

Appendix 4.4 Consideration of Scoping Stage Sites



EDF Energy Renewables Ltd

Dunside Wind Farm EIA Report

Appendix 4.4: Consideration of Scoping Stage Sites

Final report

Prepared by LUC

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EDF Energy Renewables Ltd

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Chapter 1

Consideration of Scoping Stage Sites

Introduction

4.4.1 This appendix sets out high level commentary on potential landscape and visual interactions between the Proposed Development and the other wind farm proposals which would lie relatively close to Dunside Wind Farm, at Longcroft, Wedderlie Farm, Back Burn, and Lees Hill Energy Park, and which are all at Scoping stage. It is not a requirement to examine the cumulative effects of a Proposed Development with Scoping stage projects. However, when they are well advanced and likely to reach application stage before determination of the Proposed Development, or when they are very close by, NatureScot or the Council may request that they are included. The closer Scoping stage developments are considered here for these reasons.

4.4.2 It should be noted that the proposed layouts are uncertain and subject to change as they move through the planning application process, and as such the consideration of these sites provided here is at high level, and focused on describing potential interactions or patterns. As elsewhere, the key purpose of this appendix is understand the effect of adding the Proposed Development, when considered against a potential future baseline scenario, not to understand the total or combined effects of all existing and proposed developments taken together, although comment is made on combined effects where it is appropriate to do so.

Approach to Consideration of Cumulative Effects

4.4.3 This consideration of cumulative effects follows the approach detailed in the methodology in **Appendix 4.1: LVIA and Visualisation Methodology**. It does not make a judgement as to the level of effect or its significance given the proposed Scoping layouts, turbine size etc will be subject to change, and the fact that their advancement to application stage is also uncertain.

4.4.4 The baseline for the Landscape and Visual Impact Assessment (LVIA) is the current landscape at the time of writing the assessment. This is referred to as the 'primary assessment'. The Proposed Development is being introduced into an area where wind farms and wind turbines are already a feature of the baseline. Wind farms that are present or under construction (when it is well advanced) are considered within the primary assessment. As such, many of the effects considered within the primary assessment are cumulative effects, or include a cumulative component. Where this is the case, these cumulative effects are described within the primary assessment in the main LVIA Chapter.

4.4.5 The 'Future Scoping Scenario' set out as the speculative future baseline for this appendix includes wind farms at Scoping stage. These lie within around 12 kilometres (km) of the Proposed Development, and are considered here because of the potential for future cumulative effects, should these projects progress further. The proposed Newlands Hill Wind Farm, also at Scoping stage, has an advanced layout (i.e. it is close to being the layout which will be used for the application, as was confirmed through discussions with the developer). It is considered more certain, and is therefore also considered as part of Scenario 2 in the main LVIA Chapter.

4.4.6 The following proposed wind farms are considered in this appendix, in addition to the Newlands Hill Wind Farm. Information was drawn from Scoping Reports.

- Longcroft (24 turbines, 220 metres (m) tip height) is proposed approximately 3 km to the south-west of the Proposed Development, within the host Landscape Character Type (LCT) (Dissected Moorland Plateau), situated adjacent to the existing Fallago Rig Wind Farm;
- Wedderlie Farm (5 turbines, 149.9 m tip height) is proposed approximately 3 km to the south-east of the Proposed Development, within the host LCT (Dissected Moorland Plateau) and the Lammermuir Hills Special Landscape Area (SLA), and situated between Watch Water Reservoir and Derrington Little Law;

- Back Burn (15 turbines, 200 m tip height) is proposed approximately 8.5 km to the west of the Proposed Development, within the host LCT (Dissected Moorland Plateau) and the Lammermuir Hills SLA, directly north of the village of Oxtou; and
- Lees Hill Energy Park (7 turbines, 200 m tip height) is proposed approximately 10.5 km to the south of the Proposed Development, west of Duns and straddling the border of LCT 102 (Upland Fringe with Prominent Hills) and LCT 105 (Upland Fringe Moorland with Hills).

Wireline Visualisations

4.4.7 Visualisations are one source of information used to inform the LVIA. Indicative wireline visualisations were produced for ten representative assessment viewpoints (see **Figures TA4.4.1 to TA4.4.10** in Volume 3b of the Environmental Impact Assessment (EIA) Report. The wirelines illustrate a 90 degree field of view in the direction of the Site, only. The methodology for the preparation of wireline visualisations is detailed in **Appendix 4.1**.

Effects on Landscape Character and Designated Landscapes

Table A4.4.1: Operational Effects on LCT 90: Dissected Plateau Moorland (host)

