Technical Appendix

Lairdmannoch Energy Park

Technical Appendix 5-3: Viewpoint Analysis

Lairdmannoch Energy Park Limited

May 2025

APPENDIX 5.3: VIEWPOINT ANALYSIS

Introduction

1. A viewpoint assessment has been carried out from a selection of key representative viewpoint locations to inform the assessment of the likely magnitude and significance of landscape and visual effects arising as a result of the Proposed Development.

2. Following desk-top analysis and site survey work, a total of 25 viewpoint locations were selected to represent the main landscape and visual receptors found in the study area.

3. The locations of the selected viewpoints are shown in Figure 2. Details for each viewpoint are provided below. Annotated panoramic photographs are provided to illustrate the existing view at each viewpoint location and the likely extent of the Proposed Development within the view (see Viewpoints 1-25). A summary of the viewpoint analysis is provided in Table 5.9 in the LVIA report.

4. This viewpoint assessment considers the nature of the predicted view and the scale of change. The wider extent of the effect (beyond the individual viewpoint considered), and its duration, are not captured in the viewpoint analysis (as a single viewpoint cannot capture extent or duration) and are considered in the main body of the LVIA (EIAR Chapter 5; Section 5.12). Extent and duration are factors in the overall judgement on magnitude of change, therefore judgements on magnitude of change and overall level of effect and significance are also provided in the LVIA.

5. The method of assessment used for the viewpoint analysis, which is described in Appendix 1, accords with current good practice guidance in line with GLVIA3. Observations are made of the baseline landscape and visual characteristics at and around each of the representative viewpoints. Observations, computer modelling and professional judgement are applied to determine the scale of change attributable to the Proposed Development **(Large, Medium, Small and Negligible**) upon landscape character and visual amenity at each individual viewpoint in order to determine the scale of effect.

6. The visual assessment takes into account the screening effect of intervening landform, vegetation and built form and the potential for changes to those features. It assumes excellent clear weather conditions; although the influence of different seasons, weather, sunlight and visibility conditions have been considered, where relevant.

7. The night-time assessment has been restricted to those locations where aviation warning lights would be theoretically visible (see Figure 5.8) and such views are most likely to be experienced at night from receptors which would be sensitive to changes at night, i.e., from at, or near, settlements. In addition, VPs 5, (Glengap) 8 (Laurieston) and 13 (Upper Rusko) are illustrated by night-time photomontages.

VP	Location/ Distances to Wind/ Solar Farm Arrays	Key features of existing baseline view (including future baseline)	Predicted Visual Change	Predicted Change to Landscape Character
1	**Lairdmannoch Bridge** A762 south of Laurieston northern solar array 0.57km southern solar array 0.50km windfarm array 2.69km	The view to the west is towards the derelict Upper Lairdmannoch Farm which lies within undulating improved pastureland visible as far as the skyline, including clumps of conifer woodland in the mid-ground and a small telecommunications mast. A silage clamp is being constructed in the foreground. To the southwest there are ungrazed low hills including Linn Hill which is clothed with moorland rough grass and heather. To the east is more pastureland backed by moorland-clad Barstobrick Hill featuring Neilson's Monument. Field boundaries are of dry-stone walls and hedgerows with mature trees along the roadside. The fields here are very large in scale.	Construction: Vehicles on the solar access track would be visible. Earthmovers would strip the soil and reshape the ground, currently pastureland, across the slopes to the southwest. Construction of the solar farm north array would be clearly visible from this viewpoint. At the same time erection of the wind turbines by cranes would be visible in the background for a limited period. However, all ground level infrastructure and the access track for the windfarm would be screened by landform. **Scale of Visual Change: Large** Operation: On completion and during operation, the turbines and solar arrays would appear to occupy approximately a half of the western view from this location, with turbines skylined. From here all nine turbines would be theoretically visible but in reality, five hubs and one tip would be seen above the clump of coniferous trees on the skyline. The solar farm north array would also be visible from this location above Upper Lairdmannoch towards the southwest, rising up the hill. At night, filtered views of three red aviation warning lights would be visible against a dark sky. The lights would appear to blink, when the blades pass in front of the lights when the wind direction is from the east (which is not the prevailing wind direction). This night-time effect would increase the duration of impacts at this VP. The mitigation of automatic	This VP lies within AU13 – Drumlin Pastures. but is adjacent to AU20-Foothills with Forest, the "host landscape". Construction: The relative tranquillity of the valley would be disturbed by construction work, HGVs and plant, on the slopes to the southwest (solar farm) and skyline to the west (windfarm). There would be direct changes to the existing landscape features (i.e., the drumlin pastures) and indirect change to the character of both AUs. **Scale of Landscape Change: Large** Operation: Within AU13 – Drumlin Pastures- and AU 20-Foothills with Forest- the undulating form of the pastures would be interrupted by new built form of the solar farm on the hillside and in the valley although this would be progressively softened and screened with the growth of the mitigation planting. The vertical forms and motion of the turbines on the skyline would accord with the gentle undulating simple large scale of the pasture in the foreground. **Scale of Landscape Change: Large/Medium**

