)* LCT: eastern section
- *Moorland slopes and hills* LCT: unit A, unit B, unit C and unit D
- *Sweeping moorland* LCT: unit A, unit B and unit C
- Loch Fleet, Loch Brora and Glen Loth SLA

Inland loch LCT: Loch Brora

7.9.10 There are four parts to *inland loch: Loch Brora* which are referred to in the 2015 ES and 2016 FEI as parts 1, 2, 3 and 4, with 1 being the northernmost and 4 being the southernmost. These references are also followed in this assessment. While there are no viewpoints from the LCT itself, Viewpoints 2, 3 and 4 illustrate views from the western and eastern sides of the loch and provide an indication of the type of visibility available from the loch.

7.9.11 The 2016 FEI Report concluded that the Consented Development would have a significant effect on some areas of Part 3, the southern end of Part 1, and some areas of the western side of Part 2 of this. The cumulative effect was assessed to be not significant.

7.9.12 The sensitivity of this receptor will remain **high**, as assessed in the 2015 ES.

7.9.13 The implications of the Proposed Varied Development on this receptor are as follows:

- The ZTVs show that theoretical visibility of the Proposed Varied Development from the eastern side of Part 2 (the second to northmost) of this receptor would be less extensive than that of the Consented Development due to the removal of turbines;
- Where there is visibility of the Proposed Varied Development, it would have a similar magnitude of change to the Consented Development, as seen in Viewpoint 2;
- The Proposed Varied Development would lie further away from the receptor than the Consented Development due to the removal of the southernmost turbines, and this would reduce the level of influence of the turbines; and
- The increased height and rotor diameter of the Proposed Varied Development turbines would increase their level of influence.

7.9.14 The combination of these factors will not alter the magnitude of change as assessed for the Consented Development, and this would remain as a maximum of **medium/medium-low**. The effect of the Proposed Varied Development on some areas of Part 3 of the LCT; the southern end of Part 1; and some slightly smaller areas of the western side of Part 2 of *inland loch: Loch Brora* would remain **significant**. The effect on other areas would remain **not significant**.

7.9.15 The cumulative effect would remain **not significant**. The operational Gordonbush Wind Farm is not visible from all areas of the loch that are shown to gain visibility of the Proposed Varied Development, and the cumulative effect of the Proposed Varied Development on these areas would not alter. Where there is visibility of the operational Gordonbush Wind Farm, there would be a slight increase in the cumulative magnitude of change due to the increased contrast between the turbine dimensions of the Proposed Varied Development and the operational Gordonbush Wind Farm. However, the cumulative effect on these areas would remain limited, and not significant, due to the close visual and physical association of the Proposed Varied Development with the operational Gordonbush Wind Farm.

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

7.9.16 The Balnacoil area of *small farms and crofts (fringe crofting and historic features* subtype) lies on the northern side of Strath Brora, between the enclosed *strath* landscape and the surrounding expansive and exposed landscapes of *upland moorland slopes* and hills and *sweeping moorland*. There are no viewpoints in this receptor.

7.9.17 The 2016 FEI Report concluded that the Consented Development would have a significant effect on the majority of the receptor, with a not significant effect on the south-eastern end and along the Allt Ach a' Bhathaich valley. The cumulative effect was assessed to be not significant.

7.9.18 The sensitivity of this receptor will remain **medium**, as assessed in the 2015 ES.

7.9.19 The implications of the Proposed Varied Development on this receptor are as follows:

- The ZTVs show that theoretical visibility of the Proposed Varied Development from this receptor would remain very similar to that of the Consented Development;
- The Proposed Varied Development would lie further away from the receptor than the Consented Development due to the removal of the southernmost turbines, and this would reduce the level of influence of the turbines; and
- The increased height and rotor diameter of the Proposed Varied Development turbines and their increased contrast with the operational Gordonbush turbines would, however, increase their level of influence.

7.9.20 The combination of these factors will not alter the magnitude of change as assessed for the Consented Development, and this would remain as a maximum of **medium-high**. The effect of the Proposed Varied Development on the majority of the Balnacoil area of *small farms and*

crofts (fringe crofting and historic features subtype) would therefore remain **significant**. The effect on the south-eastern end and along the Allt Ach a' Bhathaich valley would remain **not significant**.

7.9.21 The cumulative effect would remain **not significant**. There would be a slight increase in the cumulative magnitude of change due to the increased contrast between the turbine dimensions of the Proposed Varied Development and the operational Gordonbush Wind Farm. However, the cumulative effect arising from the addition of the Proposed Varied Development remains limited, and not significant, due to its close visual and physical association with the operational Gordonbush Wind Farm in terms of proximity, location, and landscape setting. These factors ensure that the Proposed Varied Development would not be perceived as a distinctive 'new' or separate wind farm influence on the landscape character of the receptor.

Strath (Strath Brora) LCT: eastern section

7.9.22 The eastern section of *strath (Strath Brora*) runs from near Sciberscross to the western side of Brora. Viewpoints 2, 3, 4, 5 and 6 lie within this receptor.

7.9.23 The 2016 FEI Report concluded that the Consented Development would have a significant effect on areas around Sciberscross and south of the graveyard; the lower slopes of Cnoc an t-Socaich and Carroll Rock; the loch shore south of Carroll Rock; the ridge line of Cnoc a'Ghrianain; and very small areas above Oldtown and on Killin Rock. A significant cumulative effect was assessed to arise on very limited areas around and to the east of Sciberscross, the ridge line of Cnoc a' Ghrianain and a very small area above Oldtown.

7.9.24 The sensitivity of this receptor will remain **high**, as assessed in the 2015 ES.

7.9.25 The implications of the Proposed Varied Development on this receptor are as follows:

- The ZTVs show that theoretical visibility of the Proposed Varied Development from the south-eastern end of this receptor would be less extensive than that of the Consented Development due to the removal of turbines;
- This reduction in visibility (as seen, for example, in the visualisations for Viewpoints 3 and 4) results in a reduction in the influence of the Proposed Varied Development on landscape character;
- These areas were assessed to have a not significant effect arising from the Consented Development;
- The Proposed Varied Development would lie further away from the receptor than the Consented Development due to the removal of the southernmost turbines, and this would also reduce the level of influence of the turbines;
- The Proposed Varied Development would affect a more limited part of the setting to the receptor, again due to the removal of turbines (as seen in Viewpoint 6); and
- The increased height and rotor diameter of the Proposed Varied Development turbines and, where it is visible (e.g. Viewpoint 6), their increased contrast with the operational Gordonbush turbines would increase their level of influence on landscape character.

7.9.26 The combination of these factors will not alter the maximum magnitude of change as assessed for the Consented Development, and this would remain as **medium/medium-low**. The effect of the Proposed Varied Development on areas around Sciberscross and south of the graveyard, lower slopes of Cnoc an t-Socaich and Carroll Rock; loch shore south of Carroll Rock; ridge line of Cnoc a'Ghrianain, and a very small area above Oldtown would remain **significant**. The effect on the area around Killin Rock would be become **not significant** due to the reduced and more distant influence of the Proposed Varied Development, and the effect on all other areas would remain **not significant**.

7.9.27 The cumulative effect on the area around and to the east of Sciberscross, the ridge line of Cnoc a' Ghrianain and a very small area above Oldtown would remain **significant** as the Proposed Varied Development would continue to interact with the operational Gordonbush Wind Farm and Kilbraur Wind Farm in the same way as the Consented Development. Cumulative effects elsewhere would remain **not significant**.

Moorland slopes and hills LCT: unit A

7.9.28 Unit A of *moorland slopes and hills* covers the eastern part of the site and the eastern part of the operational Gordonbush Wind Farm. There are no viewpoints within this receptor.

7.9.29 The 2016 FEI concluded that the Consented Development would have a significant effect on this receptor. The cumulative effect was assessed to be not significant.

7.9.30 The sensitivity of this receptor will remain **medium**, as assessed in the 2015 ES.

7.9.31 The implications of the Proposed Varied Development on this receptor are as follows:

- The number of turbines within the receptor would be reduced by two, and the direct effects upon the landscape patterns would therefore be reduced;
- The ZTVs show that theoretical visibility of the Proposed Varied Development from this receptor would remain very similar to that of the Consented Development; and
- The increased height and rotor diameter of the Proposed Varied Development turbines and their increased contrast with the operational Gordonbush turbines would increase their level of influence.

7.9.32 The combination of these factors will not alter the magnitude of change as assessed for the Consented Development, and this would remain **medium**. The effect of the Proposed Varied Development on unit A of *moorland slopes and hills* would therefore remain **significant**.

7.9.33 The cumulative effect would remain **not significant**. There would be a slight increase in the cumulative magnitude of change due to the increased contrast between the turbine dimensions of the Proposed Varied Development and the operational Gordonbush Wind Farm. However, the cumulative effect arising from the addition of the Proposed Varied Development remains limited, and not significant, due to its close visual and physical association with the operational Gordonbush Wind Farm in terms of proximity, location, and landscape setting. These factors ensure that the Proposed Varied Development would not be perceived as a distinctive 'new' or separate wind farm influence on the landscape character of the receptor.