NatureScot (2019) LCT	LCT 90: Dissected Plateau Moorland
<p>Location and Baseline Description:</p> <p>This LCT is located approximately 3 km north of Westruther and encompasses the entirety of the Site and northern half of the access road. Two further units of this LCT are located approximately 19 km south-west and 43 km west of the nearest turbines. The larger and closer of the two units encompasses the Moorfoot Hills north of Innerleithen, and the latter encompasses part of the Pentland Hills just north of West Linton. Key characteristics include:</p> <ul style="list-style-type: none"> ■ <i>“Plateau landform consisting of a series of level-topped hills and ridges;</i> ■ <i>Strong topographic identity and overall grandeur of scale;</i> ■ <i>Individual hill masses separated by steep sided valley features of different scales;</i> ■ <i>Semi-natural peatland, heather moorland and grassland communities dominant, with a high degree of perceived naturalness of vegetation cover;</i> ■ <i>Very low settlement density with isolated, dispersed pattern;</i> ■ <i>Scattered prehistoric settlement and burial mounds above watercourses; and</i> ■ <i>Sense of wildness created by wide horizons and long distance, unobstructed views.”¹</i> 	
<p>Potential for Effects:</p> <p>If Scoping-stage projects advance, both the proposed Longcroft Wind Farm and the proposed Wedderlie Farm would be introduced into the host LCT, to the west and south-east of the Site, respectively. The proposed Back Burn Wind Farm would be located in the adjacent Plateau Grassland – Borders LCT to the west, between the Dun Law Group and Longcroft. The combined effect would narrow the gap between the Dun Law Group and Fallago Rig turbines. The proposed Newlands Hill Wind Farm would be located in the adjacent Plateau Moorland – Lothians LCT to the north. As illustrated by Figure 4.1.13, there would be visibility of both the Proposed Development and other operational, consented and proposed developments (including the Scoping stage developments) from elevated parts of the Dissected Plateau Moorland LCT. Although this LCT is already influenced by wind farms, both within and outside of the LCT, the above changes would increase the influence and intensity of wind farm development across the western Lammermuir Hills, narrowing gaps between the Dun Law Group and wind farms in the centre of the Lammermuir plateau. In the north-east of the Dissected Plateau Moorland LCT, which is already characterised in part by the Crystal Rig / Aikengall Group of wind farms, the introduction of Scoping stage schemes would be less perceptible. The addition of the Proposed Development, in the context of this potential future baseline, would intensify the effect of wind farm development in the central part of the LCT, reducing the gap between operational and Scoping stage wind farms.</p>	

¹ SNH (2019) National Landscape Character Assessment, Landscape Character Type 90, Dissected Plateau Moorland

Table A4.4.2: Operational Effects on LCT 91: Plateau Grassland – Borders

NatureScot (2019) LCT	LCT 91: Plateau Grassland – Borders
<p>Location and Baseline Description:</p> <p>This LCT is situated approximately 8 km west of the nearest turbine. Key characteristics include:</p> <ul style="list-style-type: none"> ■ <i>“Large-scale rolling plateau topography with gentle slopes and smooth relief;</i> ■ <i>Vegetation cover dominated by coarse grassland with localised patches of heather moorland rush pasture and scattered conifer plantations;</i> ■ <i>Low density settlement with widely dispersed farm buildings;</i> ■ <i>Wind farm development in the northern and central parts of the LCT; and</i> ■ <i>Remote isolated quality, with open panoramic views.</i>² 	
<p>Potential for Effects:</p> <p>If Scoping stage projects advance, Back Burn would be located at the north-eastern edge of the Plateau Grassland – Borders LCT unit, to the east of the Dun Law Group of wind farms. In combination with Longcroft in the neighbouring Dissected Plateau Moorland LCT, Back Burn would reduce the gap between the Dun Law Group and the operational Fallago Rig Wind Farm. At a landscape scale, the Proposed Development would form a group with Fallago Rig, and both would be seen in combination with Back Burn and Longcroft in easterly views from the northern part of the LCT. However, the northern part of the LCT is characterised by wind farm development, and the Proposed Development would be seen in distant views.</p>	

Table A4.4.3: Operational Effects on LCT 99: Rolling Farmland – Borders

NatureScot (2019) LCT	LCT 99: Rolling Farmland – Borders
<p>Location and Baseline Description:</p> <p>This LCT occurs as five units within the study area, the closest of which is located approximately 3.5 km south of the nearest turbine, encompassing the settlement of Westruther and southern half of the access track to the Proposed Development. The remaining four LCT units are over 25 km to the south and west of the nearest turbine, extending beyond the 45 km study area. Key characteristics include:</p> <ul style="list-style-type: none"> ■ <i>“Undulating relief, becoming more pronounced at higher elevations;</i> ■ <i>Distinctive areas of flat or constant gentle gradients, giving wide horizons and Skyscapes;</i> ■ <i>Large-scale strong geometric field pattern, enclosed by hedgerows, with scattered coniferous woods;</i> ■ <i>Moderately densely settled, with frequent farmsteads and small villages; and</i> ■ <i>Well-kempt, prosperous appearance.”</i>³ 	
<p>Potential for Effects:</p> <p>None of the Scoping stage wind farms considered in this appendix are within the Rolling Farmland – Borders LCT. However, the proposed Wedderlie Farm would be situated in proximity within the adjacent LCT 90, and would be visible in some combined northerly views with the Proposed Development. The proposed Lees Hill Energy Farm would be situated east of the LCT, in the Upland Fringe Moorland with Hills LCT, south of the operational Black Hill Wind Farm. Lees Hill Energy farm may be visible in some successive views with the Proposed Development from the Rolling Farmland – Borders LCT.</p> <p>The introduction of the Proposed Development, in the context of this potential future baseline, would increase the sense of wind turbines being present across the moorland plateau north of the LCT. Seen in combination with the proposed Wedderlie Farm, the influence of wind farm development would extend south towards the LCT.</p>	