VP	Location/ Distances to Wind/ Solar Farm Arrays	Key features of existing baseline view (including future baseline)	Predicted Visual Change	Predicted Change to Landscape Character
			dimming in good visibility would reduce the brightness of the light, but it would remain visible. The secondary mitigation of vertical directional intensity reduction would reduce the brightness even further at this VP. **Scale of Visual Change: Large/Medium** **If all forestry felled change would be: Large**	
2	**Kirkconnell** Roadside lay-by on A762 south of Laurieston southern solar array 0.12km windfarm array 2.74km	Looking west across the valley through roadside hedgerow trees and mature riverside trees and scrub in the foreground, there are glimpses of improved pasture beyond, leading up to low moorland hills above the valley. To the east is Neilson's monument on Barstobrick Hill in the background, skylined, and in the foreground, sweeping improved pasture land leading down to the road. A small telecoms tower is visible in the immediate foreground looking south, and in the distance can be seen Kirkconnell farm and Kirkconnell cottages in filtered views through the trees.	Construction: Construction activities associated with of the solar farm south array would be visible through gaps in the foreground trees. Little construction activity to the windfarm array would be visible, just the tops of cranes. **Scale of Visual Change: Large** Operation: Above low moorland hills to the northwest, two blade tips would be theoretically visible over the low hills (but in reality, these would be screened or part-screened by foreground trees) with limited likely change to visual amenity with no lights visible at night. The solar farm would be partly visible in the foreground/ mid-ground. Additional mitigation planting would to help screen this view from the cottages and farmhouse. The growth of peripheral tree planting would in the medium term appear to soften and screenthe development along the partly visible south sides of the solar farm south array. **Scale of Visual Change: Medium**	This VP lies within AU13 – Drumlin Pastures, but is adjacent to AU20-Foothills with Forest, the "host landscape Construction: The relative peace and tranquillity of the valley would be disturbed by construction work, HGVs and plant, on the valley floor to the west (solar farm). However there would be little or no change arising from the windfarm. There would be direct change to the existing landscape features (i.e., the flat valley pastureland) and some limited indirect change to the character of both AUs. **Scale of Landscape Change: Large** Operation: At this location there would be very limited or no change arising from the windfarm in neighbouring AU 20. However, within AU13 – Drumlin Pastures - the river valley pastures would include the solar farm, although this would be progressively softened and partially screened with the growth of the mitigation planting. There would be long term direct changes to the existing landscape features (i.e., the

VP	Location/ Distances to Wind/ Solar Farm Arrays	Key features of existing baseline view (including future baseline)	Predicted Visual Change	Predicted Change to Landscape Character
				drumlin pastures) and indirect change to the character of both AUs. **Scale of Landscape Change: Large/Medium**
3	**Neilson's Monument** Barstobrick Hill Core Path northern solar array 1.66km southern solar array 1.11km windfarm array 3.71km	A popular visitor destination, on a core path, with 360-degree panoramic views. The view westwards towards the Proposed Development is of a broad open valley featuring flat improved pastureland fields in the valley floor, rising to undulating and knolly improved pastures, ultimately rising to moorland with extensive areas of forestry in the background. There are also many coniferous and deciduous trees; the latter tending to follow routes of watercourses but they also appear in individual clumps in the pastureland. From this location views to the northeast are of the Dee Valley with extensive clumps and groupings of coniferous forestry interspersed with improved pasture and well settled with farmsteads and rural houses. Castle Douglas can be seen to the northeast, including a clear view of Threave Castle. To the northwest there are ranges of hills including Merrick, and on the skyline a distant view of a windfarm to the north. To the south in the distance can be seen Kirkcudbright and beyond that still, Kirkcudbright Bay.	Construction: Construction activity associated with the construction of both solar arrays would be visible from this elevated viewpoint. Extraction of material would be visible from the borrow pit, located in front of the turbines. There would also be some ground level construction activity visible from a few of the wind turbines as well as the wind turbine towers and blades, lifted into place by cranes for a temporary period.. **Scale of Visual Change: Large** Operation: On completion and during operation, the turbines and solar arrays together would appear to west, along with the solar access tracks and restored borrow pit. From here the proposed turbines would be prominent on the skyline with all nine turbines visible in a compact group with limited overlapping. Both solar arrays would be clearly visible below the turbines, extending down the valley to the road. The combination of the smaller scale element of the norther solar array would contrast with the large scale of the turbines, leading to a more complex view of energy generation. At night, views of four red aviation warning lights would be visible against a dark sky. The lights would appear to blink, when the blades pass in front of the lights when the	This VP lies within AU13 – Drumlin Pastures, but overlooks AU20-Foothills with Forest, the "host landscape". Construction: The relative tranquillity of the hilltop and valley below would be disturbed by construction work at times on the slopes and valley floor to the (solar farm) and skyline to the west (windfarm). There would be direct changes to the existing landscape features (i.e., the drumlin pastures) and indirect change to the character of both AUs. **Scale of Landscape Change: Large** Operation: Within AU13 – Drumlin Pastures the undulating form of the pastures would include new built form of the solar arrays. The northern solar array would extend up to the moorland edge amongst small blocks of forestry. The southern solar array would sit in the valley floor along the roadside. The rather hard edges of the built form would be progressively softened and screened with the growth of the mitigation planting. The AU 20-Foothills with forest- would host the proposed wind turbines. The vertical emphasis of the turbines would contrast with the horizontal landform and motion of the turbines on the skyline would contrast with the static qualities of the moorland landscape. But the large scale and simple undulating landform would

VP	Location/ Distances to Wind/ Solar Farm Arrays	Key features of existing baseline view (including future baseline)	Predicted Visual Change	Predicted Change to Landscape Character
			wind direction is from the east (which is not the prevailing wind direction). This night-time effect would increase the duration of impacts at this VP, if anyone were to visit at night. The mitigation of automatic dimming in good visibility would reduce the brightness of the light, but it would remain visible. **Scale of Visual Change: Large**	accord with the large scale and simple form of the turbines. The combination of both smaller scale elements of the solar arrays would contrast with the large scale of the turbines, leading to a complex array of energy generation. **Scale of Landscape Change: Large**
4	**Loch Mannoch** Core Path Near Glengap, en-route to the Martyrs Memorial and Kirkconnell northern solar array 1.51km windfarm array 2.08km	Receptors would have a slightly elevated view from above Glengap Burn as it runs into Loch Mannoch. Marshy grassland and tufts of reeds can be seen in the immediate foreground and in the background, rough grass and moorland rise steeply up with clumps of Scots Pine and in the immediate to mid-ground a large clump of forestry conifers. Also, more conifers crown the skyline immediately to the northwest. Views to the south are screened by forestry conifers; however, views to the north from the core path are largely open and slightly elevated and from here the loch itself appears elongated and relatively narrow. It is bounded to the east by Linn Hill, clothed with rough grass and moorland and some clumps of native deciduous trees and conifers at the northern edge. Dow Craig hill lies prominently to the west.	Construction: The only visibility of the construction work would be the cranes, seen temporarily above the mid-ground ridge, as the towers and blades are erected and fixed. There would be no ground level construction activity of the windfarm visible. Views of construction of the solar array would be difficult to discern at this distance. **Scale of Visual Change: Large** Operation: In theory five hubs and four tips would be visible from this location; however in practice one of the hubs and two of the tips may be screened or partially screened by the conifers and landcover which run along the mid-ground ridge. Whilst the turbines would be clearly perceived as large scale elements, they would be partially screened and would appear lower on the horizon than the adjacent hill. A small amount of a solar array might be visible in front of forestry to the north. At night, filtered views of two red aviation warning lights would in theory be visible against a dark sky; although in reality one of these may be screened by the mid-ground	This VP lies in AU20-Foothills with Forest, the "host landscape" but is adjacent to AU13 – Drumlin Pastures. Change would be indirect. Construction: Limited effect of construction beyond erection of the turbines and distant views to the solar array. **Scale of Landscape Change: Large** Operation: Indirect change to the character of both AUs would arise from the intervisibility of the turbine hubs and tips above the ridge which would reduce the sense of rural isolation and tranquillity. **Scale of Landscape Change: Large**

