# Pentland floating offshore wind farm

Volume 3: Appendix A.16.7

Onshore Wind Energy Supplementary Guidance Assessment







## OFFSHORE EIAR (VOLUME 3): TECHNICAL APPENDICES

#### **APPENDIX 16.7: ONSHORE WIND ENERGY**

### SUPPLEMENTARY GUIDANCE ASSESSMENT

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# APPENDIX 16.7: ONSHORE WIND ENERGY SUPPLEMENTARY GUIDANCE ASSESSMENT

#### 1.1 Introduction

This Appendix relates to Offshore EIAR (Volume 2): Chapter 16: SLVIA. In response to the EIA Scoping Opinion, the following table responds to the ten landscape and visual criteria set out in The Highland Council's Onshore Wind Energy Supplementary Guidance (OWESG). Each criterion is considered in respect of the potential effects that will arise as a result of the Offshore Development.

Table 1.1-1 SLVIA response to OWESG Criteria

Criteria	Issue	Detail	SLVIA response
1	Relationship between Settlements/ Key locations and wider landscape respected.	The extent to which the proposal contributes to perception of settlements or key locations being encircled by wind energy development.	The Offshore Development will be located in the North Atlantic at a minimum distance of 7.5 km off the north Caithness coast. The closest settlements and key locations are located along this coastline. The Horizontal Angle Blade Tip ZTV in Figure 16.8 shows that in views from the settlements of Portskerra, Melvich, Reay, Isauld, Forss and Strathy that the Offshore Development will occupy either 10 to 20 degrees of the full 360 degree view available. Even taking into consideration the presence of operational Baillie Hill and Forss Wind Farms, as well as the consented Limekiln Wind Farm, none of these settlements will be perceived to be encircled by wind energy developments and the contribution of the Offshore Development will be limited to a small proportion of the wider available view from those locations where actual visibility will arise.
	Development should seek to achieve a threshold where >	> turbines are not visually prominent in the majority of views within or from settlements/ Key Locations or from the majority of its access routes.	The ZTV in Figure 16.12 shows that the Offshore Development will be theoretically visible from Portskerra, Melvich, Reay and Isauld, although actual visibility in all these settlements is reduced to some extent by the enclosure of buildings and/or landform. There is no theoretical visibility shown from Strathy and very limited visibility from Forss. Reay and Isauld are a minimum of approximately 9.5 to 10 km from the Offshore Development. While views of the Offshore Development will occur from the more open and/or elevated parts of these settlements, they will appear prominent owing to their scale, although this will be moderated by the small number of wind turbine generators (WTGs) and their middle range location, which means they only occupy 10 to 20 degrees of the wider view, as shown in the Horizontal Angle ZTV in Figure 16.8. There is also a baseline influence from onshore operational wind farms, Dounreay Nuclear Power Plant and Vulcan Naval Reactor Test Establishment (NRTE). More open views will occur from Portskerra and the more elevated part of Melvich, and in these views the WTGs will appear prominent owing to their scale and seen in a context where there is very little influence from other large-scale energy developments. The minimum distance of approximately 9 to 10 km, combined with the small number of WTGs, will again moderate the overall effect. The key access route connecting most of these coastal settlements is the A836. The ZTV in Figure 16.12 shows that theoretical visibility of the Offshore Development occurs fairly consistently along this route. While the Offshore Development will form a prominent feature in views from the A836 owing to their



