

Hollandmey Renewable Energy Development

Updated Cumulative Landscape and
Visual Impact Assessment

DPEA Reference: WIN-270-19

Index

1. Executive Summary	2
2. Introduction	4
3. Methodology	8
4. Planning Policy	10
5. Baseline	12
6. Landscape and Visual Effects	15
7. Cumulative Effects	36
8. Assessment Summary Table	40

Appendix 1 – Methodology

**Appendix 7.2 – Residential Visual Amenity Assessment
(from EIA Report)**

Appendix 3 – LVIA Components

Appendix 4 - Viewpoints

Appendix 5 - Landscape Sensitivity

Appendix 6 – Consultation

Appendix 7 - Effects less than Moderate

1. Executive Summary

Scope and Purpose

1. This assessment provides an updated cumulative assessment as requested by the Reporter during the Pre-Examination Meeting on the 16 June. It describes the existing landscape and views, considers their sensitivity to change and identifies changes likely to arise from Hollandmey Renewable Energy Development (the 'proposed Development'), providing judgements of the importance of the effects arising.

Design

2. The design process is described within Chapter 2 of the EIA Report and the only design change relevant to this LVIA which has taken place since the EIA Report was prepared is an offsite proposal for a hedge to screen southward views from Castle of Mey which was agreed as a mitigation measure for effects on the heritage assets (as set out in Additional Information submitted in July 2022 and related correspondence).

Effects on Character

3. The host unit of landscape character type LCT 134 Sweeping Moorland and Flows is a large scale open landscape with a smoothly undulating landform and limited settlement. It hosts existing and consented wind farms close to the site including four turbines at Lochend windfarm adjacent to the west and Slickly and Stroupster 3.5 km to the east. Effects on this host landscape would be Moderate, adverse and not significant.
4. Significant effects would arise on the adjacent unit of LCT 144 Coastal Crofts and Small Farms landscape character type located 1.9 km to the northeast between Canisbay and John O'Groats. Views of the turbines from this smaller scale, settled and open pastoral landscape where there is more limited visibility of existing and consented wind farms would present scale contrasts and effects would be Major/Moderate Adverse.
5. There would be Moderate, Adverse and not significant effects on the unit of LCT 140 Sandy Beaches and Dunes at Dunnet Bay, 5.4 km to the west. This is a small LCT encompassing the beach, dunes and an area inland across Greenland Links. Visibility of the turbines would arise from the inland area giving rise to small changes to character given the limited visibility of existing wind farms.
6. Moderate/minor and adverse effects would arise for LCT 143 Farmed Lowland Plain and the unit of LCT 144 Coastal Crofts and Small Farm between Dunnet and Brough.
7. Effects on other character types and units within the study area would be Negligible.

Effects on Visual Receptors

8. The area hosting the proposed Development is sparsely settled and has few visual receptors to the south and east within 5-6 km, but the farming and crofting landscapes which surround it host many small, dispersed settlements, connected by local and main road routes, and the coastal areas include beaches, the North Coast 500 and a number of visitor locations.
9. Significant effects would arise for residents of, and visitors to, the settlements of Lochend, Barrock, Inkstack, Rattar, Skarfskerry, Gills, Upper Gills and Mey which are all located within 3.5 km. The settlements to the north and northwest would see the proposed Development in closer and more open views within a larger scale open landscape alongside the existing turbines at Lochend Wind Farm. From settlements to

- the north, and northeast, the turbines would be seen above nearby skylines in foreshortened views.
10. Effects on settlements between 4-7.5 km in all directions except to the southeast would be Moderate where there are more open views or Moderate/minor where visibility is more restricted and/or the turbines at Slickly and Stroupster are seen more nearby than the proposed Development would be. Effects on Castletown, the nearest larger settlement located 8.5 km to the west, would be Minor and not significant.
 11. Effects on settlements to the southeast would be negligible as the proposed Development would have limited visibility and be seen looking through the closer windfarms at Slickly and Stroupster.
 12. There would be no significant effects on recreational receptors to visitor destinations. Moderate, Adverse effects would arise for visitors to Dunnet Head and Duncansby Head, as a result of visibility from the panoramic viewpoints and some, but not all of the vicinity of those viewpoints. Visitors to beaches between Kirkstyle and Huna would also experience Moderate effects, and visitors to beaches between Murkle Bay and Castletown would experience Moderate/minor effects. Views from beaches elsewhere would typically be screened by the inland landform of cliffs and dunes.
 13. Visitors to Castle of Mey would experience Moderate, Adverse effects arising from views of the turbines above the boundary hedge from near the castle entrance. Proposed hedgerow mitigation planting would reduce these effects to be Minimal and Neutral once mature.
 14. Significant Major/moderate and Adverse effects would arise for users of local roads within 5 km as a result of close and open views of the turbines from some more open stretches of the roads which pass the Site; and for travellers on the Gills Bay to St Margaret's Hope ferry who would see the turbines set on the mainland skyline throughout much of their journey, and in close views at distances of 4-6 km between Stroma and the mainland.
 15. For users of other routes including the A836, A99, North Coast 500, National Cycle Route 1, local Roads beyond 5 km and John O'Groats to Burwick, South Ronaldsay ferry, effects would be Moderate or Moderate/minor and Adverse as a result of more infrequent and/or distant views.

Effects on Designated Areas

16. The proposed Development would not give rise to effects on National Parks or National Scenic Areas.
17. Non-significant effects would arise on two locally designated Special Landscape Areas (SLA), designated via the Highland-wide Local Development Plan (2012). Effects on the closer of these, the Dunnet Head SLA, would be Moderate and Adverse as a result of changes to panoramic views from parts of the SLA, where the turbines would be seen set amongst existing and consented turbines to the southeast beyond the coastal farmland and not impinging on key views to the islands to the north, mountains to the south, and coastal features to the east and west. Effects on the more distant Duncansby Head SLA would be Moderate/minor and Adverse as a result of small changes to the special quality of 'commanding views' within which the turbines would be seen looking over the coastal farmland to the west beyond the intervening skyline formed by the line of hills between Warth Hill and Hill of Warse.

Cumulative Effects

18. Windfarms in planning at Tormsdale, Cairnmore Hill, Melvich and Kirkton are all located more than 20 km from the Site and cumulative effects with these would remain the same as for the proposed Development alone.

2. Introduction

Background

19. This Updated Cumulative Landscape and Visual Impact Assessment (LVIA) has been prepared by Abseline in preparation for the Public Local Inquiry (PLI) in relation to Hollandmey Renewable Energy Development (RED) (the 'proposed Development'). The update is prepared in response to a change to the cumulative development scenarios, which include a changed future baseline due to a consent for Slickly Windfarm, as well as a number of other changes to windfarm proposals as set out in Section 7 of this report. The consent for Slickly Windfarm means that the main assessment scenario set out within Chapter 7: Landscape and Visual Impact Assessment, of the EIA Report is now superseded.
20. In addition, the organisation which prepared the previous assessment (RSK Landscape) no longer exists and the methodology used to prepare Chapter 7 is not the methodology used for LVIA by the author of this report. This assessment has been undertaken to a different methodology set out in detail in Appendix 1 to this report, with key points summarised in Section 2 below.
21. This assessment forms a replacement for Chapter 7: Landscape and Visual Impact Assessment of the EIA Report. Some of the supporting appendices, figures and visualisations are also replaced as set out within Appendix 3 – Retained, Replaced and New LVIA Components, to this Updated Cumulative LVIA and referenced within this text.
22. This assessment defines the landscape and visual baseline environments and any known future changes; assesses their sensitivity to change; describes the nature of the anticipated changes to the landscape and views and assesses the effects arising during all stages of development.

Competence

23. This report has been prepared by Chartered Landscape Architects at Abseline. The Practice is a Landscape Institute registered practice and the preparation of this report has been led by Mary Fisher who is a Chartered Landscape Architect with over 22 years' experience of LVIA.

The Site and Proposed Development

24. Figure 3.1 of the EIA Report places the proposed Development within its local context. The Site is currently mostly used for commercial forestry with a small area of improved grassland to the southeast. As set out within Chapter 3: Proposed Development, of the EIA Report, the proposal includes ten wind turbines of up to 149.9m tip height, around 15 MW of solar arrays, around 15 MW of battery storage and other ancillary infrastructure including a substation, met mast, tracks and crane hardstandings. Except for the met mast and some of the tracks to the southeast of the layout, the majority of these elements of the proposed Development are set within the forestry.
25. The design process is described within Chapter 2: Site Description and Site Evolution, of the EIA Report and the only design change relevant to this LVIA which has taken place since the EIA Report was prepared is an offsite proposal for a hedge to screen southward views from Castle of Mey which was agreed as a mitigation measure for effects on the heritage assets (as set out in Additional Information submitted in July 2022 and related correspondence).

26. To inform the assessment, site visits were made to locations including representative viewpoints, the Site and wider study area by the assessment team.

Stakeholder Consultation

27. Appendix 6 provides an extract from Section 7.4 of the EIA Report which summarises consultation during the preparation of the EIA Report.
28. Further consultation was undertaken with The Highland Council (THC) prior to the preparation of this Updated Cumulative LVIA. Matters on which agreement was sought were:
- Additional viewpoints to be included as full visualisations and wirelines. The final list of viewpoints considered is provided in Appendix 4 - Viewpoints, and Table 1 - Viewpoint Analysis
 - Cumulative sites to be included in the assessment update. The updated list of cumulative developments considered within this Updated Cumulative LVIA is provided within Table 4 - Cumulative Development Proposals

Study Area and Scope

29. It is accepted practice that the extent of the study area for a development proposal is broadly defined by where it will be visible. In this case an initial study area of 45 km was defined in the EIA Report, which exceeds the distance required by guidance¹ in relation to the turbine tip height, which indicates that 40 km would have been adequate.
30. With the benefit of the previous completed LVIA and consultees comments in relation to that, this Updated Cumulative LVIA focusses on a 20 km study area, which is judged to be sufficient to include all potentially significant effects.

Night-time Assessment

31. The proposed Development does not include visible lighting and no night-time assessment is provided.

Cumulative Assessment

32. Cumulative assessment relates to the assessment of the effects of more than one development (as set out within Appendix 1). Operational developments are included in the baseline, consented development forms part of the future baseline, unless there is some uncertainty regarding the future construction of consented developments in which case they may be considered as the first scenario of the cumulative assessment. The only developments falling into that category within this assessment are Berriedale Windfarm, Dunbeath Windfarm and Golticlay Windfarm which is subject to a recent scoping request for a revised design. Other consents are recent and are assumed to be likely to be constructed.
33. The focus of the cumulative assessment is on developments in planning. The potential development scenarios considered within the cumulative assessment are set out within Section 7 of this report.

¹ Scottish Natural Heritage (2017). *Visual Representation of Windfarms*. Available at: <https://www.nature.scot/doc/visual-representation-wind-farms-guidance>

Residential Amenity

34. This report does not include an updated assessment of residential visual amenity as it is agreed with THC (based on their Report of Handling dated 18 November 2022 and Objection Letter dated 28 November 2022) that the proposed Development would not give rise to effects meeting the threshold described above.

Assessment Scenarios and Potential Effects

35. Effects arising from the proposed Development are considered at the following key stages. The nature of the potential effects relevant to this assessment are described for each stage below.

Construction

36. The construction of the proposed Development would take place over a period of approximately 22 months. It would involve the activities set out within Table 3.3: Construction Programme, in Chapter 3 of the EIA Report.
37. Effects during construction on landscape fabric would arise from:
- Removal of 24.3 ha of commercial forestry as shown on Figure 15.4 of the EIA Report, and its replacement with offsite compensatory planting;
 - Felling of all forestry and restoration of peatland within the 168 ha Habitat Management Plan (HMP) Area as set out in Technical Appendix 8.6: Draft Habitat Management Plan, of the EIA Report;
 - widening of existing forestry tracks and the construction of some new tracks and crane hardstandings within formerly forested areas and open moorland;
 - construction of the turbine foundations, substation, energy storage facility and solar array; and
 - site reinstatement.
38. Effects during construction on landscape character would arise from:
- The changes to landscape fabric within the Site;
 - The change of the Site character from forestry and moorland to construction site; and
 - Views towards the construction activity, particularly the crane and part completed turbines.
39. Effects during construction on visual receptors would arise from:
- Views towards the construction activity, particularly the crane and part completed turbines.
40. Effects during construction on designated landscapes would arise from:
- Short-term changes to the special qualities as a result of views towards the construction activity, particularly the crane and part completed turbines.
41. Effects on landscape fabric are not considered to be significant. The elements which make up the landscape fabric of the Site are commonplace both within the study area and within Scotland, and the felling of commercial forestry is an expected outcome within its normal lifecycle.

