## **Technical Appendix 4.5: Assessment of Effects on Designated Landscapes**

Table 4.5.1 presents the potential impacts and the residual effects of the proposed development and the cumulative effects. EIAR Volume 3: Figure 4.5a presents the ZTV and the viewpoints referred to in the table below.

Designation	Unit	Magnitude of Impact	Magnitude of Cumulative Impact	Residual Effects	Cumulative Residual Effect
	Cairngorms NP (CNP)	According to the ZTV in Figure 4.5a the total extent of the viewshed of the proposed development within the CNP would affect around 61 km², equating to 1.35% of the total CNP area. The majority of this visibility would be localised and occur at the following locations:  • Adverikie: Glen Shirra area of the CNP (as represented by Viewpoint 14), from where up to 16 turbines (7 blade tips and 9 hubs/rotors would be seen on the skyline to north at a distance of over 7 km. Based on stated distance and relative prominence and contrast of the proposed development to the landscape context, the localised magnitude of impact would be moderate.  • Spey Headwaters: Upper Glen of the Spey area of CNP, from where up to 21 turbines (11 blade tips and 11 hubs/rotors) would be seen on the skyline to north at a distance of over 4 km. However, field reconnaissance suggests that such visibility would be constrained by intervening vegetation in the vicinity of Garvamore. Taking into consideration the intermittent or localised visibility, proximity and prominence of the proposed development, the localised magnitude of impact would be moderate.  • A small number of elevated locations in the Spey Headwaters: Spey Dam area of the CNP (as represented by Viewpoint 11) from where up to 17 turbines would be visible (8 blade tips and 9 hubs/rotors) on the skyline around 7 km to the north west. However, much of the elevated edge of this area is forested, thereby reducing the number of visual receptor locations affected. No visibility is predicted in lower lying positions, adjoining the Spey Dam. In general, the impact on this part of the CNP would be negligible, but with localised moderate impacts at a small number of elevated summits.  • Elevated locations in the Glen Truim: Upper Glen and Dalwhinnie area of the CNP (as represented by Viewpoints 9 and 20) from where views of up to 26 turbines would be visible at distances of over 20 km, the turbines largely being backclothed by topography and seen in the context of the blade tips of a small	The proposed development would be seen in conjunction with all of the existing, consented and proposed wind farm developments in the study area. The relative distance and direction of these wind farms from the affected area of the CNP are set out below:  Proposed Development  Glenshero 1.5 km W.  Existing/Consented Wind Farms  Aberarder – 14 km N;  Beinneun and Ext – 29 km W;  Corriegarth and Ext – 10 km NNW;  Corrimony – 35 km NW;  Dunmaglass – 13 km NNW;  Farr – 23 km N;  Glen Kyllachy – 22 km N;  Millennium – 25 km NW;  Millennium South – 27 km NW; and  Stronelairg – 8 km NNW.  Proposed Wind Farms  Dell – 9 km NW.	<ul> <li>No direct effects.</li> <li>The majority of the CNP would be subject to no views of the proposed development and consequently, no indirect effects.</li> <li>Of the areas that would afford views of the proposed development, the majority of the CNP, including the core Cairngorm massif would be subject moderate – moderate/minor effects due to a combination of the screening effects of intervening topography, distance and the presence of the existing Stronelairg Wind Farm, which forms a developed context in views from elevated positions.</li> <li>Significant localised effects would be experienced north of Aberarder Lodge, in the vicinity of Garvamore, at Dun da Lamh hill fort. The effect on the special qualities at these locations would vary, reflecting the special qualities and sensitivity of each of the locations.</li> <li>Aberarder Lodge is located in the Glen Shirra landscape area of the CNP which is dominated by the sense of seclusion, tranquillity and remoteness and is essentially simple. The proposed development would introduce greater complexity and movement to this still landscape and reduce the sense of seclusion and remoteness.</li> <li>Garvamore is located in the Upper Glen of the Spey area which is dominated by the confluence of several glens and side valleys that radiate north and west from Garva Bridge, and these reinforce the sense of a 'pass'. This is further emphasised by the historic Wade Road which goes through the Corrleyalrack Pass, linking Fort Augustus with Ruthven Barracks and Dalwhinnie. The proposed development would form a prominent new feature on the skyline to the north of the Pass, with consequent effects on the perceived scale and would impact upon the character of the historic General Wades route. However, there is a tangible sense of being on the edge of the CNP at this location.</li> <li>Dun da Lamh hill fort is located within the Coul Farmland landscape, which is a transitional landscape that is noted for its sense of 'threshold' between the flat strath floor to the east,</li></ul>	<ul> <li>The majority of the CNP would be subject to no cumulative effects as a result of the proposed development. However, the areas that would afviews of the proposed development, including the core Cairngorm massif, would be subject moderate to moderate/minor cumulative effects due to the relative distance of wind farms.</li> <li>Significant localised effects would be experienced a small number of summits adjoining the wester boundary of the CNP (e.g. at Geal Charn and Cai Dearg).</li> <li>Such effects would affect the amenity of recreati receptors and perceptions of the wildness and natural forms. Whilst the proposed development would often be seen in the context of the existing Stronelairg Wind Farm array, it would be more prominent or form a notable lateral extension to existing array. In locations within the Adverikle a Spey Headwaters areas of the CNP, the proposed development would introduce turbines to aspects currently without such features.</li> <li>However, given the geographically limited extent the CNP subject to potentially significant cumular effects, and their location on the outer extents or CNP where there is already the influence from existing wind farm developments, the effects on CNP overall is not considered to be significant, a its integrity would not be undermined.</li> </ul>

