Mynydd Llanhilleth Wind Farm
Appendix 6H: BBNP, AONB and WHS Assessment of Landscape Effects
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1.1 This appendix sets out the assessment of landscape effects for the Brecon Beacons National Park (BBNP), the Wye Valley Area of Outstanding Natural Beauty (AONB) and the Blaenavon Industrial Landscape World Heritage Site (BILWHS) and it should be read in conjunction with **Figure 6.16**. All Figures are contained in the Landscape and Visual Impact Assessment Baseline (**Appendix 6B**). The BBNP and the Wye Valley AONB are both landscape designations afforded protection at a national level, both have published character assessments that have been reviewed herein.

1.2 The cumulative effects on the published character areas of the National Park are considered below and the methodology used is set out in **Appendix 6A**. The list of wind farm developments considered as part of the high-level Cumulative Landscape and Visual Assessment (CLVIA) are listed in **Table 6.7** of the Environmental Statement. **Figure 6.32** illustrates the status, pattern and distribution of these other wind farm developments in relation to the Proposed Development at Mynydd Llanhilleth (ML) within a 27km study area. Two cumulative ZTVs have been prepared to illustrate the scenarios that have been considered:

- **Scenario A** shows Mynydd Llanhilleth in addition to schemes in operation and consented; and

- **Scenario B** shows Mynydd Llanhilleth in addition to schemes in operation and consented plus schemes in planning or in scoping.

1.3 Scenario A is shown on **Figure 6.33** and Scenario B is shown on **Figure 6.34**. **Figure 6.35** shows the cumulative wireframes for PVPs 1-30.

1.4 The Blaenavon Industrial Landscape is a World Heritage Site as designated by UNESCO due to the historic industrial land use in the late 18th and early 19th Century. Potential landscape character effects on the tangible elements of the landscape designations and the industrial landscape are summarised herein. A review of LANDMAP visual and sensory, and historic landscape characterisations have informed this assessment, and the respective LANDMAP assessments are expanded on in **Appendix 6C** and **6D** of **Chapter 6** of the Environmental Statement. Furthermore, a review of Special Landscape Areas (SLAs) has been carried out as part of the LVIA, and those which also partially overlap with BILWHS informed this assessment. There is no single LANDMAP aspect area or SLA boundary which aligns with the boundary of the BILWHS, therefore professional judgement has been employed to arrive at a level of effect on the character of the World Heritage Site overall.

1.5 A detailed assessment of the heritage effects has been considered by a heritage consultant which is detailed in **Chapter 7** of the ES.

A6H.1 Brecon Beacons National Park

Special Qualities of the BBNP

1.6 The Brecon Beacons National Park is located c.4.1km to the east of the Site at its closest point to the nearest turbine proposed. The National Park extends further north-east, north and north-west of the Site where a series of valleys border the southern edge of the National Park and provide further separation from the Proposed Development.

1.7 Ten special qualities of the Brecon Beacons National Park (BBNP) are defined within the *Future Beacons, The Management Plan for the Brecon Beacons National Park 2022-2027*, Consultation Draft and these are listed below:

- **(1) Sweeping grandeur and outstanding natural beauty**

  "The Park's sweeping grandeur and outstanding natural beauty observed across a variety of harmoniously connected landscapes, including marvellous gorges and waterfalls, classic karst geology with caves and sink holes, contrasting glacial landforms such as cliffs and broad valleys carved from old red sandstone and prominent hilltops with extensive views in all directions. A landscape that provides a sense of time depth and timelessness."

- **(2) Rugged, remote and challenging**

  "In the context of the UK, geographically rugged, remote and challenging landscapes."

- **(3) Sounds, sights, smells and tastes**

  "A feeling of vitality and wellbeing that comes from enjoying the Park's fresh air, clean water, rural setting, open land and locally produced foods."

- **(4) Peace, tranquillity, and darkness**

  "A National Park offering dark night time skies, peace and tranquillity with opportunities for quiet enjoyment, inspiration, relaxation and spiritual renewal."

- **(5) Contrasting patterns, colours, and textures**

  "A working, living "patchwork" of contrasting patterns, colours and textures comprising well-maintained farmed landscapes, open uplands, lakes and meandering rivers, punctuated by small-scale woodlands, country lanes, hedgerows and stone walls and scattered settlements."

- **(6) Intimate sense of community**

  "An intimate sense of community where small, pastoral towns and villages are comparatively safe, friendly, welcoming and retain a spirit of cooperation".

- **(7) Sense of place and cultural identity**

  "A sense of place and cultural identity - "Welshness" - characterised by the indigenous Welsh language, religious and spiritual connections, unique customs and events, traditional foods and crafts, relatively unspoilt historic towns and villages, family farms and continued practices of traditional skills developed by local inhabitants to live and earn a living here, such as common land practices and grazing."

- **(8) Enjoyable and accessible**

  "Enjoyable and accessible countryside with extensive, widespread and varied opportunities to pursue walking, cycling, fishing, water-based activities and other forms of sustainable recreation or relaxation."

- **(9) Sense of discovery**

  "A sense of discovery where people explore the Park's hidden secrets and stories such as genealogical histories, prehistoric ritual Sites, relic medieval rural settlements, early industrial Sites, local myths and legends and geological treasures from time immemorial."

- **(10) Diversity of wildlife and richness of seminatural habitats**

  "Extensive and widespread access to the Park's diversity of wildlife and richness of semi-natural habitats, such as native woodlands, heathland and grassland, natural lakes and riparian habitats, ancient hedgerows, limestone pavement and blanket bogs including those of international and national importance."