VP	Location/ Distances to Wind/ Solar Farm Arrays	Key features of existing baseline view (including future baseline)	Predicted Visual Change	Predicted Change to Landscape Character
			conifer belt. The visible light would appear to blink, when the blades pass in front of the light when the wind direction is from the east (which is not the prevailing wind direction). This night-time effect would increase the duration of impacts at this VP. The mitigation of automatic dimming in good visibility would reduce the brightness of the light, but it would remain visible. The secondary mitigation of vertical directional intensity reduction would reduce the brightness even further at this VP. **Scale of Visual Change: Large/Medium** **NB If all forestry felled, change would be: Large**	
5	**Glengap** Forest track north of Gordon's Cairn and village windfarm array 1.66km	This location is on a forestry track heading northwards at a distance from the small settlement of Glengap and is not therefore representative of it. (See RVAA property P1, Gordon's Cairn, for a more representative assessment from the settlement). The track lies opposite Dow Craig Hill above the deeply incised valley of the Glengap Burn. Moorland with heather and scrub are the landcover on the upper slopes of the hill opposite, with improved and rough pasture on the lower slopes. To the north, lies the edge of Glengap forest conifer plantation with peripheral deciduous trees running down into the valley and ahead lies open, undulating, improved pastureland	Construction: Limited effect of construction other than erection of turbines visible over the trees/ topography. **Scale of Visual Change: Large** Operation: The proposed turbines would be in close proximity and appear large on the horizon to the north with all hubs and tips theoretically visible. Night-time: In theory, all four aviation warning lights would be visible at night relatively closely, against an otherwise dark sky area (since the lights of the settlement of Glengap are to the south and relatively unnoticeable at this point.) The visible lights may appear to blink in southerly winds. This night-time effect would increase the duration of impacts at this	This VP lies in AU20-Foothills with Forest, the "host landscape". Operation: Although there are existing artificial features in the landscape such as the power lines and forest track, nevertheless, indirect change to the character of the AU would arise from the intervisibility of the turbine hubs and tips above the horizon which would appear prominent in the local landscape and change the current sense of rural isolation and tranquillity in this immediate vicinity. The appearance of lights in this otherwise dark night-time landscape would alter the sense of remoteness and isolation. This night-time effect would also increase the duration of

VP	Location/ Distances to Wind/ Solar Farm Arrays	Key features of existing baseline view (including future baseline)	Predicted Visual Change	Predicted Change to Landscape Character
		with the occasional clump of coniferous trees. Power distribution lines and telegraph lines run alongside the track. Night-time view; a dark sky area, with the village lights to the south and relatively unnoticeable at this location.	VP. The mitigation of automatic dimming in good visibility would reduce the brightness of the light, but it would remain visible. The secondary mitigation of vertical directional intensity reduction would reduce the brightness even further at this VP. **Scale of Visual Change: Large**	impacts at this VP. The mitigation of automatic dimming in good visibility would reduce the brightness of the light, but it would remain visible. The secondary mitigation of vertical directional intensity reduction would reduce the brightness even further at this VP. **Scale of Landscape Change: Large**
6	**Loch Whinyeon** Public Footpath near minor road between Gatehouse of Fleet and Laurieston windfarm array 2.41km	This elevated location is on the public footpath from the road to Loch Whinyeon. Panoramic views are obtained west and south across the Fleet Valley and down towards Gatehouse of Fleet and Fleet Bay. The foreground is rough moorland with heather. To the east there are views of the reservoir looking towards Glengap Forest. Low moorland hills to the north of the viewpoint restrict views in this direction.	Operation: In theory all nine hubs and tips of the proposed development would be visible from here at relatively close quarters spread evenly across the horizon above the loch. However, the intervening forestry would screentwo of the hubs and most of the lower parts of the turbines. At night, up to four lights could be visible but with the current state of forestry one light would be screened by forestry. **Scale of Visual Change: Large**	This VP lies within AU19-Foothills but is adjacent to AU 20-Foothills with Forest-the "host" landscape. Change would be indirect. Operation: The turbines would be clearly visible above the forestry above the loch. However, appreciation of the wider and more attractive landscapes to the west and south would remain unaffected. **Scale of Landscape Change: Large/Medium**
7	**Near Dumgarroch Bridge** Minor road between Gatehouse of Fleet and Laurieston windfarm array 1.61km	From this location, the main views are to the north and northwest over the Grobdale Lane Valley. On the opposite side of the valley, low hills rise to a ridge of open moorland with clumps of heather and a farm track leading eventually to Grobdale of Girthon. Looking in a southerly direction, moorland hills rise up towards McGhie's seat, and the edge of Glengap Forest forms the skyline.	Operation: In theory four tips and one hub would be seen from this location but in reality the relatively young conifers are likely to screen all but one hub and two tips. **Scale of Visual Change: Small** **NB If forestry felled, change would be:** **Small/Medium**	This VP lies within AU 19-Foothills. Change would be indirect. Operation: Due to the foreground topography combined with forestry screening, there would be little awareness of the wind turbines in this immediate locality, little or no resultant change to landscape characteristics. **Scale of Landscape Change: Small/Negligible**

