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Volume 3 Caledonia North

Chapter 12 Seascape, Landscape and Visual Impact Assessment

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Acronyms and Abbreviations

AC	Aberdeenshire Council
BOWL	Beatrice Offshore Windfarm Ltd
CLSA 2017	Caithness Landscape Sensitivity Appraisal (THC 2017)
CPRE	Campaign to Protect Rural England
cd	Candela
DSLP	Development Specification and Layout Plan
DTM	Digital Terrain Model
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
GDL	Garden and Designed Landscape
GLVIA3	Guidelines for Landscape and Visual Impact Assessment: Third Edition
HAT	Highest Astronomical Tide
HDD	Horizontal Directional Drilling
HFoV	Horizontal Field of View
HwLDP	Highland-wide Local Development Plan
km	Kilometre
LCA	Landscape Character Area
LCT	Landscape Character Type
LUC	Land Use Consultants
LVIA	Landscape and Visual Impact Assessment
m	Metre
MD-LOT	Marine Directorate - Licensing Operations Team

MHWS	Mean High Water Springs
MSL	Mean Sea Level
NASA	National Aeronautics and Space Administration
NC500	North Coast 500
NE250	North East 250
NPF3	National Planning Framework 3
NPF4	National Planning Framework 4
OECC	Offshore Export Cable Corridor
OESEA 4	Offshore Energy Strategic Environmental Assessment
OnTI	Onshore Transmission Infrastructure
OWESG	Onshore Wind Energy Supplementary Guidance
OWF	Offshore Wind Farm
RCCA	Regional Coastal Character Area
SLA	Special Landscape Area
SLVIA	Seascape, Landscape and Visual Impact Assessment
THC	The Highland Council
WTG	Wind Turbine Generator
ZTV	Zone of Theoretical Visibility

Executive Summary

The Seascape, Landscape and Visual Impact Assessment (SLVIA) identifies and assesses the significance of changes resulting from the construction, operation and decommissioning of the Caledonia North Site. This is carried out in relation to both the seascape (coastal) character and landscape character as environmental resources in their own right, and on people's views and visual amenity. The construction, operation and decommissioning of the offshore cable route has been scoped out of the SLVIA.

Publication of the Offshore Scoping Report and subsequent meetings and correspondence with The Highland Council, Aberdeenshire Council and NatureScot provided opportunities for feedback which have been considered in preparing the Environmental Impact Assessment Report. Of particular note was the agreement of the Study Area, representative viewpoints and the status of the onshore and offshore wind farms to be included in the cumulative assessment.

The SLVIA is based on the Design Envelope with the assessment based on a defined 'worst case scenario' in terms of the Wind Turbine Generators (WTGs) and Offshore Substation Platforms (OSPs) dimensions and locations as set out in Section 12.6 of this chapter. It is the likely significant effects of this 'worst case scenario' that are assessed and illustrated in the SLVIA.

The worst-case scenario, which includes 47 fixed foundation WTGs with a maximum blade tip height of 355m and two OSPs incorporates fixed and WTGs occupy locations that represent the impacts arising from the full extent of the Caledonia North Site in a grid arrangement with a predominance of WTGs positioned around the Caledonia North Site perimeter.

Importantly the Caledonia North Site will be located adjacent to the Moray East OWF which is part of an OWF cluster that also includes Beatrice Offshore Windfarm Ltd, Moray West and the Beatrice Demonstrator WTGs. Due to the span of time and different layouts the existing cluster of OWFs includes WTGs of ever-increasing scale/spacing and differing layouts. Over time, due to economic considerations and technological advancements wind turbine generators have become larger and more powerful with consequently wider spacing between them to ameliorate wake effects as compared to the historic Moray Firth OWF projects. It is to this context that Caledonia North Site will be added introducing WTGs that are larger in scale again when compared to the most recently developed Moray West at approximately 258m to blade tip.

The largely linear north to south orientation of the Caledonia North Site itself will ensure that from the coastal areas of the northern Highlands and along the closest parts of Aberdeenshire/Moray the development is seen across its narrower cross section with turbines at the farthest extents located at a considerable distance from each coastline or otherwise beyond existing OWFs.

The significant visual effects identified occur along the coastal area of Caithness in the Highlands, in the western part of the Study Area between approximately the Hill of Harley (approximately 5km north of Keiss) and Whaligoe Steps. These locations, which represent views from sensitive receptors such as residents in settlements and recreational users (walkers

along core paths, dog walkers, beach goers etc) represent the outer limits of significant visual effects on the Highlands coastline.

The effects on each coastline are very different. Views of Caledonia North Site from the Caithness coast are largely cumulative so that the significant effects arise at relatively close range and often where the addition of Caledonia North Site widens the horizontal extent of OWF development across the sea horizon to such an extent that OWF fill or span even more widely across the visible seascape. The disparity in WTG scale between the Caledonia North Site and the adjacent Moray East WTGs (at 200.56m to blade tip) is also most apparent from along this northern section of the coast.

Receptors, which include people in settlements and recreational users along this 27km section of coast may be significantly affected where there is visibility of Caledonia North Site in Very Good or Excellent visibility conditions. These significant effects are represented by Viewpoint 4: Keiss, Viewpoint 5: Wick (path south of South View), Viewpoint 6: Sarclet (Sarclet Haven Info Board) and Viewpoint 8: Whaligoe Steps.

Further north along the Highlands coast and from the Orkney Isles the effects have found to be not significant. This is largely due to increasing distance, the scale of the Caledonia North Site as a proportion of the wider seascape and the fact that it appears to be an addition to existing OWF development seen in the same part of the view.

Further south along the Highlands coastline the Caledonia North Site tends to be seen to an increasing degree beyond the existing OWFs and its larger scale WTGs also become less apparent due to the closer proximity of the existing OWFs to the coastline.

From the Aberdeenshire coast the Caledonia North Site is 50.1km at its closest point will be seen as small vertical features occupying a small proportion of the overall distant seascape horizon during excellent visibility conditions. At more distant locations along this coastline within Moray and Aberdeenshire the Caledonia North Site will be barely discernible to the naked eye, and when visible occupy a small proportion of the view and will be seen along expansive seascape horizon. Whilst the Caledonia North Site will be noticeable along these coastlines in excellent visibility conditions it is considered that its distance, vertical scale and location within wide expansive seas, which would remain the predominant characteristic, would ensure that such effects are not significant.

From the Highlands, the Caledonia North Site would mostly be seen in the context of Beatrice Offshore Windfarm Ltd and Moray East. Importantly, significant visual and cumulative effects were assessed as being likely to arise as a result of Beatrice Offshore Windfarm Ltd and Moray East wind farms within their respective Environmental Statements along the (approximately 40km) stretch of coast between Wick and Berriedale. The more south-westerly location and orientation of the Moray West OWF extended and increased the OWF influence rather than introducing new effects along this same stretch of coast and also in many other parts of the Study Area. The Moray West SLVIA found that significant effects would also arise between Berriedale and Crakaig as a result of its addition to the cumulative context at that time.

The SLVIA for Caledonia North Site has found that a further 17km extent of the coast to the north between Wick and Hill of Harley (approximately 5km north of Keiss) would also be

significantly affected by OWF development views through the further addition of Caledonia North Site to this context.

No seascape (coastal) or landscape character effects have been assessed as significant and no significant effects on Landscape Planning Designations have been assessed.

The night-time effects have been assessed as not significant. This is largely due to the long distance and low intensity of the lights when viewed from the coast as well as the lit context within which the lights would be seen. The Applicant has committed to install sensors so that when visibility of the WTGs lights from all sensors is greater than 5km in the hours of darkness the aviation lighting is reduced from 2000 candela to 200 candela. The addition of the Caledonia North Site to baseline OWFs (operational and under construction) is considered throughout the SLVIA. It has been assessed that there would be Moderate significant cumulative effect on the settlement of Keiss and localised sections of the A882, the B784, the B78 and the rail line through the addition of the Caledonia North Site to a cumulative context that includes operational, under construction onshore and offshore wind farms when Coggle Moss onshore wind farm is added to the cumulative context.

12 Seascape, Landscape and Visual Impact Assessment

12.1 Introduction

- 12.1.1.1 This chapter of the Environmental Impact Assessment Report (EIAR) presents the assessment of the likely significant effects of Caledonia North on seascape, landscape, and visual receptors. This includes the Caledonia North Site (comprising Wind Turbine Generators (WTGs), Inter-array/Interconnector cables and Offshore Substation Platforms (OSPs)) and the Caledonia North Offshore Export Cable Corridor (OECC). Specifically, this Seascape, Landscape, and Visual Impact Assessment (SLVIA) chapter considers both the potential impact of the Caledonia North Site seaward of Mean High Water Springs (MHWS) and onshore receptors landward of Mean Low Water Springs (MLWS) during the construction, operation and maintenance, and decommissioning phases.
- 12.1.1.2 The offshore topic of the SLVIA study area includes the intertidal area. This intertidal area overlaps with the onshore topic of the Landscape and Visual Impact Assessment (LVIA) (landward of MHWS).
- 12.1.1.3 The assessment presented has inter-relationships with the following EIAR chapters:
- Volume 5, Chapter 4: Landscape and Visual;
 - Volume 5, Chapter 5: Terrestrial Archaeology and Cultural Heritage; and
 - Volume 6, Chapter 2: Socioeconomics, Tourism and Recreation.
- 12.1.1.4 This chapter is supported by the following Technical Appendices:
- Volume 7C, Appendix 12-1: Night Time Assessment;
 - Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures;
 - Volume 7C, Appendix 12-3: Seascape, Landscape and Visual Impact Assessment Visualisations;
 - Volume 7C, Appendix 12-4: Seascape, Landscape and Visual Impact Assessment Visualisations (The Highland Council);
 - Volume 7B, Appendix 12-5: Seascape Landscape and Visual Impact Assessment Methodology; and
 - Volume 7B, Appendix 12-6: Visibility Frequency and Range of Visibility.
- 12.1.1.5 This SLVIA EIAR chapter:
- Presents the existing environmental baseline established from desk studies, site-specific surveys and consultation with stakeholders;

- Identifies any assumptions and limitations encountered in compiling the environmental information;
- Presents the key parameters for the SLVIA including any embedded mitigation included within the proposals to prevent, minimise, reduce or offset the possible environmental effects of Caledonia North Site on seascape, landscape and visual receptors; and
- Presents the likely significant environmental effects on seascape, landscape and visual resources arising from Caledonia North Site, based on the information gathered and the analysis and assessments undertaken.

12.2 Legislation, Policy and Guidance

- 12.2.1.1 Volume 1, Chapter 2: Legislation and Policy, of this EIAR sets out the policy and legislation associated with the Caledonia North Site.
- 12.2.1.2 Policy and legislation specifically in relation to seascape, landscape, and visual amenity, is contained in the Marine (Scotland) Act 2010 (Scottish Parliament, 2010¹) and the UK Marine Policy Statement (UK Government, 2011²).
- 12.2.1.3 Relevant local planning policies are contained within The Highland Council (THC) Highland-wide Local Development Plan (THC, 2012³), Moray Local Development Plan (Moray Council, 2020⁴) and Aberdeenshire Local Development Plan (Aberdeenshire Council, 2023⁵).
- 12.2.1.4 A summary of the policy provisions relevant to seascape, landscape and visual receptors is provided in Table 12-1, with guidance used to inform the SLVIA listed below.

Table 12-1: Policy provisions relevant to SLVIA.

Relevant Policy	Description
National Planning Framework 4 (NPF4) (Scottish Government, 2023⁶) – Scotland’s National Planning Framework 4 (NPF4) was adopted on 13 February 2023. NPF4 sets out the spatial principles, regional priorities, national developments, and national planning policy.	
Policy 4	<p>“a) Development proposals which by virtue of type, location or scale will have an unacceptable impact on the natural environment, will not be supported. [...]</p> <p>c) Development proposals that will affect a National Park, National Scenic Area, Site of Special Scientific Interest or a National Nature Reserve will only be supported where:</p> <ul style="list-style-type: none"> i. The objectives of designation and the overall integrity of the areas will not be compromised; or ii. Any significant adverse effects on the qualities for which the area has been designated are clearly outweighed by social, environmental or economic benefits of national importance. <p>d) Development proposals that affect a site designated as a local nature conservation site or landscape area in the LDP will only be supported where:</p> <ul style="list-style-type: none"> i. Development will not have significant adverse effects on the integrity of the area or the qualities for which it has been identified; or ii. Any significant adverse effects on the integrity of the area are clearly outweighed by social, environmental or economic benefits of at least local importance. <p>e) The precautionary principle will be applied in accordance with relevant legislation and Scottish Government guidance”.</p>
Policy 11	<p>Policy intends to encourage, promote and facilitate all forms of renewable energy development onshore and offshore. It states (inter alia):</p> <p>“d) Development proposals that impact on international or national designations will be assessed in relation to Policy 4.</p> <p>e) In addition, project design and mitigation will demonstrate how the following impacts are addressed:</p> <ul style="list-style-type: none"> i. impacts on communities and individual dwellings, including, residential amenity, visual impact... ii. 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; iii. public access, including impact on long distance walking and cycling routes and scenic routes;

Relevant Policy	Description
	<p>...and xiii. cumulative impacts.</p> <p>In considering these impacts, significant weight will be placed on the contribution of the proposal to renewable energy generation targets and on greenhouse gas emissions reduction targets”.</p>
<p>Scotland’s National Marine Plan: A Single Framework for Managing Our Seas (Scottish Government, 2015’) – Scotland’s National Marine Plan sets out strategic policies for the sustainable development of Scotland’s marine resources out to 200 nautical miles.</p>	
<p>General Policy 7 (GEN7) Landscape/ Seascape</p>	<p>“Marine planners and decision makers should ensure that development and the use of the marine environment take seascape, landscape and visual impacts into account” (GEN7).</p> <p>It continues:</p> <p>“The Scottish Government is committed to implementing the principles of the European Landscape Convention, which include seascape and applies an ‘all landscapes approach’ that addresses developed, altered and cultural landscapes as well as more natural scenic areas. This does not preclude development or change but recommends that it is carried out appropriately for the area’s landscape character and visual amenity.</p> <p>Development and use that affect National Scenic Areas, National Parks and World Heritage Sites should only be permitted where:</p> <ul style="list-style-type: none"> ▪ It will not adversely affect the integrity of the area or its special qualities for which it has been designated; or ▪ Any such adverse effects are clearly outweighed by social, environmental or economic benefits of national importance. <p>In making these judgments, planners and decision makers should have regard to the qualities of the location in question, including any designation. More generally, the siting and design of a development should take account of the local landscape/seascape character and quality. Potential effects on landscapes and seascapes, including cumulative effects should be considered and developers should seek to minimise adverse impacts through careful planning and design, considering the services which the natural environment is providing and maximising the potential for enhancement” (paras 4.27 – 4.29).</p> <p>“Existing Scottish Natural Heritage (SNH) guidance on the principles of good siting and design and examples of emerging good practice should be followed. SNH Landscape Character Assessments and forthcoming SNH guidance on undertaking Coastal Character Assessment also provide useful tools in considering impacts on landscape” (p.21-22).</p>

Relevant Policy	Description
UK Marine Policy Statement (UK Government, 2011²) – Provides the UK’s framework for preparing marine plans.	
Chapter 2.6.5 Seascape Paragraph 2.6.5.3	“In considering the impact of an activity or development on seascape, the marine plan authority should take into account existing character and quality, how highly it is valued and its capacity to accommodate change specific to any development. Landscape Character assessment methodology may be an aid to this process”.
Chapter 2.6.5 Seascape Paragraph 2.6.5.4	“For any development proposed within or relatively close to nationally designated areas the marine plan authority should have regards to the specific statutory purposes of the designated areas. The design of a development should be taken into account as an aid to mitigation”.
The Highland-wide Local Development Plan (HwLDP) (THC, 2012³) – Sets out policy relating to planning and development matters in the THC area.	
Policy 57 Natural, Built and Cultural Heritage	<p>Natural, Built and Cultural Heritage states that:</p> <p>“[a]ll development proposals will be assessed taking into account the level of importance and type of heritage features, the form and scale of the development, and any impact on the feature and its setting”.</p> <p>It states that the following relevant criteria will also apply:</p> <p>“1. For features of local/regional importance we will allow developments if it can be satisfactorily demonstrated that they will not have an unacceptable impact on the natural environment, amenity and heritage resource.</p> <p>2. For features of national importance, we will allow developments that can be shown not to compromise the natural environment, amenity and heritage resource. Where there may be any significant adverse effects, these must be clearly outweighed by social or economic benefits of national importance. It must also be shown that the development will support communities in fragile areas who are having difficulties in keeping their population and services”.</p>
Policy 61 Landscape	“New developments should be designed to reflect the landscape characteristics and special qualities identified in the Landscape Character Assessment of the area in which they are proposed. This will include consideration of the appropriate scale, form, pattern and construction materials, as well as the potential cumulative effect of developments where this may be an issue. The Council would wish to encourage those undertaking development to include measures to enhance the landscape characteristics of the area. This will apply particularly where the condition of the landscape characteristics has deteriorated to such an extent that there has been a loss of landscape quality or distinctive sense of place. In the assessment of new developments, the Council will take account of Landscape Character Assessments, Landscape Capacity

Relevant Policy	Description
	Studies and its supplementary guidance on Siting and Design and Sustainable Design, together with any other relevant design guidance”.
Policy 67 Renewable Energy Developments	<p>Renewable Energy Developments is a multi-criteria based policy which provides general support for wind energy proposals provided they will not be significantly detrimental overall, having regard in particular to any significant effects on the specific criteria contained in the policy.</p> <p>“Subject to balancing with these considerations and taking into account any mitigation measures to be included, the Council will support proposals where it is satisfied that they are located, sited and designed such that they will not be significantly detrimental overall, either individually or cumulatively with other developments (see Glossary), having regard in particular to any significant effects on the following:</p> <ul style="list-style-type: none"> ▪ natural, built and cultural heritage features; [...] ▪ visual impact and impact on the landscape character of the surrounding area (the design and location of the proposal should reflect the scale and character of the landscape and seek to minimise landscape and visual impact, subject to any other considerations); ▪ amenity at sensitive locations, including residential properties, work places and recognised visitor sites (in or out with a settlement boundary); [...] ▪ the amenity of users of any core path or established public access for walking, cycling or horse riding”.
Moray Local Development Plan (Moray Council, 2020⁴) – Sets out policy relating to planning and development matters in the Moray Council area.	
Policy DP9 Renewable Energy	<p>DP9 is a general policy which relates to all renewable energy proposals. However, it does not specifically reference offshore wind energy developments.</p> <p>“All renewable energy proposals will be considered favourably where they meet the following criteria:</p> <ul style="list-style-type: none"> ▪ They are compliant with policies to safeguard and enhance the built and natural environment; ▪ They do not result in the permanent loss or permanent damage of prime agricultural land; ▪ They avoid or address any unacceptable significant adverse impacts including (Inter alia): <ul style="list-style-type: none"> ○ Landscape and visual impacts. <p>In addition to the above criteria, detailed assessment of impact will include consideration of the extent to which the proposal contributes to renewable energy generation targets, its effect on greenhouse gas emissions and net economic impact, including socio-economic benefits such as employment”.</p>

Relevant Policy	Description
Policy EP11: Battlefields, Gardens and Designed Landscapes	<p>"Development proposals which adversely affect nationally designated Battlefields or Gardens and Designed Landscapes or their setting will be refused unless;</p> <ul style="list-style-type: none"> ▪ The overall character and reasons for the designation will not be compromised, or ▪ Any significant adverse effects can be satisfactorily mitigated and are clearly outweighed by social, environmental, economic or strategic benefits".
Aberdeenshire Council: Aberdeenshire Local Development Plan (Aberdeenshire Council, 2023⁵) – Sets out policy relating to planning and development matters in the Aberdeenshire Council (AC) area.	
Policy C2: Renewable Energy	<p>Covers all renewable energy developments. Parts of the policy relevant to wind energy are principally concerned with onshore wind development. However, the policy includes the following general guidance:</p> <p>"All wind farms must be appropriately sited and designed and avoid unacceptable environmental effects, taking into account the cumulative effects of existing and approved wind WTGs...Unacceptable significant adverse effects on the amenity of dwellinghouses, ... or on tourism and recreation interests including core paths and other established routes used for public walking, riding or cycling, or to protected species should also be avoided".</p>
Policy E2: Landscape	<p>"We will refuse development that causes unacceptable effects through its scale, location or design on key characteristics, natural landscape elements, features or the composition or quality of the landscape character as defined in the Landscape Character Assessments produced by NatureScot. These impacts can be either alone or cumulatively with other recent developments. A Landscape and Visual Impact Assessment (LVIA) may be required to assess the effects of change on a landscape that could be experienced should a development proposal be approved. Appropriate mitigation should be identified".</p>
Orkney Local Development Plan (Orkney Islands Council, 2017⁸) – Sets out policy relating to planning and development matters in the Orkney Islands Council area.	
Policy 1: Criteria for All Development	<p>This is a wide-ranging policy that sets out guiding principles for new development. It states:</p> <p>"Development will be supported where:</p> <ol style="list-style-type: none"> i. It is sited and designed taking into consideration the location and the wider townscape, landscape and coastal character; ii. The proposed density of the development is appropriate to the location; iii. It is not prejudicial to the effective development of, or existing use of, the wider area;

Relevant Policy	Description
	<p>iv. The amenity of the surrounding area is preserved and there are no unacceptable adverse impacts on the amenity of adjacent and nearby properties/users;</p> <p>...ix. It protects and where possible enhances and promotes access to natural heritage, including green infrastructure, landscape and the wider environment; and</p> <p>x. It protects and where possible enhances Orkney's cultural heritage resources".</p>
Policy 7 Energy, part D: Onshore Wind Energy	<p>Parts of the policy relevant to wind energy are principally concerned with onshore wind development. However, the policy includes the following general guidance:</p> <p>"i. Proposals for wind energy developments of all scales, including extensions to existing developments and repowering, will be assessed against the following factors to ensure that there will be no significant adverse individual or cumulative impacts:</p> <p>[...] b. Landscape and Visual Impact".</p>
Policy 8: Historic Environment & Cultural Heritage, Part B Specific Policy Considerations	<p>"v. Inventory Gardens and Designed Landscapes Development which preserves or enhances the character and features of inventory gardens and designed landscapes and their setting, will be supported. Development that would have a significant negative impact upon the character of their areas will not be permitted. The conservation, maintenance and restoration, including the restoration of layout and features, will be supported where this is appropriate and based on historical research".</p>
Policy 9: Natural Heritage & Landscape, Part G Landscape	<p>This is an overarching policy which sets out guidance in relation to potential landscape impacts of development proposals:</p> <p>"i. All development proposals must be sited and designed to minimise negative impacts on the landscape, townscape and seascape characteristics and landscape sensitivities that are identified in the Orkney Landscape Character Assessment, and should be sympathetic to locally important natural and/or historic features within the landscape.</p> <p>ii. Consideration should be given to the siting, scale and design of the proposal, as well as the potential for cumulative effects with other developments.</p> <p>iii. Development that affects the National Scenic Area (NSA) will only be permitted where it is demonstrated that:</p> <p>a) the proposal will not have a significant effect on the overall integrity of the area or the qualities for which it has been designated; or</p> <p>b) any such adverse effects are clearly outweighed by social, environmental or economic benefits of national importance.</p>

Relevant Policy	Description
	iv. Development proposals affecting the area of wild land on Hoy will be only be permitted where it has been demonstrated that any significant effects on the character and qualities of this area can be substantially overcome by siting, design or other mitigation”.

Guidance

- 12.2.1.5 The following guidance has been used to inform the SLVIA:
- Carol Anderson Landscape Associates for Scottish Natural Heritageⁱ (2018⁹) Guidance Note – Coastal Character Assessment – Version;
 - Countryside Agency and Scottish Natural Heritage (2002¹⁰) Guidelines for Landscape Character Assessment;
 - Landscape Institute and the Institute of Environmental Management and Assessment (2013¹¹) Guidelines for Landscape and Visual Impact Assessment, 3rd Edition (GLVIA3);
 - Landscape Institute (2021¹²) Technical Guidance Note 02/21 Assessing landscape value outside national designations;
 - NatureScot (2021¹³) Guidance – Assessing the cumulative landscape and visual impact of onshore wind energy development;
 - NatureScot (2020¹⁴) Assessing the Impacts on Wild Land: Technical Guidance;
 - NatureScot (2012¹⁵) Offshore Renewables – Guidance on Assessing the Impact on Coastal Landscape and Seascape. Guidance for Scoping an Environmental Statement;
 - Scottish Natural Heritage (2018-2019¹⁶) Draft Guidance for Assessing the Effects on Special Landscape Qualities;
 - Scottish Natural Heritage (2017¹⁷) Visual Representation of Wind Farms Guidance – Version 2.2;
 - Scottish Government (2022¹⁸) Guidance for applicants on using the design envelope for applications under section 36 of the Electricity Act 1989; and
 - The Highland Council (2016¹⁹) Visualisation Standards for Wind Energy Developments.

12.3 Stakeholder Engagement

12.3.1 Overview

- 12.3.1.1 Scoping and consultation have been ongoing throughout the Environmental Impact Assessment (EIA) process and has played an important part in ensuring the scope of the baseline characterisation and impact assessment are appropriate with respect to Caledonia North and the requirements of the regulators, their advisors and other interested stakeholders.
- 12.3.1.2 The Offshore Scoping Report (Volume 7, Appendix 2) was submitted to Marine

ⁱ In 2020, Scottish Natural Heritage was rebranded as NatureScot.

Directorate - Licensing Operations Team (MD-LOT)ⁱⁱ in September 2022, who then circulated the report to relevant consultees. A Scoping Opinion (Volume 7, Appendix 3) was received from MD-LOT on 13 January 2023. Relevant comments from the Scoping Opinion specific to the SLVIA are provided in Table 12-2 below, which provides a high-level response on how these comments have been addressed within the EIAR.

- 12.3.1.3 At the time of the scoping consultation, it was not anticipated there would be separate applications for Caledonia North and Caledonia South. Therefore, the Offshore Scoping Report, Scoping Opinion and consultee responses were applicable to the Proposed Development (Offshore) as a whole and are included for Caledonia North where applicable.
- 12.3.1.4 Further consultation has been undertaken throughout the pre-application stage. Table 12-3 summarises the consultation activities carried out relevant to the SLVIA.

ⁱⁱ In 2023, Marine Scotland was renamed Marine Directorate, and thus the marine licensing and consents team is now referred to as Marine Directorate - Licensing Operations Team (MD-LOT).

Table 12-2: Scoping Opinion responses.

Consultee	Comment	Response
NatureScot	<p>Mitigation and Design</p> <p>We consider that the most likely significant effects are to be derived from the cumulative design relationship between the existing/under construction OWFs in the Moray Firth and the proposed development. Particularly in the context that the WTGs of Beatrice are 182m blade tip height and the proposed development is at a maximum blade tip height of 350m, with a more open and wider spaced composition. As part of design iteration, we encourage the consideration of alternative heights and locations within the Caledonia Array Area to mitigate potential significant effects from poor cumulative composition and higher WTGs on sensitive coastal receptors, in particular on the closest east Sutherland coast.</p> <p>To have a combination of both fixed and floating technology to secure WTGs within the Array Area, could mean that opportunities for a clear and contained design solution could be fully explored.</p> <p>The use of both fixed and floating WTG technologies could potentially avoid or reduce the appearance of illogical gaps or breaks in the layout (derived from benthic constraints). Furthermore, the use of different turbine heights within the Array Area could reduce significant cumulative effects arising from the substantial difference in turbine heights proposed (350m tip heights versus ~200m) against those existing in particular in the adjacent developments of Beatrice and Moray East. We request further design iteration is given to this aspect with the aim of producing a cohesive composition with those existing Moray OWF developments.</p> <p>This advice is in line with our Sectoral Plan Consultation Design Guidance²⁰ and the extract for the NE4 draft plan option contained in Annex 2.</p>	<p>Volume 1, Chapter 3: Proposed Development Description (Offshore) sets out the design issues pertinent to Caledonia OWF. The assessment set out in Section 12.7 of this Chapter considers Caledonia North Site in the context of the operational WTGs.</p> <p>See Table 12-3 for response on design matters.</p>
NatureScot	<p>SLVIA baseline receptors</p> <p>We agree with the proposed 50km radius outer limit for the SLVIA with a reduced 40km for the landscape and coastal character/receptors assessment. We</p>	<p>A 60km SLVIA study area has been agreed following the scoping response from THC and MD-LOT. The SLVIA assesses that significant seascape,</p>

Consultee	Comment	Response
	<p>support the amendment of the proposed study area as refinement of the proposed layout continues with design iteration.</p> <p>As part of the consideration of baseline landscape and coastal character, consideration should be given to the night-time component of that character and visual amenity. This then provides a robust basis for the assessment of lighting on sensitive receptors.</p> <p>We support the use of baseline coastal character information used for the previous assessment of the Moray OWFs, filling in gaps where required.</p> <p>We agree to the draft location of viewpoints proposed within the scoping report - Table 16.4.</p>	<p>landscape and visual effects would not occur beyond 60km.</p> <p>Night-time effects of Caledonia North Site are considered in Volume 7C, Appendix 12-1: Night Time Assessment of the SLVIA. The assessment focuses on the visual effects of aviation and navigational lighting, however the impact of Caledonia North Site lighting on coastal character at night is considered for some limited areas where coastal character and the landform/skyline of inshore islands etc may be perceived at night with lights in the background (i.e., where a perceived character effect may occur as a component of visual effects). Areas and receptors located outside the Zone of Theoretical Visibility (ZTV) (i.e., in areas with no visibility), are scoped out of the SLVIA since they have no visibility of Caledonia North Site and will not be affected.</p>
NatureScot	<p>Nationally protected landscapes</p> <p>The Dornoch Firth and Hoy and West Mainland NSAs are well beyond the outer 60km study radius and we agree with the scoping report that these can be scoped out of the SLVIA.</p> <p>Whilst partially within the 60km outer study area radius, the closest WLA 36 is 40km to the site boundary. At this distance we consider that there is unlikely to be significant effects introduced by the proposed development. As such we agree that the WLAs can also be scoped out of the SLVIA.</p>	<p>This is noted by the Applicant.</p>

Consultee	Comment	Response
NatureScot	<p>Cumulative assessment</p> <p>The assessment of the proposed development in addition to those developments existing and under construction (terrestrial and marine) form part of the baseline 'landscape' assessment and should be considered under that section.</p> <p>The assessment of the proposed development with the baseline 'landscape' assessment (above) and consented development (terrestrial and marine), represents a cumulative scenario for change and it is appropriate to assess this under the cumulative assessment section. From the EIA Regulations 2017, a cumulative assessment is no longer required to assess the cumulative effects of 'application' developments.</p>	<p>Operational and under-construction onshore and offshore wind farms within the SLVIA study area are considered as part of the baseline in Section 12.7 of the SLVIA. These, as well as consented wind farms are considered within the cumulative assessment presented in Section 12.8.</p> <p>See Table 12-3 for further details on cumulative wind farms to be included in the cumulative assessment.</p>
NatureScot	<p>We support the use of baseline coastal character information used for the previous assessment of the Moray OWFs, filling in gaps where required.</p>	<p>The baseline information from both Moray East and Moray West EIARs is used to describe the baseline condition and where gaps exist, this has been infilled following industry best practice. See Section 12.7.5.</p>
The Highland Council	<p>The Council expects the EIAR to consider the seascape, landscape and visual impact of the development. The Council makes a distinction between the two. While not mutually exclusive, these elements require separate assessment and therefore presentation of visual material in different ways. It is the Council's position that it is not possible to use panoramic images for the purposes of visual impact assessment.</p> <p>The Council, while not precluding the use of panoramic images, require single frame images with different focal lengths taken with a 35mm format full frame sensor camera – not an 'equivalent.' The focal lengths required are 50mm and 75mm. The former gives an indication of field of view and the latter best represents the scale and distance in the seascape and landscape i.e. a more realistic impression of what we see from the viewpoint. These images should form part of the EIAR and not be separate from it. Photomontages should follow the Council's Visualisation Standards which is available on the Councils website.</p>	<p>Visual representations have been prepared in accordance with THC guidance for viewpoints 2-12 located within the Highlands and are included in Volume 7C, Appendix 12-4: Visualisations (The Highland Council).</p> <p>All offshore WTGs have been re-rendered in the visualisations in accordance with THC (2016¹⁹) Guidance.</p>

Consultee	Comment	Response
	The use of monochrome for specific viewpoints is useful where there are a number of different wind farms (existing and proposed) in the view. We are happy to provide advice on this matter going forward. All existing and proposed WTGs should be re-rendered even if they appear to be facing the viewer in the photograph to ensure consistency and to ensure the cumulative assessment can be considered on the worst-case scenario.	
The Highland Council	It is considered that given the scale of the development, a study boundary of 60km should be adopted for this proposed development. For instance, this would also allow for the inclusion of an assessment from the whole of Dunnet Head (including the Special Landscape Area) and the areas around Morven and Navidale which are considered important by the Council. The assessment of seascape, landscape and visual impact should be completed in full across the entire study area. For the avoidance of doubt, THC do not consider it to be acceptable to screen out viewpoints for a full assessment based upon distance.	A 60km SLVIA study area has been agreed following consultation with THC and MD-LOT as set out in Table 12-3.
The Highland Council	<p>The finalised list of Viewpoints (VP) and wireframes for the assessment of effects of a proposed development must be agreed in advance of preparation of any visuals with THC and other interested parties. However, at present we can advise that we would like to see additional viewpoints.</p> <ul style="list-style-type: none"> ▪ A viewpoint from Dunnet Head would be beneficial. This is also located within the Dunnet Head Special Landscape Area. One of the Special Qualities is the panoramic views which can be expansive. ▪ In terms of the night-time assessment- in addition to VP3 the Council would also like a night-time visualisation from VP6 Lybster to be included. 	<p>Representative viewpoints have been agreed with Stakeholders in consultation as set out in Table 12-3.</p> <p>A further viewpoint has been included in the SLVIA: Viewpoint 2: Dunnet Head, within the Dunnet Head SLA (Volume 7C, Appendix 12-3: Visualisations, Figures 12-2a - h, and Volume 7C, Appendix 12-2: SLIVA Figures, Figure 12-4: Visual Receptor and Viewpoint Locations).</p> <p>A further night-time viewpoint has been included in the SLVIA: Viewpoint 9: Lybster (Volume 7C, Appendix 12-3: Seascape, Landscape and Visual Impact Assessment Visualisations, Figure 12-9i - o, and Volume 7C,</p>

Consultee	Comment	Response
		Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-4: Visual Receptor and Viewpoint Locations).
The Highland Council	<p>When assessing the impact on tourist and recreational routes please ensure that all core paths, the national cycle network, North Coast 500 and long distance trails are assessed.</p> <p>It should be noted that these routes are used by a range of receptors. Sequential route assessments should be included to consider the impact of the development on users of the road network, for instance the A9, A99, B876 and B870, but this is not exhaustive.</p> <p>Route assessments should be supported by wirelines and viewpoint assessments should be provided from these routes in the main body of the LVIA.</p>	<p>Sequential impacts on routes such as major roads and long-distance recreational routes and selected core paths, agreed with THC, are considered Section 12.7.</p> <p>See Table 12-3 for details of core paths to be included in the SLVIA.</p> <p>The assessment is supported by visualisations contained in Volume 7C, Appendix 12-3: Seascape, Landscape and Visual Impact Assessment Visualisations.</p>
The Highland Council	<p>The development will further extend the number of proposals of this type in the surrounding area, necessitating appropriate cumulative impact...Given the potential cumulative impact of the proposal it is expected that the applicant should present images for presentation within the Panoramic Digital Viewer.</p>	<p>Visual representations have been prepared as per the NatureScot (2017) and THC (2016) guidance, see Volume 7C, Appendix 12-3: Seascape, Landscape and Visual Impact Assessment Visualisations and Appendix 12-4 Visualisations (The Highland Council).</p> <p>Selected viewpoints have been provided for presentation within the THC Panoramic Digital Viewer.</p>
The Highland Council	<p>We expect an assessment of the proposal against the criterion set out in the Council's OWESG to be included within the SLVIA chapter of the EIAR.</p>	<p>An assessment of the Caledonia North Site against the criterion set out in THC</p>

Consultee	Comment	Response
		OWESG is contained in Section 12.7.6 of this SLVIA.
The Highland Council	An assessment of the impacts of the proposal on landscape should assess the impacts on any landscapes designated at a national and local scale. As part of this the impact on the Special Landscape Areas (SLA) must be undertaken using the SLA citations available from the Council's website. It is noted that there is a request to scope out the Wild Land Areas in the assessment. It is anticipated that NatureScot will provide detailed guidance on Wild Land Areas.	An assessment of designated landscapes, including SLAs, is contained in Section 12.7.
The Highland Council	<p>In relation to Table 16.5 of the Scoping Report, the following elements are requested to be scoped out. THC make the following observations:</p> <ul style="list-style-type: none"> ▪ We do not consider it appropriate to completely scope out the construction and decommissioning impacts and reference should be made to them in the EIAR. ▪ We do not consider that effects beyond 50km can be scoped out, we request that given the scale of the development the study area is 60km. ▪ THC agree that the effects from the offshore cable during the operation phase can be scoped out of the assessment. ▪ THC agree that the lighting can be scoped out of the seascape and landscape character assessment. ▪ THC do not agree that the impact of the operation and maintenance of the development experienced by offshore visual receptors can be completely scoped out of the assessment. It is noted that a VP from the ferry route is proposed. 	<p>Impacts during construction and decommissioning are considered in Section 12.7.</p> <p>Following responses in the Scoping Opinion and during stakeholder consultation on the SLVIA study area radius has been revised to 60km, as set out in Table 12-3.</p> <p>Impacts on offshore receptors are assessed by representation Viewpoint 22 Ferry Route (Kirkwall to Aberdeen), see Section 12.7 of the SLVIA.</p>
The Highland Council	It is considered that the guidance in the Onshore Wind Energy Supplementary Guidance and the Caithness Landscape Sensitivity Appraisal (both available on the Council website) should be used to inform the assessment. Further the recently published guidance from Marine Scotland and Energy Consents Unit on the use of design envelopes should be considered.	<p>Baseline data sources used to inform the SLVIA, including THC OWESG and the Caithness Landscape Sensitivity Appraisal, are identified in Table 12-4.</p> <p>The SLVIA is based on the Design Envelope described in Volume 1, Chapter 3: Proposed Project Description (Offshore) and the worst-</p>

Consultee	Comment	Response
		case scenario identified as appropriate for the SLVIA as described in Section 12.6. In accordance with Scottish Government (2022) the likely significant effects of a 'worst case' scenario are assessed and illustrated in the SLVIA.
Moray Council	We note that the proposed development area is some distance offshore from the Moray Coast, and that the energy transmission infrastructure is proposed to make landfall entirely within Aberdeenshire. On this basis the only comment we would have is a request that in preparing photomontages and night-time lighting photo montages that one viewpoint be selected from within Moray, such as from Cullen viaduct or some other coastal viewpoint at the eastern side of Moray just to give a better understanding of the distances and degree of impact anticipated (or lack thereof).	A night-time viewpoint has been included in the SLVIA: Viewpoint 15 Cullen viaduct (Volume 7C, Appendix 12-3: SLIVA Visualisations, Figures 12.15g – k).
MD-LOT	With regards to the proposed study area for the Seascape, Landscape and Visual Impact Assessment ("SLVIA"), the Scottish Ministers advise that it should be a radius of 60km from the boundary of the Proposed Development which is in line with the Highland Council representation. The SLVIA should be completed in full across the entire study area and the Developer should note the Highland Council does not consider it to be acceptable to screen out viewpoints for a full assessment based on distance.	Following responses in the Offshore Scoping Opinion and during stakeholder consultation on the SLVIA study area radius has been revised to 60km, as set out in Table 12-3.
MD-LOT	In line with the Highland Council representation, the Scottish Ministers advise that two additional viewpoints are required, Dunnet Head and a night-time visualisation from VP6 Lybster. Additionally, the Scottish Ministers advise that viewpoints and wireframes for the SLVIA must be agreed in advance of preparation of any visuals with the Highland Council.	A further viewpoint has been included in the SLVIA: Viewpoint 2: Dunnet Head, within the Dunnet Head SLA (Volume 7C, Appendix 12-3: Visualisations, Figures 12-2a - h, and Volume 7C, Appendix 12-2: SLIVA Figures, Figure 12-4: Visual Receptor and Viewpoint Locations).

Consultee	Comment	Response
		A further night-time viewpoint has been included in the SLVIA: Viewpoint 9: Lybster (Volume 7C, Appendix 12-3: Seascape, Landscape and Visual Impact Assessment Visualisations, Figure 12-9i – o, and Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-4: Visual Receptor and Viewpoint Locations), at the request of THC.
MD-LOT	In addition, the Scottish Ministers highlight the Moray Council representation which requests that a viewpoint is selected from within Moray, such as from Cullen viaduct or some other coastal viewpoint at the eastern side of Moray. The Developer should also note that Community Councils may request additional viewpoints and therefore the Scottish Ministers advise the Developer to discuss this with the local community and Community Councils prior to submission of the EIA Report.”	A night-time visualisation from Viewpoint 15 Cullen viaduct (Volume 7C, Appendix 12-3: SLIVA Visualisations, Figures 12.15g – k), has been included at the request of Moray Council.
MD-LOT	The Scottish Ministers advise that the Developer should consider the night-time component of the character and visual amenity, in line with the NatureScot representation.	Night-time effects of Caledonia North Site are considered in Volume 7C, Appendix 12-1: Night Time Assessment of the SLVIA. The assessment focuses on the visual effects of aviation and navigational lighting, however the impact of Caledonia North Site lighting on coastal character at night is considered for some limited areas where coastal character and the landform/skyline of inshore islands etc may be perceived at night with lights in the background (i.e., where a perceived character effect may occur as

Consultee	Comment	Response
		a component of visual effects). Areas and receptors located outside the ZTV (i.e., in areas with no visibility), are scoped out of the SLVIA since they have no visibility of Caledonia North Site and will not be affected.
MD-LOT	In line with the NatureScot representation, the landscape baseline assessment should include the Proposed Development in addition to existing and/or under construction OWFs (terrestrial and marine).	Operational and under-construction onshore and offshore wind farms within the SLVIA study area are considered as part of the baseline in Section 12.7 of the SLVIA. These, as well as consented wind farms are considered within the cumulative assessment presented in Section 12.8.
MD-LOT	The Scottish Ministers advise in line with the Highland Council representation impacts during the construction and decommissioning phase should be scoped into the EIA Report.	Impacts during construction and decommissioning on the seascape, landscape, and visual resource are considered in Section 12.7.
MD-LOT	The Scottish Ministers disagree with the proposal to scope out the impact of the operation and maintenance of the Proposed Development experienced by offshore visual receptors and this impact should therefore be scoped into the EIA Report.	Impacts on offshore visual receptors are considered in Section 12.7 of the SLVIA and illustrated by Viewpoint 22 (Volume 7C, Appendix 12-3: Visualisations, Figure 12-22).
MD-LOT	With regards to the SLVIA, the Scottish Ministers advise the Developer to utilise the Onshore Wind Energy Supplementary Guidance ("OWESG") and the Caithness Landscape Sensitivity Appraisal which are available on the Highland Council website and include an assessment of the Proposed Development against the criterion set out in the OWESG in the EIA Report.	An assessment of Caledonia North Site against the criterion set out in THC OWESG is contained in Section 12.7 of this SLVIA.

Consultee	Comment	Response
MD-LOT	The Scottish Ministers highlight the Highland Council representation which contains specific requirements for the presentation of visual material for the assessment of seascape, landscape and visual impacts as separate elements. The Developer must ensure that the EIA Report contains images in line with the Highland Council representation and that the minimum requirements for the printed hard copies are also achieved. On the use of monochrome for specific viewpoints, the Developer should note that the Highland Council is able to provide further advice.	Visual representations have been prepared as per the NatureScot (2012 ¹⁵) and THC (2016 ¹⁹) guidance, see Table 12-3 for agreement. Volume 7C, Appendix 12-3: Visualisations contains these visualisations. Printed versions have been provided by the Applicant to THC as required.
MD-LOT	The Developer should ensure that the Highland Council representation is addressed with regards to the requirements for route assessments including impacts on tourist and recreational routes and sequential route assessments.	Sequential impacts on routes such as major roads and long-distance recreational routes and selected core paths, agreed with THC (see Table 12-3), are considered Section 12.7.
MD-LOT	The Scottish Ministers further advise that the methodology for the SLVIA should be clearly set out in the EIA Report in line with the Highland Council representation.	The methodology for the SLVIA is set out in Volume 7B, Appendix 12-5: Seascape, Landscape and Visual Impact Assessment Methodology and summarised in Section 12.5
MD-LOT	The Scottish Ministers advise that the assessment should include impacts on any landscapes designated at a national and local scale including the impact on Special Landscape Area which should be undertaken using the citations available from the Highland Council website.	An assessment of designated landscapes, including SLAs, is contained in Section 12.7.
MD-LOT	With regards to the cumulative impacts, the Scottish Ministers draw the Developers attention to the NatureScot and Highland Council representations. NatureScot considers that the most likely significant effects are to be derived from the cumulative design relationship between the existing and/or under construction OWFs in the Moray Firth and the Proposed Development. The Scottish Ministers agree with NatureScot and encourage that, as part of design iteration, consideration is given to alternative heights and locations within the	Volume 1, Chapter 3: Proposed Development Description (Offshore) sets out the design issues pertinent to Caledonia North Site. The assessment set out in Section 12.7 of this Chapter considers Caledonia North Site in the context of the operational WTGs and a

Consultee	Comment	Response
	<p>Array Area to mitigate potential significant effects from poor cumulative composition and higher WTGs on sensitive coastal receptors, in particular on the closest east Sutherland coast. The Developer should assess the cumulative seascape, landscape and visual impacts in the EIA Report in line with the NatureScot representation. Additionally, the Developer should review the wind energy map provided by the Highland Council and also note the requirements for images for presentation within the Panoramic Digital Viewer.</p>	<p>cumulative assessment is provided in Section 12.8 of this SLVIA.</p> <p>The use of floating WTGs (in Caledonia South) has currently been determined by water depth. Their use to infill illogical gaps in the layout will be considered in the detailed design stage.</p> <p>See Table 12-3 for the Applicant's response on design matters.</p>
MD-LOT	<p>The Scottish Ministers further highlight the NatureScot representation which identifies that the use of both fixed and floating WTG technologies could potentially avoid or reduce the appearance of illogical gaps or breaks in the layout and that the use of different turbine heights within the Array Area could reduce significant cumulative effects arising from the substantial difference in turbine heights proposed against those of existing OWFs (in particular Beatrice and Moray East). As part of design iteration, the Developer must aim to produce a cohesive composition with the existing Moray OWFs in line with the NatureScot representation.</p>	<p>The balance between mitigation of visual and landscape effects and significant operational constraint/reduction in function is considered in Volume 1, Chapter 6: Site Selection and Alternatives and will be further developed in the EIAR.</p>

Table 12-3: Stakeholder Engagement Activities.

Date	Consultee and Type of Consultation	Summary
14 June 2023	NatureScot, THC, Aberdeenshire Council; meeting	Study Area agreed as 60km radius from Array Area, as per THC scoping request to include Dunnet Head Sensitive Landscape Area.
14 June 2023	NatureScot, THC, Aberdeenshire Council; meeting	Potential maximum WTG height increased to 355m above MSL for fixed WTGs.
14 June 2023	NatureScot, THC, Aberdeenshire Council; meeting	Viewpoint locations agreed. Final list to include a further daytime viewpoint at Dunnet Head Trig Point and a further night time view at Lybster. A night time viewpoint at Cullen was proposed in the Scoping Report.
14 June 2023	NatureScot, THC, Aberdeenshire Council; meeting	Moray West WTGs are under construction and are to be photomontaged in to views.
14 June 2023	NatureScot, THC, Aberdeenshire Council; meeting	THC requirement for full set of visualisations in accordance with THC (2016 ¹⁹) in addition to those required by NatureScot was discussed. It was asked if THC would be willing to reconsider the requirement for 50mm field of view photomontages. THC to consider request from the Applicant to reconsider the requirement for 50mm field of view (65.5 degree horizontal field of view) photomontages.
14 June 2023	NatureScot, THC, Aberdeenshire Council; meeting	In relation to THC requirement to assess various visual receptors such as users of routes OPEN requested if THC could rationalise which of the Core Paths are important to THC's consideration of the effects of the Caledonia North Site and if any could be omitted from the assessment. THC provided initial thoughts that those Core Paths associated with an onshore wind farm can be scoped out (given these are already in the immediate locality of a wind farm). THC to confirm which Core Paths within the Caledonia North Site study area should be assessed as part of the SLVIA.

Date	Consultee and Type of Consultation	Summary
14 June 2023	NatureScot, THC, Aberdeenshire Council; meeting	<p>Design envelope (or worst case scenario) approach to assessment was discussed along with need to consider fixed WTGs across most of the site but floating WTG types in the southern part where the water is deeper. The largest number of the smallest WTGs or the smallest number of the largest WTGs are at either end of the potential worst case scenario considerations. In addition, there is the potential for Fixed and Floating WTGs to be developed according to differing maximum scenarios. Caledonia OWF WTGs not seen in isolation but in the immediate context of BOWL and Moray East WTGs, which adds complexity.</p> <p>Cumulative wirelines from seven viewpoint locations for three potential indicative worst case layouts for Caledonia OWF were presented. It was discussed that the density and overlapping of WTGs, as shown in wirelines, would not materialise in reality due to the long distances between the closer and more distant WTGs.</p> <p>NatureScot and Aberdeenshire Council agreed that the scenario with the largest fixed and floating WTGs (i.e., fewer but taller) would be considered worst case.</p> <p>THC's position to be confirmed.</p> <p>Notably the Caledonia North Site does not include floating WTGs, however the principle of the largest WTGs being the worst case scenario has been followed in determining the worst case scenario for Caledonia North Site.</p>
14 June 2023	NatureScot, THC, Aberdeenshire Council; meeting	<p>Minimum WTG spacing was discussed. Following the meeting, it was confirmed by Accept the Applicant that spacing in the indicative worst case layouts presented is 6.4 times the rotor diameter crosswind, and 6.1 times the rotor diameter downwind. Therefore, with the current smallest rated turbine (15MW) having a rotor diameter of 236m, this means a spacing of 1.5km crosswind and 1.4km downwind. The minimum spacing assumptions will be confirmed later in 2023.</p>
14 June 2023	NatureScot, THC, Aberdeenshire Council; meeting	<p>Was discussed that it is unlikely that known constraints would result in a notable gap in the WTGs from the viewpoints given shape and orientation of the Array Area for the Caledonia North Site.</p>
14 June 2023	NatureScot, THC, Aberdeenshire Council; meeting	<p>It was discussed that assessment results from the EIA stage and initial seabed characterisation surveys would be further informed by detailed geophysical and geotechnical surveys following a positive consent decision. It is at this post-consent stage that the layout would be finalised and submitted as a Development Specification and Layout Plan (DSLPL). NatureScot queried if the Applicant</p>

Date	Consultee and Type of Consultation	Summary
		would retain an SLVIA specialist, such as OPEN, to provide SLVIA support to inform the final layout. The Applicant confirmed it is the intention to involve an SLVIA specialist to help finalise the layout post-consent.
14 June 2023	NatureScot, THC, Aberdeenshire Council; meeting	<p>NatureScot set out, in its scoping response, a request for a number of considerations relating to further design iteration. This included consideration of lower turbine heights in order to reduce scale comparison with existing WTGs to achieve a more cohesive composition, use of floating WTGs to infill gaps in the layout derived from benthic constraints and reduction of the Array Area to the north and south of the Area for Lease.</p> <p>The Applicant is not in a position to consider reducing turbine scale or the Array Area at this early stage in the EIA process for reasons set out in the pre-consultation briefing note. The Applicant will review the full SLVIA then consider any mitigation, if required and considering NatureScot's Sectoral Marine Plan (SMP) advice.</p>
14 June 2023	NatureScot, THC, Aberdeenshire Council; meeting	<p>On its scoping response NatureScot commented that "From the EIA Regulations 2017, a cumulative assessment is no longer required to assess the cumulative effects of 'application' developments". It was confirmed that the cumulative SLVIA will, therefore, include offshore and onshore wind farms that are operational, under construction and consented within the 60km radius SLVIA Study Area.</p> <p>OPEN noted that the Applicant will seek confirmation from NatureScot, THC, Aberdeenshire Council and Moray Council on the onshore and offshore wind farms to be included in the assessment later in 2023.</p>
14 June 2023	NatureScot, THC, Aberdeenshire Council; meeting	<p>NatureScot suggested early sight of photography where any doubt about its suitability rather than waiting for the application.</p> <p>This has not been required as the vast majority of photographs were taken in clear conditions.</p>
14 June 2023	THC; email	<p>Landscape officer preference is to retain the requirement for the 50mm field of view visualisations. This requirement was subsequently dropped by THC. See 28 September 2023.</p>
14 June 2023	THC; email	<p>In relation to Core Paths to be considered THC Landscape Officer suggested that a focus on Core Paths nearest the coast and on the outskirts of settlements or close to heritage assets might be useful ,where those are not already captured, so that would include paths such as CA15.17 Keiss/Reiss</p>

Date	Consultee and Type of Consultation	Summary
		Shore, CA15.03 Castle of Old Wick, CA10.06 Camster Forest, at a point close to Hill o' Many Stanes and CA12.05 Yarrow Archaeological Trail. The visual effect on users of these routes is assessed in Section 12.7 of the SLVIA.
14 June 2023	THC; email	THC Landscape Officer advised 'in this instance I would tend to the view that the taller machines will be visible in a greater range of weather conditions and potentially over a greater distance and so the Figure 3 scenario would potentially represent the worst case scenario.' The smallest number of the largest WTGs forms the basis for the worst case scenario assessed in the SLVIA.
26 June 2023	THC - email	THC Access Officer suggested a further viewpoint on Core Path CA12.05, the Yarrow Archaeological Trail, at the Cairns of Warehouse. A viewpoint at this location has been included as Viewpoint 7 in the SLVIA.
28 September 2023	THC; email	THC Landscape Officer confirmed 'In view of THC position on Moray East and West I am content that we not insist on the 50mm in this instance.'
21 May 2024	NatureScot; email	Guidance sought by the Applicant on how the aviation lights should be displayed in the Seascape, Landscape and Visual Impact Assessment Visualisations. Mitigation is proposed so that automatic dimming would reduce the intensity of the visible aviation lights from 2000 candela or cd to 200cd when visibility exceeds 5km.
29 May 2024	NatureScot; email	Our advice (as agreed with Scottish Government and the working group for the draft aviation lighting assessment guidance) is that photomontage visualisations should illustrate the maximum case lighting intensity scenario. For example, 200cd where dimming of aviation lights is proposed as embedded mitigation, and 2000cd only where this mitigation is not proposed. In addition, we advise against use of manipulated day-time photography due to the risk of misrepresenting the baseline (photographs should capture the baseline situation; i.e., any other lights in the view). However, there may be instances where the approach could be used for remote locations where it can be verified that no other sources of artificial light are present in the baseline.

12.4 Baseline Characterisation

12.4.1 Study Area

- 12.4.1.1 The study area for the SLVIA is defined as the Caledonia North Site plus a 60km radius (Figure 12-1 SLVIA Study Area in Volume 7B, Appendix 12-5: Seascape, Landscape and Visual Impact Assessment Figures). NatureScot was in agreement with a reduced study area of 50km as suggested in the Offshore Scoping Report (Volume 7, Appendix 2); however, a 60km study area was agreed with MD-LOT and THC which takes precedence. The rationale for this is discussed below.
- 12.4.1.2 A 50km radius SLVIA study area was proposed in the Offshore Scoping Report (Volume 7, Appendix 2) for a number of reasons. Although WTGs of the height proposed could theoretically be visible at distances beyond 50km they are, however, unlikely to be significant at this range. The EIA regulations require assessment of the 'likely significant effects,' therefore, the SLVIA study area should extend far enough to include all areas within which likely significant effects may occur. It need not cover all areas where there may be effects. The Offshore Scoping Opinion (Volume 7, Appendix 3) response confirmed that NatureScot was satisfied with a study area of 50km, while THC and MD-LOT requested a 60km radius from the Caledonia North Site boundary to include Dunnet Head.
- 12.4.1.3 The spatial scope of the SVLIA is therefore defined as encompassing a 60km radius from the Caledonia North Site, which has formed the basis of the study area described in this section and illustrated in Volume 7C, Caledonia North, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-8: Blade Tip ZTB with Viewpoint Locations Caledonia North.
- 12.4.1.4 This has been agreed with consultees as set out in Table 12-3. Potential impacts on seascape, landscape, and visual amenity from the Caledonia North Site outside of the 60km study area are scoped out of this assessment as they are considered unlikely to result in significant effects.
- 12.4.1.5 The offshore export cables, inter-array and interconnector cables will be trenched and buried along the seabed and would therefore not be visible during operation and maintenance. During the installation and decommissioning of the sub-sea cables the only effect on the seascape, landscape and visual amenity would be the visibility of a small number of vessels out at sea, which are a common occurrence as part of the baseline character and views. Such temporary, short duration effects are not likely to give rise to a significant effect. Therefore, for SLVIA, rather than including all of the components of Caledonia North, it is only the construction, operation and decommissioning of the WTGs, and OSPs within the Caledonia North Site that are assessed, as agreed through the scoping process, as set out in Section 12.5.

12.4.2 Data Sources

12.4.2.1 A desk-based review was undertaken of the guidance and data relevant to this SLVIA and was used to inform the reporting of the baseline environment and assessment of effects. The primary data sources used in the preparation of this chapter are listed in Table 12-4.

Table 12-4: Sources of information.

Title	Author	Year
Met Office weather station historic visibility data	MetOffice ²⁰	2024
Aberdeenshire Local Development Plan	Aberdeenshire Council ⁵	2023
Assessing Impacts on Wild Land Areas – technical guidance	NatureScot ²¹	2023
UK Offshore Energy Strategic Environmental Assessment (OESEA 4), Environmental Report	DECC ²²	2022
Google Earth Pro (2022), Aerial Photography	Google ²³	2022
Guidance for applicants on using the design envelope for applications under section 36 of the Electricity Act 1989	Scottish Government ¹⁸	2022
Assessing the Cumulative Impact of Onshore Wind Energy Developments	NatureScot ¹³	2021
Moray West OWF, EIAR	EDPR ²⁴	2019
Scottish Landscape Character Map and Descriptions	NatureScot ²⁵	2019
Guidance Note – Coastal Character Assessment – Version 1a	Carol Anderson ⁹	2018
Guidance Note: Coastal Character Assessment	NatureScot ²⁶	2018
Special Landscape Areas – Supplementary guidance.	Aberdeenshire Council ²⁷	2017
Highland wide Local Development Plan	THC ³	2017
Landscape Sensitivity Appraisal: Black Isle, Surrounding Hills and Moray Firth Coast Caithness Addendum Supplementary Guidance: Part 2B, December 2017	THC ²⁸	2017
Visual Representation of Windfarms: Version 2.2	NatureScot ²⁹	2017
Siting and Designing Windfarms in the Landscape	NatureScot ³⁰	2017

Title	Author	Year
Orkney Local Development Plan	Orkney Island Council ⁸	2017
Visualisation Standards for Wind Energy Developments	THC ¹⁹	2016
Onshore Wind Energy Supplementary Guidance, November 2016	THC ³¹	2016
Interactive maps of the UK's light pollution and dark skies as part of a national mapping project	LUC and CPRE ³²	2016
Coastal Character Assessment: Orkney and North Caithness	NatureScot ³³	2016
Guidelines for Landscape and Visual Impact Assessment: Third Edition (GLVIA3)	Landscape Institute and IEMA ¹¹	2013
Moray East OWF, EIAR	EDPR ³⁴	2012
Offshore Renewables – Guidance on Assessing the Impact on Coastal Landscape and Seascape. Guidance for Scoping an Environmental Statement	NatureScot ¹⁵	2012
Caithness and Sutherland Local Development Plan	THC ³⁵	2011
Assessment of Highland Special Landscape Areas on behalf of SNH and The Highland Council	THC ³⁶	2011
National Coastal Character Map	NatureScot ³⁷	2010
The special qualities of the National Scenic Areas. Scottish Natural Heritage Commissioned Report No.374 (iBids and Project no 648)	NatureScot ³⁸	2010
An assessment of the sensitivity and capacity of the Scottish seascape in relation to windfarms	NatureScot ³⁹	2005
Inventory of Gardens and Designed Landscapes	N/A	N/A
National Trust Scotland: Specific visitor attractions/tourist destinations.	N/A	N/A
OPEN internal dataset: Public Rights of Way	N/A	N/A
Ordnance Survey 1:50,000 scale mapping	N/A	N/A
Ordnance Survey 1:25,000 scale mapping	N/A	N/A
Ordnance Survey County Region, Local Unitary Authority, Railways, Road and Settlements	N/A	N/A

Title	Author	Year
Ordnance Survey Terrain 50 Digital Terrain Model (DTM)	N/A	N/A
Ordnance Survey Terrain 5 Digital Terrain Model (DTM)	N/A	N/A
National Cycle Network	N/A	N/A
Marine and coastal mapping data, ferry routes	N/A	N/A

Desk Study

- 12.4.2.2 The SLVIA for the Caledonia North Site draws upon the description of the baseline seascape, landscape and visual conditions of the identified receptors as set out in the Moray East EIAR (2012⁴⁰) and Moray West EIAR (2018⁴¹). This is due to the similarities of the study areas.
- 12.4.2.3 Re-use of certain baseline information has been agreed through scoping and all relevant information has been included in this SLVIA. The baseline has been updated as necessary to take account of revised guidance, definition of valued landscapes through policy and new development that has arisen.
- 12.4.2.4 Additional baseline information has also been gathered through desk study and fieldwork with the different extents of the SLVIA study area being taken into account. The key references that have informed this work are included at the end of this chapter.
- 12.4.2.5 Interactions have been identified between the Caledonia North Site and seascape, landscape and visual receptors, to predict potentially significant effects arising and measures are proposed to mitigate effects.

Site-specific Surveys

- 12.4.2.6 For those receptors where a detailed assessment is required, primary data acquisition has been undertaken through a series of surveys. These surveys include field survey verification of the ZTV from terrestrial landscape character areas (LCAs), micro-siting of viewpoint locations, panoramic baseline photography and visual assessment survey from representative viewpoints. The viewpoint photography, visual assessment and landscape assessment surveys were undertaken during autumn/winter 2023 to spring/summer 2024; as described in Table 12-5. Sea-based offshore surveys have not been undertaken as part of the SLVIA as the land-based survey from the coast was sufficient to verify the ZTV, undertake viewpoint photography and perform the visual and landscape assessment surveys.
- 12.4.2.7 To inform the SLVIA EIAR chapter, site-specific surveys were undertaken, including viewpoints agreed with stakeholders (as described in Table 12-6). A

summary of the surveys undertaken to inform the SLVIA are outlined in Table 12-5.

Table 12-5: Summary of surveys undertaken to inform the SLVIA.

Survey Title	Extent of Survey	Date	Overview
Viewpoint photography	Viewpoints in the Highlands	16-17 October 2023	Day and night photography
Viewpoint photography	Viewpoints in the Highlands	11 December 2023	Day photography
Viewpoint photography	Viewpoints in Moray/Aberdeenshire	7-9 September 2023	Day and night photography
Viewpoint photography	Viewpoints in Moray/Aberdeenshire	16 September 2023	Day and night photography
Viewpoint photography and assessment	Aberdeenshire, Moray and the Highlands coast	19-21 March 2024	Coastal/landscape character and visual assessment at viewpoints. Day and night photography
Viewpoint photography and assessment	Highlands and Orkney	2-8 May 2024	Day photography and viewpoint assessment

12.4.3 Baseline Description

Introduction

- 12.4.3.1 An overview of the current baseline conditions for seascape, landscape and visual amenity is outlined in this section and then subsequently described in further detail within each of the main receptors in the assessment in Section 12.7.
- 12.4.3.2 The baseline provides a “description of the relevant aspects of the current state of the environment (baseline scenario)” as required by the EIA Regulations. The ‘relevant aspects’ for seascape, landscape and visual are those that may be impacted by Caledonia North, either through physical effects or visibility/views of the Caledonia North Site.
- 12.4.3.3 In line with GLVIA3 the baseline therefore “establishes the area in which the development may be visible” (Landscape Institute, 2013) in order to define the relevant aspects of the current seascape, landscape and visual environment of the SLVIA study area.