Moorland slopes and hills LCT: unit B

7.9.34 Unit B of *moorland slopes and hills* extends from the Allt Smeorail valley to a maximum of approximately 5km from the nearest turbine on the eastern side of the Development site. The distinctive landform of Beinn Smeorail (Viewpoint 1) is within this unit.

7.9.35 The 2016 FEI Report concluded that the Consented Development would have a significant effect on the west-facing slopes that gain high visibility of the Consented Development. The cumulative effect was assessed to be not significant. The sensitivity of this receptor will remain **medium-high**, as assessed in the 2015 ES.

7.9.36 The implications of the Proposed Varied Development on this receptor are as follows:

- The ZTVs show that theoretical visibility of the Proposed Varied Development from this receptor would be slightly lower, especially at the southern end, than that of the Consented Development due to the removal of turbines;
- The Proposed Varied Development would affect a more limited part of the setting to the receptor, again due to the removal of turbines (as seen in Viewpoint 1, which lies within this receptor); and

- The increased height and rotor diameter of the Proposed Varied Development turbines and their increased contrast with the operational Gordonbush turbines would increase their level of influence.

7.9.37 The combination of these factors will not alter the magnitude of change as assessed for the Consented Development, and this would remain as a maximum of **medium-high**. The effect of the Proposed Varied Development on the west-facing slopes of unit B of *moorland slopes and hills* that gain high visibility of the Proposed Varied Development would therefore remain **significant**. The effect on other areas would remain **not significant**.

7.9.38 The cumulative effect would remain **not significant**. There would be a slight increase in the cumulative magnitude of change due to the increased contrast between the turbine dimensions of the Proposed Varied Development and the operational Gordonbush Wind Farm. However, the cumulative effect arising from the addition of the Proposed Varied Development would remain limited, and not significant, due to its close visual and physical association with the operational Gordonbush Wind Farm in terms of proximity, location, and landscape setting. These factors ensure that the Proposed Varied Development would not be perceived as a distinctive 'new' or separate wind farm influence on the landscape character of the receptor.

Moorland slopes and hills LCT: unit C

7.9.39 Unit C of *moorland slopes and hills* lies to the south of the site, separated from units A and B by Strath Brora, and covers distinctive landform such as Carroll Rock, Ben Horn (Viewpoint 9) and Kilbraur Hill. Kilbraur Wind Farm lies within this receptor.

7.9.40 The 2016 FEI Report concluded that the Consented Development would have a significant effect on north-facing slopes in the north-eastern part of the receptor. The cumulative effect was assessed to be not significant.

7.9.41 The sensitivity of this receptor will remain **medium-high**, as assessed in the 2015 ES.

7.9.42 The implications of the Proposed Varied Development on this receptor are as follows:

- The ZTVs show that theoretical visibility of the Proposed Varied Development from this receptor would be very similar to that of the Consented Development;
- The Proposed Varied Development would lie further away from the receptor than the Consented Development due to the removal of the southernmost turbines, and this would reduce the level of influence of the turbines; and
- The increased height and rotor diameter of the Proposed Varied Development turbines and their increased contrast with the operational Gordonbush turbines would, however, increase their level of influence.

7.9.43 The combination of these factors will not alter the magnitude of change as assessed for the Consented Development, and this would remain as a maximum of **medium/ medium-low**. The effect of the Proposed Varied Development on the north-facing slopes in the north-eastern part of unit C of *moorland slopes and hills* would therefore remain **significant**. The effect on other areas would remain **not significant**.

7.9.44 The cumulative effect would remain **not significant**. There would be a slight increase in the cumulative magnitude of change due to the increased contrast between the turbine dimensions of the Proposed Varied Development and the operational Gordonbush Wind Farm. However, the cumulative effect arising from the addition of the Proposed Varied Development would remain limited, and not significant, due to its close visual and physical association with the operational Gordonbush Wind Farm in terms of proximity, location, and landscape setting. These factors ensure that the Proposed Varied Development would not be perceived as a distinctive 'new' or separate wind farm influence on the landscape character of the receptor.

Moorland slopes and hills LCT: unit D

7.9.45 Unit D of *moorland slopes and hills* covers two areas to the west of the site: firstly, the southern part of the Black Water, Dailbane Hill and Meall na Gaoithe, and secondly, the hills of Cnoc Leamhnachd and Cnoc a' Garbh-leathaid, to the west of Sciberscross. There are no viewpoints within this receptor.

7.9.46 The 2016 FEI Report concluded that the Consented Development would have a significant effect on the east-facing slopes of Meall na h-Amaite and Cnoc Cille Pheadair. The cumulative effect was assessed to be not significant.

7.9.47 The sensitivity of this receptor will remain **medium**, as assessed in the 2015 ES.

7.9.48 The implications of the Proposed Varied Development on this receptor are as follows:

- The ZTVs show that theoretical visibility of the Proposed Varied Development from this receptor would be very similar to that of the Consented Development;
- The Proposed Varied Development would lie further away from the receptor than the Consented Development due to the removal of the southernmost turbines, and this would reduce the level of influence of the turbines; and
- The increased height and rotor diameter of the Proposed Varied Development turbines and their increased contrast with the operational Gordonbush turbines would, however, increase their level of influence.

7.9.49 The combination of these factors will not alter the magnitude of change as assessed for the Consented Development, and this would remain as a maximum of **medium/ medium-low**. The effect of the Proposed Varied Development on the east-facing slopes of Meall na h-Amaite and Cnoc Cille Pheadair within unit D of *moorland slopes and hills* would therefore remain **significant**. The effect on other areas would remain **not significant**.

7.9.50 The cumulative effect would remain **not significant**. There would be a slight increase in the cumulative magnitude of change due to the increased contrast between the turbine dimensions of the Proposed Varied Development and the operational Gordonbush Wind Farm. However, the cumulative effect arising from the addition of the Proposed Varied Development would remain limited, and not significant, due to its close visual and physical association with the operational Gordonbush Wind Farm in terms of proximity, location, and landscape setting. These factors ensure that the Proposed Varied Development would not be perceived as a distinctive 'new' or separate wind farm influence on the landscape character of the receptor.

Sweeping moorland slopes and hills LCT: unit A

7.9.51 Unit A of *sweeping moorland* covers the western part of the site and the western part of the operational Gordonbush Wind Farm. There are no viewpoints within this receptor.

7.9.52 The 2016 FEI Report concluded that the Consented Development would have a significant effect on this receptor. The cumulative effect was assessed to be not significant.

7.9.53 The sensitivity of this receptor will remain **medium**, as assessed in the 2015 ES.

7.9.54 The implications of the Proposed Varied Development on this receptor are as follows:

- The number of turbines located within the receptor would be reduced by two, and the direct effects upon the landscape patterns would therefore be reduced;
- The ZTVs show that theoretical visibility of the Proposed Varied Development from this receptor would remain very similar to that of the Consented Development; and
- The increased height and rotor diameter of the Proposed Varied Development turbines and their increased contrast with the operational Gordonbush turbines would increase their level of influence.

7.9.55 The combination of these factors will not alter the magnitude of change as assessed for the Consented Development, and this would remain **medium**. The effect of the Proposed Varied Development on unit A of *sweeping moorland* would therefore remain **significant**.

7.9.56 The cumulative effect would remain **not significant**. There would be a slight increase in the cumulative magnitude of change due to the increased contrast between the turbine dimensions of the Proposed Varied Development and the operational Gordonbush Wind Farm. However, the cumulative effect arising from the addition of the Proposed Varied Development remains limited, and not significant, due to its close visual and physical association with the operational Gordonbush Wind Farm in terms of proximity, location, and landscape setting. These factors ensure that the Proposed Varied Development would not be perceived as a distinctive 'new' or separate wind farm influence on the landscape character of the receptor.

Sweeping moorland slopes and hills LCT: unit B

7.9.57 Unit B of *sweeping moorland* covers the expansive area of sweeping moorland that extends from the Allt Mhuilinn and the 275kV transmission line to a maximum of approximately 11km from the nearest turbine on the western side of the Proposed Varied Development site. The gently rising landform of Hope Hill (Viewpoint 10) is within this unit.

7.9.58 The 2016 FEI Report concluded that the Consented Development would have a significant effect on east-facing slopes within this receptor that gain high visibility and lie within approx. 6km of the Consented Development. The cumulative effect was assessed to be not significant.

7.9.59 The sensitivity of this receptor will remain **medium-high**, as assessed in the 2015 ES.

7.9.60 The implications of the Proposed Varied Development on this receptor are as follows:

- The ZTVs show that theoretical visibility of the Proposed Varied Development from this receptor would be very slightly higher, especially on lower valley sides, than that of the Consented Development due to the increased height of the turbines;
- The Proposed Varied Development would affect a more limited part of the setting to the receptor due to the removal of turbines (as seen in Viewpoint 11, which lies within this receptor); and
- The increased height and rotor diameter of the Proposed Varied Development turbines and their increased contrast with the operational Gordonbush turbines would increase their level of influence, particularly on closer parts of the receptor.