Criteria	Issue	Detail	SLVIA response
			large-scale, this prominence will be moderated by the fact that there are only seven WTGs, which will be seen at distances beyond approximately 9 km and in the context of closer range, onshore operational wind farms. While there will be significant effects on settlements and the A836 along the coast between Strathy and Forss, not all the settlements in this area will be significantly affected and the extent of these effects will be relatively localised, with settlements and roads beyond this section not being significantly affected or not affected at all. The effects on settlements and roads are assessed in Sections 16.7.4 and 16.7.5 of Chapter 16: SLVIA (Offshore EIA (Volume 2)).
2	Key Gateway locations and routes are respected	The extent to which the proposal reduces or detracts from the transitional experience of key Gateway Locations and routes.	The key route that is relevant to this assessment is the A836. It runs along the north coast and is closely associated with the coastal landscapes it passes through. Although there are no distinct 'Gateway Locations' along this route, there are transitional experiences, most notably to the west of Reay, where the road transitions from a coastal landscape characterised by farmland, settlement, wind farm developments and Dounreay Nuclear Power Plant, into a coastal landscape characterised by largely undeveloped open moorland. The location of the Offshore Development in the North Atlantic will not affect this transition as it will not have any direct effects on landscape character and indirect effects will be based on its association with the separate and distinct seascape.
	Development should seek to achieve a threshold where >	Wind Turbines or other infrastructure do not overwhelm or otherwise detract from landscape characteristics which contribute to the distinctive transitional experience found at key gateway locations and routes.	The location of the Offshore Development in the North Atlantic means that it is associated with the open seascape and not with any of the onshore landscapes. The Offshore Development, therefore, will have no direct effects on landscape character and indirect effects will not overwhelm or detract from landscape characteristics which contribute to distinctive transitional experiences, as it will be seen associated with the more distinct and well-defined seascape. The effects on the A836 are assessed in Section 16.7.5 of Chapter 16: SLVIA (Offshore EIA (Volume 2), which found that east-bound road-users will be significantly affected in the section between Strathy and Reay, while west-bound road-users will be significantly affected in the section between Hill of Scrabster and Forss and then Reay and Melvich. Road-users on all other sections of the A836 will not be significantly affected.
3	Valued natural and cultural landmarks are respected	The extent to which the proposal affects the fabric and setting of valued natural and cultural landmarks	Using landscape designations as an indicator of the presence of natural and cultural landmarks with a recognised value, there are no local or national designations such as National Scenic Areas (NSA), Special Landscape Areas (SLA) or Gardens and Designed Landscape (GDL) within a 20 km radius of the Offshore Development, with the exception of the Farr Bay, Strathy and Portskerra SLA which lies a minimum of 8 km to the south-west. The most notable natural landmark in the SLA is Strathy Point. The Offshore Development will be seen as a feature in the seascape setting to Strathy Point and will give rise to localised significant effects in the closer range sections of the SLA coast. There will be no significant effects on the Dunnet Head SLA to the east. The effects on the SLAs are assessed in Section 16.7.3 of Chapter 16: SLVIA (Offshore