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8	**Laurieston** A762, on southern periphery of village northern solar array 3.28kn windfarm array 3.65km	This viewpoint is on the main road just to the south of the village, looking west towards a low ridge to the skyline which is covered in mixed woodland. In the foreground is a farm with outbuildings (Gatehouse Farm) lying within undulating improved pasture with foreground woodland clumps which are deciduous and predominantly mature. Night-time view; from the viewpoint looking southwest, there are no artificial lights visible in the immediate foreground except the occasional vehicle headlights. There are no lights on the farm in the foreground. However, to the north, the village streetlights are illuminated and there are also some lights from house windows.	Construction: The only visibility of the construction work may be the tops of some taller cranes over the tops of the trees along the ridge, as they erect the towers and blades. **Scale of Visual Change: Medium/Small** Operation: In theory all nine hubs of the wind turbines and the northern array of the solar farm would be visible from here; however, in practice, the solar farm views would be obscured by foreground and midground trees and hedgerows. In respect of the turbines, three hubs and six tips would be visible over mid-ground topography and tree groups but three of the four lights would screened by the foreground woodland combined with the topography. Night-time: The village lights would not lie in the direction of the proposed turbines and as a result, from this VP, one red aviation light would be seen against a dark sky. The light would appear to blink, when the blades pass in front of the it when the wind direction is from the east (which is not the prevailing wind direction). This night-time effect would increase the duration of impacts at this VP. The mitigation of automatic dimming in good visibility would reduce the brightness of the light, but it would remain visible. The secondary mitigation of vertical directional intensity reduction would reduce the brightness even further at this VP.	This VP lies within AU13-Drumlin Pastures but is adjacent to AU 20-Foothills with Forest-the “host” landscape. Change would be indirect. Operation: There would be some awareness of the rotating turbine tips and some hubs above the trees above the medium scale, largely static pastoral landscape. However, the foreground and mid-ground woodland would to some extent act as a landscape buffer; and appreciation of the wider pastoral landscapes to the east and south would remain unaffected. **Scale of Landscape Change: Medium** Night-time: The limited perception of aviation lights against the dark sky in the VP locale due to foreground screening by trees, buildings and streetlights would render little change to night-time landscape characteristics. **Scale of Landscape Change: Medium**

VP	Location/ Distances to Wind/ Solar Farm Arrays	Key features of existing baseline view (including future baseline)	Predicted Visual Change	Predicted Change to Landscape Character
			From the village, the turbine light would be less obvious because of the foreground street lights and house lights. **Scale of Visual Change: Large/Medium** **NB If all forestry felled, change would be: Large**	
9	**A75 South of Castle Douglas** windfarm array 5.9km	At this A75 roadside location, north-westerly views are across undulating improved pastureland to a ridge of low hills crowned by clumps of deciduous trees. Barstobrick hill is also visible, crowned by Neilson's monument, which is skylined. To the south lies further improved pastureland looking towards a more open section of the Dee valley. On both sides of the road in the foreground are roadside hedgerows with trees and scrub.	Operation: All nine turbine hubs and four aviation warning lights would be theoretically visible along the top of ridge. However, in reality, all but two of the hubs, three tips and one light would be screened by a midground deciduous tree group on the ridge (a permanent feature of the landscape). There would be less screening in winter. From other locations they would appear less screened. They would occupy a relatively small part of the wider view in the northerly direction. At night-time, the one visible light would appear to blink, when the blades pass in front of the lights when the wind direction is from the south (which is not the prevailing wind direction). The mitigation of automatic dimming in good visibility would reduce the brightness of the light, but it would remain visible. The secondary mitigation of vertical directional intensity reduction would reduce the brightness even further at this VP. **Scale of Visual Change: Medium/Small**	Operation: Turbine towers and rotating blades in the neighbouring AU would appear behind the foreground trees within the undulating pastureland. From other locations they would appear less screened. They would occupy a relatively small part landscape to the north and not appear taller on the horizon that other nearby landscape features. **Scale of Landscape Change: Medium/Small**
10	**Underwood**	A slightly elevated valley viewpoint alongside the A762. Primary views are westerly, across the Tarff Valley, with a slurry store in the	Operation: Six turbine tips would be just visible over the ridge to the northwest where not screened by clumps of trees. There	Operation: Very limited indirect effects on landscape characteristics in this already busy

VP	Location/ Distances to Wind/ Solar Farm Arrays	Key features of existing baseline view (including future baseline)	Predicted Visual Change	Predicted Change to Landscape Character
	A762 between Tongland Bridge & A75 windfarm array 7.23km	immediate foreground. The valley floor is improved pasture with a large farm and outbuildings in the centre of the view. Other farms and houses are visible along the base of the valley together with extensive, mainly deciduous, woodland clumps along the valley following the line of the river. There are further copses and clumps of trees along the valley sides, again, primarily deciduous. The valley is enclosed to the west by a low ridge, with low hills behind forming the skyline. Easterly views are similar, with gently sloping valley sides, wooded clumps, farmhouses, and one domestic scale wind turbine visible to the north and a distribution line along the skyline above Underwood Farm and outbuildings, which lie adjacent to the road near the viewpoint.	would be no night-time view due to no lights being visible. The movement of the tips over the skyline would be very limited but noticeable. However, they would occupy a relatively small part of the wider view in the northerly direction. **Scale of Visual Change: Small/Negligible**	agricultural landscape arising from the blade tips just perceptible above the skyline. **Scale of Landscape Change: Negligible**
11	**A75 West of Twynholm** windfarm array 7.19km	From this location at a junction with the minor road near Twynholm on the A75, a northerly view is obtained, looking across undulating improved pastures divided by hedgerows and featuring hedgerow trees, and clumps of trees. Isolated farmhouses can be seen in the mid-ground with gently rolling pastures in the background leading to low hills with conifer plantations. Medium to large-scale fields are bounded by drystone walls and post and wire fencing in addition to hedging, The view to the south is of open pastureland with isolated farmhouses. It has more open characteristics, with less trees evident.	Operation: Two turbine hubs and four tips would be seen in the distance in a low part of the skyline to the north, including one aviation warning light at night-time. However, this would form a relatively small and contained part of the view in this location and would be seen in the context of a foreground electricity distribution line by day. At night-time the one visible light would appear to blink, when the blades pass in front of the lights when the wind direction is from the south (which is not the prevailing wind direction). This would be seen in the foreground context of vehicle headlights at night; reducing the degree of change.	Operation: Indirect effects arising from the, two turbine hubs, one light and rotating blades and tips of the turbines located in the neighbouring AU would result in a very limited and localised indirect change to the foreground landscape character day and by night. **Scale of Landscape Change: Small**