7.9.61 The combination of these factors will not alter the magnitude of change as assessed for the Consented Development, and this would remain as a maximum of **medium-high**. The effect of the Proposed Varied Development on the east-facing slopes within unit B of *sweeping moorland* that gain high visibility and lie within approx. 6km of the Proposed Varied Development would therefore remain **significant**. The effect on other areas would remain **not significant**.

7.9.62 The cumulative effect would remain **not significant**. There would be a slight increase in the cumulative magnitude of change due to the increased contrast between the turbine dimensions of the Proposed Varied Development and the operational Gordonbush Wind Farm. However, the cumulative effect arising from the addition of the Proposed Varied Development would remain limited, and not significant, due to its close visual and physical association with the operational Gordonbush Wind Farm in terms of proximity, location, and landscape setting. These factors ensure that the Proposed Varied Development would not be perceived as a distinctive 'new' or separate wind farm influence on the landscape character of the receptor.

Sweeping moorland slopes and hills LCT: unit C

7.9.63 Unit C of *sweeping moorland* covers an area that lies to the west of the Black Water and north of Strath Brora. Viewpoint 12 (Track to Ben Armine Lodge) lies within this unit.

7.9.64 The 2016 FEI Report concluded that the Consented Development would have a significant effect on the east-facing slopes of Meall na h-Amaite, Cnoc Cille Pheadair and Druim Torr nan Cliabh. The cumulative effect was assessed to be not significant.

7.9.65 The sensitivity of this receptor will remain **medium-high**, as assessed in the 2015 ES.

7.9.66 The implications of the Proposed Varied Development on this receptor are as follows:

- The ZTVs show that theoretical visibility of the Proposed Varied Development from this receptor would be very slightly higher, especially on lower valley sides, than that of the Consented Development due to the increased height of the turbines;
- The Proposed Varied Development would lie further away from the receptor than the Consented Development due to the removal of the southernmost turbines, and this would reduce the level of influence of the turbines;
- The Proposed Varied Development would also affect a more limited part of the setting to the receptor due to the removal of turbines (as seen in Viewpoint 12, which lies within this receptor); and
- The increased height and rotor diameter of the Proposed Varied Development turbines and their increased contrast with the operational Gordonbush turbines would increase their level of influence, particularly on closer parts of the receptor.

7.9.67 The combination of these factors will not alter the magnitude of change as assessed for the Consented Development, and this would remain as a maximum of **medium/medium-low**. The effect of the Proposed Varied Development on the east-facing slopes of Meall na h-Amaite, Cnoc Cille Pheadair and Druim Torr nan Cliabh within unit C of *sweeping moorland* would therefore remain **significant**. The effect on other areas would remain **not significant**.

7.9.68 The cumulative effect would remain **not significant**. There would be a slight increase in the cumulative magnitude of change due to the increased contrast between the turbine dimensions of the Proposed Varied Development and the operational Gordonbush Wind Farm. However, the cumulative effect arising from the addition of the Proposed Varied Development would remain limited, and not significant, due to its close visual and physical association with the operational Gordonbush Wind Farm in terms of proximity, location, and landscape setting. These factors ensure that the Proposed Varied Development would not be perceived as a distinctive 'new' or separate wind farm influence on the landscape character of the receptor.

Loch Fleet, Loch Brora and Glen Loth SLA

7.9.69 Viewpoints 2, 3, 4, 9, 10 and 14 lie within the SLA, and Viewpoint 1 lies on the western edge of the designated area.

7.9.70 The assessment of effects on the SLA is based upon the assessment of effects on the LCTs that cover the SLA, as assessed above. The 2016 FEI Report concluded that the Consented Development would have a significant effect on:

- Some limited parts of Loch Brora;
- Lower slopes of Carroll Rock and the southern loch shore around Carroll Rock;
- Very small elevated areas above Oldtown and on Killin Rock;
- West-facing slopes close to the eastern edge of the Proposed Varied Development; and
- Not significant elsewhere.

7.9.71 A significant cumulative effect was assessed to arise on a very small area above Oldtown.

7.9.72 The sensitivity of this receptor will remain **high**, as assessed in the 2015 ES.

7.9.73 On the basis of the assessment of the effects of the Proposed Varied Development on the LCTs that cover the SLA, it can be concluded that the effect on the great majority of the SLA would be

not significant, and effects on the area around Killin Rock would become **not significant**. However, the effects on some limited parts of Loch Brora, lower slopes of Carroll Rock and the southern loch shore around Carroll Rock, very small elevated areas above Oldtown, and west-facing slopes close to the eastern edge of the Proposed Varied Development would remain **significant**.

7.9.74 Cumulative effects on the great majority of the SLA would also remain **not significant**, with just one small area above Oldtown remaining **significant**.

Assessment of Effects on Wild Land

7.9.75 The effect on the Ben Klibreck – Armine Forest WLA was assessed in the 2015 ES and 2016 FEI to be not significant due largely to the baseline presence of Gordonbush Wind Farm and the level of integration and proximity of the Consented Development to the operational Wind Farm, which ensures that wind farm influence on the WLA would not be significantly increased. The 275kV transmission line that runs along the edge of the WLA was also a notable consideration.

7.9.76 The comparative ZTV in Figure 7.5b shows that visibility of the Proposed Varied Development from the WLA is very similar to that of the Consented Development, with just several small areas of additional visibility. The ZTV on Figure 7.5a, which shows only the Proposed Varied Development, indicates that visibility in these areas of 'new' visibility is limited to a maximum of four turbines (i.e. yellow or orange colouring, as shown on the ZTV legend).

7.9.77 Furthermore, the ZTV on Figure 7.5c shows that there are very few parts of the WLA where the Proposed Varied Development would be seen without the operational Gordonbush Wind Farm.

7.9.78 The comparative wirelines for Viewpoints 11 (Hope Hill) and 13 (Creag nam Fiadh) indicate that the removal of Turbines 11, 13, 14 and 16 would notably reduce the horizontal spread of the wind farm to the south, as seen from these locations within the WLA. The wirelines also indicate that while the proposed maximum increase in tip height to 149.9m is likely to be discernible, the proposed turbines would remain below the vertical envelope of the operational wind farm.

7.9.79 The assessment of the effects of the Proposed Varied Development on these viewpoints, described later in this chapter, has concluded that the magnitude of change at these viewpoints would remain as it was for the Consented Development, with the effect at both viewpoints remaining not significant.

7.9.80 At Viewpoint 11, the cumulative effect would remain **not significant**, while at Viewpoint 13 the cumulative effect would change from **significant** to **not significant**. This is due to the notable reduction in the extent of the Proposed Varied Development across the view when compared to the Consented Development, which increases the separation from Kilbraur Wind Farm and gives a compact and cohesive form to the Proposed Varied Development.

7.9.81 This review indicates that the effect on the WLA would remain **not significant**.

Assessment of Effects on Views

7.9.82 The assessment of effects on views includes effects on the 17 viewpoints (as assessed in the 2015 ES and the 2016 FEI Report) which represent visibility of the Proposed Varied Development from around the study area and effects on principal visual receptors such as settlements and routes.

7.9.83 The following sections update the assessment of the Consented Development in relation to the Proposed Varied Development. This includes the assessment of the 17 viewpoints that constitute the viewpoint assessment and the principal visual receptors that were considered in the 2015 ES and 2016 FEI Report to have potential to undergo a significant effect as a result of the Proposed Varied Development, as described in the Scope of Assessment in Section 7.4 of this report.

Viewpoint 1 Beinn Smeorail

7.9.84 The 2016 FEI Report concluded that the Consented Development would have a significant effect on this viewpoint, and a not significant cumulative effect.

7.9.85 The sensitivity of this viewpoint will remain **medium-high**, as assessed in the 2015 ES.

7.9.86 The implications of the Proposed Varied Development on this viewpoint are as follows:

- The 11 turbines in the Proposed Varied Development would all be seen at full height (as are the 15 turbines in the Consented Development);
- The Proposed Varied Development would be considerably more compact than the Consented Development; it would extend approx. 28° beyond the horizontal envelope of the operational Gordonbush Wind Farm, while the Consented Development extends approx. 48° beyond the operational turbines;
- The extent of the overall Gordonbush development (including operational and proposed turbines) would therefore reduce from approx. 95° to approx. 75°;
- The removal of the four southernmost turbines would pull the Proposed Varied Development back from the *strath* landscape of Strath Brora;
- The removal of the southernmost turbines would also increase the separation distance of the Proposed Varied Development from the operational Kilbraur Wind Farm, in comparison with the Consented Development, reducing the potential for perception of coalescence of wind farms;
- Distance to the nearest turbine would increase from 1.60km to 1.63km;
- The apparent scale and level of visibility of the 11 turbines in the Proposed Varied Development would increase in comparison with those in the Consented Development due to their increased tip height and rotor diameter; and
- The increased tip height and rotor diameter of the Proposed Varied Development in comparison with the Consented Development is likely to result in increased contrast with the operational Gordonbush Wind Farm, particularly given the proximity of the viewpoint to the site.