Criteria	Issue	Detail	SLVIA response
			EIA (Volume 2), which found that significant effects will arise along coastal parts between 8 and 13 km but that the remainder of the SLA will not be significantly affected.
	Development should seek to achieve a threshold where >	The development does not, by its presence, diminish the prominence of the landmark or disrupt its relationship to its setting.	The Offshore Development will not diminish the prominence of Strathy Point, as it will be located a minimum of 8 km to the north-east. It will, however, have an effect on its setting by introducing WTGs into a previously undeveloped seascape. This effect will be moderated by the relatively small number of WTGs and their relatively contained extents within a much wider seascape and landscape setting.
4	The amenity of key recreational routes and ways is respected.	The extent to which the proposal affects the amenity of key recreational routes and ways (e.g. Core Paths, Munros and Corbetts, Long Distance Routes etc.)	While there are no key recreational routes in this local area, local core paths have the potential to be affected by the Offshore Development. These are typically short in extent and occur across the local landscapes around settlements and along the coast, although with no medium or long sections of coast covered by core paths. While the Offshore Development will have an effect on the visual amenity of local walkers on these paths, it will be seen from a context in which human influences are readily evident in the form of small-scale settlement, but also nearby large-scale wind farms and Dounreay Nuclear Power Plant in respect of core paths around Reay, Isauld and Forss. There will be a more notable effect on the visual amenity of walkers on more rural core paths where there is a lesser influence from operational energy developments. The effects of the Offshore Development will, however, be moderated by the minimum distances of 8 km and the small number of WTGs contained within a compact group which will mean only 10 to 20 degrees or 20 to 30 degrees of the 360-degree views will be affected, as shown in the Horizontal Angle ZTV in Figure 16.8. The closest Munro is Ben Hope at a minimum of approximately 48 km and the closest Corbett is Ben Loyal at a minimum of approximately 42 km, with the effect of the Offshore Development on the experience of walkers being moderated by the substantial separation distance.
	Development should seek to achieve a threshold where >	- wind turbines or other infrastructure do not overwhelm or otherwise significantly detract from the visual appeal of key routes and ways.	The Offshore Development does not overwhelm or significantly detract from the visual appeal of key routes and ways, owing to their contained extents that they will occupy 10 to 20 degrees or 20 to 30 degrees of the wider 360-degree views available. Furthermore, from many of the core paths, there is an existing influence from closer range onshore wind farms and other energy developments which will moderate the effects of the more distant Offshore Development. The effects on key routes are assessed in Section 16.7.5 of Chapter 16: SLVIA (Offshore EIA (Volume 2).
5	The amenity of transport routes is respected >	- the extent to which the proposal affects the amenity of transport routes (tourist routes as well as rail, ferry routes and local road access)	The A836 is the key transport route with potential to be affected and it forms part of the North Coast 500 and a Visit Scotland identified scenic route. The extent to which the Offshore Development will affect the amenity of road-users on the A836 route will be moderated by the presence of closer range operational wind farms, such as Baillie Hill and Forss, being readily visible from sections, and the more detached location of the Offshore Development, associated with the open seascape rather than the closer range landform. There will be visibility of the Offshore



Criteria	Issue	Detail	SLVIA response
			Development from the Scrabster to Stromness ferry route which passes over the Pentland Firth, although the effects will be moderated by a combination of the separation distance between this route and the offshore WTGs and the existing influence of other onshore wind farms visible along the north Caithness coast.
	Development should seek to achieve a threshold where >	> wind turbines or other infrastructure do not overwhelm or otherwise significantly detract from the visual appeal of transport routes	The Offshore Development will not overwhelm road-users or significantly detract from the visual appeal of the A836 as they will be contained in a part of the North Atlantic that is recessed a minimum of 9 km from the coastal route of the A836. Furthermore, they will be seen in the context of other large scale energy developments including Baillie Hill and Forss Wind Farms and Dounreay Nuclear Power Plant and Vulcan NRTE. The effects on the A836 are assessed in Section 16.7.5 of Chapter 16: SLVIA (Offshore EIA (Volume 2). While significant effects will arise, these will occur in the localised section between Melvich and Scrabster Hill with all other sections either not affected or not significantly affected.
6	The existing pattern of Wind Energy Development is respected.	The degree to which the proposal fits with the existing pattern of nearby wind energy development, considerations include:  Turbine height and proportions, density and spacing of turbines within developments, density and spacing of developments, typical relationship of development to the landscape previously instituted mitigation measures,  Planning Authority stated aims for development of area.	While there is a concentration of wind farm developments and other large scale energy developments in the coastal landscape, this is not a pattern with which the Offshore Development would benefit from fitting, especially in respect of the potential impacts on the more sensitive coastal landscapes. The location of the Offshore Development in the open seascape of the North Atlantic is sufficiently well separated from the coastal landscapes and utilises the broader scale and simplicity that this seascape has to offer. The proposed WTGs will be larger in scale than the operational WTGs in the coastal landscapes, although the broader scale and simplicity of this seascape will be able to accommodate these larger proportions and the separation distance from the coast will help to moderate their effects.
	Development should seek to achieve a threshold where >	- the proposal contributes positively to existing pattern or objectives for development in the area.	The Offshore Development contributes positively to the existing pattern and objectives for development in the area, by maintaining a well-contained group in the simple and open seascape, which is well separated to the north of the A836 and the northern coastal edge. It will give rise to localised significant effects, although these will generally occur within a context that is affected by existing developments and other human influences.
7	The need for separation between developments and/or clusters is respected	The extent to which the proposal maintains or affects the spaces between existing developments and/ or clusters	Existing developments, including the closest operational wind farms, the Dounreay Nuclear Power Plant, Vulcan NRTE and SSE Substation are all located in the coastal landscapes. While the Offshore Development extends this influence into the undeveloped seascape to the north, it does also form a broad cluster with these large-scale energy developments which keeps significant effects localised