1.8 With respect to potential indirect effects on the special qualities of the BBNP, possible indirect effects would be limited to special qualities which list distinct visual or perceptual scenic traits that have the potential to experience change as a result of the proposals assessed herein. As such, four special qualities of the BBNP have been identified for further consideration, and these have been assessed below.

Assessment of Effects to Special Qualities of the BBNP

1.9 The effect to the special qualities of the BBNP are assessed in **Table EDP 1.1**:

Table EDP 1.1: BBNP special qualities assessment of effects.

Special Quality	Sensitivity	Magnitude of change	Level of Effect and Significance
(1) Sweeping grandeur and outstanding natural beauty	**Very High**	**Very Low**	**Moderate/Minor Not Significant**
	As a national designation the special quality is of very high value. The "*harmoniously connected landscape*" render it of very high susceptibility due to its scenic quality.	The Proposed Development would not limit the "*extensive views*", nor would it alter any physical features of the '*harmoniously connected landscape*" itself and the openness of views available would not be changed. The character of the sweeping grandeur would also remain unchanged. The Proposed Development would be perceptible in southerly views from prominent hilltops intervisible with the Site, such as The Blorenge and the Sugar Loaf, but the proposals would not alter the availability of "*extensive views in all directions*" and the field of view in which the proposals would be seen would be 10 degrees at most of the 360 degree hilltop views assessed within the 26km study area.	A very high sensitivity and a very low magnitude of change results in a **Moderate/Minor** level of effect. This effect would be adverse, indirect, long-term, reversible, and Not Significant.
(2) Rugged, remote and challenging	**Very High**	**Very Low**	**Moderate/Minor Not Significant**
	As a national designation the special quality is of very high value. The remoteness of the landscape makes it highly susceptible to change whereby manmade features in the wider landscape less perceptible from remote areas.	Although there would be no change to the "*geographically rugged… and challenging landscapes*", the presence of the Proposed Development in available views from high points may reduce the sense of remoteness somewhat. This change would, however, be limited to the locations from which the proposals would be visible, and only from a single point perspective in the direction of the Site. Furthermore, the Proposed Development would only pose a nominal loss to the sense of remoteness due the relative distance between the Site and BBNP, as well as the sheer scale of the BBNP itself. Of the proportion of the BBNP which is within the 26km study area, only 12% overlaps with the tip height ZTV, and 6% within the hub height ZTV. The alteration to key components as a whole would be barely discernible.	A very high sensitivity and a very low magnitude of change results in a **Moderate/Minor** level of effect. This effect would be adverse, indirect, long-term, reversible, and Not Significant.

Special Quality	Sensitivity	Magnitude of change	Level of Effect and Significance
(3) Sounds, sights, smells and tastes	**Very High**	**Very Low**	**Moderate/Minor Not Significant**
	As a national designation the special quality is of very high value. The susceptibility to development beyond the BBNP boundary varies depending on the scale of the landscape perceived and what other visual detractors are present within the wider setting.	Although the proposals would be visible from some outward views from (some 12% at most of the part of the BBNP which is within the study area), the intrinsic value associated with the sensory experiences associated with this special quality would be largely unaffected by the Proposed Development due to the vast extent of the BBNP. The addition of the proposals to the wider setting of the BBNP would be perceptible, however, and the worst affected areas would at its closest point to the proposals, e.g. from the south-eastern extents of the BBNP. From this location, the Proposed Development would be seen in clearly views from the edge of the BBNP (**PVP 16** – **Figure 6.12**). In these views, the proposals would be perceived as an addition to a settled landscape context. Overall, the change to the rural setting would be nominal when this special quality of the BBNP is considered in the round. Discreet parts of the BBNP would be effected, but there would be no change to the openness associated with the sights of the BBNP for instance, or an appreciation of the key characteristics of this special quality such as *"fresh air, clean water,... open land and locally produced foods".*	A very high sensitivity and a very low magnitude of change results in a **Moderate/Minor** level of effect. This effect would be adverse, indirect, long-term, reversible, and Not Significant.
(4) Peace, tranquillity, and darkness	**Very High**	**Very Low**	**Moderate/Minor Not Significant**
	As a national designation the special quality is of very high value. The tranquil qualities and dark night skies of the BBNP render it susceptible to moving and lit development.	The addition of proposed turbines, although not located within the BBNP, would partially reduce the level of tranquillity within the BBNP from the south and south-eastern extents when visible. The layout and pattern of the array would generally appear evenly spread across similar height contours. Where multiple turbines overlap and busy the skyline, the tranquillity of the landscape is reduced. The field of view likely to be affected from views assessed in the PVP assessment	A very high sensitivity and a very low magnitude of change results in a **Moderate/Minor** level of effect.

Special Quality	Sensitivity	Magnitude of change	Level of Effect and Significance
		ranges from 28 degrees at worst to 5 degrees at best. The Proposed Development would also have a nominal change to the dark skies core as a whole, given the limited extent of visibility from within the BBNP. From the worst affected areas, single aviation lights on each turbine proposed would likely be seen as a very small component of the view. In most instances, the lighting would be seen against the urban glow of the settled valleys and south-coast situated beyond the extent of the Site when viewed, and visible from the BBNP. Overall, given the extent of BBNP which would remain completely unaffected, and the limited direction and intervisibility between the Site and the BBNP, the Proposed Development result in a barely noticeable change to the tranquillity of the BBNP and the dark skies core as a whole.	This effect would be adverse, indirect, long-term, reversible, and Not Significant.