7.9.87 The combination of these factors will not alter the magnitude of change as assessed for the Consented Development, and this would remain as **high**.

7.9.88 The effect of the Proposed Varied Development on Viewpoint 1 would remain **significant**.

7.9.89 The cumulative effect would remain **not significant**. There would be a slight increase in the cumulative magnitude of change due to the increased contrast between the turbine dimensions of the Proposed Varied Development and the operational Gordonbush Wind Farm. However, the cumulative effect remains limited, and not significant, due to the level of integration between the Proposed Varied Development and the operational Gordonbush Wind Farm in terms of visual and physical association (including visibility of shared infrastructure) and landscape setting; the increase in the separation of the Proposed Varied Development from Kilbraur Wind Farm that results from the removal of the four southernmost turbines; and the clear visual and physical separation of the Proposed Varied Development and Kilbraur Wind Farm by the distinctive landform of Strath Brora.

Viewpoint 2 Loch Brora (south-west side)

7.9.90 The 2016 FEI Report concluded that the Consented Development would have a significant effect on this viewpoint, and a not significant cumulative effect.

7.9.91 The sensitivity of this viewpoint will remain **high**, as assessed in the 2015 ES.

7.9.92 The implications of the Proposed Varied Development on this viewpoint are as follows:

- The number of theoretically visible turbines would reduce from 10 turbines (eight hubs and two blades) in the Consented Development to nine (seven hubs and two blades) in the Proposed Varied Development due to the removal of turbines;
- Clustering of turbines would be reduced by the removal of T16 from the Consented Development;
- Distance to the nearest turbine would increase from 3.98km to 4.69km;
- The operational Gordonbush Wind Farm is not visible in this view, thereby avoiding contrasts in scale between operational and proposed turbines;
- Forestry on the skyline would continue to provide screening;
- Rising landform would continue to enclose each side of the Proposed Varied Development, reducing the perceived turbine scale;
- The apparent scale and level of visibility of the turbines in the Proposed Varied Development would increase in comparison with those in the Consented Development due to their increased tip height and rotor diameter; and
- The extent of the Proposed Varied Development across the view would theoretically increase due to the 'new' visibility of the blade tip of T4 (as a result of its increased tip height); in reality, however, this blade tip is unlikely to be seen in views due to forestry screening on the skyline.

7.9.93 The combination of these factors will not alter the magnitude of change as assessed for the Consented Development, and this would remain as **medium**.

7.9.94 The effect of the Proposed Varied Development on Viewpoint 2 would remain **significant**.

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

Viewpoint 3 Brora to Rogart minor road south of Killin

7.9.96 The 2016 FEI Report concluded that the Consented Development would have a not significant effect, including cumulative effect, on this viewpoint.

7.9.97 The sensitivity of this viewpoint will remain **high**, as assessed in the 2015 ES.

7.9.98 The implications of the Proposed Varied Development on this viewpoint are as follows:

- The number of theoretically visible turbines would reduce from eight turbines (four hubs and four blades) in the Consented Development to five (two hubs and three blades) in the Proposed Varied Development due to the removal of turbines;
- The removal of turbines 11, 14 and 16 (all of which were theoretically visible as hubs) would considerably reduce visibility of the Proposed Varied Development;
- The Proposed Varied Development would be more compact than the Consented Development, extending to approx. 7° of the view whereas the Consented Development covers approx. 11° (although the part of both the Consented/Proposed Varied Development that is actually visible covers less than this):
- Distance to the nearest turbine would increase from 6.53km to 7.10km;
- The operational Gordonbush Wind Farm is not visible in this view, thereby avoiding contrasts in scale between operational and proposed turbines;
- Woodland on the skyline would continue to provide screening; and

- The limited visibility of the Proposed Varied Development (due to screening by both landform and woodland) ensures that the increase in height and rotor diameter of the Proposed Varied Development in comparison with the Consented Development would not be readily apparent.

7.9.99 The combination of these factors will reduce the magnitude of change as assessed for the Consented Development, and this would become **low** rather than **medium-low**.

7.9.100 The effect of the Proposed Varied Development on Viewpoint 3 would remain **not significant**.

7.9.101 The cumulative effect would remain **not significant**. No operational, consented or application stage wind farms are seen from this viewpoint, and the addition of the Proposed Varied Development would therefore not lead to any cumulative effects.

Viewpoint 4 Brora to Rogart minor road north of Killin

7.9.102 The 2016 FEI Report concluded that the Consented Development would have a not significant effect, including cumulative effect, on this viewpoint.

7.9.103 The sensitivity of this viewpoint will remain **high**, as assessed in the 2015 ES.

7.9.104 The implications of the Proposed Varied Development on this viewpoint are as follows:

- The number of theoretically visible turbines would reduce from five turbines (one hub and four blades) in the Consented Development to two (two blades) in the Proposed Varied Development due to the removal of turbines;
- These blades are likely to be screened by forestry;
- Theoretically, the Proposed Varied Development would be considerably more compact than the Consented Development, extending to approx. 4° of the view whereas the Consented Development covers approx. 9° (although the part of both the Consented/Proposed Varied Development that is actually visible covers a smaller part of the view);
- Distance to the nearest turbine would increase from 5.17km to 5.76km;
- The operational Gordonbush Wind Farm is not visible in this view, thereby avoiding contrasts in scale between operational and proposed turbines; and
- The very limited visibility of the Proposed Varied Development (due to screening by both landform and woodland) ensures that the increase in height and rotor diameter of the Proposed Varied Development in comparison with the Consented Development would not be readily apparent.

7.9.105 The combination of these factors will reduce the magnitude of change as assessed for the Consented Development, and this would become **negligible** with forestry and **low** without forestry rather than **low** and **medium-low** respectively.

7.9.106 The effect of the Proposed Varied Development on Viewpoint 4 would remain **not significant**.

7.9.107 The cumulative effect would remain **not significant**. No operational, consented or application stage wind farms are seen from this viewpoint, and the addition of the Proposed Varied Development would therefore not lead to any cumulative effects.

Viewpoint 5 Strath Brora near Balnacoil

7.9.108 The 2016 FEI Report concluded that the Consented Development would have a significant effect on this viewpoint, and a not significant cumulative effect.

7.9.109 The sensitivity of this viewpoint will remain **high**, as assessed in the 2015 ES.

7.9.110 The implications of the Proposed Varied Development on this viewpoint are as follows:

- The number of theoretically visible turbines would reduce from 12 turbines (three hubs and nine blades) in the Consented Development to nine (two hubs and seven blades) in the Proposed Varied Development due to the removal of turbines;
- The removal of turbine 14 (which was theoretically visible as a hub) would reduce visibility of the Proposed Varied Development;
- The removal of turbines would reduce the theoretical extent of the Proposed Varied Development from approx. 22° of the view to approx. 19° (although the part of both the Consented and Proposed Varied Development that is actually visible covers less than this);
- Distance to the nearest turbine would increase from 2.85km to 3.65km;
- The operational Gordonbush Wind Farm has very limited visibility in this view, thereby avoiding contrasts in scale between operational and proposed turbines;
- Rising landform would continue to enclose each side of the Proposed Varied Development, reducing the perceived turbine scale; and
- The apparent scale and level of visibility of the turbines in the Proposed Varied Development would slightly increase in comparison with those in the Consented Development due to their increased tip height and rotor diameter.

7.9.111 The combination of these factors will reduce the magnitude of change as assessed for the Consented Development, and this would become **medium** rather than **medium/medium-high**.

7.9.112 The effect of the Proposed Varied Development on Viewpoint 5 would remain **significant**.

7.9.113 The cumulative effect would remain **not significant**. No operational, consented or application stage wind farms are seen from this viewpoint other than negligible visibility of the operational Gordonbush Wind Farm, and the addition of the Proposed Varied Development would therefore not lead to any cumulative effects.

Viewpoint 6 Brora to Rogart minor road near Sciberscross

7.9.114 The 2016 FEI Report concluded that the Consented Development would have a significant effect on this viewpoint, and a not significant cumulative effect.

7.9.115 The sensitivity of this viewpoint will remain **medium-high**, as assessed in the 2015 ES.

7.9.116 The implications of the Proposed Varied Development on this viewpoint are as follows:

- Seven of the 11 turbines in the Proposed Varied Development would be seen at full height, with the remaining four having the bottom part of their towers screened;
- The Proposed Varied Development would be considerably more compact than the Consented Development, extending approx. 2° beyond the horizontal envelope of the operational Gordonbush Wind Farm, while the Consented Development extends approx. 5° beyond the operational turbines;
- The removal of turbines 11 and 14 reduces clustering in the Proposed Varied Development;
- The removal of the southernmost turbines would pull the Development back from the *strath* landscape of Strath Brora;
- The removal of the southernmost turbines would also increase the separation distance of the Proposed Varied Development from the operational Kilbraur Wind Farm, in comparison with the Consented Development, reducing the potential for perception of coalescence of wind farms;
- Distance to the nearest turbine would increase from 5.85km to 6.58km;
- The apparent scale and level of visibility of the 11 turbines in the Proposed Varied Development would increase in comparison with those in the Consented Development due to their increased tip height and rotor diameter; and

- The increased tip height and rotor diameter of the Proposed Varied Development in comparison with the Consented Development is likely to result in increased contrast with the operational Gordonbush Wind Farm, particularly given their visual association.