<sup>&</sup>lt;sup>1</sup> Based on nearest position within designation with intervisibility of the proposed development and the cumulative scheme.

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ignation Unit Magnitude of Impact	Magnitude of Cumulative Impact	Residual Effects	Cumulative Residual Effect
the proposed development would be seen, the magnitude of impact would slight.  • Cairngorm Central Massive area of the CNP, from where up to 24 of the proposed development's turbines would be visible at distances of over 30 km. Views would primarily be from elevated slopes and summits and the proposed development's turbines would be backclothed and seen in the turbines would be backclothed and seen in the context of the Stronelairg Wind Farm turbines. Given the distance at which they would be seen and the existing developed context, the impact caused by the proposed development in this part of the CNP would be negligible.  Highly localised visibility would also occur in:  • Monadhilaths: South Monadhilaths area of the CNP (as represented by Viewpoints 6 and 12). Seen from the majority of summits within this part of the CNP (as represented by Viewpoints 6 and 12). Seen from the majority of summits within this part of the CNP the proposed development would be substantially screened, with only a small number of blade tips evident. The greatest visibility of the proposed development would occur at Carn Dearg, from where a maximum of 27 turbines (all blade tips save for 3 hubs/rotors) would be visible, would be backclothed by topography and seen in conjunction with the Stronelairg Wind Farm array, which would have a greater promience. At the summit of Geal Charn, on the boundary of the CNP, the proposed development would be prominent in the middle-ground, most of its turbines appearing in front of the Stronelairg Wind Farm array, Viewed from the edge of the CNP, the lower towers of the proposed development; burbines would be obscured by Intervening topography. However, viewed from Viewpoint 6, which is just outside of the CNP, the entire height of the turbines would be obscured by Intervening topography. However, viewed from Viewpoint 6, which is just outside of the CNP, the entire height of the proposed development. Such and the prominence of the proposed development form the proposed development form the subject t		by the resistant rock forms and woodland and forest cover. The proposed development would affect the perceived scale of Spey Headwaters and the background context provided by the edge of the Monadhliath Mountains, but would represent a highly localised effect.  The scale, form and contrast between the different constituent landscapes of the CNP and the prominence and distinctiveness of the mountains and plateaux would not be significantly affected. Similarly, as demonstrated in the ZTVs, the proposed development would not significantly affect the settled straths and glens of the CNP. The proposed development would not significantly affect the visual or sensory qualities of the CNP, or the wildness of its more remote and secluded areas.  Given The limited geographical extent of the CNP subject to potentially significant effects as a result of the proposed development and their location on the outer extents of the CNP (i.e. away from the most sensitive areas within the interior of the CNP means that the overall effects on the CNP would not be significant, and its integrity would not be undermined.	