VP	Location/ Distances to Wind/ Solar Farm Arrays	Key features of existing baseline view (including future baseline)	Predicted Visual Change	Predicted Change to Landscape Character
			Scale of Visual Change: Small	
12	**Millennium Monument (Near Rutherford's Monument)** (c.80m AOD) Near Gatehouse of Fleet; near Core Path to Anwoth in NSA windfarm array 8.03km	Within the Boreland Hills, these difficult to access and seemingly little-visited monuments are at an elevated location on a low hill rising from the valley floor, which has nearly 360° views. The local landscape is very knolly and uneven with dense thickets of gorse in all directions and clumps of oak with some Birch and Scots pine. There are low-lying hollows with standing water and marshy bogs in places. The views to the north and east are over the Fleet valley and Gatehouse of Fleet.To the north the Fleet valley appears to become narrower as it leads up into the hills. Views to the west are of Cairnharrow with Mill Knock in the foreground, whilst open views to the south feature Fleet Bay with Murray's Isles.	Construction: Construction of the access road would be visible across the valley at Disdow Wood c.1.5km away from this elevated location. Here, there would be evidence of some earthworks and felling on the east side of the existing forestry track together with construction vehicles. Given the mitigation of the retention of trees on the western (outside) of the track, these views would be filtered/part-screened by the retained trees. **Scale of Visual Change: Medium/Small** Operation: One hub and a further three tips, would be visible over the ridge to the northeast. Where visible, the movement of the tips over the skyline would be very limited but noticeable. However, they would occupy a relatively small part of the wider view in this direction. At night-time, one aviation warning light may just visible on the skyline; however, this would be seen in the midground context of the lights of Gatehouse of Fleet to the southeast. The access road where visible through the foreground tree filtering would appear similar to the baseline given it is an existing forestry track. **Scale of Visual Change: Small**	Construction: The access track would cause some direct changes due to earthworks and some tree clearance, but the vehicle movements may appear similar to the commercial forestry operations already on that forestry track. **Scale of Landscape Change: Medium** Operation: Very limited indirect effects on landscape characteristics arising from the rotating blade tips just perceptible above the skyline. The one visible aviation light would have little influence on a night-time landscape which already features the lights of Gatehouse of Fleet. The access track would be similar to the existing. **Scale of Landscape Change: Small**

VP	Location/ Distances to Wind/ Solar Farm Arrays	Key features of existing baseline view (including future baseline)	Predicted Visual Change	Predicted Change to Landscape Character
13	**B796 Near Upper Rusko** On Cycle Route 7; In NSA; Representative of rural properties in the Rusko area of the upper Fleet Valley windfarm array 7.38km	From this location, elevated easterly panoramic views can be obtained from the roadside, over the upper Fleet valley across to low hills on the opposite side. Improved pasture fields on the lower slopes make way to moorland on the upper slopes. Large groups and clumps of conifers characterise the hillsides, whilst in the valley floor native scrub and birch woodland predominates. Views to the west however are contained by rising moorland slopes. Night-time views; from this location, no artificial lights are visible, and a full dark sky can be seen.	Operation: Two turbine hubs and a further six tips would be seen in the distance in a low part of the skyline to the east between and above, two tree clumps. This would form a relatively small part of the wider view in this location and would appear lower on the horizon than other landscape features and hills. At night-time, one aviation warning light would be visible in a dark sky area otherwise devoid of artificial light. The one visible light would appear to blink, when the blades pass in front of the lights when the wind direction is from the west (which is not the prevailing wind direction). This night-time effect would increase the duration of impacts at this VP. **Scale of Visual Change: Small**	Operation: Indirect change may arise from the two turbine hubs and rotating blades of the turbines located in the nearby AU. Although introducing a slightly distracting element due to their motion in an otherwise fairly static landscape, this would constitute a very limited and localised indirect change to the mid-ground landscape character. The red aviation light in an otherwise dark-sky area would appear in the local landscape and would detract from the feeling of remoteness. But it would only appear as a single light. **Scale of Landscape Change: Small**
14	**Airie Hill** (291m AOD) Near Core Path Slogarie-to New Rusko windfarm array 6.19km	This is another difficult to access and seemingly little-visited hilltop with no apparent paths, which nevertheless provides an elevated location with 360° panoramic views. The local landscape is open moorland with some boulders and tussocky, marshy grassland on the slopes, some heather and the occasional conifer. On the lower slopes to the north is a young conifer plantation. The south side is steeper and craggier in nature than the south side. Immediately to the north is the disused Dumfries-Stranraer railway line and former halt at Loch Skerrow; now the route of a Core Path.	Operation: All nine hubs and tips of the proposed development would be visible in a single cluster with little overlapping and skylined from here at a distance of c.6km; however, the lower parts, would be screened by Laurieston Forest. In addition, the main focus of the view tends to be westwards, towards Loch Skerrow. At night-time, four aviation warning lights would be visible in a dark sky area otherwise devoid of artificial light. The lights would appear to blink, when the blades pass in front of the lights when the wind direction is from the north (which is not the prevailing wind direction).	This VP lies within AU19-Foothills but is adjacent to AU 20-Foothills with Forest-the "host" landscape. Change would be indirect. Operation: There would be some awareness of the turbine tops above the trees in the middle distance. However, the conifer forest on a ridge would act as a mid-ground landscape buffer, softening the integration of the Proposed Development into its setting; and the appreciation of the wider and more aesthetically appealing landscapes to the west south and north would remain unaffected.