Baseline Overview

- 12.4.3.4 The following section provides an overview of the key landscape, seascape, and visual characteristics of the study area. Detailed descriptions of the baseline environment associated with specific receptors identified as requiring assessment are included with the assessments in Section 12.7.
- 12.4.3.5 The Caledonia North Site is located within the Moray Firth (see Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-8: Blade Tip ZTB with Viewpoint Locations Caledonia North). Broadly, the SLVIA study area covers a large area of the North Sea seascape including parts of the Moray Firth and the Caithness and Sutherland coasts, and the Moray and Aberdeenshire coasts. The study area also covers the south isles of Orkney, including parts of South Ronaldsay, Hoy, Flotta, and Burray, and the southern tip of Mainland Orkney.
- 12.4.3.6 On mainland Scotland, in the Highlands, the SLVIA study area includes Scrabster, Dunnet Head and Duncansby Head on the north coast of Caithness, as far south as Helmsdale on the east coast of Sutherland. The southern part of the study area includes the Moray and Aberdeenshire coast between Kingston in the west and Cairnbulg Point in the east. The Landfall Site for the offshore export cables will be located within the Landfall Site along a section of the Aberdeenshire coast, west of Whitehills at Stake Ness (Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-8: Blade Tip ZTB with Viewpoint Locations Caledonia North).
- 12.4.3.7 The coastline is generally rural in character with a predominantly agricultural land use and a strong association with the sea. There are numerous settlements along the coastline, and these are connected by roads that generally run close to, or on, the coast.
- 12.4.3.8 The concentrations of visual receptors are located along routes, in settlements and at visitor attractions and representative viewpoints (Volume 7B, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-4: Visual Receptors and Viewpoint Locations) located along the coast are generally sited slightly above sea level due to the underlying geology of the area. The main transport routes tend to run along the coast or are set back from it, running along more even ground, and provide links between the various settlements and linking the bridging points over the numerous water bodies. Locations around the confluences of the rivers and smaller water bodies present coastal areas, which have been eroded and these have often been exploited as areas suitable for settlement.
- 12.4.3.9 Older settlement areas and housing along the coast tends to have been sited and designed to reduce exposure from the coastal weather conditions. This means that older properties often do not have open outlooks towards the sea.
- 12.4.3.10 Modern parts of settlements and individual properties tend to still be arranged in order to limit the effects of exposure through their orientation and planting. However, modern building and glazing techniques mean that some newer

properties or additions tend to be designed in order to obtain sea views.

12.4.4 Visual Baseline – Views and Visual Receptors

- 12.4.4.1 There are several locations within the study area where visual receptors (people) are most usually found. These include people within settlements, driving on roads, visitors to tourist facilities or historic environment assets and people engaged in recreational activity such as those using walking and cycle routes. Likely locations of these visual receptors are shown in Volume 7B, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-4: Visual Receptors and Viewpoint Locations.
- 12.4.4.2 Many such receptor groups are represented by the viewpoints included in the detailed assessment. In addition, specific assessment of the effects on views from residential areas of settlements and from routes are included.
- 12.4.4.3 The SLVIA focuses on the receptors located within areas from where they may gain views of the Caledonia North Site. The starting point for understanding potential visibility is ZTV mapping. The ZTV shows the main area in which Caledonia North would theoretically be visible, highlighting the different groups of people who may experience views of the WTGs located within the Caledonia North Site and assisting in the identification of viewpoints where they may be affected. The ZTVs are based on wind WTGs of up to 355m to blade tip above MSL and represents a likely worst case scenario for the SLVIA as shown on Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-7 SLVIA Worst Case Scenario.
- 12.4.4.4 The visual baseline is largely defined by the blade tip ZTV shown in Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-8: Blade Tip ZTV with Viewpoint Locations Caledonia North and in more detail in Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figures 12-13 to 12-16 presented with landscape planning designations, landscape character and visual receptors.
- 12.4.4.5 The blade tip ZTV also illustrates the main coastal areas of the SLVIA study area with theoretical visibility of Caledonia North Site. These areas of visibility have the potential to extend over relatively wide terrestrial areas; extending from Cairnbulg Point in the south-east, along the coastlines of Aberdeenshire and Moray, to north of Kingston; in the Highlands from Scrabster Hill on the mainland to the north-west, along the Caithness and Sutherland coastline from Duncansby Head in the north, to Berriedale to the south; and on the southern coastline and coastal hinterland of South Ronaldsay, Orkney.
- 12.4.4.6 To the west, the closest coastal areas with visibility of the Caledonia North Site will be from Duncansby Head to Halberry Head along the Highlands coastline, with the closest onshore location to the Caledonia North Site at South Head in Wick, at approximately 24.2km. Theoretical visibility occurs to the north-west at Scrabster Hill; however, it is considered that actual visibility will be screened by intervening local landform undulations and vegetation. To

the south, the closest coastal areas with visibility of Caledonia North Site will be from Cullen to Rosehearty, with the closest location at Troup Head, at approximately 50.1km.

- 12.4.4.7 The principal visual receptors within the SLVIA study area include people in or using the following and are described in more detail below and in Section 12.7:
- Settlements;
 - Roads;
 - Railways;
 - Core paths;
 - Places of interest and visitor facilities; and
 - Offshore receptors.

Settlements

- 12.4.4.8 Settlement throughout the study area is generally concentrated along the coastline, particularly in Highland. In Moray and Aberdeenshire settlement extends further inland due to the wider coastal shelf where farming predominates resulting in scattered settlement with small towns and villages at crossroads. The pattern of settlement in each of these areas is described in more detail below.
- 12.4.4.9 Settlement along the Highlands coast consists largely of scattered farms and crofts, with occasional small towns and villages such as Helmsdale, Dunbeath, Lybster and Keiss. The settlements of Thurso and Scrabster lie to the west of Duncansby Head, along the northern coastline of Caithness. Wick is the largest settlement on the eastern Highlands coast of the SLVIA study area; the town straddles the River Wick and extends along both sides of Wick Bay.
- 12.4.4.10 In the Moray and Aberdeenshire part of the study area, the population is much greater than in Highland. The density of urban areas is higher with numerous towns and villages many of which are along the coast to take advantage of proximity to the sea which was and is important for fishing as well as for communication and transportation. The areas in the south of the study area covering the Moray and Aberdeenshire coasts contain a substantial amount of development, the main settlements include Buckie, Cullen, Banff, and Fraserburgh, with smaller settlements at Findochty, Portknockie, Portsoy, Whitehills, Gardenstown and Rosehearty located within the sheltered bays along this coast.
- 12.4.4.11 The coastal settlement of Whitehills is the closest settlement to where the Landfall Site is located and will therefore be the closest settlement to the Caledonia North OECC.

Roads

- 12.4.4.12 There are numerous road corridors traversing the study area, many of which are associated with urban development, while others provide access to the wider countryside. The main 'A' road corridors within the Highlands part of the study area are the A9(T), A99, A882, A855 and A836, with 'B' and minor roads connecting the more remote parts of the study area including the B870, B874 and B876. The main road corridors within the Moray/Aberdeenshire part of the study area are the A97, A98, A95, A947, A961, A981, A990, A90 and A942.
- 12.4.4.13 Within the Highlands part of the study area coastal sections of the A9, the A99 and the A836, form part of the North Coast 500 (NC500). This self-guided 500-mile route was defined in 2014 by the North Highland Initiative to promote tourism within the north Highlands. It is described on the associated website (<https://www.northcoast500.com/about-nc500/>) as:
- "Bringing together a route of just over 500 miles of stunning coastal scenery, the North Coast 500, naturally follows the main roads along the coastal edges of the North Highlands of Scotland, taking in the regions of Wester Ross, Sutherland, Caithness, Easter Ross, the Black Isle and Inverness-Shire".*
- 12.4.4.14 Within the Moray and Aberdeenshire part of the study area coastal sections of the A990, A942, A98, B9139, B9031, B9104, and A90, forms part of the North East 250 (NC250). Like the NC500, the 250-mile self-guided route has been defined to promote tourism within northern Scotland. It is described on the associated website (<https://www.northeast250.com/>) as:
- "The North East 250 explores everything for which Scotland is famous in a unique Scottish road trip taking you through the whisky distilleries of Speyside, the spectacular mountain passes of the Cairngorms National Park, the famous castles of Royal Deeside, the Granite City of Aberdeen, the rugged North Sea coastline to the east, and the picturesque seaside villages of the Moray Firth Coast".*

Railways

- 12.4.4.15 The study area includes the main railway line in Highlands between Inverness to Wick and Thurso (the Far North Line). The line extends eastwards from Halkirk at Georgemas Junction before turning south-east to Wick. It is the most northerly railway in the UK crossing through Flow Country and across rivers famed for salmon fishing (such as the River Thurso). The section of the railway line east of Altnabreac Station that continues to Thurso and Wick is located within the study area.

Long Distance Recreational Routes

- 12.4.4.16 National Cycle Route 1 (NCR1) traverses the northern part of the study area, running along the north Caithness coast between John o'Groats and Thurso, through Highlands. To the south, NCR 1 passes through Moray and

Aberdeenshire along a section of coastline between Buckie in the west, passing through Cullen and Macduff before heading inland south along minor roads leaving the study area north of Muirden on the way to Turiff.

- 12.4.4.17 The coastline and settlements of Moray are linked by a waymarked coastal walking trail, the Moray Coast Trail, covering approximately 80km between Findhorn and Cullen. The Moray Coast Trail is one of Scotland's Great Trails. The route takes in landscapes from rugged cliffs, caves, and sheltered coves to fisher-town harbours, and sweeping stretches of sandy beaches.
- 12.4.4.18 The Speyside Way is one of Scotland's Great Trails. It runs for approximately 163km from Buckie on the shore of the Moray Firth coast, following the River Spey south-west to Tomintoul. At Buckie, the Speyside Way connects with the Moray Coast Trail.
- 12.4.4.19 The Formartine and Buchan Way, another of Scotland's Great Trails, is an 85km route which connects Dyce in the south to Fraserburgh in the north. The route enters the study area from the south close to Cairnbulg Castle before finishing at Faithlie Harbour at Fraserburgh.

Core Paths

- 12.4.4.20 A number of core paths occur within the 60km SLVIA study area. These routes are designated by local authorities under the Land Reform (Scotland) Act 2003. Within the SLVIA study area these routes typically provide access from settlements to parts of the coastline and areas of surrounding countryside in areas further inland, see Figures 12-15 and 12-16 (Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures).
- 12.4.4.21 During consultation with THC and NatureScot, it was agreed that owing to the large number of core paths within the SLVIA study area, only the following routes required assessment for likely significant impacts:
- CA15.17 Keiss/Reiss Shore;
 - CA15.03 Castle of Old Wick;
 - CA10.06 Camster Forest; and
 - CA12.05 Yarrows Archaeological Trail.

Places of Interest and Visitor Facilities

- 12.4.4.22 Readers should refer to Volume 6, Chapter 2: Socioeconomics, Tourism and Recreation for detailed assessment of effects on tourism and recreation as a result of Caledonia North.
- 12.4.4.23 There are places of interest to visitors within the study area. In Highlands, John o'Groats is popular with tourists because it is one end of the longest distance between two inhabited points on the British mainland.
- 12.4.4.24 The historic environment of the coastline provides interest to visitors. The Highlands landscape, and particularly the coastline, is rich with the remains of

human occupation from the pre-historic era to the present day, and there are numerous sites where this history is interpreted for visitors. Historic environment assets within the study area that are accessible to the public include the Garden and Designed Landscapes (GDLs) at Castle of Mey and Duff House. GDLs with more restricted public access include Dunbeath Castle (grounds only, by appointment) and Cullen House (access to roads within the grounds only on specific days). Along the Moray and Aberdeenshire coasts there are numerous historic elements and locations that are popular with visitors, for example castles and brochs, and the historic fishing villages along the coastline.

- 12.4.4.25 The coastal landscape of the study area also includes a variety of tourist facilities such as beaches, links golf courses, public open space, coastal caravan and camping sites that have long been popular for visitors.

Offshore Receptors

- 12.4.4.26 The Moray Firth is used by a range of mariners for both commercial and recreational purposes. There is a density of recreational yachting routes along the inshore waters of the Highlands, and Moray and Aberdeenshire coasts. The Moray Firth is also a popular starting point for sailing routes to Orkney and Shetland, and further afield to Norway, Sweden, and Denmark.

Viewpoints

- 12.4.4.27 The SLVIA is informed by a series of viewpoints, which have been agreed with NatureScot, THC, Moray Council and Aberdeenshire Council and are listed in Table 12-6 and shown in Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-8: Blade Tip ZTV with Viewpoint Locations Caledonia North. These include viewpoints similar to those agreed for the Moray East and Moray West EIARs, but with less concentration of viewpoints in the west of the study area where the Caledonia North Site would be less visible and seen behind the Moray East and Moray West schemes and a greater number in Aberdeenshire where the theoretical visibility of the Caledonia North Site extends further along the coast.
- 12.4.4.28 Viewpoints have been selected to represent seascape, landscape and visual assessment, cumulative assessment, in some cases sequential assessment or as a representative location from a settlement. This information is included in the table and lists the Landscape Character Type (LCT) and where appropriate the Regional Coastal Character Area (RCCA) as well as which visual receptors it represents.
- 12.4.4.29 In some cases, viewpoints have been re-sited in order to gain a higher degree of visibility of the Caledonia North Site. Alternative viewpoints have been included to take account of the more easterly location of the Caledonia North Site and its corresponding study area, or at the request of consultees.
- 12.4.4.30 Viewpoint 13 Lossiemouth is not included in this SLVIA as it lies outside the

60km study area for the Caledonia North Site. The viewpoints have not been renumbered to allow for consistency with Caledonia OWF (Volume 2) and the Caledonia South Site (Volume 4).

Table 12-6: Representative viewpoints.

No	Description	Grid Ref.	Distance to Closest WTG	Reason for Selection	Purpose
1	Burwick Ferry Landing	343617 983920	45.2km	Coastal Hills and Heath LCT 306, Brough Ness and Barth Head RCCA. Passengers on ferries and other boats, Views from South Ronaldsay, Orkney Islands	Seascape, visual, cumulative assessments and representative view of ferry passengers and crew
2	Dunnet Head	320531 976492	53.9km	High Cliffs and Sheltered Bays LCT 141, Dunnet Head RCCA. Visitor attraction	Seascape, landscape, visual, cumulative assessments, representative of visitors, impact on designated landscape
3	Duncansby Head	340522 973247	37.7km	High Cliffs and Sheltered Bays LCT 141, Duncansby Head RCCA, Duncansby Head SLA, visitor attraction	Seascape, landscape, visual, cumulative assessments, representative of visitors, impact on designated landscape
4	Keiss	334539 961097	33.1km	Coastal Crofts and Small Farms LCT 144, Close to Sinclair's Bay RCCA, settlement, major road	Landscape, visual, cumulative, sequential assessments and impact on community
5*	Wick (path south of South View)	337892 950958	24.6km	Farmed Lowland Plain LCT 143, Wick Bay RCCA, settlement, core path	Seascape and cumulative assessments, and impact on community
6	Sarclet (Sarclet Haven Info Board)	334987 943330	24.9km	Coastal Crofts and Small Farms LCT 144, Sarclet Head RCCA, visitor attraction, scattered settlement	Seascape, visual and cumulative assessments, representative of visitors, and impact on nearby individual properties

No	Description	Grid Ref.	Distance to Closest WTG	Reason for Selection	Purpose
7	Yarrows Arch Trail	330611 942133	29.0km	Coastal Crofts and Small Farms LCT 144, Yarrows Archaeological Trail core path (CA12.05), visitor attraction	Landscape, visual and cumulative assessments, representative of visitors
8	Whaligoe Steps	332053 940288	27.5km	High Cliffs and Sheltered Bays LCT 141, Sarclet Head RCCA, visitor attraction	Seascape, visual and cumulative assessments, representative of visitors, and impact on nearby individual properties
9*	Lybster (end of Main Street)	324836 935074	34.9km	Coastal Crofts and Small Farms LCT 144, Lybster Bay RCCA, settlement, core path	Landscape, cumulative, sequential assessments and impact on community
10	Dunbeath (near Heritage Centre)	316071 929517	44.5km	Coastal Crofts and Small Farms LCT 144, Dunbeath Bay RCCA, in vicinity of Dunbeath Castle, settlement	Landscape, visual, cumulative, sequential assessments, representative of visitors, and impact on community
11	Morven	300474 928536	60.0km	Lone Mountains LCT 138, Flow Country and Berriedale Coast SLA, Causeymire-Knockfin Flows WLA, hill walkers	Landscape, visual and cumulative assessments, and impact on designated landscape
12	Navidale	303766 916161	60.4km	Coastal Crofts and Small Farms LCT 144, Helmsdale to Berriedale Coastal Shelf RCCA, in vicinity of Loch Fleet, Loch Bora and Glen Loth SLA, major road, scattered settlement, close to settlement	Landscape, visual, cumulative, sequential assessments and impact on community

No	Description	Grid Ref.	Distance to Closest WTG	Reason for Selection	Purpose
14	Portnockie (Bow Fiddle Rock Info Point)	349409 868739	50.8km	Cliffs and Rocky Coast – Moray and Nairn LCT 282, Portgordon to Portnockie Coast RCCA, visitor attraction, core path, close to settlement	Seascape, landscape, visual, sequential and cumulative assessments, representative of visitors and impact on designated landscape and community
15*	Cullen (viaduct)	350944 867089	51.8km	Cliffs and Rocky Coast – Moray and Nairn LCT 282, close to Cullen Bay RCCA, close to Cullen GDL, settlement, NCR 1, close to Moray Coastal Trail	Seascape, landscape, visual, sequential and cumulative assessments, representative of visitors and impact on designated landscape and community
16	Findlater Castle	354170 867083	50.8km	Cliffs and Rocky Coast - Aberdeenshire LCT 10, Sandend Bay RCCA, visitor attraction, castle access path	Seascape, landscape, visual and cumulative assessments, representative of visitors and impact on designated landscape
17	Portsoy	359070 866381	50.3km	Cliffs and Rocky Coast - Aberdeenshire LCT 10, Sandend Bay RCCA, settlement	Seascape, landscape, visual, sequential and cumulative assessments, representative of visitors and impact on designated landscape and community
18	Macduff, viewpoint outside Macduff Parish Church, Station Brae	370127 864382	51.4km	Cliffs and Rocky Coast - Aberdeenshire LCT 10, East of Banff Bay to East of Macduff RCCA. Settlement at Macduff and Banff. Recognised viewpoint on Ordnance Survey mapping	Seascape, landscape, visual, sequential and cumulative assessments, representative of visitors and impact on designated landscape and community
19*	Gardenstown, Seatown, Harbour Road	379990 864763	52.2km	Cliffs and Rocky Coast - Aberdeenshire LCT 10, Gardenstown RCCA, settlement	Seascape, visual and cumulative assessments, representative of

No	Description	Grid Ref.	Distance to Closest WTG	Reason for Selection	Purpose
					visitors and impact on designated landscape and community
20	Rosehearty Harbour	393117 867817	53.7km	Cliffs and Rocky Coast - Aberdeenshire LCT 10, Rosehearty to Fraserburgh RCCA, settlement	Seascape, landscape, visual, sequential and cumulative assessments, and impact on designated landscape and community
21*	B9031, west of Fraserburgh	398007 866947	56.9km	Cliffs and Rocky Coast - Aberdeenshire LCT 10, Rosehearty to Fraserburgh RCCA. Coastal road, close to settlement	Seascape, landscape, visual, sequential and cumulative assessments, representative of visitors and impact on designated landscape and community
22	Ferry Route (Kirkwall to Aberdeen) – wireline only	397455 906915	28.2km	Passengers on ferries and other boats	Seascape, visual and cumulative assessments, representative of offshore receptors
Note, viewpoints with an asterisk (*) are also assessed as a night-time visual assessment.					

Visibility Frequency and Range of Visibility

- 12.4.4.31 Atmospheric conditions and distance will affect visibility and therefore the ability of observers to see Caledonia North Site from areas where theoretical visibility is indicated in the ZTV. A range of visibility conditions prevail in the SLVIA study area, at different locations, times of day/year and in different weather.
- 12.4.4.32 Whilst ZTV mapping can model the theoretical visibility of the Caledonia North Site, it is important to note that atmospheric conditions will affect visibility. The Met Office defines visibility as 'the greatest distance at which an object can be seen and recognised in daylight, or at night could be seen if the general illumination were raised to a daylight level' (Met Office, 2000).
- 12.4.4.33 A quantitative description of the existing visibility is provided using visibility data from the closest Met Office weather stations at Lossiemouth and Wick, to highlight potential trends in the visibility conditions of the study area. This 'visibility data' shows a 10-year average of the frequency of observations at measured distances from the station between January 2014 to December 2023. This information is derived from information included in Volume 7B, Appendix 12-6: Visibility Frequency and Range.
- 12.4.4.34 Visibility range and frequency is mapped in Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-12 Visibility Range Caledonia North, in the context of the Caledonia North Site using visibility ranges based on Met Office visibility definitions:
- < 1km Very Poor;
 - 1 – 4km Poor;
 - 4 -10km Moderate;
 - 10 – 20km Good;
 - 20 – 40km Very Good; and
 - 40km > Excellent.
- 12.4.4.35 The visibility range is shown in bands extending from the Caledonia North Site and is combined with the ZTV of the Caledonia North Site to show the likely frequency of visibility within different distance threshold bands. Graphs showing the Percentage Visibility Frequency within Met Office Range Bands over 10 years based on data from Wick Airport and Lossiemouth are also presented on Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-12 Visibility Range Caledonia North.
- 12.4.4.36 Although there are limitations to how this data can be applied to judgements about windfarm visibility, the visibility data provides context for an evidence basis for evaluating the visibility of the Caledonia North Site in the prevailing conditions.

- 12.4.4.37 The visibility of the Caledonia North Site that will be experienced by people will be influenced substantially by the prevailing weather and visibility conditions in the area. The visibility frequency data presented on Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-12 Visibility Range Caledonia North and in Volume 7B, Appendix 12-6: Visibility Frequency and Range of Visibility provides an understanding about the amount of time when visibility is experienced at the distances required to see the Caledonia North Site and Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-12 Visibility Range Caledonia North relates this visibility data to the geographic extent of the SLVIA study area.
- 12.4.4.38 The viewpoints included in the SLVIA range from 24.5km to 60.4km from the Caledonia North Site.
- 12.4.4.39 The closest parts of the coastline of the Highlands falls within 24.1km of the Caledonia North Site. The Met Office data from Wick Airport shows that visibility at 24.1km occurs for approximately 54% of the time over the 10-year period.
- 12.4.4.40 With increasing distance, the Met Office data from Wick Airport shows that visibility frequency drops for visibility at longer distances, such that:
- 'Very Good' visibility of over 30km occurred for approximately 37% of the time over the 10 year period.
 - 'Excellent' visibility of over 40km occurred for approximately 17.6% of the time over the 10-year period.
 - 'Excellent' visibility of over 50km occurred for approximately 6% of the time over the 10-year period.
 - Visibility recordings beyond the 60km range equated to 0.1% of the time over the 10-year period.
- 12.4.4.41 The closest parts of the Moray/Aberdeenshire, coastline falls within approximately 50km of the Caledonia North Site. The Met Office data from Lossiemouth shows that visibility at 50km occurs for approximately 24% of the time over the 10-year period.
- 12.4.4.42 With increasing distance, the Met Office data from Lossiemouth shows that visibility frequency drops for visibility at longer distances, such that visibility recordings beyond the 60km range equated to 10% of the time over the 10-year period.
- 12.4.4.43 The Met Office visibility data allows some quantification of the likely frequency of visibility of the Caledonia North Site from individual viewpoints, based on the distance of each viewpoint location. The Met Office visibility frequency data is used to inform an assessment of the 'likelihood of effect' from each viewpoint in Section 12.7, to qualify any significant effects assessed in optimum visibility conditions with how likely they are to actually occur given the prevailing weather/visibility conditions.

Night Time Visual Baseline

- 12.4.4.44 The National Aeronautics and Space Administration (NASA) Visible Infrared Imaging Radiometer Suite onboard two satellite platforms⁴² provides yearly Night Time Lights composite that provides cloud-free images that have been corrected for atmospheric, terrain, lunar, thermal and straylight effects. It is provided at 15 arc per second resolution which equates to 500m resolution to create a measure of night-time brightness. These have been categorised into colour bands to distinguish between different light levels. The maps do not show what the view of the night sky would be from the ground. This information has been used to create Volume 7B, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-5 Baseline Lighting NASA VIIRS NIR Light Composite 2023.
- 12.4.4.45 The highest levels of lighting in the baseline environment tend to be in and around settlements where there are lights in and around buildings as well as streetlights and a higher concentration of vehicle lights. The concentration of lights in settlements can also create light glow. In the countryside lights tend to be clustered around or emitted from the scattered settlement and farmsteads. When moving through the countryside people tend to be in vehicles which have their own lighting. Once it is dark this tends to make the focus of any views ahead of the vehicle. This is except for locations which draw attention due to their lighting.
- 12.4.4.46 This far north in Scotland, night time/low light views are prevalent for much of the 24 hour period from late autumn to early spring, particularly when people are travelling to and from their places of work and/or school. Whilst this is the case, most activity that takes place outdoors or for appreciation of the landscape/seascape occurs during daylight hours. When people are indoors they generally exclude the views into or out of their homes for privacy with curtains or blinds which are also used for insulation.
- 12.4.4.47 The baseline night time lighting conditions quantified by NASA are shown on Volume 7B, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-5 Baseline Lighting NASAA VIIRS NIR Light Composite 2023. The CPRE data shows that within Moray and Aberdeenshire the coastal urbanised areas of Fraserburgh, Rosehearty, Gardenstown, Macduff, Banff, Portsoy, Cullen, Portknockie and Buckie are the brightest light sources. Less bright light sources from smaller settlements are strung out along the coast. The relatively dark parts of Moray and Aberdeenshire are located inland.
- 12.4.4.48 Within the Highlands part of the study area, the urban areas of Wick and Thurso have the greatest light influence, which extends outwards across their suburban context and surrounding landscape. The eastern coastline is influenced by a combination of light from smaller settlements strung out along the A9 at Helmsdale, Dunbeath, Lybster, and on the A99 at Keiss and John o'Groats, and a notable source of lighting at the Subsea 7 pipeline facility 3km south of Keiss. Along the northern coast there is light influence from smaller

settlements including at Gills and Castletown. The relative sparsity of settlement leaves areas of relative darkness across much of the intervening coastal landscape. Further inland, much of the coastal hinterland and landscape of the sweeping moorland and flows, and open rounded hills and uplands are unsettled, with few roads, and therefore a relatively dark part of the study area. There is light influence at smaller settlements inland at Halkirk and Watten, and at the other end of the pipeline facility near Hastigrow.

- 12.4.4.49 In the northern part of the study area that covers the southern isles of Orkney, there is considerable light influence from the Flotta Oil Terminal. There is also some light influence from the smaller settlements at Longhope, Lyness and St Margaret's Hope.
- 12.4.4.50 There are several lighthouses along the coast within the SLVIA study area. Within Highlands are Dunnet Head Lighthouse, Stroma Lighthouse, Duncansby Head Lighthouse and Noss Head Lighthouse. In the Orkney Islands are Swona Lighthouse, Cantick Head Lighthouse and the Pentland Skerries Lighthouse. In Moray and Aberdeenshire within the study area is the Kinnaird Lighthouse. Navigational markers are also lit and are often visible from the coast.
- 12.4.4.51 Offshore, there are flashing lights on the hubs of the two Beatrice Demonstrator WTGs and static lights on the platforms of the Beatrice Oil Field. Ships and fishing boats out at sea also have lights that may be visible at different ranges from the coast. These are seen as spots of light, with platforms tending to be more brightly lit.
- 12.4.4.52 The flashing BOWL, Moray East and Moray West OWFs operational lighting is visible at night, as shown in the baseline night-time photographs. The flashing nature of the actual lights makes these more noticeable than static lights.
- 12.4.4.53 'Night time' (civil twilight) photographs have been taken from the following viewpoints (shown in Volume 7C, Appendix 12-3: Seascape, Landscape and Visual Impact Assessment Visualisations with specific figure numbers noted for each viewpoint below) to illustrate the night-time visual baseline and consider the visual effects of turbine lighting:
- Viewpoint 5: Wick (path south of South View) (Figures 12.5g – k);
 - Viewpoint 9: Lybster (end of Main Street) (Figures 12.9i – o);
 - Viewpoint 15: Cullen (viaduct) (Figures 12.15g – k);
 - Viewpoint 19: Gardenstown, Harbour Road (Figures 12.19e – i); and
 - Viewpoint 21: B9031, west of Fraserburgh (Figures 12.21g – k).
- 12.4.4.54 The selection of the views for the preparation of night-time visualisations considers the potential for views that include lighting along the Highlands, Moray, and Aberdeenshire coasts. The use of photographic views taken civil twilight (dusk) allows recognition of the landscape features that are the context for the lights and also represents a time of day when both the features of the landscape and seascape resource are visible as well as the

lights.

- 12.4.4.55 The night-time viewpoint locations as well as the extent of the visualisations and assessment associated with them were agreed through the Scoping and consultation process.

12.4.5 Coastal Character – Seascape/Coastal/Landscape Character Baseline

- 12.4.5.1 Due to its scale, distance from shore and extent of visibility, it is necessary to consider the effects of the Caledonia North Site on both coastal character and landscape character.

Coastal Character Baseline

- 12.4.5.2 The majority of the SLVIA study area includes the offshore waters of the Outer Moray Firth. There is a gradual transition from the more estuarine and sheltered conditions of the three inner firths (i.e., Beaully, Cromarty and Dornoch Firths) to the open sea of the outer firth.
- 12.4.5.3 The UK Marine Policy Statement (UK Government, 2011²) states:
“References to seascape should be taken as meaning landscapes with views of the coast or seas, and coasts and the adjacent marine environment with cultural, historical and archaeological links with each other”.
- 12.4.5.4 In Scotland, “the focus is on the coast and its interaction with the sea and hinterland, relationships that are quite distinctive in the Scottish context” (NatureScot, 2018). Coastal character is the “distinct, recognisable and consistent pattern of elements on the coast, land and sea that makes one part of the coast different from another” (NatureScot, 2018²⁶) and is made up of the margin of the coastal edge, its immediate hinterland, and areas of sea.
- 12.4.5.5 The extent of the coast is principally influenced by the dominance of the sea in terms of physical characteristics, views, and experience. The landward extent of the coast can be narrow where edged by cliffs or settlement; or broad where it includes raised beaches, dunes, or more open coastal pasture or machair. The major determinant in defining the landward and seaward components of the coast is the sea - the key characteristic.
- 12.4.5.6 Given the definition in the UK Marine Policy Statement (UK Government, 2011²) and the NatureScot coastal character assessment guidance, the assessment of seascape character effects in this SLVIA focuses on areas of onshore landscape with views of the coast or seas/marine environment, in other words the ‘coastal character’, on the premise that the most important effect of OWFs is on the perception of the character of the coast. Visual receptors at sea are represented by Viewpoint 22 Ferry Route (Kirkwall to Aberdeen) as a wireline visualisation.

National Coastal Character Types

12.4.5.7 The coastal character of the SLVIA study area within Scotland is defined at the national level within the research report NatureScot (2005³⁹) Seascapes Study. This broad classification still stands and five of the National Coastal Character Types (NCCTs) are located within the 60km study area, as shown in in Volume 7B, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-2: Landscape and National Coastal Character. As character types they are generic and occur in different locations around the study area. The baseline description of the NCCTs within the study area are quoted from the *Description of Coastal character types* by NatureScot⁴³.

Type 1: Remote High Cliffs

Location within study area: North Caithness

- 12.4.5.8 **Physical characteristics:** High cliffs, often over 200m tall, with occasional small sandy or stony bays at their base, contained by rocky headlands. Stacks, caves and collapsed cliffs are often features of this coastline. There is a strong contrast of line and form arising between the sheer verticality of cliffs and wide horizontal expanse of the sea.
- 12.4.5.9 This type usually has a high moorland, or occasionally, mountainous, hinterland where semi-natural heathland is the dominant land cover. Settlement is generally absent although occasional small villages can be found tucked in bays and inlets or extensive crofting on tops within Highlands areas. Light houses can be prominent features on headlands. This type has a remote, wild character due to the absence of roads and settlement. Where roads exist they are aligned parallel to the coast.
- 12.4.5.10 Access and views to the coast from the hinterland are restricted due to the cliffs. Wide elevated views are directed along the coast and out to open sea, although views of other islands are possible, such as Orkney. Views of offshore WTGs, rigs or boats can be a focus within the maritime component of this type. The Northern quality of light often gives intense clarity in views.
- 12.4.5.11 **Experiential qualities:** Coastline has a particularly exposed character and is physically remote from settlement. The coast is difficult to access and the water's edge is often blocked by impassable steep cliffs. These are exhilarating and awe-inspiring coastlines due to the great height of cliffs giving elevated and distant views and being particularly dramatic when the sea is turbulent. The noise of sea birds nesting on cliffs and waves add to the attraction and excitement of this seascape type.

Type 2: Mainland Rocky Coastline with Open Sea Views

Location within study area: Caithness, Sutherland, Moray and Aberdeenshire coasts.

- 12.4.5.12 **Physical characteristics:** Long straight stretches of coastline with cliffs rising to some 30m height and often with a raised beach edge. There are few significant headlands although geological differences create variety with softer sandstone forming an indented coast with bays and inlets, arches and caves; harder volcanic rocks producing a more resistant coastline of promontories,

low cliffs and rocky shoreline. Notable blow holes on the north east coast. Productive arable farming occurs up to the cliff edge and tree cover is minimal. Compact fishing villages are located at the base of cliffs in small bays while castles and cliff top forts occur on dramatic headland locations, and are highlighted against the simple sea backdrop. These settlements and built features appear to be spaced at even intervals and thus provide a visual rhythm of foci along the coast. Views over the North Sea are generally wide and open, although parts of the Caithness coast have views of Hoy over the Pentland Firth. Shipping is a common feature seen out to sea. Some isolated industry occurs along this coast (for example: the pipeline fabrication facility in Sinclair's Bay).

- 12.4.5.13 **Experiential qualities:** Exposed coastline with open views and strong historical associations of castles and cliff top forts and cultural interest of fishing villages. These coastlines are of geological and ecological interest and support nesting birds. While these are exposed seascapes, their agricultural hinterland, the presence of settlement and nearby roads and also views of shipping, offshore WTGs and occasional industry, limits the sense of wildness likely to be experienced.

Type 3: Mainland Deposition Coastline with Open Views

Location within study area: East Caithness, Moray and Aberdeenshire coasts.

- 12.4.5.14 **Physical characteristics:** Low sections of coast comprising long, sweeping curved sandy beaches, often backed by dunes and forming a soft linear edge to the sea. This type tends to have a simple horizontal visual composition of sky, sea and land. Grassland and gorse occurs behind dunes and this is backed in turn by flat, mixed or arable farmland. Some areas of dunes are reserved for military live firing. Golf courses occur within this type and settlements are located within farmland. Larger settlements are popular holiday and golf resorts. Views are long and expansive along beaches and uninterrupted, although low level, views occur over the North Sea. Ships and from some locations, oil platforms, are commonly seen at sea.

- 12.4.5.15 **Experiential qualities:** This type is often located within relatively well-populated areas and beaches are an important recreational resource. The straightness of the coast and open views of the sea give a degree of exposure. The northern coastal light can often accentuate particular textures, shapes and colours. This type has a dynamic character – both physically and experientially – visible in the migration of sand and the constantly changing character of the sea and passing weather systems.

Type 6: Narrow Coastal Shelf

Location within study area: East Sutherland Coast between Golspie and north of Helmsdale.

- 12.4.5.16 **Physical characteristics:** Predominantly rocky but 'straight' coastline, backed by a narrow corridor of level land tightly constricted by inland hills and the open sea, creating a distinctly linear space. The coastal shelf forms an

important corridor for communications including major roads, railway lines and power lines. Steep sided narrow glens intersect the coastal shelf and these are often wooded. The coastal shelf is largely utilised for agriculture due to favourable drainage and soils.

12.4.5.17 In Sutherland, crofts are often located in a linear fashion parallel to the coast. This type is generally sparsely settled with small harbour settlements situated on inlets; and with historic churches, harbours and houses within these settlements forming foci. Views focus on open sea with some offshore wind farm visibility.

12.4.5.18 **Experiential qualities:** The Coastal Shelf can feel remote due to the containment of inland hills/coastal scarp, although communications often are aligned close to or within this type. Views directed over sea rather than hinterland due to the presence of steep hills inland.

Type 12: Deposition Coasts of Islands

Location within study area: Pentland Firth Islands and Orkney Islands

12.4.5.19 **Physical characteristics:** Long sandy beaches backed by dunes and low lying machair, or by pastures. Crofting or farms are set back from coast. An open, low lying, largely treeless and windswept landscape with views of the Atlantic Ocean or North Sea, although dunes can often screen views of open sea and coast inland. Sparsely settled, low-key land management and lack of coastal development.

12.4.5.20 On Harris and Barra, islands such as Taransay, and mountainous headlands funnel and add drama to sea views.

12.4.5.21 **Experiential qualities:** Often wild, remote 'edge of ocean' feel. Big breakers and low lying exposure of island landscapes, with few sights of land in large scale sea views. Combination of mountains with coast provides particularly high scenic quality and drama.

Regional Coastal Character Areas

12.4.5.22 This national characterisation provides a context for the Regional Coastal Character Areas (RCCAs). The RCCAs within the study area are and their associated coastal LCTs, as listed in Table 12-7 below, form the baseline coastal characterisation and mapping for the SLVIA, against which the seascape effects of the Caledonia North Site are assessed. They are shown on Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-13 Blade Tip ZTV (Western Study Area) with Designations, Character and RCCAs and Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-14 Blade Tip ZTV (Southern Study Area) with Designations, Character and RCCAs. Detailed descriptions of the baseline environment associated with specific receptors identified as requiring assessment are included with the assessments in Section 12.7.

Table 12-7: Regional Coastal Character Areas within the study area.

Regional Coastal Character Area	Location
Holborn Head to Brims Ness	Coastline between Brims Ness and Holborn Head
Thurso Bay	Coastline between Holborn Head and Clardon Head
Dunnet Bay	Coastline between Clardon Head and Point of Ness
Dunnet Head	Coastline of Dunnet Head
Hen's Head to St John's Point	Coastline between Hen's Head and Gills Bay
Gills Bay and John o' Groats	Gills Bay and adjacent coast between St John's Point and Ness of Duncansby
Duncansby Head	From Skirza Head to Ness of Duncansby
Freswick Bay and Nybster Coast	Freswick Bay between Skirza Head and Ness Head
Sinclair's Bay	Sinclair's Bay between Keiss and Noss Head
Noss Head	Coastline around Noss Head between Castle Sinclair and Wick Bay
Wick Bay	Wick Bay between Staxigoe and Castle of Old Wick
Sarclet Head	Coastline round Sarclet Head between Wick Bay and Lybster Bay
Lybster Bay	Lybster Bay and adjacent coast
Dunbeath Bay	Coastline between Berriedale and Latheronwheel, encompassing Dunbeath Bay
Helmsdale to Berriedale Coastal Shelf	Coastal shelf between Berriedale and Helmsdale
Spey Bay	Spey Bay between Lossiemouth and Portgordon
Portgordon to Portnockie Coast	Coastline between Portgordon and Portnockie
Cullen Bay	Cullen Bay between Portnockie and Logie Head
Sandend Bay	Sandend Bay between Logie Head and East Head
Boyne Bay	Boyne Bay between East Head and Whitehills
Knock Head to Bay of Cullen	Coastline between Knock Head and Bay of Cullen
Bay of Cullen to More Head	Coastline between Knock Head and More Head
Gamrie Bay	Coastline between More Head and Crovie Head

Regional Coastal Character Area	Location
Troup Head to Quarry Head	Coastline between Crovie Head to Quarry Head
Quarry Head to Bay of Lochielair	Coastline between Quarry Head and Bay of Lochielair
Roseheartly to Fraserburgh	Coastline between the eastern end of Bay of Lochielair and Fraserburgh Bay
Fraserburgh Bay	Coastline between Kinnaird Head and Inverallochy
Inverallochy to Scotstown Head	Coastline between Inverallochy and Sctostown Head
Brough Ness and Barth Head	Coastline between Brough Ness and Barth Head
Burray Ness to Halcro Head	Coastline between Burray Ness and Halcro Head on South Ronaldsay
Cava, Rysa Little and Fara	Coastlines of Cava, Rysa Little and Fara (only coastline of Fara found within study area)
Deerness, East End of Holm and Rose Ness	Coastline between Black Geo and Mull Head on Mainland Orkney and coastlines of Copinsay and Corn Holm
Flotta	Coastline of Flotta
Hen's Head to Gills Bay	Coastline between Hen's Head and Gills Bay
Holm Sound	Coastline between Burray Ness and Weddell Point on Burray, east coast of Glimps Holm and Lamb Holm, and the coastline between the landfall of Churchill Barrier No 1 and Black Geo on Mainland Orkney
North Bay, Longhope and Switha	Coastline of Switha, the coastline between Cantick Head and The Ayre of South Walls, and the coastline between The Ayre and Crock Ness of Hoy
Scapa Bay	Coastline between Howequoy Head and Het on Mainland Orkney
South East Hoy	Coastline between Crock Ness and Green Head of Hoy
South Walls and Brims Ness	Coastline between Cantick Head and The Ayre on South Walls continuing along the southern coastline of Hoy to Tor Ness
Stroma	Coastline of Stroma
West Burray and South Ronaldsay	Coastline between The Nev and Churchill Barrier No 4 of South Ronaldsay and the Ayre of Westermill and Churchill Barrier No 3 of Burray, and western coastline of Glimps Holm and Lamb Holm

Regional Coastal Character Area	Location
West Hoy Cliffs	Coastline between Tor Ness and Too of the Head of Hoy

- 12.4.5.23 The parts of the coastline that were not included within the Moray East EIAR and Moray West EIAR, specifically the gaps in the Regional Coastal Character Areas (RCCAs) dataset to the east of Banff and north of Duncansby Head, have been assessed using the layers of desk information available on NatureScot (2005³⁹) Seascapes Study, National Coastal Character Types (NCCTs) and NatureScot (2019) terrestrial Landscape Character Types (LCTs), together with site survey and in accordance with Guidance on Coastal Character Assessment (NatureScot, 2017a) have been defined and, where necessary, described in accordance with Guidance on Coastal Character Assessment (SNH, 2017).

Landscape Character Baseline

- 12.4.5.24 There is a hierarchy of published Landscape Character Assessments that describe the baseline landscape character of the landscape in the SLVIA study area, at the national and local level. NatureScot's landscape character map (NatureScot, 2019) and associated LCT descriptions will form the basis of the baseline landscape character description of the SLVIA study area and the assessment of the visual aspects of perceived character resulting from the Caledonia North Site. These LCTs are shown on Volume 7B, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-2: Landscape and National Coastal Character.
- 12.4.5.25 Through the Scoping process, NatureScot agreed with the focussed 40km study area for landscape and coastal character/receptors; however, THC and MD-LOT considered that a 60km study area was necessary. It is not anticipated that there will be landscape character effects beyond 40km, however, THC has requested that Dunnet Head (including the Special Landscape Area) and the areas around Morven and Navidale are considered in the assessment as they are considered important to the Council. As such, the LCTs covering these areas will be included. Morven and Navidale are covered by LCT 138 and LCT 135 respectively and will be assessed. Dunnet Head is covered by LCT 134 and LCT 141. These LCTs are found elsewhere in the study area and these additional compartments will be included in the assessment. The remaining LCTs outside the 40km study area boundary are assessed in Section 12.7.2.

12.4.6 Offshore Wind Farm Context

- 12.4.6.1 The Moray Firth is host to three existing OWFs. Beatrice OWF (BOWL) is the closest to shore at approximately 13km from the Caithness coastline. It sits offshore between Lybster and Wick. South-east of BOWL is Moray East OWF approximately 22km from the coastline. South-west of both BOWL and Moray East is Moray West OWF at approximately 22.5km offshore and is currently under construction, due to be fully operational in early 2025. It has been agreed with stakeholders that Moray West is to be included in the assessment as part of the baseline context with the WTGs having been photomontaged in to the 53.5 degree field of view visualisations. Beatrice Demonstrator WTGs and associated oil platforms are located within the Moray West OWF at 22km from the coastline. Table 12-8 sets out the number of WTGs and maximum blade tip height for each of the OWFs within the Moray Firth.
- 12.4.6.2 Both Moray East and Moray West OWF WTGs are aligned north-south with several large open areas in their layouts. BOWL WTGs are arranged in a dotted pattern on three axes. This results in WTGs appearing to be 'stacked' in rows from several locations along the Highland, Moray and Aberdeenshire coastlines.

Table 12-8: Moray Firth OWFs.

OWF	No. of WTGs	Maximum Blade Tip Height
BOWL	84	187m above LAT
Moray East	100	198.9m above LAT
Moray West	60	262.02m above LAT
Beatrice Demonstrator WTGs	2	151m

12.4.7 Do Nothing Baseline

- 12.4.7.1 If Caledonia North does not come forward, an assessment of the future baseline conditions has also been carried out and is described within this section.
- 12.4.7.2 The EIA Regulations require that the following is included within the EIAR:
"A description of the relevant aspects of the current state of the environment (baseline scenario) and an outline of the likely evolution thereof without development as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge".
- 12.4.7.3 The main driver of future change to the coastline and inland parts of the study area is climate change. This will be evidenced two potential ways, activities to mitigate against the effects of climate change, and activities to try to limit

climate change. This is reflected in NPF4 in which tackling climate change and nature crises are central to the Scotland's planning policy and spatial strategy. These factors will change the landscape and coast, including through attempting to achieve Net Zero carbon emissions through increased renewable energy development, including further onshore and offshore wind farm development, tidal and wave power projects and solar development. The development of such projects will also likely require further grid infrastructure development to connect to the national grid and consumers.

- 12.4.7.4 An assessment of the impacts of climate change on Scottish landscapes (Land Use Consultants, 2011) found that changes in the coastal environment 'will result from direct impacts resulting from sea level rise and the increased risk of flooding from surge events, together with the impacts of adaptation responses. These will result in changes in the nature and distribution of coastal habitats, erosion and deposition, changing morphology, loss of land, increased flood defences (hard and soft), increased risk of flooding and implications for land use'. It also recognises that additional changes within the coastal landscape 'may include offshore energy generation in order to help attain the Scottish Government's greenhouse gas emission targets' and that 'future development of wind WTGs may be concentrated in the shallower waters off the east coast', such that the combined influence of direct, mitigation and adaptation changes 'may be greatest in coastal landscapes'.
- 12.4.7.5 Recent development management decisions and planning decision precedent has established and accepted seascape and landscape change from both offshore and onshore wind farm development within the study area. In addition to the operational BOWL and Moray East offshore wind farms is the Moray West offshore wind farm which is under construction (and assumed to be part of the future landscape and visual (daytime and night-time baseline). In other parts of the study area and beyond other OWFs are in the early planning stages and if consented they will introduce more wide-spread wind farm influences on the seascape. The Beatrice Demonstrator WTGs and the nearby oil and gas platforms and associated infrastructure will be decommissioned during or before the construction or operation of Caledonia North.
- 12.4.7.6 The pressure for onshore wind farm development across Highland, Aberdeenshire, Moray and Orkney is likely to continue with the potential for taller WTGs resulting in impacts that are further reaching than those that are currently operational.
- 12.4.7.7 A range of policies impact on the management of the landscape, coastline, and seascape, ranging from national policy and regulation, through to community strategies and development frameworks. Planning policies covering the landscape, coastal and seascape resource within the study area generally seek to conserve and enhance the natural beauty of the area, while recognising the need to adapt to inevitable change over time, particularly in areas where natural processes may drive more rapid change, such as coastal

landscapes shaped by coastal processes, changing agricultural practices and/or changes to the integrity of agricultural character, and the need to respond to development pressures that reflect the changing needs of society.

- 12.4.7.8 The legislative framework already exists to ensure that no net loss of internationally important habitat occurs, but there remains a need to increase understanding of the potential effects of climate change on the characteristic landscapes of the study area and to develop longer term strategies that will mitigate any adverse effects of climate change. A number of reports and assessments on the nature and scale of the biodiversity crisis have fed into the draft Biodiversity Strategy to 2045 which aims for Scotland to be Nature Positive by 2030 as a first step. Changes are likely to include re-naturalisation of parts of human-created landscapes (such as field edges, green corridors through settlements, etc) and returning habitats to their original condition (such as peat bogs, woodlands and rivers).
- 12.4.7.9 An example of how environmental pollution is reducing as a result of policy and technological advancement is in the amount of light pollution in the UK. Through legislation local councils have been responsible for reducing sky-glow and light intensity of streetlights which has reduced the amount of night time brightness spilling into the night sky⁴⁴. This is likely to continue to improve, although the spread of some settlements may increase and correspondingly increase the spread of night time light pollution.
- 12.4.7.10 Further development pressures which may change the baseline conditions include suburbanisation and increased tourist development influences, particularly around the coastal landscapes and established coastal towns within the study area, which have potential to increase the developed influence and reduces perceived naturalness of the coastline.

12.4.8 Data Gaps and Limitations

- 12.4.8.1 There are limitations in terms of the depiction and accuracy of the ZTVs and visualisations as set out in Volume 7C, Appendices 12-2: Seascape, Landscape and Visual Impact Assessment Figures and 12-3: Seascape, Landscape and Visual Impact Assessment Visualisations. Importantly the visualisations do not portray the movement of the WTG blades or the flashing of the aviation lights.
- 12.4.8.2 It is not possible to visit and assess the impacts from every part of the 60km radius study area and for that reason assessments are made based on professional judgement, which includes experience of viewing OWF development.
- 12.4.8.3 There are no operational WTGs of the scale proposed and for this reason it is necessary to base assessments on professional judgement and extrapolation of the impacts of smaller WTGs.
- 12.4.8.4 The WTG and OSP sizes and locations within the Caledonia North Site have

not yet been determined. This is due to the limitations created by the lack of costly, detailed site investigation information at this early stage in the planning process. For this reason, it is necessary for the SLVIA to be based on worst case assumptions of the scale and locations of the WTGs and OSPs within the Caledonia North Site. Importantly it is likely to be requirement of any consent conditions that the ultimate design proposals (i.e., those that are to be built) are reviewed, by a Chartered Member of the Landscape Institute, against what assessed in the SLVIA to ensure that the worst case assumptions made in the SLVIA are not exceeded by the proposals and that its likely effects are no greater than those assessed in the SLVIA.

12.5 EIA Approach and Methodology

12.5.1 Overview

- 12.5.1.1 This section outlines the methodology for assessing the likely significant effects on seascape, landscape and visual receptors from the construction, operation and decommissioning of Caledonia North. Full details of the methodology, including relevant assumptions and limitations, can be found in Volume 7B, Appendix 12-5: Seascape, Landscape and Visual Impact Methodology.

Caledonia North Site

- 12.5.1.2 The Caledonia North Site covers an area of approximately 218.5km² in open sea to east of the operational Moray East OWF site. The Caledonia North Site is located 24.1km from the Highlands coast and 50km from the Moray/ Aberdeenshire coast. It is located at the eastern edge of the Outer Moray Firth and beyond it is the North Sea.
- 12.5.1.3 Marine traffic is common throughout the Firth, including cruise ships, vessels associated with oil and gas production and recreational vessels. The regular Aberdeen to Kirkwall and Lerwick to Aberdeen ferries pass to the east of the Caledonia North Site. Other traffic includes fishing boats ships and currently larger vessels associated with the under-construction Moray West OWF to the west of the Caledonia North Site and close to the Aberdeenshire coast as well as operation and maintenance vessels associated with the BOWL and Moray East OWFs.
- 12.5.1.4 The Caledonia North Site will appear as an extension of the baseline OWFs out in the open sea of the outer Moray Firth. The coastline of the Firth is mainly rocky with large open bays at Spey Bay and Sinclair's Bay.

Caledonia North OECC

12.5.1.5 The Caledonia North OECC runs southward from the Caledonia North Site and makes landfall just to the west of Whitehills, Aberdeenshire. Construction of Caledonia North OECC is scheduled to take six months. This is classified as short term within the SLVIA methodology. During this period there will be vessels in this area of the sea, which are already an apparent component of the baseline seascape and views. However, when the cable is being laid closer to shore the vessels will be more apparent due to horizontal directional drilling ships being moored in this area. The cable will be laid such that it is ultimately under the seabed and under the shore at the Landfall Site.

12.5.2 Impacts Scoped into the Assessment

12.5.2.1 The Offshore Scoping Report (Volume 7, Appendix 2) was submitted to MD-LOT in September 2022. The Offshore Scoping Report set out the overall approach to assessment and allowed for the refinement of Caledonia OWF over the course of the assessment. It has subsequently transpired that two separate applications are to be submitted for Caledonia North Site and Caledonia South Site. The proposed scope of the assessment remains relevant and is set out in Table 12-9.

Table 12-9: Seascape, Landscape and Visual Receptors Scope of Assessment.

Potential Impact	Phase	Nature of Impact
Impact (daytime) of the construction of the WTGs on coastal character	Construction (and Decommissioning)	In-Direct
Impact (daytime) of the construction of the WTGs on perceived landscape character	Construction (and Decommissioning)	In-Direct
Impact (daytime) of the construction of the WTGs on perceived landscape character/special qualities of designated landscapes	Construction (and Decommissioning)	In-Direct
Impact (daytime) of the construction of the WTGs on visual receptors/ views	Construction (and Decommissioning)	In-Direct
Impact (daytime) of the operation and maintenance of the WTGs on seascape coastal character	Operation and Maintenance	In-Direct
Effects (daytime) of the operation and maintenance of the WTGs on perceived landscape character/special qualities of designated landscapes	Operation and Maintenance	In-Direct
Effects (daytime) of the operation and maintenance of the WTGs on visual receptors/views	Operation and Maintenance	In-Direct

Potential Impact	Phase	Nature of Impact
Effects (night-time) of the operation and maintenance of the WTGs on visible aviation lighting on visual receptors/ views	Operation and Maintenance	In-Direct
Cumulative effect (daytime) of the operation of the WTGs on seascape coastal character, landscape character and views/ visual receptors	Operation and Maintenance	In-Direct

12.5.3 Impacts Scoped Out of the Assessment

12.5.3.1 The impacts scoped out of the assessment during EIA scoping and subsequent stakeholder consultation, and the justification for this, are listed in Table 12-10.

Table 12-10: Impacts Scoped Out for Seascape, Landscape and Visual Receptors.

Potential Impact	Justification
Construction, operational and decommissioning phase seascape, landscape, and visual impacts of the offshore elements of Caledonia North outside the 60km radius SLVIA study area	The 60km radius SLVIA study area is defined to an outer limit within which significant effects could occur. Significant effects will not occur beyond 60km due to the limited changes to views arising from Caledonia North over such distances, particularly since the Caledonia North Site is located largely beyond, east of, the operational Beatrice Offshore Demonstrator, Beatrice OWF and Moray East OWF.
Impacts of the construction, operation and decommissioning of Caledonia North on physical aspects of landscape character	Due to the location of Caledonia North Site at considerable distance offshore it will only impact on the perception of character and qualities – which is considered as an indirect effect in LVIA. No physical attributes that define landscape character or special qualities of designated landscapes will be changed because of Caledonia North.
The seascape, landscape, and visual impacts of the offshore cable route construction, operation and decommissioning	Limited influence on seascape, landscape, and visual receptors due to sporadic, temporary nature of above sea construction processes. The activities mainly occur from vessels, which are already an apparent component of the baseline seascape and views.
Impact of the Caledonia North lighting on seascape coastal, landscape character and visual receptors at night during construction	Navigational lights associated with construction buoyage and construction vessels will not be visible from the coast. Aviation marking lights may be required on top of cranes associated with heavy lift vessels or jack up vessels, however, these will be temporary in nature and will largely be indistinguishable behind or in the context of existing wind farms which have visible aviation lighting.

12.5.4 Assessment Methodology

- 12.5.4.1 The project-wide generic approach to assessment is set out in Volume 1, Chapter 7: EIA Methodology. The assessment methodology for SLVIA for the EIAR is consistent with that provided in the Offshore Scoping Report (Volume 7, Appendix 2).
- 12.5.4.2 The methodology for the assessment of SLVIA is set out in full in Volume 7B, Appendix 12-5: Seascape, Landscape and Visual Impact Methodology. An overview is provided in the following sections.
- 12.5.4.3 Broadly, the SLVIA is undertaken using the following steps:
- The overall scope of the assessment is defined, in consultation with stakeholders, including the study area and range of possible seascape, landscape and visual effects;
 - The seascape/landscape baseline is established based on published coastal landscape character assessments, supplemented by field work findings and ZTV maps, to identify landscape receptors that may be affected, their key characteristics and their value;
 - The visual baseline is established by identifying the ZTV's extent, the visual receptors within the ZTV, the people who may be affected by the Caledonia North Site, and selecting representative viewpoints for these receptors;
 - The elements of the Caledonia North Site that may result in seascape, landscape and visual effects are described;
 - Interactions are identified between the Caledonia North Site and the identified seascape, landscape and visual receptors, to predict potentially significant effects that may arise and measures are proposed to mitigate these effects;
 - The value attached to landscape receptors and views, and the susceptibility of seascape/landscape and visual receptors to specific changes arising from the Caledonia North Site are assessed and these judgements are combined to assess the sensitivity rating of the landscape and visual receptor to the Proposed Development (Onshore);
 - An assessment of the size/scale of seascape/landscape effects and the extent to which the effects change the key characteristics of the seascape/landscape is undertaken, combining these judgements to assess the magnitude of change to the seascape/landscape receptor; and
 - An assessment of the size/scale of visual effect, the extent to which the change would affect views, whether this is unique or representative of a wider area, and the position of the Caledonia North Site in relation to the principal orientation of the view and activity of the receptor. These judgements are combined to assess the magnitude of change to the visual receptor; and
 - The assessments of sensitivity to change and magnitude of change are combined to assess the level of effect and whether or not the effect is

significance. This assessment is based on professional judgement aided by a matrix as presented in Volume 7B, Appendix 12-5: Seascape, Landscape and Visual Impact Methodology.

- 12.5.4.4 GLVIA3 sets out an approach to the assessment of magnitude of change in which the size or scale of the effect, its geographical extent and its duration and reversibility are combined in considering the magnitude of change rating. Guidance within GLVIA3 suggests that this approach is to be applied in respect of both landscape and visual receptors. Noting that GLVIA3 does not provide a prescriptive methodology, it is considered that the process of combining all three considerations in one rating can distort the aim of identifying likely significant effects of development.
- 12.5.4.5 In this chapter, the consideration of the size or scale of the effect, its geographical extent and its duration and reversibility has been undertaken separately, by basing the magnitude of change on size or scale to determine where significant and not significant effects occur, and then describing the geographical extents of these effects and their duration and reversibility separately.
- 12.5.4.6 These factors are also considered as part of drawing conclusions about likely significance, combining with other judgements on sensitivity and magnitude, to allow a final judgement to be made on whether each effect is significant or not significant.
- 12.5.4.7 The assessment methodology utilises six scales of magnitude of change - high, medium-high, medium, medium-low, low and negligible/none; which are preferred to the 'maximum of five categories' suggested in GLVIA3 as a means of clearly defining and summarising magnitude of change judgements.

12.5.5 Approach to Cumulative Effects

- 12.5.5.1 The Cumulative Impact Assessment (CIA) assesses the impact associated with Caledonia North Site together with other relevant plans, projects and activities. Cumulative effects are therefore the combined effect of Caledonia North Site in combination with the effects from a number of different projects, on the same receptor or resource.
- 12.5.5.2 The approach to the CIA for SLVIA is as set out in the SLVIA methodology (Volume 7B, Caledonia OWF, Appendix 12-5: Seascape, Landscape and Visual Impact Methodology). There is some divergence from the process outlined in Volume 1, Chapter 7: EIA Methodology due to NatureScot (2021) guidance and in accordance with agreement during stakeholder consultation.
- 12.5.5.3 The list of relevant developments for inclusion within the CIA is outlined in Volume 7A, Appendix 7-1: Cumulative Impact Assessment Methodology.
- 12.5.5.4 Developments which are located within the SLVIA study area have the potential to result in a cumulative effect. Developments which are either operational, under construction or are in the decommissioning stage are

considered to be part of the baseline and are included in the assessment contained in Section 12.7.

- 12.5.5.5 As set out in Section 12.3, it was agreed through scoping and further consultation that the cumulative assessment would include only offshore and onshore wind farms that are operational, under construction or consented. To provide further context OWFs at a pre-scoping, scoping stage or application stage are also shown on Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-6: Cumulative Wind Farms Caledonia North at A3 size and at a larger scale on Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figures 12-15 to 12-16. These are listed in Section 12.8.

12.5.6 Embedded Mitigation

- 12.5.6.1 Where possible, mitigation measures will be embedded into the design of Caledonia North. The likely visual effects of different layout scenarios have been investigated in the absence of mitigation measures as part of the review of the worst case scenario layout for the Caledonia North Site.
- 12.5.6.2 Where embedded mitigation measures have been developed into the design of Caledonia North with specific regard to the SLVIA, these are described in Table 12-11. The impact assessment presented in Sections 12.7 to 12.10 takes into account this embedded mitigation.

Table 12-11: Embedded Mitigation.

Code	Mitigation Measure	Securing Mechanism
M-14	Development of and adherence to a Lighting and Marking Plan (LMP). The LMP will confirm compliance with legal requirements with regards to shipping, navigation and aviation marking and lighting.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences.
M-103	The Applicant has committed to install sensors so that when visibility of the WTGs lights from all sensors is greater than 5km in the hours of darkness the aviation lighting is reduced from 2000cd to 200cd.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences.

12.6 Key Parameters for Assessment

12.6.1 Overview

12.6.1.1 Volume 1, Chapter 3: Proposed Project Description (Offshore) details the parameters of Caledonia North using the Rochdale Envelope approach. This section identifies those parameters during construction, operation and decommissioning relevant to potential impacts on the seascape, landscape and visual resource.

12.6.1.2 The worst case assumptions with regard to SLVIA are summarised in Table 12-12.

12.6.2 WTG Dimensions and Layout

12.6.2.1 The following general assumptions are made with regards to the worst case scenario for SLVIA:

- WTGs laid out around the perimeter of the Caledonia North Site may result in higher proportions of WTGs being located within the closest parts of the Caledonia North Site to the coastlines and stacking or clustering of WTGs around the edges in certain views, which may be inconsistent with the distribution of WTGs across other parts of the view;
- WTGs laid out in grid spacing, where rows are aligned both down and cross wind. The cross wind rows would be aligned perpendicular to the predominant wind direction which is 230 degrees plus or minus 10 degrees (with due north as 0 degrees). The worst case alignment within these parameters would be where the rows are aligned perpendicular to the closest sections of the Caithness and Aberdeenshire coasts. This is due to the potential for turbine stacking in views from these locations;
- The tallest WTGs within the range of height parameters and the areas defined for their use. This is due to the greater extent of theoretical visibility of the tallest WTGs as well as the fact that they will often be seen in the context of the nearby operational and under construction WTGs, which are smaller in height. The larger comparative scale of the tallest WTGs proposed is considered to result in a higher magnitude of change. A comparison between the largest number of the smallest WTGs and the smallest number of the largest WTGs, as well as a combination of the two, was the subject of consultation with Aberdeenshire Council, THC and NatureScot. Comparative cumulative wirelines were reviewed by the parties and all were in agreement that the worst case scenario is the smallest number of the largest WTGs;
- Fixed WTGs with maximum dimensions to blade tip of 355m above MSL;
- The largest blade diameters on the tallest WTGs are considered to be the worst case scenario for SLVIA. This is due to the comparison with the blade

diameters of the nearby operational and under construction WTGs which have smaller blade diameters. The maximum potential difference in blade diameter dimensions is considered to have a higher magnitude of change;

- Potential options exist for how the Caledonia OWF will be developed with a range of WTG numbers being proposed for Caledonia North to accommodate flexibility. It has been determined that locating a larger number of WTGs within the Caledonia North site would be the worst case scenario when compared with the alternative possibility of a lesser number of WTGs; and
- With the exception of the western edge of Caledonia North Site, which includes a wayleave for an subsea cable as well as an offset from the Moray East WTGs, the proposed WTGs may be located anywhere within the Caledonia North Site. However, due to technical or environmental constraints, which may come to light during the post consent site investigations, certain areas within the Caledonia North Site may not be developed. As such, the effective site boundary may be reduced from the maximum Array Area considered here.