1.10 In summary, the visual and perceptual characteristics associated with the special qualities of the BBNP assessed herein are two of many components that make up the special qualities listed in the Management Plan. The extent of the BBNP stretches far beyond the study area, however, where visual and perceptual qualities of the landscape character within the study area are concerned, the scale, geographical extent and proportion of the proposals likely to be perceived is limited a single perspective from elevated locations that overlap with the ZTV.

1.11 From such areas, such as a slope or plateau, sweeping 360 degree hilltop views are typically available from these exposed uplands, and the field of view likely to be affected is a very small proportion. Furthermore, the proposals are mostly at a sufficient distance to constitute a very minor alteration to peace, tranquillity, views and remoteness of the BBNP as a whole. The exception to this is from discreet parts of the BBNP, such as to south-east, where the proposals would result in a noticeable addition to the skyline. In such views, the proposals would typically be perceived in combination with settled valleys and infrastructure.

1.12 In summary, none of the special qualities of the BBNP were found to be significantly affected by the Proposed Development assessed herein at operation, and therein at construction either. A **Moderate/Minor** level of effect which is Not Significant was found for each of the special qualities assessed above. These effects are considered worst case, which is at operation.

1.13 The rest of the special qualities of the BBNP have been scoped out from the character assessment as the rest largely relate to physical characteristics and cultural connections focussed on within BBNP itself and these are unlikely be altered to such a degree as to result in indirect changes or significant landscape effects from the development proposed.

1.14 The visual effects at night-time and day time have been assessed separately in **Chapter 6** of the Environmental Statement.

BBNP Published Landscape Character Assessment

1.15 The BBNP is divided into 15 Landscape Character Areas (LCAs) within the *Beacon Beacons National Park Landscape Character Assessment (August 2012)*. 12 LCAs are located within a 26km study area as illustrated on **Figure 6.16**. The Site is outwith the BBNP therefore none of the LCAs would experience direct physical or direct perceptual landscape effects as a result of the Proposed Development.

1.16 Potential landscape effects and therefore likely change to landscape character would only be experienced from parts of the BBNP with a visual connection to the Proposed Development. Six LCAs with coverage of greater than 1% of the LCA were found to overlap with ZTV to tip and these six LCAs are assessed below. Those with less than 1% coverage are not considered to have the potential to result in effects of likely significance.

1.17 The BBNP Landscape Character Assessment lists special qualities of each LCA. These include "*scenic quality and sense of place*", and "*perceptual qualities*" among others. The two aforementioned qualities, which are relevant to this assessment, are listed for each LCA below.

The following LCAs assessed herein are listed in order of distance between the LCA and Site boundaries below:

- **LCA 15: Blorenge Hills and Slopes**

  Scenic quality and sense of place: "*High scenic quality resulting from the harmonious juxtaposition of moorland, woodland and pasture*."

  Perceptual qualities: Exceptionally peaceful valley sides. "*Moorland feels more open and exposed, with longer views over surrounding landscapes*."

- **LCA 9: Mynydd Llangatwg and Llangynidr**

  Scenic quality and sense of place: The LCA has scenic quality and sense of place created by "*openness, landform…and views to distinctive skylines in other LCAs*".

  Perceptual Qualities: "*Exceptionally open and exposed landscape*" with an "*absence of settlement*". It has a sense of "*tranquillity, remoteness and relative wildness in parts*". "*The western part is within the BBNP core dark skies area*."

- **LCA 12: Skirrid and Sugar Loaf**

  Scenic quality and sense of place: "*High scenic quality and sense of place, resulting from the composition of soft, wooded valleys and distinctive uplands*."

  Perceptual qualities: Sense of tranquillity created by long views, openness and elevation.

- **LCA 13: The Black Mountains**

  Scenic quality and sense of place: "*elevation, panoramic views, dramatic and distinctive topography, historic Sites, and traditional land uses*" give the LCA a strong sense of place and high scenic quality.

  Perceptual qualities: "*large-scale landscape, with a strong sense of openness and expansiveness on higher ground*". The landscape is "*bleak, exposed and disorientating*" in poor weather. There is a strong sense of tranquillity, remoteness and wildness across the extensive commons with very few detractors. Great sense of enclosure within valleys with slightly less of a sense of remoteness.

- **LCA 8: Talybont and Taff Reservoir Valleys**

  Scenic quality and sense of place: "*high scenic quality and sense of place, which is heightened by views to the Central Beacons and other high land on the horizons".*

Perceptual qualities*: "Sense of tranquillity and relative remoteness", "open views experienced across lakes and from higher ground"* The LCA is located within the BBNP core dark skies which "*enhances the sense of tranquillity*".

- **LCA 7: Central Beacons**

Scenic quality and sense of place: "*Iconic landscape*" in the heart of the BBNP. "*Exceptionally high scenic quality…strong sense of place resulting from its elevation, dramatic and distinctive topography, and panoramic views*."

Perceptual qualities: "*high levels of tranquillity*" due to openness, naturalness, low noise and dark skies. Few landscape detractors. Numbers of people present on paths and summits reduces sense of tranquillity. Sense of remoteness created by inaccessibility, landform and absence of settlement. Sense of wildness. Hostile in poor weather conditions.

Assessment of Landscape Effects to BBNP Landscape Character Areas

1.18 The effects to the BBNP LCAs are assessed below at **Table EDP 1.2.**

Table EDP 1.2: BBNP LCA assessment of effects.