42. Effects on landscape character, views and designations during construction would be short-term and would primarily arise from views of the crane and part-completed turbines. During this stage of construction, effects would be very similar to those from the operational stage and are not assessed separately.

Operation

43. A 50-year consent is sought for the proposed Development, and effects are assessed as though Permanent for the purposes of this assessment as the duration exceeds the 25-year 'Long-term' duration as defined in Appendix 1. Effects during operation on landscape fabric would arise from:
- The presence of the turbines, solar array and other site infrastructure;
 - Establishment of bog habitats in restored peatland areas; and
 - growth of new hedgerow planting south of Castle of Mey.
44. Effects during operation on landscape character would arise from:
- The permanent inclusion of wind turbines, the solar array and other infrastructure within the forestry and moorland; and
 - changes to vegetation cover as a result of the removal of forestry and increase of moorland within the Site.
45. Effects during operation on visual receptors would arise from:
- Changes to views towards the Site across an extensive area to include the wind turbines and met mast;
 - Smaller scale, close range changes to views into the Site where other infrastructure may be visible.
46. Effects during operation on designated landscapes would arise from:
- Changes to the special qualities as a result of visibility of the turbines.

Decommissioning

47. Effects during decommissioning would be short-term (over an up to 3 year period) and similar to those arising during construction except in reverse in terms of the Site being reinstated to forestry and moorland.

Supporting Information and Terminology

48. Supporting appendices, figures and visualisations have been prepared as set out within Appendix 3. These are important to the assessment and should be read alongside this report.
49. Key terms used within the assessment are described in Section 2 and Appendix 1 which set out the methodology. A glossary is provided within Annex 1 of Appendix 1.

3. Methodology

50. The full methodology is described in Appendix 1, which also references the key guidance documents which inform the approach. A summary of key points is provided below.

Distances

51. Where distances are given in the assessment, these are approximate distances between the nearest turbine and the nearest part of the receptor in question, unless explicitly stated otherwise.

Visualisations

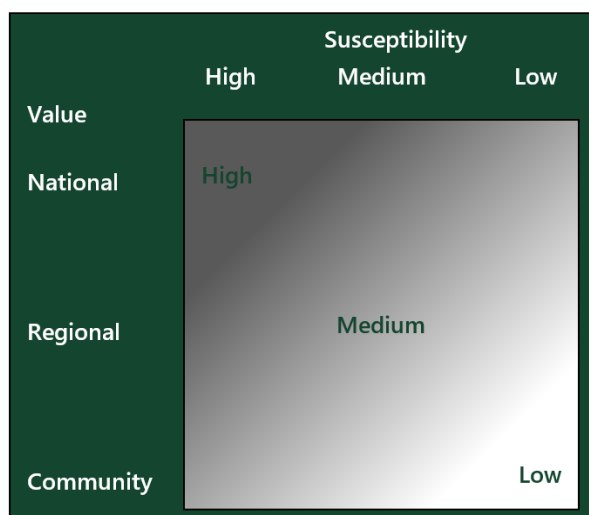
52. Photographs of the existing views, wirelines and photomontages showing the proposed Development are provided with the EIA Report and updated visualisations previously issued which form part of this Updated Cumulative LVIA. The method of visualisation selected has been informed by relevant Scottish Natural Heritage ¹ and Highland Council ² guidance.

Sensitivity

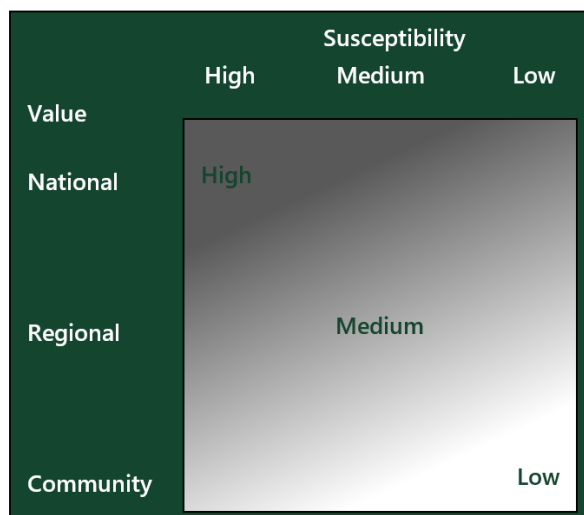
53. Sensitivity judgements take account of consideration of the value and susceptibility of the receptor as illustrated by Diagram 1: Sensitivity below. Where sensitivity is judged to lie between levels, an intermediate assessment will be adopted. As comparison of the two diagrams indicates, a slightly greater weight is given to susceptibility in judging sensitivity of visual receptors.

Diagram 1: Sensitivity

Landscape Sensitivity



Visual Sensitivity



² Highland Council (2016). Visualisation Standards for Wind Energy Developments. Available at: https://www.highland.gov.uk/downloads/file/12880/visualisation_standards_for_wind_energy_developments

Magnitude

54. Magnitude of change (Large, Medium, Small, Negligible) judgements take account of the degree of change arising from the proposed Development at any particular location in terms of its size or scale; extent of the area or receptor that is influenced, and the duration and reversibility of the change.
55. The maximum scale of change on the receptor is the primary factor in determining magnitude. However, for particularly widespread and/or long-lasting effects the magnitude judgement may be slightly greater than the scale of change; or for effects that are constrained in geographic extent and/or short-lived the magnitude of change may be slightly lower than the scale of change.

Level of Effect

56. The level (Major, Moderate, Minor, Minimal) of any identified landscape or visual effect reflects a professional judgement as to the relative importance of the effects identified, taking account of the sensitivity of the receptor and the predicted magnitude of change as illustrated by Diagram 2: Level of Effect, below. Where the effect has been classified as Major or Major/Moderate this is considered to be equivalent to likely significant effects referred to in the EIA Regulations. The indication that some effects are 'significant' should not be taken to imply that they should warrant refusal in any decision-making process.

Diagram 2: Level of Effect

		Magnitude			
		Large	Medium	Small	Negligible
Sensitivity	High	Major			
	Medium		Moderate		
	Low			Minor	Minimal

Positive/Adverse

57. Landscape and visual effects can be positive, adverse or neutral (different but neither better nor worse taking all factors into account). Taking a precautionary approach in making an assessment of the 'worst case scenario', the assessment considers that all effects which would result in a notable difference to the existing features, character, views or special qualities would be adverse unless indicated otherwise. It should be noted however that people's individual responses to change arising from development can vary markedly.

4. Planning Policy

National Planning Policy

58. Relevant national planning policy is set out within National Planning Framework 4 (NPF4)³.
59. Within NPF4, Policy 11 Energy is of specific relevance to the proposed Development and indicates in relation to landscape and visual matters that project design and mitigation should demonstrate how the following impacts are addressed:
- *“on communities and individual dwellings, including, residential amenity, visual impact ...”;*
 - *significant landscape and visual impacts, recognising that such impacts are to be expected for some forms of renewable energy. Where impacts are localised and/ or appropriate design mitigation has been applied, they will generally be considered to be acceptable;”*
60. Policy 11 also indicates that Policy 4 relating to Natural Places, will be taken into account in relation to effects on international or national designations but does not refer to Policy 4 in relation to local designations. Policy 4 sets out criteria identifying that the *“objectives of designation and the overall integrity”* of a National Park or National Scenic Area should not be compromised by development. Other criteria within that policy indicate in relation to locally designated landscapes that significant effects on the qualities for they are designated or on their integrity may be *“clearly outweighed by social, environmental or economic benefits of at least local importance”* – which would include the benefits arising from the proposed Development.
61. Although not planning policy, the Onshore Wind Policy Statement (OWPS)⁴ sets out the Scottish Government’s policy towards onshore wind and explicitly notes that: *“Meeting our climate targets will require a rapid transformation across all sectors of our economy and society. This means ensuring the right development happens in the right place. Meeting the ambition of a minimum installed capacity of 20 GW of onshore wind in Scotland by 2030 will require taller and more efficient turbines. This will change the landscape”* (their underlining).
62. The OWPS also notes within the section relating to landscape and visual impacts that outside of National Parks and National Scenic areas the criteria within NPF4 include *“stronger weight being afforded to the contribution of the development to the climate emergency”* and that *“Landscape Sensitivity Studies (LSS) are strategic appraisals of the relative sensitivity of landscapes ... a tool to help guide development to less sensitive locations. ... LSS should not be used in isolation to determine the acceptability of a development type in landscape terms..., however they will continue to be a useful tool in assessing the specific sensitivities within an area.”*

³ Scottish Government (2023). National Planning Framework 4. Available at: <https://www.gov.scot/publications/national-planning-framework-4/documents/>

⁴ Scottish Government (2022). Onshore Wind Policy Statement. Available at: <https://www.gov.scot/publications/onshore-wind-policy-statement-2022/>

Local Planning Policy

63. Current local planning policy is described in the Highland-wide Local Development Plan (2012)⁵. Key policies relevant to this assessment include:
- Policy 57 Natural, Built and Cultural Heritage – which covers effects on “*features of local/regional importance*” (which may be considered a reference to Special Landscape Areas).
 - Policy 61 Landscape – which relates specifically to the consideration of landscape character and references relevant local baseline studies including landscape character assessments and capacity studies, and design guidance.
 - Policy 67 Renewable Energy Developments – which identifies effects on landscape character and visual receptors – including residential properties and recognised visitor sites as key matters to be considered - including “*cumulatively with other developments*”.

Policy Considerations

64. Taking account of these policies, this assessment considers effects on landscape and visual receptors; with the assessment for designated landscapes identifying any effects on the qualities for which they are designated and the effect on the overall integrity of the designation.
65. Baseline studies also inform this assessment as set out below. This Updated Cumulative LVIA does not consider a revised design and considerations in relation to design guidance remain as set out in Chapter 2 and Section 7.9 of the EIA Report.

Other Relevant Guidance and Baseline Studies

66. Other published documents relevant to this assessment include the following documents which have informed this assessment and/or the design of the proposed Development in relation to the mitigation of landscape and visual effects:
- NatureScot National Landscape Character Assessment (2019)⁶;
 - Highland Council Onshore Wind Energy Supplementary Guidance (OWESG), including addendum ‘Part 2b’ (2017)⁷; and
 - Highland Council Assessment of Highland Special Landscape Areas (2011)⁸.
67. These baseline studies are further considered in Section 5.

⁵ Highland Council (2012), *Highland-wide Local Development Plan*. Available at: https://www.highland.gov.uk/info/178/local_and_statutory_development_plans/199/highland-wide_local_development_plan

⁶ NatureScot (2019). *National Landscape Character Assessment*. Available at: <https://www.nature.scot/professional-advice/landscape/landscape-character-assessment/scottish-landscape-character-types-map-and-descriptions>

⁷ Highland Council (2017). *Onshore Wind Energy Supplementary Guidance*. Available at: <https://www.highland.gov.uk/onshorewind>

⁸ Highland Council (2011). *Assessment of Highland Special Landscape Areas*. Available at: https://www.highland.gov.uk/downloads/file/2937/assessment_of_highland_special_landscape_areas

5. Baseline

Introduction

68. LVIA is an iterative process; baseline studies have informed both design and early assessment before the final design and final assessment were prepared as documented in this report. This section provides a review of documented baseline studies (as listed at paragraph 66 above) and a baseline description of the Site and its landscape and visual context. The baseline description of the individual landscape and visual receptors is provided alongside the assessment in Section 5 for ease of reference.

Baseline Studies

NatureScot National Landscape Character Assessment

69. This is the most recently updated characterisation of the study area and is used as the primary reference in relation to landscape character. The character type boundaries (though not the references and names) coincide with the character types considered in the OWESG.