12.6.3 Foundation Substructures

12.6.3.1

The worst case scenario for SLVIA assumes that the substructure design for the fixed WTGs is a jacket substructure. Field survey and experience of the visual effects of existing offshore wind farms suggests that jacket foundations are worst case for visual impacts. However, given the distance that the Caledonia North Site will lie from the coast, this will not affect the judgements made in this assessment with respect to the magnitude and significance of effect on land-based receptors and therefore jacket foundations are not shown in the visualisations. This is consistent with the approach taken in the BOWL, Moray East and Moray West Environmental Statements, where the WTGs are closer to or at a similar distance to the coast. The foundation substructures are assumed to have a working platform and tower interface, where the tower connects with the jacket foundation structure. The interface level between the substructure and the WTG is assumed to be approximately 15m above HAT. The jacket foundations are assumed to have four sides and four legs, supported in a lattice tower arrangement. The foundation substructures will be painted yellow (generally RAL 1023 traffic light yellow) for navigational purposes and this is illustrated in the photomontages where relevant.

12.6.4 Offshore Substation Platforms Assumptions

12.6.4.1

Indicative locations of the OSPs have been assumed for the SLVIA. Sites for two OSPs have been located in likely positions within Caledonia North Site and this reflects the worst case scenario. There may only be a requirement for one OSP within the Caledonia North Site which would be located more centrally. The maximum dimensions of one OSP would be as follows:

- Maximum OSP platform length of 55m;
- Platform width of 45m; and
- Height of 55m above MSL.

- 12.6.4.2 The maximum height of 55m is assumed to be the total height of the topside structure (the substation 'box') with the helipad/lightning masts and visible jacket foundations/air gap, above MSL. The SLVIA assumes that the interface level (the height of visible jacket structures above water) is approximately 20m above MSL and the height of the topside structure is 25m.
- 12.6.4.3 The jacket foundations for the OSPs will have four sides and be up to four legged, supported in a lattice tower arrangement and painted yellow for navigational marking. The effect of the OSPs in the context of Caledonia North is assessed in Section 12.7.

12.6.5 Lighting

- 12.6.5.1 Offshore structures will be marked in order to meet the requirements of navigation and aviation standards. Specific requirements for aviation and navigational lighting will be agreed with the relevant stakeholders post-consent and prior to construction through the Lighting and Marking Plan.
- 12.6.5.2 The aviation lighting requirement is likely to incorporate medium intensity (2000cd), flashing (morse code 'W') red lights located on top of the turbine hubs of the peripheral WTGs in the layout. These lights may be visible from the coast. The intensity of these lights will reduce to low intensity (200cd) during visibility conditions when sensors located on a number of peripheral WTGs all indicate visibility of greater than 5km.
- 12.6.5.3 Whilst a WTG layout with the largest number of the smallest WTGs could potentially result in more aviation lights being visible within views it is assessed that such a scenario would not alter the magnitude of change and therefore, for simplicity, the same scenario is assessed for night time as is assessed for daytime.
- 12.6.5.4 Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-19: Hub Aviation Lighting ZTV Caledonia North illustrates the WTGs that are assumed to have aviation lights fitted with an aviation lighting ZTV (lights fitted to the nacelle). For the same figure but shown at a larger scale see Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figures 12-20 and 12-21.
- 12.6.5.5 Whilst low intensity lighting would also be fixed to the WTGs and OSPs for navigation and aviation purposes it is assessed that from the shore these are unlikely to be markedly visible at the distances proposed and therefore these lights have been excluded from the SLVIA and visualisations.

Table 12-12: Worst Case Assessment Scenario Considered for Each Impact as Part of the Assessment of Likely Significant Effects.

Potential Impact	Assessment Parameter	Explanation
Construction		
Impact 1: Short to medium term impact (daytime) of construction of WTGs and OSPs on visual receptors/views	Construction/installation of: <ul style="list-style-type: none"> 47 WTGs; jacket foundations (bottom-fixed); Two OSPs; and Construction period of three years. 	The worst case scenario during construction from the closest visual receptors will be when the maximum number of the tallest WTGs are in place in addition to concentrations of activity in the form of marine vessels and cranes.
Impact 2: Short to medium term impact of construction of WTGs and OSPs on seascape (coastal) character	Refer to Impact 1.	Refer to Impact 1.
Impact 3: Short to medium term impact of construction of WTGs and OSPs on perceived landscape character	Refer to Impact 1.	Refer to Impact 1.
Impact 4: Short to medium term impact of construction of WTGs and OSPs on landscape planning designations	Refer to Impact 1.	Refer to Impact 1.
Operation and Maintenance		
Impact 5: Long term impact (daytime) of operation of WTGs and OSPs on visual receptors/views	Operation of: <ul style="list-style-type: none"> 47 WTGs (31 WTGs with hub height aviation lights); jacket foundations (bottom-fixed); and Two OSPs. 	Largest WTGs will have the most widespread impact and their tip height and blade diameters will result in higher impacts due to the most marked comparative scale with the

Potential Impact	Assessment Parameter	Explanation
		nearby operational and under construction WTGs. Perimeter layout will result in WTGs located closest to the coast and potential alignment of WTGs along the edges of the Caledonia North Site in views creates irregularity within the layout.
Impact 6: Long term impact (night time) of operation of WTGs and OSPs on visual receptors/views	Refer to Impact 5.	Refer to Impact 5.
Impact 7: Long term impact of operation of WTGs and OSPs on coastal character	Refer to Impact 5.	Refer to Impact 5.
Impact 8: Long term impact of operation of WTGs and OSPs on perceived landscape character	Refer to Impact 5.	Refer to Impact 5.
Decommissioning		
Impact 9: Short to medium term impact (daytime) of decommissioning of WTGs and OSPs on visual receptors/views	Decommissioning of: <ul style="list-style-type: none"> 47 WTGs; jacket foundations (bottom-fixed); and Two OSPs. 	The worst case scenario during decommissioning from the closest visual receptors would be when the maximum number of the tallest WTGs are still in place in addition to concentrations of activity in the form of marine vessels and cranes.
Impact 10: Short to medium term impact of decommissioning of WTGs	Refer to Impact 9.	Refer to Impact 9.

Potential Impact	Assessment Parameter	Explanation
and OSPs on coastal character		
Impact 11: Short to medium term impact of decommissioning of WTGs and OSPs on perceived landscape character	Refer to Impact 9.	Refer to Impact 9.
Impact 12: Short to medium term impact of decommissioning of WTGs and OSPs on landscape planning designations	Refer to Impact 9.	Refer to Impact 9.

12.7 Potential Effects

12.7.1 Structure of Assessment

- 12.7.1.1 The structure of the SLVIA reporting throughout this section and the remainder of the chapter has diverted from the template structure for a number of reasons. As described in Volume 7B, Caledonia OWF, Appendix 12-5: Seascape, Landscape and Visual Impact Methodology, the sensitivity of receptors is determined based on a combination of judgements of value and susceptibility. These judgements do not vary based on the phase of the project which is being assessed and also need to take account of the susceptibility to the proposed change as set out in Section 12.6. Therefore, for conciseness, and to avoid repetition the sensitivity of each receptor is described initially, followed by a description of the magnitude of change and significance of effect which are judged to be experienced by each receptor during the construction and decommissioning phases, and operational phase respectively. The effects during decommissioning are likely to be the same or less than the effects during construction.
- 12.7.1.2 Additionally, all mitigation relating to seascape, landscape and visual effects has been embedded into the design of Caledonia North as set out in Section 12.5.6. Therefore, there is no additional mitigation proposed for SLVIA, and residual effects will be as described in the assessment. Reporting of additional mitigation and residual effects is therefore also excluded in this chapter. Since the Caledonia North Site is out at sea all of the receptors to be assessed are affected visually rather than physically and therefore the assessment of the visual effects is presented first, as it is used to inform the effects on landscape/seascape receptors. The assessment of visual effects from representative viewpoints is also presented first, as this is used to inform the subsequent assessment of effects on visual receptors.
- 12.7.1.3 The assessment of night time effects is contained in Volume 7C, Appendix 12-1: Night Time Assessment.

12.7.2 Preliminary Assessment

- 12.7.2.1 Guidance contained in GLVIA3 and drawn originally from the European Union Directive 2011/92/EU suggests that the SLVIA should focus on identifying likely significant effects. In SLVIA there are no defined thresholds that can be used to inform this. Therefore, preliminary assessment work is carried out to identify effects that can be scoped out of the assessment. This preliminary assessment work is carried out following the collation and review of the baseline information and the generation of ZTVs and representative viewpoint information for Caledonia North.
- 12.7.2.2 All of the representative viewpoints, mapped on Volume 7C, Appendix 12-2:

Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-8 Blade Tip ZTV with Viewpoint Locations Caledonia North, are included in the assessment as this work is important in determining and illustrating the threshold of where significant effects on seascape, landscape and visual receptors may arise. The assessment of the effects on the viewpoints has informed the determination of the potential for significant effects on the visual receptors in settlements or using routes as set out below. In addition, the assessment of the effects on viewpoints has also informed the preliminary assessment of effects on landscape/seascape character receptors.

- 12.7.2.3 The scoped out effects identified from the preliminary assessment and rationale for scoping these effects out from further assessment is set out in the following sections.

Preliminary Assessment of Effects on Visual Receptors

- 12.7.2.4 Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figures 12-15 and 12-16 illustrates the blade tip ZTV of visual receptors such as settlements, roads, rail routes, recreational routes and visitor attractions.

Settlements

- 12.7.2.5 A preliminary assessment of the effects of Caledonia North on settlements identified in the Offshore Scoping Report (Volume 7, Appendix 2) is presented in Table 12-13 except Findhorn and Kinloss which were included erroneously as they are not located within the 60km study area. The settlement of Macduff was omitted from the list and is included. Detailed assessment follows in Section 12.7.4.

Table 12-13: Preliminary Assessment of Settlements.

Settlement	Approx. Distance to Caledonia North Site	Subject to Theoretical Visibility?	Needs Detailed Assessment within SLVIA?
Keiss	32.8km	Yes	Yes. Assessed at Viewpoint 4 Keiss.
Wick	24.9km	Yes	Yes. Assessed at Viewpoint 5 Wick (path south of South View).
Lybster	34.9km	Yes	Yes. Assessed at Viewpoint 9 Lybster (end of Main Street).
Dunbeath	44km	Yes	Yes. Assessed at Viewpoint 10 Dunbeath (near Heritage Centre).
Helmsdale, West Helmsdale and Navidale	60km	Yes	Yes. Assessed at Viewpoint 12 Navidale.
Portgordon	58.5km	Yes	

Settlement	Approx. Distance to Caledonia North Site	Subject to Theoretical Visibility?	Needs Detailed Assessment within SLVIA?
Buckie	56.5km	Yes	No. Whilst the ZTV shows that there is theoretical visibility and it is recognised that the value of the settlement is heightened by the special landscape area designation that covers it, the long distance to the Caledonia North Site reduces susceptibility and the magnitude of change such that there is no potential for significant effects.
Findochty	52.9km	Yes	
Portknockie	50.8km	Yes	Yes. Assessed at nearby Viewpoint 14 Portknockie (Bow Fiddle Rock Info Point).
Cullen	50.1km	Yes	Yes. Assessed at Viewpoint 15 Cullen (viaduct).
Portsoy	50.5km	Yes	Yes. Assessed at Viewpoint 17 Portsoy.
Whitehills	50km	Yes	No. Whilst the ZTV shows that there is theoretical visibility and it is recognised that the value of the settlement is heightened by the special landscape area designation that covers it, the long distance to the Caledonia North Site reduces susceptibility and the magnitude of change such that there is no potential for significant effects.
Banff	50.9km	Yes	
Macduff	50.9km	Yes	Yes. Assessed at Viewpoint 18 Macduff, viewpoint at Bi-Centennial monument near Macduff Parish Church.
Gardenstown	52km	Yes	Yes. Assessed at Viewpoint 19 Gardenstown, Harbour Road.
Rosehearty	53.7km	Yes	Yes. Assessed at Viewpoint 20 Rosehearty Harbour.
Fraserburgh	56.7km	Yes	Yes. Assessed at nearby Viewpoint 21 B9031, west of Fraserburgh.

- 12.7.2.6 Except those settlements that are assessed at a nearby viewpoint, there are no settlements identified as requiring detailed assessment.

Recreational Routes

- 12.7.2.7 The Offshore Scoping Report (Volume 7, Appendix 2) identified Speyside Way, Moray Coast Trail, the Formartine and Buchan Way, and National Cycle Route 1 (NCR1) recreational routes to be included in the assessment. Table 12-14 identified which routes will be assessed in detail in Section 12.7.4.

Road Users

- 12.7.2.8 The Offshore Scoping Report (Volume 7, Appendix 2) identified coastal roads and roads covering the coastal shelf in Highland, Aberdeenshire and Moray as principal visual receptors. Table 12-15 identified which roads will be assessed in detail in Section 12.7.4.

Table 12-14: Preliminary Assessment of Recreational Routes.

Recreational Route	Approx. Distance to Caledonia North Site	Subject to Theoretical Visibility?	Needs Detailed Assessment within SLVIA?
Speyside Way	56.5km	Yes	Following the viewpoint assessment (see Section 12.7.3) in which no significant effects were found for any of the viewpoints (or receptors represented by these) along the Moray and Aberdeenshire coastline there is no potential for significant effects for recreational receptors within the southern part of the study area which covers coastal and inland areas of Moray and Aberdeenshire.
Moray Coast Trail	50.8km	Yes	
Formartine and Buchan Way	57.8km	Yes	
NCR1	49.9km	Yes	
CA15.17 Keiss/Reiss Shore	29.3km	Yes	Assessed at Viewpoint 4: Keiss
CA15.03 Castle of Old Wick	24.3km	Yes	Assessed at Viewpoint 5: Wick (path south of South View) which has similar views of the open seascape where Caledonia North Site will be located, albeit without South Head in the view.
CA10.06 Camster Forest	30.3km	Yes	<p>No. Whilst the ZTV shows theoretical visibility for approximately half of the core path, it is considered that the magnitude of change is not sufficient to result in a significant effect due to:</p> <p>Caledonia North Site will be visible during very good conditions.</p> <p>Caledonia North Site will be seen across a wide expanse of open sea along the distant seascape horizon.</p> <p>Caledonia North Site will appear to extend the spread of OWFs northwards, which are an element of the background but not a characterising element. As such Caledonia North Site would not be introducing an uncharacteristic element.</p> <p>The layout of Caledonia North Site will echo the pattern of the existing OWFs with a cluttered appearance including some areas where WTGs appear</p>

Recreational Route	Approx. Distance to Caledonia North Site	Subject to Theoretical Visibility?	Needs Detailed Assessment within SLVIA?
			<p>'stacked'. Due to these similarities Caledonia North Site will appear as an extension of the existing OWFs, albeit larger in scale.</p> <p>Part of the core path is located in close proximity to Burn of Whilk wind farm, with Caledonia North Site being seen between the turbines of the Burn of Whilk along the distant seascape horizon beyond existing OWFs.</p>
CA12.05 Yarrows Archaeological Trail	28.8km	Yes	Assessed at Viewpoint 7: Yarrows Archaeological Trail.

Table 12-15: Preliminary Assessment of Roads within the Study Area.

Road	Approx. Distance to Caledonia North Site	Subject to Theoretical Visibility?	Needs Detailed Assessment within SLVIA?
A9(T)	40km	Yes	Yes. Areas of theoretical visibility along A9 between Helmsdale and Latheron.
A99	25.5km	Yes	Yes. Long stretches of the A99 have theoretical visibility of Caledonia North Site between Helmsdale and Warth Hill.
A90	57.6km	Yes	No. Following the viewpoint assessment (see Section 12.7.3) in which no significant effects were found for any of the viewpoints (or receptors represented by these) along the Moray and Aberdeenshire coastline there is no potential for significant effects from roads within the southern part of the study area which covers coastal and inland areas of Moray and Aberdeenshire.
A95	53.8km	No	
A97	52km	Yes	
A98	50.7km	Yes	
A942	51.3km	Yes	
A947	52km	Yes	
A981	58.3km	Yes	
A990	56.5km	Yes	
A961	45.2km	Yes	No. Limited and distant theoretical visibility, no potential for significant effects.
A836	38.9km	Yes.	
A882	25.9km	Yes	No. Whilst there are some areas with theoretical visibility, Caledonia North Site will generally be visible beyond the intervening landscape with landscape features such as vegetation and buildings generally screening views of the seascape. Where there are more open views these are glimpses across the intervening landscape. There is no potential for significant effects.
B876	30.4km	Yes	
B870	37.8km	Yes	

Road	Approx. Distance to Caledonia North Site	Subject to Theoretical Visibility?	Needs Detailed Assessment within SLVIA?
B874	27.5km	Yes	

Railway Lines

- 12.7.2.9 The Offshore Scoping Report (Volume 7, Appendix 2) identified that the Far North Line that runs between Inverness and Thurso and Wick crosses through the northern part of the study area. Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-15: Blade Tip ZTV (Western Study Area) Visual Receptors and Viewpoint Locations shows that whilst there are patches of visibility along the route between Halkirk and Wick Caledonia North Site will generally be visible beyond the intervening landscape with landscape features such as vegetation and buildings generally screening views of the seascape. Where there are more open views these are glimpses across the intervening landscape. There is no potential for significant effects.

Visitors to Tourist Facilities

- 12.7.2.10 The Offshore Scoping Report (Volume 7, Appendix 2) identified that visitors to beaches, public open space, common, coastal caravan and camping sites would be assessed in detail. Viewpoints have been selected to represent views from popular destinations such as Whaligoe Steps, Dunnet Head, Duncansby Head, Cullen, Sarclet, Findlater Castle, etc. Although not every tourist or visitor destination is represented by a viewpoint, the viewpoints have been selected to represent worst-case views from these locations and as places where people often visit. In the interest of proportionality (in line with guidance), the viewpoints are considered to represent such locations and no further assessment is necessary.

Preliminary Assessment of Effects on Landscape/Coastal Character Receptors

- 12.7.2.11 Effects on landscape/coastal character are manifested where the pattern of elements that characterises the landscape/coastal will be altered by the addition of Caledonia North to the seascape and where visibility of it may alter the way in which this pattern of elements is perceived.
- 12.7.2.12 Landscape/coastal character receptors fall into three groups:
- Landscape Character Types (LCTs);
 - Regional Coastal Character Areas (RCCAs) (as defined by coastal character assessment); and
 - Landscape designations or Wild Land Areas (e.g., SLAs, NSAs, WLAs).

Landscape Character Types

- 12.7.2.13 Terrestrial LCTs and RCCAs are shown on Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figures 12-13 and 12-14. Table 12-16 identifies those LCTs where there is potential for significant effects which are assessed in detail in Section 12.7.5 in conjunction with the adjacent RCCA(s).

Regional Coastal Character Areas

- 12.7.2.14 RCCAs are shown in conjunction with the Blade Tip ZTV Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figures 12-13 and 12-14.
- 12.7.2.15 Through scoping the Orkney Island RCCAs were scoped out of the assessment as they are located beyond 40km from the Caledonia North Site. The Pentland Skerries are located within 40km and were erroneously omitted; the associated RCCA is now included in this assessment.
- 12.7.2.16 Table 12-17 identifies those RCCAs where there is potential for significant effects which are assessed detail in Section 12.7.5.

Landscape Planning Designations and Wild Land Areas

- 12.7.2.17 Landscape Planning Designations and Wild Land Areas are shown on Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-3 Landscape Planning Designations and Wild Land Areas and with the Blade Tip ZTV in Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figures 12-13 and 12-14.
- 12.7.2.18 Wild Land Areas (WLAs) are recognised in the National Planning Framework 4 (NPF4) and regional planning policy as a nationally important mapped interest, and not a designation. While WLAs are afforded protection for their wildness qualities, they are not statutorily protected in the way that National Parks and National Scenic Areas are for their scenic qualities. Through scoping it was agreed with THC and NatureScot that there would be no potential significant effects due to the distance to the Caledonia North Site and the existing influence of OWFs that are located in closer proximity to the on the two WLAs within the study area (Causeymire – Knockfin Flows (36) and East Halladale Flows (39)), and as such they were scoped out of the detailed assessment.
- 12.7.2.19 Moray and Aberdeenshire SLAs were omitted from the Offshore Scoping Report (Volume 7, Appendix 2). Table 12-18 identifies those landscape designations where there is the potential for significant effects.

Table 12-16: Preliminary Assessment of Landscape Character Types.

LCT	Approx. Distance to Caledonia North Site	Subject to Theoretical Visibility?	Needs Detailed Assessment within SLVIA?
Coastal Crofts and Small Farms LCT 144	24.1km	Yes	Yes. This LCT is assessed in conjunction with Freswick Bay and Nybster Coast RCCA, Sinclair's Bay RCCA, Sarclet Head RCCA and Lybster Bay RCCA.
Farmed Lowland Plain LCT 143	24.1km	Yes	Yes. The coastal edge is assessed in conjunction with Sinclair's Bay RCCA, Noss Head RCCA and Wick Bay RCCA.
High Cliffs and Sheltered Bays LCT 141	27km	Yes	Yes. The LCT is assessed in conjunction with Duncansby Head RCCA, Sarclet Head RCCA and Lybster Bay RCCA.
Sandy Beaches and Dunes LCT 140	29.6km	Yes	Yes. The LCT is assessed in conjunction with Sinclair's Bay RCCA.
Sweeping Moorland and Flows LCT 134	25.9km	Yes	<p>No. Whilst there is theoretical visibility in bands and patches across this LCT, coniferous forestry and intervening local landform undulations restricts views from some areas. Where there is visibility, the magnitude of change to the landscape character is not sufficient to result in a significant effect due to:</p> <p>No physical change to the LCT, the only changes will be as a result of visibility of Caledonia North beyond the horizon.</p> <p>The separation from the coastline limiting the influence of Caledonia North on the LCT.</p> <p>The limited perceived prominence of Caledonia North along the distant seascape horizon.</p> <p>Innate, strongly defined elements of landscape character unaffected due to Caledonia North indirectly affecting the LCT.</p>

LCT	Approx. Distance to Caledonia North Site	Subject to Theoretical Visibility?	Needs Detailed Assessment within SLVIA?
Gently Undulating Coastal Farmland LCT 14	51.2km	Yes	No. Whilst the ZTV shows that there is theoretical visibility, the long distance to the Caledonia North Site reduces susceptibility and the magnitude of change such that there is no potential for significant effects.
Broad Ridges and Valleys LCT 15	51.5km	Yes	
Coastal Farmland with Ridges and Valleys LCT 16	55km	Yes	
Cliffs and Rocky Coast - Aberdeenshire LCT 10	49.6km	Yes	
Undulating Agricultural Heartland LCT 20	54.3km	Yes	
Farmed and Wooded River Valleys LCT 32	52.2km	Yes	
Beaches, Dunes and Links - Moray & Nairn LCT 281	58.2km	Yes	
Cliffs and Rocky Coast - Moray & Nairn LCT 282	50.6km	Yes	
Coastal Agricultural Plain - Aberdeenshire LCT 17	59.3km	Yes	

LCT	Approx. Distance to Caledonia North Site	Subject to Theoretical Visibility?	Needs Detailed Assessment within SLVIA?
Coastal Farmlands - Moray & Nairn LCT 284	51.1km	Yes	
Low Forested Hills LCT 293	53km	Yes	
Low Hills and Basins LCT 18	59.1km	Yes	
Cliffs - Orkney LCT 307	43.6km	Yes	
Coast with Sand - Orkney LCT 308	49.5km	Yes	
Coastal Basin LCT 301	45km	Yes	
Coastal Hills and Heath LCT 306	45.2km	Yes	
Holms LCT 295	47.4km	Yes	
Inclined Coastal Pasture LCT 302	48.4km	Yes	
Lone Mountains LCT 138	50.9km	Yes	
Low Island Pastures LCT 298	43.4km	Yes	
Low Moorland LCT 311	51.3km	Yes	

LCT	Approx. Distance to Caledonia North Site	Subject to Theoretical Visibility?	Needs Detailed Assessment within SLVIA?
Moorland Hills - Orkney LCT 314	58.8km	Yes	
Plateau Heath and Pasture LCT 312	44.7km	Yes	
Rounded Hills - Caithness & Sutherland LCT 135	48.7km	Yes	
Strath - Caithness & Sutherland LCT 142	49.4km	Yes	
Undulating Island Pasture LCT 299	55.4km	Yes	
Upland Farmland LCT 288	49.2km	Yes	
Whaleback Islands LCT 296	54.3km	Yes	

Table 12-17: Preliminary Assessment of Regional Coastal Character Areas.

RCCA	Approx. Distance to Caledonia North Site	Subject to Theoretical Visibility?	Needs Detailed Assessment within SLVIA?
Brough Ness and Barth Head (Pentland Skerries)	37km	Yes	<p>No. Whilst there is theoretical visibility of Caledonia North from the coastline of the Pentland Skerries it is considered that the magnitude of change to the landscape character is not sufficient to result in a significant effect due to the following factors:</p> <p>Large scale of the receiving context for Caledonia North Site.</p> <p>No physical change to the RCCA, the only changes will be as a result of visibility of Caledonia North beyond the horizon.</p> <p>Separation from the coastline limiting the influence of Caledonia North on the RCCA.</p> <p>The closer WTGs are visible to tower base (no foundations) with the more distant WTGs visible as hubs/blade above the horizon due to the curvature of earth.</p> <p>Due to the orientation of the Caledonia North Site to the coastline, the depth of the layout and the separation from the coastline the more distant WTGs will appear less visible than the closest.</p> <p>Limited perceived prominence of Caledonia North along the horizon at distance from the RCCA.</p> <p>Innate, strongly defined elements of coastal character unaffected due to Caledonia North indirectly effecting the RCCA.</p> <p>The orientation of the Caledonia North Site in relation to the Pentland Skerries results in a small proportion of the seascape horizon that will be occupied by the Caledonia North Site.</p> <p>Caledonia North Site will extend the influence of OWFs along the horizon, which are already a characterising element along the horizon of seascape views.</p>
Holborn Head to Brims Ness	58km	No	No. No theoretical visibility of Caledonia North Site.

RCCA	Approx. Distance to Caledonia North Site	Subject to Theoretical Visibility?	Needs Detailed Assessment within SLVIA?
Thurso Bay	53.2km	No	
Dunnet Bay	48.4km	No	
Dunnet Head	50km	No	
Hen's Head to Gills Bay	45.4km	No	
Gills Bay and John o' Groats	39km	No	
Duncansby Head	34.6km	Yes	Yes. There is theoretical visibility of Caledonia North Site along this coastline.
Freswick Bay and Nybster Coast	32.5km	Yes	
Sinclair's Bay	26.9km	Yes	
Noss Head	24.9km	Yes	
Wick Bay	24.2km	Yes	
Sarclet Head	24.2km	Yes	
Lybster Bay	31.3km	Yes	
Dunbeath Bay	37.8km	Yes	

No. Whilst it is recognised that part of the RCCA is located within a special landscape area designation which heightens the value it is considered that the magnitude of change to the landscape character is not sufficient to result in a significant effect due to the following factors:

Large scale of the receiving context for Caledonia North Site.

RCCA	Approx. Distance to Caledonia North Site	Subject to Theoretical Visibility?	Needs Detailed Assessment within SLVIA?
			<p>No physical change to the RCCA, the only changes will be as a result of visibility of Caledonia North Site beyond the horizon.</p> <p>Separation from the coastline limiting the influence of Caledonia North Site on the RCCA.</p> <p>The closer WTGs are visible to tower base (no foundations) with the more distant WTGs visible as hubs/blade above the horizon due to the curvature of earth.</p> <p>Due to the orientation of Caledonia North Site to the coastline, the depth of the layout and the separation from the coastline the more distant WTGs will appear less visible than the closest.</p> <p>Innate, strongly defined elements of coastal character unaffected due to Caledonia North Site indirectly effecting the RCCA.</p> <p>Caledonia North Site will be visible within the context of existing OWF which are already a characterising element along the seascape horizon.</p>
Helmsdale to Berriedale Coastal Shelf	50.3km	Yes	No. Whilst the ZTV shows that there is theoretical visibility, the long distance to Caledonia North Site reduces susceptibility and the magnitude of change such that there is no potential for significant effects.
Spey Bay	59.4km	Yes	
Portgordon to Portnockie Coast	50.7km	Yes	
Cullen Bay	50.2km	Yes	
Sandend Bay	49.5km	Yes	
Boyne Bay	49.5km	Yes	

RCCA	Approx. Distance to Caledonia North Site	Subject to Theoretical Visibility?	Needs Detailed Assessment within SLVIA?
Knock Head to Bay of Cullen	49.8km	Yes	
Bay of Cullen to More Head	50.9km	Yes	
Gamrie Bay	51km	Yes	
Troup Head to Quarry Head	50.2km	Yes	
Quarry Head to Bay of Lochielair	53.6km	Yes	
Rosehearty to Fraserburgh	54.7km	Yes	
Fraserburgh Bay	57.3km	Yes	
Burray Ness to Halcro Head	45.2km	Yes	
Cava, Rysa Little and Fara	59.5km	Yes	
Deerness, East End of Holm and Rose Ness	56.5km	Yes	
Flotta	55.4km	Yes	

RCCA	Approx. Distance to Caledonia North Site	Subject to Theoretical Visibility?	Needs Detailed Assessment within SLVIA?
Holm Sound	54.8km	Yes	
North Bay, Longhope and Switha	54.3km	Yes	
Scapa Bay	59.9km	Yes	
South East Hoy	58.7km	Yes	
South Walls and Brims Ness	54.3km	Yes	
Stroma	43km	Yes	
West Burray and South Ronaldsay	50.3km	Yes	
West Hoy Cliffs	59.3km	Yes	

Table 12-18: Preliminary Assessment of Landscape Designations.

Designation	Approx. Distance to Caledonia North Site	Subject to Theoretical Visibility?	Needs Detailed Assessment within SLVIA?
Duncansby Head SLA	35.1km	Yes	Yes. Assessed at Duncansby Head RCCA. Special Qualities of the SLA were reviewed and these elements are included in the baseline description.
Flow Country and Berriedale Coast SLA	41.1km	Yes	<p>No. Whilst it is recognised that this designation equates to a higher value it is considered that the magnitude of change to the landscape designation is not sufficient to result in a significant effect due to the following factors:</p> <p>Large scale of the receiving context for Caledonia North Site.</p> <p>Caledonia North Site will be visible during excellent conditions.</p> <p>Caledonia North Site WTGs are visible from blade tips to foundations.</p> <p>Due to the orientation of Caledonia North Site to the coastline, the depth of the layout and the separation from the coastline the more distant WTGs will appear less visible and less frequently visible than the closest.</p> <p>No physical change to the SLA, the only changes will be as a result of visibility of the Caledonia North Site close to the horizon.</p> <p>Separation from the coastline limiting the influence of Caledonia North Site on the SLA.</p> <p>Limited perceived prominence of the Caledonia North Site close to the horizon at distance from the SLA.</p> <p>Caledonia North Site will be located beyond the existing OWFs and will appear to extend the spread of OWFs northwards which is already a characterising element of seascape views.</p> <p>Viewpoint 11 is located within this SLA.</p>
Dunnet Head SLA	47.7km	Yes	No. Whilst it is recognised that this designation equates to a higher value it is considered that the magnitude of change to the landscape designation is not sufficient to result in a significant effect due to the following factors:

Designation	Approx. Distance to Caledonia North Site	Subject to Theoretical Visibility?	Needs Detailed Assessment within SLVIA?
			<p>Caledonia North Site will be visible during excellent conditions.</p> <p>The closest Caledonia North Site WTGs are visible as blades, hubs and upper part of tower.</p> <p>Due to the orientation of Caledonia North Site to the coastline, the depth of the layout and the separation from the coastline the more distant WTGs will appear less visible and less frequently visible than the closest.</p> <p>Due to the curvature of the earth, angle of view and depth of the layout of Caledonia North Site will result in the most distant WTGs appearing lower in the view than those to the front of the wind farm. The more distant WTGs will be visible as blades only.</p> <p>No physical change to the SLA, the only changes will be as a result of visibility of the Caledonia North Site close to the horizon.</p> <p>Caledonia North Site will be seen along the horizon in most developed part of view to the south-east which includes views across the scattered settlement of crofting townships, field parcels, coniferous forestry plantations and existing wind farms (both offshore and onshore).</p> <p>It will be seen above the intervening landmass of north-east Scotland between Dunnet Head and Wick.</p> <p>Caledonia North Site will be sited within part of landscape where there already is a high concentration of wind energy development and appear to infill a gap between onshore wind farms (Stroupster and Lochend Farm)</p> <p>The layout of Caledonia North Site will echo the pattern of the existing OWFs and will appear as an extension of the existing OWFs, albeit larger in scale.</p> <p>Viewpoint 2 is located within this SLA.</p>
Lossiemouth to Portgordon Coast SLA	59.4km	Yes	

Designation	Approx. Distance to Caledonia North Site	Subject to Theoretical Visibility?	Needs Detailed Assessment within SLVIA?
Portgordon to Cullen Coast SLA	50.6km	Yes	No. Whilst the ZTV shows that there is theoretical visibility, the long distance to Caledonia North Site reduces susceptibility and the magnitude of change such that there is no potential for significant effects.
North Aberdeenshire Coast SLA	58.5km	Yes	
Deveron Valley SLA	51.9km	Yes	
Duff House GDL	51.9km	Yes	
Cullen House GDL	51.8km	Yes	
Dunbeath Castle GDL	45km	Yes	<p>No. Whilst the ZTV shows that there is theoretical visibility throughout the GDL and it is recognised that this designation equates to a higher value it is considered that the magnitude of change to the landscape designation is not sufficient to result in a significant effect due to the following factors:</p> <p>Large scale of the receiving context for Caledonia North Site.</p> <p>Caledonia North Site will be visible during very good conditions.</p> <p>The existing OWFs are located closer to the GDL and are visible during good conditions. Caledonia North Site will be seen beyond them and appear to extend the spread of offshore wind energy development northwards.</p> <p>OWF will be a characterising feature of seascape views, as such Caledonia North Site will not be introducing an uncharacteristic feature.</p> <p>The closest WTGs will be visible as towers, hubs and blades with more distant WTGs will be seen as hubs and the uppermost parts of towers and blades above the horizon. Due to the orientation of Caledonia North Site to the coastline, the depth of the layout and the separation from the coastline the more distant WTGs will appear less visible and less frequently visible than the closest.</p> <p>No physical change to the GDL, the only changes will be as a result of visibility of the Caledonia North Site along the horizon.</p>

Designation	Approx. Distance to Caledonia North Site	Subject to Theoretical Visibility?	Needs Detailed Assessment within SLVIA?
			Viewpoint 10 is located nearby at Dunbeath Heritage Centre, approximately 1km to the south-south-west.
Castle of Mey (Barrogill Castle) GDL	45.5km	No	No. No theoretical visibility.
Melsetter House GDL	58.5km	No	No. Whilst the ZTV shows that there is some limited theoretical visibility of between 1 to 15 WTG, the intervening vegetation and local landform undulations would screen views of the distant seascape such that there is no potential for significant effects.

12.7.3 Assessment of Effects on Representative Viewpoints

12.7.3.1 Since the Caledonia North Site is offshore all of the receptors to be assessed are affected visually rather than physically and therefore the assessment of the visual effects is presented first, as it is used to inform the effects on landscape/ seascape (coastal) receptors in Section 12.7.5. The assessment of visual effects from representative viewpoints is also presented first, as this is used to inform the subsequent assessment of effects on visual receptors in Section 12.7.4.

12.7.3.2 The assessment of effects of Caledonia North Site is largely based on the representative viewpoints listed in Table 12-6 and identified on Figures 12-4, 12-15 to 12-18 at a larger scale (Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures). Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-9 Hub Height ZTV with Viewpoint Locations, Caledonia OWF shows the extend of theoretical visibility of hub height ZTV with viewpoints, and Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-10 Blade Tip and Hub Height ZTV Comparison demonstrates where only blades are theoretically visible.

12.7.3.3 Visual representations and photomontages have been produced for all the viewpoints (Volume 7C, Appendix 12-3: Seascape, Landscape and Visual Impact Assessment Visualisations, Figures 12-1 to 12-22) as follows (note, Viewpoint 22: Ferry Route (Kirkwall to Aberdeen) is included as a wireline only):

- Viewpoint 1: Burwick Ferry Landing
- Viewpoint 2: Dunnet Head
- Viewpoint 3: Duncansby Head
- Viewpoint 4: Keiss
- Viewpoint 5: Wick (path south of South View)*
- Viewpoint 6: Sarclet (Sarclet Haven Info Board)
- Viewpoint 7: Yarrow's Archaeological Trail
- Viewpoint 8: Whaligoe Steps
- Viewpoint 9: Lybster (end of Main Street)*
- Viewpoint 10: Dunbeath (near Heritage Centre)
- Viewpoint 11: Morven
- Viewpoint 12: Navidale
- Viewpoint 14: Portknockie (Bow Fiddle Rock Info Point)
- Viewpoint 15: Cullen (viaduct)*
- Viewpoint 16: Findlater Castle

- Viewpoint 17: Portsoy
- Viewpoint 18: Macduff, viewpoint at Bi-Centennial monument near Macduff Parish Church
- Viewpoint 19: Gardenstown, Harbour Road*
- Viewpoint 20: Rosehearty Harbour
- Viewpoint 21: B9031, west of Fraserburgh*
- Viewpoint 22: Ferry Route (Kirkwall to Aberdeen)

- 12.7.3.4 Note that although Viewpoint 13: Lossiemouth Harbour was included in the study area for the Caledonia OWF, it does not fall within the 60km study area of the Caledonia North Site. The viewpoints and corresponding visual representations and photomontages have not been renumbered in order to allow for easy comparison between the Caledonia North Site, Caledonia South Site and Caledonia OWF.
- 12.7.3.5 The visualisations have been prepared to NatureScot's visualisation standards. Those marked with '*' also have night time views and visualisations.
- 12.7.3.6 In addition, THC requested that a number of viewpoints located in Highlands should have 75mm equivalent single frame photographs, wirelines or photomontages prepared and composite panoramic images for use in its viewer in monochrome and colour, in accordance with its visualisation standards. The existing OWFs and under construction Moray West OWF WTGs have been photomontaged into these views in accordance with THC (2016¹⁹) guidance and agreement at scoping stage. In these visualisations and in the 53.5 degree field of view photomontages these WTGs, along with the Caledonia OWF WTGs, have been presented as being fully visible in order to ensure the relationships in excellent visibility is understood. This may make them more visible in the visualisations than will be the case, particularly in longer range views.
- 12.7.3.7 The photographs and other graphic material such as wirelines and photomontages used in this assessment are for illustrative purposes only and the assessments are carried out based on assessor observations in the field.
- 12.7.3.8 It should be noted that bold colours of WTGs shown in wirelines can be a misleading representation of likely wind farm visibility, particularly where they are representative of long range views over sea. The more distant the sky within a view the paler it becomes, in nearly all weather conditions, and therefore as a backdrop to pale coloured WTGs the contrast between the WTGs and the sky will generally be much less apparent than is inferred by the bold colour of WTGs in the wirelines. In addition, the line work used to indicate WTGs on a wireline at this size may not correspond with the width of the turbine components when viewed at this range.

- 12.7.3.9 The following section sets out the assessment of the effect on viewpoints of the construction, operation and maintenance and decommissioning of Caledonia North.
- 12.7.3.10 Where a viewpoint is representative of more than one receptor (e.g., road-users and residents) and consequently have different susceptibility levels, the overall sensitivity is based on the highest susceptibility receptors at that viewpoint.
- 12.7.3.11 In the worst case scenario layout for SLVIA, WTGs have been intentionally positioned close to the extremes of the Caledonia North Site so that the full extent of the HFoV that may be affected (where WTGs may be positioned anywhere within the Caledonia North Site) is understood and assessed. The Applicant is aware that from certain viewpoints and sections of the coast the worst case scenario layout creates an apparent 'outlier'. This gap relates to the WCS developed for the SLVIA and may not occur in the final DSLP layout taken forward for construction.
- 12.7.3.12 In finalising the WTG positions the layout will be reviewed and refined as the project develops, post-consent in preparation of the DSLP. One of the aims will be to avoid pronounced outliers, where possible. The Applicant has committed to a landscape architect being part of this review process.

Viewpoint 1 Burwick Ferry Landing

Baseline Condition and Sensitivity

- 12.7.3.13 Please refer to Volume 7C, Appendix 12-3: Seascape, Landscape and Visual Impact Assessment Visualisations, Figure 12-1 Viewpoint 1: Burwick Ferry Landing.
- 12.7.3.14 The viewpoint is representative of passengers on ferries and other boats, walkers, birdwatchers, and visitors and residents of South Ronaldsay and the Orkney islands. The viewpoint is located in Brough Ness and Barth Head RCCA and Coastal Hills and Heath LCT (306). It is located on the South Ronaldsay West Coast Walk. The ferry routes to Orkney from Scrabster (the ZTV shows no theoretical visibility from this route) and Gills Bay which terminates at Burwick Ferry Landing are denoted as Key Routes in THC Onshore Wind Energy Supplementary Guidance 2016 (with addendum December 2017) (THC, 2016b³¹), hereafter to referred to as OWESG.
- 12.7.3.15 The viewpoint is located on the headland to the west of the Burwick ferry landing affording slightly elevated, open, panoramic views.
- 12.7.3.16 The focus of the views are the islands of Orkney and the Pentland Firth, the distant Scottish mainland and the coastline of South Ronaldsay. The view east and north is across the farmed, gently undulating landscape with scattered settlement. Wood-pole mounted electricity lines follow roads leading to houses. Two small-scale wind WTGs are located in the field adjacent to the ferry landing, which is obscured from the view by stacks of concrete sea

defence units and a pier. The rocky bay is visible beyond. To the north-west beyond the cliffs of the headland, which are popular with bird watchers, the hills of the Island of Hoy and lower elevation South Walls, Flotta and Swona islands form the focal interest.

- 12.7.3.17 To the south-west the Island of Stroma and more distant mainland are seen beyond the swirling currents of the Pentland Firth where the North Sea meets the Atlantic. The constant churning sound of the sea as the tide comes in and out along the rocky coastline is a distinctive and notable feature when visiting the viewpoint and this part of the coastline.
- 12.7.3.18 To the south is a small, rocky, unnamed islet with a navigational beacon on one end. To the south-east the Muckle Skerry with its double tower lighthouse. The smaller islands of the Pentland Skerries are seen beyond Muckle Skerry. The low grassy Brough Ness headland extends into the firth. The landforms to the south-east have a strong horizontal emphasis with the lighthouses, beacon and isolated houses adding small vertical features.
- 12.7.3.19 The wireline shows that existing OWFs are theoretically visible as blades and hubs along the horizon 47km distant at their closest point. They are visible to the south along an open stretch of the seascape horizon between the mainland and Muckle Skerry. However, these are unlikely to be visible to the naked eye except in excellent weather conditions.
- 12.7.3.20 Onshore wind farms are visible above the mainland to the south and south-west. Stroupster is visible at 19.2km to the south and Lochend Farm further to the west at 21.7km. The individual turbine Taigh na Muir is theoretically visible at 21.5km and further west of it Baillie Hill wind farm at 44.3km. To the north-west Ore Brae is visible backclothed against Hoy and West Hill on the Island of Flotta is visible at 16.6km.
- 12.7.3.21 During some weather conditions sea and sky appear to merge, which also affects visibility of the OWFs.
- 12.7.3.22 The viewpoint is not located within and does not look out over any landscape planning designations. The view will be locally valued due to the open outlook from properties, the coast and from the South Ronaldsay West Coast Walk. There is an interpretation board by the ferry landing car park which includes information on the walk. The value is considered to be Medium.
- 12.7.3.23 Representative of views obtained by people on ferries and other boats, residents and visitors staying at the scattered settlement, walkers and birdwatchers along the coast. The landscape is open such that although not all houses will be orientated to face towards the south-east and in the direction of Caledonia North Site there are open views from the curtilage of the properties. Passengers of ferries and other boats will be focussed on the seascape including in the direction of Caledonia North Site. Walkers and birdwatchers will have an appreciation of the surrounding landscape and seascape and will be focussed on views. Caledonia North Site may be visible in excellent visibility conditions at a considerable range of over 45km. The

landscape within the wider view has some development characteristics in the form of settlement, transmission lines and coastal structures. Existing OWFs are visible as hubs and blades along part of the open sea horizon during excellent weather conditions to the south.

12.7.3.24 Taken together susceptibility is considered to be Medium-High.

12.7.3.25 In combining the Medium value with the Medium-High susceptibility, the sensitivity of receptors at this viewpoint is considered to be **Medium-High**.

Magnitude of Change

12.7.3.26 Caledonia North Site will be located 45.2km to the south-east and be visible during excellent conditions. The ZTV shows that between 41 - 47 WTGs will be theoretically visible. The OSPs will not be visible from this viewpoint due to distance and the size of the OSPs.

12.7.3.27 Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-15 Blade Tip ZTV (Western Study Area) with Visual Receptors and Viewpoint Locations illustrates the extent of theoretical visibility within the vicinity of the viewpoint location. It shows that there is theoretical and actual visibility of the Caledonia North Site along the coast up to approximately 200m inland. There is also a patch of visibility corresponding to the south-east facing slope of Ward Hill. The landscape is open with few intervening features that screen views except buildings and surrounding vegetation. Inland from Burwick bay within the shallow valley that runs north-east to Blows Moss there is no visibility.

Construction and Decommissioning

12.7.3.28 During the construction and decommissioning phases of the project the worst case scenario will occur when the majority of WTGs and OSPs are present and when there are still large numbers of vessels and cranes present carrying out works. The activity associated with the WTG and OSPs will be distant (minimum 45.2km) and will occur behind and to the side of Muckle Skerry which is a minor focus of views out to sea to the south-east.

12.7.3.29 The magnitude of change during construction and operation is considered to be **Low** with much of the activity concealed behind Muckle Skerry.

Operation

12.7.3.30 Caledonia North Site will be seen beyond Muckle Skerry, which along with its lighthouse is a minor focus of view out to sea to the south-east. It will appear to extend to the west of it along the horizon.

12.7.3.31 The Caledonia North Site WTGs will be visible as blade tips, hubs and the upper part of towers above the horizon. Due to the curvature of the earth, angle of view and depth of the layout of Caledonia North Site will result in the most distant WTGs appearing lower in the view than those to the front of the wind farm. These more distant WTGs will be seen as blades above the horizon. The distance to the most distant turbine will be 72.7km. Further, the increased separation from the viewpoint to the more distant WTGs means that

they will appear to be less visible than the closest.

- 12.7.3.32 Moray East, BOWL and Moray West are visible along the horizon to the south occupying 31 degrees of the HFoV. Caledonia North Site will occupy 10 degrees of the HFoV, adding nine degrees to the HFoV. Caledonia North Site will occupy a small proportion of the overall seascape horizon.
- 12.7.3.33 The Caledonia North Site WTGs will appear to be of a larger scale than existing offshore WTGs. As there are few seascape features to determine scale and distance, Caledonia North Site will appear to be closer than the slightly more distant existing OWFs but importantly the WTGs will appear smaller than the Muckle Skerry lighthouse.
- 12.7.3.34 The Caledonia North Site will be seen in the southern part of the view, which means that the WTGs will be backlit for the first part of the day and be seen in shadow. In certain conditions they will contrast with a light sky background. WTGs that are lit by the sun, as is the case in the afternoon/evening, could potentially increase contrast against the sky background making them more apparent when visibility is very good during these times of the day.
- 12.7.3.35 Located south-east and due to the prevailing wind direction, the angle of the rotors will generally be aligned at an angle to the viewpoint such that the blades will be directed away from the viewpoint location, occupying less space. This also reduces the influence of blade movement in the view. Movement of WTG blades at these long ranges is difficult to discern with the naked eye.
- 12.7.3.36 Caledonia North Site will be separated from the coastline by an open stretch of water and be visible beyond the Pentland Skerries. Caledonia North Site will be seen within the context of the lighthouse towers of Muckle Skerry and the closest WTGs will introduce additional small vertical features to this part of the view. However, they will introduce further development influences into a narrow part of the view that is a minor focal point within a wide expanse of the sea views from this location.
- 12.7.3.37 Taking into account the description of change and the factors of magnitude described above, the magnitude of change for the Caledonia North Site is considered to be **Low**.

Significance of Effect

Construction and Decommissioning

- 12.7.3.38 The visual effect of the Caledonia North Site during construction and decommissioning at this viewpoint and across the southern part of South Ronaldsay and for up to approximately 1km inland of the coastal edge is considered to be **Moderate-Minor and Not Significant in EIA terms**. The effects will be adverse, short term and temporary. The frequency of visibility at a range which equates to the closest part of the Caledonia North Site is approximately 11.5% of the year.

Operation

- 12.7.3.39 The visual effect of the Caledonia North Site during operation at this viewpoint and across the southern part of South Ronaldsay and for up to approximately 1km inland of the coastal edge is considered to be **Moderate-Minor and Not Significant in EIA terms**. The effects will be adverse, long term and reversible. The frequency of visibility at a range which equates to the closest part of the Caledonia North Site is approximately 11.5% of the year.

Viewpoint 2 Dunnet Head

Baseline Condition and Sensitivity

- 12.7.3.40 Please refer to Volume 7C, Appendix 12-3: Seascape, Landscape and Visual Impact Assessment Visualisations, Figure 12-2 Viewpoint 2: Dunnet Head.
- 12.7.3.41 The viewpoint is representative of walkers and visitors to Dunnet Head, including to the lighthouse located on the northernmost point of Dunnet Head which is the focus of the Dunnet Head SLA. The viewpoint is located within RCCA Dunnet Head and the High Cliffs and Sheltered Bays LCT (141). Located on Dunnet Head View Point core path (CA05.06). Dunnet Head is noted as a Key View and as a Gateway, with the minor road that provides vehicular access to the lighthouse from Brough (B855) denoted a Key Route in CLSA 2017.
- 12.7.3.42 The viewpoint is located at a viewing platform on the path that loops around the summit of Dunnet Head (127m AOD) from the car park at the end of the B855. There are information boards highlighting surrounding landmarks and trig point nearby.
- 12.7.3.43 Views are panoramic with the sea surrounding the headland on three sides. Along the distant horizon to the south-west across the moorland of Dunnet Head and subsequent settled coastal edge of the northern Caithness the summits of Morven, Ben Klibreck, Sgor Chaonasaid, Ben Hope and Ben Hutig are visible during excellent conditions. Baillie Hill Wind Farm is visible on the uplands beyond Thurso Bay at a distance of 20.2km.
- 12.7.3.44 The view north and north-east looks across the Pentland Firth to the Orkney Islands and east along the coast to Duncansby Head and the Island of Stroma. This is the focal point of the view, encompassing the Orkney Islands and the interaction of the sea with the indented and varied coastal edge to the east. The individual turbine at West Hill, Flotta (22.7km) is visible to the north-east, with other wind energy development on Orkney including Ore Brae, Northfield Burray and Barnes of Ayre difficult to discern due to size of the turbine or distance.
- 12.7.3.45 To the south-east, in the direction of the Caledonia North Site, the view is across the north-eastern tip of mainland Scotland across elevated moorland and lochs, and the settled and farmed north-eastern coastal edge of Caithness. This is the most developed part of the view. The coastline is indented with cliffs and sea stacks that transition to raised beaches with rocky

outcrops further east.

- 12.7.3.46 The operational onshore wind farms Stroupster (16.1km) and Lochend Farm (10.3km) are skylined along the horizon to the south-east with the individual turbine Taigh na Muir (6.2km) between the coastline and these more distant WTGs. Further west the group of wind farms west of Wick (Achairn Farm, Wathegar, Wathegar II, Bilbster, Burn of Whilk and Camster) are dotted across the distant landscape seen at distances ranging between 25.5km and 35.6km. North of these is another group of onshore wind farms including Halsary, Buolfruich, Bad a Cheo, Causeymire and Achlachan at distances of between 25.1km and 40.8km.
- 12.7.3.47 BOWL, Moray East and Moray West OWFs are seen above the intervening landscape as blades, hubs and the upper parts of the tower visible stretching between Lochend Farm Wind Farm and the group further to the west. They are 48.9km distant at their closest point and therefore only visible in excellent visibility conditions. Due to the distance and intervening landscape, it is difficult to discern that some of the WTGs are offshore from this location. They appear together as a collective mass of WTGs along the horizon with WTGs in the wirelines appearing 'stacked' in rows in places, although this is unlikely to be discernible in reality.
- 12.7.3.48 The viewpoint lies within and overlooks Dunnet Head SLA, thus having a higher scenic value than the surrounding landscape. The viewpoint is marked on OS maps. Views are valued for their wide panoramic views with scenic focus towards Orkney and the Pentland Firth to the north and along the indented coastline of Caithness. The value is considered to be Medium-High.
- 12.7.3.49 Representative of visitors and walkers at an Ordnance Survey mapped viewpoint, who have appreciation of the surrounding landscape and seascape, and will be focussed on views which are the subject of interpretative materials at the viewpoint. OWFs BOWL, Moray East and Moray West WTGs and onshore wind farms on the mainland to the south-east and south add a strong wind farm characteristic which modulates susceptibility in the part of the view that will be affected by Caledonia North Site at a considerable distance. Taken together susceptibility is considered to be Medium.
- 12.7.3.50 In combining the Medium-High value with the Medium susceptibility, the sensitivity of receptors at this viewpoint is considered to be **Medium-High**.

Magnitude of Change

- 12.7.3.51 Caledonia North Site will be visible during excellent conditions 53.9km to the south-east. The ZTV shows that all 47 WTGs will be theoretically visible.
- 12.7.3.52 Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-15 Blade Tip ZTV (Western Study Area) with Visual Receptors and Viewpoint Locations illustrates the extent of the ZTV within the vicinity of the viewpoint location. It shows that there is theoretical and actual visibility of the upper parts of the Caledonia North Site WTGs from

the broad, flat-topped summits of Burifa Hill (115m AOD) and Dunnet Hill (121m AOD) of Dunnet Head, across the Moss of Dunnet and along the ridgeline south to West Dunnet. The viewpoint is located on Dunnet Hill.

Construction and Decommissioning

- 12.7.3.53 The intervening landmass of north-east Scotland obscures views of the sea such that during the construction and decommissioning phases of the project only the upper parts of cranes, blades, hubs and upper parts of some towers as they are constructed will be visible from this viewpoint location.
- 12.7.3.54 The magnitude of change during construction and decommissioning is considered to be **Low**.

Operation

- 12.7.3.55 Caledonia North Site will be seen along the horizon in most developed part of view to the south-east which includes views across the scattered settlement of crofting townships, field parcels, coniferous forestry plantations and existing wind farms (both offshore and onshore). It will be seen above the intervening landmass of north-east Scotland between Dunnet Head and Wick.
- 12.7.3.56 The blades, hubs and upper part of tower of closest WTGs of Caledonia North Site will be visible above the horizon in excellent visibility conditions. The increased separation from the viewpoint to the more distant WTGs means that they will be less visible than the closest. The distance to the most distant turbine will be 77.7km. Additionally, due to the curvature of the earth, angle of view and depth of the layout of Caledonia North Site will result in the most distant WTGs appearing lower in the view than those to the front of the wind farm. These more distant WTGs will be seen as hubs and blades.
- 12.7.3.57 Caledonia North Site will be sited within part of landscape where there already is a high concentration of wind energy development. It will occupy 14 degrees of the HFoV and will infill the gap of open skyline between the onshore Stroupster and Lochend Farm wind farms, located 16.1km and 10.3km respectively. OWFs are seen as a mass along the horizon occupying 35 degrees seen to the east of Lochend Farm wind farm and at much greater distance (minimum of 48.9km). Caledonia North Site will extend eastwards beyond Lochend Farm and seen in conjunction with Moray East and BOWL OWFs at a comparable distance (57.2km and 48.9km respectively). Moray West is theoretically visible further to the west at 61.4km. Caledonia North Site adds 10 degrees to the existing spread of OWFs in this view.
- 12.7.3.58 Caledonia North Site WTG will appear to be of a larger scale than the other WTGs seen along the horizon (these are OWFs but as they appear above landform it is not apparent that this is the case). Caledonia North Site WTGs will appear smaller in scale than the closer range onshore wind farms located in the same part of the view and will be less prominent, even in excellent visibility conditions.
- 12.7.3.59 The layout of Caledonia North Site will echo the pattern of the existing OWFs appearing as a mass of WTGs including some areas where WTGs may appear

'stacked' in rows. Due to these similarities Caledonia North Site will appear as an extension of the existing OWFs, albeit larger in scale.

- 12.7.3.60 Caledonia North Site will be seen in the southern part of the view, which means that the WTGs will be backlit for large parts of the day and be seen in shadow. In certain conditions they will contrast with a light sky background. WTGs that are lit by the sun, as is the case in the morning and afternoon/evening, could potentially increase contrast against the sky background making them more apparent when visibility is excellent during these times of the day.
- 12.7.3.61 Located south-east and due to the prevailing wind direction, the angle of the rotors will generally be aligned at an angle to the viewpoint such that the blades will be directed away from the viewpoint location, occupying less space. This also reduces the influence of blade movement in the view. Movement of WTG blades at these long ranges is difficult to discern with the naked eye.
- 12.7.3.62 Closer view of The Stacks, cliffs and the coastline beyond is unaffected which are a focal point of the view in this direction, Caledonia North Site will form part of the wider view. An important element of the focal point of the view is the interaction between the sea and coastal edge. The view of the Orkney Islands and the northern Caithness coastline is unaffected by Caledonia North Site and remain the key, scenic focus.
- 12.7.3.63 Taking into account the description of change and the factors of magnitude described above, the magnitude of change for Caledonia North Site is considered to be **Low**.

Significance of effect

Construction and decommissioning

- 12.7.3.64 The visual effect of Caledonia North Site during construction and decommissioning at this viewpoint and across the other small summits on Dunnet Head is considered to be **Moderate-Minor and Not significant in EIA terms**. The effects will be adverse, short term and temporary. The frequency of visibility at a range which equates to the closest part of the Caledonia North Site is approximately 6% of the year.

Operation

- 12.7.3.65 The visual effect of Caledonia North Site during operation at this viewpoint and across the other small summits on Dunnet Head is considered to be **Moderate-Minor and Not significant in EIA terms**. The effects will be adverse, long term and reversible. The frequency of visibility at a range which equates to the closest part of the Caledonia North Site is approximately 6% of the year.

Viewpoint 3 Duncansby Head

Baseline Condition and Sensitivity

- 12.7.3.66 Please refer to Volume 7C, Appendix 12-3: Seascape, Landscape and Visual Impact Assessment Visualisations, Figure 12-3 Viewpoint 3: Duncansby Head.
- 12.7.3.67 The viewpoint is representative of visitors and walkers in the Duncansby Head SLA. The viewpoint is located in Duncansby Head RCCA and the High Cliffs and Sheltered Bays LCT (141). Located on Duncansby Head and Stacks core path (CA07.06). Duncansby Head is noted as a Key View and as a Gateway in CLSA 2017.
- 12.7.3.68 The viewpoint is located close to the most north-easterly point of mainland Scotland on a headland which affords expansive panoramic views. It is located on a core path close to a trig point and accessed from close to a minor road from John o'Groats or via a coastal walk along a path that continues south along the coast. There is, however, no signposted route between the car-park and the trig point to encourage large numbers of visitors to this location. The Ordnance Survey mapped viewpoint indicates views to the north from the lower car park from where there are no views out to the sea to the south.
- 12.7.3.69 The key views from the viewpoint are along the coastline to the west and south, and to the Orkney Islands further north. The view west is along the settled coastal edge backed by undulating moorland inland. The lighthouse is a key feature of views to the north-east and many people visiting this location will do so to see it and the cliffs and Stacks of Duncansby, which are an attractive, natural, coastal feature to the south, and can be viewed at closer range from the coastal path. There is a strong sense of exposure and connection to the sea, which can be seen across large parts of the view. The distant skyline will be difficult to discern from the sea in certain weather conditions.
- 12.7.3.70 The operational wind farms BOWL, Moray West, Moray East and Beatrice Demonstrator WTGs may be visible to the south and appear to extend from behind the most distant headland (Noss Head) in the view out across the seascape. They appear in the wireline as a mass of wind WTGs and it is difficult to distinguish between the different wind farms, although Moray West is distinguishable due to the 'stacked' appearance of the layout from this location in contrast with the clustered appearance of the WTGs of the other wind farms. However, this relationship of the WTGs is unlikely to be discernible at these ranges, particularly due to the considerable separation between the viewpoint and the more distant WTGs in the view. The operational OWFs are visible in very good or excellent conditions across part of the open sea.
- 12.7.3.71 The Stroupster and Lochend Farm onshore wind farms are visible beyond low moorland and inland from the rugged cliff edge at a distance of 8.5km and 13.3km respectively seen in different parts of the view to the south-east. Burn of Whilk onshore wind farm is visible only as blade tips from this location

at a range of 33.3km.

- 12.7.3.72 Baillie Hill onshore windfarm is theoretically visible as blade tips only along the horizon at 37.8km to the west. Taigh na Muir individual turbine is visible as a hub above the horizon to the west at 15.1km.
- 12.7.3.73 To the north, Ore Brae (22.8km) and West Hill (21.2km) individual WTGs are visible on Hoy and Flotta respectively. Barnes of Ayre is theoretically visible at 35.7km to the north-north-east but is obscured behind the lighthouse in the viewpoint photography.
- 12.7.3.74 The viewpoint lies within and overlooks the locally designated Duncansby Head SLA, thus having a higher scenic value than the surrounding landscape. There is a view cone marked on OS maps at the carpark to the west of the lighthouse, approximately 100m to the north of the viewpoint. The viewpoint is located close to a trig point and information board near the car parking area, accessed across open grass to south of lighthouse, however the views from it do not include views southwards towards the Caledonia North Site.
- 12.7.3.75 The area where the viewpoint is located is valued for its wide panoramic views with scenic focus towards Orkney and the Pentland Firth to the north and to Duncansby Stacks to south. Views to the Duncansby Stacks may be missed by some visitors due to screening landform and the lack of signposts or paths across the headland marking the way towards them. The value is considered to be Medium-High.
- 12.7.3.76 Visitors and walkers have appreciation of the surrounding landscape and will be focussed on views. The simple, expansive sea view over a short foreground of rough grassland landcover draws the eye towards the seascape and coastal landscape. The rugged, steep Duncansby cliffs and dramatic coastal edge with stacks and small enclosed bays to the south, which are the focus of the southerly views, are in a different part of the view from existing OWFs. The more distant parts of the mainland coast extend out beyond the Duncansby cliffs with operational OWFs appearing to extend from the most distant headland along the horizon and in the direction of the Caledonia North Site.
- 12.7.3.77 BOWL, Moray East and Moray West are visible in excellent conditions on the skyline of the open sea between the lighthouse to the north-east and the Duncansby cliffs to the south adding a strong offshore wind farm characteristic which modulates susceptibility. Visibility of onshore wind farms as part of the landscape context adds an onshore wind farm influence.
- 12.7.3.78 Taken together susceptibility is considered to be Medium.
- 12.7.3.79 In combining the Medium-High value with the Medium susceptibility, the sensitivity of receptors at this viewpoint is considered to be **Medium-High**.