² SNH (2019) National Landscape Character Assessment, Landscape Character Type 91, Plateau Grassland - Borders

³ SNH (2019) National Landscape Character Assessment, Landscape Character Type 99, Rolling Farmland – Borders

Table A4.4.4: Operational Effects on LCT 100: Plateau Farmland – Borders

NatureScot (2019) LCT	LCT 100: Plateau Farmland – Borders
<p>Location and Baseline Description:</p> <p>This LCT is located between approximately 13 km and 23 km to the east of the nearest turbine, to the east of the Lammermuir Hills. Key characteristics include:</p> <ul style="list-style-type: none"> ■ <i>“Large scale smooth landform characterized by gentle sweeping slopes;</i> ■ <i>Simple pattern of large arable and pasture fields emphasized by contrasting coniferous shelterbelts and forests;</i> ■ <i>Fields divided by drystone dykes or fences;</i> ■ <i>Widely dispersed farmsteads and small villages linked by a grid like minor road network</i> ■ <i>A line of prehistoric settlement on the southern edge; and</i> ■ <i>An open exposed landscape with a simple uniform character.”⁴</i> 	
<p>Potential for Effects:</p> <p>None of the Scoping stage wind farms considered in this appendix are within, or in proximity to, the Plateau Farmland – Borders LCT. The proposed Wedderlie Farm, Lees Hill Energy Park, and Newlands Hill would appear to the north and south of the Proposed Development in combined westerly views. These proposed wind farms would extend the influence of wind farm development north and south across the Lammermuir Hills in long-distance views. Given the widespread visibility of wind farms in outward views from the LCT and the distance, the addition of the Proposed Development, in the context of this potential future baseline, would not alter the key characteristics of the LCT.</p>	

Table A4.4.5: Operational Effects on LCT 102: Upland Fringe with Prominent Hills

NatureScot (2019) LCT	LCT 102: Upland Fringe with Prominent Hills
<p>Location and Baseline Description:</p> <p>This LCT occurs as four units between 8 km and 38 km from the nearest turbine. The closest of the units is located approximately 8 km to the east of the nearest turbine, adjacent to the small village of Longformacus and rising to a high point of 360 m at Hardens Hill and 353 m AOD at Knock Hill. The other units are approximately located between 25 km and 38 km to the south of the nearest turbine. Key characteristics include:</p> <ul style="list-style-type: none"> ■ <i>“Typically steep, cone or dome-shaped hills, frequently of volcanic or igneous rock giving strong landform identity;</i> ■ <i>Diverse surrounding landform types, ranging from smooth undulations to strongly elongated ridges and hollows;</i> ■ <i>Land cover dominated by permanent pasture;</i> ■ <i>Locally frequent woodland cover;</i> ■ <i>Generally low settlement density with isolated farmsteads and occasional small settlements;</i> ■ <i>Rich in visual contrasts, with individual hills as dominant focal points of views; and</i> ■ <i>Diversity of landscape scale.”⁵</i> 	
<p>Potential for Effects:</p> <p>If Scoping stage projects progress, Lees Hill Energy Park would be partially located along the western edge of the LCT to the south of Black Hill Wind Farm, and partially within the adjacent LCT 105 (Upland Fringe Moorland with Hills). The proposed Wedderlie Farm and Newlands Hill would appear to the south and north of the Proposed Development, respectively, in combined westerly views. These Scoping stage wind farms would extend the visual influence of wind farm development north and south across the Lammermuir Hills and plateau margins.</p> <p>However, given the widespread visibility of wind farms in outward views from the LCT, and given the distance, the addition of the Proposed Development would not alter the key characteristics of the LCT.</p>	

⁴ SNH (2019) National Landscape Character Assessment, Landscape Character Type 100, Plateau Farmland - Borders

⁵ SNH (2019) National Landscape Character Assessment, Landscape Character Type 102, Upland Fringe with Prominent Hills

Table A4.4.6: Operational Effects on LCT 103: Undulating Upland Fringe

NatureScot (2019) LCT	LCT 103: Undulating Upland Fringe
<p>Location and Baseline Description:</p> <p>This LCT occurs as two units, between 13 km and 23 km to the south-west of the nearest turbine. Both LCT units are located east and west of Gala Water Valley, on the rising slopes either side of the town of Galashiels. Key characteristics include:</p> <ul style="list-style-type: none"> ■ <i>“Large-scale, moderately to steeply sloping and undulating landform incised in places by steep gullies and narrow valleys;</i> ■ <i>Unity of land cover characterised by improved pastures, with prominent field pattern delineated by a well maintained network of drystone dykes, and scattered coniferous plantations;</i> ■ <i>Medium density settlement with small villages and farmsteads sited typically in sheltered valleys and on lower slopes;</i> ■ <i>Simple uniform landscape of smooth flowing curves, open in character with distant views over adjoining valley types and the Lammermuir and Moorfoot hills; and</i> ■ <i>Boundaries clearly defined by major river valleys”⁶.</i> 	
<p>Potential for Effects:</p> <p>None of the Scoping stage wind farms considered in this appendix are within the Undulating Upland Fringe LCT. However, other Scoping stage schemes would be seen in distant views to the north and north-east, in combination with the Proposed Development. The Proposed Development would potentially be seen to narrow the gap between the existing Fallago Rig and proposed Wedderlie Farm, extending the visual influence of wind farm development south across the Lammermuir Hills and plateau margins. The proposed Back Burn and Longcroft Wind Farms would be seen to the north of the eastern LCT unit, narrowing gaps between the Dun Law Group and the Fallago Rig turbines. However, given the widespread visibility of wind farms in outward views from the LCT, and given the distance, the addition of the Proposed Development, in the context of this potential future baseline, would not alter the key characteristics of the LCT.</p>	