VP	Location/ Distances to Wind/ Solar Farm Arrays	Key features of existing baseline view (including future baseline)	Predicted Visual Change	Predicted Change to Landscape Character
		Providing a backdrop to the north are a higher range of conifer-clad hills, with Cairn Edward Hill (325m AOD) in the mid-ground overlooking the upper River Dee (Black Water) valley in the foreground. On a clear day, on hills in the far distance to the north, five or six windfarm developments can be perceived on the horizon including Blackcraig. The focal point of the views, however, is the roughly triangular Loch Skerrow which lies in a basin surrounded to the west by broad swathes of coniferous forestry on a series of low hills. To the south of this, is the broad Grobdale Lane valley and to the southeast lies Laurieston Forest which also clothes a series of low peaks; all slightly less elevated than Airie Hill.	**Scale of Visual Change: Medium**	At night, the four red aviation lights would appear in a part of dark area and would detract from the feeing of remoteness. **Scale of Landscape Change: Medium**
15	**Parton Red Kite Viewing point** Near Airds House and Core Path windfarm array 9.09km	A well-used local vantage point with a maintained access path and interpretation board, looking southwest across the Loch Ken reservoir. A low range of hills forms the background and in front of this, a low ridge with deciduous woodland runs down to the Loch, with a disused railway viaduct in the mid-ground. The A713 can also be glimpsed in the mid-ground. In the foreground, improved pasture sweeps up the hillside and there is a caravan park at the base of the slope. Airds House mature policy woodland lies to the north whilst native woodland follows the line of the valley to the southeast. Barend Hill rises to the east and together with other low hills, closes the view in this direction.	Operation: Eight turbine hubs and one tip would be seen relatively distantly from this location and occupy a small part of the wider background panoramic view towards the southeast and southwest. The array would be very evenly spread and low on the horizon, not appear higher than the adjacent hill. Four aviation warning lights would be distantly visible in a dark sky area otherwise devoid of artificial light at night. The lights would appear to blink, when the blades pass in front of the lights when the wind direction is from the northeast (which is not the prevailing wind direction). However,	Operation: Indirect change may arise from the nine turbine hubs and rotating blades of the turbines located in the more distant AU. Although adding a new feature into the local characteristics, this would in reality constitute a limited and localised indirect change to the overall landscape character of this area. The four red aviation lights in an otherwise dark area would appear noticeable in the local landscape but would feel distant especially in the foreground context of a busy road . **Scale of Landscape Change: Small**

VP	Location/ Distances to Wind/ Solar Farm Arrays	Key features of existing baseline view (including future baseline)	Predicted Visual Change	Predicted Change to Landscape Character
		Nearby infrastructure includes two overhead electricity lines and in the near distance is a telecommunications transmission tower.	foreground vehicle headlights would reduce the magnitude of change. **Scale of Visual Change: Small**	
16	**Crossmichael** Residential area in village; near A713; (Galloway Tourist Route, Red Kite Trail, Robert the Bruce Trail,) and lochside Core Path windfarm array 8.89km	This is a low-level viewpoint within Crossmichael, a linear village of primarily one-storey terraced houses backing onto the east shore of Loch Ken reservoir. The viewpoint itself lies above the now converted old station and abandoned Dumfries-Stranraer railway line (now used as a lochside Core Path). The views to the south-west are of Loch Ken in the in the foreground with low hills in the background; featuring improved pasture fields and clumps of mainly deciduous woodland. At night-time, the mostly rear views from the houses (represented by the viewpoint) across Loch Ken to the hillside opposite are dark, apart from one or two small house lights on the opposite side.	Operation: Theoretically the hubs and tips of all nine turbines would be seen skylined above low hills in the relative distance; however due to intervening commercial forestry only two hubs and eight tips would be visible above the loch; furthermore they would occupy a small part of the wider background panoramic views towards the southeast and southwest. One turbine light would be seen low on the horizon (the other three being screened by commercial forestry) relatively distant but noticeable against a dark sky. The lights would appear to blink, when the blades pass in front of the lights when the wind direction is from the east (which is not the prevailing wind direction). However, the streetlights of the village, housing lights and the headlights of passing cars combined with foreground screening would reduce the potential degree of change to road-users, pedestrians and residents in the houses on the opposite side of the road. **Scale of Visual Change: Small** **NB If forestry felled, change would be: Medium/Small**	Operation: Indirect change may arise from the nine turbine hubs and rotating blades located in the more distant AU. This would constitute a limited and localised indirect change to the background character of this area. The one visible light would be relatively distant but noticeable against the predominantly dark sky across the loch. However, this is mitigated by the foreground lights of the village and headlights of passing cars. **Scale of Landscape Change: Small** **NB If forestry felled, change would be: Medium/Small**
17	**Threave Castle**	This is a low-level viewpoint on a well-used, well-maintained core footpath opposite the ruined Threave Castle, which lies on an island	Operation: All nine turbines would be theoretically visible, skylined. In reality, five	Operation: Some change would arise from the nine turbine hubs or rotating blades of

VP	Location/ Distances to Wind/ Solar Farm Arrays	Key features of existing baseline view (including future baseline)	Predicted Visual Change	Predicted Change to Landscape Character
	Core Path CP155 windfarm array 8.85	in the Dee (Threave Island). North-westerly views across the river to the castle in the foreground, feature riverside mature trees and scrub with improved pasture on the opposite side. In the distance, low hills rise above the tree line, with Neilson's Monument distantly skylined to the immediate west of this location on Barstobrick Hill. To the east and south, there are views across marshes to a large clump of woodland, with wider views semi-enclosed in contrast to those to the north and west.	hubs and four tips would remain visible behind midground trees. They would, however, appear distant from this location and occupy a relatively small part of the wider background western vista. These views would be partially screened or filtered by foreground and mid-ground trees and scrub and would not detract from the foreground castle and riverside views. Three aviation warning lights would be distantly visible in a limited area of dark sky otherwise devoid of artificial light. The lights would appear to blink, when the blades pass in front of the lights when the wind direction is from the east (which is not the prevailing wind direction). **Scale of Visual Change: Small**	the turbines located in the more distant AU, but this would be very limited and indirect. The three visible lights, relatively distant but noticeable against the predominantly dark sky across the loch, would introduce a limited impression of man-made intrusion at night in an area of sky where there are very few such influences on character. **Scale of Landscape Change: Small**
18	**Castle Douglas** Meadow View Residential Area windfarm array 10.86	At this location, two-storey semi-detached houses in an elevated location look west over marshy floodplain and an immediate foreground of allotment gardens. In the middle distance is the A75 cutting across the view from north to south on an embankment. In the distance are low hills and Neilson's Monument can be seen on the top of one of these hills. In the middle ground can be seen improved pastureland and large clumps of deciduous woodland primarily, although there are some coniferous groups and some farm buildings and outbuildings. The edge of the town of Castle Douglas lies to the immediate north and east. However, most other	Operation: During operation, although skylined, at almost 11km, in open front views, all nine hubs and blades would be visible on a low ridge above the midground trees, but would appear relatively distant from this location and occupy a small part of the wider background panorama to the west. In the direction of the proposed development four red lights would be seen relatively distantly against an otherwise dark sky; and the lights may appear to blink in easterly winds. However, the foreground and mid-ground lighting would mitigate this to a considerable extent.	Operation: Following construction, indirect change may arise from the completed nine turbine hubs and rotating blades of the turbines located in the more distant AU but this would be very limited and indirect. There would be limited change to local night-time landscape characteristics arising from the aviation lights, owing to the prevailing urban edge lighting environment. **Scale of Landscape Change: Small**