Magnitude of Change

- 12.7.3.80 The Caledonia North Site will be visible during very good conditions 37.8km to the south-east. The ZTV shows that all of the WTG will be theoretically visible. Whilst OSPs will theoretically be visible from this viewpoint, due to the

distance and size of the OSPs they will not be easily discernible from this viewpoint.

- 12.7.3.81 Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-15 Blade Tip ZTV (Western Study Area) with Visual Receptors and Viewpoint Locations illustrates the extent of theoretical visibility within the vicinity of the viewpoint location. It shows that there is theoretical visibility of the Caledonia North Site from the south-eastern side Duncansby Head and east of the ridgeline that follows the coast including the coastal path by the Duncansby Stacks.

Construction and Decommissioning

- 12.7.3.82 During the construction and decommissioning phases of the project the worst case scenario will occur when the majority of WTGs and OSPs are present and when there are still large numbers of vessels and cranes present carrying out works. The activity associated with the WTG and OSPs will be distant (minimum 37.7km).
- 12.7.3.83 The magnitude of change during construction and operation is considered to be **Medium-Low**.

Operation

- 12.7.3.84 The Caledonia North Site will be seen along the seascape horizon appearing to extend the spread of existing wind energy development further eastwards into the undeveloped part of the seascape. There is an open, undeveloped stretch of sea between the shoreline and existing OWFs which are seen along the horizon.
- 12.7.3.85 The Caledonia North Site will be sited adjacent to the area in the view where OWFs are found. It will occupy 12 degrees of HFoV. The eastern part of Caledonia North Site appears in conjunction with the western extent of Moray East (at a distance of 43.7km). Due to the closer proximity and larger size of Caledonia North Site WTGs when compared to the adjacent Moray East WTGs they will appear comparatively more prominent and will be more frequently visible than Moray East.
- 12.7.3.86 Existing OWFs occupy 37 degrees of the view, with the Caledonia North Site adding approximately 10 degrees to the spread of OWF in the view from this location.
- 12.7.3.87 BOWL is sited in front of Moray East, located 37km from the viewpoint, and extending further westwards. Moray West is located to the west of BOWL and Moray East and overlaps with the eastern part of both schemes, located at 52.2km from the viewpoint.
- 12.7.3.88 Caledonia North Site WTGs will appear to be larger in scale than the WTGs of the existing OWFs. However, as there are no seascape features that indicate distance, the larger scale of the Caledonia North Site WTGs will appear to be closer due to the anticipated interactions of scale and distance, and perspective, avoiding the perception of distortions of scale with the similarly

distant BOWL. This is further reduced by the horizontal separation between the Caledonia North Site and BOWL.

- 12.7.3.89 Caledonia North Site will appear as a mass of WTGs, following a similar pattern to the existing OWFs, with rows of WTGs which may appear to be 'stacked' in rows in certain places as is the case for certain areas of the existing OWFs. The layout of the Caledonia North Site will echo the pattern of the existing OWFs with a cluttered appearance where the Caledonia North Site overlaps with the existing OWFs becoming more spread out towards the north including some areas where WTGs may appear 'stacked'. This is similar to the pattern of the layout in the south where Moray West is visible. Due to these similarities the Caledonia North Site will appear as an extension of the existing OWFs, albeit larger in scale.
- 12.7.3.90 The Caledonia North Site WTGs will be visible from blade tips to foundations. Due to the curvature of the earth, angle of view and depth of the layout of the Caledonia North Site will result in the most distant WTGs appearing lower in the view than those to the front of the wind farm. These more distant WTGs will be seen as blades, hubs and the upper part of the tower above the horizon. The distance to the most distant turbine will be 64.1km. Further, the increased separation from the viewpoint to the more distant WTGs means that they will appear to be less visible than the closest.
- 12.7.3.91 Caledonia North Site will be seen in the southern part of the view, which means that the WTGs will be back-lit for large parts of the day and be seen in shadow. In certain conditions they will contrast with a light sky background. WTGs that are lit by the sun, as is the case in the morning and afternoon/evening, could potentially increase contrast against the sky background making them more apparent when visibility is excellent during these times of the day.
- 12.7.3.92 Located south-east and due to the prevailing wind direction, the angle of the rotors will generally be aligned at an angle to the viewpoint such that the blades will be directed away from the viewpoint location, occupying less space. Movement of WTG blades at these long ranges is difficult to discern with the naked eye.
- 12.7.3.93 Caledonia North Site will be seen in a separate part of the view from the main focus of the view of Duncansby Stacks and cliffs located to the south-east, although it will form part of the wider context. The view northwards of Duncansby lighthouse, the northern Caithness coast, the Pentland Firth and the Orkney Islands will be unaffected.
- 12.7.3.94 Taking into account the description of change and the factors of magnitude described above, the magnitude of change for the Caledonia North Site is considered to be **Medium-Low**.

Significance of Effect

Construction and Decommissioning

- 12.7.3.95 The visual effect of Caledonia North Site during construction and decommissioning at this viewpoint and for up to 500m inland is considered to be **Moderate and Not Significant in EIA terms** due to distance and that it will appear to extend the spread of the OWFs along the horizon in a part of the view that is already affected by OWF development, which is not the key focus for views from this headland. A large extent of open sea will remain undeveloped. Effects will be adverse, short term and temporary. The frequency of visibility at a range which equates to the closest part of the Caledonia North Site is approximately 26% of the year.

Operation

- 12.7.3.96 The visual effect of Caledonia North Site during operation at this viewpoint and for up to 500m inland is considered to be **Moderate and Not Significant in EIA terms**. This assessment has been made due to distance and that it will appear to extend the spread of the OWFs along the horizon in a part of the view that is already affected by OWF development, which is not the key focus for views from this headland. A large extent of open sea will remain undeveloped. Effects will be adverse, long term and reversible. The frequency of visibility at a range which equates to the closest part of the Caledonia North Site is approximately 26% of the year.

Viewpoint 4 Keiss

Baseline Condition and Sensitivity

- 12.7.3.97 Please refer to Volume 7C, Appendix 12-3: Seascape, Landscape and Visual Impact Assessment Visualisations, Figure 12-4 Viewpoint 4: Keiss.
- 12.7.3.98 The viewpoint is representative of views from the A99 road as well as the settlement of Keiss, located to the north-east. Whilst the nearby core path CA15.17 Keiss/Reiss Shore sits at a lower elevation and follows the shoreline of Sinclair's Bay with the view south-east towards Caledonia North Site from the viewpoint is still representative albeit without the intervening crofting landscape foreground. Whilst not part of a National Tourist Route, this section of the A99 is part of the NC500 route. The viewpoint is located within Sinclair's Bay RCCA (Freswick Bay and Nybster Coast RCCA begins just north of the settlement at Tang Head), and the High Cliffs and Sheltered Bays LCT (141). The layby 1mile (1.6km) north of Keiss near the Baptist Manse (approximate grid ref 336088 962317) is noted as a Key View in OWESG for its 'expansive view south taking in sea, coast and inland areas [...] with views to prominent hills.' Views from settlement along the A99 extending north to the Hill of Harley have similar views south cross the seascape and coast with the prominent hills along the skyline.
- 12.7.3.99 Keiss is a small fishing village located at the northern end of Sinclair's Bay. The A99 is set slightly inland and runs parallel to the south-east facing

coastline at this location and through the centre of the village. The High Street runs perpendicular from the A99 to the harbour, which is located at the bottom of a grass covered steep bank with rocky outcrops that runs along the coastline. Houses face towards the roads that run perpendicular to the coast such that views to the south-east towards the sea are from the street and gardens. Houses on the south-western edge of the village have views to the south-west across the surrounding crofting landscape and, from their gardens, towards Sinclair's Bay.

- 12.7.3.100 The view from the viewpoint is panoramic of a varied landscape of simple sea and coast transitioning to a sub-divided crofting landscape of dwellings and fields. The view south-west is across fields adjoining the village with scattered dwellings seen extending further along the road with the wider countryside and coastline beyond. Whilst the view is markedly horizontal and low-lying in character, the slight rise in elevation on which Keiss is located encloses the view to the north-east. The curve of Sinclair's Bay leads the eye round to the low promontory of Noss Head to the south which is the focal point of the view. Ackergill Tower is seen in its walled setting close to the shore on the far side of Sinclair's Bay.
- 12.7.3.101 The narrow, long crofting fields and associated dwellings creates a rhythmic pattern to the landscape through which the A99 crosses. The mountains of Morven, Scaraben and Ben Graims are visible in clear conditions to the south-west on either side of the road corridor. Numerous wood-pole transmission lines are also a feature of the view.
- 12.7.3.102 The land rises slightly to the south and south-west beyond Wick (out of view) where the operational onshore wind farm of Burn of Whilk is visible along the horizon near the Hill of Yarrows. Further west is a group of onshore wind farms including Achairn, Camster, Wathegar, Wathegar 2 and Bilbster clearly visible to the east of the A99 road corridor. The wind farms further west including Halsary, Causeymire, Bad a Cheo and Achlachan are obscured by intervening forestry and other skyline features. Stroupster wind farm is theoretically visible to the north but is obscured by the settlement of Keiss from this location.
- 12.7.3.103 In the view to the south-east BOWL, Moray East and Moray West wind farms are visible in very good or excellent conditions as blade tips above the Noss Head promontory. The eastern parts of Moray and BOWL OFWs are seen to a greater extent along a short section of the skyline formed by the open sea beyond Noss Head. In the open part of the seascape the sky and sea appear to merge in certain weather conditions which would also affect visibility of the OFWs.
- 12.7.3.104 The viewpoint is not located within and does not look out over any landscape planning designations. The view will be locally valued due to the open outlook from properties and locations such as the interpretation point above Keiss Harbour and from core paths. The value is considered to be Medium. This viewpoint is representative of views obtained by people in their homes and

when moving around parts of the settlement. The orientation of the settlement is such that the focal point of views is not often the view directly visible from the closest houses, which tend to be orientated to the south-west. Views towards Caledonia North Site are oblique rather than directional for south-bound users of the main A99 road along the Caithness coast linking Wick and John o’Groats, although views are likely to be drawn towards the sea and headlands from this straight section of the route.

- 12.7.3.105 BOWL, Moray East and Moray West as well as a prominent grouping of onshore wind farms are a key characteristic in this view modulating susceptibility. The local headland of Tang Head encloses views to the east and Noss Head to the south restricting views of the open sea. Taken together susceptibility is considered to be Medium-High.
- 12.7.3.106 In combining the Medium value with the Medium-High susceptibility, the sensitivity of receptors at this viewpoint is considered to be **Medium-High**.

Magnitude of Change

- 12.7.3.107 The Caledonia North Site will be visible during very good conditions at 33.1km at its closest point to the south-east. The ZTV shows that all 47 WTGs will be theoretically visible. Whilst OSPs will theoretically be visible from this viewpoint, due to the distance and size of the OSPs they will not be easily discernible from this viewpoint.
- 12.7.3.108 Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-15 Blade Tip ZTV (Western Study Area) with Visual Receptors and Viewpoint Locations illustrates the extent of theoretical visibility within the vicinity of the viewpoint location. It shows that there is theoretical visibility of the Caledonia North Site throughout the settlement of Keiss and along the coastline, with theoretical visibility reducing to no visibility cross southern part of Sinclair’s Bay. Actual visibility will be restricted to the south-eastern and south-western edges of the village due to built form screening views of the seascape. There will be views along the High Street road corridor, from amenity spaces and gardens at the edges of the village.

Construction and Decommissioning

- 12.7.3.109 During the construction and decommissioning phases of the project the worst case scenario will occur when the majority of WTGs and OSPs are present and when there are still large numbers of vessels and cranes present carrying out works. The activity associated with the WTG and OSPs will be distant (minimum 33.1km).
- 12.7.3.110 The magnitude of change during construction and operation is considered to be **Medium-Low**.

Operation

- 12.7.3.111 The Caledonia North Site will appear to extend eastwards from Moray East which is seen beyond Noss Head. The Caledonia North Site occupies 21 degrees of the HFoV, which is a large proportion of the remaining open

seascape, with approximately 4 degrees of open seascape remaining.

- 12.7.3.112 As described in the baseline, the majority of BOWL is visible as blade tips above the landform horizon of Noss Head at 28.2km distance. Only the very tip of blade tips of Moray West are visible above this landform at a distance of 41.7km, and are barely perceptible. Between a third and a quarter of the Moray East WTGs are seen along the open sea horizon, with the rest visible as blade tips above the promontory (36.4km at their closest point). The existing WTGs seen along the seascape horizon occupy 35 degrees of the HFoV with Caledonia North Site adding 15 degrees to the overall spread of OWFs along the horizon.
- 12.7.3.113 Caledonia North Site WTGs will appear to be of a larger scale than existing offshore WTGs. However, as there are no seascape features that indicate distance, the larger scale of the Caledonia North Site WTGs will appear to be closer due to the anticipated interactions of scale and distance, and perspective, avoiding the perception of distortions of scale with the similarly distant BOWL and Moray East OWFs.
- 12.7.3.114 Caledonia North Site WTGs will be visible from blade tips to foundations. Due to the curvature of the earth, angle of view and depth of the layout of Caledonia North Site will result in the most distant WTGs appearing lower in the view than those to the front of the wind farm. These more distant WTGs will be seen as hubs, blades and the upper parts of towers above the horizon. The distance to the most distant turbine will be 56.9km. Further, the increased separation from the viewpoint to the more distant WTGs means that they will appear to be less visible and also less frequently visible than the closest.
- 12.7.3.115 The pattern of the Caledonia North Site WTGs will be similar to the existing OWFs, with some areas seen as a mass of WTGs and some areas where WTGS are aligned in rows appearing 'bunched' or 'stacked.' Due to these similarities the Caledonia North Site will appear as an extension of the existing OWFs, albeit larger in scale so that they will appear more prominent in this view.
- 12.7.3.116 The Caledonia North Site will be seen in the southern part of the view, which means that the WTGs will be back-lit for the first half of the day and be seen in shadow. When seen against a pale sky they will contrast with the sky background. WTGs that are lit by the sun, as is the case in the afternoon/evening, could potentially increase contrast against the sky background making them more apparent when visibility is very good during these times of the day.
- 12.7.3.117 Located south-east and due to the prevailing wind direction, the angle of the rotors will be aligned at an angle to the viewpoint such that the blades will be directed away from the viewpoint location, occupying less space. This also reduces the influence of blade movement in the view.
- 12.7.3.118 The Caledonia North Site will be seen in a part of the view separate from the

main focus of the view to the south of Sinclair's Bay and Noss Head although it will form part of the wider context. The layout of the settlement is orientated such that the majority of houses face towards the south-west or north-east, away from the Caledonia North Site which is located to the south-east. As such static views from within the majority of houses will not include views of the Caledonia North Site, however there will be views of it from the curtilage of properties, roads and footpaths.

- 12.7.3.119 Taking into account the description of change and the factors of magnitude described above, the magnitude of change for the Caledonia North Site is considered to be **Medium-Low**.

Significance of Effect

Construction and Decommissioning

- 12.7.3.120 The visual effect of Caledonia North Site during construction and decommissioning at this viewpoint and for up to approximately 1km inland of the coastal edge extending north to the Hill of Harley and approximately 1.6km (1mi) south of the settlement envelope of Keiss is considered to be **Moderate and Significant in EIA terms** as the Caledonia North Site and associated vessels and cranes will occupy a large proportion of the remaining open seascape and visual complexity created by the scale of Caledonia North Site WTGs as compared to the existing OWF WTGs. The effects will be adverse, short term and temporary. The frequency of visibility at a range which equates to the closest part of the Caledonia North Site is approximately 37% of the year.

Operation

- 12.7.3.121 The visual effect of Caledonia North Site during operation at this viewpoint and for up to approximately 1km inland of the coastal edge extending north to the Hill of Harley and approximately 1.6km (1mi) south of the settlement envelope of Keiss is considered to be **Moderate and Significant in EIA terms** as the Caledonia North Site will occupy a large proportion of the remaining open seascape and visual complexity created by the scale of Caledonia North Site WTGs as compared to the existing OWF WTGs. The effects will be adverse, long term and reversible. The frequency of visibility at a range which equates to the closest part of the Caledonia North Site is approximately 37% of the year.

Viewpoint 5 Wick

Baseline Condition and Sensitivity

- 12.7.3.122 Please refer to Volume 7C, Appendix 12-3: Seascape, Landscape and Visual Impact Assessment Visualisations, Figure 12-5 Viewpoint 5: Wick.
- 12.7.3.123 The viewpoint is representative of those obtained by some residents of Wick and visiting tourists. It is also representative of coastal path users and of core path CA15.03 Castle of Old Wick which runs along the coastal edge to the

Castle of Old Wick from the car park at the end of the minor road. Views towards the open seascape where Caledonia North Site will be located are similar, albeit without South Head in the view.

- 12.7.3.124 The viewpoint is located on a locally popular coastal core path (North Head CA15.01) which runs between the rear boundary of properties and the cliff top of North Head. It is located in Wick Bay RCCA and within Farmed Lowland Plain LCT (143).
- 12.7.3.125 Wick is the largest town in the Highlands part of the study area. It has grown up around the confluence of the River Wick where it reaches Wick Bay. The bay is orientated so that its open 'mouth' is towards the south-east. The town is centred around the river crossing and the land slopes up from there with the settlement extending along the edges of the bay and onto higher land to the north and south. The harbour area of Wick has been important for its development with a high concentration of commercial uses clustered around it.
- 12.7.3.126 The layout of the town is generally in a grid pattern running parallel to the shores of Wick Bay, in the northern part of the town the streets are aligned east-west and in the southern part north-west to south-east. The majority of houses in the southern part face onto the street such that gable ends face towards the sea protecting them from the elements. In the northern part of the town houses face or back on to the north or south, to face the sea, where the viewpoint is located. The focus of views is across the harbour, or at the eastern edges of the town out across the open sea to the east or south across Wick Bay.
- 12.7.3.127 The view from the viewpoint is across Wick Bay where it meets the open sea to the east and extends westwards to the harbour area encompassing a wide range of settlement characteristics. The cliffs and dwellings of South Head extend the settled influence out to the coast in the view south-west. Burn of Whilk wind farm (12.5km) is theoretically visible from this location, however the built form along South Head obscures it.
- 12.7.3.128 Beyond the town, the Achairn Farm and Wathegar wind farms are clearly visible above the built form at distances of 7.7km to 9.8km respectively. Camster wind farm is also partially visible in a slightly separate part of the view, however. The more distant wind farms of Causeymire, Bad a Cheo, Halsay, Wathegar, Wathegar 2, and Bilbster are not apparent.
- 12.7.3.129 The BOWL, Moray East, and Moray West wind farms are visible to their full extent out in the open sea at a range of 18.1km at the closest point. From this location within Wick Bay and at this range they are located so that they appear to extend from the land to the south and take up a large proportion of the visible sea skyline. They form a prominent feature when visibility is good to excellent. The layout of the OWF WTGs means that they appear 'stacked' in rows or there are large gaps within parts of the wind farms in the southern part of the view, with a more cluttered appearance to the south-east where

wind farms sit one behind the other.

- 12.7.3.130 The Beatrice Demonstrator WTGs and the associated oil platforms are less frequently visible as point features on the skyline at a distance of 38km, beyond the intervening Moray West OWF, distinguishable due to the difference in the height of the WTGs and massing of the oil rigs in comparison to the WTGs.
- 12.7.3.131 The open seascape, South Head promontory and the activity of the port are the focal features of the view from this location. During certain conditions the sea and sky appear to merge, affecting visibility of OWFs which are seen along the horizon. The viewpoint is not located within and does not look out over any landscape planning designations. The view will be valued locally due to the open outlook from properties and locations such as the coastal footpath. The value is considered to be Medium.
- 12.7.3.132 Representative of views obtained by people in their homes. The orientation of this part of the settlement is such that the view direction is generally akin to the views from the rear of a small number of properties along the southern edge of North Head towards the south. The properties on South Head and Papigoe tend to be orientated further to the east and views from the properties take in more of the open sea (to the east).
- 12.7.3.133 Residents have static, long-term views, and dynamic views coming and going from their residence. Although residents are the main receptor there is some tourist/visitor activity in Wick, associated with pleasure craft at the marina and the nearby Castle of Old Wick.
- 12.7.3.134 Views from the coastal core path (North Head CA15.01) provides opportunities for users to gain views of a wide variety of settlement and coastal characteristics and to enjoy being close to the sea. It enables users to leave the confines of the urban area and experience a more natural environment.
- 12.7.3.135 Areas of amenity land, footpaths and the harbour facilitate informal enjoyment of sea views over Wick Bay. These have some local scenic qualities associated with the foreground view contained by the points of North and South Head, towards large scale, open seas beyond.
- 12.7.3.136 The visibility of the BOWL, Moray East, Moray West and onshore wind farms extend wind energy characteristics across two different parts of the views available from this location, and within markedly different landscape and seascape contexts, modulating susceptibility. Caledonia North Site may relate to some of the main characteristics of views from the settlement including the broad expansive scale of the wide, open sea and OWFs. Taken together susceptibility is considered to be Medium-High.
- 12.7.3.137 In combining the Medium value with the Medium-High susceptibility, the sensitivity of receptors at this viewpoint is considered to be **Medium-High**.

Magnitude of Change

- 12.7.3.138 Caledonia North Site will be visible during very good and excellent conditions 24.6km to the south-east. The ZTV shows that all of the WTGs will be theoretically visible. OSPs will be visible from this viewpoint.
- 12.7.3.139 Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-15 Blade Tip ZTV (Western Study Area) with Visual Receptors and Viewpoint Locations illustrates the extent of theoretical visibility within the vicinity of the viewpoint location. It shows that there is theoretical visibility of the Caledonia North Site throughout the eastern part of Wick including North Head (where the viewpoint is located) and eastern parts of South Head. The centre of the town has limited visibility due to the screening effects of topography and built form. Actual visibility will generally be concentrated along the coastal edge: 1km from the southern coastline of North Head and for up to 400m inland from the eastern coastline of South Head.

Construction and Decommissioning

- 12.7.3.140 During the construction and decommissioning phases of the Caledonia North Site the worst case scenario will occur when the majority of WTGs and OSPs are present and when there are still large numbers of vessels and cranes present carrying out works. The activity associated with the WTG and OSPs will be distant (minimum 24.6km).
- 12.7.3.141 The magnitude of change during construction and operation is considered to be **Medium**.

Operation

- 12.7.3.142 The Caledonia North Site extends the spread of offshore wind energy development across the majority of the remaining open stretch of seascape viewed from this part of the bay. The existing OWFs occupy 62 degrees of the HFoV appearing to stretch from the headlands to the south out across the open seascape. The Caledonia North Site will occupy 32 degrees of the HFoV, adding a further 21 degrees to the HFoV affected by OWF.
- 12.7.3.143 The Caledonia North Site WTGs will be visible from blade tips to foundations. Due to the curvature of the earth, angle of view and depth of the layout of the Caledonia North Site will result in the most distant WTGs appearing lower in the view than those to the front of the wind farm. These more distant WTGs will be seen as blades, hubs and the upper part of the tower above the horizon. The distance to the most distant turbine will be 46.9km. Further, the increased separation from the viewpoint to the more distant WTGs means that they will appear to be less visible and less frequently visible than the closest.
- 12.7.3.144 The layout of Caledonia North Site will echo the pattern of the existing OWFs where turbines are more spread out and some areas where WTGs appear stacked. This is similar to the pattern of the layout in the south where Moray West is visible, creating a 'bookend' effect on either side of the more cluttered appearance where Moray East sits behind BOWL. Due to these similarities

Caledonia North Site will appear as an extension of the existing OWFs, albeit larger in scale.

- 12.7.3.145 Caledonia North Site WTGs will appear to be of a slightly larger scale than existing, closer range BOWL WTGs. However, as there are no seascape features that indicate distance, the larger scale of Caledonia North Site WTGs will appear to be closer due to the anticipated interactions of scale and distance, and perspective, avoiding the perception of distortions of scale with the similarly distant BOWL (18.1km) and Moray East (26.6km) OWFs. Further, the WTGs of Caledonia North Site that are closest to the viewpoint are seen to the north with a gap between these and the closest WTGs of BOWL (more distant WTGs of Moray East and Caledonia North Site which infill the gap may be visible, less frequently, between them).
- 12.7.3.146 Caledonia North Site will be seen in the southern part of the view, which means that the WTGs will be backlit for the first part of the day and be seen in shadow. As such during this part of the day they may contrast with a pale sky background. WTGs that are lit by the sun, as is the case in the afternoon/evening, could potentially increase contrast against the sky background making them more apparent when visibility is very good during these times of the day.
- 12.7.3.147 Located south-east and due to the prevailing wind direction, the angle of the rotors will be generally be aligned at an angle to the viewpoint such that the blades will be directed away from the viewpoint location, occupying less space. This also reduces the influence of blade movement in the view.
- 12.7.3.148 The Caledonia North Site will affect the open seascape part of the view, which is currently a foil the developed seascape horizon. Large parts of South Head promontory and the port of Wick will be unaffected.
- 12.7.3.149 Taking into account the description of change and the factors of magnitude described above, the magnitude of change for the Caledonia North Site is considered to be **Medium**.

Significance of Effect

Construction and Decommissioning

- 12.7.3.150 The visual effect of the Caledonia North Site during construction and decommissioning at this viewpoint for up to 1km from the southern coastline of North Head and for up to 400m inland from the eastern coastline of South Head is considered to be **Moderate and Significant in EIA terms** as the Caledonia North Site and associated vessels and cranes will occupy a large proportion of the remaining open seascape and the visual complexity created by the larger scale of the Caledonia North Site WTGs as they are constructed compared to the existing OWF WTGs. The effects will be adverse, short term and temporary. The frequency of visibility at a range which equates to the closest part of the Caledonia North Site is approximately 54% of the year.

Operation

The visual effect of the Caledonia North Site during operation at this viewpoint for up to 1km from the southern coastline of North Head and for up to 400m inland from the eastern coastline of South Head is considered to be **Moderate and Significant in EIA terms**. This relates to the Caledonia North Site occupying a large proportion of the remaining open seascape and the visual complexity created by the scale of the Caledonia North Site WTGs compared to the existing OWF WTGs. The effects will be adverse, long term and reversible. The frequency of visibility at a range which equates to the closest part of the Caledonia North Site is approximately 54% of the year.

Viewpoint 6 Sarclet (Sarclet Haven Info Board)

Baseline Condition and Sensitivity

- 12.7.3.151 Please refer to Volume 7C, Appendix 12-3: Seascape, Landscape and Visual Impact Assessment Visualisations, Figure 12-6 Viewpoint 6: Sarclet (Sarclet Haven Info Board).
- 12.7.3.152 The viewpoint is representative of views from scattered properties, minor roads and upper part of the core path to minor visitor attraction. It is located in Sarclet Head RCCA and the Coastal Crofts and Small Farms LCT (144).
- 12.7.3.153 This is an expansive view out over the open sea across a foreground of elevated shores and cliffs. The viewpoint is located at the end of a minor road where there is a small area for parking and an information point promoting access via a core path to the harbour (Sarclet Haven CA12.04). The minor road runs south-east to the coast through the small crofting settlement of Sarclet and also leads to a small number of other coastal properties. The natural harbour (the Haven) is set at the bottom of the steep slope below and was at one time important for fishing.
- 12.7.3.154 Burn of Whilk onshore wind farm is visible to the west at a distance of 5.7km and is partially screened by an intervening house from this location. It will be more visible from other locations in Sarclet.
- 12.7.3.155 BOWL, Moray East and Moray West OWFs are visible across a large part of the view out to sea at a range of 15.2km at the closest to the south and south-east. Beatrice Field oil platforms and demonstrator WTGs are visible further to the south at a range of approximately 30km and seen within the context of Moray West OWF distinguishable due to the difference in the height of the WTGs and massing of the oil rigs in comparison to the WTGs. The layout of the OWF WTGs means that they appear 'stacked' in rows or there are large gaps within parts of the wind farms particularly further to the south, with a more clustered appearance to the south-east where wind farms sit one behind the other.

- 12.7.3.156 The sea and its interaction with the cliffs and the Haven are the focal features of the view from this location. During certain conditions the sea and sky appear to merge, affecting visibility of OWFs which are seen along the horizon.
- 12.7.3.157 The viewpoint is not located within and does not look out over any landscape planning designations. The view will be valued locally due to the open outlook from properties and locations such as the core path and visitor attraction of The Haven. The value is considered to be Medium.
- 12.7.3.158 This viewpoint is representative of views obtained by people in their homes. Settlement is scattered, however the majority of houses along the minor road leading to the information point are orientated to face north-east or south-west such that the gable end faces south-east.
- 12.7.3.159 Views from the core path are expansive from the cliff-tops, however, within the Haven below views are well contained with an open sea outlook to the east to south-east. Caledonia North Site is seen to the south-east.
- 12.7.3.160 BOWL, Moray East, Moray West, Beatrice Field platforms and demonstrator WTGs are characterising features of the view out to sea which modulate susceptibility. Taken together susceptibility is considered to be Medium.
- 12.7.3.161 In combining the Medium value with the Medium susceptibility, the sensitivity of receptors at this viewpoint is considered to be **Medium**.

Magnitude of Change

- 12.7.3.162 The Caledonia North Site will be visible during very good conditions 24.9km to the south-east. The ZTV shows that all 47 of the WTGs will be theoretically visible. OSPs will be visible from this viewpoint.
- 12.7.3.163 Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-15 Blade Tip ZTV (Western Study Area) with Visual Receptors and Viewpoint Locations illustrates the extent of theoretical visibility within the vicinity of the viewpoint location. It shows that there is theoretical visibility of Caledonia North Site along the eastern coastline including from Sarclet and the surrounding areas.

Construction and Decommissioning

- 12.7.3.164 During the construction and decommissioning phases of the project the worst case scenario will occur when the majority of WTGs and OSPs are present and when there are still large numbers of vessels and cranes present carrying out works. The activity associated with the WTG and OSPs will be distant (minimum 24.9km).
- 12.7.3.165 The magnitude of change during construction and operation is considered to be **Medium**.

Operation

- 12.7.3.166 The Caledonia North Site will extend the spread of offshore wind energy development across the seascape horizon. The existing OWFs occupy 78

degrees of the HFoV appearing to stretch from the south out across the open seascape eastwards. The Caledonia North Site will occupy 39 degrees of the HFoV, adding 20 degrees to the overall HFoV affected by OWF development.

- 12.7.3.167 The layout of Caledonia North Site will echo the pattern of the existing OWFs with a cluttered appearance where the Caledonia North Site overlaps with existing OWFs becoming more spread out towards the north including some areas where the Caledonia North Site WTGs appear 'stacked' one behind another. This is similar to the pattern of the layout in the centre of the view where BOWL is visible. Due to these similarities Caledonia North Site will appear as an extension of the existing OWFs, albeit with the closest WTGs appearing slightly larger in scale than the closer range BOWL WTGs.
- 12.7.3.168 The Caledonia North Site WTGs will be visible from blade tips to foundations. Due to the curvature of the earth, angle of view and depth of the layout of Caledonia North Site will result in the most distant WTGs appearing lower in the view than those to the fore of the wind farm. These more distant WTGs will be seen as blades, hubs and approximately half of towers above the horizon. The distance to the most distant turbine will be 43.6km. Further, the increased separation from the viewpoint to the more distant WTGs means that they will appear to be less visible and less frequently visible than the closest.
- 12.7.3.169 The Caledonia North Site will be seen in the eastern part of the view, which means that the WTGs will be backlit for the first part of the day and be seen in shadow. As such during these times of day they will potentially contrast with a lighter sky background. WTGs that are lit by the sun, as is the case in the afternoon/evening, could potentially increase contrast against the sky background making them more apparent when visibility is excellent during these times of the day.
- 12.7.3.170 Located south-east and due to the prevailing wind direction, the angle of the rotors will generally be aligned at an angle to the viewpoint such that the blades will be directed away from the viewpoint location, occupying less space. This also reduces the influence of blade movement in the view.
- 12.7.3.171 From the viewpoint location, the location of the house in the north-east part of the view focuses the view eastwards and in the direction of Caledonia North Site, as such Caledonia North Site will affect this part of the view, adding further to the expanse of the seascape horizon affected by OWFs. As visitors approach Sarclet Haven and the coastal edge the focus of the view is of the interaction between the sea, the cliffs and shoreline. Caledonia North Site will form part of the wider context of the background of the view where OWFs are already a characterising element. In the contained views from The Haven itself the expanse of baseline OWF is less apparent and Caledonia North Site will be seen as part of the channelled view out to sea. From within The Haven the key scenic qualities are the close range interactions between the sea and coastal formations with the open sea expanse forming a foil to this. Whilst Caledonia North Site will be apparent on and beyond the horizon the sense of the open sea separation of these elements will remain.

- 12.7.3.172 Taking into account the description of change and the factors of magnitude described above, the magnitude of change for Caledonia North Site is considered to be **Medium**.

Significance of Effect

Construction and Decommissioning

- 12.7.3.173 The visual effect of Caledonia North Site during construction and decommissioning at this viewpoint and for up to approximately 1km inland is considered to be **Moderate and Significant in EIA terms** due to the Caledonia North Site and associated vessels and cranes will occupy a large proportion of the remaining open seascape (particularly when viewed from The Haven itself), as well as the slightly greater scale of the Caledonia North Site WTGs as they are constructed in comparison to existing offshore WTGs.
- 12.7.3.174 The effects will be adverse, short term and temporary. The frequency of visibility at a range which equates to the closest part of the Caledonia North Site is approximately 54% of the year.

Operation

- 12.7.3.175 The visual effect of Caledonia North Site during operation at this viewpoint and for up to approximately 1km inland is considered to be **Moderate and Significant in EIA terms** due to the Caledonia North Site occupying a large proportion of the remaining open seascape (particularly when viewed from The Haven itself), as well as the slightly greater scale and spacing of Caledonia North Site WTGs in comparison to existing offshore WTGs.
- 12.7.3.176 The effects will be adverse, long term and reversible. The frequency of visibility at a range which equates to the closest part of the Caledonia North Site is approximately 54% of the year.

Viewpoint 7 Yarrows Arch Trail

Baseline Condition and Sensitivity

- 12.7.3.177 Please refer to Volume 7C, Appendix 12-3: Seascape, Landscape and Visual Impact Assessment Visualisations, Figure 12-7 Viewpoint 7: Yarrows Arch Trail.
- 12.7.3.178 The view is representative of walkers and visitors to the Cairns of Warehouse and other nearby archaeological remains. The viewpoint is located within the Coastal Crofts and Small Farms LCT (144). It is located on the Yarrows Archaeological Trail core path (CA12.05). The trail is accessed from a minor road from Thrumster.
- 12.7.3.179 The viewpoint is located approximately 2.5km inland from the coast at Ulbster on elevated moorland which provides panoramic views. Views west and south are across undulating moorland with views of the hillfort and chambered cairns forming distinct features along the skyline. The Burn of Whilk (1.2km) onshore wind farm is visible as blades beyond the hill on which one of the cairns is located. In views north the landscape slopes down towards the

coastal shelf where farming, small blocks of coniferous plantation forestry, settlement and lochs form the pattern of the landscape. In the middle-distance to the north a collection of onshore wind farms are visible including Bilbster (9.9km), Wathegar (8.8km), Wathergar 2 (8.1km), Taigh na Muir (31.1km) and Achairn Farm (8.2km). Lochend Farm wind farm (26.5km) is visible along the horizon in the distance. Further east Stroupster wind farm (23.4km) is visible along the horizon. Between them along the horizon Ore Brae on Hoy (51.3km) and West Hill on Flotta (51.9km) are visible during excellent conditions. To the north-east Barnes of Ayre wind farm is visible at 67.9km during excellent conditions.

- 12.7.3.180 The view east and south-east, in the direction of Caledonia North Site, is across a foreground of moorland towards the coastal edge where agricultural fields and sparse settlement is visible as rooftops against the open expanse of sea beyond. The rising artificial hill of the cairn and surrounding moorland enclose the view to the south. The distant coastline of Moray and Aberdeenshire visible along the horizon during excellent conditions beyond the Moray Firth.
- 12.7.3.181 The operational OWFs BOWL, Moray East and Moray West extend across the seascape from the Moray Firth. Some the WTGs appear 'stacked' in rows in some locations, however, overall they appear as a 'clutter' of WTGs particularly in views to the east where one wind farm appears behind another. The Beatrice Demonstrator WTGs and the associated oil platforms are visible as point features on the skyline within the context of Moray West, distinguishable due to the difference in the height of the WTGs and massing of the oil rigs in comparison to the WTGs. They are visible in very good or excellent conditions across part of the open sea. During some weather conditions sea and sky appear to merge, which also affects visibility of the OWFs.
- 12.7.3.182 The viewpoint is not located within and does not look out over any landscape planning designations. The view will have local value for walkers and for visitors to the archaeological trail where the setting of the archaeological remains (hillforts, standing stones, cairns) provides an essential contribution to understanding their historical importance within the landscape. The value is considered to be Medium.
- 12.7.3.183 Walkers and visitors to the archaeological trail will be focused on closer range historic artifacts in the context of views of the surrounding landscape. The presence of BOWL, Moray East, Moray West, the Beatrice Demonstration WTGs and associated oil platforms, and nearby Burn of Whilk onshore wind farm mean that there is a noticeable influence of wind energy development within views to the east and south. As such wind energy is a key feature which modulates susceptibility. Taken together susceptibility is considered to be Medium.

- 12.7.3.184 In combining the Medium value with the Medium susceptibility, the sensitivity of receptors at this viewpoint is considered to be **Medium**.

Magnitude of Change

- 12.7.3.185 Caledonia North Site will be visible during very good conditions 29km to the east and south-east. The ZTV shows that all of the WTGs will be theoretically visible. OSPs will be visible from this viewpoint.
- 12.7.3.186 Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-15 Blade Tip ZTV (Western Study Area) with Visual Receptors and Viewpoint Locations illustrates the extent of theoretical visibility within the vicinity of the viewpoint location. It shows that there is patchy theoretical visibility of Caledonia North Site across higher elevations in the vicinity of the viewpoint location where there are open views towards the east. The open moorland character of the landscape surrounding the viewpoint means that actual visibility closely corresponds to theoretical visibility.

Construction and Decommissioning

- 12.7.3.187 During the construction and decommissioning phases of the project the worst case scenario will occur when the majority of WTGs and OSPs are present and when there are still large numbers of vessels and cranes present carrying out works. The activity associated with the WTG and OSPs will be distant (minimum 29km) and largely located beyond the operational BOWL and Moray East OWFs.
- 12.7.3.188 The magnitude of change during construction and operation is considered to be **Medium-Low**.

Operation

- 12.7.3.189 Caledonia North Site will extend the spread of offshore wind energy development across the seascape horizon. The existing OWFs occupy 77 degrees of the HFoV appearing to stretch from the south beyond the intervening landform out across the open seascape northwards. Caledonia North Site will occupy 37 degrees of the HFoV, adding approximately 16 degrees to the HFoV occupied by OWFs due to the overlap with the existing.
- 12.7.3.190 The layout of Caledonia North Site will echo the pattern of the existing OWFs with a cluttered appearance where Caledonia North Site overlaps with the existing OWFs becoming more spread out towards the north including some limited areas where WTGs appear stacked. This is similar to the pattern of the layout in the centre of the view where BOWL is visible and in the south where Moray West is visible as a more widely spread array. Due to these similarities Caledonia North Site will appear as an extension of the existing OWFs with the closest WTGs appearing to be slightly larger in scale to those of the closer proximity WTGs of BOWL OWF.
- 12.7.3.191 Due to the higher elevation of the viewpoint (182.1m AOD) as compared with

viewpoints along the coast all of the Caledonia North Site WTGs will be theoretically visible to their foundations. However the increased separation from the viewpoint to the more distant WTGs means that they will appear less visible and less frequently visible than the closest. The distance to the most distant turbine will be 46.5km.

- 12.7.3.192 The distortion of perspective resulting from the differences in scale between the larger and more distant Caledonia North Site WTGs (29km) and the existing smaller scale offshore WTGs (BOWL at 18km and Moray East at 26.5km) will result in greater visual complexity. The fact that the BOWL WTGs are visible within the sea whilst those of the Caledonia North Site are notably on or beyond the sea horizon, so that their greater distance but taller height is apparent, adds to this complexity.
- 12.7.3.193 The Caledonia North Site will be seen to the east and south, which means that WTGs will be backlit for the first part of the day and be seen in shadow. As such during this part of the day they will contrast with lighter sky backgrounds. WTGs that are lit by the sun, as is the case in the afternoon/evening could potentially increase contrast against the sky background making them more apparent when visibility is very good during these times of the day.
- 12.7.3.194 Located to the south-east and due to the prevailing wind direction, the angle of the rotors will be aligned at an angle to the viewpoint such that the blades will generally be directed away from the viewpoint location, occupying less space. This also reduces the influence of blade movement in the view.
- 12.7.3.195 The panoramic view from this viewpoint location does not have a specific focal point or feature. The Caledonia North Site will be seen in the part of the view where OWFs are already a characterising element of the seascape with part of the seascape remaining free from development.
- 12.7.3.196 Taking into account the description of change and the factors of magnitude described above, the magnitude of change for the Caledonia North Site is considered to be **Medium-Low**.

Significance of Effect

Construction and Decommissioning

- 12.7.3.197 The visual effect of the Caledonia North Site during construction and decommissioning at this viewpoint and the surrounding open moorland is considered to be **Moderate-Minor and Not Significant in EIA terms**. The effects will be adverse, short term and temporary. The frequency of visibility at a range which equates to the closest part of the Caledonia North Site is approximately 40% of the year.

Operation

- 12.7.3.198 The visual effect of Caledonia North Site during operation at this viewpoint and the surrounding open moorland is considered to be **Moderate-Minor and Not Significant in EIA terms**. The effects will be adverse, long term

and reversible. The frequency of visibility at a range which equates to the closest part of the Caledonia North Site is approximately 40% of the year.

Viewpoint 8 Whaligoe Steps

Baseline Condition and Sensitivity

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|------------|---|
| 12.7.3.199 | Please refer to Volume 7C, Appendix 12-3: Seascape, Landscape and Visual Impact Assessment Visualisations, Figure 12-8 Viewpoint 8: Whaligoe Steps. |
| 12.7.3.200 | The view is representative of visitors and nearby residents. The viewpoint is located in Sarclet Head RCCA and the High Cliffs and Sheltered Bays LCT (141). |
| 12.7.3.201 | This viewpoint is located above the cliff enclosed cove of Whaligoe. The view is on high ground and has a wide panoramic outlook across the open expanse of sea as well as down to the sheltered harbour below, which is a visitor attraction. Views in other directions include the scattered crofts which extend along the A99 with rising moorland hills beyond. |
| 12.7.3.202 | BOWL, Moray East and Moray West OWFs are visible across a notable section of this view and are a key characteristic of the wide panoramic view out to sea. The layout of the BOWL, Moray East and Moray West WTGs means that they appear 'stacked' in rows or there are large gaps within parts of the wind farm particularly to the south where Moray West is visible more widely spaced. South-east, WTGs appear 'cluttered' where one OWF is located behind another. The Beatrice Demonstrator WTGs and the associated oil platforms are visible as point features on the skyline within the context of Moray West, distinguishable due to the difference in the height of the WTGs and massing of the oil rigs in comparison to the WTGs. |
| 12.7.3.203 | Views seaward from within the natural harbour below the viewpoint are focussed by the surrounding cliffs in an easterly direction. Views from the clifftop are focused seaward, and the sea forms the backdrop to Whaligoe cove. During certain conditions sea and sky appear to merge, which also affects visibility of the distant OWFs seen along the horizon. |
| 12.7.3.204 | The viewpoint is not located within and does not look out over any landscape planning designations. Views are valued locally as coastal outlook from properties and higher sections of the A99, which generally have a foreground of settled crofting landscape. |
| 12.7.3.205 | The visitor attraction of Whaligoe Steps consists of 365 man-made steps cut into cliff to access the small port. It is the steps themselves and their confined location within this historically important, enclosed, natural harbour (east facing) which is the key attraction rather than the wider seascape. The value is considered to be Medium. |
| 12.7.3.206 | Representative of views obtained by people in their homes. Scattered houses nearby often face south-east across foreground fields towards the seascape beyond. |

- 12.7.3.207 Visitors to Whaligoe Steps will have an appreciation of the wider seascape, however the dramatic drop of the cliffs and their exposed rocky faces draw the viewer's attention within Whaligoe cove itself. The open view of the sea has no valued focal points, however BOWL, Moray East and Moray West OWFs are a key characteristic modulating susceptibility. Taken together susceptibility is considered to be Medium.
- 12.7.3.208 In combining the Medium value with the Medium susceptibility, the sensitivity of receptors at this viewpoint is considered to be **Medium**.

Magnitude of Change

- 12.7.3.209 Caledonia North Site will be visible during very good conditions 27.5km to the east and south-east. The ZTV shows that all 47 of the WTGs will be theoretically visible. OSPs will be visible from this viewpoint.
- 12.7.3.210 Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-15 Blade Tip ZTV (Western Study Area) with Visual Receptors and Viewpoint Locations illustrates the extent of theoretical visibility within the vicinity of the viewpoint location. It shows that there is theoretical visibility of Caledonia North Site along the eastern coastline including from the Whaligoe Steps and cove and the surrounding areas.

Construction and Decommissioning

- 12.7.3.211 During the construction and decommissioning phases of the project the worst case scenario will occur when the majority of WTGs and OSPs are present and when there are still large numbers of vessels and cranes present carrying out works, which will partially occur beyond the existing OWFs. The activity associated with the WTG and OSPs will be distant (minimum 27.5km).
- 12.7.3.212 The magnitude of change during construction and operation is considered to be **Medium**. The key changes during construction and decommissioning will arise during works within the northern part of the Caledonia North Site. Works within the southern part of the Caledonia South site are likely to result in a lower magnitude of change.

Operation

- 12.7.3.213 Caledonia North Site will extend the spread of offshore wind energy development across the seascape horizon. The existing OWFs occupy 84 degrees of the HFoV appearing to stretch from the south out across the open seascape eastwards. Caledonia North Site will occupy 39 degrees of the HFoV, adding 15 degrees to the HFoV of OWFs due to overlapping with the existing.
- 12.7.3.214 The layout of the Caledonia North Site will echo the pattern of the existing OWFs with a cluttered appearance where the Caledonia North Site overlaps with the existing OWFs becoming more spread out towards the north including some areas where the Caledonia North Site WTGs appear 'stacked' one behind another. This is similar to the pattern of the layout in the south where Moray West is visible. Due to these similarities the Caledonia North Site will appear as an extension of the existing OWFs, albeit with the closer WTGs being

slightly larger in scale when compared with those of closer proximity BOWL OWF.

- 12.7.3.215 The Caledonia North Site WTGs will be visible from blade tips to foundations. Due to the curvature of the earth, angle of view and depth of the layout of Caledonia North Site will result in the most distant WTGs appearing slightly lower in the view than those to the front of the wind farm. These more distant WTGs will be seen as blades, hubs and towers to base (no foundations) above the horizon. The distance to the most distant turbine will be 44.1km. Further, the increased separation from the viewpoint to the more distant WTGs means that they will appear to be less visible and less frequently visible than the closest.
- 12.7.3.216 The Caledonia North Site WTGs will appear to be of a larger scale than existing offshore WTGs. However, as there are no seascape features that indicate distance, the larger scale of the Caledonia North Site WTGs will appear to be closer due to the anticipated interactions of scale and distance, and perspective, avoiding the perception of distortions of scale. This is aided by the smaller WTGs of BOWL and Moray East being slightly closer 15.8km 24.2km respectively.
- 12.7.3.217 Caledonia North Site will be seen in the eastern part of the view, which means that the WTGs will be backlit for the first part of the day and be seen in shadow. As such during these times of day they may contrast with a pale sky background. WTGs that are lit by the sun, as is the case in the afternoon/evening, could potentially increase contrast against the sky background making them more apparent when visibility is excellent during these times of the day.
- 12.7.3.218 Located south-east and due to the prevailing wind direction, the angle of the rotors will generally be aligned at an angle to the viewpoint such that the blades will be directed away from the viewpoint location, occupying less space. This also reduces the influence of blade movement in the view.
- 12.7.3.219 The main focus of the view at the viewpoint location, which is representative of the approach to Whaligoe Steps, is of the seascape directly in front of the viewer. Caledonia North Site will affect this view. As visitors start to descend into the natural harbour the focus of their attention is on the steps and the inlet as it comes into view. Views to the wider seascape are appreciated when visitors stop to take in the view and once they are within the harbour itself. At these locations the focus of the view is on the stacks and cliffs and the interaction of the sea with these features. Caledonia North Site will be seen within the framed view created by the cliffs and seen along the horizon. It will form part of the wider context of the background of the view where OWFs are already a characterising element.

- 12.7.3.220 Taking into account the description of change and the factors of magnitude described above, the magnitude of change for Caledonia North Site is considered to be **Medium**.

Significance of Effect

Construction and Decommissioning

- 12.7.3.221 The visual effect of Caledonia North Site during construction and decommissioning at this viewpoint, along the coastal edge and for up to approximately 1.5km inland of the coastal edge is considered to be **Moderate and Significant in EIA terms** as the Caledonia North Site and associated vessels and cranes will occupy a further proportion of the remaining open seascape (particularly when viewed from within the natural harbour itself) as well as the slightly larger scale of the Caledonia North Site WTGs in comparison to existing offshore WTGs.
- 12.7.3.222 The effects will be adverse, short term and temporary. The frequency of visibility at a range which equates to the closest part of the Caledonia North Site is approximately 45.5% of the year.

Operation

- 12.7.3.223 The visual effect of the Caledonia North Site during operation at this viewpoint, along the coastal edge and for up to approximately 1.5km inland of the coastal edge is considered to be **Moderate and Significant in EIA terms** due to the Caledonia North Site occupying a large proportion of the remaining open seascape (particularly when viewed from within the natural harbour itself) as well as the scale of the Caledonia North Site WTGs in comparison to existing offshore WTGs.
- 12.7.3.224 The effects will be adverse, long term and reversible. The frequency of visibility at a range which equates to the closest part of the Caledonia North Site is approximately 45.5% of the year.

Viewpoint 9 Lybster (end of Main Street)

Baseline Condition and Sensitivity

- 12.7.3.225 Please refer to Volume 7C, Appendix 12-3: Seascape, Landscape and Visual Impact Assessment Visualisations, Figure 12-9 Viewpoint 9: Lybster (end of Main Street).
- 12.7.3.226 The viewpoint is representative of views from residential properties and parts of settlement of Lybster. It is located in Lybster Bay RCCA and the Coastal Crofts and Small Farms LCT (144).
- 12.7.3.227 The viewpoint is located near to the southerly dead-end of Main Street in the planned village of Lybster, which is orientated in a strongly north south direction with houses set out along its length. There are a small number of houses located along the coast, some of which are seen in the view

presented. The view shows a foreground turning area at the end of the street with grassed verges, fenced fields and garden boundaries.

- 12.7.3.228 The properties generally follow the strong alignment of the Main Street axis, which runs almost due south from the A99 junction, are visible in the wider view. These are generally inward looking to the Main Street. Other properties in the view are a short terrace of two-storey local authority built houses and a more modern, detached property closer to the coast. The sea is the focus of views from the gardens/rears of residences on Main Street and from the south end of the settlement near the coast.
- 12.7.3.229 Properties are set within small gardens and with urban amenities such as boundary walls, streetlights and pole mounted transmission lines. A small track leads across agricultural land through field gates. There are also several core paths mostly providing links from the village to the coast and harbour, which was once the focus of the important herring fishing industry.
- 12.7.3.230 The Burn of Whilk wind farm is likely to be visible from the golf course located to the east of Main Street as well as the rears and gardens of some properties at a range of approximately 7.2km, where they have an open outlook to the north-east. It is unlikely that from the properties themselves people will have open views of both Burn of Whilk and Caledonia North Site due to their different directions.
- 12.7.3.231 Views out from this location are across a broad expanse of sea, broken by intervening properties and with the BOWL, Moray East and Moray West OWFs prominent features to the east at a distance appearing to extending from behind the headland to the east (although partially screened by the intervening property from this precise location). The layout of the OWF WTGs means that they appear 'stacked' in rows in some locations, with a more cluttered appearance to the south-east where one wind farm is located behind the other. The layout appears simpler to the south where Moray West is seen on its own albeit within the context of the Beatrice Demonstrator WTGs and associated oil platforms distinguishable due to the difference in the height of the WTGs and massing of the oil rigs in comparison to the WTGs.
- 12.7.3.232 The viewpoint is in close proximity to and directly overlooking the sea, which is expansive and large scale, extending uninterrupted to the sky at a horizon that is level with the roof-line of the modern property. During certain conditions the distant skyline is difficult to discern from the sea which also affects visibility of OWFs seen along the horizon.
- 12.7.3.233 The viewpoint is not located within and does not look out over any landscape planning designations. The view will be valued locally as coastal outlook from properties, parts of Lybster with views towards the sea and from nearby core paths. The value is considered to be Medium.
- 12.7.3.234 Representative of views obtained by people in their homes and when moving

around the settlement. The orientation of the settlement is such that the focal point of views is not often the view directly visible from the houses which tend to be orientated to the east-west. The focus of views from core paths, the curtailment of properties, streets and amenity spaces is the seascape and coastline.

12.7.3.235 BOWL, Moray East, Moray West and the Beatrice Demonstrator WTGs and associated oil platforms are a key characteristic in this view moderating susceptibility. Taken together susceptibility is considered to be Medium.

12.7.3.236 In combining the Medium value with the Medium susceptibility, the sensitivity of receptors at this viewpoint is considered to be **Medium**.

Magnitude of Change

12.7.3.237 Caledonia North Site will be visible during very good conditions 34.9km to the east. The ZTV shows that all 47 WTG will be theoretically visible. Whilst OSPs will theoretically be visible from this viewpoint, due to the distance and size of the OSPs they will not be discernible from this viewpoint.

12.7.3.238 Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-15 Blade Tip ZTV (Western Study Area) with Visual Receptors and Viewpoint Locations illustrates the extent of theoretical visibility within the vicinity of the viewpoint location. It shows that there is patchy theoretical visibility of Caledonia North Site throughout the southern part of Lybster in line with the school, and the surrounding settlements. In actuality, views will be screened by the intervening houses of the settlement, garden vegetation and landscape features of the wider landscape, including at the viewpoint location where local landform undulations screen views of one WTG. Actual visibility will be limited to properties and gardens at the edges of the settlement, down the road corridor and from certain paths. There is theoretical and actual visibility along the coastal edge.

Construction and Decommissioning

12.7.3.239 During the construction and decommissioning phases of the project the worst case scenario will occur when the majority of WTGs and OSPs are present and when there are still large numbers of vessels and cranes present carrying out works. The activity associated with the WTG and OSPs will be distant (minimum 34.9km) and largely beyond landform or the existing OWFs.

12.7.3.240 The magnitude of change during construction and decommissioning is considered to be **Low** along the coastal edge and for up to 1.5km inland where there are open views of the sea. Inland of this the magnitude of change for Caledonia North Site during construction and decommissioning will be lower.

Operation

12.7.3.241 The Caledonia North Site will appear to extend the spread of offshore wind energy development eastwards across the small section of remaining open seascape horizon in that direction. One of the northerly-most WTGs of the

Caledonia North Site will be obscured behind the headland to the east with three WTGs visible as blades only. The existing OWFs occupy 86 degrees of the HFoV of the seascape from the headland in the east southwards across the Outer Moray Firth. Caledonia North Site will occupy 33 degrees of the HFoV, adding only four degrees to the HFoV of OWFs due to the extensive overlapping.

- 12.7.3.242 The layout of the Caledonia North Site will echo the pattern of the existing OWFs with a cluttered appearance where Caledonia North Site overlaps with the existing OWFs including some areas where WTGs appear 'stacked'. Due to these similarities the Caledonia North Site will appear as an extension of the existing OWFs, and of a similar scale due to the closer proximity of the BOWL WTGs.
- 12.7.3.243 The Caledonia North Site WTGs will be visible from blade tips to foundations. Due to the curvature of the earth, angle of view and depth of the layout of Caledonia North Site will result in the most distant WTGs appearing lower in the view than those to the front of the wind farm. These more distant WTGs will be seen as hubs, blades and towers to base (no foundations) above the horizon. The distance to the most distant turbine will be 49.8km. Further, the increased separation from the viewpoint to the more distant WTGs means that they will appear to be less visible and less frequently visible than the closest.
- 12.7.3.244 The Caledonia North Site will be seen in the eastern part of the view, which means that the WTGs will be backlit for the first half of the day and be seen in shadow. During these times the WTGs will contrast less with a light sky background. WTGs that are lit by the sun, as is the case in the afternoon/evening, could potentially increase contrast against the sky background making them more apparent when visibility is very good during these times of the day.
- 12.7.3.245 Located east and due to the prevailing wind direction, the angle of the rotors will be aligned at an angle to the viewpoint such that the blades will be directed away from the viewpoint location, occupying less space. This also reduces the influence of blade movement in the view.
- 12.7.3.246 Whilst there is no focal point to the view at the viewpoint, and from the surrounding area, views of the sea will be important. The Caledonia North Site will be located largely within the context of existing OWFs which are a characterising element of the seascape in views east and south-east.
- 12.7.3.247 Taking into account the description of change and the factors of magnitude described above, the magnitude of change for the Caledonia North Site is considered to be **Low** along the coastal edge and for up to 1.5km inland where there are open views of the sea. Inland of this the magnitude of change for the Caledonia North Site during construction and decommissioning will be lower.

Significance of Effect

Construction and Decommissioning

- 12.7.3.248 The visual effect of the Caledonia North Site during construction and decommissioning at this viewpoint and for up to approximately 1.5km inland from the coastal edge is considered to be **Minor and Not Significant in EIA terms**.
- 12.7.3.249 Effects will be adverse, short term and temporary. The frequency of visibility at a range which equates to the closest part of the Caledonia North Site is approximately 37% of the year.

Operation

- 12.7.3.250 The visual effect of the Caledonia North Site during operation at this viewpoint and for up to approximately 1.5km inland from the coastal edge is considered to be **Minor and Not Significant in EIA terms**.
- 12.7.3.251 Effects will be adverse, long term and reversible. The frequency of visibility at a range which equates to the closest part of the Caledonia North Site is approximately 37% of the year.

Viewpoint 10 Dunbeath (near Heritage Centre)

Baseline Condition and Sensitivity

- 12.7.3.252 Please refer to Volume 7C, Appendix 12-3: Seascape, Landscape and Visual Impact Assessment Visualisations, Figure 12-10 Viewpoint 10: Dunbeath (near Heritage Centre).
- 12.7.3.253 The viewpoint is representative of views from the settlement of Dunbeath, residential receptors, visitors to Heritage Centre/tourist information, beach and around the coast including along core paths. It is located in Dunbeath Bay RCCA and the Coastal Crofts and Small Farms LCT (144). It is located on core path Old road link (CA04.12).
- 12.7.3.254 Note that similar views would be available from Dunbeath Castle and its associated GDL located just along the coast to the south-west.
- 12.7.3.255 The viewpoint is located on the western side of the small, dispersed settlement that is set around and above the valley of the Dunbeath Water. The curving, modern structure of the A9 bridge is a key feature of the village as well as offering views out across it. Roads run parallel to the river which flows south-east to the harbour with a small car park and visitor area to the east of it. There are roads leading to residential properties on the north-east and south-west sides of the river.
- 12.7.3.256 Viewpoint is sited below the Heritage Centre at the corner of a sharp hairpin bend. It is located on the gently sloping hilltop summit before the change in slope to the steep valley through which Dunbeath Water flows out at Dunbeath Harbour, seen to the east. There is a small row of houses and isolated properties near the confluence of the river as well as properties

further up the valley.

- 12.7.3.257 The fore-to mid-ground is medium to large in scale and pastoral in character with some limited dwellings and farmsteads strung out along the road, on higher ground and above Dunbeath Water on the far side of the valley. Fenced field boundaries and some unimproved pasture with wetness characteristics surround the settlement separated by small areas of woodland, particularly associated with valley sides. Wood-pole and steel lattice transmissions lines are common and there are infrequent small, individual wind WTGs associated with settlement.
- 12.7.3.258 The view is across the harbour at the mouth of Dunbeath Bay and harbourside properties, which are set below the steep slopes which envelope lower Dunbeath. The wider view includes a broad expanse of open sea to the east. The Moray and Aberdeenshire coastlines are visible during excellent conditions to the south-east.
- 12.7.3.259 BOWL, Moray East and Moray West OWFs are visible across the majority of the seascape horizon to the east from this location. They appear to extend from the headland to the north of Dunbeath southwards leaving a small section of the Outer Moray Firth horizon undeveloped to the south-east. They appear as a cluttered mass of WTGs particularly in the east where one wind farm is seen behind another. Further south the WTGs are spaced further apart where Moray West is seen on its own.
- 12.7.3.260 The Beatrice Demonstrator WTGs and the associated oil platforms are visible as point features on the skyline within the context of Moray West, distinguishable due to the difference in the height of the WTGs and massing of the oil rigs in comparison to the WTGs.
- 12.7.3.261 The view of the sea is the focal point of the view to the south-east. During certain weather conditions the distinction between sea and sky will be difficult to discern, also affecting visibility of the OWFs which are seen at distance along the horizon. The viewpoint is not located within and does not look out over any landscape planning designations. The view will be locally valued by residential receptors, visitors to Heritage Centre and beach/harbour visitors. Views vary but include views towards the seascape beyond the foreground of Dunbeath Bay framed by Portormin Head and the cliffs on the far side of the bay. The value is considered to be Medium.
- 12.7.3.262 Representative of views obtained by people in their homes and when moving around the settlement. Whilst views vary depending on the orientation of the house, the focus of views is towards the seascape. The focus of views from the beach is the seascape and coastline. Views from core paths vary but include views towards the seascape.
- 12.7.3.263 BOWL, Moray East, Moray West and the Beatrice Demonstrator WTGs and associated oil platforms appear to occupy nearly the full length of the seascape horizon from this viewpoint. OWFs are a key characteristic in this view modulating susceptibility. Taken together susceptibility is considered to

be Medium.

- 12.7.3.264 In combining the Medium value with the Medium susceptibility, the sensitivity of receptors at this viewpoint is considered to be **Medium**.

Magnitude of Change

- 12.7.3.265 Caledonia North Site will be visible during excellent conditions 44.5km to the east. The ZTV shows all of the WTGs will be theoretically visible. Whilst OSPs will theoretically be visible from this viewpoint, due to the distance and size of the OSPs they will not be discernible from this viewpoint.
- 12.7.3.266 Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-15 Blade Tip ZTV (Western Study Area) with Visual Receptors and Viewpoint Locations illustrates the extent of theoretical visibility within the vicinity of the viewpoint location. It shows that there is theoretical visibility of the Caledonia North Site from parts of Dunbeath that are higher up in the valley to the south of the river extending to Dunbeath Castle and from northern Dunbeath. There is no visibility throughout the valley through which Dunbeath Water flows and from much of the harbour area, however there will be actual visibility from the coastline. Actual visibility will be restricted by intervening vegetation including areas of woodland and built form.

Construction and Decommissioning

- 12.7.3.267 During the construction and decommissioning phases of the project the worst case scenario will occur when the majority of WTGs and OSPs are present and when there are still large numbers of vessels and cranes present carrying out works, which will occur entirely beyond the existing OWFs in this view. The activity associated with the WTG and OSPs will be distant (minimum 44.5km).
- 12.7.3.268 The magnitude of change during construction and operation is considered to be **Low**.