Table A4.4.7: Operational Effects on LCT 105: Upland Fringe Moorland with Hills

NatureScot (2019) LCT	LCT 105: Upland Fringe Moorland with Hills
<p>Location and Baseline Description:</p> <p>This LCT is located approximately 4.5 km south of the nearest turbine, and contains the prominent landform of Dirrington Great Law and Dirrington Little Law in the north, and the Bedshiel Kaims in the south. Key characteristics include:</p> <ul style="list-style-type: none"> ■ <i>“Landform consists of a uniform, flat to gently sloping platform interrupted by two prominent dome-shaped hills, and a distinctive meandering glacial moraine;</i> ■ <i>Open land cover with few trees dominated by rough grassland with rushes and bog vegetation on lower ground and heather moorland on upper slopes;</i> ■ <i>Very widely dispersed isolated farm buildings and few field boundaries;</i> ■ <i>A dramatic large scale landscape with open views; and</i> ■ <i>Unique within the region, with well-defined visual identity.”⁷</i> 	
<p>Potential for Effects:</p> <p>If Scoping stage wind farms progress, the Lees Hill Energy Park Wind Farm would be partially located in the east of the LCT, on the boundary with neighbouring LCT 102 (Upland Fringe with Prominent Hills), and would be seen in combined easterly views with the operational Black Hill Wind Farm. In views north-west, the Proposed Development would appear in combined views with Wedderlie Farm, and successive views with Lees Hill Energy Park. In the distance to the west, the proposed Longcroft Wind Farm would appear to extend the influence of Fallago Rig towards the Dun Law Group, and with the addition of Back Burn Wind Farm would continue to intensify the influence of wind farms in north-westerly views from elevated</p>	

⁶ SNH (2019) National Landscape Character Assessment, Landscape Character Type 103, Undulating Upland Fringe

⁷ SNH (2019) National Landscape Character Assessment, Landscape Character Type 105, Upland Fringe Moorland with Hills

NatureScot (2019) LCT	LCT 105: Upland Fringe Moorland with Hills
landforms (particularly Durrington Great Law and Durrington Little Law). With the addition of Wedderlie Farm to the west and Lees Hill Energy Park to the east, there would be an increase in wind farm development in several directions, bringing wind farm development closer in views. However, given the widespread visibility of wind farms in outward views from the LCT, and given the distance, the addition of the Proposed Development, in the context of this potential future baseline, would not alter the key characteristics of the LCT.	

Table A4.4.8: Operational Effects on LCT 108: Lowland Margin

NatureScot (2019) LCT	LCT 108: Lowland Margin
<p>Location and Baseline Description:</p> <p>This LCT is located approximately 11 km south of the nearest turbine, within the Tweed Lowlands, and encompassing the town of Gordon. Key characteristics include:</p> <ul style="list-style-type: none"> ■ <i>“Even, very gently sloping landform with extensive flat low-lying areas;</i> ■ <i>Large arable and pasture fields divided by drystone dykes;</i> ■ <i>Widely dispersed woodlands;</i> ■ <i>Medium density settlement of scattered stone built farmsteads and villages; and</i> ■ <i>A large scale, regular, uniform landscape with distant and panoramic views to uplands, punctuated by volcanic hills in the middle distance outwith the unit.”⁸</i> 	
<p>Potential for Effects:</p> <p>None of the Scoping stage wind farms considered in this appendix are within the Lowland Margin LCT or immediately adjacent landscapes. As such, the addition of the Proposed Development, in the context of this potential future baseline, would not alter the key characteristics of the LCT.</p>	

Table A4.4.9: Operational Effects on LCT 115: Upland Valley with Mixed Farmland

NatureScot (2019) LCT	LCT 115: Upland Valley with Mixed Farmland
<p>Location and Baseline Description:</p> <p>This LCT is split into two units either side of the Lammermuir plateau, and each is within 5 km and 10 km of the nearest turbine. The unit to the east is approximately 3 km from the nearest turbine, and the unit to the west is approximately 8 km from the nearest turbine. Key characteristics include:</p> <ul style="list-style-type: none"> ■ <i>“Broad flat valley floor with distinct floodplain and meandering river channel;</i> ■ <i>Evenly sloping valley sides;</i> ■ <i>Rich red soils derived from Old Red Sandstone parent materials;</i> ■ <i>Land cover dominated by arable and improved pasture land, with medium to large size fields;</i> ■ <i>Valley bottom and lower valley sides well-treed, with hedgerows, hedgerow trees, small woodlands and coniferous plantations all locally prominent;</i> ■ <i>Significant designed landscapes in each valley; and</i> ■ <i>Unity of vernacular architecture utilizing local red sandstone and whinstone.”⁹</i> 	
<p>Potential for Effects:</p> <p>None of the Scoping stage wind farms considered in this appendix are within the Upland Valley with Mixed Farmland LCT. However, from the eastern LCT unit the proposed Wedderlie Farm lies approximately 2 km to the south-west within the neighbouring LCT 90, and would be seen in successive views with the Proposed Development. At the northern edge of the</p>	