Criteria	Issue	Detail	SLVIA response
			along the coastal edge and hinterland between Strathy Point and Brims Ness.
	Development should seek to achieve a threshold where >	- the proposal maintains appropriate and effective separation between developments and/ or clusters	The location of the Offshore Development in the North Atlantic, at a distance of more than approximately 10 km from the closest operational wind farm, avoids any issues associated with clustering or expansion.
8	The perception of landscape scale and distance is respected	The extent to which the proposal maintains or affects receptors' existing perception of landscape scale and distance.	The Offshore Development is recessed from the coastal edge and within a broad expanse of open seascape which has the scale and simplicity to accommodate the seven proposed WTGs without the sense that they are impinging on the sensitive coastal or sweeping moorland landscapes to the south.
	Development should seek to achieve a threshold where >	- the proposal maintains the apparent landscape scale and/or distance in the receptors' perception.	The combination of the concentration of visual receptors along the coastal edge and the location of the Offshore Development in the North Atlantic, means that there are very few visual receptors within the first 8 km of the Offshore Development, in which there will be the greatest likelihood for perceptions of scale to be challenged. Even from the closer range settlements and roads along the northern coastal edge, there is sufficient distance to maintain that sense of separation and the large scale of the seascape and lack of features helps to moderate the perceptions of scale.
9	Landscape setting of nearby wind energy developments is respected	The extent to which the landscape setting of nearby wind energy developments is affected by the proposal.	The setting of nearby wind energy developments will not be affected by the Offshore Development. Forss and Baillie Hill are the closest operational wind farms which are located in the Farmed Lowland Plain LCT, which is characterised by farmland and rural settlement. The Offshore Development will be located in the North Atlantic, which is characterised by an open and expansive seascape The distinct nature of these two settings and the minimum separation distance of over 8 km ensures that the effect on the landscape setting of the closest wind farms will be limited.
	Development should seek to achieve a threshold where >	- proposal relates well to the existing landscape setting and does not increase the perceived visual prominence of surrounding wind turbines.	The Offshore Development will be appropriately located in the open seascape of the North Atlantic. Through its scale and simplicity, this seascape has the capacity to accommodate the Offshore Development without impinging on the sensitive coastal landscapes to the south, or the sensitive open moorlands and peatlands beyond. The distinct and well-contained layout of the Offshore Development ensures that it does not increase the perceived visual prominence of surrounding WTGs.
10	Distinctiveness of Landscape character is respected	The extent to which a proposal affects the distinction between neighbouring landscape character types, in areas where the variety of character is important to the appreciation of the landscape.	The variety of character is important to the appreciation of the landscape, with the contrast between the coastal landscape to the north and the sweeping moorlands to the south adding to the scenic qualities of the wider landscape. The location of the Offshore Development in the North Atlantic will not affect the distinction between these landscapes. It will, however, have an effect on the distinctiveness of the seascape, a part of which relates to the current absence of development, making it distinct from the coastal landscape where energy developments are evident. The contained layout of the Offshore Development and its separation distance from the coast will moderate this effect by ensuring that the openness and simplicity of the



Criteria	Issue	Detail	SLVIA response
			seascape remain as the defining qualities and the Offshore Development will be seen as a feature within this context.
	Development should seek to achieve a threshold where >	Integrity and variety of Landscape Character Areas are maintained.	The containment of the Offshore Development in the North Atlantic, will associate it with an appropriate location and help maintain the integrity and variety of the surrounding landscape character areas.

#### References

The Highland Council (November 2016). Onshore Wind Energy Supplementary Guidance