Highland Council Onshore Wind Energy Supplementary Guidance

70. As noted above, the character type boundaries used in this study coincide with the national landscape character assessment. However, some of the character types in both the NatureScot assessment and the OWESG have multiple instances of the same character type within the study area, and for some but not all of these the OWESG splits these out as separate character types. Within this report and its appendices, each instance of the character types ('units') are assessed individually and both the NatureScot and Highland references are used, along with geographic description where needed to individually identify the unit.

71. The OWESG provides very limited character description and focusses on sensitivity and design advice in relation to windfarm development within each landscape character type (LCT). The sensitivity advice in relation to 'large turbines' is also considered. As indicated on page 35 of the OWESG, it rates susceptibility on a numeric scale of 1-4 with 1 being the 'most susceptible to change' and in reaching that judgement for each character type takes account of:

- Landform (apparent scale);
- Landform complexity;
- Land Cover;
- Habitation;
- Enclosure, and
- 'Moderating factors'.

72. The detail relating to these considerations is not published within the OWESG – just the resultant rating with a short commentary. These factors are similar to those considered in relation to susceptibility within this report, which also includes the consideration of visual factors such as skylines and intervisibility with adjacent areas (see Appendix 3).

Highland Council Assessment of Highland Special Landscape Areas

73. This document describes each of the Special Landscape Areas (SLAs). Key sections within the description of relevance to this assessment are the descriptions of special qualities which identify the qualities for which each area is designated; the 'overview' and the factors identified under the heading of 'sensitivity to change'.

Site and Context

74. As noted within the EIA Report Chapter 7 at 7.5.2.1:

"The Site is located approximately 8 km south west of John o' Groats and 16 km east of Thurso in the county of Caithness as shown on Figure 3.1. Land at the Site rises to an altitude of approximately 79 m Above Ordnance Datum (AOD) in the north east and slopes gradually down to approximately 37 m AOD in the north west and 42 m AOD in the south west. Land use at the Site is mainly commercial conifer plantation on heather and grass moorland with improved grassland in the south east. Phillips Mains Mire Site of Special Scientific Interest (SSSI) is in the north east of the Site.

A number of small watercourses and drainage ditches are present at the Site including Link Burn which drains the southern and eastern parts of the Site; Burn of Ormigill and Burn of Hollandmey which drain the central part and Burn of Horsegrow which drains the northern part of the Site.

There are uninhabited farm buildings in the north and south east of the Site and old shielings and sheepfolds at various locations. There are constructed tracks in the northern part of the Site and a single access track into the south-eastern part.

Lochend Windfarm comprising of four wind turbines each 91 m in height to blade tip is adjacent to the south-western part of the Site. The land adjacent to the south-western part of the Site includes improved grassland while to the north west moorland is the dominant land cover. The Site is partly fringed by agricultural land to the north and east although moorland and forestry are the dominant land cover forming part of a continuous tract of similar land cover that extends east to the coast between Duncansby Head and Freswick bay and south to Lyth and Keiss.

Settlement pattern comprises townships of scattered properties such as Inkstack and Barrock to the west and Gills to the northeast with linear townships such Scarfskerry, Mey and East Mey to the north. There are small groups of properties and farmsteads to the west of the Site at Syster, Lochend and Greenland; to the north at West Lodge and to the south east at Slickly. In addition, there are scattered individual properties."

75. As shown on Figure 7.5a, the Site lies almost entirely within LCT 134 Sweeping Moorland and Flows (CT3 Northeast Caithness in the OWESG), which is surrounded by farmland landscape types. On site, the transition between the farmed landscape types and the moorland can be seen to be more gradual and patchy than the boundaries of this unit of the LCT suggest, with pockets of farmland occurring around the periphery of this unit of LCT 134 and within it – for instance at Slickly and Brabster along the local road to the east of the Site.
76. The nearest National Park or National Scenic Area (NSA) is the North Hoy and West Mainland NSA, located approximately 25 km to the north as shown by Figure 7.6 in the EIA Report. The nearest locally designated landscapes are shown on Figure 7.6a to

this report and are Dunnet Head located approximately 6 km to the west, and Duncansby Head, located approximately 8 km to the east. The North Coast 500 route and 'end of the road' experiences of Duncansby head and Dunnet Head bring tourists to the coastal areas and the Castle of Mey is a nearby visitor attraction.

6. Landscape and Visual Effects

Introduction

77. This section sets out the effects that the proposed Development would have on landscape and visual receptors. Some receptors are only briefly discussed and for these receptors, effects “*have been judged unlikely to occur or so insignificant that it is not essential to consider them further*” (GLVIA3, para. 3.19).
78. Effects on landscape character and visual receptors are set out before those on designated areas as it is common for designations to encompass both character and visual considerations within their special qualities or purposes of designation.
79. As set out at paragraphs 35 to 42 above, effects during construction are not expected to be significant (in terms of landscape fabric) or would be similar to the effects arising during operation (for all other receptors) and are not considered in detail within this report. The smaller scale infrastructure of the proposed Development (tracks, energy storage, solar array and substation) are largely within forested areas and are not likely to be readily visible. Where they are seen, effects would always be subsidiary to those of the turbines. The met mast would also be seen with the turbines, though they are typically not readily visible beyond distances of 5 km and its effects would also be subsidiary to those arising from the turbines. The assessment provided below focusses on effects arising from the turbines during operation.

Geographic Distribution of Effects

Zone of Theoretical Visibility Studies

80. An updated Zone of Theoretical Visibility (ZTV) study (Figure 7.2) has been prepared to indicate the potential visibility of the proposed Development; inform viewpoint selection and site assessment work; and ensure that this assessment focusses on the most important / significant effects. This ZTV study replaces Figure 7.2 of the EIA Report, which provided a subset of information already available in Figure 7.1.
81. The revised ZTV study focusses on the approximately 20 km area within which all significant effects have been identified by either the EIA Report or THC. It includes modelling of woodland within the study area, including felling plans for the proposed Development and consented windfarms with 20 km.
82. Forestry cover is variable due to the cycle of felling and replanting and this can be observed within the study area. It is modelled at a height of 15 m, reflecting trees that are not fully mature (given Sitka spruce may grow to heights of up to 50 m). Thus, the ZTV study does not provide an exact indication of whether the proposed Development will or will not be visible from each location, but it provides a more realistic impression of the visibility pattern than a bare ground ZTV study.
83. As shown on Figure 7.2 (updated), visibility within 5 km of the turbines would be relatively widespread, with gaps in visibility or views of just blade tips beyond small hills near Greenland, Barrock and Alterwall to the south and west of the Site; and similarly limited visibility in some areas to the north and northeast as a result of localised screening by woodland and the gradual slope downwards towards the coast.
84. Between 5-10 km, visibility would be more patchy. To the northeast there would be limited visibility between Canisbay, John O’Groats and Duncasby Head where higher ground between Hill of Warse and Warth Hill reduce visibility beyond. There would be more open views across the moorlands to the southeast within up to 8 km, and as far

as Freswick and Tofts to the east and Lyth to the south. In this area Slickly and Stroupster windfarms would be seen more nearby than the proposed Development in views towards the Site. To the south and southwest there is a notable break in visibility along the south facing slopes and valley between Lyth and Bower and a broad band of visibility between 7-10 km from the north facing slopes of the valley. To the west, the gap in visibility continues towards the coast at Castletown and Dunnet Bay, patchy visibility would arise within the sparsely settled areas to the southeast and southwest of Castletown, and across the links as far as the dunes to the west of the A836. To the northwest, the undulating moorland of Dunnet Head would constrain visibility to south facing slopes and higher ground, with more limited visibility from lower lying settlements.

85. Between 10-15 km, visibility would reduce further, with the main areas of visibility located to the south of the site around Killimster and Reiss; to the west of the site from east-facing slopes beyond Castletown and extending west along the coast towards the edge of Thurso, and the southern half of Stroma to the northeast.
86. Between 15-20 km there would be visibility from east-facing slopes between Thurso and the turbines at Hill of Forss; along a broad band of settled north facing slopes beyond Loch Watten and the River Wick to the south, and from the airport and Noss Head to the north of Wick.
87. Figure 7.12 (Updated) shows a cumulative ZTV study with existing and consented developments. Within 20 km of the proposed Development, there are few areas without visibility of one or more windfarms or the single turbine at Taigh na Muir Dunnet, except where localised vegetation (not modelled in the ZTV study) provides screening. As a result, the proposed Development adds only very limited areas of new visibility.

Viewpoint Analysis

88. Viewpoint analysis has been undertaken from 29 viewpoints. These include the 23 viewpoints used within the EIA Report, with changes and additions as follows:
 - Representations to the application included comments regarding the locations of some viewpoints respective to the local communities that they represent. Viewpoints 8 (Barrock) and 11 (Lochend) have been moved closer to the Site within the settlements. Additional viewpoints have also been included to represent the nearby communities at Gills, Upper Gills, Canisbay, East Mey, Mey, Rattar, Skarfskerry, Dunnet and West Dunnet. A number of these are located quite close to each other and to other EIA viewpoints and some of the new locations (Viewpoints 27-29) are included as wirelines only for this reason.
 - The location of EIA Viewpoint 10 was also commented on by consultees as it is not located at the panoramic viewpoint (which is by the roadside and has no visibility), but also did not represent road users given its hilltop location. A new location which represents road users has been included within the updated visualisations.
89. Table 1 provides a summary of the scale and nature of the changes to views at each viewpoint, supporting descriptions are provided within Appendix 4.
90. Visualisations are provided as set out within the Cumulative LVIA Visualisations Cover Note and Appendix 3 to this report.

Table 1 – Viewpoint Analysis

Viewpoint	Dist./Dir.	Scale of Visual Effects
Viewpoint 1: North Hoy & West Mainland NSA	30.8 km, N	Negligible, Neutral
Viewpoint 2: Burwick, South Ronaldsay	19.4 km, NE	Negligible, Neutral
Viewpoint 3: Gills Bay Ferry	11.0 km, N	Small, Adverse
Viewpoint 4: Dunnet Head	10.2 km, NW	Small, Adverse
Viewpoint 5: Castle of Mey entrance	3.8 km, N	Medium/small, adverse, reducing to Small/negligible, Neutral once hedgerow is mature.
Viewpoint 6: Duncansby Head	10.4 km, W	Small, Adverse
Viewpoint 7: A836 West of Thurso	20.4 km, W	Negligible, Adverse
Viewpoint 8: Barrock (new location)	2.3 km, NW	Large, Adverse
Viewpoint 9: Brabster	1.5 km, E	Large, Adverse
Viewpoint 10: A99 at Warth Hill (new location)	6.5 km, E	Medium/small, Adverse
Viewpoint 11: Lochend (new location)	2.0km, W	Large/medium, Adverse
Viewpoint 12: Bower	7.8 km, SW	Small, Adverse
Viewpoint 13: Lyth	4.9 km, S	Medium, Adverse
Viewpoint 14: Keiss	8.6 km, SE	Negligible, Neutral
Viewpoint 15: Ben Dorrery	25.9 km, SW	Negligible, Neutral
Viewpoint 16: A9 Georgemas Junction	16.1 km, SW	Negligible, Neutral
Viewpoint 17: Watten	14.4 km, S	Negligible, Neutral
Viewpoint 18: Noss Head	16.1 km, SE	Negligible, Neutral
Viewpoint 19: A9 near Rangag	25.1 km, S	Negligible, Neutral
Viewpoint 20: Badlipster	19.4 km, S	Negligible, Neutral
Viewpoint 21: Thrumster	23.4 km, S	Negligible, Neutral
Viewpoint 22: A836 East of Castletown	8.3 km, W	Medium/small, Adverse
Viewpoint 23: Far North Railway Line	30.4 km, SW	Negligible, Neutral
Viewpoint 24: Upper Gills (new viewpoint)	2.7 km, NE	Large, Adverse
Viewpoint 25: Rattar (new viewpoint)	3.6 km, NW	Medium, Adverse
Viewpoint 26: Mey (new viewpoint)	2.8 km, N	Large/medium, Adverse
Viewpoint 27: West Dunnet (new viewpoint)	7.5 km, W	Medium/small, Adverse
Viewpoint 28: Canisbay (new viewpoint)	4.7 km, NE	Medium/small, Adverse
Viewpoint 29: East Mey (new viewpoint)	3.8 km, N	Medium, Adverse

Outcomes

91. Each of the viewpoints is a 'sample' of the potential effects, representing a range of visual receptors including people at the viewpoint and nearby, at a similar distance and/or direction. From the ZTV and viewpoint analysis it can be seen that changes to views would arise as follows:
- The extent of Large and Large/medium scale visual changes, where the proposed Development would form a major alteration to key elements, features, qualities and characteristics of the view such that the baseline will be fundamentally changed, would generally be limited to locations within 3 km of the turbines.
 - Beyond this area, Medium scale changes to views would arise within up to 5 km, generally reducing to Medium/small within approximately 8 km, though some receptors to the north within 5 km (Canisbay, Castle of Mey) would also experience Medium/small scale effects).
 - Small scale effects on views would extend to approximately 11 km.
 - Beyond 12 km, effects would typically be Negligible.
92. The ZTV and viewpoint analysis also inform the consideration of effects on character. Typically, the scale of change to character at a particular location will be slightly less than the changes to views, as character derives from a more holistic experience of the landscape, not just views. The degree to which a proposal changes character depends on a combination of:
- The degree to which it is 'in keeping' with the existing character;
 - proximity and visibility; and
 - the importance of views towards the site to the existing character.
93. These factors vary by character area and are considered below.