LCA	Sensitivity	Magnitude of change	Level of Effect and Significance
LCA 15	**Very High**	**Low**	**Moderate** and **Significant**
	LCA15 is of high landscape value. The peaceful valley sides and long views from higher ground renders the landscape highly susceptible to change.	LCA 15: Blorenge Hills and Slopes is c.4.1km to the NE of the Site at its closest point and all of LCA15 is within the study area. Approximately 12.7% of the LCA overlaps with the ZTV to tip. The change to the landscape character would therefore be limited to west and south-westerly views from a small part LCA. The wider LCA covers the eastern side of a ridgeline that runs north-south to the east of the Site. The Proposed Development would be visible from the western edge of the LCA along the high points of the ridgeline as demonstrated by the ZTV. Views from the LCA are represented in **PVP 16** and **22** (**Figure 6.12**). From within the LCA directly east of the Site from where views of the Proposed Development can be gained, the addition of the proposed turbines would be clearly noticeable which in turn would have an impact on the harmonious juxtaposition of the landscape habitats experienced from parts of this LCA due to the introduction of manmade vertical features. Further north, however, their addition to the skyline would be evident but not fundamentally alter views, these long views are a key characteristic of the LCA but overall, the change would only be experienced across a small part of the LCA as a whole. The magnitude of change to LCA 15 is considered Low.	A very high sensitivity and a low magnitude of change result in a **Moderate** adverse effect. This effect would be adverse, indirect, long-term, reversible, and **Significant**.
	Cumulative Effects: LCA 15: Blorenge Hills and Slopes		
	Scenario A	As with ML when assessed in isolation, only 12.7% of the LCA overlaps with the ZTV. In Scenario A therefore, potential cumulative effects with the addition of ML would also only be theoretically perceived in combination with operational and consented schemes from 12.7% of the LCA. **Figure 6.33** illustrates that for the part of the LCA that overlaps with the cumulative ZTV, ML would theoretically be perceived largely in combination with 1-5 operational and consented	**Moderate** and **Significant**

LCA	Sensitivity	Magnitude of change	Level of Effect and Significance
		developments. A very small proportion of the LCA would theoretically have up to 6-10 operational and consented developments visible in combination with ML such as from The Blorenge. Photoviewpoints from this LCA include **PVP 16** and **PVP 22** (Cumulative wireframes for Scenario B are included at **Figure 6.35** which shows that operational schemes (in green) are barely perceptible due to intervening landform). In such views it is clear that the addition of ML to Scenario A would result in almost exactly the same view as with ML alone. The magnitude of change would therefore not alter from that assessed above, and although this necessarily leads to a significant effect, the extent of cumulative change in actuality is *de minimis*.	
	Scenario B	As above, only 12.7% of the LCA overlaps with the ZTV. In Scenario B therefore, potential cumulative effects with the addition of ML would also only be theoretically perceived in combination with operational and consented schemes plus those in scoping and in planning from 12.7% of the LCA. **Figure 6.34** illustrates that for the part of the LCA that overlaps with the cumulative ZTV, ML would theoretically be perceived mostly in combination with 6-10 wind farms in Scenario B. A very small proportion of the LCA would theoretically have up to 11-15 developments visible in combination with ML such as from The Blorenge. Cumulative wireframes for **PVP 16** and **PVP 22** (**Figure 6.35**) have been prepared which illustrate Scenario B. The cumulative wireframes show that from **PVP 16** and **PVP 22**, the schemes in this scenario would result in a change in the landscape character to a 'wind farm landscape', with turbines breaking the skyline and spreading along the horizon in westerly views only. In Scenario B, the addition of ML to the potential scenario would alter the perceived spread of wind farm areas by partially infilling gaps between other schemes. However, review of the wireframes illustrates that even without ML in the view, the cumulative change is such that there would already be a 'wind farm landscape' character; this is	**Moderate** and **Significant**

LCA	Sensitivity	Magnitude of change	Level of Effect and Significance
		particularly due to the presence of the Mynydd Maen, Trecelyn, Twyn Hywel Mynydd Carn-y-Cefn and Abertilly schemes. Together these wind farms contribute significantly more to the cumulative view than ML, and in terms of both horizontal spread and proximity are equally as visible. Overall, this would result in a retained low magnitude of change to LCA 15, as the addition of ML would lead to a minor alteration to a view already significantly altered by turbine development, which would have an indirect landscape effect on the character area. The effect would not be uncharacteristic in Scenario B, however, and furthermore, ML is demonstrably not the main scheme or the lead contributing factor to the significant cumulative effects arising.	
	Type of Effect	Long term (reversible), indirect, cumulative adverse and **Significant** for Scenario B only.	
LCA 9	**Very High**	**Very Low**	**Moderate/Minor** And Not Significant
	LCA 9 is of very high value. The remoteness and tranquillity provided by the open and exposed landscape, along with its dark skies in the west render this LCA very highly susceptible to change. The level of susceptibility varies depending on the tranquillity experienced at present in views towards the Site. A sensitivity of the LCA noted within the BBNP LCA is to "*inappropriate development*	LCA9 is c.10.2km to the NW of the Site at its closest point. All of the LCA is within the study area and c.35.6% of the LCA overlaps with the ZTV to tip. Views to distinctive skylines in other LCAs is a characteristic of this LCA; this would remain unaffected as the proposals would not be perceived in combination with other BBNP LCAs due to the direction and distance to Site. Change to remoteness varies as shown by **PVPs 25**, **27** and **28** (**Figure 6.35**) which represent views towards the Site from high points within the LCA. **PVP 25** and **27** illustrated that settled valleys are also perceived in some views south towards the Site, therefore the sense of remoteness is already reduced in the baseline scenario. **PVP 28**, which is at a higher elevation than the other two, has very little manmade features perceptible from this LCA, therefore, the introduction of the proposals in southerly views could be considered to affect the sense of remoteness from some parts of the LCA. A large	A very high sensitivity and a low magnitude of change result in a **Moderate/Minor** adverse effect. This effect would be adverse, indirect, long-term, reversible, and Not Significant.

