



BLAENAU GWENT COUNTY BOROUGH COUNCIL

TOWN AND COUNTRY PLANNING ACT 1990 (as amended)

**The Developments of National Significance
(Wales) Regulations 2016**

LOCAL IMPACT REPORT

Application by: Cenin Renewables Ltd

Site: Land at Manmoel Common

PEDW Reference: DNS/3239181- Manmoel Wind

CONTENTS

1. Introduction
2. Site and Surroundings
3. The Proposed Development
4. Planning History
5. Local Designations Relevant to the Site / Surroundings
6. Local Development Plan
7. Publicity of the Development National Significance Application
8. Impact of the Development on the Area
9. Summary
10. Proposed conditions

Appendices

1. LDP Proposals Map extracts
2. Local Development Plan Policies
3. Sensitivity and Capacity Study
4. Map of site notice locations and evidence of publicity

1.0 **INTRODUCTION**

1.1 This Local Impact Report (LIR) has been prepared to meet the requirements of Section 62K of the 1990 Act, and Regulation 25 of the Developments of National Significance (Procedure) (Wales) Order 2016 (The Order). The LIR has been prepared to inform PEDW of the likely impact of the proposed development on the area. The report is based on existing local knowledge and evidence of local issues.

1.2 In accordance with Section 62K the LIR will set out at a minimum: -

- Planning history of the site.
- Local designations relevant to the site / surroundings.
- Any relevant local planning policies, guidance or other documents.
- Evidence of the Publicity undertaken by the Local Planning Authority (LPA) in accordance with the Procedure Order, i.e. a copy of the Site Notice, a photograph of the Site Notice on display and a map showing the location of the Site Notice.
- The likely impact of the development on the area.
- Secondary consent requirements.
- Draft conditions or obligations which the LPA considers necessary for mitigating any likely impacts of the development.

1.3 This LIR is reliant upon information available within the submitted documents and prior knowledge of the site and has regard to the relevant procedural guidance contained at Appendix 5 of the Welsh Government's 'Guidance on Developments of National Significance'.

1.4 The LIR is a factual document that should not weigh evidence or make recommendations. Accordingly, this LIR will not qualify impacts other than stating whether impacts are anticipated to be positive, negative or neutral, since to do otherwise would be to apply weighting which is expressly excluded in the relevant advice.

2.0 **SITE AND SURROUNDINGS**

2.1 The proposed development is located on Manmoel Common, along Cefn Manmoel ridge, situated between the Sirhowy Valley to the west and Ebbw Vale to the east. Most of the proposed development is located within the Blaenau Gwent County Borough Council (BGCBC) area, although its south-western corner lies within the Caerphilly County Borough Council (CCBC) local authority boundary.

- 2.2 The site is surrounded by settlements with Ebbw Vale approximately 200m to the east and Tredegar approximately 500m to the west. The village of Manmoel is situated approximately 2km to the south. The Bannau Brycheiniog National Park Authority Boundary is located approximately 4km (at its closest point) to the north.
- 2.3 The redline of the application site encompasses an area of approximately 206 hectares (ha) comprised of a mix of upland, plateau grasslands, marsh, heath, bracken and blocks of coniferous forestry and woodland covering parts of the steep valley sides which typically define the eastern and western edges of the site. The western and eastern sides of the site fall approximately 200m eastwards towards the settlement of Ebbw Vale and westward towards the settlement of Tredegar. Whilst the urban landscape is connected to the north of the site, the rural landscape predominates to the south.
- 2.4 The site is accessed via an unclassified highway, known as Manmoel Road which runs through the site from north to south, connecting with the A4047 to the north and the A4048 to the south-west. Tredegar Road, a small number of minor access and unmade tracks, some with restricted access pass through the site from east to west.
- 2.5 The land within the application site is registered as Common and Open Access Land with a with several Public Rights of Way (PRoW) crossing the site, allowing access from the adjacent settlements.
- 2.6 Although there are no dwellings within the redline of the application site Troed-y-Rhiwa farm is located immediately adjacent to the western boundary with Maes Yr Onn Farm and two existing windturbines approximately 200m to the south of the site.

3.0 THE PROPOSED DEVELOPMENT

- 3.1 The Proposed Development would comprise the following elements:
- Up to five turbines of up to 180 m maximum tip height and associated crane hardstandings.
 - Transformers housed adjacent to or in turbines.
 - Onsite existing access tracks plus underground cables run alongside – 1367.15 m.
 - An onsite sub-substation building.
 - Existing highway to be upgraded (from the A4047 junction along the length of Manmoel Road) – 4442.66 m.