Effects on Landscape Character

94. Descriptions for each of the assessed character areas/types are provided below, based on review of the baseline documents discussed in Section 4 and site work.
95. Based on the geographic distribution of changes set out in paragraph 91 above and illustrated on Figures 7.2 (updated) and 7.5a, some of the character areas / types within the study area would experience negligible effects and do not require detailed assessment, as follows:
- LCT 144 Coastal Crofts and Small Farms / CT1 Keiss to Freswick Bay (6.4 km, E); LCT 134 Sweeping Moorland and Flows / CT6 Black Hill Mosses (6.9 km, S) and LCT 140 LCT 140 Sandy Beaches and Dunes (CT7 Keiss) - visibility is limited from these areas and views towards the Site include intervening windfarms at Stroupster and Slickly as shown by Figure 7.5a.
 - Character types located beyond LCT 143 Farmed Lowland Plain / CT9 North Caithness to the south and west of the Site given this LCT covers most of the study area within 15-20 km in this direction as shown by Figure 7.5 of the EIA Report.

LCT 134 Sweeping Moorland and Flows / CT3 Northeast Caithness

96. As shown on Figure 7.5a, this unit of the LCT includes the Site and extends up to 9 km to the east and southeast, including Slickly and Stroupster windfarms. The Site is located towards the northwest edge of the LCT unit, though some parts of the unit extend up to 5 km to the north and southwest. Lochend Windfarm is located within this unit of LCT to the west of the Site. As noted at paragraph 75 above, the character in this part of the LCT is transitional with pockets of farmland around the moorland and forestry which characterises the Site.
97. Key characteristics of the LCT are described within the National Landscape Character Assessment as:
- *“Gently sloping or undulating landform which lies generally below 350 metres.*
 - *Occasional isolated hills of limited height form local landmark features.*
 - *Lochs and mature, meandering rivers.*
 - *Very distinct flora, dominated by sphagnum mosses, produced by the wetness and infertility of the flows.*
 - *Areas of peat cuttings and haggling.*
 - *Pockets of improved grazing, mainly within the outer fringes of sweeping moorland.*
 - *Coniferous forest forming a dominant characteristic within some parts of this landscape character type.*
 - *Ribbons of broadleaf woodland occasionally run along the water courses and loch edges.*
 - *Very sparsely settled with dispersed crofts, farms and estate buildings largely found on the outer edges of this landscape or near a strath.*
 - *Vehicular tracks within parts of the landscape.*
 - *Wind farms, transmission lines, the A9 and a network of minor roads are key features within the more modified outer fringes within Caithness.*
 - *Long, low and largely uninterrupted skylines offering extensive views across this landscape and result in a feeling of huge space.*
 - *Consistent views to the distant Lone Mountains and Rugged Mountain Massif – Caithness & Sutherland.*
 - *Great sense of exposure on areas of flat peatland on upland plateau.*
 - *A strong sense of remoteness is associated within the largely uninhabited, inaccessible core flows and moorlands of this landscape.”*
98. The Site is located in a less remote unit of the LCT, with a closer association to the coastal landscapes to the north and west, stronger human influences and more limited and distant views to upland areas inland, otherwise it broadly reflects the above description.
99. As indicated by the sensitivity analysis provided within Appendix 5, this unit of the LCT is judged to be of Community value based on its lack of designated and limited valued landscape features and qualities except for a number of national ecological

designations. Susceptibility is judged to be High/medium, with the larger scale, gently undulating landform, simple landcover and openness indicating lower susceptibility, and the open views and function of the LCT unit as the inland skyline to coastal landscapes and views from the sea indicating higher susceptibility. High/medium susceptibility is considered to be equivalent to the rating of '2' indicated for susceptibility within the OWESG. Considering value and susceptibility together, this unit of the LCT is judged to be of Medium sensitivity.

100. The Site is adjacent to an existing windfarm, albeit one which is smaller in scale. Turbines would not be a new feature in the locality and the scale of change to character would be at most Large/medium scale for an area extending east, south and southwest to the local road and woodland up to 1.5 km from the turbines; and north and northwest as far as the local road between Barrock and Upper Gills. In this area the turbines would be the most dominant landscape characteristic, creating the sense of being at or very close to a windfarm. Beyond these areas there is either a reduction in visibility, the edge of the LCT unit, or the influence of existing and consented windfarms would reduce the degree of change experienced. The only other areas of non-negligible effects within this unit of the LCT would be Small scale effects in the areas beyond the woodland to the south and to the edge of the unit at Moss of Greenland; and beyond the local road to the north where the proposed Development would be closer than the existing and consented windfarms, resulting in an increased sense of proximity.
101. Considered together, these changes would be Large/medium scale across a Localised extent of this unit of the LCT and Small scale for a Localised extent of the unit resulting in a Medium magnitude of change. Taking into account the existing association between this LCT unit and windfarms, effects would be Moderate, Adverse and not significant.

LCT 144 Coastal Crofts and Small Farms / CTI Canisbay to John O'Groats

102. As shown by Figure 7.5a, this unit of the LCT runs along the coast between East Mey and John O'Groats. At its closest point near Upper Gills, it lies 1.9 km to the northeast of the proposed turbines.
103. Key characteristics relevant to this part of the LCT are identified in the National Landscape Character Assessment as:
- *"Narrow, settled and farmed coastal fringe with subtle variations in topography, from long stretches of strongly contained coastal shelves and raised beaches, to smaller pockets at river mouths and squeezed between dunes and areas of Cnocan – Caithness & Sutherland.*
 - *Pastures and occasional arable fields, most often divided by post and wire fences, with the division of fields marked by crop colour and texture rather than boundaries.*
 - *Little woodland within the more exposed east and north Caithness coasts.*
 - *Small, hunkered-down croft houses and outbuildings loosely clustered or sometimes aligned in a linear fashion on the top of terraces or ridges above the coast or a river floodplain.*
 - *A number of settlements, often located at bridging points and at the junction with the straths, many with harbours particularly on the east coast of Sutherland and Caithness.*

- *A number of historic sites including churches, castles, mills and cemeteries.*
 - *Highly visible landscape, seen from major roads.*
 - *Complex visual composition of views tending to focus on the detail of houses, field patterns and crops, yet with the wider context of backdrop hills and sea adding diversity.”*
104. As set out within the analysis in Appendix 5, this unit of the LCT is judged to be of Regional/Community value, taking account of the coastal views, cultural associations, distinctive character and recreational use associated with the North Coast 500 route increasing value. Susceptibility is judged to be High/medium – slightly lower than the rating of ‘1’ indicated within the OWESG – with the openness, simple landcover and gentle landform indicating lower susceptibility, whilst other factors indicate higher susceptibility. Considering value and susceptibility together, sensitivity is judged to be Medium.
105. Effects on this unit of the LCT would consist of changes to views as a result of views inland towards the turbines – mainly from the inland parts of the unit between Mey Hill and Hill of Warse, encompassing areas of settlement at East Mey, Gills and Upper Gills as illustrated by Figure 7.5a. Changes to views in this area would be Large scale in the closest areas reducing to Medium scale with distance, with views of the turbines typically partly screened by terrain, but characterised by marked scale contrasts with foreground features in areas where existing and consented windfarms are largely screened, as illustrated by Viewpoint 24 at Upper Gills. In this area there would be Large/medium scale changes to character within an Intermediate extent of the LCT unit. With increasing distance, visibility would be more limited and there is greater visibility of Slickly and Stroupster windfarms as illustrated by Viewpoint 28 at Canisbay. Changes to views in this area would be small scale and the change to character would be Negligible across an Intermediate extent of this unit of the LCT. Taking both areas of effects into account, the magnitude of change would be Large/medium and effects would be Major/moderate, Adverse and significant.

LCT 140 Sandy Beaches and Dunes / CT7 Dunnet Bay

106. As shown by Figure 7.5a, this unit of the LCT forms the beach and extends slightly inland from Dunnet Bay and is located 5.4 km to the west.
107. This unit is part of a frequently occurring landscape character type around the coast within 20 km of the Site. Key characteristics relevant to this part of the LCT are identified in the National Landscape Character Assessment as:
- *“Near continuous stretch of sandy beach between the Dornoch Firth and Brora.*
 - *Low shingle ridges backing many of these sandy beaches and forming the base for dune systems.*
 - *Long gently curved sandy arcs of Dunnet Bay in Caithness.*
 - *Focus for recreation with camp sites, caravan parks and car parks located close to more accessible areas of coast with golf courses present where links and machair areas are more extensive.*
 - *Many small crofting communities located on the fringes of beaches, particularly in north and west Sutherland.*

- *Castles with historic gardens and designed landscapes, as well as prehistoric brochs and cists, cairns, and hut circles.*
 - *Strong sense of space, light and exposure, and extensive visibility on the larger and more open stretches of sandy beach.*
 - *Contained smaller beaches on the north coast with views focused along the beach to rocky headlands and out to sea to near shore islands.*
 - *Strong contrast of the white/pale pink sands of the beaches in the north-west with surrounding darker cliffs and moorland.*
 - *Wildness character to of all these seascapes, more intensely experienced on the more remote beaches along the north and west coasts of Sutherland.”*
108. As set out within the analysis in Appendix 5, this unit of the LCT is judged to be of Regional/Community value, taking account of the coastal views, cultural and natural heritage, recreational importance and perceptual qualities increasing value. Susceptibility is judged to be High/medium – slightly lower than the rating of ‘1’ indicated within the OWESG – with the openness, simple landcover and focus of the views out to sea rather than inland indicating lower susceptibility, whilst other factors indicate higher susceptibility. Considering value and susceptibility together, sensitivity is judged to be High/medium.
109. Effects on this unit of the LCT would consist of changes to views as a result of views inland towards the turbines from the inland parts of the unit behind the dunes. Woodland and the dunes would screen visibility from the beach and northern part of the LCT as illustrated by Figure 7.5a. Changes to views would be Medium/small scale as illustrated by nearby Viewpoint 22 on the A836 near Castletown and Viewpoint 27 at West Dunnet. Existing and consented windfarms have variable visibility in this area and changes to character would be Small scale for an Intermediate inland extent of this unit of the LCT along the A836 corridor. The magnitude of change would be Small and effects would be Moderate, Adverse and not significant.