7.9.117 The combination of these factors will not alter the magnitude of change as assessed for the Consented Development, and this would remain as **medium**.

7.9.118 The effect of the Proposed Varied Development on Viewpoint 6 would remain **significant**.

7.9.119 The cumulative effect would remain **not significant**. There would be a slight increase in the cumulative magnitude of change due to the increased contrast between the turbine dimensions of the Proposed Varied Development and the operational Gordonbush Wind Farm. However, the cumulative effect remains limited, and not significant, due to the level of integration between the Proposed Varied Development and the operational Gordonbush Wind Farm in terms of visual and physical association and landscape setting; the very minor increase in the extent of wind farm development across the view; the increase in the separation of the Proposed Varied Development from Kilbraur Wind Farm that results from the removal of the southernmost turbines; and the clear visual and physical separation of the Proposed Varied Development and Kilbraur Wind Farm by the distinctive landform of Strath Brora.

Viewpoint 7 Brora to Rogart minor road near Dalreavoch

7.9.120 The 2015 ES and the 2016 FEI Report considered that there was not potential for a significant effect (including cumulative effect) to arise at this viewpoint due to limited visibility of the Development, its association with the operational Gordonbush Wind Farm, the moving nature of the viewer, the angled nature of the view and the limited susceptibility of the viewer due to the location of the viewpoint on a minor road.

7.9.121 These factors continue to ensure that a significant effect would not arise with the Proposed Varied Development. In addition, the removal of turbines in the Proposed Varied Development ensures a closer association with the operational Gordonbush Wind Farm and a notable reduction in the extent of the Proposed Varied Development across the view. While the increased tip height and rotor diameter of the Proposed Varied Development in comparison with the Consented Development is likely to result in higher visibility of the turbines and an increased contrast with the operational Gordonbush Wind Farm, this would not increase the magnitude of change to an extent where a significant effect could arise.

7.9.122 The effects, including the cumulative effect, of the Proposed Varied Development on Viewpoint 7 would remain **not significant**.

Viewpoint 8 Craggie Beg

7.9.123 The 2016 FEI Report concluded that the Consented Development would have a not significant effect, including cumulative effect, on this viewpoint.

7.9.124 The sensitivity of this viewpoint will remain **high**, as assessed in the 2015 ES.

7.9.125 The implications of the Proposed Varied Development on this viewpoint are as follows:

- The 11 turbines in the Proposed Varied Development would be seen at full height in this view;
- The Proposed Varied Development would be more compact than the Consented Development, extending approx. 1° beyond the horizontal envelope of the operational Gordonbush Wind Farm, while the Consented Development extends approx. 3° beyond the operational turbines;
- The removal of turbines 11 and 14 reduces clustering in the Proposed Varied Development;
- The removal of the southernmost turbines would pull the Proposed Varied Development back from the *strath* landscape of Strath Brora;

- The removal of the southernmost turbines would also increase the separation distance of the Proposed Varied Development from the operational Kilbraur Wind Farm, in comparison with the Consented Development, reducing the potential for perception of coalescence of wind farms;
- Distance to the nearest turbine would increase from 11.02km to 11.74km;
- The difference in turbine dimensions between the Proposed Varied Development and Consented Development would not be readily apparent due to the distance of the Development from the viewpoint; and
- The contrast between the turbine dimensions of the Proposed Varied Development and the operational Gordonbush Wind Farm is unlikely to be readily apparent due to the distance of the Development from the viewpoint.

7.9.126 The combination of these factors will not alter the magnitude of change as assessed for the Consented Development, and this would remain as **low/medium-low**.

7.9.127 The effect of the Proposed Varied Development on Viewpoint 8 would remain **not significant**.

7.9.128 The cumulative effect would also remain **not significant**. There would be a slight increase in the cumulative magnitude of change due to the slightly increased contrast between the turbine dimensions of the Proposed Varied Development and the operational Gordonbush Wind Farm. However, the cumulative effect remains limited, and not significant, due to the level of integration between the Proposed Varied Development and the operational Gordonbush Wind Farm in terms of visual and physical association and landscape setting; the very minor increase in the extent of wind farm development across the view; the increase in the separation of the Development from Kilbraur Wind Farm that results from the removal of the southernmost turbines; and the clear visual and physical separation of the Proposed Varied Development and Kilbraur Wind Farm by the distinctive landform of Strath Brora.

Viewpoint 9 Ben Horn

7.9.129 The 2016 FEI Report concluded that the Consented Development would have a significant effect on this viewpoint, and a not significant cumulative effect.

7.9.130 The sensitivity of this viewpoint will remain **medium-high**, as assessed in the 2015 ES.

7.9.131 The implications of the Proposed Varied Development on this viewpoint are as follows:

- The 11 turbines in the Proposed Varied Development would be seen at full height (as are the 15 turbines in the Consented Development);
- The removal of the Turbine 11 and Turbine 14 would reduce clustering and stacking of turbines at the left side of the Proposed Varied Development;
- The removal of the Turbine 13 and Turbine 16 would reduce encroachment of the centre of the Proposed Varied Development towards the viewpoint at;
- The removal of the four southernmost turbines would pull the Proposed Varied Development back from the *strath* landscape of Strath Brora, in the foreground of the view;
- Distance to the nearest turbine would increase from 7.17km to 7.81km;
- The apparent scale and level of visibility of the 11 turbines in the Proposed Varied Development would increase in comparison with those in the Consented Development due to their increased tip height and rotor diameter; and
- The increased tip height and rotor diameter of the Proposed Varied Development in comparison with the Consented Development is likely to result in increased contrast with the operational Gordonbush Wind Farm, particularly given the elevated nature of the viewpoint.

7.9.132 The combination of these factors will not alter the magnitude of change as assessed for the Consented Development, and this would remain as **medium**.

7.9.133 The effect of the Proposed Varied Development on Viewpoint 9 would remain **significant**.

7.9.134 The cumulative effect would remain **not significant**. There would be a slight increase in the cumulative magnitude of change due to the increased contrast between the turbine dimensions of the Proposed Varied Development and the operational Gordonbush Wind Farm. However, the cumulative effect remains limited, and not significant, due to the level of integration between the Proposed Varied Development and the operational Gordonbush Wind Farm in terms of visual and physical association (including visibility of shared infrastructure) and landscape setting; the very minor increase in the extent of wind farm development across the view; and the considerable separation that is retained between the overall Gordonbush development and Kilbraur Wind Farm.

Viewpoint 10 Beinn Dhorain`

7.9.135 The 2015 ES and the 2016 FEI Report considered that there was no potential for a significant effect (including cumulative effect) to arise at this viewpoint due to limited visibility of the Development and its association with the operational Gordonbush Wind Farm, as it lies almost completely within the same visual envelope.

7.9.136 These factors continue to ensure that a significant effect would not arise with the Proposed Varied Development. While the increased tip height and rotor diameter of the Proposed Varied Development in comparison with the Consented Development is likely to result in slightly higher visibility of the turbines and an increased contrast with the operational Gordonbush Wind Farm, this would not be very readily apparent at a distance of over 7km away, and would not increase the magnitude of change to an extent where a significant effect could arise.

7.9.137 The effects, including the cumulative effect, of the Proposed Varied Development on Viewpoint 7 would remain **not significant**.

Viewpoint 11 Hope Hill

7.9.138 The 2016 FEI Report concluded that the Consented Development would have a not significant effect, including cumulative effect, on this viewpoint.

7.9.139 The sensitivity of this viewpoint will remain **high**, as assessed in the 2015 ES.

7.9.140 The implications of the Proposed Varied Development on this viewpoint are as follows:

- The hubs of the 11 turbines in the Proposed Varied Development would be seen in this view;
- The removal of turbines would reduce the extent of the Proposed Varied Development from approx. 15° to approx. 10°;
- The Proposed Varied Development would be considerably more compact than the Consented Development, extending approx. 7° beyond the horizontal envelope of the operational Gordonbush Wind Farm, while the Consented Development extends approx. 13° beyond the operational turbines;
- The removal of the four southernmost turbines would pull the Proposed Varied Development back from the *strath* landscape of Strath Brora;
- The removal of the southernmost turbines would also increase the separation distance of the Proposed Varied Development from the operational Kilbraur Wind Farm, in comparison with the Consented Development, reducing the potential for perception of coalescence of wind farms;

- The removal of turbines would increase the consistency of the visible proportion of turbines in the Development so that they do not appear to be 'disappearing' behind landform, and would reduce the extent of turbines across the sloping landform;
- Distance to the nearest turbine would remain as 7.97km;
- The difference in turbine dimensions between the Proposed Varied Development and Consented Development would not be readily apparent due to the distance of the Development from the viewpoint; and
- The contrast between the turbine dimensions of the Proposed Varied Development and the operational Gordonbush Wind Farm is unlikely to be readily apparent due to the distance of the Development from the viewpoint.

