

# **EUCHANHEAD RENEWABLE ENERGY DEVELOPMENT**

## **Technical Appendix 7.7: Night-time Viewpoint Analysis**

**10/2020**

# A. Appendix 7.7: Night-time Viewpoint Analysis

## A.1 Introduction

- A.1.1 A viewpoint analysis with regard to the night-time effects has been carried out from all viewpoint locations to inform the assessment of the likely night-time effects.
- A.1.2 All wirelines in the visualisations within **Volumes 3b and 3c: Visualisations** have included the potential visibility of lighting at each viewpoint. Visualisations, including cumulative, at dawn/dusk have been prepared for **Viewpoints 7, 9, and 11**.
- A.1.3 As noted in the night-time assessment in **Section 7.9**, the receptors at night are different from those in the day and for those which are the same, the sensitivity is may be different at night.
- A.1.4 A description of cumulative sites with lighting is noted within **Section 7.9**.

## A.2 Night-time Viewpoint Analysis

Vp No.	Viewpoint and Distance	Night-time receptor	Night-time changes	Cumulative Night-time
1	Colt Hill (Striding Arches sculpture)  0.3 km	<b>Landscape:</b> Ken unit Southern Uplands with Forest LCT (SNH178/D&G19a)  <b>Visual:</b> None, users appreciating this sculpture or on long distance routes unlikely at night and there would be no amenity value to the view.	All 21 nacelle lights and 20 tower lights would be visible from this close range, elevated viewpoint from the northwest to the east.	One or two of the Windy Standard 2 (extension) lights might be visible in the distance to the west. Some of the nacelle lights of the consented Lethans and Kennoxhead will be visible in the distance to the north, c.16.9 km away. Most of the lights of the proposed Sanquhar II would be visible across much of the view from the northwest extending to the east, behind the Eucharhead lights. Many of the Windy Standard 3 lights would be visible 11.6 km away to the west. Many of the lights from the proposed Fell and Glenshimmeroch to the south, c.11.2 km away, would also be visible.

Vp No.	Viewpoint and Distance	Night-time receptor	Night-time changes	Cumulative Night-time
2	Lorg Glen  2.0 km	<p><b>Landscape:</b> Ken unit Narrow Wooded River Valley – Dumfries and Galloway (SNH 160/D&amp;G 4)</p> <p><b>Visual:</b> None, users of Core Paths unlikely at night and there would be no amenity value to the view.</p>	Five nacelle lights and three tower lights would be visible.	Only a couple of the lights on the proposed Sanquhar II turbines would be visible, depending on the state of the forestry.
3	Benbrack, Southern Upland Way (Striding Arches sculpture)  2.5 km	<p><b>Landscape:</b> Ken unit Southern Uplands with Forest LCT (SNH 178/DGW19a)</p> <p><b>Visual:</b> None, users of long distance routes unlikely at night and there would be no amenity value to the view.</p>	21 nacelle lights and 19 tower lights would be visible from this elevated viewpoint.	<p>One or two of the Windy Standard 2 (extension) lights might be visible in the distance to the west.</p> <p>Some of the nacelle lights of the consented Kennoxhead will be visible in the distance to the north, c 25.1 km away.</p> <p>Many of the lights of the proposed Sanquhar II would be visible across much of the view from the northwest extending to the northeast, behind the Eucharhead lights. Only three of the Windy Standard 3 lights would be visible 7.9 km away to the west. Many of the lights from the proposed Fell and Glenshimmeroch to the south, c.11.5 km away would be visible.</p>

Vp No.	Viewpoint and Distance	Night-time receptor	Night-time changes	Cumulative Night-time
4	Blackcraig Hill (East Ayrshire)  2.8 km	<p><b>Landscape:</b> Upland Glen – Ayrshire (SNH 73/ EAC 14)</p> <p><b>Visual:</b> None, upland hillwalkers unlikely at night and there would be no amenity value to the view</p>	All 21 nacelle and tower lights would be visible from this elevated viewpoint.	<p>None of the Windy Standard 2 (extension) lights are visible due to screening by the summit. However, on the summit all 4 are likely to be visible to the southwest.</p> <p>Many of the lights of the consented Lethans and Kennoxhead (and the proposed extension behind) will be visible in the distance to the northeast, over 9.9 km away.</p> <p>Most lights of the proposed Sanquhar II would be visible across much of the view from the southwest extending to the northeast, with the Euchanhead lights appearing in the centre of the array to the southeast.</p> <p>Some of the Windy Standard 3 lights would be visible 7.2 km away to the southwest. Many of the lights from the proposed Glenshimmeroch to the south, c.17.8 km away would be visible.</p>
5	Afton Reservoir  3.0 km	<p><b>Landscape:</b> Upland Glen – Ayrshire (SNH 73/ EAC 14)</p> <p><b>Visual:</b> None, hillwalkers unlikely at night and there would be no amenity value to the view</p>	Only three nacelle lights and one tower light would be visible, from this position at the head of the valley.	A few lights on the proposed Sanquhar II turbines would be visible, further east from the Euchanhead.
6	Southern Upland Way crossing Cloud Hill  5.4 km	<p><b>Landscape:</b> Southern Uplands – Dumfries and Galloway (SNH 177/ D&amp;G 19)</p> <p><b>Visual:</b> None, users of long distance routes unlikely at night and there would be no amenity value to the view</p>	16 nacelle lights and 15 tower lights would be visible from this elevated position.	Most of the lights on the proposed Sanquhar II turbines would be visible, from the south to the west mainly in front of Euchanhead.