Other Landscape Character Types

110. Effects on the following character types are assessed to be of lesser importance (Moderate/minor or lower) and are described in full within Appendix 7 and summarised below:
- *LCT 134 Sweeping Moorland and Flows / CT5 Dunnet Interior (7.5 km, NW)* – This unit is of the same character type as the host LCT and is a small outlier of the character type on the peninsula of Dunnet Head. The LCT unit forms part of the Dunnet Head SLA and is judged to be of High/Medium sensitivity. Effects would consist of changes to views where the proposed Development would be seen in association with existing and consented windfarms. Changes to character would be of Negligible magnitude and effects would be Minimal, Neutral and not significant.
 - *LCT 143 Farmed Lowland Plain / CT9 North Caithness (0.6 km, N and 1.2 km W)* – This extensive LCT wraps around the host moorland character type to the north, west and south. It is a relatively open, settled and farmed landscape with a gently undulating landform and is judged to be of Medium/low sensitivity. Changes to character would arise within up to 8 km to the north and west of the proposed

turbines – a relatively small part of this large LCT - as a result of views towards the windfarm, with effects moderated by the intervening presence of Lochend Windfarm to the west and more limited visibility from the north. The magnitude of change would be Small and effects would be Moderate/minor, Adverse and not significant.

- *LCT 144 Coastal Crofts and Small Farms / CT1 Dunnet to Brough (6.1 km, NW)* – This small LCT unit is of the same character type as that described at paragraphs 96-101 above and is likewise judged to be of Medium sensitivity. Effects would consist of widespread but relatively distant views of the turbines from areas where existing windfarms have limited visibility. The magnitude of change would be Small and effects would be Moderate/minor, Adverse and not significant.
- *LCT 141 High Cliffs and Sheltered Bays / CT8 Dunnet Head (8.6 km, NE) and Duncansby Head (8.6 km, NW)* – The two units of this LCT wrap around coastal headlands. They are sparsely settled landscapes with a gently undulating inland area hosting light houses and other infrastructure including visitor car parks, and a dramatic coastline of cliffs and small bays. Sensitivity is judged to be High/medium. Effects on the LCT would consist distant visibility of the turbines alongside existing and consented windfarms. For each unit of the LCT there would be a Negligible magnitude of change. Effects would be Minimal, Neutral and not significant.

Visual Effects

111. Three types of visual receptors are considered within this assessment:

- Groups – Based around settlements, beaches or rural areas and representing effects on the community within public spaces including streets and local recreational routes in that place. Views from groups of homes may also be noted in the descriptions, but effects on homes are considered separately within the Appendix 7.2 Residential Visual Amenity where relevant.
- Routes – Users of longer distance transport and recreational routes through the study area.
- Specific viewpoints – Visitors to locations which are recognised and valued for the views available.

112. Based on the geographic distribution set out in Table 1 and paragraph 91, some visual receptors within the study area as shown on Figure 7.2 (updated) would experience negligible effects and do not require detailed assessment, as follows:

- *Visual receptors beyond approximately 12 km.*
- *People visiting beaches and bays around the coast except the areas between Castletown and Murkle Bay; and between Gills Bay and Huna.* From other parts of the coast within 12 km, dunes and/or cliffs limit views towards the Site.
- *Coastal settlements between Killimster and Auckengill (7-11 km, SE)* – Figure 7.2 illustrates that visibility from this area of coastal settlement is limited and viewpoint

14 at Keiss shows that where there is visibility, the turbines would be seen as distant blades seen beyond those at Stroupster and/or Slickly windfarms, giving rise to negligible changes to views.

- *Warth Hill panoramic viewpoint* – This roadside panoramic viewpoint is marked by a layby and interpretation board relating to the first open views of the Orkney Islands for road users heading north on the A99. The proposed Development would be screened by Warth Hill and not visible from this location.
- *Core Paths at Dunnet Bay, Stroma and Nybster*- As illustrated by Figure 7.7 of the EIA Report, most of the Core Paths within 12 km are short routes closely associated with settlements; with specific viewpoints at Duncansby Head and Dunnet Head, or with Murkle Bay and effects on those are considered within the assessment of those receptors. The exceptions to this are:
 - Route CA 05.05 along the beach at Dunnet Bay and the nearby network of routes within Dunnet Forest: The only visibility from these routes, as shown by Figure 7.2, would be a brief glimpse of part of some of the turbines when leaving the car park at the southern edge of Dunnet Bay, beyond which the turbines would be screened by the dunes and woodland.
 - Route CA 08.07 which runs from Nybster to Stroupspter windfarm: As shown by Figure 7.2, once west of Crow Hillock, there would be open views of the proposed Development seen through nearby turbines at Stroupster and Slickly.
 - Route CA 07.05 across Stroma, to which there is no readily available access given the island is uninhabited and has no public ferry routes.

Settlements

113. *Lochend (2 km, W)* - As shown by Figure 7.2 (updated), this small settlement of a few homes and farms is located 1.3 km southwest of the existing turbines at Lochend Windfarm Wind Farm. The local residents and visitors would have a High susceptibility to changes to views, and views from this area are judged to be of Community value. Considering these two factors together, sensitivity is judged to be High/medium.
114. Views from the settlement would be similar to those shown from Viewpoint 11 where, as a function of perspective, the proposed Development would be seen beyond Lochend Windfarm but would appear to be of a similar scale, such that changes to views would consist of an increase in the number of turbines seen and the width of the views they occupy, rather than turbines appearing larger or closer. Changes to views would be Large/medium scale for a Wide extent of the settlement and would give rise to a Large/medium magnitude of change. Effects would be Major/moderate, Adverse and significant.
115. *Barrock and Inkstack (2.2 km, NW)* - As shown by Figure 7.2 (updated), these two dispersed settlements are located just over 2 km to the northwest of the nearest proposed turbine locations with homes and the small grid of local roads situated on the summit and east facing slopes of a small hill. The local residents and visitors would have a High susceptibility to changes to views, and views from this area are judged to

- be of Community value. Considering these two factors together, sensitivity is judged to be High/medium.
116. The most open views of the proposed Development would be from the eastern edge of the settlement where views from the road and homes look out over lower lying areas across fields and moorland towards forestry as illustrated by Viewpoint 8. Views from other parts of the settlement are slightly more restricted by intervening buildings, garden plants and forestry at Lucifer Moss as illustrated by Figure 7.2 (updated). Changes to views for residents and visitors would be Large scale for a Wide extent of the settlements and would give rise to a Large magnitude of change. Effects would be Major/moderate, Adverse and significant.
117. *Scarfskerry and Rattar (2.5 km, N)* - Scarfskerry and Rattar are located to the north of the A836, dispersed along local roads between the A836 and the coast. The local residents and visitors would have a High susceptibility to changes to views, and views from this area are judged to be of Community value. Considering these two factors together, sensitivity is judged to be High/medium.
118. As illustrated by Figure 7.2 (updated), visibility of the proposed Development would be relatively widespread but also fragmented by the buildings and vegetation within the settlements, particularly from the northern parts of Rattar. Where more open views are available, the proposed Development would be seen alongside Lochend windfarm as illustrated by Viewpoint 25. Changes to views would be Medium and Medium/small scale (with increased distance) for a Wide extent of the settlements. The magnitude of change would be Medium and effects would be Major/moderate, Adverse and significant.
119. *Gills and Upper Gills (2.6 km, NE)* - As shown by Figure 7.2 (updated), these two settlements are located between the forestry and the coast, just over 2.5 km to the northeast of the nearest proposed turbine locations. Gills is the more distant of the two settlements and is aligned along the A836, Upper Gills is dispersed around a small gird of local roads. Both are situated within farmland which gently slopes towards the sea with limited vegetation except for around some of the homes. The local residents and visitors would have a High susceptibility to changes to views, and views from this area are judged to be of Community value. Considering these two factors together, sensitivity is judged to be High/medium.
120. As shown by Figure 7.2 (updated) and Viewpoint 24, views in the direction of the Site are foreshortened by the gently rising ground and forestry beyond, with more open views away from the Site towards the coast. Visibility of the turbines would be affected by localised screening and typically views would be similar to those shown from Viewpoint 24, with the lower parts of towers screened by landform and forestry and some of the turbines seen above the nearby buildings and forestry. The closest area of forestry to these settlements would be felled and would not be replanted, instead being replaced by peatland habitat as set out by Technical Appendix 8.6: Draft Habitat Management Plan, of the EIA Report. As a result of the felling the two nearest turbines would appear to sit against the new forest edge in views from this group although the turbine bases and associated infrastructure would remain screened by landform.
121. Scale contrasts would arise as a result of the foreshortened views and juxtaposition of the turbine rotors with the small scale buildings and field pattern. Changes to views for residents and visitors would be Large and Large/medium scale (with distance) for a Wide extent of the settlements and would give rise to a Large/medium magnitude of change. Effects would be Major/moderate, Adverse and significant.

122. *Mey (2.7 km, N)* – This small linear settlement is located along the A836. Buildings and vegetation largely screen southward views, but in places, such as near Viewpoint 26 there are more open views in which Lochend Windfarm can be seen. The local residents and visitors would have a High susceptibility to changes to views, and views from this area are judged to be of Community value. Considering these two factors together, sensitivity is judged to be High/medium.
123. As shown by Figure 7.2 (updated) and Viewpoint 26, visibility would be partly screened by woodland such that some turbines would be seen as blade tips and those closer to Lochend Windfarm would be seen more openly, presenting scale contrasts with the smaller scale local features and the turbines at Lochend Windfarm. Changes to views would be Large/medium scale for an Intermediate extent of this settlement. The magnitude of change would be Medium and effects would be Major/Moderate, Adverse and significant.
124. *East Mey (3.6 km, N)* – This small linear settlement is located along the A836 and local roads to the north. Homes are sparsely placed and there is limited vegetation. The local residents and visitors would have a High susceptibility to changes to views, and views from this area are judged to be of Community value. Considering these two factors together, sensitivity is judged to be High/medium.
The terrain slopes gently towards the coast in the northern part of the settlement, directing views out to sea and screening visibility towards the proposed Development, as illustrated by Figure 7.2 (updated). From the southern part of the settlement along the A836 the land slopes gently southwards, and the turbines would be seen openly along the skyline between the existing and consented windfarms, but noticeably larger and closer as illustrated by Viewpoint 29. Changes to views would be Medium scale for an Intermediate extent of the settlement. The magnitude of change would be Medium/small and effects would be Moderate, Adverse and not significant.
125. *Greenland, Bowermadden and Tain (4 km, SW)* – This area of widely dispersed settlement is located to the southeast of Castletown. The local residents and visitors would have a High susceptibility to changes to views, and views from this area are judged to be of Community value. Considering these two factors together, sensitivity is judged to be High/medium.
126. As shown by Figure 7.2 (updated), visibility from the nearest part of these settlements at Greenland would be restricted to blade tips by the small hill to the south of Loch Heilen. Elsewhere views are more open and the turbines would be seen beyond Lochend windfarm and forming a cluster of similar scale and appearance, but slightly closer than the windfarms at Slickly and Stroupster. Changes to views would be Medium/small scale, similar to nearby Viewpoint 22, for a Wide extent of this settled area. The magnitude of change would be Medium/small and effects would be Moderate, Adverse and not significant.
127. *Canisbay and Huna (4.7 km, NE)* - Canisbay, Huna and nearby settlements consist of a small, nucleated settlement at Canisbay and more dispersed settlement along the A836 and local roads. Within Canisbay, views out of the settlement are mostly screened by nearby houses and garden plants. The more dispersed parts of these settlements have more open views. The local residents and visitors would have a High susceptibility to changes to views, and views from this area are judged to be of Community value. Considering these two factors together, sensitivity is judged to be High/medium.