⁸ SNH (2019) National Landscape Character Assessment, Landscape Character Type 108, Lowland Margin

⁹ SNH (2019) National Landscape Character Assessment, Landscape Character Type 105, Upland Fringe Moorland with Hills

NatureScot (2019) LCT	LCT 115: Upland Valley with Mixed Farmland
<p>western LCT unit, the proposed Back Burn wind farm lies directly north, seen in front of the Dun Law Group. To the north-east, the large scale turbines of Longcroft would be seen, in front of the turbines of Fallago Rig. The introduction of both Back Burn and Longcroft would narrow the gap between existing wind farm clusters, and intensify the influence of wind farm development in views across the Lammermuir plateau, where available from elevated western slopes. The introduction of the Proposed Development would further increase the presence of turbines across the hills. However, considering the widespread visibility of wind farms from limited elevated locations within the LCT, and given the distance to the Proposed Development, the addition of the Proposed Development would not alter the key characteristics of the LCT.</p>	

Table A4.4.10: Operational Effects on LCT 117: Pastoral Upland Fringe Valley

NatureScot (2019) LCT	LCT 117: Pastoral Upland Fringe Valley
<p>Location and Baseline Description:</p> <p>Within the study area, this LCT is found as five units. The closest LCT unit is located approximately 12 km to the south-west of the nearest turbine, and the valley contains the A68 corridor between Lauder and Melrose, following the Leader Water. Another unit is located 18 km to the east of the nearest turbine, and encompasses Eye Water between Cockburnspath and Houndwood. Further units are located beyond 30 km to the south, and the valley landform contain the watercourses Kale Water, Bowmont Water, and part of the River Teviot. Key characteristics include:</p> <ul style="list-style-type: none"> ■ <i>“Medium scale pastoral valley with flat floor enclosed by upland fringe pastures, often with rough grassland and moorland covered hills above;</i> ■ <i>Smooth large scale landform modified in places by bluffs and moraine on valley floor, scree slopes or rock outcrops on valley sides;</i> ■ <i>Narrow, often wooded tributary side valleys;</i> ■ <i>Broadleaf woodlands and scrub on bluff slopes and scattered trees along river banks, occasional coniferous plantations and shelterbelts on valley sides;</i> ■ <i>Valley floor pastures enclosed by drystone dykes with occasional hedgerows, interspersed with occasional patches of scrub, coarse grass and rushes; and</i> ■ <i>Scattered villages, farmsteads and mansion houses with policy woodlands.”¹⁰</i> 	
<p>Potential for Effects:</p> <p>None of the Scoping stage wind farms considered in this appendix are within the Pastoral Upland Fringe Valley LCT or immediately adjacent landscape. As such, the addition of the Proposed Development, in the context of this potential future baseline, would not alter the key characteristics of the LCT.</p>	

Table A4.4.11: Operational Effects on LCT 266: Plateau Moorland - Lothians

NatureScot (2019) LCT	LCT 266: Plateau Moorland - Lothians
<p>Location and Baseline Description:</p> <p>This LCT is located north of the Site, and forms part of the Lammermuir platform that hosts the Proposed Development. Lammer Law (529 m AOD) forms a focal point at the far west of the unit, and Spartleton rises to a high point of 468 m AOD in the east. Through the middle of the unit, Whiteadder Water cuts through a broader valley and feeds into Whiteadder Reservoir. Key characteristics include:</p> <ul style="list-style-type: none"> ■ <i>“Modest hills and moors forming broad plateau;</i> ■ <i>Smooth convex hill slopes dissected by a complex tracery of valley landform which vary in scale and appearance, from minor burn and incised gullies to occasional wider flat-bottomed valleys of larger rivers;</i> ■ <i>Medium to large scale landscape;</i> 	

¹⁰ SNH (2019) National Landscape Character Assessment, Landscape Character Type 117, Pastoral Upland Fringe Valley