7.9.141 The combination of these factors will not alter the magnitude of change as assessed for the Consented Development, and this would remain as **medium-low**.

7.9.142 The effect of the Proposed Varied Development on Viewpoint 11 would remain **not significant**.

7.9.143 The cumulative effect would also remain **not significant**. There would be a slight increase in the cumulative magnitude of change due to the slightly increased contrast between the turbine dimensions of the Proposed Varied Development and the operational Gordonbush Wind Farm. However, the cumulative effect remains limited, and not significant, due to the level of integration between the Proposed Varied Development and the operational Gordonbush Wind Farm in terms of visual and physical association and landscape setting; the very minor increase in the extent of wind farm development across the view, which is reduced by the removal of the southernmost turbines; the increase in the separation of the Development from Kilbraur Wind Farm, also resulting from the removal of the southernmost turbines; and the clear visual and physical separation of the Proposed Varied Development and Kilbraur Wind Farm by the distinctive landform of Strath Brora.

Viewpoint 12 Track to Ben Armine Lodge

7.9.144 The 2016 FEI Report concluded that the Consented Development would have a significant effect on this viewpoint, and a not significant cumulative effect.

7.9.145 The sensitivity of this viewpoint will remain **medium-high**, as assessed in the 2015 ES.

7.9.146 The implications of the Proposed Varied Development on this viewpoint are as follows:

- The hubs and some full towers of the 11 turbines in the Proposed Varied Development would be seen in this view;
- The Proposed Varied Development would be considerably more compact than the Consented Development, extending less than 4° beyond the horizontal envelope of the operational Gordonbush Wind Farm, while the Consented Development extends approx. 9° beyond the operational turbines;
- The removal of the four southernmost turbines would pull the Proposed Varied Development back from the *strath* landscape of Strath Brora;
- The removal of Turbine 16 would remove an outlying turbine from the Consented Layout;
- The difference in turbine dimensions between the Proposed Varied Development and Consented Development would not be readily apparent due to the distance of the Proposed Varied Development from the viewpoint; and
- The contrast between the turbine dimensions of the Proposed Varied Development and the operational Gordonbush Wind Farm is unlikely to be readily apparent due to the distance of the Proposed Varied Development from the viewpoint.

7.9.147 The combination of these factors will not alter the magnitude of change as assessed for the Consented Development, and this would remain as **medium**.

7.9.148 The effect of the Proposed Varied Development on Viewpoint 12 would remain **significant**.

7.9.149 The cumulative effect would remain **not significant**. There would be a slight increase in the cumulative magnitude of change due to the slightly increased contrast between the turbine dimensions of the Proposed Varied Development and the operational Gordonbush Wind Farm. However, the cumulative effect remains limited, and not significant, due to the level of integration between the Proposed Varied Development and the operational Gordonbush Wind Farm in terms of visual and physical association and landscape setting; the very minor increase in the extent of wind farm development across the view, which is reduced by the removal of the southernmost turbines; and the very limited visibility of Kilbraur Wind Farm.

Viewpoint 13 Creag nam Fiadh

7.9.150 The 2016 FEI Report concluded that the Consented Development would have a not significant effect on this viewpoint, and a significant cumulative effect.

7.9.151 The sensitivity of this viewpoint will remain **high**, as assessed in the 2015 ES.

7.9.152 The implications of the Proposed Varied Development on this viewpoint are as follows:

- The hubs, upper towers and several lower towers of the 11 turbines in the Proposed Varied Development would be seen in this view;
- The Proposed Varied Development would be more compact than the Consented Development, extending approx. 7° beyond the horizontal envelope of the operational Gordonbush Wind Farm, whereas the Consented Development extends to approx. 9° beyond the operational turbines;
- The removal of the southernmost turbines ensures that the Proposed Varied Development would relate to a single, domed landform;
- The removal of the southernmost turbines would also increase the separation distance of the Proposed Varied Development from the operational Kilbraur Wind Farm in comparison with the Consented Development, thus reducing the potential perception of coalescence of wind farms;
- Distance to the nearest turbine would remain as 8.88km;
- The difference in turbine dimensions between the Proposed Varied Development and Consented Development would not be readily apparent due to the distance of the Development from the viewpoint; and
- The contrast between the turbine dimensions of the Proposed Varied Development and the operational Gordonbush Wind Farm is unlikely to be readily apparent due to the distance of the Development from the viewpoint.

7.9.153 The combination of these factors will not alter the magnitude of change as assessed for the Consented Development, and this would remain as **medium-low**.

7.9.154 The effect of the Proposed Varied Development on Viewpoint 13 would remain **not significant**.

7.9.155 The cumulative effect would become **not significant**. The Consented Development was assessed to have a medium cumulative magnitude of change as a result of the increased number of turbines and increased width of the overall Gordonbush development by approximately 9°, and the resultant reduction in the separation from Kilbraur Wind Farm, so that some coalescence may be perceived. The cumulative magnitude of change arising from the Proposed Varied Development would reduce to a **medium-low** level. This is due to the reduction in the extent of the Proposed Varied Development across the view in comparison with the Consented Development, and the resultant increase in the separation from Kilbraur Wind Farm, which reduces the perception of coalescence. The association of the Proposed Varied Development with a single, domed landform rather than extending downslope to the south also reduces the

cumulative magnitude of change as the Proposed Varied Development has a strong sense of containment that reduces the perception of coalescence with Kilbraur Wind Farm.

7.9.156 The reduction of the cumulative magnitude of change to a **medium-low** level results in a **not significant** cumulative effect on Viewpoint 13.

Viewpoint 14 Ben Bhraggie

7.9.157 The 2015 ES and the 2016 FEI Report considered that there was no potential for a significant effect (including cumulative effect) to arise at this viewpoint due to the limited visibility of the Consented Development, its strong association with the operational Gordonbush Wind Farm, the very limited additional part of the full open view that would be affected (less than 4°), the location of the Consented Development in a relatively unremarkable aspect of the view, and its distance from the viewpoint.

7.9.158 These factors continue to ensure that a significant effect would not arise with the Proposed Varied Development. While the increased tip height and rotor diameter of the Proposed Varied Development in comparison with the Consented Development may result in slightly higher visibility of the turbines and an increased contrast with the operational Gordonbush Wind Farm, this would not be clearly apparent at a distance of 12.54km away (increased from 11.83km for the Consented Development), and would not increase the magnitude of change to an extent where a significant effect could arise.

7.9.159 The effects, including the cumulative effect, of the Proposed Varied Development on Viewpoint 14 would remain **not significant**.

Viewpoint 15 Ben Armine

7.9.160 The 2015 ES and the 2016 FEI Report considered that there was not potential for a significant effect (including cumulative effect) to arise at this viewpoint due to the distance of the Consented Development from the viewpoint (19.62km) and the resultant very small additional proportion of the panoramic view that would be affected (less than 6°). The association of the Consented Development with the operational Gordonbush Wind Farm ensures that it would not introduce wind farm influence into a part of the view that currently displays remote, undeveloped characteristics and would not extend wind farm influence into a new aspect of the view. The separation retained between the overall Gordonbush development and Kilbraur Wind Farm is also important, ensuring that coalescence across the skyline would not occur.

7.9.161 The Proposed Varied Development would be more compact than the Consented Development, extending less than 4° beyond the horizontal envelope of the operational Gordonbush Wind Farm, whereas the Consented Development extends to approx. 6° beyond the operational turbines.

7.9.162 These factors continue to ensure that a significant effect would not arise with the Proposed Varied Development. While the increased tip height and rotor diameter of the Proposed Varied Development in comparison with the Consented Development may result in very slightly higher visibility of the turbines and slightly increased contrast with the operational Gordonbush Wind Farm, this would not be apparent at a distance of 19.62km away, and would not increase the magnitude of change to an extent where a significant effect could arise.

7.9.163 The effects, including the cumulative effect, of the Proposed Varied Development on Viewpoint 15 would remain **not significant**.

Viewpoint 16 Portmahomack

7.9.164 The 2015 ES and the 2016 FEI Report considered that there was no potential for a significant effect (including cumulative effect) to arise at this viewpoint due primarily to the distance of the Consented Development from the viewpoint (28.38km), which ensures both that it would affect

a very small proportion (less than 4°) of the full open view that is available, and that the turbines would constitute very minor components in the outlook. The enclosure of the Consented Development on both sides by higher landform (including Beinn Smeorail to the east) also would reduce its influence on the view as this reduces the perceived height and prominence of the turbines.