128. Viewpoint 28 and Figure 7.2 (updated) indicate that visibility of the proposed Development would typically be of blade tips seen over the skyline formed by Hill of Warse, with some areas of greater visibility where up to 4 turbines may be visible from below hub height. Within the denser areas of settlement, buildings and nearby vegetation would provide localised screening. As illustrated by Viewpoint 28, changes to views would be Medium/small and Small scale (with increased distance and in areas of more limited visibility) for a Wide extent of the settlement. The magnitude of change would be Medium/small and effects would be Moderate, adverse and not significant.
129. *Dunnet and West Dunnet (6.2 km, NW)* - Dunnet and West Dunnet are located to the north of Dunnet Bay, Dunnet is situated on the A836 in a lower lying area between St John's Loch and the bay; West Dunnet is slightly more elevated on an east facing slope as the landform ascends to the moorland to the northwest. The local residents and visitors would have a High susceptibility to changes to views, and views from this area are judged to be of Regional value taking the inclusion of the settlements within an SLA into account. Considering these two factors together, sensitivity is judged to be High/medium.
130. As illustrated by Figure 7.2 (updated), visibility of the proposed Development would be limited from Dunnet, with visibility towards the Site screened by Couper Hill. Moving further west and onto more elevated ground, eastwards views open up and the proposed Development would be seen as blades above Couper Hill as illustrated by viewpoint 27. There is little or no visibility of existing and consented windfarms in this area and the scale of change would be Medium/small for an Intermediate extent of these settlements. The magnitude of change would be Medium/small and effects would be Moderate, Adverse and not significant.
131. *Brough (6.5 km, NW)* - Brough is located to the north of Dunnet and St Johns Loch on largely level ground around Brough slipway. The local residents and visitors would have a High susceptibility to changes to views, and views from this area are judged to be of Community value. Considering these two factors together, sensitivity is judged to be High/medium.
132. As illustrated by Figure 7.2 (updated), visibility of the proposed Development would be relatively widespread, though fragmented by nearby buildings and vegetation within the settlement. Views of the proposed Development would be from a similar distance and direction to those considered above, but without the screening provided by Couper Hill. The proposed Development would be seen alongside Lochend Windfarm and the more nearby single turbine at Taigh na Muir Dunnet and the scale of change to views would be Medium/small for a Wide extent of the settlement. The magnitude of change would be Medium/small and effects would be Moderate, Adverse and not significant.

Recreational Receptors

133. *Castle of Mey GDL (3.5 km, N)* - The Castle of Mey Garden and Designed Landscape is designated for its heritage value, and effects on the heritage related aspects of the designation are considered in Chapter 11 of the EIA Report and subsequent related submissions. It is also a visitor destination and visual effects on visitors seeking to appreciate the castle and gardens are considered here. The designation indicates that the castle gardens are of National value, and visitors would have high expectations of scenic views within the formal and walled gardens particularly, but also within the parkland. Susceptibility to changes to views is judged to be High, and sensitivity also to be High.

134. As indicated by Figure 7.6a and Viewpoint 5 from the castle entrance, visibility would be limited to views from the driveway on exiting the castle grounds, where the proposed Development would be seen above woodland, and an aligned view southwards from the castle entrance, shown by viewpoint 5. There would be no visibility from the formal and walled gardens. Changes to views would be Medium/small scale until the proposed hedge matures (a medium-term duration of around 10-15 years), reducing thereafter to Small/negligible. Although a very limited part of the castle grounds, the view south across the parkland is important and is likely to be experienced by all visitors; and the extent of effects is judged to be Intermediate. The magnitude of change would be Small until planting matures, reducing to Negligible thereafter. Effects would be Moderate and Adverse before planting matures and Negligible and Neutral after.
135. *Beaches between Kirkstyle and Huna (4.5 km, NE)* - Visitors to the beaches in this area would have a High susceptibility to changes to views and the views in this location would be of Community value. Taking these together, sensitivity is judged to be High/medium. There are few access points to the rocky beaches along this stretch of coast.
136. As illustrated by Figure 7.2 (updated), there would be visibility of the proposed Development from these beaches where it would be seen looking southwest along the coast and slightly inland. Views would be similar to those from viewpoint 3b but more foreshortened with Slickly and Stroupster wind farms typically screened by the line of hills between Hill of Warse and Warth Hill, and the lower parts of the towers of the proposed Development would be screened by terrain and forestry. Changes to views in this area would range from Medium/small to Small scale with increased distance and would affect a Wide extent of the receptor group. The magnitude of change would be Medium/small and effects would be Moderate, Adverse and not significant.
137. *Dunnet Head (10 km, NW)* - Visitors to this location come to see the lighthouse, visit the most northerly point of the mainland and enjoy the views from the panoramic viewpoint and nearby. The views are judged to be of Regional/national value give the inclusion of this area within an SLA, and the location. Visitors to the panoramic viewpoint would have a High susceptibility and High sensitivity.
138. As shown by Figure 7.2 (updated), views towards the Site from the area around the carpark and lighthouse are screened by terrain and only open up from more elevated areas to the south and east, including the panoramic viewpoint. Following the path up to the viewpoint, visitors arrive with their views oriented towards the Site, but once there, the viewpoint offers 360 degree views with interpretation marking features of interest in all directions. The view east towards the Site includes the coastal farmland and existing turbines with views out to sea, across moorland and inland to mountains seen in other directions.
139. As illustrated by Viewpoint 4, the proposed Development would be seen in a part of the view which already includes a number of windfarm developments and smaller single turbines. The turbines would be the same apparent scale as that at Taigh na Muir Dunnet, and larger than the windfarms seen beyond. Effects would be Small scale, and taking account of visibility from the panoramic viewpoint, and screening from other nearby areas would affect an Intermediate extent of the views experienced from this visitor location. The magnitude of change would be Small, and effects would be Moderate, Adverse and not significant.

140. *Duncansby Head (10 km, NE)* - Visitors to this location come to see the lighthouse, visit the end or start point of the longest journey across the UK mainland and enjoy the views from the panoramic viewpoint and the Core Path southwards past the Stacks of Duncansby. The views are judged to be of Regional/national value given the inclusion of this area within an SLA, and the location. Visitors to the panoramic viewpoint would have a High susceptibility and High sensitivity.
141. As shown by Figure 7.2 (updated), views towards the Site are most open from the area around the panoramic viewpoint, with more limited visibility from the Core Path heading south. Key views from the Core Path focus south and eastwards along the coast and towards the stacks. Views from the panoramic viewpoint are available in all directions.
142. As illustrated by Viewpoint 6, the proposed Development would be seen looking over the coastal farmland to the west, in front of Lochend windfarm and to the right of the blades of Slickly and Stroupster windfarms. Effects would be Small scale, and taking account of visibility from the panoramic viewpoint, and screening from much of the Core Path would affect an Intermediate extent of the views experienced from this visitor location. The magnitude of change would be Small, and effects would be Moderate, Adverse and not significant.

Routes

143. *A836 (2.7 km, N)* - The A836 runs east-west along the north coast between Tongue and John O' Groats. Road users include people travelling within and beyond the local area who would have a Medium susceptibility to changes to views from this main road route (users of this route as part of the North Coast 500 are considered specifically below). The route within 12km of the turbines between John O'Groats and Murkle (where non-negligible changes to views may be experienced as set out at paragraph 91 above) passes through the Dunnet Head SLA to the northeast of Castletown, but otherwise does not pass through any designated areas and views are judged to be of Community value. Considering value and susceptibility together, sensitivity is judged to be Medium.
144. For eastbound route users, there would be occasional distant views of the proposed Development from the route west of Thurso as illustrated by Viewpoint 7 where the turbines would be seen amongst others at a range of distances and the scale of change would be Negligible. Between Thurso and Castletown there would be two short stretches of visibility, with the changes to views increasing to Small scale in the closer views as the route approaches Castletown. Views open up again as the A836 leaves Castletown, and Viewpoint 22 (where changes to views would be Medium/small) represents views from the short section of visibility within the SLA between Castletown and the small parking area approximately 2 km northeast of Castletown. Beyond this, visibility would reduce and the next views would be as the route approaches Corsback, where changes to views would also be Medium/small scale, and more continuous visibility between Rattar and Mey where turbines would be seen to the right of the road alongside Lochend windfarm as illustrated by Viewpoints 25 and 26. Between Mey and East Mey, there would be a break in visibility until the route turns southeast at East Mey and the proposed Development would be visible to the right of the route and seen alongside existing and consented turbines as illustrated by Viewpoint 29 where changes to views would be Medium scale. Continuing towards Gills, visibility would reduce and the proposed Development would pass behind the direction of travel.
145. For westbound route users, the first views of the proposed Development would be as blade tips from John O'Groats, with visibility increasing as the route continues through

- Huna and Gills. Viewpoint 28 at Canisbay represents views in this section, where changes to views would be Medium/small scale. Passing through East Mey and Mey and on to Rattar, the proposed Development would be seen to the left of the route and effects would be as described above for eastbound route users. Once beyond Rattar the turbines would be behind the direction of travel.
146. In summary there would be changes to views ranging between Medium/small and Large/medium scale from parts of the route between Castletown and East Mey for eastbound route users, affecting an Intermediate extent of the route. For westbound route users changes to views would range between Medium/small and Large/medium scale from parts of the route between Huna and Rattar, also affecting an Intermediate extent of the route. Considering these changes to views together, the magnitude of change would be Medium and effects would be Moderate, adverse and not significant.
 147. *Local road users within 5km (0.9km, E)* - This receptor group encompasses local road users outside of settlements, including travellers on the minor road between Greenland and Lyth, the minor road to the east of the Site between Lyth and Upper Gills, and the minor road between Greenland, Upper Gills and Tofts. Users of these routes would mostly be local residents and would have a Medium susceptibility to changes to views from these routes and views from these roads do not have scenic value and are judged to be of Community value. Considering susceptibility and value together, sensitivity is judged to be Medium.
 148. As shown by Figure 7.2 (updated), visibility from these routes would be widespread with only occasional breaks due to screening by localised terrain or woodland. The greatest effects would arise on the two local roads closest to the site, between Inkstack and Upper Gills and Upper Gills and Lyth, as represented by Viewpoints 8, 9 and 24; frequent, close views of the turbines from these routes would give rise to Large scale effects. Road users travelling between Greenland and Lyth would experience Medium scale changes to views as a result of seeing turbines to one side of the road for approximately 4 km northwest of Lyth.
 149. These routes also offer similar close views of existing and consented windfarms and the scale of change would be Large and Medium scale for a Wide extent of this local road network. The magnitude of change would be Large/medium and effects would be Major/moderate, adverse and significant.
 150. *North Coast 500 (2.7 km, N)* - The North Coast 500 follows the A836 and A99 within 12 km of the proposed turbine locations. Tourists following the route will enjoy the views as they travel, but will also be focussed on driving and reaching destination points along their route. They are judged to have a High/medium susceptibility to changes to views which are of Community value with only a short stretch of the route near Dunnet Bay within a designated landscape. Sensitivity is judged to be Medium.
 151. Effects will be as described for the A836 (above) and A99 (in Appendix 7) and illustrated by Viewpoints 7, 22, 25, 26, 29, 10 and 14. The scale of change to views would be Large/medium near Mey, reducing to Medium and Medium/small scale for stretches of the route between Castletown and Huna, and to the south of Warth Hill. Small scale changes to views would also arise near John O'Groats, from Freswick and Tofts and from areas of visibility near Thurso.
 152. Considered in the context of a 516 mile (830 km route), these changes would affect a Localised extent and the magnitude of change would be Medium. Effects would be Moderate, Adverse and not significant.

153. *Gills Bay to St Margarets Hope ferry (3.5 km, NE)* – Ferry users on this route between the north coast and Orkney would include local residents and tourists who, in good weather conditions, would be enjoying the views on this short crossing which takes just over an hour. They would have a High susceptibility to changes to views which are of Community value and High/medium sensitivity. The ferry occasionally deviates from the route marked on maps, as illustrated by the location of Viewpoint 3a on Figure 7.2.
154. As illustrated by Viewpoints 3a (wireline in the EIA Report) and 3b, the turbines would be seen above the mainland skyline to the south, separated from and notably larger than those at Stroupster and Slickly and overlapping with the turbines at Lochend windfarm. As illustrated by Figure 7.2 (updated), visibility of the turbines would reduce closer to Gills Bay as a result of screening by landform. The scale of change to views within 4-6 km (a Localised extent of the route) would be Medium, reducing to Medium/small and then Small to approximately 12 km (an Intermediate extent of the route), beyond which effects would be Negligible as illustrated by Viewpoint 2.
155. Considering these changes to views from the route and the near continuous views of the proposed Development, the magnitude of change would be Medium and effects would be Major/moderate, Adverse and significant.
156. *National Cycle Network (NCN) Route 1 (1.8 km, N)* - NCN Route 1 runs from Dover to John O' Groats. Within 12 km of the Site as illustrated by Figure 7.2 (updated), it runs northeast into and around Castletown, and then follows local roads between Castletown, Greenland, Barrock, Upper Gills, Canisbay, Huna and John O'Groats. Whilst long distance cyclists will be in part enjoying the views along their journey, they also need to focus on the road and views in this section of the route are not identified as being of scenic value. Susceptibility is judged to be Medium; the views are of Community value and Sensitivity is judged to be Medium.
157. The route follows roads and passes through settlements considered within assessments provided above and in Appendix 7. Changes to views will be Large scale between Upper Gills and Barrock as represented by Viewpoint 22, reducing to Medium/small and Small scale for southbound cyclists between John O'Groats and Canisbay as represented by Viewpoint 24, and Medium/small to Small scale for northbound cyclists between the area southwest of Castletown and Greenland as illustrated by Viewpoint 22. In the context of a national route passing through widely varied landscapes and contexts, albeit in a location close to one of the ends of the route, this represents a change to views for a very Limited extent of the route. The magnitude of change would be Medium and effects would be Moderate, adverse and not significant.