NatureScot (2019) LCT	LCT 266: Plateau Moorland - Lothians
<ul style="list-style-type: none"> ■ <i>Open upland character with sparse tree cover;</i> ■ <i>Expanses of heather moorland, with rough grasses on upper slopes;</i> ■ <i>Generally unenclosed, with some post and wire fences along roads and access tracks, and occasional stone sheep stells and walls around farmsteads;</i> ■ <i>Sparely inhabited, with scattered farmsteads in valleys;</i> ■ <i>Reservoirs creating local focal points;</i> ■ <i>Historic human influences evident in the many enclosures, cairns, hill forts and stone circles;</i> ■ <i>Steep north-facing scarps with spectacular panoramic views overlooking the coastal plain of Lothian to the north with views across the Firth of Forth; and</i> ■ <i>Forms the skyline when viewed from lower land to the north.”¹¹</i> 	
<p>Potential for Effects:</p> <p>If Scoping stage projects advance, the proposed Newlands Hill (at Scoping) would be located within the centre of this LCT, on the plateau to the north of the Proposed Development. Beyond the LCT to the south, the proposed Wedderlie Farm would be located within the adjacent LCT 90 (Dissected Plateau Moorland) and seen beyond the Proposed Development. Longcroft Wind Farm would be seen to the south of the operational Fallago Rig Wind Farm. Further south, the proposed Lees Hill Energy Park would be located within LCT 105 (Upland Fringe Moorland with Hills).</p> <p>In southerly views from this LCT, the Proposed Development would be seen in combined views with other proposed wind farms, particularly with the proposed Newlands Hill (at Scoping) and Longcroft. The Proposed Development would be seen to extend the influence of the operational Fallago Rig Wind Farm, and would be visible from elevated areas of the LCT, particularly from along Spartleton Edge and the upland moors immediately adjacent to the north. To the south, the proposed Wedderlie Farm and Lees Hill Energy Park would be seen to close the visual gap between the operational Black Hill Wind Farm and the Proposed Development, and would extend the influence of wind farm development along the horizon to the south.</p> <p>Visibility of wind farms across this LCT would be possible, however, as indicated by the lack of green shading shown on the cumulative ZTV in Figure 4.1.12, the addition of the Proposed Development would not contribute substantially to the extension of visual influence over these areas.</p>	

¹¹ SNH (2019) National Landscape Character Assessment, Landscape Character Type 105, Upland Fringe Moorland with Hills

Table A4.4.12: Operational Effects on LCT 275: Lowland Farmed Plains - Lothians

NatureScot (2019) LCT	LCT 275: Lowland Farmed Plains - Lothians
<p>Location and Baseline Description:</p> <p>This LCT is located broadly north and north-west of the Site, between 8 km and 30 km, and forms part of the extensive agricultural plains that border the Lammermuir Hills. Generally a low-lying and undulating landscape, the Garleton Hills, Traprain Law, and North Berwick Law provide more prominent points of elevation within the north-east of the area. Key characteristics include:</p> <ul style="list-style-type: none"> ■ <i>“Smoothly rolling, large-scale arable plain landform with occasional igneous intrusions forming local landmarks;</i> ■ <i>Small streams forming shallow breaks in the smooth slopes, feeding into the broad meandering valley of the River Tyne;</i> ■ <i>High quality agricultural land, divided into a chequerboard pattern of fields with historic field pattern being retained in some areas. Field boundaries defined by clipped hedges, scattered hedgerow trees, post and wire fences and occasional stone walls.</i> ■ <i>Occasional small-scale woodlands and shelterbelts relate to watercourses and reinforce field pattern;</i> ■ <i>Policy woodlands, estate houses and, buildings and boundary walls of several estates throughout the area create a historic character;</i> ■ <i>Numerous conservation villages spread throughout the Landscape Character Type with a scattering of farmsteads and small housing clusters, as well as larger settlement of Haddington; and</i> ■ <i>Open views across the landscape to Edinburgh, the coast to the north, and hills to the south.”¹²</i> 	
<p>Potential for Effects:</p> <p>None of the Scoping stage wind farms considered in this appendix are within the Lowland Farmed Plains – Lothians LCT or immediately adjacent landscape. As such, the addition of the Proposed Development, in the context of this potential future baseline, would not alter the key characteristics of the LCT.</p>	

Effects on Visual Amenity

Table A4.4.13: Viewpoint 1: Twin Law Cairns, Southern Upland Way

Viewpoint 1: Twin Law Cairns, Southern Upland Way			
Grid Reference (NGR)	362427 654795	Figure Number	TA.4.4.1
LCT	90 - Dissected Plateau Moorland	Designated Landscape	Lammermuir Hills SLA
Direction of View	North-west	Distance to nearest turbine (km)	1.9 km
Number of hubs theoretically visible	15	Number of turbines with blades theoretically visible	15
<p>Potential for Effects:</p> <p>If Scoping stage projects advance, Newlands Hill (at Scoping) would be visible on the skyline behind the Site. The turbines would appear as an extension to Fallago Rig (operational) from this viewpoint, albeit with a small gap, and the turbines would appear similar in scale. Wedderlie Farm would be visible in close views to the east, mainly backclothed although with turbine blades breaking the skyline. Back Burn would be visible on the skyline to the west, in front of Dun Law Phase 1 (operational). The Proposed Development would appear in front of Fallago Rig and Newlands Hill, slightly extending the horizontal field of view occupied by wind turbines.</p>			

¹² SNH (2019) National Landscape Character Assessment, Landscape Character Type 275: Lowland Farmed Plains - Lothians

Viewpoint 3: Minor road near Wanside Rig junction

Viewpoint 3: Minor road near Wanside Rig junction			
Grid Reference (NGR)	360689 664164	Figure Number	TA4.4.2
LCT	266: Plateau Moorland – Lothians	Designated Landscape	Lammermuir Moorland SLA
Direction of View	South	Distance to nearest turbine (km)	4.0 km
Number of hubs theoretically visible	15	Number of turbines with blades theoretically visible	15
<p>Potential for Effects:</p> <p>If Scoping stage projects advance, the proposed Newlands Hill would appear immediately adjacent to the viewpoint, forming prominent features on the skyline above the viewer to the north and west. In views towards the Site, the proposed Longcroft Wind Farm would appear just over the horizon, seen beyond the turbines of Fallago Rig. The tips of Wedderlie Farm would be perceptible to the south of the Site. Intervening landform would mostly screen both proposed developments. Given the proximity of Newlands Hill to the north and west of this viewpoint, the Proposed Development, seen on the skyline to the south, would be less noticeable.</p>			