Operation

- 12.7.3.269 The Caledonia North Site will appear beyond the existing OWFs and will appear to extend southwards from the headland north of Dunbeath. Eight of the WTGs will be visible as blades and blade tips as the intervening headland obscures the rest of the WTG. The existing OWFs occupy 75 degrees of the HFoV of the seascape from the headland southwards across the Outer Moray Firth. Caledonia North Site will occupy 31 degrees of the HFoV, adding only three degrees to the HFoV of OWFs due to the extensive overlapping.
- 12.7.3.270 The layout of the Caledonia North Site will echo the pattern of the existing OWFs with a cluttered appearance with some areas where WTGs appear 'stacked'. Caledonia North Site will appear behind the existing OWFs increasing the numbers of WTGs and visual complexity.
- 12.7.3.271 Due to the curvature of the earth, angle of view and depth of the layout of the Caledonia North Site will result in the most distant WTGs appearing lower in the view than those to the front of the wind farm. The closest WTGs will be

visible as towers, hubs and blades with more distant WTGs will be seen as hubs, blades and the upper parts of towers above the horizon. The distance to the most distant turbine will be 54.4km. Further, the increased separation from the viewpoint to the more distant WTGs means that they will appear to be less visible than the closest.

- 12.7.3.272 There will be minimal distortions of perspective resulting from the differences in scale between the larger and more distant Caledonia North Site WTGs (44.5km) and the existing smaller scale OWF WTGs (BOWL at 25.7km and Moray East at 34.9km), visible at closer range. which will result in some limited visual complexity. This will be restricted to the very eastern part of the view where the Caledonia North Site WTGs are closer and will be seen in gaps between clusters of existing OWFs WTGs apparent at a similar scale.
- 12.7.3.273 Caledonia North Site will be seen to the east which means that the WTGs will be backlit for the first part of the day and be seen in shadow. As such during this time of the day these WTGs may contrast with lighter sky backgrounds. WTGs that are lit by the sun, as is the case in the afternoon/evening, could potentially increase contrast against the sky background making them more apparent when visibility is excellent during these times of the day.
- 12.7.3.274 Located to the east and due to the prevailing wind direction, the angle of the rotors will be aligned at an angle to the viewpoint such that the blades will be directed away from the viewpoint location, occupying less space. This also reduces the influence of blade movement in the view.
- 12.7.3.275 Whilst there is no focal point to the view at the viewpoint, and from the surrounding area, views towards the sea will be important. Caledonia North Site will be located within the context of existing OWFs which are a characterising element of the seascape in views east and south-east.
- 12.7.3.276 Taking into account the description of change and the factors of magnitude described above, the magnitude of change for Caledonia North Site is considered to be **Low**.

Significance of Effect

Construction and Decommissioning

- 12.7.3.277 The visual effect of Caledonia North Site during construction and decommissioning at this viewpoint is considered to be **Moderate-Minor and Not Significant in EIA terms** for up to approximately 1.5km inland of the coastal edge, including at Dunbeath Castle. Effects will be adverse, short term and temporary. The frequency of visibility at a range which equates to the closest part of the Caledonia North Site is approximately 18% of the year.

Operation

- 12.7.3.278 The visual effect of the Caledonia North Site during operation at this viewpoint is considered to be **Moderate-Minor and Not Significant in EIA terms** for up to approximately 1.5km inland of the coastal edge, including at Dunbeath Castle. Effects will be adverse, long term and reversible. The frequency of

visibility at a range which equates to the closest part of the Caledonia North Site is approximately 18% of the year.

Viewpoint 11 Morven

Baseline Condition and Sensitivity

- 12.7.3.279 Please refer to Volume 7C, Appendix 12-3: Seascape, Landscape and Visual Impact Assessment Visualisations, Figure 12-11 Viewpoint 11: Morven.
- 12.7.3.280 The viewpoint is representative hillwalkers. It is located in the Lone Mountains LCT 138, the locally designated Flow Country and Berriedale Coast SLA, and the nationally important Causeymire – Knockfin Flows WLA 36. Morven (and Scaraben) is denoted as a Key View in CLSA 2017.
- 12.7.3.281 The viewpoint is taken from rocky summit of Morven (706m AOD), the highest peak in Caithness and classified as a Graham. It is likely to be of interest locally and/or regionally, rather than nationally. Morven is often walked in conjunction with other peaks to the east (Carn Mor, Smean and Maiden Pap).
- 12.7.3.282 There are panoramic views in all directions with distant views to the Cairngorms to the south, and to distant Highlands peaks in the south-west, west and north when visibility is excellent. Views towards these mountain ranges are impressive and appear to show there is very little evidence of man's influence over this landscape. Beyond Morven to the north-west, north and north-east blanket bog appears to stretch toward the distant peaks, coniferous forestry and the coast respectively.
- 12.7.3.283 More distant views north-east contain a settled coastal strip of crofting landscape and villages. Across the north-east quadrant of the panoramic view there are three areas of onshore wind energy development within open moorland and coniferous forestry. Close to the coastal edge Buolfrulich (16.6km) and Burn of Whilk (30.8km) are visible, further north a group of wind farms consisting of Bilbster, Wathegar, Wathergar 2, Camster, Achairn Farm are visible at a distance of 31km at their closest point. Further inland Achlachan, Causeymire, Halsary and Bad a'Cheo are 25km at the closest point, with Lochend Farm and Stroupster further away at 48.5km 49.4km respectively. The mast on Ben a' chielt lies within the same quadrant close to the coast.
- 12.7.3.284 The summit is most easily ascended from the east so that views in this direction are available during much of walk once sufficient elevation is attained. This includes views towards the sea seen beyond Carn Mor, Smean and Maiden Pap, and the Scaraben ridgeline above approximately 500-550m elevation. During very good to excellent weather conditions Moray West, Moray East, BOWL and Beatrice Demonstrator WTGs and associated oil platforms are visible. They are seen as a mass of WTGs set back from the coastal edge at 35.8km at their closest point. In some places WTGs appear 'stacked' in rows. The most distant WTGs are 73.9km distant.

- 12.7.3.285 The view east includes a substantial area of fore and middle ground containing further moderately high concave, smoothed, undulating or rocky hills including the Scarabens, Sron Gharbh, Smean and the distinctive conical rock outcrop of Maiden Pap. They form a large scale landscape of smoothed rock and heather moorland, which are the key characterising features of the view east. Lower elevations surround the hill forms with well-defined valleys of Berriedale Water and Langwell Water further to the south having some improved pasture and forestry blocks, minor access roads and limited scattered settlement.
- 12.7.3.286 The viewpoint is located within the locally designated Flow Country and Berriedale Coast SLA, and within the nationally important Causeymire – Knockfin Flows WLA 36, and as such it has a higher scenic value than the surrounding landscape. Morven is an important local landmark and local attraction for hillwalkers. Views are valued for their wide panoramic vistas towards distant mountains beyond blanket bog and towards the sea to the east. The value is considered to be Medium-High.
- 12.7.3.287 Representative of views obtained by hillwalkers who have an appreciation of the surrounding landscape and seascape, and will be focussed on views. OWFs BOWL, Moray East and Moray West WTGs and onshore wind farms to the north-east add a strong wind farm characteristic which moderates susceptibility. Taken together susceptibility is considered to be Medium.
- 12.7.3.288 In combining the Medium-High value with the Medium susceptibility, the sensitivity of receptors at this viewpoint is considered to be **Medium-High**.

Magnitude of Change

- 12.7.3.289 Caledonia North Site will be visible during excellent conditions 60.0km to the east. The ZTV shows that all of the WTGs will be theoretically visible. Whilst OSPs will theoretically be visible from this viewpoint, due to the distance and size of the OSPs they will not be discernible from this viewpoint.
- 12.7.3.290 Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-15 Blade Tip ZTV (Western Study Area) with Visual Receptors and Viewpoint Locations illustrates the extent of theoretical visibility within the vicinity of the viewpoint location. It shows that there is a patch of theoretical visibility of the Caledonia North Site across the eastern half of Morven, which corresponds to actual visibility with tors and larger rocky outcrops screening views in places. Actual visibility extends down the eastern slopes to approximately the 500m contour. Similar visibility patterns are found across the eastern slopes of Maiden Pap, Sron Gharbh, Scaraben and East Scaraben with visibility extending further down eastern slopes of Maiden Pap and East Scaraben as there are no intervening landforms between them and the coast.

Construction and Decommissioning

- 12.7.3.291 During the construction and decommissioning phases of the project the worst case scenario will occur when the majority of WTGs and OSPs are present and

when there are still large numbers of vessels and cranes present carrying out works largely beyond and in the immediate context of the operational OWFs. The activity associated with the WTG and OSPs will be distant (minimum 60.0km).

- 12.7.3.292 The magnitude of change during construction and decommissioning is considered to be **Low**.

Operation

- 12.7.3.293 The Caledonia North Site will be located beyond the existing OWFs. It will appear to be close to the horizon and appear to slightly extend the spread of offshore wind energy development northwards. The existing OWFs occupy 51 degrees of the HFoV of the seascape to the east within the Outer Moray Firth. The Caledonia North Site will occupy 24 degrees of the HFoV, adding only three degrees to the HFoV of OWFs.
- 12.7.3.294 The layout of the Caledonia North Site will echo the pattern of the existing OWFs with a cluttered appearance where the Caledonia North Site overlaps with the existing OWFs including some areas where WTGs appear 'stacked'. Due to these similarities the Caledonia North Site will appear as an extension of the existing OWFs, albeit larger in scale.
- 12.7.3.295 The Caledonia North Site WTGs will be visible from blade tips to foundations. The increased separation from the viewpoint to the more distant WTGs means that they will appear to be less visible and less frequently visible than the closest. The distance to the most distant turbine will be 73.8km.
- 12.7.3.296 Caledonia North Site WTGs will appear to be twice the size of adjacent existing WTGs. The slight distortion of perspective resulting from the differences in scale between the larger and more distant Caledonia North Site WTGs (60.0km) and the existing smaller scale OWF WTGs (BOWL at 41.0km and Moray East at 50.3km) and the Moray West WTGs (35.8km) which appear to be a similar size to Caledonia North Site WTGs will result in some visual complexity.
- 12.7.3.297 Caledonia North Site will be seen in the eastern part of the view, which means that the WTGs will be backlit for the first part of the day and be seen in shadow. During these times the WTGs will contrast with lighter sky backgrounds. WTGs that are lit by the sun, as is the case in the afternoon/evening, could potentially increase contrast against the sky background making them more apparent when visibility is very good during these times of the day.
- 12.7.3.298 Located east and due to the prevailing wind direction, the angle of the rotors will be aligned at an angle to the viewpoint such that the blades will be directed away from the viewpoint location, occupying less space. This also reduces the influence of blade movement in the view.
- 12.7.3.299 Whilst there is no focal point to the view at the viewpoint, and from the surrounding summits, views of the seascape are an important feature as a

backdrop to Scaraben. Caledonia North Site will be located within the context of existing OWFs which are a characterising element of the seascape in views east and south-east.

- 12.7.3.300 Taking into account the description of change and the factors of magnitude described above, the magnitude of change for the Caledonia North Site is considered to be **Low**.

Significance of Effect

Construction and Decommissioning

- 12.7.3.301 The visual effect of the Caledonia North Site during construction and decommissioning at this viewpoint is considered to be **Moderate-Minor and Not Significant in EIA terms**. The effect will be the same at the nearby summits Maiden Pap, Sron Gharbh, Scaraben and East Scaraben.
- 12.7.3.302 Effects will be adverse, short term and temporary. The frequency of visibility at a range which equates to the closest part of the Caledonia North Site is approximately 0.1% of the year.

Operation

- 12.7.3.303 The visual effect of the Caledonia North Site during operation at this viewpoint is considered to be **Moderate-Minor and Not Significant in EIA terms**. The effect will be the same at the nearby summits Maiden Pap, Sron Gharbh, Scaraben and East Scaraben.
- 12.7.3.304 Effects will be adverse, long term and reversible. The frequency of visibility at a range which equates to the closest part of the Caledonia North Site is approximately 0.1% of the year.

Viewpoint 12 Navidale

Baseline Condition and Sensitivity

- 12.7.3.305 Please refer to Volume 7C, Appendix 12-3: Seascape, Landscape and Visual Impact Assessment Visualisations, Figure 12-12 Viewpoint 12: Navidale.
- 12.7.3.306 The viewpoint is representative of views from the settlements of Navidale, Helmsdale and Gartymore and of views gained by north bound travellers on the A9. It is located in Helmsdale to Berriedale Coastal Shelf RCCA, and within Coastal Crofts and Small Farms LCT (144).
- 12.7.3.307 The viewpoint is located on Navidale Road, a minor road that runs north from the A9, climbing to a slightly elevated location above the A9 and the coastal core path that follows the shoreline. It is located in the vicinity of scattered settlement of Navidale and East Helmsdale which lie to the north-east of the coastal village of Helmsdale located at the mouth and bridge crossing point of the River Helmsdale. There are older properties clustered around the harbour area and a planned 'newer' part set out in a grid pattern, on the side slopes of the river valley, to re-settle people at the time of the Highlands Clearances. A

cluster of more modern housing extends out along the coast to the east. There are also houses strung out along the A9 and the A897 into Strath Ullie, and along the coast at Gartymore and Navidale.

- 12.7.3.308 The view is expansive, large scale and rural in character with fenced, large to medium sized fields across the coastal shelf between the rising hills inland and the coast. The hills contain the view to the west with the focus of the view being toward the east out across the sea, which extends widely across the background of the view and is large in scale.
- 12.7.3.309 The northern extent of the seaward view is restricted by the upland area of Creag Thoraraidh, which is located close to the coast and is a large, smooth, conical hill with a heather moorland and rough grassland summit and side slopes adjacent to a rugged coastal area. There is a band of plantation forestry running along the lower slopes bounded on one side by the A9 and steel lattice tower transmission lines on the other. Two radio mast towers are found on the summit. This is where the Rounded Hills – Caithness and Sutherland LCT comes close to the coast forcing the A9 into a series of tight turns to traverse steeply sloping ground.
- 12.7.3.310 BOWL, Moray East and Moray West OWFs are visible in very good to excellent conditions to the east and north-east from this location at distances of 38.5km, 45.4km and 27.5km respectively. The OWFs are seen within the open seascape along horizon appearing just south of the headland, leaving an open stretch of water to the south-east. The layout of the OWF WTGs means that they appear 'stacked' in rows in some locations, with a more cluttered appearance to the north-east where one wind farm is located behind the other. The layout appears simpler to the south where Moray West is seen on its own albeit within the context of the Beatrice Demonstrator WTGs and associated oil platforms seen at a distance of 32.7km, distinguishable due to the massing of the oil rigs in comparison to the WTGs.
- 12.7.3.311 In clear visibility is possible to see the Moray and Aberdeenshire coastlines. Sky and sea appear to merge in certain weather conditions that affects visibility of OWFs seen along the horizon.
- 12.7.3.312 The viewpoint is not located within and does not look out over any landscape planning designations. The view will be locally valued by residential receptors. Coastal views from A9 which is part of NC 500 route will be locally valued. The value is considered to be Medium.
- 12.7.3.313 Representative of views obtained by people in their homes and when moving around the scattered settlement. When travelling along the A9 road users will have an appreciation of coastal views to the east; when travelling south views out to sea will be direct and when travelling north they are oblique. Higher landform to north-west ensures that views are generally focused along the coast or out across the wide views of generally open sea.
- 12.7.3.314 BOWL, Moray East, Moray West, Beatrice Demonstrator WTGs and associated oil platforms occupy approximately half of the seascape part of the view.

Offshore wind energy development is a key characteristic of the view which moderates susceptibility. Taken together susceptibility is considered to be Medium.

- 12.7.3.315 In combining the Medium value with the Medium susceptibility, the sensitivity of receptors at this viewpoint is considered to be **Medium**.

Magnitude of Change

- 12.7.3.316 The Caledonia North Site will be visible during excellent conditions 60.4km to the east. The ZTV shows that all 47 of the WTGs will be theoretically visible. Whilst OSPs will theoretically be visible from this viewpoint, due to the distance and size of the OSPs they will not be discernible from this viewpoint.
- 12.7.3.317 Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-15 Blade Tip ZTV (Western Study Area) with Visual Receptors and Viewpoint Locations illustrates the extent of theoretical visibility within the vicinity of the viewpoint location. It shows that there is theoretical visibility of the Caledonia North Site from east-facing slopes and summits surrounding Navidale and Gartymore, with no visibility throughout Helmsdale valley. Actual visibility will largely correspond with theoretical visibility, however vegetation surrounding housing and long roads as well as buildings will screen views.

Construction and Decommissioning

- 12.7.3.318 During the construction and decommissioning phases of the project the worst case scenario will occur when the majority of WTGs and OSPs are present and when there are still large numbers of vessels and cranes present carrying out works within the immediate context of and beyond existing OWFs. The activity associated with the WTG and OSPs will be extremely distant (minimum 60.4km).
- 12.7.3.319 The magnitude of change during construction and decommissioning is considered to be **Negligible**.

Operation

- 12.7.3.320 The Caledonia North Site will appear beyond the existing OWFs. The existing OWFs occupy 51 degrees of the HFoV of the seascape. The Caledonia North Site will occupy 25 degrees of the HFoV seen within the context of the existing OWFs.
- 12.7.3.321 The layout of Caledonia North Site will echo the pattern of the existing OWFs with a cluttered appearance with some areas where WTGs appear 'stacked'. It will increase the number of WTGs potentially visibility and increase the visual complexity of the OWFs.
- 12.7.3.322 Due to the curvature of the earth, angle of view and depth of the layout of the Caledonia North Site will result in the most distant WTGs appearing lower in the view than those to the front of the wind farm. The closest WTG will be visible as upper parts of towers, hubs and blades with less of the tower of the more distant WTGs visible. The distance to the most distant turbine will be

71.9km. Further, the increased separation from the viewpoint to the more distant WTGs means that they will appear to be less visible than the closest.

- 12.7.3.323 The Caledonia North Site will be seen to the east which means that the WTGs will be backlit for the first part of the day and be seen in shadow. As such during this time of the day these WTGs may contrast less with the sky background. WTGs that are lit by the sun, as is the case in the afternoon/evening, could potentially increase contrast against the sky background making them more apparent when visibility is excellent during these times of the day.
- 12.7.3.324 Located east and south-east and due to the prevailing wind direction, the angle of the rotors will generally be aligned at a slight angle to the viewpoint such that the blades will be directed away from the viewpoint location, occupying less space. This also reduces the influence of blade movement in the view.
- 12.7.3.325 Whilst there is no focal point to the view at the viewpoint, and from the surrounding area, views towards the sea will be important. The Caledonia North Site will be located within the context of existing OWFs which are a characterising element of the seascape in views east and south-east.
- 12.7.3.326 Taking into account the description of change and the factors of magnitude described above, the magnitude of change for the Caledonia North Site is considered to be **Negligible**.

Significance of Effect

Construction and Decommissioning

- 12.7.3.327 The visual effect of the Caledonia North Site during construction and decommissioning at this viewpoint and for up to 1km inland is considered to be **Minor and Not Significant in EIA terms**. Effects will be adverse, short term and temporary. The frequency of visibility at a range which equates to the closest part of the Caledonia North Site is approximately 0.1% of the year.

Operation

- 12.7.3.328 The visual effect of the Caledonia North Site during operation at this viewpoint and for up to 1km inland is considered to be **Minor and Not Significant in EIA terms**. Effects will be adverse, long term and reversible. The frequency of visibility at a range which equates to the closest part of the Caledonia North Site is approximately 0.1% of the year.

Viewpoint 14 Portknockie (Bow Fiddle Rock Info Point)

Baseline Condition and Sensitivity

- 12.7.3.329 Please refer to Volume 7C, Appendix 12-3: Seascape, Landscape and Visual Impact Assessment Visualisations, Figure 12-14 Viewpoint 14: Portknockie (Bow Fiddle Rock Info Point).

- 12.7.3.330 The viewpoint is representative of the views obtained by visitors to Bow Fiddle Rock, a visitor attraction, users of the long-distance recreational path (Moray Coastal Trail) and the settlement at Portknockie. It is within Portgordon to Portknockie RCCA, and Cliffs and Rocky Coast – Moray and Nairn LCT (282). It is located on the Moray Coastal Trail and within the locally designated Portgordon to Cullen Coast SLA.
- 12.7.3.331 The viewpoint is located on Moray Coastal Trail on the clifftops opposite Bow Fiddle Rock and to the north-east of Portknockie. The trail follows the coastal edge around the promontory where Portknockie is found, with the village located on the western side of the cliff top adjacent to the harbour accessed via the B9021 that winds down to the shoreline.
- 12.7.3.332 Portknockie is located on the easterly headland of Spey Bay. Founded as a fishing village it is located on the cliff tops above the rocky coastline that includes the harbour, small sandy beaches, and Bow Fiddle Rock to the north-east of the village. There is a static caravan park to the south-east of the village.
- 12.7.3.333 The village is laid out in a loose grid pattern with houses aligned north-south so that the gable end faces north to protect against the elements in the north-east part of the village. In the south-west half of the village houses are aligned east-west with gable ends facing west along the coastline providing protection from the weather. Views from the centre of the village are inward looking with sea views available down street corridors. The houses in the more recent developments to the east and south of the village have more open views including towards the Bin of Cullen inland, the broad expanse of open sea and along the coastline.
- 12.7.3.334 The view to the south-west and west is of the village. The view to the south is across an area of heather moorland and agricultural fields further inland with the Bin of Cullen (320m AOD) and Little Bin (246m AOD) forming prominent landmarks along the skyline.
- 12.7.3.335 The view east is along the coast with successive headlands stepping back towards the horizon. Boyndie (12.8km) and Boyndie Ext (14.7km) are visible as hubs and blades above the agricultural hinterland. Further along the coast Mains of Melrose (25.6km), Easter Melrose (28.5km) and Jacobshall (34km). Inland to the south-east Badentoul (9.2km) and Ley Farm (6.5km) are theoretically visible as blade tips, but intervening vegetation effectively screens views.
- 12.7.3.336 The view seaward provides an elevated outlook out across the sea and along the coastal cliffs and associated rock formations. The view west is contained by the cliffs. During excellent conditions the most distant parts of the Moray coastline to the west are visible with the hills of Caithness and Sutherland distant features along the horizon. In the view east the cliffs of Logie Head are visible with Troup Head and Kinnaid Head promontories visible beyond.
- 12.7.3.337 The view to the north looks across an expanse of sea seen beyond Bow Fiddle

Rock. There is interpretative signage and seating near the rocks. The largely open sea characterises this view and acts as main draw although no specific focus is present, however during very good to excellent conditions the WTGs of BOWL, Moray East and Moray West may be visible as blades and some hubs with upper part of towers (for BOWL and Moray East) and from blade tip to tower base seen along the horizon to the west (left) of Bow Fiddle Rock. Some of the WTGs appear 'stacked' in rows in locations. The slightly closer (39km distant) and slightly larger scale WTGs of Moray West will be more frequently visible and more prominent than BOWL (53.3km) and Moray East (41.2km). As such OWFs are a characterising feature of the view along the seascape horizon. During some conditions the sea and sky appear to merge, which also affects visibility of OWFs.

- 12.7.3.338 The viewpoint is located within the locally designated Portgordon to Cullen Coast SLA. The view is valued locally as the wider setting for Bow Fiddle Rock and other attractive rock formations as well as views from the path and settlement. The importance of viewpoint marked by an information point and as an 'Other tourist feature' on OS maps. The value is considered to be Medium-High.
- 12.7.3.339 The viewpoint represents walkers and other people undertaking activities where enjoyment of the landscape and seascape is a key reason for doing so. Views obtained by residents and visitors to the settlement will also gain such views. Views out to sea are extensive and panoramic with very little influence by man apparent. All of the above have a higher susceptibility to the change proposed, however, susceptibility is reduced due to long distance between viewpoint and Caledonia North Site, and the presence of OWFs within the view. Taken together susceptibility is considered to be Medium-High.
- 12.7.3.340 In combining the Medium-High value with the Medium-High susceptibility, the sensitivity of receptors at this viewpoint is considered to be **Medium-High**.

Magnitude of Change

- 12.7.3.341 Caledonia North Site will be visible during excellent conditions 50.8km to the north-north-east. The ZTV shows that all of the WTGs will be theoretically visible. Whilst OSPs will theoretically be visible from this viewpoint, due to the distance and size of the OSPs they will not be discernible.
- 12.7.3.342 Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-16 Blade Tip ZTV (Southern Study Area) with Visual Receptors and Viewpoint Locations illustrates the extent of theoretical visibility within the vicinity of the viewpoint location. It shows that there is theoretical and actual visibility of the Caledonia North Site along the coastline including at Portknockie and nearby Cullen Bay. Views from within Portknockie will be restricted by buildings such that actual visibility is restricted to street corridors aligned to the north and from properties and amenity spaces along the coastal edge.

Construction and Decommissioning

- 12.7.3.343 During the construction and decommissioning phases of the project the worst case scenario will occur when the majority of WTGs and OSPs are present and when there are still large numbers of vessels and cranes present carrying out works. The activity associated with the WTG and OSPs will be distant (minimum 50.8km). The magnitude of change during construction and decommissioning is considered to be **Low**.

Operation

- 12.7.3.344 The Caledonia North Site will be located beyond the eastern half of Moray East (50.8km) and extend the spread of wind energy development eastwards along the seascape horizon. The existing OWFs occupy 48 degrees of the HFoV of the seascape. The Caledonia North Site will occupy 16 degrees of the HFoV, adding five degrees of the HFoV to the spread of OWFs visible from this location. Caledonia North Site will occupy a narrow proportion of the expansive seascape horizon.
- 12.7.3.345 The WTGs of Caledonia North Site will be visible during excellent conditions as small vertical features along the horizon. Due to distance and their apparent small vertical size the WTGs of Caledonia North Site will be difficult to discern with the naked eye even during excellent visibility conditions.
- 12.7.3.346 The closest WTGs of Caledonia North Site will be visible during excellent conditions from blade tips nearly to approximately half of the tower. Due to the curvature of the earth, angle of view and depth of the layout of the Caledonia North Site will result in the most distant WTGs appearing lower in the view than those to the front of the wind farm. The more distant WTGs will be visible as hubs and blades above the horizon. The distance to the most distant turbine will be 75.7km. Further, the increased separation from the viewpoint to the more distant WTGs means that they will appear to be less visible and less frequently visible than the closest.
- 12.7.3.347 The layout of Caledonia North Site will echo the pattern of the existing OWFs with a cluttered appearance where Caledonia North Site overlaps with the existing OWFs including some areas where WTGs appear 'stacked'. Due to these similarities the Caledonia North Site will appear as an extension of the existing OWFs, albeit larger in scale than the adjacent Moray East but at a similar apparent scale to Moray West WTGs.
- 12.7.3.348 The Caledonia North Site will be seen to the north-north-east which means that the WTGs will be lit by the sun for the majority of the latter part of the day when visibility allows. This could potentially increase the contrast against the sky background making them more apparent when visibility is excellent.
- 12.7.3.349 Located north-north-east and due to the prevailing wind direction, the angle of the rotors will generally be aligned to face the viewpoint. This means that the maximum dimension of the WTG will be potentially visible.
- 12.7.3.350 Caledonia North Site is most likely only to be actually visible to the east of Bow Fiddle Rock (existing OWFs are only seen to the west of it and the

western part of the Caledonia North Site is extremely distant). Caledonia North Site will add a small section of OWF to the horizon with the majority of OWFs seen to the west. This means that OWFs will frame and form the background to this feature, which is the focal point of the view and a visitor attraction. However, when visiting the attraction, it is the interaction of the sea with this feature and the surrounding coastline which is the focal point of views. Caledonia North Site will form part of the wider context. It will be located in a part of the view where there already are OWFs and its addition will not make OWFs a key feature of views as they are seen at distance and only during excellent conditions along the seascape horizon.

- 12.7.3.351 Taking into account the description of change and the factors of magnitude described above, the magnitude of change for Caledonia North Site is considered to be **Low**.

Significance of Effect

Construction and Decommissioning

- 12.7.3.352 The visual effect of Caledonia North Site during construction and decommissioning at this viewpoint and for up to approximately 1km inland of the coastal edge is considered to be **Moderate-Minor and Not Significant in EIA terms** due to the distance to the Caledonia North Site and its associated construction and decommissioning works. Effects will be adverse, short term and temporary. The frequency of visibility at a range which equates to the closest part of the Caledonia North Site is approximately 23.5% of the year.

Operation

- 12.7.3.353 The visual effect of Caledonia North Site during operation at this viewpoint and for up to approximately 1km inland of the coastal edge is considered to be **Moderate-Minor and Not Significant in EIA terms** due to the distance to the Caledonia North Site and the relatively limited influence it will have on this expansive view where the key focus is the close range rock structure. Effects will be adverse, long term and reversible. The frequency of visibility at a range which equates to the closest part of the Caledonia North Site is approximately 23.5% of the year.

Viewpoint 15 Cullen (viaduct)

Baseline Condition and Sensitivity

- 12.7.3.354 Please refer to Volume 7C, Appendix 12-3: Seascape, Landscape and Visual Impact Assessment Visualisations, Figure 12-15 Viewpoint 15: Cullen (viaduct).
- 12.7.3.355 The view is representative of views gained by locals and visitors using the viaduct cycle path and visiting the harbour, and Cullen residents and visitors who gain coastal and sea views. The view is also representative of views from the attractive, historic settlement, its beaches, golf course and caravan park.

It is located close to Cullen Bay RCCA, and within Cliffs and Rocky Coast – Moray and Nairn LCT (282). It is also located close to Cullen GDL and Moray Coastal Trail, on NCR 1 and within the locally designated Portgordon to Cullen Coast SLA.

- 12.7.3.356 The view is taken from the elevated route near the viaduct affording views over roof tops of Seatown (the former fishing village that now forms part of Cullen) seen to the north located between the viaduct and the coastline, set back from the beach in the western part of the town. Cullen is a village on the eastern side of Cullen Bay. The village was moved to its current location in the 1820s when a new town was built, centred around a town square. The grid pattern of the settlement is disrupted by the former railway line that crossed through it, the viaducts of which have been maintained as footpaths and now provides the route for NCR 1 as well as a footpath link between Cullen and Portknockie. The Moray Coast Trail runs along the coast below.
- 12.7.3.357 Seatown is located between the viaducts and the beach with streets which run parallel or perpendicular to the shoreline. Houses along the shoreline in this part of the town are orientated so that their gable ends often face towards the sea to provide some protection from the elements and to the settlement inland. Views out to sea are mainly from external areas.
- 12.7.3.358 The rest of the town is located on higher ground. Houses face onto the street and are orientated north-east to south-west following the grid pattern. Views seaward to the north are mainly available down street corridors and from amenity spaces. Amenity spaces include the beach, Castle Hill, the paths that follow the former railway line including green spaces with benches at scenic viewpoints with views out to sea (the viewpoint is located at one of these). There is also a caravan park to the east of the town.
- 12.7.3.359 The coast is characterised by sandy Cullen Bay enclosed on either side by rocky headlands of old red sandstone cliffs. The focus of the view is the harbour area and surrounding development with the sea forming a simple, large scale, background feature which contrasts with the complexity of the settled coast. Views north-west take in the viaduct and the sandstone cliffs that back the raised beach on which the golf course is located adjacent to Seatown to the north-west. The cliffs extend out to sea to Bow Fiddle Rock on the far, western side of Cullen Bay. The settlement of Portknockie is visible above on the promontory.
- 12.7.3.360 The Beatrice Demonstrator WTGs and the BOWL WTGs are theoretically visible as blades and some hubs above the horizon, due to the curvature of the earth, however, these are unlikely to be visible to the naked eye except in excellent weather conditions as shown in the photograph. The Moray East and Moray West wind farms are closer and are seen as nearly full WTGs from blade tips and including various extents of the towers. The WTGs extend across a wide proportion of the seascape skyline. The WTGs appear 'stacked' in rows in some locations. They are visible during excellent conditions. Seen at a distance along the seascape horizon they are an element of views, but

not a key characteristic.

- 12.7.3.361 The seascape is contained by headlands visible to the west and east, which reduces the expansiveness of the view out to sea. This combined with the position of the viewpoint and coastal parts of the settlement within the bay promotes the views north to north-west across the Moray Firth as the main focus. During some conditions the sea and sky appear to merge, which also affects visibly of the OWFs.
- 12.7.3.362 The viewpoint is located within the locally designated Portgordon to Cullen Coast SLA. Views will have local value to residents, recreational users of the viaduct path, golfers, beach goers and harbour users. The value is considered to be Medium-High.
- 12.7.3.363 Views in the direction of Caledonia North Site from houses are static and views from some houses look out across the seascape vista. Visitors and residents moving around the settlement, harbour, beaches, golf course and caravan park have an appreciation of the view towards the sea, and in the direction of Caledonia North Site. The focus of the view is north and north-west across the Moray Firth in the direction of the Caledonia North Site where the largely undeveloped seascape contrasts with settled, developed coastline. The view has a strong character with the main features being where the land and coast interact around the bay, beach and harbour in the context of the cliff landform, viaduct and village. All of the above have a higher susceptibility to the change proposed, however, susceptibility is reduced due to long distance between viewpoint and the Caledonia North Site, and OWFs within the view. Taken together susceptibility is considered to be Medium-High.
- 12.7.3.364 In combining the Medium-High value with the Medium-High susceptibility, the sensitivity of receptors at this viewpoint is considered to be **Medium-High**.

Magnitude of Change

- 12.7.3.365 Caledonia North Site will be visible during excellent conditions 51.8km to the north-north-east. The ZTV shows that all of the WTGs will be theoretically visible. Whilst OSPs will theoretically be visible from this viewpoint, due to the distance and size of the OSPs they will not be discernible from this viewpoint.
- 12.7.3.366 Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-16 Blade Tip ZTV (Southern Study Area) with Visual Receptors and Viewpoint Locations illustrates the extent of theoretical visibility within the vicinity of the viewpoint location. It shows that there is theoretical visibility of the Caledonia North Site along Cullen Bay and throughout the settlement of Cullen. Actual visibility will be restricted by built form and vegetation to the coastal edge and from open amenity areas with sea views, such as from the viaducts.

Construction and Decommissioning

- 12.7.3.367 During the construction and decommissioning phases of the project the worst case scenario will occur when the majority of WTGs and OSPs are present and when there are still large numbers of vessels and cranes present carrying out works. The activity associated with the WTG and OSPs will be distant (minimum 51.8km).
- 12.7.3.368 The magnitude of change during construction and operation is considered to be **Low**.

Operation

- 12.7.3.369 The Caledonia North Site will be located beyond the eastern part of Moray East (42.9km) and extend the spread of wind energy development eastwards along the seascape horizon. The existing OWFs occupy 46 degrees of the HFoV of the seascape. Caledonia North Site will occupy 15 degrees of the HFoV, adding six degrees of the HFoV to the spread of OWFs visible from this location due to the overlap with Moray East. Caledonia North Site will occupy a narrow proportion of the overall seascape horizon.
- 12.7.3.370 The closest WTGs of Caledonia North Site will be visible during excellent conditions as blades, hubs and approximately half of the tower. Due to the curvature of the earth, angle of view and depth of the layout of Caledonia North Site will result in the most distant WTGs appearing lower in the view than those to the front of the wind farm. The more distant WTGs will be visible as hubs and blades above the horizon. The distance to the most distant turbine will be 77.1km. Further, the increased separation from the viewpoint to the more distant WTGs means that they will appear to be less visible and less frequently visible than the closest.
- 12.7.3.371 The WTGs of Caledonia North Site will be visible during excellent conditions as small vertical features along the horizon. Due to distance and their apparent small vertical size the WTGs of Caledonia North Site will be difficult to discern with the naked eye even during excellent visibility conditions.
- 12.7.3.372 The layout of Caledonia North Site will echo the pattern of the existing OWFs with a cluttered appearance including where Caledonia North Site overlaps with the existing OWFs. Due to these similarities Caledonia North Site will appear as an extension of the existing OWFs, albeit larger in scale than the adjacent Moray East but at a similar apparent scale to Moray West WTGs.
- 12.7.3.373 Caledonia North Site will be seen to the north-north-east which means that the WTGs will be lit by the sun for the majority of the latter part of the day when visibility allows. This could potentially increase the contrast against the sky background making them more apparent when visibility is excellent.
- 12.7.3.374 Located to the north-north-east and due to the prevailing wind direction, the angle of the rotors will be aligned to face the viewpoint. This means that the maximum dimension of the WTG will be potentially visible.
- 12.7.3.375 Caledonia North Site will affect the contained focus of the view in that it will

be seen along the horizon of the seascape which forms the background to the settled shoreline and sandy beach of Cullen Bay. The addition of Caledonia North Site to the existing OWF will slightly extend the spread of OWF across the seascape horizon background, leaving a part of the seascape horizon without development. They will be seen at distance along the horizon only during excellent weather conditions.

- 12.7.3.376 Taking into account the description of change and the factors of magnitude described above, the magnitude of change for Caledonia North Site is considered to be **Low**.

Significance of Effect

Construction and Decommissioning

- 12.7.3.377 The visual effect of the Caledonia North Site during construction and decommissioning at this viewpoint, along the coastal edge and from amenity areas with sea views is considered to be **Moderate-Minor and Not Significant in EIA terms** due to the distance to the Caledonia North Site and its associated construction and decommissioning works. Effects will be adverse, short term and temporary. The frequency of visibility at a range which equates to the closest part of the Caledonia North Site is approximately 23.5% of the year.

Operation

- 12.7.3.378 The visual effect of the Caledonia North Site during operation at this viewpoint, along the coastal edge and from amenity areas with sea views is considered to be **Moderate-Minor and Not Significant in EIA terms** largely due to the distance to the Caledonia North Site. Effects will be adverse, long term and reversible. The frequency of visibility at a range which equates to the closest part of the Caledonia North Site is approximately 23.5% of the year.

Viewpoint 16 Findlater Castle

Baseline Condition and Sensitivity

- 12.7.3.379 Please refer to Volume 7C, Appendix 12-3: Seascape, Landscape and Visual Impact Assessment Visualisations, Figure 12-16 Viewpoint 16: Findlater Castle.
- 12.7.3.380 The view is representative of visitors to Findlater Castle and walkers. It is located in Sandend Bay RCCA, within the Cliff and Rocky Coast – Aberdeenshire LCT (10) and the locally designated North Aberdeenshire Coast SLA.
- 12.7.3.381 The view is taken from the formal viewpoint and information point for Findlater Castle, where an access track meets a cliff top path. The view inland is across agricultural fields, where the roofline of a cottage is visible, along with a dovecot, tree crowns of a woodland and a flat roofed hut. The view seawards projects out from cliff top location across the immediate enclosed

rocky bay to an open and expansive seascape which characterises the view.

- 12.7.3.382 The elevated position and low cover of vegetation accentuates openness of view. Remains of Findlater Castle form an existing focal point in the foreground view (although it is not visible in the viewpoint photographs due to its low-lying position).
- 12.7.3.383 Fishing boats and other sea craft are common features within the view. Visibility of the coastal headland to left (Logie Head) and right of the view (Crathie Point) tempers the influence of the seascape and draws attention to these features. The headlands diminish the extent of sea view to some degree, although wide views remain with the distant Aberdeenshire coast visible as headlands along the horizon to the east and the distant Caithness and Sutherland hills are visible to the north-west during excellent visibility conditions. The cliffs obscure the irregular and rocky coastline of old red sandstone cliffs with a shore of pebbly raised beaches below.
- 12.7.3.384 To the east along the coastline Boyndie (7.8km), Boyndie Extension (9.7km), Carinton Road (8.2km), South Colleonard (12.7km), Milton of Fisherie (22.8km), Little Blyth (29.7km), Dounepark Farm (17.9km), Whitestones (19.7km), and slightly further north Easter Melrose (23.5km), Mains of Melrose (20.7km) and Jacobshall (29.1km) wind energy development is shown on the wireline but obscured by vegetation at the viewpoint location. Further along the coastline they may become visible.
- 12.7.3.385 BOWL, Moray East, Moray West and the Beatrice Demonstrator WTGs and associated oil platforms are theoretically visible. Some WTGs are seen as blades and some hubs above the horizon, due to the curvature of the earth, however these are unlikely to be visible to the naked eye except in excellent weather conditions. The closer Moray East and Moray West OWFs are visible as nearly full WTGs. In some locations the WTGs appear 'stacked' in rows. OWFs are a feature of views of the seascape, however as they are visible along the expansive sea horizon only during excellent weather conditions they are not a key characteristic of views.
- 12.7.3.386 The seascape forms the focal point of the view beyond Findlater Castle. In come conditions the sea and sky appear to merge, which also affects visibility of the OWFs.
- 12.7.3.387 The viewpoint is located within the locally designated North Aberdeenshire Coast SLA. Locally valued as an outlook from a path and as the setting to the visitor attraction of Findlater Castle. The importance of the viewpoint is denoted by formal recognition as a viewpoint on Ordnance Survey map data. The value is considered to be Medium-High.
- 12.7.3.388 View will be experienced by transient walkers and visitors with heightened sensitivity of scenic views towards the castle and the seascape beyond. The focus of the view is north across the Moray Firth, in the direction of the

Caledonia North Site, and along the coast. The interest of the view is primarily the interaction between the rugged coastline and the sea, including the castle located on a small promontory. OWFs within the view moderate susceptibility. Taken together susceptibility is considered to be Medium-High.

- 12.7.3.389 In combining the Medium-High value with the Medium-High susceptibility, the sensitivity of receptors at this viewpoint is considered to be **Medium-High**.

Magnitude of Change

- 12.7.3.390 Caledonia North Site will be visible during excellent conditions 50.8km to the north-north-east. The ZTV shows that all of the WTGs will be theoretically visible. OSPs may be visible from this viewpoint.
- 12.7.3.391 Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-16 Blade Tip ZTV (Southern Study Area) with Visual Receptors and Viewpoint Locations illustrates the extent of the ZTV within the vicinity of the viewpoint location. It shows that there is theoretical visibility of the Caledonia North Site along the coast on which Findlater Castle and the viewpoint are located. Due to the lack of screening the actual extent of visibility is likely to be similar.

Construction and Decommissioning

- 12.7.3.392 During the construction and decommissioning phases of the project the worst case scenario will occur when the majority of WTGs and OSPs are present and when there are still large numbers of vessels and cranes present carrying out works. The activity associated with the WTG and OSP construction will be distant (minimum 50.8km).
- 12.7.3.393 The magnitude of change during construction and operation is considered to be **Low**.

Operation

- 12.7.3.394 The Caledonia North Site will be located beyond the eastern part of Moray East (43.2km) and extend the spread of wind energy development eastwards along the seascape horizon. The existing OWFs occupy 47 degrees of the HFoV of the seascape. Caledonia North Site will occupy 14 degrees of the HFoV, adding only five degrees to the spread of OWFs visible from this location. Caledonia North Site will occupy a narrow proportion of the expansive seascape horizon.
- 12.7.3.395 The closest WTGs of Caledonia North Site will be visible during excellent conditions as blades, hubs and the majority of the tower. Due to the curvature of the earth, angle of view and depth of the layout of Caledonia North Site will result in the most distant WTGs appearing lower in the view than those to the front of the wind farm. The more distant WTGs will be visible as blades, hubs and the uppermost part of the tower above the horizon. The distance to the most distant turbine will be 76.6km. Further, the increased separation from the viewpoint to the more distant WTGs means that they will appear to be less visible and less frequently visible than the closest.

- 12.7.3.396 The WTGs of Caledonia North Site will be visible during excellent conditions as small vertical features along the horizon. Due to distance and their apparent small vertical size the WTGs of Caledonia North Site will be difficult to discern with the naked eye even during excellent visibility conditions.
- 12.7.3.397 The layout of Caledonia North Site will echo the pattern of the existing OWFs with a cluttered appearance including where Caledonia North Site overlaps with the existing OWFs and some areas where WTGs appear 'stacked'. Due to these similarities Caledonia North Site will appear as an extension of the existing OWFs, albeit larger in scale than the adjacent Moray East but at a similar apparent scale to Moray West WTGs.
- 12.7.3.398 Caledonia North Site will be seen to the north-north-east which means that the WTGs will be lit by the sun for the majority of the latter part of the day when visibility allows. This could potentially increase the contrast against the sky background making them more apparent when visibility is excellent.
- 12.7.3.399 Located to the north-north-east and due to the prevailing wind direction, the angle of the rotors will be generally aligned to face the viewpoint. This means that the maximum dimension of the WTG will be potentially visible.
- 12.7.3.400 Caledonia North Site will affect the main focus of the view in that it will be seen along the horizon of the seascape which forms the background to Findlater Castle and the intricate rocky coastline of cliffs and small beaches. The focus of the view is the castle and its surrounding coastline, and the interaction of the sea with coastal features. Caledonia North Site will be seen within the part of the view where OWFs are present, seen at distance along the horizon and only during excellent weather conditions.
- 12.7.3.401 Taking into account the description of change and the factors of magnitude described above, the magnitude of change for Caledonia North Site is considered to be **Low**.

Significance of Effect

Construction and Decommissioning

- 12.7.3.402 The visual effect of Caledonia North Site during construction and decommissioning at this viewpoint is considered to be **Moderate-Minor and Not Significant in EIA terms** due to the distance to the Caledonia North Site and its associated construction and decommissioning works. Effects will be adverse, short term and temporary. The frequency of visibility at a range which equates to the closest part of the Caledonia North Site is approximately 23.5% of the year.

Operation

- 12.7.3.403 The visual effect of Caledonia North Site during operation at this viewpoint is considered to be **Moderate-Minor and Not Significant in EIA terms** largely due to the distance to the Caledonia North Site and the expansive sea backdrop to the view. Effects will be adverse, long term and reversible. The

frequency of visibility at a range which equates to the closest part of the Caledonia North Site is approximately 23.5% of the year.

Viewpoint 17 Portsoy

Baseline Condition and Sensitivity

- 12.7.3.404 Please refer to Volume 7C, Appendix 12-3: Seascape, Landscape and Visual Impact Assessment Visualisations, Figure 12-17 Viewpoint 17: Portsoy.
- 12.7.3.405 The viewpoint is representative of views obtainable from residential properties as well as visitors. It is located in Sandend Bay RCCA, within Cliff and Rocky Coast – Aberdeenshire LCT (10) and the locally designated North Aberdeenshire Coast SLA.
- 12.7.3.406 View taken from grassy area between Shore Street and Schoolhendry Street in Portsoy. The historic village sits on a raised headland with a rocky shoreline and harbour visible in the foreground. There are two harbours, the older of which dates to the 17th century and is the oldest on the Moray Firth. The majority of the coastal houses in the village follow the traditional pattern of facing away from the sea in order to limit exposure to the elements. More modern housing is orientated to gain sea views. East of the village is Links Bay with a camping and caravan site on the beach.
- 12.7.3.407 Benches are sited nearby the viewpoint location and encourage appreciation of the views across the harbour and out to sea. The view presents an open and uninterrupted seascape which extends across a wide panorama and which has no specific focus. The developed context of Portsoy is visible within the remainder of panorama and characterised by the harbour and other traditional coastal developments. The hard coastal shore characterised by old red sandstone cliffs and irregular coastal edge of pebbly raised beaches. In the distance the hills of Caithness and Sutherland are seen along the horizon during excellent conditions.
- 12.7.3.408 The blades and hubs of BOWL OWF are unlikely to be noticeable across this view except in excellent visibility conditions. The nearer Moray East and Moray West OWFs are visible as hubs and upper parts of the tower above the horizon and would also only be visible in excellent visibility conditions. In some places the WTGs appear 'stacked' in rows. The WTGs appear to extend from the edge of the distant Caithness and Sutherland land mass to the east across a large sector of the sea horizon. During certain conditions the sea and sky will appear to merge, which also affects visibility of the OWFs.
- 12.7.3.409 The viewpoint is located within the locally designated North Aberdeenshire Coast SLA. Locally valued as views from properties and gained from around the settlement and harbour. The value is considered to be Medium-High.
- 12.7.3.410 Views in the direction of the Caledonia North Site from houses are static and with some houses orientated to look out across the seascape. Visitors and residents moving around the settlement and harbour have an appreciation of

the view towards the sea, and in the direction of the Caledonia North Site. All of the above have a higher susceptibility to the change proposed, however, susceptibility is moderated due to long distance between viewpoint and Caledonia North Site and the operational OWFs. Taken together susceptibility is considered to be Medium-High.

- 12.7.3.411 In combining the Medium-High value with the Medium-High susceptibility, the sensitivity of receptors at this viewpoint is considered to be **Medium-High**.

Magnitude of Change

- 12.7.3.412 The Caledonia North Site will be visible during very good conditions 50.3km to the north. The ZTV shows that all of the WTGs will be theoretically visible. OSP are not visible from this viewpoint.
- 12.7.3.413 Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-15 Blade Tip ZTV (Southern Study Area) with Visual Receptors and Viewpoint Locations illustrates the extent of theoretical visibility within the vicinity of the viewpoint location. It shows that there is theoretical visibility of the Caledonia North Site along coast surrounding Portsoy and from Portsoy itself. Actual visibility will be restricted to the coastal edge and along street corridors aligned northwards due to screening by built form.

Construction and Decommissioning

- 12.7.3.414 During the construction and decommissioning phases of the project the worst case scenario will occur when the majority of WTGs and OSPs are present and when there are still large numbers of vessels and cranes present carrying out works. The activity associated with the WTG and OSPs will be distant (minimum 50.3km).
- 12.7.3.415 The magnitude of change during construction and decommissioning is considered to be **Low**.

Operation

- 12.7.3.416 Caledonia North Site will appear to be located beyond the eastern part of Moray East (44.8km) and extend the spread of wind energy development eastwards along the seascape horizon. The existing OWFs occupy 46 degrees of the HFoV of the seascape. Caledonia North Site will occupy 13 degrees of the HFoV, adding eight degrees to the spread of OWFs visible from this location. Caledonia North Site will occupy a narrow proportion of the expansive seascape horizon.
- 12.7.3.417 The closest WTGs of Caledonia North Site will be visible during excellent conditions as blades, hubs and the upper part of the tower. Due to the curvature of the earth, angle of view and depth of the layout of Caledonia North Site will result in the most distant WTGs appearing lower in the view than those to the front of the wind farm. The more distant WTGs will be visible only as blades above the horizon. The distance to the most distant turbine will be 76.9km. Further, the increased separation from the viewpoint

to the more distant WTGs means that they will appear to be less visible and less frequently visible than the closest.

- 12.7.3.418 The WTGs of Caledonia North Site will be visible during excellent conditions as small vertical features along the horizon. Due to distance and their apparent small vertical size the WTGs of Caledonia North Site will be difficult to discern with the naked eye even during excellent visibility conditions.
- 12.7.3.419 Moray East and Moray West OWFs are visible as blades and hubs with the closest WTGs seen with the uppermost parts of towers above the horizon making it difficult to discern any noticeable pattern of development. Caledonia North Site will be visible to a similar degree albeit more distant, and appear to be a similar scale.
- 12.7.3.420 Caledonia North Site will be seen to the north which means that the WTGs will be lit by the sun for the middle part of the day, when visibility allows. This could potentially increase the contrast against the sky background making them more apparent when visibility is excellent.
- 12.7.3.421 Located to the north and due to the prevailing wind direction, the angle of the rotors will be aligned at an angle to the viewpoint such that the blades will be directed away from the viewpoint location, occupying less space.
- 12.7.3.422 Although there is no specific focus, views towards the sea will be important from Portsoy. Caledonia North Site will be seen in the background of the developed coastal edge of Portsoy within an area of the seascape where wind energy development is already present. The addition of Caledonia North Site to the seascape horizon will not alter the character of views, with OWFs being a feature but not a key characteristic due to their distance from the coastline.
- 12.7.3.423 Taking into account the description of change and the factors of magnitude described above, the magnitude of change for Caledonia North Site is considered to be **Low**.

Significance of Effect

Construction and Decommissioning

- 12.7.3.424 The visual effect of Caledonia North Site during construction and decommissioning at this viewpoint and along the coastal edge is considered to be **Moderate-Minor and Not Significant in EIA terms**. Effects will be adverse, short term and temporary. The frequency of visibility at a range which equates to the closest part of the Caledonia North Site is approximately 23.5% of the year.

Operation

- 12.7.3.425 The visual effect of Caledonia North Site during operation at this viewpoint and along the coastal edge is considered to be **Moderate-Minor and Not Significant in EIA terms**. Effects will be adverse, long term and reversible. The frequency of visibility at a range which equates to the closest part of the Caledonia North Site is approximately 23.5% of the year.

Viewpoint 18 Macduff, viewpoint at Bi-Centennial monument near Macduff Parish Church

Baseline Condition and Sensitivity

- 12.7.3.426 Please refer to Volume 7C, Appendix 12-3: Seascape, Landscape and Visual Impact Assessment Visualisations, Figure 12-18 Viewpoint 18: Macduff, viewpoint at Bi-Centennial monument near Macduff Parish Church.
- 12.7.3.427 The viewpoint is representative of views from residential properties within Macduff and Banff, as well as visitors. It is located in Knock Head to More Head RCCA, the Cliffs and Rocky Coast – Aberdeenshire LCT (10) and the locally designated North Aberdeenshire Coast SLA.
- 12.7.3.428 The viewpoint is located at a formal viewpoint (marked on OS maps) outside Macduff Parish Church found on a small, steep sided hill that faces out across the shoreline at Macduff and out over Banff Bay and Moray Firth beyond. The view is contained to the south-east by a wall and the parish church behind. It is located at the western end of the town of Macduff, which is located on the eastern side of the mouth of the River Deveron where it flows out into the sea. The land slopes upward from the shore where a road follows the coastline lined with houses that face out towards the sea. Streets within then town follow a grid-pattern aligned north-east to south-west, with perpendicular roads to the north-west and south-east. As a result there are views to the north-east and north-west out towards the sea from several areas of the town.
- 12.7.3.429 The view from the viewpoint includes views across Banff Bay towards Banff found on the western side of the river mouth. On the hills behind Banff to the south-west, a number of individual WTGs are visible including Strath of Brydock (6.4km), Gledsgreen (8.9km), Gawnsmoss (8.1km), Cairnhill Farm (7.4km), Newton of Culvie (15.8), Culvie Hill (15.8km), Hill of Culbirnie (8.2km), Backhill (7.9km), Little Blairshinnoch (7.2km) and South Colleonard (4.2km). Further west Boyndie (7.2km) and the adjacent Boyndie Extension (6.8km) onshore wind farms, and individual turbine at Cairnton Road (8.6km) are visible above the rooftops of Banff.
- 12.7.3.430 The view east is across the rooftops of Macduff that sit on land that slopes gently down towards the coast. The Mains of Melrose (4.6km) individual turbine is theoretically visible to the east, however, the rooftops and trees of Macduff screen views of it. Macduff harbour is visible to the north-east with its associated large-scale industrial sheds. The beach at Banff Bay is located to the south-west beyond the development envelope of the town and is a popular recreational attraction (out of view). There is a smaller beach within the town close to the Aquarium on the northern coastline (also out of view).
- 12.7.3.431 The view looks across an open and uninterrupted seascape panorama with no specific focus. Knock Head is seen beyond Banff to the north-west and Macduff harbour, that is protected by a promontory, to the north-east frame

the view. The distant hills of Caithness and Sutherland are visible along the horizon during excellent visibility conditions.

- 12.7.3.432 BOWL, Moray East and Moray West OWFs are theoretically visible along the horizon at distances of 62.7km, 50.1km and 52km respectively. They are seen as blades, hubs and the upper part of towers along the skyline and visible during only excellent conditions at these long ranges. Beatrice Demonstrator WTGs are visible during excellent weather conditions as blades above the horizon at 58.4km. During certain weather conditions the sea and sky appear to merge, which would also affect visibility of the OWFs.
- 12.7.3.433 The viewpoint is located within the locally designated North Aberdeenshire Coast SLA. Views will be locally valued from properties, gained from around the settlement and harbour and from visitors to the formal viewpoint. The value is considered to be Medium-High.
- 12.7.3.434 The viewpoint is representative of residents and visitors. Views in the direction of Caledonia North Site from houses are static with some houses orientated to look out across the seascape vista. Visitors and residents moving around the settlement and harbour have an appreciation of the view towards the sea, and in the direction of Caledonia North Site. The focus of the view from the formal viewpoint is out across the sea and in the direction of Caledonia North Site. All of the above have a higher susceptibility to the change proposed, however, susceptibility is reduced due to long distance between viewpoint Caledonia North Site, and the developed urban foreground. Taken together susceptibility is considered to be Medium-High.
- 12.7.3.435 In combining the Medium-High value with the Medium-High susceptibility, the sensitivity of receptors at this viewpoint is considered to be **Medium-High**.

Magnitude of Change

- 12.7.3.436 Caledonia North Site will be visible during excellent conditions 51.4km to the north. The ZTV shows that all of the WTGs will be theoretically visible. Whilst OSPs will theoretically be visible from this viewpoint, due to the distance and size of the OSPs they will not be discernible from this viewpoint.
- 12.7.3.437 Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-16 Blade Tip ZTV (Southern Study Area) with Visual Receptors and Viewpoint Locations illustrates the extent of the ZTV within the vicinity of the viewpoint location. It shows that there is theoretical visibility of the Caledonia North Site throughout Macduff and along the coastline. Actual visibility will be restricted to the coastal edge, elevated parts of the settlement and along street corridors and open amenity spaces such as the viewpoint location and the War Memorial park.

Construction and Decommissioning

- 12.7.3.438 During the construction and decommissioning phases of the project the worst case scenario will occur when the majority of WTGs and OSPs are present and when there are still large numbers of vessels and cranes present carrying out

works. The activity associated with the WTG and OSPs will be distant (minimum 51.4km).

- 12.7.3.439 The magnitude of change during construction and operation is considered to be **Low**.

Operation

- 12.7.3.440 Caledonia North Site will appear to be located beyond the eastern part of Moray East (51.4km) and extend the spread of wind energy development eastwards along the seascape horizon. The existing OWFs occupy 42 degrees of the HFoV of the seascape. Caledonia North Site will occupy 12 degrees of the HFoV, adding eight degrees to the spread of OWFs visible from this location, due to the overlap. Caledonia North Site will occupy a narrow proportion of the expansive seascape horizon.
- 12.7.3.441 The closest WTGs of Caledonia North Site will be visible during excellent conditions as blades, hubs and approximately half of the tower. Due to the curvature of the earth, angle of view and depth of the layout of Caledonia North Site will result in the most distant WTGs appearing lower in the view than those to the front of the wind farm. The more distant WTGs will be visible as blades above the horizon. The distance to the most distant turbine will be 79.1km. Further, the increased separation from the viewpoint to the more distant WTGs means that they will appear to be less visible, and less frequently visible than the closest.
- 12.7.3.442 The WTGs of Caledonia North Site will be visible during excellent conditions as small vertical features along the horizon. Moray East (50.1km) and Moray West (52km) OWFs are also theoretically visible as small vertical features along the horizon, such that Caledonia North Site will appear to be an extension of existing OWFs. They will be barely perceptible to the naked eye, except during excellent conditions.
- 12.7.3.443 Caledonia North Site will be seen to the north which means that the WTGs will be lit by the sun for the middle part of the day, when visibility allows. This could potentially increase the contrast against the sky background making them more apparent when visibility is excellent.
- 12.7.3.444 Located to the north and due to the prevailing wind direction, the angle of the rotors will be aligned at an angle to the viewpoint such that the blades will be directed away from the viewpoint location, occupying less space.
- 12.7.3.445 Although there is no specific focus to views from the settlement, views towards the sea will be important from Macduff. Caledonia North Site will be seen in the background of the developed coastal edge of the town across an open stretch of water along the horizon. Caledonia North Site will be at a similar distance and apparent size to the existing wind energy development that is theoretically visible from this location, such that they are seen as small vertical features along the horizon and only when conditions are excellent.
- 12.7.3.446 Taking into account the description of change and the factors of magnitude

described above, the magnitude of change for Caledonia North Site is considered to be **Low**.

Significance of Effect

Construction and Decommissioning

- 12.7.3.447 The visual effect of the Caledonia North Site during construction and decommissioning at this viewpoint, along the coastal edge, elevated parts of the settlement and along street corridors and open amenity spaces such as the viewpoint location and the War Memorial park is considered to be **Moderate-Minor and Not Significant in EIA terms**. Effects will be adverse, short term and temporary. The frequency of visibility at a range which equates to the closest part of the Caledonia North Site is approximately 23.5% of the year.

Operation

- 12.7.3.448 The visual effect of the Caledonia North Site during operation at this viewpoint, along the coastal edge, elevated parts of the settlement and along street corridors and open amenity spaces such as the viewpoint location and the War Memorial park is considered to be **Moderate-Minor and Not Significant in EIA terms**. Effects will be adverse, long term and reversible. The frequency of visibility at a range which equates to the closest part of the Caledonia North Site is approximately 23.5% of the year.

Viewpoint 19 Gardenstown, Harbour Road

Baseline Condition and Sensitivity

- 12.7.3.449 Please refer to Volume 7C, Appendix 12-3: Seascape, Landscape and Visual Impact Assessment Visualisations, Figure 12-19 Viewpoint 19: Gardenstown, Harbour Road.
- 12.7.3.450 The viewpoint is representative of the settlement of Gardenstown, its residents and visitors. It is located within Gardenstown RCCA, Cliffs and Rocky Coast – Aberdeenshire LCT (10) and the locally designated Aberdeenshire Coast SLA. The Crovie Ordnance Survey mapped viewpoint and picnic area is located just along the coast to the east and will gain similar views.
- 12.7.3.451 The viewpoint is found on Harbour Road as it winds down the steep hill to the harbour. It is taken from an elevated location with open views across the rooftops of the town, harbour and Gamrie Bay.
- 12.7.3.452 The town is located on a narrow coastal shelf with the settlement extending up the steep-sided hillside and onto the flat-topped hillside above. The town faces north-west across Gamrie Bay, with the small village of Crovie further to the east having a similar outlook. The houses along the coast are often orientated the gable end toward the sea to provide some protection from the elements.
- 12.7.3.453 The view looks across a seascape panorama that is framed by More Head to the north-west and Crovie Head to the north-east. Craigandargity Rocks form

a focal point within an otherwise featureless seascape beyond the cliffs, beaches and settlement of the shoreline. The hills of Caithness and Sutherland are visible during excellent conditions along the horizon.

- 12.7.3.454 The wireline shows that a blade of Easter Melrose (2.6km) is theoretically visible, however intervening houses screen views of it.
- 12.7.3.455 BOWL, Moray East and Moray West OWFs are theoretically visible as blades and some hubs along the horizon at distances of 66.9km, 53.4km and 56.9km respectively. The wireline shows that the very tip of the blades of Beatrice Demonstrator WTGs are theoretically visible at 64.2km but in actuality they would not be discernible. These OWFs would only be theoretically visible in excellent weather conditions. During certain weather conditions the sea and sky appear to merge which would also affect visibility of the OWFs.
- 12.7.3.456 The viewpoint is located within the locally designated North Aberdeenshire Coast SLA. Views are locally valued as views available to visitors and from properties, gained from around the settlement and harbour. The value is considered to be Medium-High.
- 12.7.3.457 The viewpoint is representative of residents and visitors of Gardenstown. Views in the direction of Caledonia North Site from houses are static and with some houses orientated to look out across the seascape vista. Visitors and residents moving around the settlement and harbour have an appreciation of the view towards the sea, and in the direction of the Caledonia North Site. All of the above have a higher susceptibility to the change proposed, however, susceptibility is moderated by the long distance between the viewpoint and Caledonia North Site and the developed foreground. Taken together susceptibility is considered to be Medium-High.
- 12.7.3.458 In combining the Medium-High value with the Medium-High susceptibility, the sensitivity of receptors at this viewpoint is considered to be **Medium-High**.

Magnitude of Change

- 12.7.3.459 Caledonia North Site will be visible during very good conditions 52.2km to the north-north-west. The ZTV shows that all of the WTGs will be theoretically visible. Whilst OSPs will theoretically be visible from this viewpoint, due to the distance and size of the OSPs they will not be discernible.
- 12.7.3.460 Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-16 Blade Tip ZTV (Southern Study Area) with Visual Receptors and Viewpoint Locations illustrates the extent of the ZTV within the vicinity of the viewpoint location. It shows that there is theoretical visibility of the Caledonia North Site along coastline of Gamrie Bay including at Gardenstown. Due to the steepness of the hillside on which the village is located actual visibility is similar to that shown on the ZTV with houses and vegetation screening views in some places.