Other Visual Receptors

158. Effects on the following visual receptors are assessed to be of lesser importance (Moderate/minor or lower) and are described in full within Appendix 7 and summarised below:
- *Lyth and Howe (4.8 km, S)* – Views of the proposed Development from these linear settlements to the south would consist of occasional views through gaps in roadside hedges where the turbines would be seen set in moorland and forestry beyond the nearby farmland and seen in the context of more nearby turbines at Slickly, creating a group with the turbines at Lochend windfarm. Visual receptors here would be of High/medium sensitivity and the magnitude of change would be Small. Effects would be Moderate/minor, Adverse and not significant.

- Freswick, Tofts and Skirza (6.5 km, E)* - Freswick and Tofts are located along the A99 with Skirza further to the east near Freswick Bay. Views of the proposed Development from the more elevated locations towards the north of Tofts and west of Skirza would be being similar to, but less elevated than, those shown for Viewpoint 10. Further south, the turbines would be seen more immediately to the right of the closer turbines at Stroupster. The magnitude of change would be Small and effects would be Moderate/minor, Adverse and not significant.
- John O'Groats (7 km, NE)* - John O'Groats is a small settlement near Duncansby Head. As illustrated by Figure 7.2 (updated) typically only blade tips of the proposed Development would be seen from the settlement, with some areas of greater visibility where up to two turbines may be visible from below hub height, seen through gaps between the hills forming the skyline. Visual receptors here would be of High/medium sensitivity and the magnitude of change would be Small/negligible. Effects would be Minor, Adverse and not significant.
- Bower (7.2 km, SW)* - Views of the proposed Development from this settlement set on the south side of a shallow valley would be fairly widespread and the turbines would be seen set in moorland and forestry beyond undulating farmland. The turbines would form a group with Lochend windfarm, creating a separate cluster of similar scale and appearance to the turbines at Slickly and Stroupster. Visual receptors here would be of High/medium sensitivity and the magnitude of change would be Small. Effects would be Moderate/minor, Adverse and not significant.
- Castletown (8.5 km, W)* - Castletown is located on the A836 to the south of Dunnet Bay. As illustrated by Figure 7.2 (updated), views of the proposed Development would be largely screened by surrounding woodland and buildings. Very limited areas of visibility would arise from a short stretch of Harbour Road; nearby on Castle Hill; from the Battery Walk path along coastline to the west of the town and from the south end of Harland Road, where the composition of the turbines would be very similar to those illustrated for nearby Viewpoint 22. Visual receptors here would be of High/medium sensitivity and the magnitude of change would be Small/negligible. Effects would be Minor, Adverse and not significant.
- Beaches between Murkle Bay and Castletown (8.5 km, W)* - Visitors to the sandy beach at Murkle Bay and the rocky beaches between Castletown and Murkle Bay would have a High/medium sensitivity. There would be visibility of the proposed Development from these beaches where it would be seen looking east along the coast, with the most open views being from Murkle Bay and the Core Paths towards West Murkle. The magnitude of change would be Small and effects would be Moderate/minor, Adverse and not significant.
- A99 (6.5 km, E)* - Effects for southbound route users would consist of views of blades from John O'Groats and the route as it leaves the settlement, followed by more open views of the turbines alongside the closer windfarms at Stroupster and Slickly as the road descends Warth Hill and passes through Tofts and Freswick. Northbound roads users would have more limited visibility, with the main changes

to views arising as the road passes through Freswick and Tofts. Receptors are judged to be of Medium sensitivity, the magnitude of change would be Small and effects would be Moderate/minor, Adverse and not significant.

- *Local road users between 5-12 km* - This receptor group encompasses local road users on the B876; B855 and the local road network southwest and west of Castletown who are judged to have a Medium sensitivity. The main changes to views would be for users of the B855 heading inland from Dunnet Head and there would be changes to more distant views from the B876 near Bower and the local road network west and southwest of Castletown. The magnitude of change would be Small and effects would be Moderate/minor, Adverse and not significant.
- *John O'Groats to Burwick, South Ronaldsay ferry (8 km, NE)* - Ferry users on this route between the north coast and Orkney would have High/medium sensitivity. As illustrated by Figure 7.2 (updated), visibility of the turbines would reduce closer to John O'Groats as a result of screening by landform, but from the rest of the route there would be open views of the proposed Development on the mainland skyline. Small scale changes to views within 8-12 km would result in a Small magnitude of change and effects would be Moderate/minor, Adverse and not significant.

Designated Areas

159. As illustrated by Figure 7.6 of the EIA Report, only two designated areas lie within 12 km of the proposed Development where there are likely to be greater than Negligible scale changes to views as described at paragraph 91 above. Designations beyond 12 km would receive negligible effects and are not considered further. The two designated landscapes within 12 km are shown on Figure 7.6a and effects on these are assessed below.

Dunnet Head SLA (5.8 km, W)

160. This SLA includes the cliffs, lighthouse and panoramic viewpoint at Dunnet Head, and extends out to sea and slightly inland across the moorland and southwards to include the sandy beach and dunes of Dunnet Bay. As shown on Figure 7.6a, visibility of the proposed Development would arise from inland areas within the SLA, including at the panoramic viewpoint; the south and southwest facing slopes of the moorland; parts of West Dunnet and Dunnet and from the beach carpark and inland area east of the dunes near Castletown. As a local designation, the SLA is considered to be of Regional value.
161. Table 2 considers effects on each of the special qualities of the designation as set out within the Highland Council Assessment of Highland Special Landscape Areas (2011).

Table 2 - Effects on special qualities of Dunnet Head SLA

Quality	Susceptibility	Effect
Panoramic views from prominent headland and striking cliffs	High -the turbines may be visible in panoramic views and may distract from views of the cliffs or diminish the apparent prominence of the headland.	Small scale for a Localised extent - The proposed Development would be seen from the panoramic viewpoint in the same part of the view as a number of existing and consented wind farms as illustrated by viewpoint 4. This would give rise to Small scale changes to views as described within Appendix 4 and Table 1 above. As shown by Figure 7.6a, views from the lighthouse and the clifftops around the headland would be largely unaffected, with the main area of visibility confined to the northeast facing cliffs between Easter Head and Meikle Score, and a small area of visibility at Chapel Geo. In views towards the headland (illustrated by Viewpoints 3,6,7, 15 and 25), the cliffs often catch the light, making them particularly striking features. In all such views the proposed Development would be seen well-separated from the headland and in combination with other turbines. Key views mentioned as being important in the description of special qualities are from the SLA out to sea to the north, west to Cape Wrath and Strathy Point, east to Duncansby Head and inland to the peaks of Morvern, Maiden Pap and Scaraben. The proposed Development would not be seen in close association with any of these features.
Isolated moorland and lochans	High/medium – views of the turbines may affect the moorland character (which is assessed to be of High/medium sensitivity as set out within Appendix 7)	Negligible – as set out within Appendix 7 in relation to LCT 134 Sweeping Moorland and Flows / CT5 Dunnet Interior.
Contrasting bay and cliff landscapes	Medium – The contrast between these two landscape character types would remain, although visibility of the turbines may distract from the appreciation of the contrasts.	Negligible - The proposed Development would be partly visible from the beach car park at the south end of the bay and from West Dunnet at the north end of the bay, but not from the beach itself. The scale of visual change would be medium/small and small in these locations, and the turbines would be seen as a distant inland feature, not affecting the relationship between the beach and the cliffs.

162. Based on the detailed considerations set out above, there would be a Small magnitude of change to a special quality of High/medium sensitivity. Effects on the SLA would be Moderate, Adverse and not significant.

Duncansby Head SLA (8.2 km, E)

163. This SLA includes the cliffs, lighthouse and panoramic viewpoint at Duncansby Head, and extends out to sea and slightly inland and southwards to include the clifftop walk and Stacks of Duncansby. As shown on Figure 7.6a, visibility of the proposed Development would arise from more elevated inland areas within the SLA, between Ness of Duncansby and Hill of Crogodale and from the area around the panoramic viewpoint. As a local designation, the SLA is considered to be of Regional value.
164. Table 2 considers effects on each of the special qualities of the designation as set out within the Highland Council Assessment of Highland Special Landscape Areas (2011).

Table 2 - Effects on special qualities of Duncansby Head SLA

Quality	Susceptibility	Effect
Commanding views and 'end of the road' experience	High – the proposed Development may alter the nature of the commanding views.	Small scale for a Localised extent - The 'end of the road' experience is intrinsic to the location and would not be affected by the distant proposed Development. With the exception of views along the coast to Dunnet Head, the views listed as important within the SLA description are out to sea, and would not be affected by the proposed Development. The proposed Development would be seen in views looking along the coast, in which it would be a Small scale change, well separated from Dunnet Head and seen with other wind developments as illustrated by viewpoint 7.
Striking and diverse coastal landforms	Medium – turbines may distract from appreciation of the landform.	Small/negligible for a Limited extent - The landform is best appreciated in views from the sea and along the coast southwards. As noted in the SLA description, the waters in the vicinity are challenging for sailors, for whom views are not likely to be a key focus in such an environment. Visibility from the sea and path along the clifftops near the stacks are limited in extent and from areas where views towards the stacks or cliffs would be in a different direction to the Site.

165. Based on the detailed considerations set out above, there would be a Small/negligible magnitude of change to a special quality of High/medium sensitivity ('Commanding views'), and a Negligible magnitude of change to the appreciation of the landform. Effects on the SLA would be Moderate/minor, Adverse and not significant.

7. Cumulative Effects

Introduction

166. The cumulative assessment is based on the same landscape and visual baseline and receptor groups as the main LVIA, and the methodology is the same in terms of forming and expressing judgements. Two types of judgement are provided:
- Additional effects – The effects that would arise from the addition of the proposed Development to a baseline which includes the cumulative development(s) being considered.
 - Combined effects – The effects that would arise from the addition of both the proposed Development and the cumulative development(s) being considered to the main assessment baseline.
167. Typically, only the additional effects need to be considered and the cumulative assessment is provided to inform decision-making in the event that one or more of the cumulative developments has been consented prior to the proposed Development (i.e. the future baseline has changed). The combined effects may be relevant where two or more development applications are determined together.
168. Landscape and visual receptors that are considered to receive effects of small-negligible or negligible magnitude effects from the proposed Development are not included in this assessment, as an effect of such low magnitude adds nothing or very little regardless of the effects of other developments. If significant cumulative effects arise on those receptors, they would be as a result of other developments and are not relevant for consideration as part of this application.

Assessment Scenarios

169. All cumulative schemes within the 40 km cumulative study area are illustrated on Figure 7.8 (updated). Operational and consented developments have been included within the landscape and visual baseline within the main assessment above. The majority are located more than 15 km from the Site as shown by Figure 7.8 (updated), those which are closer include:
- Lochend - 4 operational turbines of 99.5 m tip height (0.8 km, W);
 - Slickly - 11 consented turbines of up to 149.5 m tip height (2.6 km, SE);
 - Stroupster - 13 operational turbines of 110 m tip height (3.8 km, SE); and
 - Taigh na Muir Dunnet – single operational turbine of 79.6 m tip height (4 km, NW).
170. Changes since the EIA Report was prepared include:
- Consents for all of the windfarms within 40 km which were in planning at the time the EIA Report was prepared (Slickly, Golticlay, Hoy and Camster 2), and for Limekiln Extension;
 - the expiry of consent for Cogle Moss;
 - scoping for a tip height increase from 130 m to 200 m at Golticlay; and
 - new applications for windfarms listed in Table 4 below.