VP	Location/ Distances to Wind/ Solar Farm Arrays	Key features of existing baseline view (including future baseline)	Predicted Visual Change	Predicted Change to Landscape Character
		properties are lower down and do not have the same elevated viewpoint. At night-time, in the immediate vicinity of the viewpoint street lights and house lights cast a bright halo and also there are some small lights in the allotment. Further away in the mid-distance can be seen lights of vehicles on the A75 and bright road lights associated with a traffic junction. To the east, the lights associated with the edge of the town cast a glow into the night sky.	**Scale of Visual Change: Small**	
19	**Screel Hill** (344m AOD) windfarm array 14.20	Accessed by forestry track, this is one of several peaks rising above the B727 south of Gelston. The hill takes the form of an elongated, rugged moorland ridge rising above an extensive area of coniferous forestry which clothes its steep slopes on all sides. The moorland and forestry transitions to more gentle improved pasture slopes towards the road. The lower, knolly, Brownie Hills appear as "foothills" immediately to the north and these are crowned by both a telecommunications mast and a hill fort (Dungulle Hill). The policy woodlands of Gelston Park characterise the landscape below this.	Operation: Views of the Proposed Development would be distant; very limited in extent in the overall view; seen against background low hills, and not skylined. Four aviation lights would be visible against the dark background, but visible in the context of other lighting in the settled landscapes at this distance. **Scale of Visual Change: Small**	This VP lies within AU23 – Coastal Granite Uplands. Change would be indirect. Operation: Due to the distance and broad landscape context experienced at this location, the proposed development would have little influence on the local landscape and immediate locality, no resultant change to landscape characteristics. **Scale of Landscape Change: Negligible**
20	**Kirkcudbright (Lower)** Castledykes Road,	This low-level viewpoint is a popular local riverside walk, picnic area and play area. It is near the municipal swimming pool. Looking north across the River Dee are moored boats in the foreground, and on the other side of river, south-facing houses, mainly two-storey,	Operation: Views of the proposed development would be relatively distant; limited in extent in the overall view to one hub and six tips at a low point in the background	This VP lies within AU1 - Peninsula. Change would be indirect. Operation: Due to the distance and foreground urban context, there would be very limited awareness of the proposed

VP	Location/ Distances to Wind/ Solar Farm Arrays	Key features of existing baseline view (including future baseline)	Predicted Visual Change	Predicted Change to Landscape Character
	Picnic Area windfarm array 10.75km	which would have no view of the Proposed Development. On the south side of the river, receptors are mainly walkers in the park at the picnic area and on the riverside footpath. Northerly rear views from houses in Castledykes Road, Large Street (including Broughton House, owned by the National Trust for Scotland) and Castle Bank are largely screened by mature riverside trees. At night-time, the skies to the north are dark although lights from houses are visible across the river and nearby lighting associated with the town casts a glow into the sky to the east and south.	hills; in reality mostly screened by mid-ground trees. No lights visible. **Scale of Visual Change: Negligible**	development and hence in this immediate locality, little resultant change to landscape characteristics. No lights visible. **Scale of Landscape Change: Negligible**
21	**Mossyard Bay** Beach car-park In NSA windfarm array 13.45	This is a low-level viewpoint overlooking Fleet Bay to the northeast and east. Looking north eastwards from the beach car-park, views are partially constrained by a mid-ground rocky promontory with mature woodland belts behind on a low hill (Newton Hill) and at Cardoness in the background. Ben John and Mill Knock Hills dominate inland with heather moorland, and improved pastureland with extensive clumps of trees lower down on the slopes. Below the hill is the Laggan leisure development and in the foreground there are one-and-a-half storey houses and cottages above the car park. To the south is the caravan park at a higher level, constraining views in this direction.	Operation: Views of all but one hub and four tips would be screened by the background topography. These would be distantly visible and skylined. In distant views, one turbine light would be barely perceptible (the other three being screened by topography) The light would appear to blink, when the blades pass in front of the lights when the wind direction is from the southwest (which is the prevailing wind direction). However, the lights of the caravan parks, housing lights, the Laggan development and the headlights of passing cars would reduce potential degree of change to road-users, visitors, pedestrians	This VP lies within AU3 – Coastal Flats. Change would be indirect. Operation: Due to the screening effect of the background topography there would be limited awareness of the Proposed Development and hence in this immediate locality, little, if any, resultant change to landscape characteristics. There would be limited change to local night-time landscape characteristics arising from the aviation lights, owing to the distance and the prevailing local lighting environment. **Scale of Landscape Change: Negligible**

VP	Location/ Distances to Wind/ Solar Farm Arrays	Key features of existing baseline view (including future baseline)	Predicted Visual Change	Predicted Change to Landscape Character
			and residents in nearby cottages to a negligible level. **Scale of Visual Change: Negligible**	
22	**Mill Knock** (c.260m AOD) In NSA windfarm array 11.01km	A seemingly little-visited hilltop with no apparent paths, which nevertheless provides an elevated location with 360° panoramic views which include the NSA to the east and north. Fleet Bay lies to the southwest and at its head, and slightly inland, is Gatehouse of Fleet, to the northeast. Below the hill to the north is the broad Skyre Burn Valley with conifer plantations and extensive native birch woodland, and improved pasture on lower slopes. The upper slopes are open moorland with extensive heather swathes amidst tussocky, rough grasses. Distant views are obtained to hills to the north and northwest with Cairnharrow immediately to the west. There are/ would be, very distant, barely perceptible views of other windfarms in excess of 25 km to the northwest (Blackcraig, constructed; Fell, consented). A notable landscape contrast can be discerned between the broad open valley above Fleet Bay and the more enclosed and increasingly narrow valley running up into the hills to the north of Gatehouse of Fleet.	Operation: To the northeast, just over 11km distant, seven hubs and two tips would be visible above low hills. The skylined turbines although noticeable, would however appear relatively distant and limited in extent in the overall panoramic view. In distant views at night, three turbine lights would be just visible (the other one being screened by topography) The light would appear to blink, when the blades pass in front of the lights when the wind direction is from the southwest (which is the prevailing wind direction). However, the housing lights in Skyreburn, the lower Fleet Valley and Gatehouse of Fleet to the northeast would reduce the potential degree of change to a negligible level. **Scale of Visual Change: Small**	This VP lies within AU19-Foothills. Change would be indirect. Operation: Due to the distance, there would be limited awareness of the proposed development but the turbines would appear within the upland landscape, well set back from the valley landscapes. There would be limited change to local night-time landscape characteristics arising from the three aviation lights, owing to the distance and the prevailing lighting environment in the direction of the change. **Scale of Landscape Change: Small**
23	**Cairnharrow**	An elevated peak with 360° panoramic views. Looking to the north, a range of low hills	Operation: To the northeast, at just over 12km distant, all nine turbines would be visible;	This VP lies within AU19-Foothills. Change would be indirect.