LCA	Sensitivity	Magnitude of change	Level of Effect and Significance
	(including outside the National Park) which affects skylines and/or views".	proportion of the LCA would remain completely unaffected as there is no intervisibility with the proposals. The magnitude of change to LCA 9 as a whole is considered very low.	
	Cumulative Effects: LCA9: Mynyddoedd LLangatwg & Llangynidr		
	Scenario A	ML would theoretically be perceived in combination with 16-20 operational and consented wind farm developments across this LCA. Only two consented schemes are identified within the study area and neither are visible from representative viewpoints within this LCA (**PVPs 25**, **27**, and **28** (**Figure 6.35**)). The cumulative magnitude of change would not differ to the baseline assessment and would be very low.	**Moderate/Minor** and Not Significant
	Scenario B	ML would be seen in combination with potentially 21-25 other wind farm developments at most from any one location within the SLA. The cumulative magnitude of change as a whole when all wind farms are considered would be medium. This results in a change to a wind farm landscape character with all schemes perceived as breaking the skyline which are spread across the horizon in distant views. However, ML in addition to these cumulative schemes would result in partial clustering of turbines from some perspectives (e.g. **PVP 25** (**Figure 6.35**)), and extending (infilling) turbine presence in others (e.g. **PVP 27**), but the addition of ML itself would only be a minor to negligible addition (height and extent) to this scenario. The magnitude of change with the addition of ML would therefore be very low.	**Moderate/Minor** and Not Significant
	Type of Effect	Long term (reversible), indirect, cumulative adverse and Not Significant.	
LCA 12	**Very High**	**Very Low**	**Moderate/Minor** and Not Significant
	LCA 12 is of high value. The combination of long views provided from high points such as the Sugar Loaf, the open landscape, high scenic quality and high sense of	LCA12 is c.13.4km to the NE of the Site at its closest and all of the LCA is within the study area. Approximately 7.4% of the LCA overlaps with the ZTV to tip. As shown on the ZTV, the Site is likely only to be visible from high ground around the Sugar Loaf and Skirrid. Views from the Sugar Loaf are represented in **PVP 26** (**Figure 6.35**). Due to its distance, the proposals would only occupy approximately 6 degrees of the view. Where it is most visible, the Proposed Development would be evident but not fundamentally alter the	A very high sensitivity and a low magnitude of change result in a **Moderate/Minor** adverse effect.

LCA	Sensitivity	Magnitude of change	Level of Effect and Significance
	tranquillity render the LCA is highly susceptible to change.	sense of tranquillity or enjoyment of the high scenic quality experienced. Over 90% of the LCA would be completely unaffected by the proposals. The magnitude of change on LCA 12 as a whole would be very low.	This effect would be adverse, indirect, long-term, reversible, and Not Significant.
	Cumulative Effects: LCA12: Skirrid and Sugar Loaf		
	Scenario A	ML would theoretically be perceived in combination with 1-5 operational and consented wind farm developments across this LCA. The cumulative magnitude of change would not differ to the baseline assessment and would be very low.	**Moderate/Minor** and Not Significant
	Scenario B	ML would be seen in combination with potentially 6-10 other wind farm developments at most from any one location within the SLA. The cumulative magnitude of change as a whole when all wind farms are considered would be medium. This results from a change to a wind farm landscape character, with all schemes perceived in distant views SW. However, ML in addition to these cumulative schemes would only result in some grouping of turbines from some perspectives (e.g. **PVP 26** (**Figure 6.35**)) to form a distant wind farm landscape character. Generally, ML would comprise a minor to negligible addition (height and extent) to the other turbines theoretically visible and result in a very low magnitude of change should all other schemes proceed.	**Moderate/Minor** and Not Significant
	Type of Effect	Long term (reversible), indirect, cumulative adverse and Not Significant.	
LCA 13	**Very High**	**Very Low**	**Moderate/Minor** and Not Significant
	LCA 13 is of very high value. The combination of high scenic quality and very few detractors render the LCA susceptible to change.	LCA13 is vast and ranges from c.16.9km nearest turbine proposed to beyond the 26km. Of the part of the LCA within 26km of the Site, approximately 14.7% of the LCA within the study area overlaps with the ZTV to tip. The change to the landscape character would be limited to the perceptual and visual qualities of the LCA caused by the introduction of the proposal on the skyline in available views south. As shown on the ZTV, the proposal is likely to only be visible from high ground in the direction of the Site. Due to its distance, the Site would from only a minor constituent at	A very high sensitivity and a low magnitude of change result in a **Moderate/Minor** adverse effect. This effect would be adverse, indirect, long-