Viewpoint 5: Minor road near Wrunk Law

Viewpoint 5: Minor road near Wrunk Law			
Grid Reference (NGR)	367446 659497	Figure Number	TA4.4.3
LCT	90 - Dissected Plateau Moorland	Designated Landscape	Lammermuir Hills SLA / Lammermuir Moorland SLA
Direction of View	West	Distance to nearest turbine (km)	5.5 km
Number of hubs theoretically visible	6	Number of turbines with blades theoretically visible	15
<p>Potential for Effects:</p> <p>If Scoping stage projects advance, both the proposed Longcroft and Back Burn would be visible in the distance, seen beyond the turbines of Fallago Rig (operational). However, although the proposed Longcroft turbines would extend the influence of wind farms further south in views, they would appear of similar size and scale to the existing Fallago Rig turbines. The Proposed Development would appear partially in front of Fallago Rig in westerly views, bringing turbines closer to the viewer. The proposed Wedderlie Farm would appear to the south, seen in successive views with the Proposed Development.</p>			

Viewpoint 6: Spartleton Hill

Viewpoint 6: Spartleton Hill			
Grid Reference (NGR)	365316 665541	Figure Number	TA4.4.4
LCT	99 Rolling Farmland – Borders	Designated Landscape	Lammermuir Hills SLA

Viewpoint 6: Spartleton Hill			
Direction of View	South-west	Distance to nearest turbine (km)	6.5 km
Number of hubs theoretically visible	15	Number of turbines with blades theoretically visible	15
Potential for Effects:			
<p>If Scoping stage projects advance, the turbines of Wedderlie Farm, Longcroft, and Back Burn would appear along the horizon, seen in combined and successive views with the Proposed Development. The turbines of Longcroft and Back Burn would appear as part of the existing Fallago Rig Wind Farm, appearing of similar scale and within its horizontal extents. Wedderlie Farm would appear as an isolated wind farm seen at distance to the south, partially screened by Derrington Great Law and almost entirely backclothed by landform. The Proposed Development would extend the influence of wind farms to the south-west, narrowing the gap between the Fallago Rig cluster and Wedderlie Farm turbines.</p>			

Viewpoint 8: B6456 near Bedshiel

Viewpoint 8: B6456 near Bedshiel			
Grid Reference (NGR)	368161 651683	Figure Number	TA4.4.5
LCT	105 Upland Fringe Moorland with Hills	Designated Landscape	None
Direction of View	North-west	Distance to nearest turbine (km)	7.7 km
Number of hubs theoretically visible	14	Number of turbines with blades theoretically visible	15
Potential for Effects:			
<p>If Scoping stage projects advance, the turbines of Wedderlie Farm would appear closest in northerly views, occupying a small section of the horizon and appearing as a single row of turbines, stacked behind one another, which would be a notable features in oblique views from the road. The turbines of Longcroft would be theoretically visible just over the horizon to the north-west, although in practice would be largely screened by landform and vegetation. The Proposed Development would be seen on the horizon behind Wedderlie Farm, extending the influence of wind farms west across the Lammermuir plateau. The turbines of Wedderlie Farm would be seen at a distance beyond 3 km from the viewpoint and would only occupy a small section of the horizon.</p>			

Viewpoint 9: Derrington Great Law

Viewpoint 9: Derrington Great Law			
Grid Reference (NGR)	369800 654925	Figure Number	TA4.4.6
LCT	105 Upland Fringe Moorland with Hills	Designated Landscape	Lammermuir Hills SLA
Direction of View	North-west	Distance to nearest turbine (km)	8.1 km
Number of hubs theoretically visible	15	Number of turbines with blades theoretically visible	15

Viewpoint 9: Durrington Great Law

Potential for Effects:

If Scoping stage projects advance, there would be several proposed wind farms visible from this elevated location. The turbines of Wedderlie Farm would appear closest in views, extending north-south across views. Beyond these, the turbines of Longcroft and Back Burn would appear along the horizon, narrowing the gap between the existing Toddleburn Wind Farm and existing Fallago Rig Wind Farm. Further north-east, the turbines of Newlands Hill would form an isolated cluster. The introduction of the above changes, taken together, would notably alter the existing baseline, and may be described as a 'wind farm landscape' across the central Lammermuir plateau. The Proposed Development would be seen against a potential future baseline which would already be strongly characterised by the presence of wind energy.

Viewpoint 11: Edgarhope Wood, Southern Upland Way

Viewpoint 11: Edgarhope Wood, Southern Upland Way

Grid Reference (NGR)	355819 649263	Figure Number	TA4.4.7
LCT	99 Rolling Farmland - Borders	Designated Landscape	Lammermuir Hills SLA
Direction of View	North-east	Distance to nearest turbine (km)	8.8 km
Number of hubs theoretically visible	15	Number of turbines with blades theoretically visible	15

Potential for Effects:

If Scoping stage projects advance, the proposed turbines of Longcroft would appear to the south-west of Fallago Rig (operational), appearing larger in scale and extending the presence of turbines west across the Lammermuir Hills. To the south-east, the turbines of Wedderlie Farm would appear in the distance, in front of the operational turbines at Black Hill. The Proposed Development would appear immediately adjacent to the south of Fallago Rig, and together with the turbines at Longcroft would form a continuous stretch of turbines across a large section of the horizon in views from this location. Additionally, the introduction of the proposed turbines would narrow the gap between Fallago Rig and Wedderlie Farm / Black Hill.