- Total distance of all new proposed tracks from Manmoel Road to turning head beyond T1 – 1953.22 m.
- Sub Station (10m x 20m) – 200 m².
- Total area of temporary hardstanding 15,352 m² which includes:
 - Temporary Construction compound 6,187 m²; and
 - Temporary crane pads and set down areas 9,165 m².
- Permanent hardstanding 7,778 m².
- On site signage.
- Appropriate drainage measures across the site.
- Ancillary infrastructure and
- Habitat Management Plan (HMP) and enhancement measures.

3.2 It is anticipated that the development would have a lifetime of 50 years, including commissioning and decommissioning and an electrical export capacity of up to 25MW.

3.3 This LIR will primarily consider the works within BGCBC however, it will also address wider impacts the development may have upon BGCBC.

4.0 PLANNING HISTORY

4.1	Application	Proposal and location	Decision
	No		
	1373	Land reclamation South Beaufort, Ebbw Vale, Gwent.	Approved 13.10.1977
	6637	Filing Existing Depressions with surplus excavated from new A467 construction.	Approved 09/07/1987

5.0 LOCAL DESIGNATIONS RELEVANT TO THE SITE/SURROUNDINGS

5.1 The proposals and constraints maps forming part of the Blaenau Gwent County Borough Council Local Development Plan (LDP), adopted in 2012, provides the following information:

5.2 The site is in an area of open countryside outside of any defined settlement boundary.

5.3 The following designations fall within and around the site:

- The site falls within a Special Landscape Area (SLA) known as Cefn Manmoel (LDP Policy ENV2.6) with the SLAs of Mynydd Bedwellty,

Rhymney Hill and Sirhowy Sides (ENV2.5) and Mynydd Carn-y-Cefn and Cefn yr Arail (ENV2.4) located to the west and east respectively.

- There are numerous Sites of Importance for Nature Conservation (SINC) within and adjacent to the boundary of the site. These include:
 - ENV3.10- Garden City
 - ENV3.15- Land surrounding Wetland Centre
 - ENV3.34- Adjacent to Drysiog Farm
 - ENV3.40- Mynydd Manmoel, Ebbw Vale and Tredegar);
 - ENV3.46 – Lower Troedrhiwgwair
 - ENV3.49- St James Reservoir and
 - ENV3.74 (Upper Troedrhiwgwair Grassland)
- The site is immediately adjacent to areas of ancient semi natural woodland- known as Coed Troedrhiw-Gwair, noted for containing Oak, Beech and Alder;
- Site is immediately adjacent to a candidate Local Nature Reserve – Garden City
- Part of the site falls within the High-Risk Coal field area.
- Scheduled Ancient Monuments- MM345- Cefn Man Moel Cross-Ridge Dyke and GM588 – Y Domen Fawr Round Cairn are located within the boundaries of the site;
- There are several public rights of way that cross the redline boundary of the application site;
- Hilltop to Manmoel Cycle route passes through the application site (LDP policy T1.7)
- The site falls within a Coal and Aggregates Safeguarding area.

5.4 With regards to surrounding designations, Bannau Brycheiniog National Park (BNNP) and the Usk Bats Site of Special Area of Conservation (SAC) lie approximately 4-4.5km to the north and north-east.

5.5 Blaenavon World Heritage Site (WHS) is located approximately 6.5km to the east with the Blaenavon Coity Mountain Historic Landscape (HLCA020) located approximately 3.5km north-east. There are several other historical assets with statutory and non-statutory designations and Listed Buildings within the surrounding urban areas and landscape that fall within the Zones of Theoretical Visibility (ZTV).

5.6 Cwm Merddog Woodlands Site of Special Scientific Interest (SSSI) is located approximately 1.4km east of the site. Cwm Merddog

Woodlands is also designated as a Local Nature Reserve (LNR). Mynydd Llangynidr SSSI is located approximately 5.5m to the north.

- 5.7 There are three further LNRs and one candidate LNR in the vicinity – Garden City which adjoins the eastern boundary of the site; Central Valley 0.6km to the east; Sirhowy Hill Woodland and Cardiff Pond approximately 1km to north and Parc Bryn Bach approximately 2km to the northwest.
- 5.8 An area of recorded historic landslip is located approximately 500m to the west of the site, above the village of Troedrhiwgwair, Tredegar. This area is no longer monitored.
- 5.9 An extract of the LDP Proposals map is attached at Appendix 1.