Construction and Decommissioning

- 12.7.3.461 During the construction and decommissioning phases of the project the worst case scenario will occur when the majority of WTGs and OSPs are present and when there are still large numbers of vessels and cranes present carrying out works. The activity associated with the WTG and OSPs will be distant (minimum 52.2km).
- 12.7.3.462 The magnitude of change during construction and operation is considered to be **Low**.

Operation

- 12.7.3.463 Caledonia North Site will appear to be located beyond the eastern part of Moray East (53.4km) and extend the spread of wind energy development eastwards along the seascape horizon. The existing OWFs occupy 39 degrees of the HFoV of the seascape. The Caledonia North Site will occupy 10 degrees of the HFoV, adding nine degrees to the spread of OWFs visible from this location. Caledonia North Site will occupy a small proportion of the expansive seascape view.
- 12.7.3.464 The closest WTGs of Caledonia North Site will be visible during excellent conditions as blades, hubs and approximately half of the tower. Due to the curvature of the earth, angle of view and depth of the layout of Caledonia North Site will result in the most distant WTGs appearing lower in the view than those to the front of the wind farm. The more distant WTGs will be visible as blade tips above the horizon. The distance to the most distant turbine will be 80.2km. Further, the increased separation from the viewpoint to the more distant WTGs means that they will appear to be less visible than the closest.
- 12.7.3.465 The WTGs of Caledonia North Site will be visible during excellent conditions as small vertical features along the horizon. Due to distance and their apparent small vertical size the WTGs of Caledonia North Site will be difficult to discern with the naked eye even during excellent visibility conditions.
- 12.7.3.466 The closest existing OWFs are Moray East (53.4km) and Moray West (56.9km) which are theoretically visible as blades along the horizon. They will be barely perceptible to the naked eye, except during excellent conditions. Whilst Caledonia North Site will be at a similar distance at 52.2km the larger scale of the turbines make it slightly more prominent during excellent weather conditions.
- 12.7.3.467 Caledonia North Site will be seen to the north which means that the WTGs will be lit by the sun for the middle part of the day, when visibility allows. This could potentially increase the contrast against the sky background making them more apparent when visibility is excellent.
- 12.7.3.468 Located to the north and due to the prevailing wind direction, the angle of the rotors will be aligned at an angle to the viewpoint such that the blades will be directed away from the viewpoint location, occupying less space.

- 12.7.3.469 Craigandargity Rocks form a focal feature within Gamrie Bay in relative close proximity to the shore. Caledonia North Site will be seen across an open stretch of sea to the east of the Rocks along the horizon from this location, however it may be seen beyond the rocks in other views. Although wind energy development is theoretically visible from this location, due to the distance to the OWFs only the blades of the WTGs are visible along the horizon and only when conditions are excellent. A slightly greater proportion of the WTGs of Caledonia North Site will potentially be visible and at similar distance. It is very unlikely that they will be noticeable to the naked eye except during excellent conditions.
- 12.7.3.470 Taking into account the description of change and the factors of magnitude described above, the magnitude of change for Caledonia North Site is considered to be **Low**.

Significance of Effect

Construction and Decommissioning

- 12.7.3.471 The visual effect of the Caledonia North Site during construction and decommissioning at this viewpoint and along the coastal edge of Gamrie Bay including at Crovie is considered to be **Moderate-Minor and Not Significant in EIA terms**. Effects will be adverse, short term and temporary. The frequency of visibility at a range which equates to the closest part of the Caledonia North Site is approximately 23.5% of the year.

Operation

- 12.7.3.472 The visual effect of the Caledonia North Site during operation at this viewpoint and along the coastal edge of Gamrie Bay including at Crovie is considered to be **Moderate-Minor and Not Significant in EIA terms**. Effects will be adverse, long term and reversible. The frequency of visibility at a range which equates to the closest part of the Caledonia North Site is approximately 23.5% of the year.

Viewpoint 20 Rosehearty Harbour

Baseline Condition and Sensitivity

- 12.7.3.473 Please refer to Volume 7C, Appendix 12-3: Seascape, Landscape and Visual Impact Assessment Visualisations, Figure 12-20 Viewpoint 20: Rosehearty Harbour.
- 12.7.3.474 The viewpoint is representative of views from the settlement, including the residents of houses located along the coastline. It is located within RCCA Rosehearty to Fraserburgh, the Cliffs and Rocky Coast – Aberdeenshire LCT (10) and the designated North Aberdeenshire Coast SLA.
- 12.7.3.475 The viewpoint is located adjacent to Rosehearty Harbour, to the west of the pier, within the small coastal town found on a small headland. The historic town dates back to the 14th century and was an important fishing town until the railway arriving to Fraserburgh effectively ended the fishing industry at

Rosehearty. The town is laid out in a grid pattern with street aligned to the north-west or north-east until Ward Road. South-east of Ward Road the layout becomes less regular with modern development to the south laid out in a loose grid pattern. Houses face inward to the street throughout the settlement such that sea views are restricted except along the coastal edge.

- 12.7.3.476 Views from the town are focused towards the seascape to the north with the gently sloping hillside of a small hill containing the town and views inland to the south. The view inland from the viewpoint includes houses and a small green that sits between the houses and the harbour. The wireline shows that Braco Park Farm (2.1km), Little Byth (14.3km) and Jacobshall (10.5km) individual wind WTGs are theoretically visible, however intervening housing screens views of these.
- 12.7.3.477 The view seaward looks across the rocky coastline and the walls of the harbour to an uninterrupted and open expanse of sea that is large in scale. Column lighting along the harbour walls, and a lighthouse on the end of the pier introduce vertical elements to an otherwise horizontal vista.
- 12.7.3.478 The wireline shows that the blade tips of Moray East and Moray West OWFs are theoretically visible just above the horizon at a distance of 57.2km and 63.4km respectively. The OWFs are unlikely to be discernible to the naked eye. During certain weather conditions the sea and sky appear to merge, which also affects visibility of the OWFs.
- 12.7.3.479 The viewpoint is located within the locally designated North Aberdeenshire Coast SLA. Views will be locally valued as views from properties, gained from around the settlement and harbour. The value is considered to be Medium-High.
- 12.7.3.480 The viewpoint is representative of the views obtained by residents and visitors. Views in the direction of Caledonia North Site from houses are static and with some houses orientated to look out across the seascape vista. Visitors and residents moving around the settlement and harbour have an appreciation of the view towards the sea, and in the direction of Caledonia North Site across a developed foreground. Due to the limited visibility of the existing OWFs that area seen in the far distance along the horizon as blade tips only during excellent conditions, OWFs are not a characteristic feature within views. All of the above have a higher susceptibility to the change proposed. Taken together susceptibility is considered to be Medium-High.
- 12.7.3.481 In combining the Medium-High value with the Medium-High susceptibility, the sensitivity of receptors at this viewpoint is considered to be Medium-High.

Magnitude of Change

- 12.7.3.482 Caledonia North Site will be visible during excellent conditions 53.7km to the north-west. The ZTV shows that all of the WTGs will be theoretically visible. OSPs will not be visible from this viewpoint location.

- 12.7.3.483 Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-16 Blade Tip ZTV (Southern Study Area) with Visual Receptors and Viewpoint Locations illustrates the extent of the ZTV within the vicinity of the viewpoint location. It shows that there is theoretical visibility of the Caledonia North Site along coastline including throughout the settlement of Rosehearty.

Construction and Decommissioning

- 12.7.3.484 During the construction and decommissioning phases of the project the worst case scenario will occur when the majority of WTGs and OSPs are present and when there are still large numbers of vessels and cranes present carrying out works. The activity associated with the WTG and OSPs will be distant (minimum 53.7km).
- 12.7.3.485 The magnitude of change during construction and decommissioning is considered to be **Medium-Low**.

Operation

- 12.7.3.486 Caledonia North Site will occupy 10 degrees of the HFoV, occupying a small proportion of the overall seascape horizon which extends across almost 180 degrees of the view.
- 12.7.3.487 The closest WTGs of Caledonia North Site will be visible during excellent conditions as hubs, blades and the uppermost part of towers. Due to the curvature of the earth, angle of view and depth of the layout of Caledonia North Site will result in the most distant WTGs appearing lower in the view than those to the front of the wind farm. The more distant WTGs will be visible as blade tips above the horizon. The distance to the most distant turbine will be 81km. Further, the increased separation from the viewpoint to the more distant WTGs means that they will appear to be less visible than the closest.
- 12.7.3.488 Caledonia North Site will be seen to the north-west which means that the WTGs will be lit by the sun during the first half of the day, when visibility allows. This could potentially increase the contrast against the sky background making them more apparent when visibility conditions are excellent.
- 12.7.3.489 Located to the north-west and due to the prevailing wind direction, the angle of the rotors will be aligned at an angle to the viewpoint such that the blades will be directed away from the viewpoint location, occupying less space.
- 12.7.3.490 Although there is no focal point to views, views towards the sea will be important from the settlement. The existing OWFs will not be discernible to the naked eye (the wireline shows that they are visible as blade tips above the horizon). The WTGs of Caledonia North Site will be visible during excellent conditions as very small vertical features along the horizon. Due to distance and their apparent small vertical size the WTGs of Caledonia North Site will be difficult to discern with the naked eye even during excellent visibility conditions, and will be separated from the coastline by an open expanse of water.

- 12.7.3.491 Taking into account the description of change and the factors of magnitude described above, the magnitude of change for Caledonia North Site is considered to be **Negligible**.

Significance of Effect

Construction and Decommissioning

- 12.7.3.492 The visual effect of the Caledonia North Site during construction and decommissioning at this viewpoint is considered to be **Minor and Not Significant in EIA terms**. Effects will be adverse, short term and temporary. The frequency of visibility at a range which equates to the closest part of the Caledonia North Site is approximately 23.5% of the year.

Operation

- 12.7.3.493 The visual effect of the Caledonia North Site during operation at this viewpoint is considered to be **Minor and Not Significant in EIA terms**. The frequency of visibility at a range which equates to the closest part of the Caledonia North Site is approximately 23.5% of the year.

Viewpoint 21 B9031, west of Fraserburgh

Baseline Condition and Sensitivity

- 12.7.3.494 Please refer to Volume 7C, Appendix 12-3: Seascape, Landscape and Visual Impact Assessment Visualisations, Figure 12-21 Viewpoint 21: B9031, west of Fraserburgh.
- 12.7.3.495 The viewpoint is representative of road-users of the B9031 and of views from the settlement of Fraserburgh. It is located within RCCA Rosehearty to Fraserburgh and Cliffs and Rocky Coast – Aberdeenshire LCT (10).
- 12.7.3.496 The viewpoint is located on the B9031 at the western edge of Fraserburgh, a town located at Kinnaird Head. The historic town which is still one of the most important fishing towns in Scotland and Europe dates back to the 16th century. The harbour is located to the east of the town, and the western end of Fraserburgh Bay. Broadsea Shore Bay is found to the north with residential development to the west and more commercial and industrial development to the east that backs onto the harbour. South of the bay lies the historic core laid out in a grid pattern with streets aligned to the north-south and east-west. Modern development is found to the south and west of the town. Views within the town are inward looking except along the coastal edge.
- 12.7.3.497 The landscape is markedly horizontal and low-lying in character with very gently undulating hills inland and a rocky coastline. The B9031 connects the towns of Fraserburgh and Rosehearty running parallel to the coastline turning southwards and inland at Rosehearty to join the B9032.
- 12.7.3.498 The view at the viewpoint inland is across agricultural fields, and the edge of settlement including a 'big-box' store with associated parking, streetlights and wood-pole mounted transmission lines creating a clutter of vertical elements above the rooftops. Two wood-pole mounted transmission lines extend from

the settlement across the fields.

- 12.7.3.499 The small village of Sandhaven is seen further along the coast to the west, enclosing views along the coast. To the north-east the view is contained by the low, rocky outcrops of Kinnaird Head. The wireline shows that Braco Park Farm individual turbine is theoretically visible at 6.3km as a blade tip above the horizon, however crops in the agricultural fields along the horizon screen views of it.
- 12.7.3.500 The view to the north is across a simple, expansive seascape panorama without a focal point. The wireline shows that the blade tips of Moray East and Moray West OWFs are just visible above the horizon at a distance of 60.7km and 67.6km respectively. The OWFs would not be discernible to the naked eye. During certain conditions the sea and sky appear to merge, which also affects visibility of OWFs.
- 12.7.3.501 The viewpoint is not located within and does not look out over any landscape planning designations. Views will be locally valued as views from edge of settlement properties and by road-users of the B9031. The value is considered to be Medium.
- 12.7.3.502 The viewpoint is representative of residents, visitors and road users of the B9031.
- 12.7.3.503 The B9031 crosses a flat landscape with few curves or other obstacles, allowing for long lines of sight in all directions. Caledonia North Site would be seen obliquely to the direction of travel, particularly for eastbound road-users.
- 12.7.3.504 Although the views from properties are static which would normally equate to higher levels of susceptibility, views towards the sea and in the direction of Caledonia North Site are restricted from the edge of Fraserburgh due to the settlement being set back from the coast and the intervening landscape/townscape reducing actual visibility.
- 12.7.3.505 Due to the limited visibility of the existing OWFs that are seen in the far distance along the horizon, Caledonia North Site introduces distant elements which are uncharacteristic, increasing susceptibility. Taken together susceptibility is considered to be Medium.
- 12.7.3.506 In combining the Medium value with the Medium susceptibility, the sensitivity of receptors at this viewpoint is considered to be **Medium**.

Magnitude of Change

- 12.7.3.507 Caledonia North Site will be visible during excellent conditions 56.9km to the north-west. The ZTV shows that 46 of the WTGs (of a total of 47) will be theoretically visible. OSPs are not visible from this viewpoint location.
- 12.7.3.508 Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-16 Blade Tip ZTV (Southern Study Area) with Visual Receptors and Viewpoint Locations illustrates the extent of the ZTV within the vicinity of the viewpoint location. It shows that there is theoretical

visibility of Caledonia North Site along coastline to Kinnaird Head including throughout the western part of Fraserburgh. In actuality, views of Caledonia North Site will be restricted to the coastal edge and the northern and western edges of the settlement as built form will screen views throughout the rest of the town.

Construction and Decommissioning

- 12.7.3.509 During the construction and decommissioning phases of the project the worst case scenario will occur when the majority of WTGs and OSPs are present and when there are still large numbers of vessels and cranes present carrying out works. The activity associated with the WTG and OSPs will be distant (minimum 56.9km).
- 12.7.3.510 The magnitude of change during construction and operation is considered to be **Negligible**.

Operation

- 12.7.3.511 Caledonia North Site will occupy 10 degrees of the HFoV, occupying a small proportion of the wide seascape horizon.
- 12.7.3.512 The closest WTGs of Caledonia North Site will be visible during excellent conditions as the uppermost part of the tower, hubs and blades visible above the horizon. Due to the curvature of the earth, angle of view and depth of the layout of Caledonia North Site will result in the most distant WTGs appearing lower in the view than those to the front of the wind farm. The more distant WTGs will be visible as blade tips above the horizon (one WTG will not be visible above the horizon). The distance to the most distant turbine will be 83.7km. Further, the increased separation from the viewpoint to the more distant WTGs means that they will appear to be less visible and less frequently visible than the closest.
- 12.7.3.513 Caledonia North Site will be seen to the north-west which means that the WTGs will be lit by the sun during the first half of the day, when visibility allows. This could potentially increase the contrast against the sky background making them more apparent when visibility is excellent.
- 12.7.3.514 Located to the north-west and due to the prevailing wind direction, the angle of the rotors will be aligned at an angle to the viewpoint such that the blades will be directed away from the viewpoint location, occupying less space.
- 12.7.3.515 Although there is no focal point to views, views towards the sea will be important from the settlement. The existing OWFs will not be discernible to the naked eye (the wireline shows that they are visible as blade tips above the horizon). The WTGs of Caledonia North Site will be visible during excellent conditions as very small vertical features along the horizon. Due to distance and their apparent small vertical size the WTGs of Caledonia North Site will be difficult to discern with the naked eye even during excellent visibility conditions, and will be separated from the coastline by an open expanse of water.

- 12.7.3.516 Taking into account the description of change and the factors of magnitude described above, the magnitude of change for Caledonia North Site is considered to be **Negligible**.

Significance of Effect

Construction and Decommissioning

- 12.7.3.517 The visual effect of the Caledonia North Site during construction and decommissioning at this viewpoint is considered to be **Minor and Not Significant in EIA terms**. Effects will be adverse, short term and temporary. The frequency of visibility at a range which equates to the closest part of the Caledonia North Site is approximately 23.5% of the year.

Operation

- 12.7.3.518 The visual effect of the Caledonia North Site during operation at this viewpoint is considered to be **Minor and Not Significant in EIA terms**. Effects will be adverse, long term and reversible. The frequency of visibility at a range which equates to the closest part of the Caledonia North Site is approximately 23.5% of the year.

Viewpoint 22 Ferry Route (Kirkwall to Aberdeen) – wireline only

Baseline Condition and Sensitivity

- 12.7.3.519 Please refer to Volume 7C, Appendix 12-3: Seascape, Landscape and Visual Impact Assessment Visualisations, Figure 12-22 Viewpoint 22: Ferry Route (Kirkwall to Aberdeen) – wireline only.
- 12.7.3.520 The viewpoint is representative of ferry passengers and crew, as well as other offshore receptors.
- 12.7.3.521 The viewpoint taken from the Kirkwall to Aberdeenshire ferry route at a location in the Outer Moray Firth, 39.6km from the Aberdeenshire coastline and 71.5km from the Highlands coastline. The ferry takes seven hours. The ferry route from Aberdeen to Lerwick crosses the North Sea further out from the mainland. The view encompasses seascape in all directions, except to the south where the Moray and Aberdeenshire coastline will be visible during very good to excellent conditions.
- 12.7.3.522 The existing Moray East, Moray West and BOWL OWFs are visible in very good to excellent conditions 33.6km, 50.1km and 50.7km to the north-west respectively. They are visible as hubs and upper parts of towers above the horizon. The hills of Highlands are visible beyond Moray West during excellent conditions.
- 12.7.3.523 Ferry traffic and other vessels will be common features within the view.
- 12.7.3.524 This part of the seascape is not designated and this part of the sea is not the immediate context for the destinations at either end of the route where people are most likely to take in the sea views. The value is considered to be Medium-Low.

- 12.7.3.525 Views from vessels will be transitory. Passengers and crew will have a heightened awareness of their surroundings and the enjoyment of the expansive seascape views, although for most of the year passengers are likely to be indoors at this point in their seven hour evening or early morning sailing and are less likely to take in sea views. Due to the expansive large scale nature of the open sea and the distant views of existing OWFs, this element will not be uncharacteristic and modulates susceptibility slightly. Taken together susceptibility is considered to be Medium.
- 12.7.3.526 In combining the Medium-Low value with the Medium susceptibility, the sensitivity of receptors at this viewpoint is considered to be **Medium**.

Magnitude of Change

- 12.7.3.527 Caledonia North Site will be visible during good conditions 28.2km to the north-west. The ZTV shows that all of the WTGs will be theoretically visible. OSPs will be visible from this viewpoint.
- 12.7.3.528 Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-16 Blade Tip ZTV (Southern Study Area) with Visual Receptors and Viewpoint Locations illustrates the extent of the ZTV within the vicinity of the viewpoint location. It shows that there is theoretical visibility of Caledonia North Site throughout the Outer Moray Firth which will correspond with actual visibility. The ferry route is shown on Figure 12-4 to pass within 5km of Caledonia North Site at its closest point.

Construction and Decommissioning

- 12.7.3.529 During the construction and decommissioning phases of the project the worst case scenario will occur when the majority of WTGs and OSPs are present and when there are still large numbers of vessels and cranes present carrying out works. The activity associated with the WTG and OSPs will be within relative close proximity (minimum 28.2km at this point on the route but potentially passing within 5km at its closest point).
- 12.7.3.530 The magnitude of change during construction and operation is considered to be **Medium**.

Operation

- 12.7.3.531 Caledonia North Site will occupy 59 degrees of the 360 degree HFoV of the seascape. The existing OWFs occupy, at a distance, 30 degrees of the HFoV, with Caledonia North Site seen at closer range and adding a further 12 degrees.
- 12.7.3.532 The closest WTGs of Caledonia North Site will be visible during very good conditions from foundation level upwards. Due to the curvature of the earth, angle of view and depth of the layout of Caledonia North Site will result in the most distant WTGs appearing lower in the view than those to the front of the wind farm. The more distant WTGs will be visible as blades, hubs and the uppermost part of towers above the horizon. The distance to the most distant turbine will be 49.8km. Further, the increased separation from the viewpoint

to the more distant WTGs means that they will appear to be less visible and less frequently visible than the closest.

- 12.7.3.533 Caledonia North Site will be seen to the west of the ferry route, meaning that in the first part of the day the WTGs will be lit by the sun, when visibility allows. This could potentially increase the contrast against the sky background making them more apparent when visibility is good.
- 12.7.3.534 Located to the north-west and due to the prevailing wind direction, the angle of the rotors will generally be aligned at an angle to the viewpoint such that the blades will be directed away from the viewpoint location, occupying less space. This also reduces the influence of blade movement in the view. However, as the ferry moves along its route there are locations where the rotors will be seen face-on and occupy the maximum amount of space.
- 12.7.3.535 Views of the expansive seascape are the focus of views from the ferry and other vessels. In views towards the west OWFs will be a focal feature. As the ferry sails along its route the existing OWFs may be visible as small vertical features along the horizon. Caledonia North Site will be seen at a closer distance and appear to be substantially larger in scale.
- 12.7.3.536 Taking into account the description of change and the factors of magnitude described above, the magnitude of change for Caledonia North Site is considered to be **Medium**.

Significance of Effect

Construction and Decommissioning

- 12.7.3.537 The visual effect of the Caledonia North Site during construction and decommissioning at this viewpoint is considered to be **Moderate and Not Significant in EIA terms**. This takes account of the proximity of the Caledonia North Site to the ferry route, the proportion of the broad, large scale seascape it occupies and the otherwise unremarkable views from this section of the ferry route that passes nearby. Effects will be adverse, short term and temporary. The frequency of visibility at a range which equates to the closest part of the Caledonia North Site is approximately 71.5% of the year (based on data from Lossiemouth).

Operation

- 12.7.3.538 The visual effect of the Caledonia North Site during operation at this viewpoint is considered to be **Moderate and Not Significant in EIA terms**. This takes account of the proximity of the Caledonia North Site to the ferry route, the proportion of the broad, large scale seascape it occupies and the otherwise unremarkable views from this section of the ferry route that passes nearby. Effects will be adverse, long term and reversible. The frequency of visibility at a range which equates to the closest part of the Caledonia North Site is approximately 71.5% of the year (based on data from Lossiemouth which is the closest weather station to this viewpoint).

12.7.4 Assessment of Effects on Visual Receptors

Road Users

- 12.7.4.1 There are numerous road corridors traversing the study area, some of which are associated with urban development while the majority provide access to the wider countryside or key links across it.

A9 (Helmsdale to Thurso)

Baseline Condition and Sensitivity

- 12.7.4.2 Whilst viewpoints 10 and 12 are not located on the A9 they are within close proximity of it (150m and 265m respectively).
- 12.7.4.3 The A9 is Scotland's longest road leading from Falkirk in the south to Thurso in the north of Scotland via Stirling, Perth and Inverness. In the south it is largely dual carriageway with further sections under construction between Perth and Inverness. By the point where the route enters the Study Area at Helmsdale it is a much narrower, often winding, quieter road that predominantly follows the contours of the land near to the coast and demands slower speeds in places.
- 12.7.4.4 At Latheron the road turns inland to strike a direct route north to Thurso across undulating moorland. The A9 Berriedale Braes improvement scheme has removed a hair pin bend and improved the alignment of the route where it ascends the steep valley side above Berriedale Water.
- 12.7.4.5 The route is generally described from south to north as it is travellers moving in this direction that would be slightly more affected by visibility of Caledonia North Site. This is due to the fact that Caledonia North Site would mostly be seen ahead of or to the side of the route.
- 12.7.4.6 Through Helmsdale the visibility out to sea is restricted by intervening buildings. Once outwith the town views out to sea are over the more coastal parts of the settlement with some roadside vegetation also restricting visibility in parts.
- 12.7.4.7 The road climbs onto higher slopes north of East Helmsdale/Navidale (Viewpoint 12 is located approximately 150m west of the A9 on an unnamed minor road in Navidale). At this point the open seascape also contains BOWL, Moray East and Moray West at a range of 27.5km at the closest point and spread across a part of the distant seascape horizon. The Beatrice Demonstrator Turbines and the associated oil platforms are also visible as point features on the skyline at a range of approximately 32.7km.
- 12.7.4.8 Beyond this the route, whilst more elevated, also becomes more winding and visibility out to sea becomes more confined and less consistent. This is due to the route's changes in level and direction around the contours of the land formed by the Rounded Hills – Caithness and Sutherland LCT 135 landscape. Views out to sea are across an increasingly more substantial strip of simple fore and middle ground landscape of sloping moorland, which conceals the

high cliffs and sheltered bays that lie along the coast. There are several locations where vehicles can stop along this stretch.

- 12.7.4.9 Around Ord Point (where there is a layby) the A9 moves further inland around the base of the steeper slopes. CLSA 2017 denotes the section of the A9 between Ord Point and Latheron as a Key Route. Here the views out to sea are screened by landform and forestry and this continues to be the case until Berriedale (a section of approximately 7km of the route). This is with the exception of a few small sections where lower intervening land allows visibility out to sea over moorland (e.g., east of Badbea).
- 12.7.4.10 Once at approximately Lower Newport the landscape becomes characterised by Coastal Crofts and Small Farms LCT 144 below the more steeply sloping moorland further inland. The A9 runs above the lower slopes to the coast so that slightly elevated sea views are a key characteristic until the road passes Newport. The Burn of Whilk wind farm is visible on the distant headland from this stretch of the road.
- 12.7.4.11 Once north of Newport the A9 runs slightly further inland so that the shallow slopes to the coast intervene in sea views with their more settled characteristics of the Coastal Crofts and Small Farms LCT 144. The more steeply sloping Sweeping Moorland and Flows LCT 134 is set back from the road ensures that views are wider reaching and less focused out to sea. Intervening landform around the road to Rockhead at Borgue prevents sea visibility for a short stretch. CLSA 2017 denotes the A9 "heading north from Newport/Borgue [and] similar views from nearby bus stop and layby at Borgue" as a Key View and a Gateway.
- 12.7.4.12 Thereafter, the A9 moves closer to the coast but maintains a higher elevation so that views over the sea are over the lower lying slopes to the sea. Scattered properties tend to be on the inland side of the route so that the wide sea views with BOWL, Moray East and Moray West and Beatrice Demonstrator Turbines are a key characterising features.
- 12.7.4.13 Coniferous forestry planted alongside the road in the vicinity of Dunbeath Mains and woodland around Dunbeath Castle until the A9 passes the junction with Acorn Road on the south side of Dunbeath restricts actual visibility.
- 12.7.4.14 For a further short section of the route the buildings of Dunbeath prevent and filter visibility out to sea, however in the vicinity of the bridge views along the valley of the Dunbeath Water, across the village, to the open sea beyond, are possible in an east-south-easterly direction (Viewpoint 10 is approximately 265m south of the A9). At this point the open seascape also contains BOWL, Moray East and Moray West at a range of 24.3km at the closest point and spread across a wide part of the distant seascape horizon. The Beatrice Demonstrator Turbines and the associated oil platforms are also visible as point features on the skyline at a range of approximately 26.2km. Also from this stretch of the route there is visibility of several small, single turbines as well as Buolfruch wind farm to the north of the A9.

- 12.7.4.15 From the bridge the A9 rises back up the slopes onto higher ground where views across the settled slopes to the sea are again more open until north of Toremore, where intervening landform restricts visibility out to sea for a short section of the route.
- 12.7.4.16 At Knockinnon the land slopes steeply to the sea and the A9 runs slightly closer to the coast so that close range, unobstructed, open views out to sea are possible for much of the next 1km with BOWL, Moray East and Moray West and Beatrice Demonstrator Turbines key features along the seascape horizon.
- 12.7.4.17 North-east of Upper Latheron Farm the route of the A9 moves further inland, following the contours to the bridging point of the Burn of Latheronwheel. Here the substantial intervening landscape of Coastal Crofts and Small Farms LCT 144, including some woodland, reduces the influence of the sea beyond, which, when visible, forms a narrow backdrop, with BOWL, Moray West and Moray East forming an OWF feature of a wide extent of the sea skyline.
- 12.7.4.18 From level with the Smerral junction intervening woodland, landform and the buildings of Latheronwheel restrict visibility out to sea until north of Latheronwheel. There, open and relatively consistent views out to sea over the sloping, partially settled landscape and such views continue to be possible until road turns northwards towards Latheron. There the intervening landscape widens out, however the elevated position of the A9 ensures that the open sea is a key characteristic of the views with BOWL, Moray East and Moray West are visible across a large section of the skyline.
- 12.7.4.19 From Latheron itself views are restricted by intervening buildings and vegetation. Here the A9 leaves the coast and turns northwards. OWESG denotes the section of the A9 between Latheron and Causeymire as a Key Route.
- 12.7.4.20 Visibility of the sea is screened and partially restricted by vegetation around Latheron and further north along the route. To the north the sloping landform on either side of the route channels views to the coast so that only a relatively narrow section of the sea skyline is visible above Latheron.
- 12.7.4.21 North of Gillivoan sea views form a narrow component of the views forming a backdrop to the simple, partially settled landscape of the fore and middle ground. North of Upper Latheron the landscape changes to Sweeping Moorland and Flows LCT 134 with the seascape seen at distance beyond the tree crowns north of Latheron and occupying a small proportion of the overall view.
- 12.7.4.22 Sea views from the A9 are not possible from further north than the southern flanks of Ben-a-chielt where the road crosses into the Sweeping Moorland and Flows LCT 134.
- 12.7.4.23 Within this area the Causeymire, Halsary and Bad a' Cheo Wind Farms are seen ahead of the road, which passes alongside the turbines at relatively

close proximity until just south of Spittal. The landscape changes to Farmed Lowland Plain LCT 143 as the A9 crosses the B870 south of Spittal and begins a slow descent to Thurso on the north coast of Scotland.

- 12.7.4.24 The A9 between Helmsdale and Latheron forms part of the NC500 which is promoted for its attractive scenery with numerous interesting places to visit. North-east of Ousdale between approximately Badbea and Newport the A9 crosses through the THC locally designated Flow Country and Berriedale Coast SLA. Views of the sea form an important element of views along this stretch of the A9.
- 12.7.4.25 The view from the A9 north of Newport/Borgue is identified as a key view in THC (2017) Landscape Sensitivity Appraisal, which describes this as "Coastal views along east coast to Sarclet Head. Easily experienced by travellers heading north on A9" and is significant because it allows an "Unobstructed view along coastline from road. Eye is drawn to cliffs & inlets/bays. Views of open sky, experience of weather & waves."
- 12.7.4.26 Between Latheron and Thurso the A9 crosses through the eastern part of THC locally designated Flow Country and Berriedale Coast SLA near Loch Rangag.
- 12.7.4.27 The value of views along the A9 between Helmsdale and Latheron is considered to be Medium-high, and between Latheron to Thurso is value is considered to be Medium.
- 12.7.4.28 Users of the A9 are transient and therefore their appreciation of views will be of short duration and diverse due to where they are seated in the vehicle and which stretch of the A9 is being travelled.
- 12.7.4.29 The purpose for using the A9 may be varied. For example, people may be local, regular travellers, people working using the route to transport goods or they may be visitors to the area taking in the scenery for the first time.
- 12.7.4.30 People's attention to the scenery through which they are passing is likely to be varied depending on their purpose. Whilst people visiting the area are likely to give the views of it a high degree of attention, this does not mean that local people or people working do not appreciate the scenery of the route's setting, particularly on a beautiful day.
- 12.7.4.31 The views out to sea are often the focus of views from the A9, particularly where the landform restricts visibility inland as occurs for most of the route between Helmsdale and Newport.
- 12.7.4.32 The most susceptible parts of the route are where it passes close to the coast or where the intervening land is at a lower level so that it's influence on views is limited. From these locations the seascape is a key characteristic. Where there are views of the sea existing OWFs are a key feature which moderate susceptibility to the Caledonia North Site.
- 12.7.4.33 Taken together susceptibility is considered to be Medium.

- 12.7.4.34 By combining the Medium-High value and Medium susceptibility the sensitivity is considered to be **Medium-High** between Helmsdale and Latheron. By combining the Medium value and Medium susceptibility, sensitivity is considered to be **Medium** between Latheron and Thurso.

Magnitude of Change

- 12.7.4.35 Caledonia North Site will be visible during very good to excellent conditions approximately 40km to the north-east at the closest point at Latheron and 60km at the furthest point at Helmsdale. The ZTV shows that generally where there is visibility all of the WTGs will be theoretically visible. OSP will generally not be discernible from the A9 due to the size of the OSP and the distance to them.
- 12.7.4.36 Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-15 Blade Tip ZTV (Western Study Area) with Visual Receptors and Viewpoint Locations illustrates the extent of theoretical visibility. The ZTV shows that there is visibility along the majority of the A9 with areas of no visibility where the A9 curves inland at Ousdale, where the road rises north of the bridge over Dunbeath Water and the valley through which the Burn of Latheronwheel flows.
- 12.7.4.37 Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-17 Hub Height ZTV (Western Study Area) Visual Receptors and Viewpoint Locations shows that the extent of theoretical visibility up to the hub is largely the same as for the blade tip ZTV, as shown on Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-10 Blade Tip and Hub Height ZTV Comparison. This demonstrates that from the road, full WTGs are likely to be visible.
- 12.7.4.38 In actuality visibility corresponds to those parts of the A9 with visibility of the sea as described in the baseline above.

Construction and Decommissioning

- 12.7.4.39 During the construction and decommissioning phases of the project the worst case scenario will occur when the majority of turbines and OSPs are present and when there are still large numbers of vessels and cranes present carrying out works. The activity associated with the WTG and OSPs will be distant (minimum 40km).
- 12.7.4.40 The magnitude of change during construction and decommissioning is considered to be **Low** between Borgie (south of Lower Newport) and Upper Latheron.
- 12.7.4.41 The magnitude of change during construction and decommissioning is considered to be **Negligible** between Borgie (south of Lower Newport) and Helmsdale (at the edge of the study area).
- 12.7.4.42 The magnitude of change during construction and decommissioning is considered to be **No change** between Upper Latheron and Thurso.

- 12.7.4.43 The magnitude of change elsewhere along the road is considered to be **No change**.
- Operation
- 12.7.4.44 The route between Helmsdale and Latheron runs generally in a north-easterly or south-westerly direction along the coast.
- 12.7.4.45 Caledonia North Site will be seen to the east through to the south-east during excellent conditions.
- 12.7.4.46 Between Helmsdale and Dunbeath Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-11 Horizontal Angle ZTV Caledonia North the Caledonia North Site shows that Caledonia North Site will occupy between 20 – 30 degrees of the HFoV. Between Dunbeath and Wick Caledonia North Site will occupy between 30 – 40 degrees of the HFoV. However, it will be largely seen beyond the existing OWFs.
- 12.7.4.47 In views from near Helmsdale (Viewpoint 12) Caledonia North Site will be 60.4km distant, visible along the horizon as blades, hubs and the upper part of the tower. Due to the curvature of the earth, angle of view and depth of the layout of the Caledonia North Site will result in the most distant turbines appearing lower in the view than those to the front of the wind farm. The more distant turbines will be visible as blades, hubs and slightly less of the tower visible than the closest turbines.
- 12.7.4.48 In views from near Dunbeath (Viewpoint 10) Caledonia North Site will be 44.5km distant, with closer WTGs visible as towers, hubs and blades with more distant turbines will be seen as hubs and the uppermost parts of towers and blades above the horizon. Further, the increased separation from the viewpoint to the more distant turbines means that they will appear to be less visible and also less frequently visible than the closest.
- 12.7.4.49 Along the A9 between Helmsdale and Upper Latheron Caledonia North Site will be seen beyond and within the context of existing OWFs. The layout of Caledonia North Site will echo the pattern of the existing OWFs with a cluttered appearance with some areas where WTGs appear 'stacked'. It will increase the number of WTGs potentially visibility and increase the visual complexity of this section of the seascape horizon occupied by OWFs.
- 12.7.4.50 Caledonia North Site will be seen to the east which means that the WTGs will be backlit for the first part of the day and be seen in shadow. As such during there are times when WTGs will contrast less with a light sky background. WTGs that are lit by the sun, as is the case in the afternoon/evening, could potentially increase contrast against the sky background making them more apparent when visibility is excellent during these times of the day.
- 12.7.4.51 Located east and south-east and due to the prevailing wind direction, the angle of the rotors will generally be aligned at an angle to the coastal edge along which the A9 is routed such that the blades will be directed away from it, occupying less space. This also reduces the potential influence of blade

movement in views.

- 12.7.4.52 The magnitude of change during operation is considered to be **Low** between Borgie (south of Lower Newport) and Upper Latheron.
- 12.7.4.53 The magnitude of change during operation is considered to be **Negligible** between of Borgie (south of Lower Newport and Helmsdale (at the edge of the study area).
- 12.7.4.54 The magnitude of change during operation is considered to be **No change** between Upper Latheron and Thurso.
- 12.7.4.55 The magnitude of change elsewhere along the road is considered to be **No change**.

Significance of Effect

Construction and Decommissioning

- 12.7.4.56 The visual effect of the Caledonia North Site during construction and decommissioning along the A9 between Borgie (south of Lower Newport) and Upper Latheron is considered to be **Moderate-Minor and Not Significant in EIA terms**.
- 12.7.4.57 The visual effect of the Caledonia North Site during construction and decommissioning along the A9 between Borgie (south of Lower Newport) and Helmsdale (at the edge of the study area) is considered to be **Minor and Not Significant in EIA terms**.
- 12.7.4.58 The visual effect of the Caledonia North Site during construction and decommissioning along the A9 between Upper Latheron and Thurso is considered to be **No effect**.
- 12.7.4.59 The visual effect of the Caledonia North Site during construction and decommissioning along the A9 is considered to be **No effect**.
- 12.7.4.60 Effects will be adverse, short term and temporary.

Operation

- 12.7.4.61 The visual effect of the Caledonia North Site during operation along the A9 between Borgie (south of Lower Newport) and Upper Latheron is considered to be **Moderate-Minor and Not Significant in EIA terms**.
- 12.7.4.62 The visual effect of the Caledonia North Site during operation along the A9 between of Borgie (south of Lower Newport) and Helmsdale (at the edge of the study area) is considered to be **Minor and Not Significant in EIA terms**.
- 12.7.4.63 The visual effect of the Caledonia North Site during operation along the A9 between Upper Latheron and Thurso is considered to be **No effect**.
- 12.7.4.64 The visual effect of Caledonia North Site during operation along the A9 is considered to be **No effect**.
- 12.7.4.65 Effects will be adverse, long term and reversible.

A99 (Latheron to John o’Groats)

- 12.7.4.66 Viewpoint 4 is located on the A99.
- 12.7.4.67 The A99 is the coastal route between the A9 at Latheron and John o’Groats, the most northerly town in Scotland. Between Latheron and Wick it runs generally in a south-west to north-east alignment whilst north of Wick it runs predominantly north south. The route is divided into two sections:
- Section 1: Latheron to Wick; and
 - Section 2: John o’Groats to Wick.
- 12.7.4.68 The route is described from south to north for Section 1 and north to south for Section 2 as this reflects the direction in which travellers moving along that section would be most affected by visibility of the Caledonia North Site. This is due to the fact that the Caledonia North Site would mostly be seen ahead of or to the side of the route in these directions.

Section 1: Latheron to Wick

Baseline Condition and Sensitivity

- 12.7.4.69 A99 begins in Latheron where it branches off from the A9, which turns inland, with the A99 continuing along the coast. Views of the sea from within Latheron are either screened or form a backdrop to the settlement.
- 12.7.4.70 After leaving Latheron northbound on the A99 views of the sea are wide, although their vertical extent is often narrow due to the intervening landform.
- 12.7.4.71 The intervening settlement and landform at Forse and Burringill create partial screening in views towards the sea in places with some houses set against an open sea backdrop. North of Burringill more open views of the sea are available from the A99 as the land rises towards Lybster including along the road to Achastle Shore. Views out to sea tend to be of relatively narrow sections above dips in the landform and across further settled farmland to the between Swiney and Lybster.
- 12.7.4.72 Views from the A99 around Lybster have a substantial, settled foreground with views out to sea completely screened by buildings from within Lybster itself. Viewpoint 9 is located at the end of Main Street, closer to the coast, and approximately 1km south of the A99 and showing open and closer views of the sea similar to views from the A99 where it routes closer to the coast such as at Clyth, east of Occumster.
- 12.7.4.73 East of Occumster the depth of land between the sea and the A99 decreases, as does the incidence of buildings. Views towards the sea are occasionally hidden by intervening landform as well as buildings along this section of the A99.
- 12.7.4.74 North of Clyth the route also moves closer to the coast with views from the A99 including wider expanses of sea within the views as a backdrop to fields.
- 12.7.4.75 Continuing northwards past Mid Clyth the route is separated from the coast by a strip of Coastal Crofts and Small Farms LCT 144 which forms a substantial

fore and mid-ground influence in the views so that the relatively small parts of the sea visible are part of the background where visible between and above the intervening fields and buildings.

- 12.7.4.76 As the route turns eastward near Bruan it is perpendicular to the coastline with views directly east-south-east towards BOWL and Moray. Beatrice Demonstrator Turbines and associated oil platforms are apparent as point features out at sea. The Burn of Whilk wind farm may be visible directly ahead of south bound travellers along this section at relatively close range and inland from sections of the route on either side of this, at greater distances. North of this between Bruan and south of Whaligoe the views across the intervening landscape to the sea are open whilst the distance to the sea decreases. Viewpoint 8: Whaligoe Steps is a nearby viewpoint illustrating a view from the coast, located approximately 160m south-east of the A99.
- 12.7.4.77 North of Whaligoe the road starts to turn inland toward Thrumster with the intervening undulating landscape and buildings ensure that visibility of the sea is restricted to small parts of the view, where the low points on the intervening land allow views beyond to the sea and will often contain BOWL, Moray East and Moray West across the horizon. Along this stretch at Ulbster High Cliffs and Sheltered Bays LCT 141 ends. Between Wick and Thrumster intervening landform screens views out to sea. North of Whiterow and south of Wick the A99 crosses into Farmed Lowland Plain LCT 143.
- 12.7.4.78 The A99 does not pass through any designated landscapes. Between John o'Groats and Latheron the A99 forms part of the North Coast 500 route, which is promoted for its attractive scenery with numerous interesting places to visit and numerous stopping places to take in the view. The value of views from the A99 is considered to be Medium.
- 12.7.4.79 Users of the A99 are transient and therefore their appreciation of views will be of short duration and diverse due to where they are seated in the vehicle and which stretch of the A99 is being travelled.
- 12.7.4.80 The purpose for using the A99 may be varied. For example, road users may be local, regular travellers, people working using the route to transport goods or they may be visitors to the area taking in the scenery for the first time.
- 12.7.4.81 People's attention to the scenery through which they are passing is likely to be varied depending on their purpose. Whilst people visiting the area are likely to give the views of it a high degree of attention, this does not mean that local people or people working do not appreciate the scenery of the route's setting, particularly on a beautiful day.
- 12.7.4.82 The views out to sea are less of a focus for the majority of the A99 between Latheron and Wick than in views from the A9. This is largely as a result of the depth of the settled landscape that occurs between the route and the sea combined with its shallow incline so that the sea is less of a defining component.

- 12.7.4.83 The most susceptible parts of the route are where it passes close to the coast or where the intervening land is at a lower level so that it's influence on views is more limited.
- 12.7.4.84 Caledonia North Site would be seen as an extension to existing OWFs in most views. Taken together susceptibility is considered to be Medium.
- 12.7.4.85 Combining the Medium value and the Medium susceptibility the sensitivity is considered to be **Medium**.

Magnitude of Change

- 12.7.4.86 Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-15 Blade Tip ZTV (Western Study Area) with Visual Receptors and Viewpoint Locations illustrates the extent of theoretical visibility. The ZTV shows that there are swathes of visibility along the A99 south of Wick. Between Latheron and Wick there are areas of visibility between Latheron and Swiney (south of Lybster) with patches of no visibility at Forse and Swiney House, a stretch of visibility between Occumster and the southern flanks of the Hill of Ulbster and a stretch from Borrowston to north of Thrumster.
- 12.7.4.87 Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-17 Hub Height ZTV (Western Study Area) Visual Receptors and Viewpoint Locations shows that the extent of theoretical visibility up to the hub is largely the same as for the blade tip ZTV, as shown on Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-10 Blade Tip and Hub Height ZTV Comparison. This demonstrates that from the road, full WTGs are likely to be visible.
- 12.7.4.88 In actuality visibility will be reduced due to screening by buildings, vegetation and local landform undulations.

Construction and Decommissioning

- 12.7.4.89 During the construction and decommissioning phases of the project the worst case scenario will occur when the majority of turbines and OSPs are present and when there are still large numbers of vessels and cranes present carrying out works. The activity associated with the WTG and OSPs will be distant (minimum 25.5km).
- 12.7.4.90 The magnitude of change during construction and decommissioning is considered to be **Low** between Latheron and Swiney (south of Lybster).
- 12.7.4.91 The magnitude of change during construction and operation is considered to be **Medium-Low** between Occumster and the southern flanks of the Hill of Ulbster.
- 12.7.4.92 The magnitude of change during construction and decommissioning is considered to be **Negligible** between Borrowston to north of Thrumster.
- 12.7.4.93 The magnitude of change during construction and decommissioning elsewhere along this section of the A99 is considered to be **No change**.

Operation

- 12.7.4.94 Caledonia North Site will be seen to the east during very good conditions.
- 12.7.4.95 From the southern part of the A99 between Latheron and Wick it will be seen largely beyond the BOWL and Moray East OWFs. Caledonia North Site will be seen in the eastern part of the view, which means that the WTGs will be backlit for the first part of the day and be seen in shadow. As such during these times of day they may contrast with a pale sky background. WTGs that are lit by the sun, as is the case in the afternoon/evening, could potentially increase contrast against the sky background making them more apparent when visibility is very good during these times of the day. Located to the east and due to the prevailing wind direction, the angle of the rotors will generally be aligned at an angle to the viewpoint such that the blades will be directed away from the viewpoint location, occupying less space. This also reduces the influence of blade movement in the view.
- 12.7.4.96 Between Latheron and Swiney (south-east of Lybster on the A99) Caledonia North Site will be seen along the distant seascape horizon beyond the foreground of settled farmland and within relatively narrow sections of views which are available out to sea. Caledonia North Site will occupy between 30 – 40 degrees of the HFoV along this section of the road and will be seen almost entirely behind the existing OWFs. In views from Lybster (Viewpoint 9) Caledonia North Site will be 34.9km distant, visible along the horizon as blades, hubs, towers and foundations. Due to the curvature of the earth, angle of view and depth of the layout of the Caledonia North Site will result in the most distant turbines appearing lower in the view than those to the front of the wind farm. The more distant turbines will be visible as hubs, blades and towers to base (no foundations). Further, the increased separation from the viewpoint to the more distant turbines means that they will appear to be less visible than the closest. The layout of Caledonia North Site echoes the pattern of existing OWF and will be seen within the context of existing OWFs, such as it will add to the visual complexity of vertical elements along the horizon and extend the spread slightly more northwards. Caledonia North Site WTGs will appear to be of a larger scale than existing OWFs WTGs. However, as there are no seascape features that indicate distance, the larger scale of the Caledonia North Site WTGs will appear to be closer due to the anticipated interactions of scale and distance, and perspective, avoiding the perception of distortions of scale. This is aided by the smaller turbines of BOWL and Moray East being slightly closer.
- 12.7.4.97 Between Occumster and the southern flanks of the Hill of Ulbster the A99 routes closer to the coast between Occumster and Whaligoe before moving further inland towards the Hill of Ulbster. There are stretches along this section of the road where the sea forms a broad expanse of background views and places where intervening landform between the road and the coastal edge rises restricting visibility. Caledonia North Site will be seen along the distant seascape horizon and will occupy between 30 – 40 degrees of the HFoV along

this section of the road. It will be seen behind existing OWFs with approximately third to half of the Caledonia North Site extending northwards beyond the existing spread of OWF. Views from Viewpoint 8 at Whaligoe represent worst-case views from this section of the road. In views from Whaligoe (Viewpoint 8) Caledonia North Site will be 27.5km distant, with closer WTGs visible from blade tips to foundations with more distant turbines will be seen as blades, hubs and towers to base (no foundations) above the horizon. Further, the increased separation from the viewpoint to the more distant turbines means that they will appear to be less visible than the closest. Caledonia North Site will appear to extend the spread of OWFs northwards along the seascape horizon. The layout of Caledonia North Site echoes that of the existing OWFs such that it will appear to be an extension, increasing visual complexity where there is an overlap. Caledonia North Site WTGs will appear to be of a larger scale than existing OWFs WTGs. However, as there are no seascape features that indicate distance, the larger scale of the Caledonia North Site WTGs will appear to be closer due to the anticipated interactions of scale and distance, and perspective, avoiding the perception of distortions of scale. This is aided by the smaller turbines of BOWL and Moray East being slightly closer.

- 12.7.4.98 Between Borrowston to north of Thrumster Caledonia North Site will be visible along the distant seascape horizon where beyond the intervening undulating landscape that restricts views of the sea to small parts of the view. Caledonia North Site will be seen along the distant seascape horizon and will occupy between 30 – 40 degrees of the HFOV along this section of the road. Caledonia North Site will be seen beyond the existing OWF, with approximately half of the Caledonia North Site now visible beyond the existing spread of OWF. When visible the closer WTGs of Caledonia North Site will be seen from blade tips to foundations, with more distant WTGs seen as blades, hubs and the majority of the towers. Further, the increased separation from the viewpoint to the more distant turbines means that they will appear to be less visible than the closest. Caledonia North Site will appear to extend the spread of OWFs northwards along the seascape horizon. The layout of Caledonia North Site echoes that of the existing OWFs such that it will appear to be an extension, increasing visual complexity where there is an overlap. Caledonia North Site WTGs will appear to be of a larger scale than existing OWFs WTGs. However, as there are no seascape features that indicate distance, the larger scale of the Caledonia North Site WTGs will appear to be closer due to the anticipated interactions of scale and distance, and perspective, avoiding the perception of distortions of scale. This is aided by the smaller turbines of BOWL and Moray East being slightly closer.
- 12.7.4.99 The magnitude of change during operation is considered to be **Low** between Latheron and Swiney (south of Lybster).
- 12.7.4.100 The magnitude of change during operation is considered to be **Medium-Low** between Occumster and the southern flanks of the Hill of Ulbster.

- 12.7.4.101 The magnitude of change during operation is considered to be **Negligible** between Borrowston to north of Thrumster.
- 12.7.4.102 The magnitude of change during operation elsewhere along this section of the A99 is considered to be **No change**.

Significance of Effect

Construction and Decommissioning

- 12.7.4.103 The visual effect of the Caledonia North Site during construction and decommissioning along the A99 between Latheron and Swiney (south of Lybster) is considered to be **Minor and Not Significant in EIA terms**.
- 12.7.4.104 The visual effect of the Caledonia North Site during construction and decommissioning along the A99 between Occumster and the southern flanks of the Hill of Ulbster is considered to be **Moderate-Minor and Not Significant in EIA terms**.
- 12.7.4.105 The along the A99 Borrowston to north of Thrumster is considered to be **Minor and Not Significant in EIA terms**.
- 12.7.4.106 The visual effect of the Caledonia North Site during construction and decommissioning elsewhere along this section of the A99 is considered to be **No effect**.
- 12.7.4.107 Effects will be adverse, short term and temporary.

Operation

- 12.7.4.108 The visual effect of the Caledonia North Site during operation along the A99 between Latheron and Swiney (south of Lybster) is considered to be **Minor and Not Significant in EIA terms**.
- 12.7.4.109 The visual effect of the Caledonia North Site during operation along the A99 between Occumster and the southern flanks of the Hill of Ulbster is considered to be **Moderate-Minor and Not Significant in EIA terms**.
- 12.7.4.110 The visual effect of the Caledonia North Site during operation along the A99 Borrowston to north of Thrumster is considered to be **Minor and Not Significant in EIA terms**.
- 12.7.4.111 The visual effect of the Caledonia North Site during operation elsewhere along this section of the A99 is considered to be **No effect**.
- 12.7.4.112 Effects will be adverse, long term and reversible.

Section 2: John o'Groats to Wick

Baseline Condition and Sensitivity

- 12.7.4.113 The A99 starts at the ferry terminal at John o'Groats and leaves the sparsely settled village located within Coastal Crofts and Small Farms LCT 40 and heading south crosses into Sweeping Moorland and Flows LCT 41. It turns west then east to skirt the summit of Warth Hill. The view north from Warth Hill towards the Pentland Firth and Orkney is denoted a Key View in OWESG (East/North Coast Junction – north and northeast).

- 12.7.4.114 Heading west again for a short section beyond the summit the road aligns so that Stroupster wind farm is seen straight ahead. It is along this stretch of road that the Outer Moray Firth is seen beyond Freswick Bay for the first time to the east (from side windows). As the road turns south it crosses back into LCT 40 with open views across pasture, scattered settlement of Freswick and wood pole lines. There are narrow views towards the sea between the headlands on either side of Freswick Bay. The A99 between Freswick and John o'Groats is denoted as a Key Route in OWESG.
- 12.7.4.115 Freswick House forms a notable landmark on the edge of the coast, with the full sweep of the bay visible as the road dips then rises again to climb the Hill of Harley. The road routes south-east and closer to the coast to skirt the summit. There are open views of the sea from the gently rounded summit of the hill to the north-east, east and south-east with existing OWFs visible during very good conditions.
- 12.7.4.116 The road turns south-west with fields gently sloping down to the coastal cliffs affording open seaward views. The broad Sinclair's Bay with Noss Head promontory is visible to the south as the road starts the descent down the gentle slope of the hillside. Stroupster wind farm is seen across farmland to the west along the horizon.
- 12.7.4.117 As the A99 enters the small settlement of Auckengill and crosses Loch Burn, there is a narrower view of the sea between the lower slopes of the Hill of Harley and the Hill of Clayon. The road starts to climb and enters the scattered settlement of Nybster and routes closer to the coast. Buildings are sited close to the roadside briefly obscuring views of the sea occasionally.
- 12.7.4.118 South of Nybster there are open views of the sea occupying nearly 180 degrees of the view with Noss Head to the south with existing OWFs seen beyond it during very good conditions. The road moves close to the coast and turns south-west following the coastline. Settlement increases along the roadside and also some buildings set further back inland. The layby by the Baptist Manse north of Keiss is denoted a Key View in OWESG (East Coast – south) where there are expansive views seaward and of the coast and inland. Keiss Castle and the remains of the former castle form landmarks at the edge of Keiss near the coast. The sandy beach of Sinclair's Bay is seen beyond appearing to extend to Noss Head.
- 12.7.4.119 North of the Square of Keiss the road turns south-west and straightens, passing the avenue of trees leading to Keiss Castle with views towards the comparatively compact settlement of Keiss with the A99 cutting through it. The view eastwards is across pasture to the open seascape including views of existing OWFs visible during very good conditions. Crossing through Keiss the built form encloses views to the wider landscape.
- 12.7.4.120 Leaving Keiss the view opens up again. Just south of settlement envelope viewpoint 4 is located. The sea is seen across pasture with crofts set against the seascape background and existing OWFs seen along the horizon during

very good conditions. Onshore wind energy development is visible along the horizon to the southwest framing the distinctive landmark hills of Morven and the Scarabens. The road aligns more southward and slightly more inland where the beach of Sinclair's Bay begins and crosses into Farmed Lowland Plain LCT 143, with the dunes and links obscuring sea views. The Loch of Wester is seen inland after which the road crosses the burn and pipeline fabrication facility before turning to head south-south-east following the bay. The landscape rises gently such that sea is visible again at Quoys of Reiss seen beyond pasture.

- 12.7.4.121 The road turns inland slightly such that sea views are behind the direction of travel as the A99 meets the B876 at Reiss where it turns south-east. There is a narrower view of the sea between Reiss and Ackergill with Ackergill tower and its strip of woodland a landmark along the southern edge of Sinclair's Bay. The view of the sea is seen obliquely and eventually behind the direction of travel. Views westward inland across farmland include views of onshore wind energy development seen after the A99 passes the Hill of Harland. The A99 passes the Wick airport and settlement becomes denser and roadside vegetation is common. There are no views of the sea from this point into Wick.
- 12.7.4.122 Users of the A99 are transient and therefore their appreciation of views will be of short duration and diverse due to where they are seated in the vehicle and which stretch of the A99 is being travelled.
- 12.7.4.123 The purpose for using the A99 may be varied. For example, road users may be local, regular travellers, people working using the route to transport goods or they may be visitors to the area taking in the scenery for the first time.
- 12.7.4.124 People's attention to the scenery through which they are passing is likely to be varied depending on their purpose. Whilst people visiting the area are likely to give the views of it a high degree of attention, this does not mean that local people or people working do not appreciate the scenery of the route's setting, particularly on a beautiful day.
- 12.7.4.125 The views out to sea are less of a focus for the majority of the A99 between Latheron and Wick than in views from the A9. This is largely as a result of the depth of the settled landscape that occurs between the route and the sea combined with its shallow incline so that the sea is less of a defining component.
- 12.7.4.126 The most susceptible parts of the route are where it passes close to the coast or where the intervening land is at a lower level so that it's influence on views is more limited.
- 12.7.4.127 Caledonia North Site would be seen as an extension to existing OWFs in most views. Taken together susceptibility is considered to be Medium.
- 12.7.4.128 Combining the Medium value and the Medium susceptibility the sensitivity is considered to be **Medium**.

Magnitude of Change

- 12.7.4.129 Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-15 Blade Tip ZTV (Western Study Area) with Visual Receptors and Viewpoint Locations illustrates the extent of theoretical visibility. The blade tip ZTV shows that there is visibility along the A99 for a stretch at Reiss, and intermittently between south of Keiss and Warth Hill.
- 12.7.4.130 Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-17 Hub Height ZTV (Western Study Area) Visual Receptors and Viewpoint Locations shows that the extent of theoretical visibility up to the hub is largely the same as for the blade tip ZTV, as shown on Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-10 Blade Tip and Hub Height ZTV Comparison. This demonstrates that from the road, full WTGs are likely to be visible.
- 12.7.4.131 In actuality visibility will be reduced due to screening by buildings, vegetation and local landform undulations. At Freswick intervening landscape features mean that there is limited visibility of the seascape horizon. Where there is visibility this eastwards across Freswick Bay (Caledonia North Site is located south-east beyond Ness Head which screens the view).

Construction and Decommissioning

- 12.7.4.132 During the construction and decommissioning phases of the project the worst case scenario will occur when the majority of turbines and OSPs are present and when there are still large numbers of vessels and cranes present carrying out works. The activity associated with the WTG and OSPs will be distant (minimum 26.1km).
- 12.7.4.133 The magnitude of change during construction and decommissioning is considered to be **Low** at Reiss.
- 12.7.4.134 The magnitude of change during construction and decommissioning is considered to be **Medium-Low** intermittently between south of Keiss and Warth Hill.
- 12.7.4.135 The magnitude of change during construction and decommissioning elsewhere along this section of the A99 is considered to be **Negligible** where there is some limited visibility and **No change**.

Operation

- 12.7.4.136 Caledonia North Site will be seen to the south-east during very good conditions.
- 12.7.4.137 Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-11 Horizontal Angle ZTV Caledonia OWF shows that Caledonia North Site will occupy between 10 - 30 degrees of the HFOV as seen from the A99 between John o'Groats and Wick. It will generally appear behind and extend northwards from existing OWFs. Caledonia North Site will be seen in the south-eastern part of the view, which means that the WTGs will be backlit for the first part of the day and be seen in shadow. As such during

these times of day they may contrast with a pale sky background. WTGs that are lit by the sun, as is the case in the afternoon/evening, could potentially increase contrast against the sky background making them more apparent when visibility is excellent during these times of the day. Located south-east and due to the prevailing wind direction, the angle of the rotors will generally be aligned at an angle to the viewpoint such that the blades will be directed away from the viewpoint location, occupying less space. This also reduces the influence of blade movement in the view.

- 12.7.4.138 Between Warth Hill and south of Keiss Caledonia North Site will be visible beyond the foreground of settled crofting landscape and across the wide expanse of the seascape horizon and beyond Noss Head. Caledonia North Site will occupy between 10 – 30 degrees of the HFoV along this section of the road. In views from Keiss (Viewpoint 4) Caledonia North Site will be 33.1km distant, visible along the horizon as blades, hubs and to tower base (no foundations) whilst by Warth Hill the range will have increased to approximately 35km. Due to the curvature of the earth, angle of view and depth of the layout of the Caledonia North Site will result in the most distant turbines appearing lower in the view than those to the front of the wind farm. The more distant turbines will be visible as hubs, blades and the upper parts of towers above the horizon. Further, the increased separation from the viewpoint to the more distant turbines means that they will appear to be less visible than the closest. The layout of Caledonia North Site echoes the pattern of existing OWF and it will be seen within the context of existing OWFs, such as it will add to the visual complexity of vertical elements along the horizon and extend the spread of OWFs northwards into the seascape beyond Noss Head. Caledonia North Site WTGs will appear to be of a larger scale than existing OWFs WTGs. However, as there are no seascape features that indicate distance, the larger scale of the Caledonia North Site WTGs will appear to be closer due to the anticipated interactions of scale and distance, and perspective, avoiding the perception of distortions of scale.
- 12.7.4.139 At Reiss Caledonia North Site will be seen beyond the intervening farmland, Sinclair's Bay and Noss Head along the horizon and will occupy between 20 – 30 degrees of the HFoV along this section of the road. It will be seen beyond the existing OWF, with approximately two-thirds of the Caledonia North Site extending northwards beyond the existing spread of OWFs. OSPs will be visible from this part of the road. When visible the closer WTGs of Caledonia North Site will be seen from blade tips to foundations, with more distant WTGs seen as blades, hubs and the upper part of towers. Further, the increased separation from the viewpoint to the more distant turbines means that they will appear to be less visible than the closest. Caledonia North Site will appear to extend the spread of OWFs northwards along the seascape horizon. The layout of Caledonia North Site echoes that of the existing OWFs such that it will appear to be an extension, increasing visual complexity where there is an overlap. Caledonia North Site WTGs will appear to be of a larger scale than existing OWFs WTGs. However, as there are no seascape features

that indicate distance, the larger scale of the Caledonia North Site WTGs will appear to be closer due to the anticipated interactions of scale and distance, and perspective, avoiding the perception of distortions of scale.

- 12.7.4.140 The magnitude of change during operation is considered to be **Medium-Low** between south of Keiss and Warth Hill.
- 12.7.4.141 The magnitude of change during operation is considered to be **Low** at Reiss.
- 12.7.4.142 The magnitude of change during operation elsewhere along this section of the A99 is considered to be **Negligible** where there is some limited visibility and **No change** elsewhere.

Significance of Effect

Construction and Decommissioning

- 12.7.4.143 The visual effect of the Caledonia North Site during construction and decommissioning along the A99 between south of Keiss and Warth Hill is considered to be **Moderate-Minor and Not Significant in EIA terms**.
- 12.7.4.144 The visual effect of the Caledonia North Site during construction and decommissioning along the A99 at Reiss is considered to be **Minor and Not Significant in EIA terms**.
- 12.7.4.145 The magnitude of change during construction and decommissioning elsewhere along this section of the A99 is considered to be **Minor and Not Significant in EIA terms**, where there is some limited visibility and **No change** elsewhere.
- 12.7.4.146 Effects will be adverse, short term and temporary.