	ble 4.5.1: Effects on Designated Landscapes					
Designation	Unit	Magnitude of Impact	Magnitude of Cumulative Impact	Residual Effects	Cumulative Residual Effect	
		locations on the western edge of the CNP at Geal Carn, Carn Dearg, north of Aberarder Lodge, and in the vicinity Garvamore.				
National Scenic Area (NSA)	Cairngorm Mountain NSA	Up to 24 of the proposed developments turbines would be visible at distances of over 30 km. Views would primarily be from elevated slopes and summits and the proposed development's turbines would appear mainly as blade tips with 2 hubs/rotors apparent. The turbines would be backclothed and seen in the context of the Stronelairg Wind Farm turbines. Given the distance at which the proposed development would be seen, its baseline context relative to the Stronelairg Wind Farm turbines, the magnitude of impact on the NSA would be negligible.	Due to the elevated position of this designation, the proposed development would be seen in conjunction with all of the existing, consented and proposed wind farm developments in the study area. The relative distance and direction of these wind farms from the NSA are set out below:  Proposed Development  Glenshero 27 km W.  Existing/Consented Wind Farms  Aberarder – 28 km NW;  Beinneun and Ext – 69 km W;  Corriegarth and Ext – 31 km W;  Corrimony – 64 km W;  Dunmaglass – 27 km NW;  Farr – 28 km NW;  Glen Kyllachy – 26 km NW;  Millennium – 59 km W;  Millennium South – 59 km W;  Millennium South – 59 km W.  Proposed Wind Farms  Dell – 39 km WNW.  Given the limited extent of this NSA subject to potential cumulative views of the proposed development and other wind farm developments, the extent to which the proposed development would be screened, the cumulative impact on this NSA would be negligible.	No direct effects.  The majority of the NSA, including the core Cairngorm Massif would be subject moderate/minor effects due to a combination of the screening effects of intervening topography, distance and the presence of the existing Stronelairg Wind Farm.  Consequently, the NSA would not be subject to significant effects.	The majority of the NSA, including the core Cairngorm massif would be subject moderate/minor cumulative effects due to a combination of the relatively limited visibility and prominence of the proposed development, distance and its relationship with the Stronelairg Wind Farm.  In the event that the proposed Dell Wind Farm is introduced, the residual cumulative effect would remain unchanged  Consequently, the NSA would not be subject to significant cumulative effects.	
	Glen Affric NSA	Up to 32 of the proposed development's turbines would be visible from the elevated southern slopes of the Faskyle Forest. The proposed development would be seen at distances in excess of 35 km and would substantially overlap with the Stronelairg Wind Farm array. In this context, the magnitude of impact experienced in this designated area would be negligible.	Due to the elevated position of this designation, the proposed development would be seen in conjunction with all of the existing, consented and proposed wind farms developments in the study area. The relative distance and direction <sup>2</sup> of these wind farms from the NSA is set out below:	No direct effects.  The proposed development would represent a minor indirect effect, which would not be significant.	The proposed development would represent a minor cumulative effect on the NSA when considered in conjunction with existing and consented wind farms. This remains the case if the proposed Dell wind farm is also taken into account.	
			Proposed Development  Glenshero 27 km ESE.			

<sup>&</sup>lt;sup>2</sup> Based on nearest position within designation with intervisibility of the proposed development and the cumulative scheme.

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idual Effect
build be subject to no cumulative moderate cumulative effects would vated summits and slopes south of the summit of Creag Meagaidh from the selope in views. However, at Carn development would represent a the prominence of developments and a (significant) cumulative effect. The significant cumulative effect. The significant in the event of the selope selope taken into account. Ilimited geographical extent of the effects within this SLA the proposition considered to undermine the ignation.
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<sup>&</sup>lt;sup>3</sup> Based on nearest position within designation with intervisibility of the proposed development and the cumulative scheme.

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Glenshero Wind Farm Environmental Impact Assessment Report