Vp No.	Viewpoint and Distance	Night-time receptor	Night-time changes	Cumulative Night-time
7	Minor road in upper Shinnel Water, near Auchinbrack  6.0 km	<p><b>Landscape:</b> Shinnel unit Upland Glens – Dumfries and Galloway (SNH 166/ D&amp;G 10)</p> <p><b>Visual:</b> Residents and minor road users in the glen</p>	Up to four nacelle lights and one tower light would be visible but one of the nacelle lights is currently screened by forestry.	Given the extent of screening by tree cover from this viewpoint, only one light of the proposed Sanquhar II turbine lights would be visible, but there could be up to 5 more nacelle lights when forestry is felled.
8	Kirkconnel  7.5 km	<p><b>Landscape:</b> Upper Niithsdale unit Upper Dale – Dumfries and Galloway (SNH 165/ D&amp;G 9)</p> <p><b>Visual:</b> Residents at Kirkconnel / Kelloholm</p>	Only two nacelle lights would be visible and no tower lights.	<p>Some, but not all, of the Lethans nacelle lights will be visible to the northwest.</p> <p>A few lights on the proposed Sanquhar II turbines would be visible, in front of Euchanhead.</p>
9	Cairnsmore of Carsphairn  8.1 km	<p><b>Landscape:</b> Southern Uplands – Dumfries and Galloway (SNH 177 / D&amp;G 19)</p> <p><b>Visual:</b> None, upland hillwalkers unlikely at night and there would be no amenity value to the view</p>	All 21 nacelle and tower lights would be visible from this elevated viewpoint.	<p>All four of the Windy Standard 2 (extension) lights are visible at night from the northern side of the summit.</p> <p>Some of the lights of the consented Lethans and Kennoxhead (and the proposed extension behind) will be visible in the distance to the northeast, over 19.6 km away but there is notable screening by intervening landform.</p> <p>Most lights of the proposed Sanquhar II would be visible to the northeast extending to the east, with the Euchanhead lights appearing in the centre of the array to the southeast. From the position of the night-time photography, just to the north of the flat summit, all of the Windy Standard 3 lights would be visible 2.8 km away to the north but none of the lights from the proposed Glenshimmeroch and Fell turbines to the southeast would be visible.</p>

Vp No.	Viewpoint and Distance	Night-time receptor	Night-time changes	Cumulative Night-time
10	Sanquhar High School  10.1 km	<b>Landscape:</b> Upper Nithsdale unit Upper Dale – Dumfries and Galloway (SNH 165/ D&G 9)  <b>Visual:</b> Residents at Sanquhar and road users on A76	Only 5 nacelle lights would be visible from this location in Sanquhar.	Some, but not all, of the Lethans nacelle lights will be visible to the northwest.  A few lights on the proposed Sanquhar II turbines would be visible to the southwest amongst Euchanhead.
11	Fingland road near Todholes Hill  10.5 km	<b>Landscape:</b> Southern Uplands (SNH 177/ D&GC 19)  <b>Visual:</b> Minor road users	All the nacelle lights and 14 tower lights would be visible from this elevated position.	None of the Windy Standard 2 (extension) lights are visible at night from this position. There appears to be an aviation light on the temporary met mast for Sandy Knowe windfarm, which appears in the baseline night-time photography. Most of the lights on Sanquhar II turbines would be visible to the south and southwest amongst the Euchanhead turbines.
12	Auchengibbert Hill  10.7 km	<b>Landscape:</b> Tynron unit Foothills LCT (SNH175 / D&G 18) <b>Visual:</b> None, upland hillwalkers unlikely at night and there would be no amenity value to the view	18 nacelle lights would be visible and up to 15 tower lights with two of those currently screened by the extent of forestry in the landscape.	Some of the Sanquhar II turbines lights would be visible to the northwest adjacent to the Euchanhead turbines lights. All of the lights from the proposed Glenshimmeroch and Fell turbines would be visible to the southwest, over 11 km away.
13	Culmark Hill, Southern Upland Way  10.8 km	<b>Landscape:</b> Stroan unit Foothills with Forest LCT (SNH 176/ D&G 18a) <b>Visual:</b> None, users of long distance routes unlikely at night and there would be no amenity value to the view	14 nacelle lights would be visible and up to 8 tower lights.	Possibly one or two of the Windy Standard 2 (extension) lights are visible at night from this position. Some of the lights on the Sanquhar II turbines would be visible to the north northeast amongst the Euchanhead turbine lights. All of the lights from the proposed Glenshimmeroch turbines would be visible to the southeast, over 1.9 km away.