Operation

- 12.7.4.147 The visual effect of the Caledonia North Site during operation along the A99 between south of Keiss and Warth Hill is considered to be **Moderate-Minor and Not Significant in EIA terms**.
- 12.7.4.148 The visual effect of the Caledonia North Site during operation along the A99 at Reiss is considered to be **Minor and Not Significant in EIA terms**.
- 12.7.4.149 The magnitude of change during construction and decommissioning elsewhere along this section of the A99 is considered to be **Minor and Not Significant in EIA terms**, where there is some limited visibility and **No change** elsewhere.
- 12.7.4.150 Effects will be adverse, long term and reversible.

12.7.5 Assessment of Effects on Landscape and Seascape Character

- 12.7.5.1 The landscape and seascape character effects of Caledonia North Site are assessed in this section. The changes resulting from Caledonia North Site to the landscape and seascape resource are assessed during construction,

operation and decommissioning stages.

- 12.7.5.2 Effects on landscape and seascape character are manifested where the pattern of elements that characterises the landscape or seascape will be altered by the addition of Caledonia North Site to the seascape where visibility of Caledonia North Site may alter the way in which this pattern of elements is perceived.
- 12.7.5.3 Landscape/seascape character receptors fall into three groups:
- Landscape Character Types (LCTs) (as defined by NatureScot as terrestrial LCAs);
 - Regional Coastal Character Areas (RCCAs) (as defined by coastal character assessment); and
 - Landscape designations (e.g., SLAs, NSAs).
- 12.7.5.4 These receptors are shown together in Volume 7B, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-2 Landscape and National Coastal Character and in conjunction with the ZTV in Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figures 12-13 and 12-14.
- 12.7.5.5 A preliminary assessment was carried out through a desk study and site survey which examined the characteristics of the RCCAs, LCTs and Landscape Planning Designations and the visibility of Caledonia North Site using the ZTV and wirelines (see Section 12.7.2). The preliminary assessment identified those RCCAs, LCTs and Landscape Planning Designations that may be significantly affected and that are assessed in detail.
- 12.7.5.6 To avoid the duplication that would result from the assessment of effects on receptors that apply to the same areas of land the effects on the RCCAs and any concurrent LCTs are considered together. Where relevant LCTs or Landscape Planning Designations do not correspond with an RCCA these are assessed separately.
- 12.7.5.7 The baseline characteristics of those RCCAs and LCTs, which are assessed in detail are described, including night time characteristics. These take into account the Special Qualities as set out in any concurrent SLA citations contained in *THC Assessment of Highland Special Landscape Areas* (2011) and Aberdeenshire Council *Aberdeenshire Special Landscape Areas*.
- 12.7.5.8 The assessment for each of these receptor types is described in the following sections of this chapter. The assessment has taken account of relevant aspects of the THC (2017) Landscape Sensitivity Appraisal: Caithness and has drawn upon the coastal characterisation set out in the Moray West EIAR.
- 12.7.5.9 A summary of the effects on each of the SLAs that may be significantly affected is provided at the end of this section.

Duncansby Head RCCA

12.7.5.10 Viewpoint 3 Duncansby Head is located in this RCCA.

Baseline Character and Sensitivity

12.7.5.11 Duncansby Head RCCA stretches from Skirza Head (the northern headland of Freswick Bay) to the Ness of Duncansby. Forms the coastal edge to High Cliffs and Sheltered Bays LCT 141. Please see Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-13 Blade Tip ZTV (Western Study Area) with Designations, Character and RCCAs..

RCCA Baseline Character

12.7.5.12 Maritime influences:

- Coast predominantly orientated to the east.
- Dynamic coastal influences and processes under continual force from the sea.
- Physical and navigational link to the Pentland Firth and coastal waters of Orkney Islands.
- Tidal streams of Atlantic and North Sea ebbing in opposite directions forming eddies, races and overfalls including Boars of Duncansby.
- Seaward views over Pentland Firth, extending to Dunnet Head and Orkney Islands to the north.
- Major shipping route passing into Pentland Firth/Orkney Isles with high level of activity, including passenger ferries. Shipping is a common feature seen further out to sea on the horizon.
- Clarity of northern light, sense of exposure, and sounds and smell of the sea.
- Lights at night from shipping and navigation aids.

12.7.5.13 Character of coastal edge:

- High Old Red Sandstone Cliffs eroded into a complex mix of erosion landforms including cliffs, stacks, geos, arches and wave-cut platforms with small shingle bays at their base.
- Large-scale landscape with few man-made elements.
- Stacks, geos, caves and collapsed cliffs, including the prominent Stacks of Duncansby.
- Strong contrast between verticality of dark cliffs and wide horizon of sea.
- Cliffs provide nesting ground for significant bird colonies, which provide distinctive experience.

- 12.7.5.14 Character of immediate hinterland:
- High moorland hinterland where semi-natural grass heathland is prevailing landcover.
 - Settlement is almost entirely absent, with just occasional isolated crofts in hinterland.
 - Lighthouse located at Duncansby Head is a prominent feature on the headland by day and night due to its moving light beam.
 - Visitor parking at Duncansby Head and cliff top paths provide access for walkers.
 - Particularly exposed and remote character, particularly when weather/sea is turbulent.
 - Scenic value recognized by local designation (Duncansby Head Special Landscape Area).
- 12.7.5.15 Human activity: presence or absence
- Remote and exposed with some wildness attributes associated with sense of isolation, due to absence of settlement, risk associated with accessing cliffs and elemental coastal processes.
 - Location of headland at extreme north-eastern point of British mainland is a compelling attraction.
 - Car parks adjacent to lighthouse are a focus for visitors want to appreciate views of the dynamic forces of the Pentland Firth and the waves crashing into the coastal edge.
 - Presence of OWF includes large, moving form of development as a human influence out at sea visible in very good to excellent visibility conditions.
 - Presence of onshore wind farms and WTGs.
 - Minimal illumination at night except from lighthouse, housing towards John o' Groats and OWF aviation lighting flashing on the skyline to the south-east.
- 12.7.5.16 Views and visibility:
- Open, panoramic and expansive views from coastline.
 - Elevation of cliffs allows distant views east and north to Pentland Firth and Orkney Islands, and island of Stroma and the Pentland Skerries form focal features.
 - Views from the eastern coastline are of the open sea and along the cliffs that form the coastline including cliffs, geos, stacks, arches, caves and wave-cut platforms.
 - Distinctive and diverse series of views from paths parallel to coastline.
 - Duncansby Head lighthouse, Duncansby Stacks and the headland being the most north-easterly part of mainland UK are visitor attractions.

- Distant views by day and night of OWFs, when visibility allows.

High Cliffs and Sheltered Bays LCT 141 Baseline Character

- 12.7.5.17 Relevant key characteristics (NatureScot, 2019) of the LCT 141 adjacent to RCCA Duncansby Head are listed below:
- "Duncansby Head, with high, fissured and blocky cliffs, jagged asymmetric rock stacks, arches and geos."
 - "Occasional inlets and coves, often with very deep and sheltered waters, and sometimes containing tiny harbours tucked between cliffs and not readily visible from the main coast road and settlement."
 - "Moorland largely abutting this Landscape Character Type which is particularly open and sweeping to the east and north within Caithness."
 - The most prominent and exposed headlands marked by lighthouses.
 - Exhilarating experience of being precariously perched upon a high edge on the cliff tops, offering open elevated views and a perception of huge space.
 - Views of turbulent currents at the juncture of the Pentland Firth and North Sea, heightening the sense of wildness experienced from the headland.
 - The absence of development along the remote stretches of coast and a strong sense of naturalness creating a wild landscape character"
- 12.7.5.18 Additional key features identified as part of verification of baseline through desktop study and site visits include:
- Views of OWFs are a characteristic of seascape views from east coast of Caithness.
 - Views of onshore wind farms and WTGs are a characteristic of landward views.

Sensitivity

- 12.7.5.19 The majority of Duncansby Head RCCA lies within Duncansby Head SLA. Duncansby Head lighthouse, Duncansby Stacks and the headland being the most north-easterly part of mainland UK are visitor attractions along the coast within this RCCA. The value is considered to be Medium-High.
- 12.7.5.20 The occasional bays along the coast provide containment, with the expansive and large-scale cliffs, which constitute the majority of the coastal edge of the RCCA and LCT, having a strong association with the Pentland Firth to the north, the North Sea to the east and the Outer Moray Firth to the south-east where the Caledonia North Site will be located. The RCCA is highly characterised by the higher wildness characteristics of the cliffs, the smaller-scale landscape features of the bays and largely unsettled coastal hinterland. These strong, inherent characteristics ensure this coastal landscape less susceptible to changes occurring in distant views out across the vast seascape.
- 12.7.5.21 Susceptibility to character change by views of the Caledonia North Site

elements is moderated by the fact that it will not physically change the pattern or elements of the landscape and coast but will be visible as part of the wider sea context at some distance within parts of the view that are less of a focus from the headland.. Visibility of OWF development has some existing influence from parts of the RCCA and this characteristic would become more defined by the Caledonia North Site. The susceptibility is assessed as Medium.

- 12.7.5.22 In combining the Medium-High value with the Medium susceptibility, the sensitivity of Duncansby Head RCCA and LCT 141 are considered to be **Medium-High**.

Magnitude of Change

- 12.7.5.23 Closest point within this RCCA is 34.6km from the Caledonia North Site.
- 12.7.5.24 Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-13 Blade Tip ZTV (Western Study Area) with Designations, Character and RCCAs illustrates that there is theoretical visibility of all of the WTGs of the Caledonia North Site along the eastern coast of the RCCA. There is no or limited visibility from east and north-east facing coves and inlets along the east coast.
- 12.7.5.25 There is theoretical visibility throughout the southern part of LCT 141 up to the ridgeline just south of the minor road that leads up to the lighthouse. Due to the open, gently undulating landform with few landscape features actual visibility corresponds with theoretical visibility.

Construction and Decommissioning

- 12.7.5.26 There will be no physical change to the character of this RCCA and LCT. During the construction and decommissioning phases of the project the worst case scenario will occur when the majority of turbines and OSPs are present and when there are still large numbers of vessels and cranes present carrying out works which will extend and intensify the existing OWF character influence. All 47 WTGs will be visible once constructed. However, the actual influence of Caledonia North Site on coastal and landscape character is moderated by its separation from the RCCA and LCT, the characterising influence of existing OWFs and the expansive seascape it will be located within, which will remain key characteristics of the coastal setting. The only changes are as a result of visibility of the construction and decommissioning of the Caledonia North Site elements in views from the RCCA as part of its wider setting.
- 12.7.5.27 The magnitude of change to character during construction and decommissioning is considered to be **Low**. This covers the Duncansby Head RCCA and the adjacent LCT 141.

Operation

- 12.7.5.28 The characteristics and scale of Caledonia North Site will be an external influence on the coastal edge throughout this RCCA and adjacent LCT, the

only changes will be as a result of visibility of the Caledonia North Site beyond the horizon. There will be no physical change to the character of this RCCA. The innate, strongly defined elements of this RCCA will not be directly affected. The only changes are as a result of visibility of the Caledonia North Site in views from the RCCA as part of its wider setting.

- 12.7.5.29 During the operational phase of the project all 47 WTGs will be visible with the closer WTGs of Caledonia North Site visible as foundations, towers, hubs and blades above the horizon and more distant WTGs visible as blades, hubs and the upper part of the tower above the horizon. The most distant WTGs are 65.1km away.
- 12.7.5.30 Caledonia North Site will introduce additional vertical features to the seascape horizon, the distance to which reduces their vertical impact. Due to the orientation of the Caledonia North Site to the coastline, the depth of the layout and the separation from the coastline the more distant turbines will appear less visible than the closest. The separation of the Caledonia North Site from the coast and the limited perceived prominence of the Caledonia North Site along the horizon at distance from the RCCA will reduce its influence on the RCCA.
- 12.7.5.31 Orientation of coastal edge to the north and east will both increase and decrease the effect of Caledonia North Site, which is seen to the south-east, adjacent to the existing OWFs which are already a characterising element along the horizon. The broad footprint of the Caledonia North Site relates to the existing horizontal emphasis of the seascape and the wide proportion of the view existing OWFs occupy. Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-11 Horizontal Angle ZTV Caledonia North shows that the Caledonia North Site will occupy between 10 – 20 degrees of the HFoV.
- 12.7.5.32 Existing OWFs are visible from blade tip to foundations with more distant turbines visible as blades and hubs due to the curvature of the earth. OWFs are 32.5km at their closest point and visible during very good to excellent conditions. Caledonia North Site will appear to extend the spread of OWFs further east, slightly intensifying the existing OWF character influence. The pattern of the layout of Caledonia North Site echoes that of the existing OWFs creating a cohesive feature along the seascape horizon, albeit the Caledonia North Site WTGs will be larger in scale.
- 12.7.5.33 The slight distortion of perspective resulting from the differences in scale between the larger and more distant Caledonia North Site WTGs and the existing smaller scale OWF WTGs will result in greater visual complexity. This will be restricted to the eastern edge of the Caledonia North Site where the Caledonia North Site WTGs will appear to be closer, visible to foundations and to extend the spread of existing OWFs with a more prominent addition.
- 12.7.5.34 Caledonia North Site will be seen in the south-eastern part of the view, which means that the WTGs will be backlit for the first half of the day and be seen in

shadow. During these times of the day the WTGs will potentially contrast less with a light sky background. WTGs that are lit by the sun, as is the case in the afternoon/evening, could potentially increase contrast against the sky background making them more apparent when visibility is very good during these times of the day.

- 12.7.5.35 Located to the south-east and due to the prevailing wind direction, the angle of the rotors will generally be aligned at an angle to the viewpoint such that the blades will be directed away from the viewpoint location, occupying less space. Movement of WTG blades at these long ranges is difficult to discern with the naked eye.
- 12.7.5.36 The views from large scale cliffs will be affected by the addition of Caledonia North Site, however the effect is limited by the distance to it and the proportion the spread of Caledonia North Site will add to the existing extent of OWFs.
- 12.7.5.37 Caledonia North Site will be in a different part of views from focal features along the coastal edge (e.g., Duncansby Stacks and the Pentland Firth) and will not affect the appreciation of the physical influences which shape the coastal edge but will add to the wind farm seascape as a visually separate focus in the background of views.
- 12.7.5.38 Taking into account the description of change and the factors of magnitude described above, the magnitude of change for the Caledonia North Site during operation is considered to be Low.

Significance of Effect

Construction and Decommissioning

- 12.7.5.39 The effect on the character of Duncansby Head RCCA and the adjacent LCT 141 during construction and decommissioning of the Caledonia North Site is considered to be **Moderate-Minor and Not Significant in EIA terms** along the coastal edge and for up to 500m inland. Effects will be adverse, short term and temporary.

Operation

- 12.7.5.40 The effect on the character of Duncansby Head RCCA and the adjacent LCT 141 during operation of the Caledonia North Site is considered to be **Moderate-Minor and Not Significant in EIA terms** along the coastal edge and for up to 500m inland. Effects will be adverse, long term and reversible.

Freswick Bay and Nybster Coast RCCA

- 12.7.5.41 There are no viewpoints located in this RCCA.

Baseline Character and Sensitivity

- 12.7.5.42 Freswick Bay and Nybster Coast RCCA stretches from Tang Head (the northern headland of Sinclair's Bay) to Skirza Head (the northern headland of Freswick Bay). It forms the coastal edge to Coastal Crofts and Small Farms

LCT 144. Please see Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-13 Blade Tip ZTV (Western Study Area) with Designations, Character and RCCAs.

RCCA Baseline Character

- 12.7.5.43 Maritime influences
- Coast predominantly oriented to the south-east.
 - Dynamic coastal influences associated with migration of sand and constantly changing character at Freswick Bay.
 - Freswick Burn discharges into the sea at Freswick Bay.
 - Strong exposure means that wind and wave erosion is active on cliffs on both sides of the bay.
 - Water based recreational beach activities, such as surfing (e.g., at Skirza Harbour).
 - Low level of shipping in coastal waters with some recreational sailing. Shipping is a common feature seen further out to sea on the horizon.
 - Settlement associated with the sea (e.g., fishing village of Skirza).
 - Open and exposed with clarity of northern light, sense of exposure, and sounds and smell of the sea.
 - Lights at night from shipping and navigation aids.
- 12.7.5.44 Character of coastal edge
- Low cliffs of Caithness flagstone form rocky coastline with section of sweeping curved sandy beach at Freswick Bay to the north.
 - Inlets, coves and geos form indented edge to cliff coastline.
 - Beach materials include shingle derived from wave erosion of nearby sandstone cliffs, and sand derived from the deposition of sandstone, silt from the burn and offshore sources.
 - Gentle slopes with open and exposed characteristics. Freswick Bay is fully exposed to the east and the south-east with some shelter to the north-east quarter.
 - Smooth surface, sandy beach at Freswick Bay is steeply sloping and dune front has been affected by sand extraction.
 - Exposed coastline with open views and strong historical associations of castles and cliff top forts and cultural interest of fishing villages.
- 12.7.5.45 Character of immediate hinterland
- Settlement in the form of crofts at Nybster and Skirza, a linear fishing village overlooking Freswick Bay, and the hamlet of Freswick located slightly inland from the bay along the A99.

- The northern part of Keiss is located within the hinterland of this RCCA.
- A99 passes parallel to the coast with scattered settlement along it.
- Freswick House draws attention as a focal point from around Freswick Bay.
- Keiss Castle is a landmark along the southern part of the coastline, close to Sinclair's Bay.
- Simple field pattern running parallel and at right angles to the coastline.
- Cultivated fields associated with crofts interspersed with semi-natural heathland.

12.7.5.46 Human activity: presence or absence

- Although exposed, built features including main road and settlements limit sense of wildness.
- Presence of OWF includes large, moving form of development as a human influence out at sea visible in very good to excellent visibility conditions.
- Presence of onshore wind farms and WTGs.
- Some illumination at night from small farms. Aviation and navigational lighting on OWF WTGs is visible.

12.7.5.47 Views and visibility:

- Open, panoramic views from clifftops with more enclosed views from beaches and bays along the coast with headlands and cliffs restricting longer-distance views.
- Headlands restrict views south along full length of coast (Ness Head and Noss Head).
- Cliffs, geos and beaches become visible from clifftops at coves and bays and are regular, focal features along the coast. At these locations the focus of views is down and close-range, with the open sea forming the backdrop.
- Castles and other historic features such as brochs are common focal features along the coast (i.e., Freswick Castle, Bucholly Castle, Keiss Castle).

Coastal Crofts and Small Farms LCT 144 Baseline Character

12.7.5.48 Relevant key characteristics (NatureScot 2019) of LCT 144 adjacent to RCCA Freswick Bay and Nybster Coast are listed below:

- "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.
- More dispersed settlement pattern on the east coast to the north of Brora."
- "A number of historic sites including churches, castles, mills and cemeteries.
- Highly visible landscape, seen from major roads and, on the east Sutherland coast, the railway.
- 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."

12.7.5.49 Additional key characteristics identified as part of verification of baseline through desktop study and site visits include:

- Views of OWFs are a characteristic of seascape views from east coast of Caithness.
- Views of onshore wind farms and WTGs are a characteristic of landward views.

Sensitivity

12.7.5.50 Neither Freswick Bay and Nybster Coast RCCA nor LCT 144 lie within or look over any landscapes covered by a landscape planning designation. Keiss Castle, Freswick Castle and Bucholly Castle are local visitor attractions along the coast within this RCCA. The value is considered to be Medium.

12.7.5.51 Inlets and coves along the coast, as well as Freswick Bay provide containment, with the expansive and large-scale cliffs, which constitute the majority of the coastal edge of the RCCA and characterise the LCT, having a strong association with the Outer Moray Firth where the Caledonia North Site will be located. The RCCA is highly characterised by the higher wildness characteristics of the cliffs, the smaller-scale landscape features of the inlets and coves, Freswick Bay and scattered settlement of the coastal hinterland. These strong, inherent characteristics ensure this coastal landscape less susceptible to changes occurring in distant views out across the vast seascape.

12.7.5.52 Susceptibility to the Caledonia North Site elements is moderated by distance and the fact that the seascape is influenced by existing OWFs. Visibility of OWF and other development has some existing influence from parts of the RCCA and this characteristic would become more defined by the Caledonia North Site.

12.7.5.53 Taking all of these factors into account susceptibility is considered to be Medium.

- 12.7.5.54 In combining the Medium value with the Medium susceptibility, the sensitivity of RCCA Freswick Bay and Nybster Coast and LCT 144 are considered to be **Medium**.

Magnitude of Change

- 12.7.5.55 Closest point within this RCCA is 32.5km from Caledonia North Site.
- 12.7.5.56 Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-13 Blade Tip ZTV (Western Study Area) with Designations, Character and RCCAs illustrates that there is theoretical visibility of all of the WTGs of the Caledonia North Site along the full length of the RCCA except within north-east facing coves and beaches and reduced visibility along the north-east facing section of Freswick Bay between Byke Yards and Freswick House. Actual visibility corresponds with theoretical visibility along the coast due to the open and exposed nature of the coastline.
- 12.7.5.57 There is theoretical visibility throughout LCT 144 that forms the coastal hinterland to the RCCA except for a north-west facing slope west of Nybster and an area inland from Freswick House. Due to the open, gently undulating landform with few landscape features actual visibility largely corresponds with theoretical visibility.

Construction and Decommissioning

- 12.7.5.58 During the construction and decommissioning phases of the project the worst case scenario will occur when the majority of WTGs and OSPs are present and when there are still large numbers of vessels and cranes present carrying out works. The activity associated with the WTG and OSPs will occur along the seascape horizon, often beyond the intervening, existing OWFs.
- 12.7.5.59 However, the actual influence of the Caledonia North Site on coastal and landscape character is moderated by its separation from the RCCA, the characterising influence of existing OWFs and the expansive seascape it will be located within, which will remain key characteristics of the coastal setting. The characteristics of the RCCA will not be directly affected. The only changes are as a result of visibility of the construction and decommissioning of the Caledonia North Site elements in views from the RCCA as part of its wider setting.
- 12.7.5.60 The magnitude of change during construction and decommissioning is considered to be Low.

Operation

- 12.7.5.61 The characteristics and scale of the Caledonia North Site will be an external influence on the coastal edge throughout this RCCA and adjacent LCT 144, the only changes will be as a result of visibility of the Caledonia North Site beyond the horizon. There will be no physical change to the character of this RCCA. The innate, strongly defined elements of this RCCA will not be directly affected. The only changes are as a result of visibility of the Caledonia North Site in views from the RCCA as part of its wider setting.

- 12.7.5.62 During the operational phase of the project OSPs and all 47 WTGs will be visible with the closer WTGs of Caledonia North Site visible as towers, hubs and blades above the horizon and more distant WTGs visible as blades above the horizon. The most distant WTGs are 60.1km away.
- 12.7.5.63 Caledonia North Site will introduce additional vertical, moving, development features to the seascape horizon, the distance to which reduces their vertical impact. Due to the orientation of the Caledonia North Site to the coastline, the depth of the layout and the separation from the coastline the more distant turbines will appear less visible than the closest. The separation of the Caledonia North Site from the coast and the limited perceived prominence of the Caledonia North Site along the horizon at distance from the RCCA will reduce its influence on the RCCA.
- 12.7.5.64 Orientation of coastal edge to the south-east will both increase and decrease the effect of Caledonia North Site, which is seen to the south-east, adjacent to the existing OWFs which are already a characterising element along the horizon. The broad footprint of the Caledonia North Site relates to the existing horizontal emphasis of the seascape and the wide proportion of the view existing OWFs occupy. Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-11 Horizontal Angle ZTV Caledonia North shows that the Caledonia North Site will occupy between 10 – 30 degrees of the HFoV with part of this occurring behind the Moray East OWF.
- 12.7.5.65 Existing OWFs are visible from blade tip to tower base with more distant turbines visible as blades and hubs due to the curvature of the earth. OWFs are 27.8km at their closest point and visible during very good to excellent conditions. Caledonia North Site will appear to extend the spread of OWFs further east, slightly intensifying the existing OWF character influence. The pattern of the layout of Caledonia North Site echoes that of the existing OWFs creating a cohesive feature along the seascape horizon, albeit the Caledonia North Site WTGs will be larger in scale, which makes them more prominent.
- 12.7.5.66 The slight distortion of perspective resulting from the differences in scale between the larger and slightly more distant Caledonia North Site WTGs and the existing smaller scale OWF WTGs will result in greater visual complexity. This will be restricted to the eastern part of the Caledonia North Site where the Caledonia North Site WTGs will appear to be closer, visible to from blade tip nearly to tower base and to extend the spread of existing OWFs.
- 12.7.5.67 Caledonia North Site will be seen in the south-eastern part of the view, which means that the WTGs will be backlit for the first half of the day and be seen in shadow. During these times of the day the WTGs will potentially contrast less with a light sky background. WTGs that are lit by the sun, as is the case in the afternoon/evening, could potentially increase contrast against the sky background making them more apparent when visibility is very good during these times of the day.

- 12.7.5.68 Located to the south-east and due to the prevailing wind direction, the angle of the rotors will be aligned at an angle to the viewpoint such that the blades will be directed away from the viewpoint location, occupying less space. Movement of WTG blades at these long ranges is difficult to discern with the naked eye.
- 12.7.5.69 The views from large scale cliffs will be affected by the addition of Caledonia North Site, however the effect is limited by the distance to it and the proportion the spread of Caledonia North Site will add to the existing extent of OWFs.
- 12.7.5.70 Caledonia North Site will be in a different part of views from focal features along the coastal edge (e.g., Keiss Castle, Freswick Castle, Bucholly Castle and Freswick Bay) and will not affect the appreciation of the physical influences which shape the coastal edge but will add to the wind farm seascape as a visually separate focus in the background of views.
- 12.7.5.71 Caledonia North Site will appear beyond the existing OWFs which appear to extend from beyond Noss Head and the lighthouse and will affect the setting of these focal features of the view to the south south-east.
- 12.7.5.72 Taking into account the description of change and the factors of magnitude described above, the magnitude of change for the Caledonia North Site during operation is considered to be Low.

Significance of Effect

Construction and Decommissioning

- 12.7.5.73 The effect on the character of Freswick Bay and Nybster Coast RCCA and the adjacent LCT 144 during construction and decommissioning of the Caledonia North Site is considered to be **Minor and Not Significant in EIA terms** along the coastal edge and for up to 400m inland. Effects will be adverse, short term and temporary.

Operation

- 12.7.5.74 The effect on the character of Freswick Bay and Nybster Coast RCCA and the adjacent LCT 144 during operation of the Caledonia North Site is considered to be **Minor and Not Significant in EIA terms** along the coastal edge and for up to 400m inland. Effects will be adverse, long term and reversible.

Sinclair's Bay

- 12.7.5.75 Viewpoint 4 Keiss is located approximately 400m inland from the coastal edge of this RCCA and within LCT 144.

Baseline Character and Sensitivity

- 12.7.5.76 Sinclair's Bay RCCA stretches from Castle Sinclair Girnigoe to Tang Head (the northern headland of Sinclair's Bay). It forms the coastal edge to Sandy Beaches and Dunes LCT 140, Farmed Lowland Plain LCT 143 on the southern end of Sinclair's Bay, and Coastal Crofts and Small Farms LCT 144 on the

northern part of the Bay. Please see Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-13 Blade Tip ZTV (Western Study Area) with Designations, Character and RCCAs.

RCCA Baseline Character

12.7.5.77 Maritime influences:

- Curved coastline with east, south-east and northerly aspects.
- Dynamic coastal influences associated with migration of sand and constantly changing character of the sea and passing weather systems.
- The River of Wester that is fed from the Loch of Wester located slightly inland empties out into Sinclair's Bay roughly in the centre of the sandy beach.
- Low level of shipping in coastal waters with some recreational sailing and small-scale fishing. Shipping is a common feature seen further out to sea on the horizon.
- Small active harbour at Keiss used by local fishing boats that fish in Sinclair's Bay.
- Strongly affected by the northern coastal light.
- Shape of bay influenced by rock formations to the north and south and the interaction of water which is deep at the south and less deep at the north. The south limb thus acts as a giant groyne.
- Water based recreational beach activities, such as surfing.

12.7.5.78 Character of coastal edge:

- Bay sweeps south in a long elliptical curve, past Castle Sinclair Girnigoe and terminating at Noss Head.
- Cliffs are sheer further north, but to the south of Keiss, large white sandy beach and dunes form coastal edge, before a series of cliffs and crags further east around Noss Head.
- Wide open space and exposure to the sea.
- Beach is an important recreational resource.
- Ackergill Tower and Castle Sinclair Girnigoe create prominent focal point features along the coastal landscape that has a strong horizontal emphasis.
- Subtle interlocking of dunes creating low pockets of semi-enclosure along southern part of beach.
- Pipeline fabrication works interrupts the centre of the bay and extends inland across Keiss Links.

12.7.5.79 Character of immediate hinterland:

- A99 passes parallel to coast.
- Sand dunes with underlying shingle spit.

- Inland from the main dune zone extends an area of blown sand, triangular in shape and tapering towards the south end where it becomes very narrow.
- Small village of Keiss to north of the area with street lighting.
- Agricultural land of medium sized regular field parcels inland from dune and links landscape south of River of Wester which empties out into Sinclair Bay at the centre of the Bay.
- North of River of Wester the land is marshier, with field drains dug creating rough pasture in the large-scale field parcels.
- At northerly transition from sandy beach to rocky coastline landscape changes from marsh to narrow crofting fields of improved and semi-improved pasture.

12.7.5.80 Human activity: presence or absence

- Although it is exposed, built features including main road, pipeline fabrication works and dwellings limit the sense of wildness likely to be experienced.
- Some illumination at night from small crofts and properties around Keiss, the lighthouse at Noss Head, security lighting associated with the pipeline fabrication works and views of navigational and aviation lighting of OWFs.
- Presence of onshore wind farms.
- Settled character.

12.7.5.81 Views and visibility:

- Open views throughout the bay with Noss head enclosing views to the south and Tang Head to the north leaving a wide stretch of open sea between them.
- Noss Head lighthouse, Castle Sinclair Girnigoe and Ackergill Tower form prominent vertical landmarks along the bay which otherwise has a strong horizontal emphasis.
- OWFs seen to south-east appearing to extend from Noss Head into open seascape.
- Pipeline fabrication works introduce an industrial feature to the bay.

Sandy Beaches and Dunes LCT 140

12.7.5.82 Relevant key coastal characteristics (NatureScot 2019) of LCT 140 which follows the beach and inland dune landscape are listed below:

- "Low shingle ridges backing many of these sandy beaches and forming the base for dune systems."
- "Undulating machair abutting dunes and dune slacks along parts of the east Sutherland coast, with golf courses occupying some of these areas."
- "Long gently curved sandy arcs of Sinclairs Bay and 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."
- "Wildness character to of all these seascapes, more intensely experienced on the more remote beaches along the north and west coasts of Sutherland."

12.7.5.83 Additional key characteristics identified as part of verification of baseline through desktop study and site visits include:

- Views of OWFs are a characteristic of seascape views to the south-east.
- Views of onshore wind farms and WTGs are a characteristic of landward views.

Farmed Lowland Plain LCT 143 Baseline Character

12.7.5.84 Relevant key coastal characteristics (NatureScot 2019) of LCT 143 which covers the southern end of the RCCA from the sandy beach to Castle Sinclair Girnigoe are listed below:

- "A generally open, low-lying plain, gently undulating to form shallow broad valleys, which are often filled with lochs and mosses, and subtle low ridges.
- The broad and shallow valley of the River Wick forming the largest of a series of valleys generally aligned south-east/north-west across the plain.
- Agriculture the predominant land cover.
- More intensively managed farmland near the coast around Thurso and Wick, and close to Loch Watten.
- Distinctive Caithness flagstone fences in some parts, creating low, sharp edges to fields."
- "Farm buildings and houses forming focal points within the landscape.
- Occasional loose clusters of croft houses located on more marginal upper slopes and near the coast.
- A number of historic environment features, including conspicuous castles, Baronial mansions and tall 'Lairds' houses, usually with broadleaf shelter woods planted around them."
- "Many historic features, including brochs and cairns, dotted across farmland and situated on hills within, or adjacent to, this area.

- Small groups of large wind turbines sited on some of the low ridges and hills and prominent visibility of larger wind farms in adjacent Landscape Character Types.
- Extensive views due to the openness of the landscape, and the clarity of northern air and light.”

12.7.5.85 Additional key characteristics identified as part of verification of baseline through desktop study and site visits include:

- Views of OWFs are a characteristic of seascape views to the south-east.
- Views of onshore wind farms and WTGs are a characteristic of landward views.

Coastal Crofts and Small Farms LCT 144 Baseline Character

12.7.5.86 Relevant key characteristics (NatureScot 2019) of the LCT 144 adjacent to RCCA Sinclair Bay north of the Rough of Stain are listed below:

- “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.
- More dispersed settlement pattern on the east coast to the north of Brora.”
- “A number of historic sites including churches, castles, mills and cemeteries.
- Highly visible landscape, seen from major roads and, on the east Sutherland coast, the railway.
- 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.”

12.7.5.87 Additional key features identified as part of verification of baseline through desktop study and site visits include:

- Views of OWFs are a characteristic of seascape views from east coast of Caithness.

Sensitivity

12.7.5.88 Sinclair’s Bay RCCA does not lie within or look over any landscapes covered by a landscape planning designation. Ackergill Tower and Castle Sinclair Girnigoe are local visitor attractions along the coast within this RCCA. The

value is considered to be Medium.

- 12.7.5.89 LCT 140 does not lie within or look over any landscapes covered by a landscape planning designation. The pipeline fabrication works adds an industrial element to the apparently naturalistic beach and dune landscape, with the managed landscape of Wick golf course located on inland side of dunes. The value is considered to be Medium.
- 12.7.5.90 LCT 143 does not lie within or look over any landscapes covered by a landscape planning designation. Ackergill Tower and Castle Sinclair Girnigoe are local visitor attractions along the coast. The value is considered to be Medium.
- 12.7.5.91 LCT 144 does not lie within or look over any landscapes covered by a landscape planning designation. The value is considered to be Medium.
- 12.7.5.92 The wide open bay has a strong association with the seascape of Sinclair's Bay and the Moray Firth beyond Tang Head and Noss Head. The RCCA is characterised by the large-scale, broad sweeping sandy bay backed by sand dunes and the higher cliffs of the containing headlands, the settled coastal edge and industrial feature of the pipeline fabrication works. Historic landmarks form point features along the bay. These characteristics ensure this coastal landscape less susceptible to changes occurring in distant views out across the vast seascape.
- 12.7.5.93 Susceptibility to the Caledonia North Site elements is moderated by distance and the fact that the seascape is influenced by existing OWFs. Visibility of OWF development influences the RCCA and this characteristic would become more defined by the proposals.
- 12.7.5.94 Taking all of these factors into account susceptibility is considered to be Medium.
- 12.7.5.95 In combining the Medium value with the Medium susceptibility, the sensitivity of RCCA Sinclair Bay, and the adjacent LCT 140, LCT 143 and LCT 144 are considered to be **Medium**.

Magnitude of Change

- 12.7.5.96 Closest point within this RCCA is 26.9km from the Caledonia North Site.
- 12.7.5.97 Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-13 Blade Tip ZTV (Western Study Area) with Designations, Character and RCCAs illustrates that there is theoretical visibility of the Caledonia North Site cross the northern part of Sinclair's Bay between Tang Head and the start of the dunes where between 41 to 47 WTGs may be visible. Further south along the bay the number of WTGs visible decreases as Noss Head provided screening of the Caledonia North Site. From north of Wick golf club house (marked by a CH and parking symbol on OS maps) to Castle Sinclair Girnigoe there is no visibility of the Caledonia North Site.

- 12.7.5.98 Theoretical visibility of the Caledonia North Site is shown to be between all 47 of the WTGs at the northern end of LCT 140 and extending inland, reducing to no WTGs north of Wick club house. In actuality visibility is reduced in the southern part of the bay to the coastal edge due to the screening provided by the dune landscape.
- 12.7.5.99 LCT 143 extends from Noss Head (RCCA to the south of Sinclair's Bay) along the wide valley of the Wick River and north inland of LCT 140 to where it meets LCT 144. The ZTV shows that there are patches of theoretical visibility across more elevated parts of this gently undulating landscape, however, landscape features such as houses and farm buildings with surrounding vegetation, hedgerows, drystone walls, small blocks of coniferous forestry, small areas of woodland and local undulations in the landform restrict visibility of the sea. There is a band of visibility through which the A99 passes from Reiss Lodge through Reiss and to Quoys of Reiss where the flat, open landscape allows for long views seaward including towards the Caledonia North Site.
- 12.7.5.100 There is theoretical visibility throughout LCT 144 that forms the coastal hinterland to the RCCA. Actual visibility is restricted to the open parts of the landscape outside of the centre of the village of Keiss.

Construction and Decommissioning

- 12.7.5.101 There will be no physical change to the character of this RCCA. During the construction and decommissioning phases of the project the worst case scenario will occur when the majority of turbines and OSPs are present and when there are still large numbers of vessels and cranes present carrying out works which will extend and intensify the existing OWF character influence.
- 12.7.5.102 However, the actual influence of the Caledonia North Site on coastal and landscape character is moderated by its separation from the RCCA, the characterising influence of existing OWFs and the expansive seascape it will be located within, which will remain key characteristics of the coastal setting. The characteristics of the RCCA will not be directly affected. The only changes are as a result of visibility of the construction and decommissioning of the Caledonia North Site elements in views from the RCCA as part of its wider setting.
- 12.7.5.103 The magnitude of change during construction and decommissioning is considered to be **Medium-Low** along the coastal edge where there is visibility of the Caledonia North Site.

Operation

- 12.7.5.104 The characteristics and scale of the Caledonia North Site will be an external influence on the coastal edge throughout this RCCA. There will be no physical change to the character of this RCCA. The innate, strongly defined elements of this RCCA will not be directly affected. The only changes are as a result of visibility of the Caledonia North Site in views from the RCCA as part of its wider setting.

- 12.7.5.105 During the operational phase of the project between zero to all 47 WTGs will be visible with the closer WTGs of the Caledonia North Site visible from foundations to blade tips above the horizon and more distant WTGs visible only as hubs, blades and the upper parts of towers above the horizon due to the curvature of the earth. The most distant WTGs are 56.3km away.
- 12.7.5.106 The Caledonia North Site will introduce additional vertical features to the seascape horizon, the distance to which reduces their vertical impact. Due to the orientation of the Caledonia North Site to the coastline, the depth of the layout and the separation from the coastline the more distant turbines will appear less visible than the closest. The separation of the Caledonia North Site from the coast and the limited perceived prominence of the Caledonia North Site along the horizon at distance from the RCCA will reduce its influence on the RCCA.
- 12.7.5.107 Orientation of coastal edge to east, south-east and north will both increase and decrease the effect of Caledonia North Site, which is seen to the south-east, beyond the existing OWFs which are already a characterising element along the horizon. The broad footprint of the Caledonia North Site relates to the existing horizontal emphasis of the seascape and the wide proportion of the view existing OWFs occupy. Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-11 Horizontal Angle ZTV Caledonia North shows that the Caledonia North Site will occupy between 0 – 30 degrees of the HFoV.
- 12.7.5.108 Existing OWFs are visible from blade tip to foundations with more distant turbines visible as blade tips due to the curvature of the earth. OWFs are 21.3km at their closest point and visible during very good to excellent conditions. Caledonia North Site will appear to extend the spread of OWFs slightly further north, slightly intensifying the existing OWF character influence. The pattern of the layout of Caledonia North Site echoes that of the existing OWFs creating a cohesive feature along the seascape horizon, albeit the Caledonia North Site WTGs will be larger in scale and therefore more prominent.
- 12.7.5.109 The slight distortion of perspective resulting from the differences in scale between the larger and more distant Caledonia North Site WTGs and the existing smaller scale OWF WTGs will result in greater visual complexity. This will be restricted to the very eastern part of the Caledonia North Site where the Caledonia North Site WTGs are closer, visible to foundations and appear to extend beyond existing OWFs.
- 12.7.5.110 Caledonia North Site will be seen in the south-eastern part of the view, which means that the WTGs will be backlit for the first half of the day and be seen in shadow. During these times of the day the WTGs will potentially contrast less with a light sky background. WTGs that are lit by the sun, as is the case in the afternoon/evening, could potentially increase contrast against the sky background making them more apparent when visibility is very good during these times of the day.

- 12.7.5.111 Located to the south-east and due to the prevailing wind direction, the angle of the rotors will generally be aligned at an angle to the viewpoint such that the blades will be directed away from the viewpoint location, occupying less space. This also reduces the influence of blade movement in the view.
- 12.7.5.112 The views from the open bay and large-scale headlands (including Noss Head and its lighthouse) will be affected by the addition of the Caledonia North Site, however the effect is limited by the distance to it and the proportion the spread of Caledonia North Site adds to the existing extent of OWFs.
- 12.7.5.113 The interaction between the sea and the cliffs and beach, and the landmarks along the bay will be largely unaffected with the Caledonia North Site adding to the wind farm seascape as a visually separate focus at distance out at sea.
- 12.7.5.114 Taking into account the description of change and the factors of magnitude described above, the magnitude of change for Caledonia North Site during operation is considered to be **Medium-Low**.

Significance of Effect

Construction and Decommissioning

- 12.7.5.115 The effect on the character of Sinclair's Bay RCCA, LCT 140, LCT 143 and LCT 144 during construction and decommissioning of the Caledonia North Site is considered to be **Moderate-Minor and Not Significant in EIA terms**. Effects will be restricted to the coastal edge along the bay and for up to 400m inland north of the Rough of Stain. The effects will be adverse, short term and temporary.

Operation

- 12.7.5.116 The effect on the character of Sinclair's Bay RCCA, LCT 140, LCT 143 and LCT 144 during operation of Caledonia North Site is considered to be **Moderate-Minor and Not Significant in EIA terms**. Effects will be restricted to the coastal edge along the and for up to 400m inland north of the Rough of Stain. The effects will be adverse, long term and reversible.

Noss Head

- 12.7.5.117 There are no viewpoints located in this RCCA.

Baseline Character and Sensitivity

- 12.7.5.118 Noss Head RCCA stretches from Sealky Head north of Wick to the Castle of Sinclair Girnigoe the southern end of Sinclair's Bay. Forms the coastal edge to Farmed Lowland Plain LCT 143. Please see Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-13 Blade Tip ZTV (Western Study Area) with Designations, Character and RCCAs.

RCCA Baseline Character

- 12.7.5.119 Maritime influences:
- Strongly affected by the northern coastal light.
 - Coastal headland orientated to the north and to the east, which defines the southern end of Sinclair's Bay.
 - Low level of shipping in coastal waters with some recreational sailing. Shipping is a common feature seen further out to sea on the horizon.
 - Water based recreational beach activities, such as surfing at Ackergill.
- 12.7.5.120 Character of coastal edge:
- Sandstone cliffs eroded into angular blocks, with small bays at their base.
 - Stacks, caves and collapsed cliffs.
 - Strong contrast between verticality of cliffs and wide horizon of sea.
 - Lighthouse at Noss Head and remains of Castle Sinclair Girnigoe are prominent features.
 - Visitor parking and cliff top paths allow access for walkers to experience view from Noss Head.
- 12.7.5.121 Character of immediate hinterland:
- Open intensive farmland.
 - Horizontal landscape with few vertical features.
 - Scattered farm dwellings.
 - High degree of exposure.
 - Areas of semi-natural rough grassland at Noss Head.
 - Ordered, regularly shaped fields.
 - Wick Airport located in the flat expanse of this area with associated visual and aural disturbance.
 - The large-scale industrial shed of Caithness Switching Station forms a prominent feature near Wick Airport.
- 12.7.5.122 Human activity: presence or absence
- Rugged, inaccessible coastal cliff terrain.
 - Cultivated fields, wood-pole electricity lines, farm dwellings, lighthouse, Caithness switching station (visible as a large industrial building) and airport limit sense of wildness likely to be experienced.
 - Some illumination at night from Wick and Wick airport, navigational and aviation lighting of OWFs WTGs, visible alongside lighthouse at Noss Head and distant views of lights on the Moray Coast.
 - Presence of OWF includes large, moving form of development as a human influence out at sea visible in very good to excellent visibility conditions.

12.7.5.123 Views and visibility:

- Focus of views is the sea and Sinclair's Bay, as well as views along indented coastline and down to bays and inlets.
- Views from the north-facing part of headland look north across Sinclair's Bay with views east contained by cliffs.
- Views from the east-facing part of headland look east out across the North Sea with views north contained by cliffs. Views south look along the cliffs of the coastline.
- Noss Head lighthouse and Castle Sinclair Girnigoe are focal points of views.
- Cliffs, stacks and beaches become visible from clifftops at coves and inlets and are regular, focal features along the coast. At these locations the focus of views is down and close-range, with the open sea forming the backdrop.
- To the south-east OWFs are visible from the eastern part of the headland, set back from the coast and seen along the horizon.

Farmed Lowland Plain LCT 143 Baseline Character

12.7.5.124 Relevant key coastal characteristics (NatureScot 2019) of LCT 143 which meets the coast at Noss Head are listed below:

- "A generally open, low-lying plain, gently undulating to form shallow broad valleys, which are often filled with lochs and mosses, and subtle low ridges."
- "Agriculture the predominant land cover.
- More intensively managed farmland near the coast around Thurso and Wick, and close to Loch Watten.
- Distinctive Caithness flagstone fences in some parts, creating low, sharp edges to fields."
- "Farm buildings and houses forming focal points within the landscape.
- Occasional loose clusters of croft houses located on more marginal upper slopes and near the coast.
- A number of historic environment features, including conspicuous castles, Baronial mansions and tall 'Lairds' houses, usually with broadleaf shelter woods planted around them.
- Roads reinforce the settlement pattern, often following the field and property boundaries, running straight and then swinging around sharp corners."
- "Many historic features, including brochs and cairns, dotted across farmland and situated on hills within, or adjacent to, this area."
- "Extensive views due to the openness of the landscape, and the clarity of northern air and light."

- 12.7.5.125 Additional key characteristics identified as part of verification of baseline through desktop study and site visits include:
- Views of OWFs are a characteristic of seascape seen at distance to the south-east.
 - Caithness Switching Station prominent large-scale industrial structure visible throughout Noss Head and surrounding landscape due to strong horizontal emphasis of landform. As surrounding mitigation planting reaches maturity this will provide screening.

Sensitivity

- 12.7.5.126 Noss Head RCCA does not lie within or look over any landscapes covered by a landscape planning designation. The Noss Head lighthouse and Castle Sinclair Girnigoe are local visitor attractions along the coast within this RCCA. The value is considered to be Medium.
- 12.7.5.127 LCT 143 does not lie within or look over any landscapes covered by a landscape planning designation. The Noss Head lighthouse and Castle Sinclair Girnigoe are local visitor attractions along the coast. The value is considered to be Medium.
- 12.7.5.128 The expansive and large-scale cliffs of the RCCA and coast of the LCT, have a strong association with the North Sea to the east and the Outer Moray Firth to the south-east where the Caledonia North Site will be located. The RCCA is highly characterised by the higher wildness characteristics of the cliffs, farmed coastal hinterland with sparse settlement and industrial/commercial development in the form of the Caithness Switching Station and Wick Airport. These strong, inherent characteristics ensure this coastal landscape less susceptible to changes occurring in distant views out across the vast seascape.
- 12.7.5.129 Susceptibility to the Caledonia North Site elements is moderated by distance and the fact that the landscape and seascape are influenced by existing OWFs and other forms of development. Visibility of OWF development has some existing influence from parts of the RCCA and this characteristic would become more defined by the Caledonia North Site.
- 12.7.5.130 Taking all of these factors into account susceptibility is considered to be Medium.
- 12.7.5.131 In combining the Medium value with the Medium susceptibility, the sensitivity of RCCA Wick Bay and LCT 143 are considered to be **Medium**.

Magnitude of Change

- 12.7.5.132 Closest point within this RCCA is 24.9km from Caledonia North Site.
- 12.7.5.133 Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-13 Blade Tip ZTV (Western Study Area) with Designations, Character and RCCAs illustrates that there is theoretical visibility of OSPs and all 47 WTGs of Caledonia North Site along the eastern

side of Noss Head and no visibility from the north-facing coastline.

- 12.7.5.134 Within LCT 143 at Noss Head the ZTV shows theoretical visibility across the eastern part of Noss Head up to the north-easterly aligned ridgeline of the small summit near Noss farmhouse. Actual visibility corresponds with theoretical visibility across this open, relatively flat landscape.

Construction and Decommissioning

- 12.7.5.135 During the construction and decommissioning phases of the project the worst case scenario will occur when the majority of turbines and OSPs are present and when there are still large numbers of vessels and cranes present carrying out works. The activity associated with the WTG and OSPs will occur along the seascape horizon, often beyond the intervening, existing OWFs. OSPs and all 47 of the WTGs may be visible.
- 12.7.5.136 However, the actual influence of the Caledonia North Site on coastal and landscape character is moderated by its separation from the RCCA, the characterising influence of existing OWFs and the expansive seascape it will be located within, which will remain key characteristics of the coastal setting. The innate, strongly defined elements of the RCCA and will not be directly affected. The only changes are as a result of visibility of the construction and decommissioning of the Caledonia North Site elements in views from the RCCA as part of its wider setting.
- 12.7.5.137 The magnitude of change during construction and decommissioning is considered to be Medium-Low.

Operation

- 12.7.5.138 The characteristics and scale of the Caledonia North Site will be an external influence on the coastal edge throughout this RCCA and adjacent LCT 143, the only changes will be as a result of visibility of the Caledonia North Site beyond the horizon. There will be no physical change to the character of this RCCA. The innate, strongly defined elements of this RCCA will not be directly affected. The only changes are as a result of visibility of the Caledonia North Site in views from the RCCA as part of its wider setting.
- 12.7.5.139 During the operational phase of the project OSPs and all 47 WTGs may be visible with the closer WTGs of Caledonia North Site visible as foundations, towers, hubs and blades above the horizon and more distant WTGs visible as blades, hubs and the upper part of the tower above the horizon. The most distant WTGs are 50km distant.
- 12.7.5.140 Caledonia North Site will introduce additional vertical features to the seascape horizon, the distance to which reduces their vertical impact. Due to the orientation of the Caledonia North Site to the coastline, the depth of the layout and the separation from the coastline the more distant turbines will appear less visible than the closest. The separation of the Caledonia North Site from the coast and the limited perceived prominence of the Caledonia North Site along the horizon at distance from the RCCA will reduce its influence on the RCCA.

- 12.7.5.141 Orientation of coastal edge to the north and east will both increase and decrease the effect of Caledonia North Site, which is seen to the south-east, adjacent to the existing OWFs which are already a characterising element along the horizon. Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-11 Horizontal Angle ZTV Caledonia North shows that the Caledonia North Site will occupy between 20 – 30 degrees of the HFoV however part of this will be seen beyond the Moray East and BOWL OWFs.
- 12.7.5.142 Existing OWFs are visible from blade tip to foundations with more distant turbines visible as blades, hubs and approximately half the tower due to the curvature of the earth. OWFs are 19km at their closest point and visible during very good to excellent conditions. Caledonia North Site will appear to extend the spread of OWFs further east, slightly intensifying the existing OWF character influence. The pattern of the layout of Caledonia North Site echoes that of the existing OWFs creating a cohesive feature along the seascape horizon, albeit the Caledonia North Site WTGs will be larger in scale.
- 12.7.5.143 The slight distortion of perspective resulting from the differences in scale between the larger and more distant Caledonia North Site WTGs and the existing smaller scale OWF WTGs will result in greater visual complexity. This will be restricted to the eastern part of the view where the Caledonia North Site WTGs will appear to be closer, visible to foundations and to extend the spread of existing OWFs.
- 12.7.5.144 The Caledonia North Site will be seen in the south-eastern part of the view, which means that the WTGs will be backlit for the first half of the day and be seen in shadow. During these times of the day the WTGs will potentially contrast less with a light sky background. WTGs that are lit by the sun, as is the case in the afternoon/evening, could potentially increase contrast against the sky background making them more apparent when visibility is very good during these times of the day.
- 12.7.5.145 Located to the south-east and due to the prevailing wind direction, the angle of the rotors will generally be aligned at an angle to the viewpoint such that the blades will be directed away from the viewpoint location, occupying less space. This also reduces the influence of blade movement in the view.
- 12.7.5.146 The character of the large scale cliffs and agricultural hinterland will be affected by the addition of Caledonia North Site to their wider visual context, however the effect is limited by the distance to it and the proportion the spread of Caledonia North Site will add to the existing extent of OWFs.
- 12.7.5.147 Caledonia North Site will be in a different part of views from focal features along the coastal edge (e.g., Noss Head lighthouse) and will not affect the appreciation of the physical influences which shape the coastal edge but will add to the wind farm seascape as a visually separate focus in the background of views. Views of the seascape to the east and Sinclair's Bay to the north will be unaffected by wind energy development.

- 12.7.5.148 Taking into account the description of change and the factors of magnitude described above, the magnitude of change for Caledonia North Site during operation is considered to be **Medium-Low**.

Significance of Effect

Construction and Decommissioning

- 12.7.5.149 The effect on the character of Noss Head RCCA and up to 2km inland of the coastal hinterland of LCT 143 during construction and decommissioning of the Caledonia North Site is considered to be **Minor and Not Significant in EIA terms**. Effects will be adverse, short term and temporary.

Operation

- 12.7.5.150 The effect on the character of Noss Head RCCA and up to 2km inland of the coastal hinterland of LCT 143 during operation of the Caledonia North Site is considered to be **Minor and Not Significant in EIA terms**. Effects will be adverse, long term and reversible.

Wick Bay

- 12.7.5.151 Viewpoint 5 Wick (path south of South View) is located in this RCCA.

Baseline Character and Sensitivity

- 12.7.5.152 Wick Bay RCCA stretches from Castle of Old Wick just south of Wick to Sealkey Head north of Wick. Forms part of the coastal edge to Farmed Lowland Plain LCT 143. Please see Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-13 Blade Tip ZTV (Western Study Area) with Designations, Character and RCCAs.

RCCA Baseline Character

- 12.7.5.153 Maritime influences:
- Rugged, coastal cliff terrain to north and south of bay.
 - Bay where Wick River discharges into the North Sea.
 - Harbour in the bay area with fishing vessels and maritime activity.
 - Main orientation to the east and southeast out from Wick Bay.
 - Small scale, enclosed bay with larger scale cliffs at headlands with more open views of seascape.
 - Bay and harbour of Wick have been used for centuries to provide safety from the storms and rough weather of the North Sea.
- 12.7.5.154 Character of coastal edge:
- Built town environment creating hard edge with water in Wick harbour.
 - Local coastal roads cutting into and through hills adjoining the coast.
 - Vertical cliffs (10 to 20m) to north and south with distinctive bays in south.
 - Castle of Old Wick prominent ruin and coastal landmark.

- Lighthouses at Wick harbour are local landmarks.

12.7.5.155 Character of immediate hinterland:

- Cultivated fields with improved and semi-improved grassland.
- Residential gardens and industrial areas in Wick.
- Rough grassland areas adjacent to the coastline in the north of the area.
- Sense of containment within town with open views where there is less dense housing at Staxigoe and Papigoe to the north, and small farm holdings in Old Wick to the south.

12.7.5.156 Human activity: presence or absence

- Coastline is very accessible in this area with many manmade elements in Wick.
- Built environment dominant and detracts from the sense of remoteness/wildness.
- Vertical cliffs have created inaccessible bays in places.
- Extensive illumination at night from immediate town and harbour. Navigational and aviation lights of OWFs are visible.

12.7.5.157 Views and visibility:

- Inward looking views across the bay and towards headlands.
- Views from headlands look out across open seascape and along coast.
- Views south-east from more open parts of coastline include views of OWFs seen along the seascape horizon.

Farmed Lowland Plain LCT 143 Baseline Character

12.7.5.158 Relevant key coastal characteristics (NatureScot 2019) of LCT 143 which meets the coast at Wick are listed below:

- "The broad and shallow valley of the River Wick forming the largest of a series of valleys generally aligned south-east/north-west across the plain.
- Agriculture the predominant land cover.
- More intensively managed farmland near the coast around Thurso and Wick, and close to Loch Watten.
- Distinctive Caithness flagstone fences in some parts, creating low, sharp edges to fields.
- Sparse woodland, mainly comprising small angular coniferous plantations planted for shelter on farms."
- "Farm buildings and houses forming focal points within the landscape.
- Occasional loose clusters of croft houses located on more marginal upper slopes and near the coast.

- A number of historic environment features, including conspicuous castles, Baronial mansions and tall 'Lairds' houses, usually with broadleaf shelter woods planted around them.
- Roads reinforce the settlement pattern, often following the field and property boundaries, running straight and then swinging around sharp corners.
- A number of large settlements, including the towns of Thurso and Wick, situated on the coast, as well as several smaller settlements.
- Many historic features, including brochs and cairns, dotted across farmland and situated on hills within, or adjacent to, this area.
- Small groups of large wind turbines sited on some of the low ridges and hills and prominent visibility of larger wind farms in adjacent Landscape Character Types."
- "Extensive views due to the openness of the landscape, and the clarity of northern air and light."

12.7.5.159 Additional key characteristics identified as part of verification of baseline through desktop study and site visits include:

- Views of OWFs are a characteristic of seascape views to the south-east from.
- Views of onshore wind farms and WTGs are a characteristic of landward views.

Sensitivity

12.7.5.160 Neither Wick Bay RCCA nor LCT 143 lie within or look over any landscapes covered by a landscape planning designation. The Castle of Old Wick is a local visitor attraction along the coast within this RCCA and LCT. The value is considered to be Medium.

12.7.5.161 Wick Bay and harbour as well as other smaller bays along the coast provide containment, with the larger-scale headlands and low cliffs to the north and south of Wick Bay having a greater association with the Moray Firth. The RCCA is highly characterised by the settled and built-up coastline of Wick with wilder characteristics of the cliffs to the north and south where settlement density decreases. The strong association with developed coastline characteristics ensure this coastal landscape less susceptible to changes occurring in views out across the vast seascape.

12.7.5.162 Susceptibility to the Caledonia North Site elements is moderated by the fact that the seascape is influenced by urban development and existing onshore wind farms and OWFs. Visibility of OWF development influences this RCCA and this characteristic would become more defined by the proposals. The susceptibility is assessed as Medium.

12.7.5.163 In combining the Medium value with the Medium susceptibility, the sensitivity of RCCA Wick Bay and LCT 143 are considered to be **Medium**.

Magnitude of Change

- 12.7.5.164 Closest point within this RCCA is 24.2km from the Caledonia North Site.
- 12.7.5.165 OSPs and all 47 of the WTGs of the Caledonia North Site will be theoretically visible along the coast.
- 12.7.5.166 Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-13 Blade Tip ZTV (Western Study Area) with Designations, Character and RCCAs illustrates that there is theoretical visibility of the Caledonia North Site throughout the RCCA except on the north-facing part of the inner part of Wick Bay and harbour. In actuality, due to the breakwaters and built-up nature of the coastal edge there are no views of the open sea from within the inner bay and harbour, except from the south-facing cliffs of North Head. Along the coastal edge, coves and inlets will restrict visibility of the wider seascape.
- 12.7.5.167 Within LCT 143 actual visibility of the Caledonia North Site is generally limited to the coastal edge due to landscape features such as buildings and surrounding vegetation, small blocks of coniferous forestry, small areas of woodland, hedges and local undulations restricting long distance views including of the sea. Actual visibility extends approximately 400m inland from South Head and approximately 2km from North Head due to the more open nature of the landscape with coastal settlements along North Head locally restricting views of the wider seascape.

Construction and Decommissioning

- 12.7.5.168 There will be no physical change to the character of this RCCA. During the construction and decommissioning phases of the project the worst case scenario will occur when the majority of turbines and OSPs are present and when there are still large numbers of vessels and cranes present carrying out works which will extend and intensify the existing OWF character influence. OSPs and all 47 WTGs will be visible.
- 12.7.5.169 However, the actual influence of the Caledonia North Site on coastal and landscape character is moderated by its separation from the RCCA, the characterising influence of existing OWFs and the expansive seascape it will be located within, which will remain key characteristics of the coastal setting. The innate, strongly defined elements of the RCCA will not be directly affected. The only changes are as a result of visibility of the construction and decommissioning of the Caledonia North Site elements in views from the RCCA as part of its wider setting.
- 12.7.5.170 The magnitude of change during construction and decommissioning is considered to be **Medium-Low**.

Operation

- 12.7.5.171 The characteristics and scale of the Caledonia North Site will be an external influence on the coastal edge throughout this RCCA. There will be no physical change to the character of this RCCA. The innate, strongly defined elements

of this RCCA will not be directly affected. The only changes are as a result of visibility of the Caledonia North Site in views from the RCCA as part of its wider setting.

- 12.7.5.172 During the operational phase of the project OSPs and all 47 WTGs may be visible with the closer WTGs of the Caledonia North Site visible from foundations to blade tips above the horizon and more distant WTGs visible as blades, hubs and the upper part of the tower above the horizon due to the curvature of the earth. The most distant WTGs are 47.7km away.
- 12.7.5.173 The Caledonia North Site will introduce additional vertical features to the seascape horizon, the distance to which reduces their vertical impact. Due to the orientation of the Caledonia North Site to the coastline, the depth of the layout and the separation from the coastline the more distant turbines will appear less visible than the closest. The separation of the Caledonia North Site from the coast and the limited perceived prominence of the Caledonia North Site along the horizon at distance from the RCCA will reduce its influence on the RCCA.
- 12.7.5.174 Orientation of coastal edge to south-east likely to slightly increase effect of Caledonia North Site which is seen to the south-east, beyond the existing OWFs which are already a characterising element along the horizon. The broad footprint of the Caledonia North Site relates to the existing horizontal emphasis of the seascape and the wide proportion of the view existing OWFs occupy. Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-11 Horizontal Angle ZTV Caledonia North shows that the Caledonia North Site will occupy between 30 – 40 degrees of the HFoV.
- 12.7.5.175 Existing OWFs are visible from blade tip to foundations with more distant turbines visible from blade tip to the upper part of the towers due to the curvature of the earth. OWFs are 17.2km at their closest point and visible during good to very good conditions. The Caledonia North Site will appear to extend the spread of OWFs slightly further north, slightly intensifying the existing OWF character influence. The pattern of the layout of the Caledonia North Site echoes that of the existing OWFs creating a cohesive feature along the seascape horizon, albeit the Caledonia North Site WTGs will be larger in scale and more prominent.
- 12.7.5.176 The slight distortion of perspective resulting from the differences in scale between the larger and more distant Caledonia North Site WTGs and the existing smaller scale OWF WTGs will result in greater visual complexity. This will be restricted to the very eastern part of the view where the Caledonia North Site WTGs are closer, visible to foundations and will be seen in within the context of the existing OWFs.
- 12.7.5.177 Caledonia North Site will be seen in the south-eastern part of the view, which means that the WTGs will be backlit for the first half of the day and be seen in shadow. During these times of the day the WTGs will potentially contrast less

with a light sky background. WTGs that are lit by the sun, as is the case in the afternoon/evening, could potentially increase contrast against the sky background making them more apparent when visibility is very good during these times of the day.

- 12.7.5.178 Located to the south-east and due to the prevailing wind direction, the angle of the rotors will generally be aligned at an angle to the viewpoint such that the blades will be directed away from the viewpoint location, occupying less space. This also reduces the influence of blade movement in the view.
- 12.7.5.179 The views from the open and large-scale headlands and low clifftops will be affected by the addition of Caledonia North Site, however the effect is limited by the distance to it and the proportion the spread of the Caledonia North Site adds to the existing extent of OWFs and the degree to which this would alter the contextual character.
- 12.7.5.180 The interaction between the sea and the cliffs and beaches will be largely unaffected with the Caledonia North Site adding to the wind farm seascape as a visually separate focus at distance out at sea.
- 12.7.5.181 The character within the harbour and of the seascape to the north-east will be unaffected by the Caledonia North Site development.
- 12.7.5.182 Taking into account the description of change and the factors of magnitude described above, the magnitude of change for Caledonia North Site during operation is considered to be **Medium-Low**.