Table 4.5.1:	Table 4.5.1: Effects on Designated Landscapes						
Designation	Unit	Magnitude of Impact	Magnitude of Cumulative Impact	Residual Effects	Cumulative Residual Effect		
			Stronelairg -7 km WNW.  Proposed Wind Farms     Dell – 13 km NNW.  Moderate on elevated summits and slopes south of Loch Laggan and at the summit of Creag Meagaidh, increasing to major/moderate on elevated summits and south of the Spey Dam and at Carn Liath.  Due to the elevated position of the receptors	the presence of the Stronelairg Wind Farm has already altered this context.  Given the relatively limited geographical extent of predicted significant effects within this SLA the proposed development is not considered to undermine the integrity of this designation.			
	Loch Ness and Duntelchaig SLA	View of the proposed development would be restricted to elevated slopes and summits on the western side of Loch Ness and at the summits of Tom Bailgeann and Craig nan Clag, southwest of Loch Duntelchaig. Consequently, key receptors and receptor locations within the SLA would be unaffected by the proposed development.  With the exception of locations at the summit of Meall Fuar Monadhliath, the proposed development would barely be discernible from the western side of the Loch, appearing as a single blade tip amidst the Stronelairg Wind Farm array. Viewed from Meall Fuar Monadhliath the proposed development would be seen at distances of over 21 km and would merge with the Stronelairg Wind Farm turbines.  On the basis of this analysis, the magnitude of impact on the western side of the Loch would be negligible. Viewed from the eastern side of the Loch, on summits adjacent to Loch Duntelchaig, the proposed development would be seen at distances of around 28 km and would merge with the Stronelairg Wind Farm turbines. Consequently, the magnitude of impact on this part of the SLA would be negligible.	within affected parts of this designation, the proposed development would be seen in conjunction with all of the existing, consented and proposed wind farm developments in the study area. The relative distance and direction of these wind farms from the SLA is set out below:  Proposed Development  Glenshero 19 km SSE.  Existing/Consented Wind Farms  Aberarder – 6 km SE;  Beinneun and Ext – 23 km SW;  Bhlaraidh – 5 km WNW;  Corriegarth and Ext – 12 km ESE;  Corrimony – 25 km WSW;  Dunmaglass – 6 km SSE;  Farr – 8 km E;  Glen Kyllachy – 8 km ESE;  Millennium – 18 km SW;  Millennium South – 19 km SW; and  Stronelairg –15 km SSE.  Proposed Wind Farms  Dell –14 km SSE.  Given the limited extent of this SLA subject to potential cumulative views of the proposed development and other wind farm developments, the extent to which the proposed development would be screened and would merge with the Stronelairg Wind Farm, the cumulative impact on this SLA would be negligible.	No direct effects.  Given the limited extent of this SLA subject to potential views, the extent to which the proposed development would be screened and would merge with the Stronelairg Wind Farm, the residual effect on this SLA would be Moderate/minor and not significant.	Given the limited extent of this SLA subject to potential cumulative views of the proposed development and other wind farm developments, the extent to which the proposed development would be screened and would merge with the Stronelairg Wind Farm, the residual cumulative effect on this SLA would be Moderate/minor and not significant.		

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<sup>&</sup>lt;sup>4</sup> Based on nearest position within designation with intervisibility of the proposed development and the cumulative scheme.

Designation	Unit	Magnitude of Impact	Magnitude of Cumulative Impact	Residual Effects	Cumulative Residual Effect
	Loch Lochy and Loch Oich SLA	Views of the proposed development would be confined to a small number of elevated slopes and summits along the edge of the Great Glen from where up to 16 of the turbines would be seen at distances of over 23 km to the northeast, and mainly as blade tips and backclothed. In comparison to the Stronelairg Wind Farm turbines, the proposed development would appear substantially screened and recessive in views. Viewed from the eastern side of the Glen the proposed development's turbine would barely be visible, the turbines appearing as a small number of blade tips over 20 km to the northeast.  Given the limited visibility and distance at which the proposed development would be seen, the magnitude of impact on this SLA would be negligible.	Due to the elevated position of the receptors within affected parts of this designation, the proposed development would be seen in conjunction with the majority of the existing, consented and proposed wind farm developments in the study area. The relative distance and direction <sup>5</sup> of these wind farms from the SLA is set out below:  Proposed Development  Glenshero 19 km ENE.  Existing/Consented Wind Farms  Aberarder – 45 km ENE;  Beinneun and Ext – 8 km NNW;  Bhlaraidh – 24 km NNE;  Corriegarth and Ext – 35 km ENE;  Corrimony – 28 km NNE;  Dunmaglass – 43 km ENE;  Millennium – 9 km NNE;  Millennium South – 9 km N; and  Stronelairg –25 km ENE.  Proposed Wind Farms  Dell –26 km ENE.  Negligible magnitude of impact in respect of both existing/consented wind farms and negligible in respect of existing, consented and proposed developments.	No direct effects.  The proposed development would represent a minor effect on the SLA, having no significant effect on the key characteristics or special qualities of the designated area.	No direct effects.  The proposed development would represent a minor effect on the SLA, having no significant effect on the ke characteristics or special qualities of the designated area.