Vp No.	Viewpoint and Distance	Night-time receptor	Night-time changes	Cumulative Night-time
14	Southern Upland way, above Sanquhar  10.9 km	<p><b>Landscape:</b> Upper Nithsdale unit Upper Dale – Dumfries and Galloway (SNH 165/ D&amp;G 9)</p> <p><b>Visual:</b> None, users of long distance routes unlikely at night and there would be no amenity value to the view</p>	10 nacelle lights but only one tower light would be visible from this position above the town of Sanquhar.	<p>Some, but not all, of the Lethans nacelle lights will be visible to the northwest.</p> <p>Some of the lights on the Sanquhar II turbines would be visible to the southwest amongst the Eucharhead turbines.</p>
15	A76, near Mennock  11.5 km	<p><b>Landscape:</b> Upper Nithsdale unit Upper Dale – Dumfries and Galloway (SNH 165/ D&amp;G 9)</p> <p><b>Visual:</b> Road users on A76</p>	Only four nacelle lights and one tower light would be visible from this position.	<p>Some, but not all, of the Lethans nacelle lights will be visible to the northwest.</p> <p>Some of the lights on the Sanquhar II turbines would be visible to the southwest amongst the Eucharhead turbine lights.</p>
16	East Mount Lowther Hill, near Southern Upland Way  19.6 km	<p><b>Landscape:</b> Lowthers unit Southern Uplands LCT (SNH 177 /D&amp;G19)</p> <p><b>Visual:</b> None, users of long distance routes unlikely at night and there would be no amenity value to the view</p>	All 21 nacelle lights and tower lights would be visible from this elevated but distant viewpoint.	<p>One or two of the Windy Standard 2 (extension) lights maybe visible at night, but might be difficult to perceive at over 26 km away.</p> <p>Some of the lights of the consented Lethans and Kennoxhead (and the proposed extension behind) will be visible in the distance to the northeast, over 7.1 km away but there is notable screening by intervening landform.</p> <p>Most lights of the proposed Sanquhar II would be visible to the northeast extending to the east, with the Eucharhead lights appearing in the centre of the array to the southeast. Some of the Windy Standard 3 lights would be visible 29.8 km away to the north. Many of the lights from the proposed Glenshimmeroch and Fell turbines to the southeast, over 28.1 km away would be visible.</p>

Vp No.	Viewpoint and Distance	Night-time receptor	Night-time changes	Cumulative Night-time
17	Corserine, Rhinn of Kells  21.9 km	<p><b>Landscape:</b> Rhinns of Kells unit Rugged Uplands LCT (SNH 180/ D&amp;G 21)</p> <p><b>Visual:</b> Upland Hillwalkers on the edge of the Dark Sky Park Boundary</p>	All 21 nacelle lights and 15 tower lights would be visible from this elevated but distant viewpoint.	<p>Up to four of the Windy Standard 2 (extension) lights maybe visible at night, but might be difficult to perceive at over 17.8 km to the northeast. Just behind these some of the lights of the consented Lethans and Kennoxhead (but not the proposed extension behind) will be visible in the distance, over 33 km away.</p> <p>Most of the lights on the proposed Windy Standard 3 would be visible in front of Windy Standard 2, 14.5 km away. Most lights of the proposed Sanquhar II would be visible to the northeast amongst Eucharhead lights with notable screening by Cairnsmore of Carsphairn. All of the lights from the proposed Glenshimmeroch and most from the Fell turbines would be visible to the east, over 15.6 km away.</p>
18	Queensberry  27.9 km	<p><b>Landscape:</b> Lowthers unit Southern Uplands LCT (SNH 177 /D&amp;G19)</p> <p><b>Visual:</b> None, upland hillwalkers on the summits unlikely at night and there would be no amenity value to the view</p>	All 21 nacelle lights and 15 tower lights would be visible from this elevated but distant viewpoint.	<p>Possibly one or two of the Windy Standard 2 (extension) lights maybe visible at night, but might be difficult to perceive at over 40 km to the west. A few of the lights on the proposed Windy Standard 3 would be visible in front of Windy Standard 2, 37 km away. All of the lights of the proposed Sanquhar II would be visible to the west amongst Eucharhead lights. Some of the lights from the proposed Glenshimmeroch and Fell turbines would be visible to the west, over 28.3 km away.</p>