7.9.165 These factors continue to ensure that a significant effect would not arise with the Proposed Varied Development. Furthermore, the Proposed Varied Development would be more compact than the Consented Development, due to the removal of turbines, and would be slightly further away, at 28.88km. The increased tip height and rotor diameter of the Proposed Varied Development and its increased contrast with the operational Gordonbush Wind Farm are unlikely to be discernible at this distance and would not increase the magnitude of change to an extent where a significant effect could arise.

7.9.166 The effects, including the cumulative effect, of the Proposed Varied Development on Viewpoint 16 would remain **not significant**.

Viewpoint 17 Ben Griam Beg

7.9.167 The 2015 ES and the 2016 FEI Report considered that there was no potential for a significant effect (including cumulative effect) to arise at this viewpoint due to the distance of the Consented Development from the viewpoint (26.38km), which ensures both that it would affect a very small proportion (less than 5°) of the 360° view, and that the turbines would constitute very minor components in the outlook. The considerable separation that is retained between the overall Gordonbush development and Kilbraur Wind Farm is also important, as this ensures that coalescence across the skyline would not occur.

7.9.168 These factors continue to ensure that a significant effect would not arise with the Proposed Varied Development. Furthermore, the Proposed Varied Development would be more compact than the Consented Development, due to the removal of turbines. The increased tip height and rotor diameter of the Proposed Varied Development and its increased contrast with the operational Gordonbush Wind Farm are unlikely to be discernible at this distance and would not increase the magnitude of change to an extent where a significant effect could arise.

7.9.169 The effects, including the cumulative effect, of the Proposed Varied Development on Viewpoint 17 would remain **not significant**.

Principal Visual Receptor: Brora - Rogart minor road

7.9.170 The 2016 FEI Report assessed the Consented Development to have a significant effect on views from approximately 2km of this road between Sciberscross and Point (intermittent) and approximately 1km between Balnacoil and graveyard (very intermittent) for eastbound travellers only. The cumulative effect for eastbound travellers was also assessed to be significant. The effect on views gained by westbound travellers, including cumulative effects, was assessed to be not significant.

7.9.171 The sensitivity of this receptor will remain **medium-high**, as assessed in the 2015 ES.

7.9.172 Viewpoints 3, 4, 6 and 7 lie on this route. The outlook at Viewpoints 3 and 4 gained by westbound travellers, while the outlook at Viewpoints 6 and 7 is gained by eastbound travellers. The assessment of these viewpoints previously in this Chapter indicates that the effect on Viewpoints 3, 4 and 7 would remain not significant, while the effect on Viewpoint 6 would remain significant.

7.9.173 The comparative ZTV (Figure 7.1c) indicates that visibility from this route has reduced in comparison with the Consented Development, with a stretch that lies just to the north of Viewpoint 4 ceasing to gain any visibility at all.

7.9.174 **Westbound travellers**: the blade tip ZTV for the Proposed Varied Development (Figure 7.1b) indicates reduced visibility of the Proposed Varied Development in comparison with the Consented Development from stretches of the road in the vicinity of Viewpoints 3 and 4. This is consistent with the wirelines/photomontages for these Viewpoints, which show reduced visibility, as described previously in this Chapter.

7.9.175 The maximum magnitude of change on views gained by westbound travellers would reduce to a **low** level (was previously medium-low), as assessed at Viewpoint 3, where the highest level of visibility for westbound travellers is gained. The effect on views gained by westbound travellers on the road would therefore remain **not significant**. Cumulative effects on views gained by westbound travellers would also remain **not significant**.

7.9.176 **Eastbound travellers**: the blade tip and hub height ZTVs for the Proposed Varied Development (Figures 7.1b and 7.2b) indicate reduced visibility of both hubs and blades in the Proposed Varied Development in comparison with the Consented Development from stretches of the road to the east of Viewpoint 6 and in the vicinity of Viewpoint 5 (which is not located on the road, but close to the south of the road). This is because of the removal of the four southernmost turbines, which were those that lay in closest proximity to the road. The reduced visibility can also be seen in the wireline view for Viewpoint 5 (which has a higher level of visibility than views from the road itself).

7.9.177 The maximum magnitude of change gained by eastbound travellers would remain as **medium**, as assessed at Viewpoint 6, where the highest level of visibility for eastbound travellers is gained. The effect on views gained by eastbound travellers over the stretch of road approximately 2km long between Sciberscross and Point would remain intermittently **significant**, as assessed for the Consented Development.

7.9.178 The stretch of road approximately 1km long between Balnacoil and the graveyard was assessed to have a maximum, and very intermittent, medium magnitude of change as a result of the Consented Development. This would reduce to **medium-low** due to the reduced visibility of the Proposed Varied Development over this stretch. As a result, the very intermittent **significant** effect that was assessed for the Consented Development between Balnacoil and the graveyard would become **not significant**.

7.9.179 Significant cumulative effects would continue to arise on views gained by eastbound travellers but would be considerably reduced in extent. A medium cumulative magnitude of change was considered to arise from the Consented Development on a stretch between 1.2km west of Sciberscross and just south of Viewpoint 3 on the basis that this was the stretch over which the additional effects of the Proposed Varied Development would be most apparent when combined with visibility of the operational Gordonbush and Kilbraur Wind Farms. This gave rise to a significant cumulative effect over this stretch. However, visibility of the Proposed Varied Development would be notably reduced over this stretch, and (intermittently) significant effects on views from the road are now restricted to one stretch of approximately 2km between Sciberscross and Point. As a result, the extent of **significant** cumulative effects for eastbound travellers is now restricted to the stretch approximately 2km long between Sciberscross and Point where the Proposed Varied Development would have a notable effect on views.

7.9.180 **Summary**: the effects, including cumulative effects, of the Proposed Varied Development on views gained by westbound travellers on the minor Brora – Rogart road would be **not significant**. The effects on views gained by eastbound travellers would be intermittently **significant** on a stretch, approximately 2km long, between Sciberscross and Point. Cumulative effects would also be **significant** over this stretch.

Core path SU06.02 ('Loch Brora - West Track')

7.9.181 The 2016 FEI Report assessed the Consented Development to have a significant effect on views from approximately 4.6km (intermittent) between the coniferous forestry to around Carroll Rock and approximately 1km near the western end of the path as it passes Kilbraur. The cumulative effect was assessed to be not significant.

7.9.182 The sensitivity of this receptor will remain **high**, as assessed in the 2015 ES.

7.9.183 Viewpoint 2, Loch Brora (south-west side), is located on the path. The assessment of this Viewpoint previously in this Chapter indicates that the magnitude of change would remain medium with the Proposed Varied Development, and the effect would remain significant.

7.9.184 Visibility of the Proposed Varied Development from the approximately 4.6km-long stretch between the coniferous forestry in the east and extending to around Carroll Rock would remain similar to that of the Consented Development, with a maximum medium/medium-high magnitude of change. The effect on views from this stretch would remain **significant**. Viewpoint 2 lies on this stretch of the path.

7.9.185 The second stretch of the path where a significant effect arose from the Consented Development is over approximately 1km as it passes Kilbraur. Visibility of the Proposed Varied Development would be reduced over this stretch due to the removal of the four southernmost turbines, and the hub height ZTV (Figure 7.2b) shows no visibility of hubs from this stretch. The nearest turbine in the Proposed Varied Development would be approximately 3.75km away, while the Consented Development is a minimum of 3.1km away. The magnitude of change arising from the Consented Development on this stretch was assessed as medium; this would reduce to a **medium-low** level due to the reduced visibility of the Proposed Varied Development, and the effect would become **not significant**.

7.9.186 The cumulative effect on views from this path would remain **not significant**. This is due to the very limited visibility of baseline wind farms, and the level of integration between the Proposed Varied Development and the operational Gordonbush Wind Farm on the short stretch where it is visible.

7.9.187 **Summary**: a **significant** effect would continue to arise on views from a 4.6km long stretch of core path SU06.02 effects, between the coniferous forestry in the east and extending to around Carroll Rock. However, the significant effect that was assessed to arise from the Consented Development on a further stretch of approximately 1km, around Kilbraur, would become **not significant** as a result of the more limited visibility of the Proposed Varied Development. Cumulative effects on views from the full length of the path would remain **not significant**.

SU06.14 ('Doll Bridge – Loch Brora')

7.9.188 The 2016 FEI Report assessed the Consented Development to have a significant effect on views from approximately 100-150m of this path. The cumulative effect was assessed to be not significant.

7.9.189 The sensitivity of this receptor will remain **high**, as assessed in the 2015 ES.

7.9.190 Viewpoint 3 (Brora to Rogart minor road south of Killin) is located close to the western end of the route. The assessment of this Viewpoint previously in this Chapter indicates that the magnitude of change, which is assessed to be medium-low for the Consented Development, would reduce to low for the Proposed Varied Development.

7.9.191 Visibility of the Proposed Varied Development from this path would be lower than that of the Consented Development due to the removal of the four southernmost turbines, and the distance from the path to the nearest turbine would also increase to a minimum of approximately 7km (was 6.5km for the Consented Development). Viewpoint 3 indicates the

change in visibility that is likely to be apparent. The magnitude of change on views from the path would therefore reduce to a maximum **medium-low** level and the effect would become **not significant**.