LCA	Sensitivity	Magnitude of change	Level of Effect and Significance
		most from a sufficient distance. Roughly 85% of the LCA would be completely unaffected by the proposals. Although the presence of the Proposed Development may detract from the sense of remoteness, due to its very limited scale within the view, this would be to a very minor degree. The magnitude of change on LCA 13 as a whole would be very low.	term, reversible, and Not Significant.
	Cumulative Effects: LCA13: The Black Mountains		
	Scenario A	ML would theoretically be perceived in combination with 16-20 operational and consented wind farm developments at most across this LCA. The very limited number of consented developments (two) with one (Rush Wall Redwick) c.40km SE of this LCA and both adjacent to existing operational schemes ensures that the cumulative magnitude of change would not differ to the baseline assessment (which includes operational schemes) and would be very low.	**Moderate/Minor** and Not Significant
	Scenario B	ML would be seen in combination with potentially 21-25 other wind farm developments at most from any one location within the LCA, and limited to summits. The cumulative magnitude of change would be low resulting from an increased density of wind turbines and 'windfarm' landscape character to distant views S/SE. ML would result in a dense clustering of turbines in southerly views in the context of schemes both operational already (e.g. Coed Gilfach), and those currently in scoping/planning (e.g. Abertillery) which would be in front of the ML Site. In combination with other schemes the magnitude of change to the LCA would be medium at most. As an additional scheme assessed against a future baseline where all schemes in planning and scoping are also developed, the magnitude of change would not exceed very low, and the future baseline as a wind farm landscape character would not be changed.	**Moderate/Minor** and Not Significant
	Type of Effect	Long term (reversible), indirect, cumulative adverse and Not Significant.	
LCA 8	**Very High**	**Very Low**	**Moderate/Minor** and Not Significant

LCA	Sensitivity	Magnitude of change	Level of Effect and Significance
	LCA8 is of very high value. Its relationship with the Central Beacons (north) LCA heightens its susceptibility to change.	LCA8 ranges from c.19.2km to the nearest turbine proposed to beyond the 26km study area. Approximately 8.8% of the LCA within the study area overlaps with the ZTV to tip. A key characteristic of the LCA is the open views experienced across lakes and from higher ground and views into the adjacent character area (Central Beacons) to the NW. There would be no change to these characteristics as a result of the proposals as the Site is located to the SE (e.g. in the Opposite direction to the Central Beacons). The magnitude of change to LCA8 as a whole is very low at most.	**Moderate/Minor** and Not Significant
	Cumulative Effects: LCA8: Talybont and Taff Reservoir Valleys		
	Scenario A	ML would theoretically be perceived in combination with 6-10 operational and consented wind farm developments at most across this LCA. The magnitude of change resulting from the Proposed Development would not change, and being very low would not lead to additional cumulative effects on the LCA.	**Moderate/Minor** and Not Significant
	Scenario B	ML would be seen in combination with potentially 16-20 other wind farm developments from any one location within the LCA, and from a very small proportion of the LCA as a whole. Generally, the other schemes would only be visible from summits, with other areas within the ZTV being wooded making therefore intervisibility unlikely. ML is difficult to discern from within LCA 8, therefore the magnitude of change when considered in isolation is deemed very low at most. There are a number of schemes that would intervene in views towards ML such that the addition is unlikely to be discernible. Therefore, the cumulative effect of ML when perceived in addition to other schemes in scenario B would also be very low at most.	**Moderate/Minor** and Not Significant
	Type of Effect	Long term (reversible), indirect, cumulative adverse and Not Significant.	
LCA 7	**Very High**	**Very Low**	**Moderate/Minor** and Not Significant
	LCA 7 is of very high value. It's surrounded by other BBNP LCAs which have few detracting features therefore	LCA7 ranges from c.21.9km from the nearest turbine proposed to beyond the 26km study area. Of the part of the LCA within 26km of the Site, approximately 26.9% of the LCA within the study area overlaps with the ZTV to tip.	A very high sensitivity and a low magnitude of change result in a

LCA	Sensitivity	Magnitude of change	Level of Effect and Significance
	it is very highly susceptible to change. The BBNP LCA refers to "*development within or outside the LCA which impacts on views from summits*" as a sensitivity of LCA 7.	The change to landscape character would be limited to perceptual and visual effects caused by the introduction of the array to the skyline in south-easterly views. As shown by the ZTV, the Site is likely to only be visible from highest ground. **PVP 30** (**Figure 6.35**) is taken from within the LCA, and in this view, the proposals would occupy c.5 degrees. Given this is only one perspective from a trig point with 360 panoramas available, the sense of wildness together with dark skies and the other perceptual qualities associated with the LCA would only be marginally altered, and in some instances due to the extent of the LCA within the ZTV and the distance between the Site and the receptor. The magnitude of change to LCA 7 as a whole is very low.	**Moderate/Minor** adverse effect. This effect would be adverse, indirect, long-term, reversible, and Not Significant.
	Cumulative Effects: LCA7: Central Beacons		
	Scenario A	ML would theoretically be perceived in combination with 16-20 operational and consented wind farm developments at most across this LCA, with this visibility restricted to summits. The magnitude of change to this LCA resulting from the Proposed Development would not change from the baseline which considers existing operational schemes and would remain very low as a whole.	**Moderate/Minor** and Not Significant
	Scenario B	**Figure 6.34** illustrates that for the part of the LCA that overlaps with the cumulative ZTV, ML would theoretically be perceived in combination with up to 21-25 wind farms in Scenario B at most. The number of wind farms theoretically visible reduces with the landform of the LCA. From **PVP 30** for instance, 16-20 wind farms are theoretically visible. A cumulative wireframe from **PVP 30** illustrates Scenario B. The schemes visible in this scenario would result in a change in the landscape character to a wind farm landscape, with turbines breaking the skyline. The distribution of the other wind farms is mostly grouped and concentrated in one area in the far distance, and this is limited to south-easterly views. In Scenario B, the addition of ML to the potential scenario would alter the perceived spread of wind farm areas by partially infilling gaps between other schemes. Overall, this would result in a low magnitude of change to LCA 7, as the addition of ML would lead to a minor alteration at most, which would	**Moderate** and **Significant**

