

## **Mynydd Llanhilleth Wind Farm**

### **Appendix 6K: Schedule of Night-time Visual Effects**

#### **edp6367\_r031a**

- 1.1 This appendix sets out the predicted visual effects of the proposed development at night-time. The visual assessment has been conducted in accordance with the methodology included at **Appendix 6A** of the Environmental Statement.
- 1.2 This appendix should be read in conjunction with **Appendix 6B** of the Environmental Statement which sets out the night-time baseline at **Section 6. Appendix 6B** also contains the following figures which are relevant to this appendix:
  - **Figure 6.5** Baseline Light Pollution;
  - **Figure 6.11** LVIA Photoviewpoint Locations; and
  - **Figure 6.12** LVIA Photoviewpoints.
- 1.3 Levels of existing light sources has been classified by NRW, and of the classification zones of darkness reviewed at **Appendix 6B**, the site was identified within the 'Intrinsic Rural Darkness and Buffer' zone with a surrounding influence of the 'Transition' zone which almost entirely surrounds the Site. As a result, four viewpoints were selected for the night-time assessment and these are **PVPs 6, 11, 12** and **22**. The selection was informed by statutory consultation and as per the agreed scope, the night-time selection includes views from within 5km of the nearest turbine proposed and one from the BBNP. **PVP 22** The Blorenge c.9.4km from the closest turbine proposed, and it was the chosen PVP from within the Brecon Beacons National Park. Dark Skies are protected in the Brecon Beacons National Park itself, and this designation is awarded by the International Dark Skies Association.
- 1.4 **Table EDP 1.1** below describes the predicted night-time effects of the proposed development assessed herein.

**Table EDP 1.1:** Visual amenity schedule of effects at operation.

Photoviewpoints	Sensitivity	Assessment of Effects	Magnitude of Change	Effect
Photoviewpoint 6 - Public Footpath in Pantygasseg to the east of Mountain View looking north-west towards the site	Medium	<p>The baseline view comprises a well-lit foreground provided by nearby street lighting. However lighting here is very localised, with darker landscape located a short distance north of the site. The hills of which the site is located upon are unlit, with no visible light sources from dwellings or other structures, whilst glow appears in the backdrop, likely as a result of light sources from settlements to the north of the site.</p> <p>The location falls within the 'Intrinsic Rural Darkness and Buffer' zone as does the site itself. The Recreational receptors and road users are likely to remain the same during the night but are unlikely to be as frequented during daylight hours. PRow and road users are likely to be focussed on their nearby surroundings and direction of travel than for an appreciation of landscape.</p> <p>The introduction of the turbines would introduce five turbine hub lights to the night-time view, which with the immediate lighting along the road through Pantygasseg and from dwellings, the magnitude of change would be considered to be medium. Furthermore the lighting introduced for the turbines would be very unlikely to result in a change from 'Intrinsic Rural Darkness and Buffer' to the 'Transitional' zone.</p> <p>This medium change would merit an effect of <b>Moderate/Minor</b> which is Not Significant. The nature would be long-term, reversible and adverse.</p>	Medium	<p><b>Moderate/Minor</b> Not Significant</p> <p>Long-term, reversible and adverse</p>
Photoviewpoint 11 - Llanerch Lane in Pen-twyn on the edge of settlement looking north-east towards the site	Medium	<p>The baseline view comprises well-lit views of the settlement of Brynithel and Llanhilleth of which linear lighting across streets across the valley bottom and sides provide a bright focal point within the view. There are no light sources further upslope in the direction of the site, whilst the hills themselves appear as a silhouette against a backdrop of light glow, likely from valley settlements to the east. The immediate surrounding area of the settlement and towards the site boundary falls within the 'Transition' zone from Urban to Rural.</p> <p>Minor road users and dwellings at this location are likely to have a lower sensitivity at night-time, with road users likely to be focussed on their immediate surrounds and concentrating on the direction of travel, whilst the activity of residential receptors would alter from daylight house (likely to be resting with curtains drawn).</p> <p>The magnitude of change is therefore considered to be low, which would merit a <b>Minor/Negligible</b> effect that would be long-term, reversible, adverse but Not Significant. Furthermore, the lighting introduced for the turbines would be very unlikely to result in a change from 'Intrinsic Rural Darkness and Buffer' to the 'Transitional' zone.</p>	Low	<p><b>Minor</b> Not Significant</p> <p>Long-term, reversible and adverse</p>
Photoviewpoint 12 - Torfaen Trail and Woodside Road in Trevethin looking west towards the site	Medium	<p>Baseline night-time views from Trevethin Settlement are illustrated by Photoviewpoint EDP 12 and include street lighting, lighting from housing and commercial areas which exhibit a glow across the view. The hills beyond are lit up as a light silhouette, likely from light sources from the valley settlement of Abertillery, Blackwood, Pontllanfraith, Bargoed and Ystrad Mynach and beyond. There are very few light sources upon the valley side themselves, with a handful of dwellings providing limited light source. The location of the Photoviewpoint itself falls within the 'Transition' zone whilst an area of 'Urban' zone lighting is situated between the view and the site itself.</p> <p>Users of the Torfaen Trail traveling through an urban area are unlikely to be frequented at night but perhaps more so than where the route passes through rural countryside. Users are likely to be focussed on their surroundings and their direction of travel within the settlement than for the valley sides surrounding the settlement during dark hours.</p> <p>The change to the view would comprise seven turbine hub lights against an existing glowing backdrop provided by the settlements of Abertillery, Blackwood, Pontllanfraith, Bargoed and Ystrad Mynach whilst the foreground is already well lit.</p> <p>The magnitude of this change is considered to be low, meriting an effect of <b>Minor</b> and Not Significant. The nature of the effect would be long-term, reversible and adverse. The lighting introduced for the turbines would be very unlikely to result in a change from 'Intrinsic Rural Darkness and Buffer' to the 'Transitional' zone.</p>	Low	<p><b>Minor</b> Not Significant</p> <p>Long-term, reversible and adverse</p>