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<sup>&</sup>lt;sup>5</sup> Based on nearest position within designation with intervisibility of the proposed development and the cumulative scheme.

esignation	Unit	Magnitude of Impact	Magnitude of Cumulative Impact	Residual Effects	Cumulative Residual Effect
	Moidart, Morar and Glen Sheil SLA	Whilst theoretical visibility of up to 24 turbines is indicated in Figure 4.5a, at elevated summits north of Loch Cluanie (e.g. Carn Ghlusard), the proposed development would be seen at distances of over 30 km and would appear almost entirely as blade tips and partially overlapping with the Stronelairg Wind Farm turbines. Given the highly restricted nature of visibility, the distance at which the proposed development would be seen and the context with	Due to the elevated position of the receptors within affected parts of this designation, the proposed development would be seen in conjunction with all of the existing, consented and proposed wind farm developments in the study area. The relative distance and direction of these wind farms from the SLA is set out below:	No direct effects. The proposed development would represent a minor indirect effect.	No direct effects.  The proposed development would represent a minor indirect effect.
		Stronelairg Wind Farm the magnitude of impact would be negligible.	Proposed Development  Glenshero 32 km ESE.		
			Existing/Consented Wind Farms  • Aberarder – 46 km ENE;		
			Beinneun and Ext – 6 km ESE;		
			Bhlaraidh – 17 km ENE;		
			Corriegarth and Ext – 38 km E;		
			Corrimony – 22 km NE;		
			Dunmaglass – 45 km E;		
			• Farr – 55 km ENE;		
			Glen Kyllachy – 55 km ENE;		
			Millennium – 9 km ES;		
			Millennium South – 9 km ESE; and		
			Stronelairg -31 km ESE.		
			Proposed Wind Farms		
			• Dell – 31 km E.		
			Negligible magnitude of impact in respect of both existing/consented wind farms and negligible in respect of existing, consented and proposed developments.		
	Strathconon, Monar and Mullardoch SLA	Up to 32 of the proposed development's turbines would be visible from elevated slopes and summits on the edge of the SLA at Faskayle Forest and Balmore Forest. The turbines would be seen at distances in excess of 36 km to the southeast and would appear to overlap and merge with the Stronelairg Wind Farm array. Given the distance at which it would be seen	Due to the elevated position of the receptors within affected parts of this designation, the proposed development would be seen in conjunction with all of the existing, consented and proposed developments in the study area. The relative distance and direction of these wind farms from the SLA is set out below:	No direct effects.  The proposed development would represent a moderate/minor effect, which would not be significant.	No direct effects.  The proposed development would represent a moderate/minor effect, which would not be significated.
		and its position relative to the Stronelairg Wind Farm, the magnitude of impact on this SLA would be	Proposed Development		
		negligible.	Glenshero 34 km SE.		
			Existing/Consented Wind Farms		
			Aberarder – 35 km ESE;      Aberarder – 35 km ESE;		
			Beinneun and Ext – 20 km SE;		
			Bhlaraidh – 9 km SE;		

<sup>&</sup>lt;sup>6</sup> Based on nearest position within designation with intervisibility of the proposed development and the cumulative scheme.

<sup>&</sup>lt;sup>7</sup> Based on nearest position within designation with intervisibility of the proposed development and the cumulative scheme.

Table 4.5.1: E	Table 4.5.1: Effects on Designated Landscapes						
Designation	Unit	Magnitude of Impact	Magnitude of Cumulative Impact	Residual Effects	Cumulative Residual Effect		
			Corrimony – 7 km ESE;				
			Dunmaglass – 34 km SE;				
			• Farr – 38 km ESE;				
			Glen Kyllachy – 38 km ESE;				
			Millennium – 19 km S;				
			Millennium South – 20 km S; and				
			Stronelairg -31 km SE.				
			Proposed Wind Farms				
			• Dell – 30 km SE.				
			Negligible magnitude of impact in respect of both existing/consented wind farms and negligible in respect of existing, consented and proposed developments.				