Table 4 - Cumulative Development Proposals

Name	Description	Planning Status	Distance, Direction
Cairnmore Hill	5 turbines of up to 138.5 m	Planning	21.5 km, W
Tormsdale	12 turbines of up to 149.9 m	Planning	23.5 km, S
Kirkton	11 turbines of up to 149.9 m	Planning	41.3 km, W
Melvich	12 turbines of up to 149.9 m	Planning	41.5 km, W

171. Kirkton and Melvich are just beyond the study area and would not give rise to more than negligible effects on the same receptors as the proposed Development except for the A836 and North Coast 500 which passes close to these proposed windfarms as shown on Figure 7.8 (updated).
172. Tormsdale is located on the far side of an existing and consented windfarm cluster, and at a distance of more than 23 km as an extension to an existing cluster would not give rise to more than negligible effects on the same receptors as the proposed Development.
173. Scenarios considered within this cumulative assessment are:
- *Scenario 1* – The proposed Development with operational and consented development – i.e. the effects of the proposed Development compared to the current baseline – as described in the main LVIA above; and
 - *Scenario 2* – The proposed Development with operational and consented wind farms and Cairnmore Hill.
 - *Scenario 3* – A qualitative assessment of the proposed Development with operational and consented wind farms and wind farms in planning – specifically in relation to effects on users of the A836 and North Coast 500 route.

Cumulative ZTV Studies

174. Figure 7.12 (updated) which shows a cumulative ZTV study with operational and consented windfarms is described at paragraph 87 above.
175. Figure 7.11 (updated) shows a cumulative ZTV study with Cairnmore Hill windfarm. The visibility patterns of the two wind farms have some overlaps, but also large areas where only one or the other would be visible. There is a notable gap in combined visibility within the area roughly equidistant from the two sites, around and to the south of Castletown and most areas of combined visibility are closer to one of the two sites.

Cumulative Viewpoint Analysis

176. The scale of effect at viewpoints arising from adding the proposed Development to a baseline including the relevant cumulative developments for each scenario has been considered in relation to each cumulative development scenario and effects are described in Appendix 4. Whilst there is some intervisibility, the scale of changes to views from all viewpoints would remain the same in all development scenarios – due to the distance between the Site and the developments in planning; the relatively small scale of the Cairnmore Hill proposal and the location of Tormsdale on the far side of an existing windfarm cluster.

Cumulative Effects on Landscape Character

Scenario 2 – Effects with Cairnmore Hill

177. Based on the ZTV study shown in Figure 7.11 (updated); the viewpoint analysis at paragraph 176 above, and the assessment of effects on character set out above and within Appendix 7, the effects of adding the proposed Development to a baseline including Cairnmore Hill windfarm would remain the same as set out within the main LVIA. The scale of change to views arising from the proposed Development would be Negligible beyond 12 km, and areas where visibility would overlap within 12 km of the proposed Development, Cairnmore Hill would be seen in the opposite direction at distances of 9 km or more and its presence would not alter the effects arising from the proposed Development.

Cumulative Visual Effects

178. This assessment considers two types of cumulative visual effect:

- Combined views which “occur where the observer is able to see two or more developments from one viewpoint”. Combined visibility may either be in combination (where several developments are within the observer's arc of vision at the same time) or in succession (where the observer has to turn to see the various developments); and
- Sequential views which “occur when the observer has to move to another viewpoint to see different developments.”

Scenario 2 – Effects with Cairnmore Hill

179. Based on the ZTV study shown in Figure 7.11 (updated); the viewpoint analysis at paragraph 176 above, and the assessment on visual receptors set out above and within Appendix 7, the effects of adding the proposed Development to a baseline including Cairnmore Hill Windfarm would remain the same as set out within the main LVIA. The scale of change to views arising from the proposed Development would be Negligible beyond 12 km, and areas where visibility would overlap within 12 km of the proposed Development, Cairnmore Hill Windfarm would be seen in the opposite direction at distances of 9 km or more and its presence would not alter the effects arising from the proposed Development.

Scenario 3 – Effects on users of the A836 and North Coast 500

180. The A836 and North Coast 500 pass close to a number of existing windfarms and the sites for wind farms in planning at Melvich, Kirkton, and Cairnmore Hill. Tormsdale is further inland beyond existing and consented wind farms.

181. Figure 7.8a provides an analysis of the visibility and proximity of wind farms within 12 km of the route between Portskerra and Wick. The graph is based on the same ZTV studies used to prepare Figure 7.11 and 7.12, and the vertical axis is inverted, so that wind farms that are closer to the route (likely to give rise to greater effects) are shown towards the top of the graph. Gaps in the coloured lines indicate where each windfarm is not visible.

182. Few windfarms are located within 2 km of the route, and these are typically smaller existing developments (Hill of Forss 1 and 2, Taigh na Muir Dunnet). The proposed developments at Melvich and Cairnmore Hill would also be within 2 km and visible as the route passes them. More wind farms are located within 4 km, and this is the most common distance with the group including the proposed Development, Lochend and

- a number of larger wind farms (Slickly, Stroupster, Baillie, Limekiln and extension) and the proposed windfarm at Kirkton.
183. The addition of the proposed Development to the baseline of operational and consented projects is considered at paragraphs 143-146 (for the A836) and 150-152 (North Coast 500) above. As can be seen from Figure 7.8a, it would be seen along with the existing wind farm at Lochend from the route west of Gills, but closer and more frequently than Lochend from the route east of Gills.
 184. Kirkton and/or Melvich windfarms would be seen in close views as the route passes them near Melvich and Portskerra, with relatively continuous visibility at distances of up to 5.5 km along the route towards Reay. Cairnmore Hill would often be seen with Baillie and Hill of Forss windfarm from the route to the west of the Cairnmore Hill site, and in close views without any other windfarms within 12 km between the Cairnmore Hill site and Thurso.
 185. Overall, adding the proposed Development to a baseline including wind farms in planning would not result in a marked change to the pattern of visibility of wind farms along the route; and the combination of the proposed Development with other wind farms in planning would retain stretches of the route where wind farms are not close features in views, notably between Thurso and Castletown, at John O’Groats, and between Keiss and Wick.

Cumulative Effects on Designated Areas

Scenario 2 – Effects with Cairnmore Hill

186. Based on the ZTV study shown in Figure 7.11 (updated); the viewpoint analysis at paragraph 176 above, and the assessment of designated landscapes set out above, the effects of adding the proposed Development to a baseline including Cairnmore Hill windfarm would remain the same as set out within the main LVIA for Duncansby Head given that it lies to the east of the proposed Development and approximately 30 km from Cairnmore Hill Wind Farm.
187. Dunnet Head SLA lies between the two sites, slightly closer to the proposed Development than it is to Cairnmore Hill and shows a pattern of largely separate views towards each windfarm (as illustrated by Figure 7.11 (updated)), except from the higher areas of moorland and the panoramic viewpoint (Viewpoint 4). Given the largely separate visibility patterns, and the limited presence of Cairnmore Hill in combined views, effects on the Dunnet Head SLA would remain as reported in the main LVIA above.

8. Assessment Summary Table

188. In Table 5 below, only non-Negligible effects are included and significant effects are underlined.

Table 5 – Landscape and Visual Effects

Receptor	Distance, Direction	Sensitivity	Magnitude	Level of Effect
<i>Landscape Character</i>				
LCT 134 Sweeping Moorland and Flows / CT3 Northeast Caithness	Includes Site	Medium	Medium	Moderate, Adverse
<u>LCT 144 Coastal Crofts and Small Farms / CT1 Canisbay to John O'Groats</u>	<u>1.9 km, NE</u>	<u>Medium</u>	<u>Large/medium</u>	<u>Major/moderate, Adverse</u>
LCT 140 Sandy Beaches and Dunes / CT7 Dunnet Bay	5.4 km, W	Medium	Medium	Moderate, Adverse
LCT 143 Farmed Lowland Plain / CT9 North Caithness	0.6 km. N and 1.2 km, W	Medium/low	Small	Moderate/minor, Adverse
LCT 144 Coastal Crofts and Small Farms / CT1 Dunnet to Brough	6.1 km, NW	Medium	Small	Moderate/minor, Adverse
<i>Visual Receptors - Settlements</i>				
<u>Lochend</u>	<u>2 km, W</u>	<u>High/medium</u>	<u>Large/medium</u>	<u>Major/moderate, Adverse</u>
<u>Barrock and Inkstack</u>	<u>2.2 km, NW</u>	<u>High/medium</u>	<u>Large</u>	<u>Major/moderate, Adverse</u>
<u>Scarfskerry and Rattar</u>	<u>2.5 km, N</u>	<u>High/medium</u>	<u>Medium</u>	<u>Major/moderate, Adverse</u>
<u>Gills and Upper Gills</u>	<u>2.6 km, NE</u>	<u>High/medium</u>	<u>Large/medium</u>	<u>Major/moderate, Adverse</u>
<u>Mey</u>	<u>2.7 km, N</u>	<u>High/medium</u>	<u>Medium</u>	<u>Major/moderate, Adverse</u>

Receptor	Distance, Direction	Sensitivity	Magnitude	Level of Effect
East Mey	3.6 km, N	High/medium	Medium/small	Moderate, Adverse
Greenland, Bowermadden and Tain	4 km, SW	High/medium	Medium/small	Moderate, Adverse
Canisbay and Huna	4.7 km, NE	High/medium	Medium/small	Moderate, Adverse
Dunnet and West Dunnet	6.2 km, NW	High/medium	Medium/small	Moderate, Adverse
Brough	6.5 km, NW	High/medium	Medium/small	Moderate, Adverse
Lyth and Howe	4.8 km, S	High/medium	Small	Moderate/minor, Adverse
Freswick, Tofts and Skirza	6.5 km, E	High/medium	Small	Moderate/minor, Adverse
John O'Groats	7 km, NE	High/medium	Small/negligible	Minor, Adverse
Bower	7.2 km, SW	High/medium	Small	Moderate/minor, Adverse
Castletown	8.5 km, W	High/medium	Small/negligible	Minor, Adverse
<i>Visual Receptors - Recreational</i>				
Castle of Mey GDL	3.5 km, N	High	Small, adverse, reducing to Negligible, Neutral once mitigation planting matures.	Moderate, adverse, reducing to Minimal, Neutral once mitigation planting matures.
Beaches between Kirkstyle and Huna	4.5 km, NE	High/medium	Medium/small	Moderate, Adverse
Beaches between Murkle Bay and Castletown	8.5 km, W	High/medium	Small	Moderate/minor, Adverse
Dunnet Head	10 km, NW	High	Small	Moderate, Adverse
Duncansby Head	10 km, NE	High	Small	Moderate, Adverse
<i>Visual Receptors - Routes</i>				
A836	2.7 km, N	Medium	Medium	Moderate, Adverse
<u>Local roads within 5km</u>	<u>0.9 km, E</u>	<u>Medium</u>	<u>Large/medium</u>	<u>Major/moderate, Adverse</u>

Receptor	Distance, Direction	Sensitivity	Magnitude	Level of Effect
North Coast 500	2.7 km, N	Medium	Small	Moderate, Adverse
<u>Gills Bay to St Margarets Hope ferry</u>	<u>3.5 km, NE</u>	<u>High/medium</u>	<u>Medium</u>	<u>Major/moderate, Adverse</u>
National Cycle Network (NCN) Route 1 (1.8km, N)	1.8 km, N	Medium	Medium	Moderate, Adverse
A99	6.5 km, E	Medium	Small	Moderate/minor, Adverse
Local roads between 5-12 km		Medium	Small	Moderate/minor, Adverse
John O'Groats to Burwick, South Ronaldsay ferry	8 km, NE	High/Medium	Small	Moderate/minor, Adverse
<i>Designated Landscapes</i>				
Dunnet Head SLA	5.8 km, W	High/médium	Small	Moderate, Adverse
Duncansby Head SLA	8.2 km, E	High/médium	Small/negligible	Moderate/minor, Adverse