Photoviewpoints	Sensitivity	Assessment of Effects	Magnitude of Change	Effect
Photoviewpoint 22 - The Bloreng Summit (BBNP) looking south-west towards the site	Very High	<p>The Brecon Beacons National Park is an International Dark Sky Reserve, however the Photoviewpoint is not located within the 'Dark Sky Core' but does lie within the 'Intrinsic Rural Darkness and Buffer'. Visual receptors at this location would be considered to have very high sensitivity.</p> <p>The centre of the existing view comprises a dark skyline with some static light sources visible and night glow from the settlement of Abersychan. The hills in the vicinity of the site can be distinguished by light glow from the valley settlements that create a silhouette of the horizon.</p> <p>The magnitude of change brought about by the Proposed Development would introduce seven lights at some distance to the centre of this view that would be very low considering there is already static light sources and glow in this direction. The very low change combined with a very high sensitivity would result in a <b>Moderate/Minor</b> effect that would be Not Significant. The nature of the effect would be long-term, reversible and adverse.</p> <p>The lighting introduced for the turbines would be very unlikely to result in a change from 'Intrinsic Rural Darkness and Buffer' to the 'Transitional' zone at the site itself let alone upon the Photoviewpoint location.</p>	Very Low	<p><b>Moderate/Minor</b> Not Significant</p> <p>Long-term, reversible and adverse</p>

- 1.5 In summary, the potential visual effects at night-time have been assessed above and the findings show that of the four views assessed, none were considered to have significant impacts at night-time as a result of the proposals. The effects found were considered **Moderate/Minor** adverse at most. The aviation lighting introduced by the proposals would be very unlikely to result in a change from 'Intrinsic Rural Darkness and Buffer' to the 'Transitional' zone for the area covers the site itself and therefore, impacts of the proposal would be very unlikely to result in a change to the 'Dark Skies Core' which mostly makes up the levels of brightness found within the BBNP dark skies reserve, as illustrated by **PVP 22**.