7.9.192 No operational, consented or application stage wind farms are seen from this route, and the cumulative effect of the Proposed Varied Development would therefore remain **not significant**.

7.9.193 **Summary**: the significant effect on views from a 100-150m stretch of core path SU06.14 ('Doll Bridge – Loch Brora') that was assessed to arise from the Consented Development would become **not significant** as a result of the more limited visibility of the Proposed Varied Development. Cumulative effects would remain **not significant**.

7.10 Comparison of Effects between Proposed Varied Development and Consented Development

7.10.1 The following tables summarise the effects that were assessed for the Consented Development in the 2016 FEI Report and compare these with the effects of the Consented Development. Where there has been a change to the significance of effects, the boxes are shown shaded.

7.10.2 Table 7.4 summarises the comparison of landscape effects, while Table 7.5 summarises the comparison of effects on views.

Table 7.4: Comparison of Landscape Effects

Landscape Receptor	Consented Development Assessment (2016 FEI Report)	Proposed Varied Development Assessment
Rough grassland/ moorland ground cover	Not significant	No change
Inland loch: Loch Brora	Significant effect on some areas of Part 3 of the LCT; the southern end of Part 1; and some areas of the western side of Part 2. Not significant elsewhere. Cumulative effect: not significant	No change
Small farms and crofts (fringe crofting and historic features subtype): Balnacoil area	Significant effect on the majority of the receptor. Not significant effect on the south-eastern end and along the Allt Ach a' Bhathaich valley. Cumulative effect: not significant	No change
Strath (Strath Brora): eastern section	Significant effect on areas around Sciberscross and south of the graveyard, lower slopes of Cnoc an t-Socaich and Carroll Rock; loch shore south of Carroll Rock; ridge line of Cnoc a'Ghrianain, and very small areas above Oldtown and on Killin Rock. Not significant elsewhere. Cumulative effect: significant effect on the area around and to the east of Sciberscross, the ridge line of Cnoc a' Ghrianain and a very small area above Oldtown. Not significant elsewhere.	Significant effect at Killin Rock becomes **not significant** No change to cumulative effect
Moorland slopes and hills: unit A	Significant effect Cumulative effect: not significant	No change

Landscape Receptor	Consented Development Assessment (2016 FEI Report)	Proposed Varied Development Assessment
Moorland slopes and hills: unit B	Significant effect on west-facing slopes that gain high visibility of the Development, including Cnoc Cragaidh, Beinn Smeorail, Col-bheinn, Meallan Liath Beg and Mor, Carn Garbh, and Cnoc a'Chrubaich Mhoir. Not significant elsewhere. Cumulative effect: not significant	No change
Moorland slopes and hills: unit C	Significant effect on north-facing slopes in the north-eastern part of the receptor (including Carroll Rock and Kilbraur Hill, and several unnamed hills and high points). Not significant elsewhere. Cumulative effect: not significant	No change
Moorland slopes and hills: unit D	Significant effect on east-facing slopes of Meall na h-Amaite and Cnoc Cille Pheadair. Not significant elsewhere. Cumulative effect: not significant	No change
Sweeping moorland: unit A	Significant effect Cumulative effect: not significant	No change
Sweeping moorland: unit B	Significant effect on east-facing slopes within the receptor that gain high visibility and lie within approx. 6km of the Consented Development. Not significant elsewhere. Cumulative effect: not significant	No change
Sweeping moorland: unit C	Significant effect on east-facing slopes of Meall na h-Amaite, Cnoc Cille Pheadair and Druim Torr nan Cliabh. Not significant elsewhere. Cumulative effect: not significant	No change
Loch Fleet, Loch Brora and Glen Loth SLA	Significant effect on some limited parts of Loch Brora; lower slopes of Carroll Rock and the southern loch shore around Carroll Rock; very small elevated areas above Oldtown and on Killin Rock; and west-facing slopes close to the eastern edge of the Development. Not significant elsewhere. Cumulative effect: significant effect on a very small area above Oldtown. Not significant elsewhere.	Significant effect at Killin Rock becomes **not significant** No change to cumulative effect

Table 7.4: Comparison of Effects on Views

Viewpoint/ Visual Receptor	Consented Development Assessment (2016 FEI Report)	Proposed Varied Development Assessment
1. Beinn Smeorail	Significant effect Cumulative effect: not significant	No change
2. Loch Brora (south-west side)	Significant effect Cumulative effect: not significant	No change
3. Brora - Rogart minor road south of Killin	Not significant effect Cumulative effect: not significant	No change
4. Brora - Rogart minor road north of Killin	Not significant effect Cumulative effect: not significant	No change
5. Strath Brora near Balnacoil	Significant effect Cumulative effect: not significant	No change
6. Brora - Rogart minor road near Sciberscross	Significant effect Cumulative effect: not significant	No change
7. Brora - Rogart minor road near Dalreavoch	Not significant effect Cumulative effect: not significant	No change
8. Craggie Beg	Not significant effect Cumulative effect: not significant	No change
9. Ben Horn	Significant effect Cumulative effect: not significant	No change
10. Beinn Dhorain	Not significant effect Cumulative effect: not significant	No change
11. Hope Hill	Not significant effect Cumulative effect: not significant	No change
12. Track to Ben Armine Lodge	Significant effect Cumulative effect: not significant	No change
13. Creag nam Fiadh	Not significant effect Cumulative effect: significant	No change to the effect of the Proposed Varied Development itself Significant cumulative effect becomes **not significant**
14. Ben Bhraggie	Not significant effect Cumulative effect: not significant	No change
15. Ben Armine	Not significant effect Cumulative effect: not significant	No change
16. Portmahomack	Not significant effect Cumulative effect: not significant	No change
17. Ben Griam Beg	Not significant effect Cumulative effect: not significant	No change
Brora - Rogart minor road	Eastbound: significant effect on approx. 2km between Sciberscross and Point (intermittent) and approx. 1km between Balnacoil and graveyard (very intermittent) Cumulative effect: significant	Westbound effects, including cumulative effects, remain **not significant** Eastbound, intermittent **significant** effect over approx. 2km between Sciberscross and Point remains.

Viewpoint/ Visual Receptor	Consented Development Assessment (2016 FEI Report)	Proposed Varied Development Assessment
	Westbound: not significant effect Cumulative effect: not significant	Significant effect over approx. 1km between Balnacoil and graveyard becomes **not significant** Extent of **significant** cumulative effect reduces to approx. 2km between Sciberscross and Point
SU06.02 ('Loch Brora - West Track')	Significant effect on approx. 4.6km (partly intermittent), between the coniferous forestry and Carroll Rock and approx. 1km near the western end of the path as it passes Kilbraur Cumulative effect: not significant	**Significant** effect over approx. 4.6km between the coniferous forestry and Carroll Rock remains. Significant effect near the western end of the path as it passes Kilbraur becomes **not significant** Cumulative effect remains **not significant**
SU06.14 ('Doll Bridge – Loch Brora')	Significant effect on approx. 100-150m Cumulative effect: not significant	Significant effect on approx. 100-150m becomes **not significant** Cumulative effect remains **not significant**

7.11 Conclusion

7.11.1 The assessment of the effects that the Proposed Varied Development would have on the landscape and visual resource indicates that the removal of turbines and the change in turbine dimensions would result in a minor reduction to the number and extent of significant effects, including cumulative effects, on landscape character receptors and views. This is due to the removal of four turbines and the resultant reduced visibility and reduced horizontal extent of the Proposed Varied Development, as well as the change to its appearance in terms of the relationship to the landform setting in which it is seen.

7.11.2 The following effects, which were assessed to be significant for the Consented Development, are now assessed to be not significant for the Proposed Varied Development:

- The area of *Strath (Strath Brora*): eastern section LCT around Killin Rock;
- The area of the Loch Fleet, Loch Brora and Glen Loth SLA around Killin Rock;
- Approximately 1km of the eastbound Brora - Rogart minor road, between Balnacoil and graveyard;
- Approximately 1km of SU06.02 ('Loch Brora - West Track') as it passes the property at Kilbraur; and
- Approximately 100-150m of SU06.14 ('Doll Bridge – Loch Brora').

7.11.3 In addition to the effects of the Proposed Varied Development itself, the assessment has also concluded that the following cumulative effects would become not significant:

- The cumulative effect at Viewpoint 13. Creag nam Fiadh; and
- The cumulative effect on the eastbound Brora - Rogart minor road, other than a stretch of approximately 2km between Sciberscross and Point.

7.11.4 In no case has the assessment of the Proposed Varied Development found an increase in magnitude of change that would result in a not significant effect becoming significant. Overall, the effects of the Proposed Varied Development would remain similar to those of the Consented Development while in some areas, as described above, the layout revisions would reduce the level of visibility and extent of the Proposed Varied Development across views, and

lead to a more balanced appearance. Of particular note are the reduction in visibility of the Proposed Varied Development from Strath Brora and the reduction in the extent of the Proposed Varied Development across the view as seen from areas to the west and north-west.

7.12 References

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