VP	Location/ Distances to Wind/ Solar Farm Arrays	Key features of existing baseline view (including future baseline)	Predicted Visual Change	Predicted Change to Landscape Character
	(457m AOD) windfarm array 12.08	stretches to the horizon. The groundcover is heather moorland with some conifer woodlands on lower ground. Twin telecommunication masts can be seen immediately to the northwest. Also approximately six windfarms are perceptible along the horizon from the northwest to the northeast at 20-40kms distance (operational; Arecleoch, Blackcraig, Wether Hill, Dalswinton, Harestanes; approved/consented; Shepherd's Rig; Glenshimmeroch; Manqhill; Troston), and there is also a distant offshore windfarm to the southeast in the Solway Firth (Robin Rigg). Although the peak is outside the NSA it obtains wide, elevated views over the NSA to the east and north. This can be seen stretching from the large hills in the north to improved pasture lowlands in the east, changing to flatter broader lower hills and then eventually the coastline around the Fleet Bay area and Murray's Isles. Looking out to the south over the Irish Sea, the Isle of Man can be seen on a clear day. To the west is the broad expanse of Wigtown Bay.	however due to the height of the viewpoint, the turbines would be viewed against the backdrop of the hills behind, with only the tips skylined. Thus, although noticeable, they would however appear relatively distant and limited in extent in the overall panoramic view. Four aviation lights although theoretically visible, would be seen with a landscape which contains other lights in the valley. **Scale of Visual Change: Small**	Operation: Due to the distance, the Proposed Development would have little influence on local landscape character but the turbines would be visible within a lower unit of Foothills with Forestry. **Scale of Landscape Change: Small**
24	**Cairnsmore of Fleet** (711m AOD) Core Path	This viewpoint is a large granite massif peak on the westernmost periphery of the study area, at the most westerly extent of ZTV coverage from which 360° panoramic views are obtained. The summit of the steep-sided craggy ridge is accessed via a Core Path from	Operation: At c.14km, views of the Proposed Development would be distant; very limited in extent in the overall view; seen against background hills, and not skylined. Four	This VP lies within AU23 – Coastal Granite Uplands. Change would be indirect. Operation: Due to the distance and broad landscape context experienced at this location, the Proposed Development would

VP	Location/ Distances to Wind/ Solar Farm Arrays	Key features of existing baseline view (including future baseline)	Predicted Visual Change	Predicted Change to Landscape Character
	windfarm array c.14.0km	the village of Cairnsmore, near Newton Stewart. The landcover of the hilltop is open, treeless moorland with rough grassland and heather, surrounded on three sides by extensive swathes of coniferous forest. Views to the south are of other large hills such as Cairnharrow, with the Cree Estuary, Wigtown Bay and the Irish Sea (and on a clear day, the Isle of Man) as a backdrop. To the west, inland from the head of the estuary, lies the town of Newton Stewart, in the Cree valley. Distant views to the north, include Merrick and other nearby Large hills amidst extensive areas of forestry and, as with Cairnharrow, feature about six very distant windfarms at, or near, the horizon.	aviation lights although theoretically visible, would be barely perceptible at this distance. **Scale of Visual Change: Negligible**	have little influence on local landscape character but the turbines would be visible within a lower unit of Foothills with Forestry. **Scale of Landscape Change: Negligible**
25	**Blackloch** B796 north of Gatehouse of Fleet Cycle Route 7 windfarm array c.7.0km access track c.1.2km	From this low-level viewpoint, open views are obtained over a broad flood plain just north of Gatehouse of Fleet across improved pasture fields bounded by hawthorn hedges and post and wire fences. Large mature trees are evident in old hedge lines and alongside roads and the riverside. On the low hill opposite is Disdow Wood, a large group of coniferous trees edged by deciduous trees. To immediate south is the more modern outskirts of Gatehouse of Fleet and to the west, Blackloch Farm and large,mostly modern, residential properties in elevated locations (Ramsay Wood and Bracken Wood developments) looking east over the floodplain towards Disdow Wood.	No views of the windfarm would be obtained from this location. Construction: The viewpoint location is approximately 1.2km from the proposed windfarm access track, which upgrades the existing forestry track within Disdow Wood. Embedded mitigation would retain the existing trees on the outside of the track to mitigate views of the track. However, as noted in the photograph, there would be a few parts where there would be filtered views of the track and passage of construction vehicles would be partially visible. However, the movement of vehicles would be similar to the existing baseline as a main forestry track. **Scale of Visual Change: Small**	This VP lies in AU4-Narrow Valleys. Change would be both direct and indirect. Construction: The relative tranquillity of the Fleet valley would be disturbed periodically by construction work to upgrade the track for a very short duration, but the movement of large vehicles would be similar to the baseline as a main forestry track. **Scale of Landscape Change: Small** Operation: There would be little change from the baseline during operation. **Scale of Landscape Change: Negligible**

VP	Location/ Distances to Wind/ Solar Farm Arrays	Key features of existing baseline view (including future baseline)	Predicted Visual Change	Predicted Change to Landscape Character
			Operation: There would be little change from the baseline during operation. **Scale of Visual Change: Negligible**	