Viewpoint 12: Minor road near Hen Law

Viewpoint 12: Minor road near Hen Law

Grid Reference (NGR)	372368 654336	Figure Number	TA4.4.8
LCT	99 Rolling Farmland - Borders	Designated Landscape	None
Direction of View	North-east	Distance to nearest turbine (km)	10.6 km
Number of hubs theoretically visible	7	Number of turbines with blades theoretically visible	9

Potential for Effects:

If Scoping stage projects advance, the proposed Newlands Hill and Wedderlie Farm would appear in combined views on the horizon to the north and south of the Proposed Development, which would lie in front of Fallago Rig. Durrington Great Law would separate Wedderlie Farm and the Proposed Development. In views from this location, the introduction of all proposed developments into the baseline would be seen to extend the influence of wind farms across a wide portion of the view. Gaps would remain along the horizon between the Proposed Development and Newlands Hill, and between Newlands Hill and the Crystal Rig / Aikengall Group. Seen in proximity to the prominent form of Durrington Great Law, the introduction of the Scoping stage projects, taken together and when thinking about their combined or total effect, would contrast with the scale

Viewpoint 12: Minor road near Hen Law
of the landform and would introduce visibility of wind turbines into a gap in existing and proposed developments along the horizon. The Proposed Development would be seen against a potential future baseline which would already be strongly characterised by the presence of wind energy.

Viewpoint 21: Eildon North Hill

Viewpoint 21: Eildon North Hill			
Grid Reference (NGR)	355510 632840	Figure Number	TA4.4.9
LCT	102 Upland Fringe with Prominent Hills	Designated Landscape	Eildon and Leaderfoot NSA
Direction of View	North	Distance to nearest turbine (km)	24 km
Number of hubs theoretically visible	15	Number of turbines with blades theoretically visible	15
<p>Potential for Effects:</p> <p>If Scoping stage projects advance, the proposed Longcroft Wind Farm would appear directly west of the existing turbines of Fallago Rig. Longcroft would appear larger in scale, extending the influence of wind farms west across the Lammermuir plateau. Seen in combination with the Scoping stage Back Burn Wind Farm this would narrow the gap between the Dun Law Group and Fallago Rig. The proposed turbines of Wedderlie Farm would be seen to the east, but would appear in combination with the existing Crystal Rig / Aikengall Group, and would not appear as notable new features. Newlands Hill would appear largely screened by landform beyond Fallago Rig, and given the distance and perspective would appear of a similar size, marginally extending the horizontal extents of wind farm development to the east in views from this location. The introduction of the Proposed Development would extend the presence of turbines to the east in views, narrowing the gap between the Crystal Rig / Aikengall Group and the Fallago Rig cluster. Given the distance, the turbines would not form prominent features on the horizon, however the addition of the Proposed Development would intensify the influence of wind farm development across the Lammermuir plateau.</p>			

Viewpoint 24: Torfichen Hill

Viewpoint 24: Torfichen Hill			
Grid Reference (NGR)	333650 653270	Figure Number	TA4.4.10
LCT	266 Plateau Moorland – Lothians	Designated Landscape	Gladhouse Reservoir and Moorfoot Scarp SLA
Direction of View	East	Distance to nearest turbine (km)	26 km
Number of hubs theoretically visible	15	Number of turbines with blades theoretically visible	15
<p>Potential for Effects:</p> <p>If Scoping stage projects advance, Back Burn would be visible to the east, in front of the existing turbines of Fallago Rig and partially backclothed. Both the proposed Wedderlie Farm and Lees Hill Energy Park would be barely perceptible due to screening by the intervening landform. Newlands Hill would appear in the distance, seen on the horizon beyond the operational turbines at Keith Hill and Pogie. Considered together, these Scoping stage projects would occupy a small horizontal field of view, and would be seen alongside operational wind farms. The additional of the Proposed Development would be barely perceptible, as it would appear behind operational and Scoping stage schemes.</p>			

Summary and Conclusion

4.4.8 This appendix sets out high level commentary on potential interactions between the Proposed Development and the other wind farm proposals which would lie relatively close to the Proposed Development, at Longcroft, Wedderlie Farm, Back Burn, and Lees Hill Energy Park, and which are all at Scoping stage. It is not a requirement to examine the cumulative effects of a Proposed Development with Scoping stage projects. However, when they are well advanced and likely to reach application stage before determination of the Proposed Development, or when they are very close by, NatureScot or the Council may request that they are included. The closer and more advanced Scoping stage developments are considered here for these reasons, and illustrated with the accompanying wirelines in **Figures TA4.4.1 to TA4.4.10** in Volume 3b of the EIA Report.

4.4.9 It should be noted that the proposed layouts are uncertain and subject to change as they move through the planning application process, and as such the consideration of these sites provided here is at high level, and focused on describing potential interactions or patterns.