LCA	Sensitivity	Magnitude of change	Level of Effect and Significance
		have an indirect landscape effect on the character area. The alteration would not be uncharacteristic in Scenario B, however, and there would be a significant effect without the addition of ML due to the number and distribution of other wind farms perceived in this Scenario B. Given the distance of ML from the character area, as well as the amount of other wind farm developments which would be perceived, ML would not be perceived as the main scheme or the lead contributing factor to cumulative effects arising.	
	Type of Effect	Long term (reversible), indirect, cumulative adverse and **Significant** for Scenario B only.	

1.19 One of the published BBNP LCAs was found to be significantly affected by the Proposed Development when assessed in isolation. A moderate adverse significance effect was found for LCA 15. There would be a minor alteration to the perceptual qualities experienced from this LCA as the addition of proposals would be perceived at a medium distance which would reduce the peace and tranquillity of the landscape, albeit from less than 15% of this LCA. No significant effects were found for the rest of the LCAs assessed above. All effects reported are worst case, which is at operation.

1.20 Cumulative landscape effects have been reviewed for the published BBNP LCAs also, and two scenarios have been considered. Scenario A assessed the cumulative landscape effects of the Proposed Development when perceived in addition to operational and consented schemes within 27km. Significant effects were found in Scenario A only for LCA 15 Blorenge Hills, with the actual extent of cumulative change at a *de minimis* level.

1.21 Scenario B assesses the cumulative landscape effects of the Proposed Development when perceived in addition to operational and consented schemes, and also those in planning and in scoping within 27km. The assessment found that two of the BBNP LCAs, LCA 15 Blorenge Hills and Slopes and LCA 7: Central Beacons are likely to experience significant cumulative effects based on the Scenario B. LCA 7 is likely to experience significant effects in Scenario B only.

1.22 The magnitude of change in both cases, however, was found to be low as the Proposed Development, when considered in addition to other schemes in Scenario B, would only result in a minor alteration to the cumulative scenario. In both cases, the other schemes considered under Scenario B comprise the main contributors towards the cumulative effect, and the Proposed Development was not considered to be the main scheme of the resulting cumulative effects in any instance. In no circumstance was the Proposed Development found to extend the extent of development perceived on the skyline, rather it infilled gaps where other proposals were already considered, such as in Scenario B. Where significant effects are found in Scenario B, significant effects would be evident with or without the addition of the Proposed Development due to the number and distribution of other wind farm developments considered in the scenario.

A6H.2 Wye Valley Area of Outstanding Natural Beauty

1.23 The Wye Valley Area of Outstanding Natural Beauty (AONB) Management Plan 2021-2026 (2021) produced by the Wye Valley AONB Joint Advisory Council provides descriptions of special qualities of the AONB and sets out Landscape Management Zones (LMZs) along with their associated special qualities. There are 27 defined special qualities.

1.24 Due to the distance between the Site and the AONB at its closest point (some c.21.3km distant), only visual and perceptual qualities of the AONB within the ZTV have the potential to experience change as a result of the Proposed Development. Other qualities, such as physical characteristics would not be changed. The special qualities defined within the AONB that are the following relevant to visual and perceptual characteristics and have therefore been assessed are as follows:

- Special Quality 11: Picturesque, extensive and dramatic views (SQ11); and
- Special Quality 12: Overall sense of tranquillity, sense of remoteness and naturalness/ wildness (SQ12).

1.25 **Figure 6.16** shows LMZs that overlap with the ZTV to tip, and these are listed below along with the associated special qualities considered relevant to this assessment:

- LMZ 12 Llangovan Foothills: SQ11 "*Long distance views*";
- LMZ 13 Devauden Escarpment: SQ11 "*Long panoramic views to the north and west*"; and
- LMZ 14 Trellech Sandstone Plateau: SQ11 "*Long views and vistas across the Severn and towards the Brecon Beacons from high land.*" SQ12 "*Distinct sense of place from the relationship of the woodland, pasture and settlement.*"

1.26 The predicted effects to these AONB LMZs are assessed below at **Table EDP 1.3.**

Table EDP 1.3: AONB LMZ assessment of effects.

LMZ	Sensitivity	Magnitude of change	Level of Effect and Significance
12	**Very High**	**Very Low**	**Moderate/Minor Not Significant**
	LMZ12 is of very high value. Its susceptibility to change is variable and depends on the direction and distance of the expansive views referenced, composition of the baseline views, and the number of detractors perceived.	LMZ12 is a small area on the edge of the AONB and it is c.21.3km to the NE of the nearest turbine proposed. Approximately 42.1% of the LMZ overlaps with the ZTV to tip. The proposals would be perceived in the background of expansive south-westerly views, which are typically framed or filtered by vegetated field boundaries and roads. Views out of the AONB in the direction of the Site are typically vast and far reaching across gently undulating low land that contains built form. Other Parts of the LMZ is bordered by the A40. Where higher parts of the LMZ overlap with the ZTV, the proposals would be perceptible in the far distance in the background of the view. The magnitude of change to LMZ would be very low overall.	A very high sensitivity and a low magnitude of change result in a **Moderate/Minor** adverse effect. This effect would be adverse, indirect, long-term, reversible, and Not Significant.
13	**Very High**	**Very Low**	**Moderate/Minor Not Significant**
	LMZ13 is of very high value. Its susceptibility to change is variable and depends on the composition of the baseline views, and the amount of detractors perceived.	LMZ13 ranges from c.21.8km to the nearest turbine proposed and extends to beyond the 26km study area. Of the part of the LCA that is within the 26km study area, approximately 55% overlaps with the ZTV to tip. Effects to the character of LMZ13 would be limited to its perceptual characteristics and specifically to "*Long panoramic views*" west. **PVP 29** (**Figure 6.12**) is an example of a view west and the proposals would be perceptible in the background of the view. Other views towards the proposals from within this LMZ would be limited by the screening effects of vegetation which is also characteristic of the landscape. Where visible, however, the proposals would form a minor component of a given view. In most instances, settlement and infrastructure would also be perceived in such views.	A very high sensitivity and a low magnitude of change result in a **Moderate/Minor** adverse effect. This effect would be adverse, indirect, long-term, reversible, and Not Significant.