Significance of Effect

Construction and Decommissioning

- 12.7.5.183 The effect on the character of Wick Bay RCCA and the coastal hinterland of LCT 143 during construction and decommissioning of the Caledonia North Site is considered to be **Moderate-Minor and Not Significant in EIA terms** along the coastal edge and approximately 2km inland to the north and 400m to the south where the character may be influenced through visibility. The effect is adverse, short term and temporary.

Operation

- 12.7.5.184 The effect on the character of Wick Bay RCCA and LCT 143 during operation of the Caledonia North Site is considered to be **Moderate-Minor and Not Significant in EIA terms** along the coastal edge and approximately 2km inland to the north and 400m to the south where the character may be influenced through visibility. The effect is adverse, long term and reversible.

Sarclet Head

- 12.7.5.185 The following viewpoints are found within this RCCA:
- Viewpoint 6 Sarclet (Sarclet Haven Info Board); and
 - Viewpoint 8 Whaligoe Steps.
- 12.7.5.186 Viewpoint 7 Yarrows Archaeological Trail is located approximately 2.4km from

the coast within LCT 144 on a local hill summit.

Baseline Character and Sensitivity

12.7.5.187 Sarclet Head RCCA stretches from Castle of Old Wick just south of Wick to Skerry Mor near Clyth Mains. Forms the coastal edge to part of the Coastal Crofts and Small Farms LCT 144 between Castle of Old Wick and Whaligoe Steps, south of this the LCT sits inland of High Cliffs and Sheltered Bays LCT 141. LCT 141 covers the coastal edge between Whaligoe Steps and Dunbeath Bay. Please see Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-13 Blade Tip ZTV (Western Study Area) with Designations, Character and RCCAs.

RCCA Baseline Character

12.7.5.188 Maritime influences:

- Broad convex headland with south-east orientation towards the sea.
- Dynamic coastal influences and processes under continual force from the sea.
- Small harbours in inlets once gave a safe haven for fishing boats.
- Low level of shipping parallel to coast and some recreational sailing. Shipping is a common feature seen further out to sea on the horizon.
- Strong maritime connection with settlements and agricultural land use patterns.
- Strong OWF influence with BOWL, Moray East, Moray West and Beatrice Demonstration Turbines and associated oil platforms visible out to sea.

12.7.5.189 Character of coastal edge:

- Rocky coastline with open sea views, vertical cliffs and small enclosed bays or harbours.
- Stacks, caves and cliffs, with strong contrast between verticality of cliffs and wide horizon of sea.
- Indented coastline with narrow coves and inlets often with deep water, providing shelter some of which were historic small harbours (i.e., Sarclet Haven and Whaligoe) which are distinctive to this coastline.
- Where coves and inlets were used as harbours evidence of built features remain, such as walls of houses and winding gear at Whaligoe Steps.
- Some recreational and visitor opportunities in places, such as Sarclet Haven and Whaligoe Steps.
- Exposed coastline with open views and strong historical associations of castles and cliff top forts and cultural interest of fishing villages.
- Very few dwellings in close proximity to coastal edge, except at Sarclet and Whaligoe, and the disused Clythness Lighthouse.

- 12.7.5.190 Character of immediate hinterland:
- Gently undulating topography along clifftops creating an open and exposed landscape.
 - Scattered small farms and crofts slightly set back from the coast, occasionally concentrated to form crofting settlements such as Ulbster and Thrumster.
 - Rough open grassland with gorse scrub in places along indented coastal edge, followed by regular narrow long semi-improved and improved crofting pasture enclosed by post-and-wire fences, allowing for open views.
 - Some areas of fields have reverted back to underlying conditions in places to moorland and rough grassland with heather.
 - Small lochs close to coastline.
 - A99 runs parallel to coastline.
 - Settlements and built features appear at even intervals and provide a visual rhythm of foci along coast.
 - Some onshore wind farm visibility inland between Wick and Thrumster.
- 12.7.5.191 Human activity: presence or absence:
- Although it is exposed, built features including main road and settlements limit sense of wildness experienced.
 - Coastal edge is mainly inaccessible due to vertical cliff faces.
 - Some illumination at night with navigational and aviation lights of OWFs visible alongside lighthouses and distant views of lights on the Moray Coast.
 - Presence of OWF includes large, moving form of development as a human influence out at sea visible in very good to excellent visibility conditions.
 - Views of onshore wind farms and WTGs are a characteristic of landward views.
- 12.7.5.192 Views and visibility:
- Open, expansive views of the sea from clifftops with undulating topography curtailing views along full stretch of coastline in some places. The height of the cliffs (ranging between 30-50m) creates a sense of separation from sea below.
 - The open sea is a key feature and focal point of views.
 - Within the characteristic narrow coves or inlets views of the sea are framed by the surrounding high cliffs. In these enclosed spaces the interaction between the sea and the cliffs, stacks and beaches is an important experiential feature.

- Cliffs, stacks and beaches become visible from clifftops at coves and inlets and are regular, focal features along the coast. At these locations the focus of views is down and close-range, with the open sea forming the backdrop.
- To the south-east OWFs are visible, set back from the coast and seen along the horizon.

High Cliffs and Sheltered Bays LCT 141 Baseline Character

12.7.5.193 Relevant key characteristics (NatureScot 2019) of the LCT 141 adjacent to RCCA Sarclet Head north of Clyth Mains are listed below:

- "Occasional inlets and coves, often with very deep and sheltered waters, and sometimes containing tiny harbours tucked between cliffs and not readily visible from the main coast road and settlement.
- Harbours on the east Caithness coast which have a strong association with settlements which are perched above the cliff.
- Moorland largely abutting this Landscape Character Type which is particularly open and sweeping to the east and north within Caithness."
- "Exhilarating experience of being precariously perched upon a high edge on the cliff tops, offering open elevated views and a perception of huge space."

12.7.5.194 Additional key features identified as part of verification of baseline through desktop study and site visits include:

- Views of OWFs are characteristic of seascape views from east coast of Caithness.

Views of onshore wind farms and WTGs are a characteristic of landward views.

Coastal Crofts and Small Farms LCT 144 Baseline Character

12.7.5.195 Relevant key characteristics (NatureScot 2019) of the LCT 144 adjacent to RCCA Sarclet Head north of Clyth Mains and inland are listed below:

- "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.
- Low stone walls enclosing fields on the shelf above the High Cliffs and Sheltered Bays between Dunbeath and Wick.
- 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.

- More dispersed settlement pattern on the east coast to the north of Brora.
- A number of historic sites including churches, castles, mills and cemeteries.
- Highly visible landscape, seen from major roads and, on the east Sutherland coast, the railway.
- 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."

12.7.5.196 Additional key features identified as part of verification of baseline through desktop study and site visits include:

- Views of OWFs are characteristic of seascape views from east coast of Caithness.
- Views of onshore wind farms and WTGs are a characteristic of landward views.

Sensitivity

12.7.5.197 Sarclet Head RCCA does not lie within or look over any landscapes covered by a landscape planning designation. Sarclet Haven and Whaligoe Steps are valued visitor attractions along the coast within this RCCA. The value is considered to be Medium.

12.7.5.198 LCT 141 does not lie within or look over any landscapes covered by a landscape planning designation. Whaligoe Steps is a valued visitor attraction along the coast within this LCT. The value is considered to be Medium.

12.7.5.199 LCT 144 does not lie within or look over any landscapes covered by a landscape planning designation. Sarclet Haven is a valued visitor attraction along the coast within this LCT. The value is considered to be Medium.

12.7.5.200 Inlets and coves along the coast provide containment, with the expansive and large-scale cliffs, having a greater association with the Moray Firth. The RCCA is highly characterised by the higher wildness characteristics of the cliff faces, the smaller-scale landscape features of the inlets and coves, and the settled and farmed coastal hinterland. These strong, inherent characteristics ensure this coastal landscape less susceptible to changes occurring in views out across the vast seascape.

12.7.5.201 Susceptibility to the Caledonia North Site elements is moderated by the fact that the seascape is influenced by existing OWFs. Visibility of onshore and OWF development influences this RCCA and this characteristic would become more defined by the proposals.

12.7.5.202 The susceptibility is assessed as Medium.

12.7.5.203 In combining the Medium value with the Medium susceptibility, the sensitivity of RCCA Sarclet Head, LCT 141 and LCT 144 north of Clyth Mains are considered to be **Medium**.

Magnitude of Change

- 12.7.5.204 Closest point within this RCCA is 24.2km from the Caledonia North Site.
- 12.7.5.205 Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-13 Blade Tip ZTV (Western Study Area) with Designations, Character and RCCAs shows that there is theoretical visibility of all 47 of the WTGs of Caledonia North Site except within north-east-facing inlets such as Ires Geo and Ashy Geo.
- 12.7.5.206 There is theoretical visibility throughout the part of LCT 141 north of Clyth Mains which lies adjacent to Sarclet Head RCCA.
- 12.7.5.207 There is theoretical and actual visibility of the Caledonia North Site along the coastal edge of LCT 144 north of Clyth Mains and 300m inland where local landform allows for open sea views. Throughout the rest of the LCT the ZTV shows there are large areas of theoretical visibility, however, in actuality there will be limited to no visibility of the Caledonia North Site due to the potential screening by buildings, vegetation (including small patches of coniferous forestry), boundary vegetation including trees and local undulations in the landform. Visibility is restricted to locations with a slightly higher elevation than surrounding areas allowing for views of the sea. These will range from views of a small section of sea to a wide expanse of the seascape and correlating with higher elevations such as Viewpoint 7.

Construction and Decommissioning

- 12.7.5.208 There will be no physical change to the character of this RCCA. During the construction and decommissioning phases of the project the worst case scenario will occur when the majority of turbines and OSPs are present and when there are still large numbers of vessels and cranes present carrying out works which will extend and intensify the existing OWF character influence. OSPs and all 47 WTGs will be visible.
- 12.7.5.209 However, the actual influence of Caledonia North Site on coastal and landscape character is moderated by its separation from the RCCA, the characterising influence of existing OWFs and the expansive seascape it will be located within, which will remain key characteristics of the coastal setting. The innate, strongly defined elements of the RCCA will not be directly affected. The only changes are as a result of visibility of the construction and decommissioning of the Caledonia North Site elements in views from the RCCA as part of its wider setting.
- 12.7.5.210 The magnitude of change during construction and decommissioning is considered to be **Medium-Low** along the coastal edge and for up to 300m inland where there may be a character influence through visibility. This covers the RCCA, and LCT 141 and the coastal edge of LCT 144 north of Clyth Mains.
- 12.7.5.211 Inland of this the magnitude of change for the Caledonia North Site during construction and decommissioning is considered to be **Low** throughout LCT 144 north of Clyth Mains where there are areas of actual visibility (corresponding to high elevation locations such as the Hill of Yarrows and Hill

of Mid Clyth). Throughout the rest of the LCT the magnitude of change is considered to be **No change**.

Operation

- 12.7.5.212 The characteristics and scale of the Caledonia North Site will be an external influence on the coastal edge throughout this RCCA. There will be no physical change to the character of this RCCA. The innate, strongly defined elements of this RCCA will not be directly affected. The only changes are as a result of visibility of the Caledonia North Site in views from the RCCA as part of its wider setting.
- 12.7.5.213 During the operational phase of the project OSPs and all 47 WTGs will be visible with the closer WTGs of the Caledonia North Site visible from foundations to blade tips above the horizon and more distant WTGs visible as blades, hubs and approximately half of towers above the horizon due to the curvature of the earth. The most distant WTGs are 46.6km away.
- 12.7.5.214 Caledonia North Site will introduce additional vertical features to the seascape horizon, the distance to which reduces their vertical impact. Due to the orientation of the Caledonia North Site to the coastline, the depth of the layout and the separation from the coastline the more distant turbines will appear less visible than the closest. The separation of the Caledonia North Site from the coast and the limited perceived prominence of the Caledonia North Site along the horizon at distance from the RCCA will reduce its influence on the RCCA.
- 12.7.5.215 Orientation of coastal edge to south-east likely to slightly decrease effect of Caledonia North Site which is seen to the east and south-east, beyond the existing OWFs which are already a characterising element along the horizon. The broad footprint of the Caledonia North Site relates to the existing horizontal emphasis of the seascape and the wide proportion of the view existing OWFs occupy. Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-11 Horizontal Angle ZTV Caledonia North shows that the Caledonia North Site will occupy between 30 – 40 degrees of the HFoV however much of the Caledonia North Site is perceived beyond the BOWL and Moray East OWFs from this coastline, particularly its southern extents.
- 12.7.5.216 Existing OWFs are visible from blade tip to foundations with more distant turbines visible from blade tip to approximately half of the towers due to the curvature of the earth. OWFs are 14.8km at their closest point and visible during good to very good conditions. Caledonia North Site will appear to extend the spread of OWFs further north, slightly intensifying the existing OWF character influence. The pattern of the layout of the Caledonia North Site echoes that of the existing OWFs creating a cohesive feature along the seascape horizon, albeit the Caledonia North Site WTGs will be larger in scale and more prominent.
- 12.7.5.217 The slight distortion of perspective resulting from the differences in scale

between the larger and more distant Caledonia North Site WTGs and the existing smaller scale OWF WTGs will result in greater visual complexity. This will be restricted to the very eastern part of the view where the Caledonia North Site WTGs are closer, visible to foundations and will be seen in within the context of the existing OWFs.

- 12.7.5.218 Caledonia North Site will be seen in the eastern part of the view, which means that the WTGs will be backlit for the first half of the day and be seen in shadow. During these times of the day the WTGs will potentially contrast less with a light sky background. WTGs that are lit by the sun, as is the case in the afternoon/evening, could potentially increase contrast against the sky background making them more apparent when visibility is very good during these times of the day.
- 12.7.5.219 Located east and south-east and due to the prevailing wind direction, the angle of the rotors will generally be aligned at an angle to the viewpoint such that the blades will be directed away from the viewpoint location, occupying less space. This also reduces the influence of blade movement in the view.
- 12.7.5.220 The views from the open and large-scale clifftops will be affected by the addition of the Caledonia North Site, however the effect is limited by the distance to it and the proportion the spread of the Caledonia North Site adds to the existing extent of OWFs.
- 12.7.5.221 The interaction between the sea and the cliffs, stacks, inlets and coves will be largely unaffected with Caledonia North Site adding to the wind farm seascape as a visually separate focus at distance out at sea.
- 12.7.5.222 Taking into account the description of change and the factors of magnitude described above, the magnitude of change for Caledonia North Site during operation is considered to be **Medium-Low** along the coastal edge and for up to 300m inland where there are open views of the sea. This covers the RCCA, and LCT 141 and the coastal edge of LCT 144 north of Clyth Mains.
- 12.7.5.223 Inland of this the magnitude of change for Caledonia North Site during operation is considered to be **Low** throughout LCT 144 north of Clyth Mains where there are areas of actual visibility (corresponding to high elevation locations such as the Hill of Yarrows and Hill of Mid Clyth). Throughout the rest of the LCT the magnitude of change is considered to be **No change**.

Significance of Effect

Construction and Decommissioning

- 12.7.5.224 The effect on the character of Sarclet Head RCCA, LCT 141 north of Skerry Mor and LCT 144 during construction and decommissioning of the Caledonia North Site is considered to be **Moderate-Minor and Not Significant in EIA terms** along the coastal edge and for up to 300m inland where there are open views of the sea. This is due to the distance to the Caledonia North Site and its associated construction and decommissioning works which will occupy the same part of the view as existing OWFs. In of this the effect will be **Minor**

and Not Significant in EIA terms where there are areas of actual visibility (corresponding to high elevation locations such as the Hill of Yarrows and Hill of Mid Clyth). Throughout the rest of the LCT 144 the magnitude of change is considered to be **No effect**. Effects will be adverse, short term and temporary.

Operation

12.7.5.225 The effect on the character of Sarclet Head RCCA, LCT 141 north of Skerry Mor and LCT 144 during operation of the Caledonia North Site is considered to be **Moderate-Minor and Not Significant in EIA terms** along the coastal edge and for up to 300m inland where there are open views of the sea. This is due to the distance to the Caledonia North Site which will occupy the same part of the view as existing OWFs. In of this the effect will be **Minor and Not Significant in EIA terms** where there are areas of actual visibility (corresponding to high elevation locations such as the Hill of Yarrows and Hill of Mid Clyth). Throughout the rest of the LCT 144 the magnitude of change is considered to be **No effect**. Effects will be adverse, long term and reversible.

Lybster Bay

12.7.5.226 Viewpoint 9 Lybster (end of Main Street) is found within this RCCA.

Baseline Character and Sensitivity

12.7.5.227 Lybster Bay RCCA stretches from Skerry Mor near Clyth Mains to the Burn of Forse. Forms the coastal edge to High Cliffs and Sheltered Bays LCT 141 with the coastal hinterland Coastal Crofts and Small Farms LCT 144. Please see Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-13 Blade Tip ZTV (Western Study Area) with Designations, Character and RCCAs.

RCCA Baseline Character

12.7.5.228 Maritime influences:

- Broad, shallowly concave bay with a mainly south-east orientation.
- Dynamic coastal influences and processes under continual force from the sea.
- Small harbour in Lybster Bay with fishing vessels. Low level of shipping parallel to coast and some recreational sailing, along with occasional vessels involved with ongoing maintenance of existing OWFs.
- Shipping is a common feature seen further out to sea on the horizon.
- Sea more distant from elevation and less immediate due to undulating and intervening coastal edge.
- Strong OWF influence with BOWL, Moray East, Moray West and Beatrice Demonstration Turbines and associated oil platforms visible out to sea.

- 12.7.5.229 Character of coastal edge:
- Rocky, undulating coastline with indentations, stacks and small enclosed bays.
 - Lybster Bay formed where Reisgill Burn empties out into sea.
- 12.7.5.230 Character of immediate hinterland:
- Scattered small farms and crofts with open fields.
 - Small-to-medium sized fields of rough grassland or semi-improved pasture, some of which follow the long, narrow crofting field patterns. Often enclosed by post-and-wire fences, very occasionally by drystone walls, resulting in open, uninterrupted views.
 - Rough open grassland with gorse and scrub in places particularly along coastal edge.
 - A99 running parallel to coastline along which majority of settlement is located, including the linear village of Lybster whose main street is perpendicular to the A99.
 - Some onshore wind farm visibility inland between Clyth and Forse and from the A99.
- 12.7.5.231 Human activity: presence or absence:
- Although it is exposed, built features including main road, communications or power lines and dwellings limit the sense of wildness likely to be experienced.
 - Some areas of shoreline inaccessible due to vertical cliff faces.
 - Presence of OWF includes large, moving form of development as a human influence out at sea visible in very good to excellent visibility conditions.
 - Presence of onshore wind farms and WTGs.
 - Some illumination at night from crofting farms and settlement including Lybster with navigational and aviation lights of OWFs visible and distant views of lights on the Moray Coast.
- 12.7.5.232 Views and visibility:
- Expansive, open and panoramic views from clifftops out across the sea throughout the majority of RCCA, contrasting with enclosed views from small bays.
 - The open sea is a key feature and focal point of view.
 - Cliffs, stacks and beaches become visible from clifftops at coves and inlets and are regular, focal features along the coast. At these locations the focus of views is down and close-range, with the open sea forming the backdrop.
 - To the south-east OWFs are visible, set back from the coast, occupy a large proportion of the seascape and are seen along the horizon.

High Cliffs and Sheltered Bays LCT 141 Baseline Character

- 12.7.5.233 Relevant key characteristics (NatureScot 2019) of the LCT 141 adjacent to RCCA Lybster Bay are listed below:
- "Occasional inlets and coves, often with very deep and sheltered waters, and sometimes containing tiny harbours tucked between cliffs and not readily visible from the main coast road and settlement.
 - Harbours on the east Caithness coast which have a strong association with settlements which are perched above the cliff."
 - "Exhilarating experience of being precariously perched upon a high edge on the cliff tops, offering open elevated views and a perception of huge space."
- 12.7.5.234 Additional key features identified as part of verification of baseline through desktop study and site visits include:
- Views of OWFs are a characteristic of seascape views from east coast of Caithness.

Coastal Crofts and Small Farms LCT 144 Baseline Character

- 12.7.5.235 Relevant key characteristics (NatureScot 2019) of the LCT 144 adjacent to RCCA Lybster Bay are listed below:
- "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.
 - Low stone walls enclosing fields on the shelf above the High Cliffs and Sheltered Bays between Dunbeath and Wick.
 - 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.
 - More dispersed settlement pattern on the east coast to the north of Brora."
 - "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 and, on the east Sutherland coast, the railway.

- 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.”

12.7.5.236 Additional key features identified as part of verification of baseline through desktop study and site visits include:

- Views of OWFs are a characteristic of seascape views from east coast of Caithness.

Sensitivity

12.7.5.237 Lybster Bay RCCA does not lie within or look over any landscapes covered by a landscape planning designation. Lybster Heritage Centre is a local visitor attraction along the coast within this RCCA as well as the view point marked on OS maps on the cliffs above Lybster Bay. The value is considered to be Medium.

12.7.5.238 LCT 141 does not lie within or look over any landscapes covered by a landscape planning designation. Lybster Heritage Centre is a local visitor attraction along the coast within this RCCA as well as the view point marked on OS maps on the cliffs above Lybster Bay. The value is considered to be Medium.

12.7.5.239 LCT 144 does not lie within or look over any landscapes covered by a landscape planning designation. The value is considered to be Medium.

12.7.5.240 Small scale, intended coastal edge of bays, coves, inlets and stacks provide containment with a reduced association with the wider seascape, contrasting with the large scale cliff tops that provide open, expansive views with a strong association with the Moray Firth. The RCCA is characterised by the higher wildness characteristics of the cliff faces, the smaller-scale landscape features of the indented coastal edge, and the settled and farmed coastal hinterland. These strong, inherent characteristics ensure this coastal landscape less susceptible to changes occurring in distant views out across the vast seascape.

12.7.5.241 Susceptibility to the Caledonia North Site elements is moderated by distance and the fact that the seascape is influenced by existing OWFs. OWFs have a characterising influence on the RCCA and the Caledonia North Site will appear to have a direct association with OWFs, being largely beyond BOWL and Moray East OWFs. Taking all of these factors into account susceptibility is considered to be Medium-Low.

12.7.5.242 In combining the Medium value with the Medium-Low susceptibility, the sensitivity of Lybster Bay RCCA, and adjacent LCT 141 and LCT 144 are considered to be **Medium**.

Magnitude of Change

- 12.7.5.243 Closest point within this RCCA is 31.3km from the Caledonia North Site.
- 12.7.5.244 The ZTV shows there may be visibility all 47 of the WTGs of the Caledonia North Site.
- 12.7.5.245 Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-13 Blade Tip ZTV (Western Study Area) with Designations, Character and RCCAs illustrates the theoretical and actual visibility of the Caledonia North Site throughout the RCCA. There is theoretical visibility throughout the majority the part of LCT 141 which lies adjacent to Lybster Bay RCCA. The exception to this is that there is limited to no theoretical visibility within the inner bay and harbour at Lybster, from the bay at Ceann Hilligeo, deep inlets and south-west facing coves or inlets.
- 12.7.5.246 There is theoretical and actual visibility of the Caledonia North Site along the coastal edge of LCT 144 adjacent to Lybster Bay RCCA up to 600m inland across the flat, relatively open landscape (houses and surrounding vegetation screen views in places). Inland from this there may be areas where the seascape horizon is visible at distance across the landscape up to 1km from the coastal edge. Elsewhere landscape features such as buildings, vegetation, small patches of wood and coniferous forestry, hedges and local undulations in the landform provide screening.
- 12.7.5.247 Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-11 Horizontal Angle ZTV Caledonia North shows that the Caledonia North Site will occupy between 30 – 40 degrees of the HFoV, however this will largely occur beyond the BOWL and Moray East OWFs.

Construction and Decommissioning

- 12.7.5.248 There will be no physical change to the character of this RCCA. During the construction and decommissioning phases of the project the worst case scenario will occur when the majority of turbines and OSPs are present and when there are still large numbers of vessels and cranes present carrying out works which will extend and intensify the existing OWF character influence. All 47 WTGs may be potentially visible.
- 12.7.5.249 However, the actual influence of the Caledonia North Site on coastal and landscape character is moderated by its separation from the RCCA and the expansive seascape it will be located within where OWFs are a characterising feature, both of which will remain a key characteristic of the coastal setting. The innate, strongly defined elements of the RCCA will not be directly affected. The only changes are as a result of visibility of the construction and decommissioning of the Caledonia North Site elements in views from the RCCA as part of its wider setting.
- 12.7.5.250 The magnitude of change during construction and decommissioning is considered to be Low along the coastal edge and for up to 600m inland where there are open views of the sea. Inland of this the magnitude of change for

the Caledonia North Site during construction and decommissioning will be lower. This covers the RCCA, and adjacent parts of LCT 141 and LCT 144.

Operation

- 12.7.5.251 The characteristics and scale of the Caledonia North Site will be an external influence on the coastal edge throughout this RCCA. There will be no physical change to the character of this RCCA. The innate, strongly defined elements of this RCCA will not be directly affected. The only changes are as a result of visibility of the Caledonia North Site in views from the RCCA as part of its wider setting.
- 12.7.5.252 During the operational phase of the project all 47 WTGs may be potentially visible with some areas where headlands and cliffs obscure the northernmost WTGs, as is the case at Viewpoint 9 Lybster (end of Main Street). Caledonia North Site will introduce additional vertical features to the seascape horizon, the distance to which reduces their vertical impact. The closer WTGs of the Caledonia North Site visible from blades to foundations with more distant WTGs seen as hubs, blades and towers to base (no foundations) above the horizon due to the curvature of the earth. The most distant WTGs of the Caledonia North Site are 52.5km away.
- 12.7.5.253 Caledonia North Site will be visible during very good conditions. Due to the orientation of Caledonia North Site to the coastline, the depth of the layout and the separation from the coastline the more distant turbines will appear less visible than the closest. The separation of Caledonia North Site from the coast and the limited perceived prominence of Caledonia North Site along the horizon at distance from the RCCA will reduce its influence on the RCCA.
- 12.7.5.254 Orientation of coastal edge to south-east likely to slightly decrease effect of Caledonia North Site which is seen to the east, largely beyond the existing OWFs which are already a characterising element along the horizon. The broad footprint of the Caledonia North Site relates to the existing horizontal emphasis of the seascape and the wide proportion of the view existing OWFs occupy. Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-11 Horizontal Angle ZTV Caledonia North shows that the Caledonia North Site will occupy between 30 – 40 degrees of the HFoV.
- 12.7.5.255 Existing OWFs are visible from blade tip to foundations with more distant turbines visible from blade tip to approximately half of the towers due to the curvature of the earth. OWFs are 16.8km at their closest point and visible during good to very good conditions. The Caledonia North Site will appear to extend the spread of OWFs slightly further north, slightly intensifying the existing OWF character influence. The pattern of the layout of the Caledonia North Site echoes that of the existing OWFs creating a cohesive feature along the seascape horizon, albeit the closest of the Caledonia North Site WTGs may appear marginally larger in scale.

- 12.7.5.256 The slight distortion of perspective resulting from the differences in scale between the larger and more distant Caledonia North Site WTGs and the existing smaller scale OWF WTGs will result in greater visual complexity. This will be restricted to the very eastern part of the view where the Caledonia North Site WTGs are closer, visible from blade tips to foundations and will be seen in within a more open part of the existing OWFs.
- 12.7.5.257 Parts of the Caledonia North Site will be seen in the eastern part of the view, which means that the WTGs will be backlit for the first half of the day and be seen in shadow. During these times of the day the WTGs will potentially contrast less with a light sky background. WTGs that are lit by the sun, as is the case in the afternoon/evening, could potentially increase contrast against the sky background making them more apparent when visibility is very good during these times of the day.
- 12.7.5.258 Located east and south-east and due to the prevailing wind direction, the angle of the rotors will generally be aligned at an angle to the viewpoint such that the blades will be directed away from the viewpoint location, occupying less space. This also reduces the influence of blade movement in the view.
- 12.7.5.259 The views from the open and large-scale clifftops will be affected by the addition of Caledonia North Site, however the effect is limited by the distance to it and the proportion the spread of Caledonia North Site adds to the existing extent of OWFs. Views south-west will remain unaffected by wind energy development.
- 12.7.5.260 The interaction between the sea and the cliffs, stacks and coves will be largely unaffected with Caledonia North Site adding to the wind farm seascape as a visually separate focus at distance out at sea.
- 12.7.5.261 Taking into account the description of change and the factors of magnitude described above, the magnitude of change for the Caledonia North Site during operation is considered to be **Low** along the coastal edge and for up to 600m inland where there are open views of the sea. Inland of this the magnitude of change for the Caledonia North Site during operation will be lower. This covers the RCCA, and LCT 141 and the coastal edge of LCT 144 between Forse and Clyth Mains.

Significance of Effect

Construction and Decommissioning

- 12.7.5.262 The effect on the character of Lybster Bay RCCA, adjacent parts of LCT 141 and LCT 144 during construction and decommissioning of the Caledonia North Site is considered to be **Minor and Not Significant in EIA terms** along the coastal edge and for up to 600m inland where there are open views of the sea. Inland of this the magnitude of change for the Caledonia North Site during construction and decommissioning will be lower. All effects will be adverse, short term and temporary.

Operation

- 12.7.5.263 The effect on the character of Lybster Bay RCCA, adjacent parts of LCT 141 and LCT 144 during operation of the Caledonia North Site is considered to be **Minor and Not Significant in EIA terms** along the coastal edge and for up to 600m inland where there are open views of the sea. Inland of this the magnitude of change for the Caledonia North Site during operation will be lower. All effects will be adverse, long term and reversible.

Landscape Planning Designations

- 12.7.5.264 The detailed assessment of landscape and seascape effects has included relevant SLA Special Qualities (as documented in *THC Assessment of Highland Special Landscape Areas* (2011) for Duncansby Head SLA within the RCCA baseline description.
- 12.7.5.265 The assessment has also taken into account the higher value attributed to these areas through this local designation.

Duncansby Head SLA

- 12.7.5.266 The assessment found the effect on the character of the Duncansby Head SLA where it is concurrent with the Duncansby Head RCCA and the adjacent LCT 141 during construction and decommissioning of the Caledonia North Site to be **Moderate-Minor and Not Significant in EIA terms** along the coastal edge and for up to 500m inland. Effects will be adverse, short term and temporary.
- 12.7.5.267 The assessment found the effect on the character of the Duncansby Head SLA where it is concurrent with the Duncansby Head RCCA and the adjacent LCT 141 during operation of the Caledonia North Site to be **Moderate-Minor and Not Significant in EIA terms** along the coastal edge and for up to 500m inland. Effects will be adverse, long term and reversible.

12.7.6 Assessment of the Effects Against OWESG Criterion

- 12.7.6.1 This section undertakes a review of the effects of the Caledonia North Site in relation to the criterion listed in THC's OWESG. Whilst this Supplementary Guidance document specifically applies to onshore wind farm development THC requested this review in its scoping consultation. Table 12-19 sets out this review which is applicable to Highlands only.

Table 12-19: Effects of the Caledonia North Site on OWESG Criterion.

No	Criterion	Measure	Extent to which the Caledonia North Site Meets the Criterion
1	Relationship between Settlements/Key locations and wider landscape respected.	The extent to which the proposal contributes to perception of settlements or key locations being encircled by wind energy development.	Caledonia North Site will not encircle any settlements or Key View locations. Views from settlements towards the seascape are generally quite restricted. See Sections 12.7.3 and 12.7.4 of this Chapter.
	Development should seek to achieve a threshold where:	Turbines are not visually prominent in the majority of views within or from settlements/key locations or from the majority of its access routes.	Caledonia North Site not visually prominent from the majority of views from settlements or Key Views from locations as set out in OWESG (pg.89 - 91). See Sections 12.7.3 and 12.7.4 of this Chapter.
2	Key Gateway locations and routes are respected.	The extent to which the proposal reduces or detracts from the transitional experience of key Gateway Locations and routes.	Caledonia North Site will not reduce or detract from the transitional experience of Key Gateway Locations (pg.94) or Key Routes (pg.91 – 92). See Section 12.7.4 of this Chapter.
	Development should seek to achieve a threshold where:	Wind Turbines or other infrastructure do not overwhelm or otherwise detract from landscape characteristics which contribute the distinctive transitional experience found at key gateway locations and routes	Caledonia North Site will not overwhelm or otherwise detract from landscape characteristics which contribute to the distinctive transitional experience found at Key Gateway locations and Routes. See Section 12.7.4 of this Chapter.
3	Valued natural and cultural landmarks are respected.	The extent to which the proposal affects the fabric and	Caledonia North Site will not affect the fabric of valued natural and cultural landmarks. Caledonia North Site may be seen in the background along the seascape horizon which may form the background to some valued natural and cultural landmarks, however

No	Criterion	Measure	Extent to which the Caledonia North Site Meets the Criterion
		setting of valued natural and cultural landmarks.	the presence of existing OWF in these views and Caledonia North Site's distance from the shore (19km at its closest point from Highland) mean that Caledonia North Site will not introduce an uncharacteristic feature. Significant visual effects were found along the coastal edge between Keiss and Whaligoe Steps. See Section 12.7.3 of this Chapter.
	Development should seek to achieve a threshold where:	The development does not, by its presence, diminish the prominence of the landmark or disrupt its relationship to its setting.	Caledonia North Site does not diminish the prominence of the landmark or disrupt its relationship to its setting due to the presence of existing OWFs within the seascape which may form the background to some landmarks. Caledonia North Site will be seen beyond existing OWFs and appear to extend the spread of wind energy development along the horizon from some locations. Where landmarks are located along the coastal edge, the seascape may form the background but it is often the relationship between the coast, the landmark and the sea which are important to the setting. See Section 12.7.3 of this Chapter.
4	The amenity of key recreational routes and ways is respected.	The extent to which the proposal affects the amenity of key recreational routes and ways (e.g., Core Paths, Munros and Corbetts, Long Distance Routes etc.).	Caledonia North Site will be located adjacent to existing OWFs, which form the baseline background amenity of key recreational routes and ways. Significant effects were found for CA15.17 Keiss/Reiss Shore and CA15.03 Castle of Old Wick core paths. Nearby coastal core paths are likely to be significantly effected due to Caledonia North Site. See Sections 12.7.3 and 12.7.4 of this Chapter.
	Development should seek to achieve a threshold where:	Wind Turbines or other infrastructure do not overwhelm or otherwise significantly detract from the visual appeal of key routes and ways.	Caledonia North Site will be seen within the same part of the view as existing OWFs and its addition to the background setting will not overwhelm or otherwise significantly detract from the visual appeal of key routes and ways. See Sections 12.7.3 and 12.7.4 of this Chapter.
5	The amenity of transport routes is respected.	The extent to which the proposal affects the amenity of transport routes (tourist	Caledonia North Site will not affect the amenity of transport routes (tourist routes as well as rail, ferry routes and local road access). See Sections 12.7.3 and 12.7.4 of this Chapter.

No	Criterion	Measure	Extent to which the Caledonia North Site Meets the Criterion
		routes as well as rail, ferry routes and local road access).	
	Development should seek to achieve a threshold where:	Wind Turbines or other infrastructure do not overwhelm or otherwise significantly detract from the visual appeal of transport routes.	Caledonia North Site will not overwhelm or otherwise significantly detract from the visual appeal of transport routes. See Sections 12.7.3 and 12.7.4 of this Chapter.
6	The existing pattern of Wind Energy Development is respected.	<p>The degree to which the proposal fits with the existing pattern of nearby wind energy development, considerations include:</p> <ul style="list-style-type: none"> ▪ Turbine height and proportions; ▪ Density and spacing of turbines within developments; ▪ Density and spacing of developments; ▪ Typical relationship of development to the landscape; ▪ Previously instituted mitigation measures; and ▪ Planning Authority stated aims for development of area. 	Although the WTGs of Caledonia North Site will have an overall tip height that is greater than existing OWFs, and except for elevated coastal areas with visibility of Caledonia North Site as represented by Viewpoint 7, there will be no scale distortion with existing OWFs. The layout of Caledonia North Site will echo that of existing OWFs such that it appears to be an extension of offshore wind energy development albeit being larger in scale and will not introduce WTGs closer to shore. Caledonia North Site will be more distant than existing OWF, and due to the anticipated interactions of scale and distance, and perspective, its larger scale will result in Caledonia North Site appearing to be closer than existing OWFs from some locations.
	Development should seek to achieve a threshold where:	The proposal contributes positively to existing pattern	Caledonia North Site will contribute positively to the existing pattern of OWF as it will appear to have a similar pattern of layout to existing OWF and will be more distant from the coastal edge.

No	Criterion	Measure	Extent to which the Caledonia North Site Meets the Criterion
		or objectives for development in the area.	
7	The need for separation between developments and/or clusters is respected	The extent to which the proposal maintains or affects the spaces between existing developments and/ or clusters.	The layout of Caledonia North Site will not introduce a new OWF cluster but maintains the pattern of OWF development albeit extending it further north along the seascape horizon.
	Development should seek to achieve a threshold where:	The proposal maintains appropriate and effective separation between developments and/ or clusters.	The layout of Caledonia North Site echoes the pattern of existing OWFs with WTGs further north appearing more spread out in a similar fashion to Moray West seen further south.
8	The perception of landscape scale and distance is respected	The extent to which the proposal maintains or affects receptors' existing perception of landscape scale and distance.	Not applicable.
	Development should seek to achieve a threshold where:	The proposal maintains the apparent landscape scale and/or distance in the receptors' perception.	Not applicable.
9	Landscape setting of nearby wind energy developments is respected.	The extent to which the landscape setting of nearby wind energy developments is affected by the proposal.	Caldonia North Site will be located within the sea adjacent to existing OWFs.
	Development should seek to achieve a threshold where:	Proposal relates well to the existing landscape setting and does not increase the	Caledonia North Site will be located within the same part of the seascape as existing OWFs and will not increase the perceived visual prominence of the surrounding WTGs.

No	Criterion	Measure	Extent to which the Caledonia North Site Meets the Criterion
perceived visual prominence of surrounding wind turbines.			
10	Distinctiveness of Landscape character is respected.	The extent to which a proposal affects the distinction between neighbouring landscape character types, in areas where the variety of character is important to the appreciation of the landscape.	Not applicable.
	Development should seek to achieve a threshold where:	Integrity and variety of Landscape Character Areas are maintained.	Not applicable.

12.8 Cumulative Effects

12.8.1 Overview

- 12.8.1.1 The list of developments identified for assessing cumulative effects is presented in Volume 7A, Appendix 7-1: Cumulative Impact Assessment Methodology. In addition, the SLVIA also includes consideration of onshore wind farm development where WTGs are over 50m tall.
- 12.8.1.2 The scope of the cumulative assessment has been agreed with consultees during the scoping process and following further consultation as set out in Section 12.3. It was agreed that the cumulative SLVIA will, include offshore and onshore wind farms that are operational, under construction and consented within the 60km radius SLVIA Study Area. These are presented in Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-6 Cumulative Wind Farms Caledonia North and shown at a larger scale with the blade tip ZTV and visual receptors in Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figures 12-15 and 12-16.
- 12.8.1.3 Table 12-20 presents the OWFs that are operational or under construction within the SLVIA Study Area.

Table 12-20: Offshore Wind Farms Within the SLVIA Study Area.

OWF	No. of WTGs	Maximum Blade Tip Height	Current Status
BOWL	84	187m above LAT	Operational
Moray East	100	198.9m above LAT	Operational
Moray West ⁱⁱⁱ	60	262.02m above LAT	Under Construction
Beatrice Demonstrator WTGs	2	151m	Operational

- 12.8.1.4 It has been agreed with stakeholders that along with the operational OWFs the Moray West OWF has to be included in the assessment as part of the baseline.
- 12.8.1.5 The Beatrice Demonstrator WTGs and the associated Beatrice Platforms are planned to be decommissioned during or prior to the construction of the Caledonia North Site. The cumulative effect of the construction of the Caledonia North Site in the context of the decommissioning of the Beatrice

ⁱⁱⁱ Moray West Export Cable was commissioned after the CIA was undertaken, and therefore has been included as part of the longlist

Demonstrator Turbines would be limited due to their distance offshore, the separation of these developments by the intervening OWFs and the limited difference between their operational phase and the short term decommissioning phase operational life of the Caledonia North Site, which is shown in the visualisations and assessed as part of the baseline. The decommissioning of the Beatrice Demonstrator WGS is therefore scoped out of the assessment as this was the approach agreed for the Moray West SLVIA.

- 12.8.1.6 The operational, under construction and consented onshore and OWFs and WTGs are shown on the viewpoint wirelines where they are within a range where they may contribute to a significant effect. For Viewpoints 1-12 onshore cumulative wind farms are shown when they are located in Highlands or in the Orkney Isles. For Viewpoints 13-22 they are shown when they are located in Moray or Aberdeenshire.
- 12.8.1.7 The addition of the Caledonia North Site to baseline OWFs (operational and under construction) is considered throughout the SLVIA in Section 12.7. A cumulative ZTV is included at Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figure 12-22 Cumulative ZTV with BOWL, Moray East and Moray West, Caledonia North to illustrate the blade tip ZTV of the Caledonia North Site along with those of the baseline OWFs.
- 12.8.1.8 The consented onshore wind farms will be added to the operational and under construction baseline context. The pattern and influence of this varies considerably across the Study Area. In THC area, as shown on Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figures 12-23 – 12-25, there are several clusters of wind farms generally set within larger scale landscape types and also some other outlying wind farms. These have been developed over a long period of time and therefore vary considerably in terms of their WTG scale and relative visibility. Their effects on views from the coastal sections of the A9 and A99 tend to be limited with the main influence arising inland.
- 12.8.1.9 On the Orkney Islands existing wind farm development tends to be small scale and dispersed across the more settled parts of the islands, associated with farms and crofts.
- 12.8.1.10 In the Aberdeenshire and Moray parts of the Study Area the pattern of onshore wind development is much more dispersed with numerous small scale wind farms and single or small groups of WTGs found across the farmed and settled parts of the landscape. These tend to have fairly localised influences on receptors. Of particular note in relation to this assessment is the Boyndie onshore wind farm and its 'extensions' (Boyndie Extension and Cairnton Road) This is a cluster of nine WTGs relatively close to the coast near to Whitehills and the A98. Their influence is considered in the main assessment in Section 12.7.
- 12.8.1.11 As of May 2024 there are no consented OWF within the Study Area.

12.8.1.12 The consented onshore wind farms that are located within the Study Area are shown in Table 12-21.

Table 12-21: Consented Onshore Wind Farms to be Considered in the Cumulative SLVIA.

Onshore Wind Farm	No. of WTGs	Maximum Blade Tip Height (m)	Inclusion in Cumulative SLVIA Required?	Receptors to be Considered
Hoy	6	149.9	No – WTGs located beyond the SLVIA Study Area boundary.	NA
Hesta Head	5	125	No – limited interaction due to separation distance between this and Caledonia North and limited receptors from where both developments may be visible.	NA
Slickly	11	149.9	Yes	Viewpoints 1,2,3,4,7, Keiss, A99, A882, B784, B786 and rail line
Cogle Moss	12	100	Yes	
Achlachan 2	3	110	No – wind farm is located on the western and northern side of an existing wind farm cluster and it will not materially change the context to which Caledonia North will be added when compared with the baseline. Cumulative ZTV include at Volume 7, Figure 12-24 illustrates the theoretical visibility of this cluster in combination with the theoretical visibility of the Caledonia North.	NA
Tacher A	1	130	No – wind farm is located close to an existing wind farm cluster and it will not materially change the context to which Caledonia North will be added when compared with the baseline. Cumulative ZTV include at Volume 7, Figure 12-24 illustrates the theoretical visibility of this cluster in combination with the theoretical visibility of the Caledonia North.	NA
Tacher B	1	130		
Tacher C	1	142.5		
Golticlay	19	130	Yes	Lybster, A9, A99, Core Path at Camster
Hill of Lichrobbie	3	74	No, this is a small scale wind farm, set back slightly from the A9 and	NA

Onshore Wind Farm	No. of WTGs	Maximum Blade Tip Height (m)	Inclusion in Cumulative SLVIA Required?	Receptors to be Considered
			likely to have only localised effects on views due to local landform. At this point along the coast Caledonia North is over 40km distant and largely sits behind the baseline OWFs so has limited effects. The addition of Hill of Lichrobbie, whilst adding further, sequential visibility of wind farm development along the A9 corridor would not give rise to a significant cumulative effect through the addition of Caledonia North.	
Bracken Hills Resubmission	1	99.5	No, as a single WTG, set back from the coast its influence on the coastal receptors that will be predominantly influenced by Caledonia North will be limited. The addition of Bracken Hills Resubmission to the cumulative context would not give rise to a significant cumulative effect through the addition of Caledonia North.	NA
Lurg Hill and Resubmission	3 (or 5)	149.9 (or 130)	No, -This small cluster of turbines would be set back some 10km from the coast and within a very different part of the landscape and views compared to those affected by Caledonia North with a separation distance between the sites of almost 60km. It would be seen in the immediate context of the Netherton of Windy Hills and Myreton WTGs. The addition of Lurg Hill Resubmission to the cumulative context would not give rise to a significant cumulative effect through the addition of Caledonia North.	NA

12.8.2 Construction

- 12.8.2.1 There is no certainty in relation to the construction programmes for the consented onshore wind farms. Some of the onshore wind farms have been consented for a number of years without being taken forward to construction so their immediate development cannot be assumed. Therefore, there is insufficient information available to be able to make an assessment of the effects of the cumulative effects of the construction of Caledonia North in the context of the construction phase of the consented onshore wind farms.

12.8.3 Operation

- 12.8.3.1 This assessment considers the cumulative effect of the addition of the Caledonia North Site to a context that includes Cogle Moss and Golticlay onshore wind farms as well as the operational and under construction wind farms include in the assessments in Section 12.7.

Cumulative Visual Effect in the Context of Cogle Moss, Slickly and the Baseline Wind Farms START

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- 12.8.3.2 The baseline wind farm context includes a small number of onshore wind farms in the vicinity of Keiss, visible at relatively close proximity from Viewpoints 1-4 as well as from the nearby sections of the A99, A882, B876, B874 and the rail line as shown on Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figures 12-6 and 12-15 at a larger scale. These onshore wind farms have an existing influence on people within the settlement and users of these routes as they pass through the landscape.
- 12.8.3.3 The addition of the Caledonia North Site to the baseline wind farm context was assessed as resulting in a Significant effect on Viewpoint 4 and parts of Keiss due to a Medium-High sensitivity and a Medium-Low magnitude of change.
- 12.8.3.4 The addition of the Caledonia North to the baseline wind farm context was assessed as having a Not-significant effect on the A99, A882, B874, B876 and rail line routes in Section 12.7.
- 12.8.3.5 Receptors using routes such as these, where they are not passing through a Landscape Planning Designation and are not defined as scenic routes are considered to be of Medium sensitivity to Caledonia North.
- 12.8.3.6 The magnitude of change arising from the addition of Caledonia North was assessed for the A99 as Medium-Low between south of Keiss and Warth Hill, Low at Reiss and Negligible or No change elsewhere along the route. For all other routes considered here the magnitude of change was not considered to be sufficient to give rise to a significant effect suggesting it will be Medium-

Low or lower.

Additional Influence of Cogle Moss

- 12.8.3.7 Cogle Moss will not be visible from Viewpoint 1: Burwick Ferry Landing.
- 12.8.3.8 Cogle Moss is visible at a distance of 20.8km from Viewpoint 2: Dunnet Head and will be visible within the context of Achairn Farm and Wathegar 2 wind farms.
- 12.8.3.9 Cogle Moss will not be visible from Viewpoint 3: Duncansby Head.
- 12.8.3.10 Cogle Moss will add a further wind farm development to views from the settlement of Keiss as shown in Volume 7C, Appendix 12-3: Seascape, Landscape and Visual Impact Assessment Visualisations, Figure 12c Viewpoint 4: Keiss. This will occur in a part of the view that is already affected by more distant onshore wind farms so that Cogle moss will theoretically appear larger and more prominent at a range of 7.9km. However, as shown in the baseline photograph intervening woodland will largely screen the WTGs so that only their upper parts may be visible.
- 12.8.3.11 There will be visibility of Cogle Moss wind farm heading north along the A99 between Gansclet and Hempriggs but not from within the village of Thrumster where built form obscures the view. Where visible it will be seen along the mid-distance horizon partially obscured by intervening vegetation. There is potential visibility north of Whiterow south of Wick for a short stretch of the A99 before the built form of Wick obscures views to the wider landscape, and there will be visibility for a short stretch north of Wick at Ackergill along the mid-distance horizon. Heading south there will be a small stretch of visibility along the A99 south of Warth Hill where Cogle Moss will be visible along the horizon seen beyond Stroupster wind farm. There will be visibility for a stretch of the A99 south of Nybster to south of Keiss where the pipeline laying facility crosses the road where Cogle Moss will be visible in the mid distance and in conjunction with the operational Bad a Cheo, Halsary and Causeymire wind farms.
- 12.8.3.12 Cogle Moss will add a further wind farm development to the north of the A882, the B874 and the rail line which is in the opposite direction to existing close range wind farm views, which are already influential so that there will be a sense of passing between developments.
- 12.8.3.13 Cogle Moss will add a further wind farm development at relatively close proximity to the south of the B876 where baseline wind farms are visible at moderate ranges to the north and south of the route.

Additional Influence of Slickly

- 12.8.3.1 At Viewpoint 1: Burwick Ferry Landing Slickly wind farm (20.9km) will be seen adjacent to the operational Stroupster wind farm (19.2km) across the Pentland Firth along the mainland horizon. The consented Slickly WTGs appear to extend the influence of wind farm development having a similar layout but larger in size and apparent scale than Stroupster, and with a

similar amount of the WTGs visible above the horizon.

- 12.8.3.2 At Viewpoint 2: Dunnet Head, Slickly wind farm (14.9km) will be seen between the operational Stroupster (16.1km) and Lochend Farm (10.3km) wind farms. The consented Slickly WTGs appear larger in size and due to the comparatively large rotor diameter to overall WTG height the bases of the towers appear as though they are obscured by intervening land form. Due to distance and the existing wind farm context Slickly wind farm will not have a material influence on views from this location.
- 12.8.3.3 At Viewpoint 3: Duncansby Head, Slickly wind farm (10.7km) appears on the far side of Warth Hill to the operational Stroupster wind farm (8.5km). The consented Slickly wind farm will be visible as blades and blade tips above the horizon. Due to the complementary layout Slickly will appear as an extension of Stroupster.
- 12.8.3.4 At Viewpoint 4: Keiss, Slickly wind farm (4.5km) will be seen in views to the north of the village. The consented wind farm will be seen as apparently large blades sweeping across the relatively flat horizon within the context of large barns or industrial-sized sheds, one and two pole electricity lines, the existing Stroupster wind farm (4.4km) blades and rooflines of houses. Views of Slickly will be available from the northern and western parts of the village, and from outside the development envelope on entering and leaving the village.
- 12.8.3.5 There will be areas of visibility of the consented Slickly wind farm seen adjacent to the operational Stroupster wind farm along the A99. There will be visibility between Reiss and Keiss straight ahead when travelling north. Between Nybster and Warth Hill there will be visibility obliquely, except when travelling south when the road faces south-west as it rounds Warth Hill when Slickly will be seen straight ahead. A section of the road is screened by the Hill of Harley which obscures views inland including of Slickly (and Stroupster) wind farm(s). The relatively flat inland landscape affords open views with WTGs often seen to turbine base and skylined.
- 12.8.3.6 Slickly wind farm will be visible from the A882, B874 and the rail line until the junction with the A9 (A882) and the eastern end of Loch Watten (B874 and rail line). It will be visible along the skyline adjacent to Stroupster wind farm across the gently undulating and relatively flat landscape with local landform undulations, houses and associated boundary vegetation and small blocks of coniferous forestry obscuring long distance views at regular locations along the routes.
- 12.8.3.7 Along the B876 there will be theoretical visibility of the consented Slickly wind farm from where it meets the A99 at Keiss to just south of the unnamed road which leads to Wester Olig, seen long the mid-distance horizon adjacent to the operational Stroupster wind farm. Housing and associated boundary vegetation as well as small areas of forestry located along the B876, at regularly intervals, obscure views to the wider landscape including towards Slickly wind farm.

Cumulative Magnitude of Change

- 12.8.3.8 At Viewpoint 1: Burwick Ferry Landing, the addition of the Caledonia North to the view which includes Slickly and the baseline wind farms will result in a **Low** cumulative magnitude of change.
- 12.8.3.9 At Viewpoint 2: Dunnet Head the addition of the Caledonia North to the view which includes Slickly and the baseline wind farms will result in a **Low** cumulative magnitude of change.
- 12.8.3.10 At Viewpoint 3: Duncansby Head the addition of the Caledonia North to the view which includes Slickly and the baseline wind farms will result in a **Low** cumulative magnitude of change.
- 12.8.3.11 At Viewpoint 4: Keiss the addition of the Caledonia North to the view which includes Cogle Moss, Slickly and the baseline wind farms will result in a **Medium-Low** cumulative magnitude of change, which is the same level of effect assessed in the principal assessment, which includes the baseline wind farms.
- 12.8.3.12 The addition of the Caledonia North to views from Keiss that include Cogle Moss, Slickly and the baseline wind farms will result in a **Medium-Low** cumulative magnitude of change.
- 12.8.3.13 The addition of the Caledonia North to views from the routes that include Cogle Moss, Slickly and the baseline wind farms will result in a **Low** cumulative magnitude of change. This is with the exception of a section of the A99 between Warth Hill and south of Keiss where the cumulative magnitude of change would be **Medium-Low**.

Cumulative Effect

- 12.8.3.14 Taking account of the **Medium-High** sensitivity of views from Viewpoints 1 to 3 combined with **Low** cumulative magnitude of change, the cumulative effect of the addition of Caledonia OWF during operation is considered to be **Moderate-Minor and Not Significant in EIA terms**.
- 12.8.3.15 Taking the **Medium-High** sensitivity of views from Viewpoint 4 and Keiss and the **Medium-Low** cumulative magnitude of change, the cumulative effect of the addition of Caledonia OWF during operation is considered to be **Moderate and Significant in EIA terms**.
- 12.8.3.16 Taking the Medium sensitivity of views from the routes and the Low or Medium-Low cumulative magnitude of change, the cumulative effect of the addition of Caledonia OWF during operation is considered to be **Minor or Moderate-Minor and Not Significant in EIA terms**.

Cumulative Visual Effect on Lybster, A9, A99 and Core Path at Camster in the Context of Golticlay and the Baseline Wind Farms

Introduction and Findings of Principal Assessment

- 12.8.3.17 The baseline wind farm context includes a small number of onshore wind farms in the vicinity of Lybster and the nearby sections of these routes as shown on Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures, Figures 12-6 and 12-15. It is the Buolfruch and Burn of Whilk wind farms that are located at closest proximity to these receptors, however they generally have a limited effect on people in the settlement and users of these routes as they pass through the landscape due to their scale and context. Volume 7C, Appendix 12-3: Seascape, Landscape and Visual Impact Assessment Visualisations, Figure 12-9 Viewpoint 9: Lybster (end of Main Street) illustrates the degree of theoretical visibility of these wind farms from the viewpoint.
- 12.8.3.18 The addition of the Caledonia North Site to the baseline wind farm context was assessed as having Not-significant effects on Lybster, the A9 and the A99 southerly section of the A99 and the Camster Forest Core Path in Section 12.7.
- 12.8.3.19 Receptors in Lybster, users of the A99 and those using the A9 between Latheron and Thurso were identified as being of **Medium** sensitivity whilst users of the A9 between Helmsdale and Latheron were assessed as having a **Medium-High** sensitivity. Users of the Core Path were not assessed in detail however people using routes such as these, where they are not passing through a Landscape Planning Designation are considered to be of **Medium-High** sensitivity to the Caledonia North Site.

Additional Influence of Golticlay

- 12.8.3.20 Golticlay will add a further wind farm development to the north-north-west of Lybster where it may be visible from some properties and parts of the settlement. It would not be seen along the northerly alignment of the main street. Golticlay wind farm may be seen in views from the A99 north of Lybster and in views east from the A9 where it passes between Stemster Hill and Ben-a-chielt. From the Camster Forest Core Path it may be seen in views west. All of these views are likely to be relatively close range but localised in terms of the geographical extent of the visibility of Golticlay as a result of local landform and intervening screening by coniferous plantation forestry.

Cumulative Magnitude of Change

- 12.8.3.21 From the section of the coast and slightly inland where views may be affected by the Golticlay wind farm the Caledonia North Site is largely located and viewed beyond the baseline OWF so that it has an incremental effect on views due to a slightly wider horizontal field of view being affected.
- 12.8.3.22 The addition of the Caledonia North Site to views from Lybster that include views of Golticlay wind farm, in approximately the opposite direction, along

with the baseline wind farms will result in a **Low** cumulative magnitude of change.

- 12.8.3.23 The addition of the Caledonia North Site to views from the routes that include Golticlay wind farm in sequential or successive views and the baseline wind farms will result in a **Low** cumulative magnitude of change.

Cumulative Effect

- 12.8.3.24 Taking the Medium sensitivity of views from Lybster and the Low cumulative magnitude of change, the cumulative effect of the addition of the Caledonia North Site during operation is considered to be **Minor and Not Significant in EIA terms**.
- 12.8.3.25 Taking the Medium or Medium-high sensitivity of views from the routes and the Low cumulative magnitude of change, the cumulative effect of the addition of the Caledonia North Site during operation is considered to be **Moderate-minor or Minor and Not Significant in EIA terms**.

12.8.4 Decommissioning

- 12.8.4.1 None of the operational OWFs are likely to be decommissioned at the same time as the Caledonia North Site. It is likely that they will be decommissioned sooner. There is no certainty in relation to the decommissioning programmes for the baseline or consented onshore wind farms. Some of the onshore wind farms have been consented for a number of years without being taken forward to construction so the timescale for their development or decommissioning cannot be assumed. Therefore, there is insufficient information available to be able to make an assessment of the effects of the cumulative effects of the decommissioning of the Caledonia North Site in the context of the decommissioning phase of the baseline or consented onshore wind farms.

12.9 In-combination Effects

12.9.1 Overview

- 12.9.1.1 In-combination impacts may occur through the inter-relationship with another EIAR topic that may lead to different or greater environmental effects than in isolation. Table 12-22 sets out the inter-relationships between this chapter and the other chapters within the EIAR. There is also the potential for in-combination impacts resulting from onshore and offshore works.
- 12.9.1.2 The potential in-combination effects for seascape, landscape and visual receptors resulting from effects between Caledonia North Site and works are described below.

Table 12-22: Inter-relationships between the SLVIA and other Chapters within the EIAR.

Topic/Chapter	Where Addressed in the SLVIA	Rationale
Volume 5, Chapter 4: Landscape and Visual	Section 12.9	Both chapters consider the potential effects of Caledonia North Site on landscape and visual receptors. Volume 5, Chapter 4 considers the effects of the onshore elements of the Proposed Development (Onshore) on these receptors whilst this SLVIA chapter considers the effects of the offshore elements of Caledonia North Site.
Volume 5, Chapter 5: Terrestrial Archaeology and Cultural Heritage	(Volume 7C, Appendix 12-3: Seascape, Landscape and Visual Impact Assessment Visualisations and Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures) Section 12.7	The visualisations and figures associated with the SLVIA (Volume 7C, Appendix 12-3: Seascape, Landscape and Visual Impact Assessment Visualisations and Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures) are also used to support the assessment in Volume 5, Chapter 5. Both chapters consider the potential effects of the visibility of offshore elements of Caledonia North Site on onshore landscape and visual receptors. The SLVIA considers this in terms of the effects on visual amenity and landscape character whilst Volume 5, Chapter 5 considers visibility of the offshore elements of Caledonia North Site in relation to the settings of the cultural heritage assets. Gardens and Designed Landscapes are referenced in the SLVIA where they are relevant to the value or view. The impact on these receptors is assessed in Volume 5, Chapter 5.
Volume 6, Chapter 2: Socioeconomics, Tourism and Recreation	(Volume 7C, Appendix 12-3: Seascape, Landscape and Visual Impact Assessment Visualisations and Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures) Section 12.7	The visualisations and figures associated with the SLVIA (Volume 7C, Appendix 12-3: Seascape, Landscape and Visual Impact Assessment Visualisations and Volume 7C, Appendix 12-2: Seascape, Landscape and Visual Impact Assessment Figures) are also used to support the assessment in Volume 6, Chapter 2. Both chapters consider the potential effects of the offshore elements of Caledonia North Site on the visual amenity of recreational users in the local area.

12.9.2 In-combination effects with landscape and visual receptors of Caledonia Proposed Development (Onshore)

12.9.2.1 The inter-relationship between the coastal, landscape and visual effects of

Caledonia North Site and the landscape and visual effects of Proposed Development (Onshore) occurs where landscape and visual receptors may be materially impacted through visibility of both parts of the project.

12.9.2.2 Caledonia North will only affect landscape receptors through visibility as part of the setting which may affect landscape character, however the Proposed Development (Onshore) will also affect the landscape physically, which in turn may affect landscape character. Effects of Caledonia North Site on landscape character in the vicinity of the Onshore Transmission Infrastructure (OnTI) and proposed substation are assessed in Table 12-16 as having no potential to be significant. The inter-relationship between the landscape character effects of Caledonia North and the Proposed Development (Onshore) are not considered further as there is no potential for significant effects to arise from the inter-connection between them.

12.9.2.3 The visual effects of the Proposed Development (Onshore) are relatively localised whilst the effects of Caledonia North are more widespread. The areas where there is a strong inter-relationship between these effects occurs only where they coincide to affect the same receptors. Effects of Caledonia North Site on representative viewpoints within Aberdeenshire are assessed in Section 12.7.3 and preliminary assessment visual receptors 12.7.2 as having no potential to be significant. The inter-relationship between the visual effects of Caledonia North Site and the Proposed Development (Onshore) are not considered further as there is no potential for significant effects to arise from the inter-connection between them.

12.10 Transboundary Effects

12.10.1.1 No significant transboundary seascape, landscape and visual effects are likely to arise.

12.11 Mitigation Measures and Monitoring

12.11.1.1 All mitigation measures associated with seascape, landscape and visual effects have been included as embedded mitigation and included in the assessment. No monitoring is proposed.

12.11.1.2 If consent is granted it is likely there will be a condition requiring a review and preparation of a Design Statement by a landscape architect in relation to the finalised proposals including WTG and OSP positions and sizes as well as the proposed lighting.

12.11.1.3 As part of the final wind farm design and the Applicant will work with stakeholders to seek to reduce, where possible, the perception of turbines as 'outliers' which could appear to extend the horizontal extent of the wind farm disproportionately when compared to the energy gained. The final wind farm design and layout will also be required to take into account other stakeholder requirements such as navigation, commercial fisheries and search and rescue

(SAR); other technical and environmental factors within the Caledonia North Site (ground conditions, cable routes, wind resources etc.); and proximity to the neighbouring BOWL and Moray East offshore wind farms. The final design will be presented within the DSLP.

12.12 Residual Effects

- 12.12.1.1 The effects of Caledonia North are assessed in Sections 12.7 to 12.9 and incorporate consideration of any embedded mitigation.

12.13 Summary of Effects

- 12.13.1.1 Table 12-23 presents a summary of the significant effects assessed within this EIAR, any mitigation required, and the residual effects are provided.

Table 12-23: Summary of Significant Effects for Seascape, Landscape and Visual.

Potential Impact	Magnitude	Sensitivity of Receptor	Significance	Secondary Mitigation Measure
Construction, Operation and Decommissioning				
Viewpoint 4 Keiss	Medium-Low	Medium-High	Moderate and Significant	See Section 12.11
Viewpoint 5 Wick	Medium	Medium-High	Moderate and Significant	See Section 12.11
Viewpoint 6 Sarclet (Sarclet Haven Info Board)	Medium	Medium	Moderate and Significant	See Section 12.11
Viewpoint 8 Whaligoe Steps	Medium	Medium	Moderate and Significant	See Section 12.11
Cumulative Visual Effects				
Views from Keiss and Viewpoint 4	Medium-Low	Medium-High	Moderate and Significant	See Section 12.11

12.14 References

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