LMZ	Sensitivity	Magnitude of change	Level of Effect and Significance
		The field of view affected from such a distance would also be a very small proportion of any panorama available. There would be no change to other special qualities of the LMZ and given the limited extent to which the Proposed Development would change perceptual characteristics, the magnitude of change to LMZ 13 as a whole is considered to be very low.	
14	**Very High**	**Imperceptible**	**Negligible** **Not Significant**
	LMZ14 is of very high value. Its susceptibility to change is variable and depends on the composition of the baseline views, and the amount of detractors perceived.	LMZ14 ranges from c.22.6km to the nearest turbine proposed and extends to beyond the 26km study area. Of the part of the LCA that is within the 26km, approximately 55% overlaps with the ZTV to tip. The addition of the proposals where perceived in the background of available views to the west would not alter the relationship between woodland, pasture and settlement that gives this LMZ its sense of place. The proposed development is at such a distance, however, that it would be a minor component within such views which contains development and infrastructure interspersed and visible from a distance. The rest of the special qualities of the LMZ would be unaffected. The magnitude of change to LMZ14 as a whole is considered to be imperceptible.	**Negligible** effect. This effect would be long-term, reversible, and Not Significant.

1.27 In summary, of the AONB LMZs that overlap with the ZTV to tip, none were found to have any significant. effects.

1.28 LMZ 13 and LMZ 14 reference long distance views west, and the proposals would be perceived as a very small component in the background of the view, therefore the landscape effect is considered **Moderate/Minor** and Not Significant for both. The rest of the LMZs assessed were found to have **Negligible** effects as a result of the Proposed Development.

A6H.3 Blaenavon Industrial Landscape World Heritage Site

1.29 **Figure 6.16** illustrates the location of the BILWHS in relation to the Site; BILWHS is located c.2.7km from the nearest turbine proposed at its closest point. The World Heritage Site is broadly characterised by unenclosed uplands, settled valleys and relict industrial features such as spoil heaps, quarries and mineshafts.

1.30 Approximately 24.1% of the BILWHS overlaps with the ZTV to tip. Of the Historic Landscape LANDMAP aspect areas that have been assessed at **Appendix 6D**, the following overlap with BILWHS and the ZTV to tip:

Table EDP 1.4 Historic Landscape Aspect Areas within the BILWHS and the ZTV to tip.

Aspect Area ID	Area Name
TRFNHL015	HL015 Cwm Afon
TRFNHL020	HL020 Mynydd Coety
TRFNHL022	HL022 Mynydd y Garn-fawr

1.31 BILWHS is a distinctive landscape with a strong sense of place. It is considered of very high value due to its historical and cultural significance associations. It's susceptibility to change is considered high as a whole due to the intrinsic relationship between the landscape and the historic settled valley, although the fabric of surrounding built form and addition of manmade features is currently perceived in the landscape and postmodern development influences the character of the BILWHS and lowers its susceptibility to change. The overall sensitivity of this publicly accessible landscape is considered high. The anticipated change as a result of the proposals would be indirect, and the character of the fabric of the protected landscape including its relics would not change fundamentally. As shown by the ZTV to tip, the areas from which the Proposed Development is likely to be visible is limited to areas of exposed high ground.

1.32 Overall, the magnitude of change to the character of BILWHS would be low as although the Proposed Development would result in additional manmade and modern features seen from parts of the BILWHS, the perceived change would be limited to c.24.1% of the WHS at most and the proportion of any given view affected would not alter any key characteristics associated with BILWHS which are perceptible in the modern landscape.

1.33 In the round, the level of effect on the character of the BILWHS as a whole would be **Moderate/Minor** adverse. This effect is indirect, long-term, reversible and Not Significant.

1.34 In summary, this appendix sets out the predicted worst case landscape effects on the BBNP, Wye Valley and BILWHS. Landscape effects reported are at operation which is considered worst case. Effects at construction have been considered at a high level for each special quality, LCA and LMZ assessed herein. Due to the nature of the proposals, the blade sweep of up to 8 turbines operating in combination for up to 30 years would result in far greater impact than temporary crane movement or ground works required at construction. Therefore, no effects predicted at construction would be worse than those reported at operation, and generally effects at construction would result in a reduced level of effect due to the duration of the activities and the reduced extent of visibility at ground level from parts of the study area assessed. Some ground level construction works would be visible and high-level work (such as use of cranes) in sweeping views. This would, however, be limited to daytime activities and would only be perceived from areas within the ZTV over a period of around 22 months.