6.0 LOCAL DEVELOPMENT PLAN

- 6.1 Section 38(6) of the Planning and Compulsory Purchase Act 2004 requires that all planning applications are determined in accordance with the relevant development plan policies, unless material considerations indicate otherwise.
- 6.2 The Development Plan for the area comprises the Blaenau Gwent County Borough Council Local Development Plan (LDP). Whilst the plan is currently under review, with regard to the provisions of the 2015 Planning (Wales) Act, any development plan adopted prior to 4 January 2016 will remain the LDP for determining planning applications until replaced by a further LDP. Therefore, the LDP, which was adopted on November 2012, remains the extant statutory development plan for the area beyond the specified 2021 plan period.
- 6.3 The following policies are of relevance:
- 6.4 Strategic Policies
- SP1- Northern Strategy Area- Sustainable growth and Regeneration
 - SP7- Climate Change
 - SP8- Sustainable Economic Growth
 - SP9- Active and Healthy Communities
 - SP10- Protection and Enhancement of the Natural Environment
 - SP11- Protection and Enhancement of the Historic Environment
 - SP12- Securing an Adequate Supply of Mineral
- 6.5 Topic Based Policies

- DM1- New Development
- DM2- Design and Placemaking
- DM4- Low and Zero Carbon Energy
- DM14- Biodiversity Protection and Enhancement
- DM15- Protection and Enhancement of the Green Infrastructure
- DM19- Mineral Safeguarding
- SB1- Settlement Boundary
- T1- Tourism and Leisure
- ENV2- Special Landscape Areas
- ENV3- Sites of Importance for Nature Conservation
- M1- Safeguarding of Minerals

6.6 A copy of the relevant LDP policies are attached at Appendix 2.

6.7 Supplementary Planning Guidance

6.8 The following study document is also considered relevant:

- Sensitivity and Capacity Study for Renewable Energy Development, Blaenau Gwent County Borough Council and Torfaen County Borough Council (October 2021)

6.9 A copy of the document is provided at Appendix 3.

7.0 **PUBLICISING THE DNS APPLICATION**

7.1 By letter dated 4th August 2023, PEDW confirmed that the DNS application had been accepted, determined as valid and the application process had commenced.

7.2 BGCBC hereby confirm that, in compliance with Regulation 20 of The Order, the documents required to be placed on the planning register, and described in the PINS validation letter, were placed on the Council's online planning register: <https://www.blaenau-gwent.gov.uk/media/lfibzhn0/week-31.pdf> within the required 5 working days.

7.3 BGCBC also confirm that the site notices issued to them were displayed, in compliance with Regulation 19 and Regulation 25 (2) I of The Order. A plan identifying the location of the site notices and photographic evidence of the site notices as displayed is provided at Appendix 4.

8.0 IMPACT OF THE DEVELOPMENT ON THE AREA

8.1 Ecology and Ornithology

- 8.2 The application site is located on common land, predominantly comprising grassland and heath land habitats. The common land is grazed all year round with a mix of stock including sheep cattle and horses.
- 8.3 Volume 1 Table 6.1 of the applicant's submission details the baseline and extended ecological surveys undertaken in 2020 and 2021. Volume 1 Table 6.7 and Volume 3 Appendix A6.1 and Volume 2 Figure 6.5 detail the designated sites with an ecological interest (habitat of non-avian species) located near the site boundary and the SINCS within the dedicated search area.
- 8.4 Habitat enhancement measures targeted at dry heath are proposed as well as embedded mitigation measures to minimise impacts of construction and operation of the proposal on Important Ecological Features (IEFs), and to prevent a breach of Wildlife legislation. Where potentially adverse ecological effects have been identified and/ or predicted for an IEF, mitigation to avoid or reduce the effects of such impacts are proposed. For IEFs for which greater than negligible residual effects are predicted after the application of the mitigation, cumulative effects with other nearby development have also been considered as part of the EclA.
- 8.5 A Species Protection Plan and further mitigation in the form of an Ecological Management Plan (EMP) to restore dry heath habitats and minimise impacts of bats are also proposed.
- 8.6 When reviewing the impact of the proposal on the Mynydd Llangattock SSSI, the applicant's submission concludes that that the proposal will have a negligible and not significant effect on lesser horseshoe bats as there are no suitable roosts within the site boundary or the nearby area/ However, it is noted from paragraph 6.4.22 of the applicants submission that not all potential roost features (PRF) some which have been assessed as having moderate to high roosting potential, within a 50-275m of the turbines were surveyed/ reviewed due to a lack of access.
- 8.7 Regarding Mynydd Manmoel SINC, it is noted that the report concludes that the development would have at its greatest, a moderate negative

impact on the integrity of habitats founds within the SINC, with the effect being not significant.

- 8.8 In relation to the habitats within the site, the report concludes that impacts on dry heath without compensation would be minor negative resulting in an effect which is not significant on the integrity of the feature at regional level. However, with the application of mitigation secured through the Ecological Management Plan (EMP) measure the magnitude of residual effects is expected to be low beneficial.
- 8.9 It is noted from the submission that Common Pipistrelle bats were the most regularly reported species at the proposed site. NatureScot guidance advises the overall population vulnerability of Common Pipistrelle to wind turbines as medium with a low to moderate collision risk. Whilst a number of PRFs were found during surveys within the site boundary not all were surveyed (para 6.4.22 and 6.5.72). Although binocular inspections were undertaken, as the closest PRF to any turbine was determined as being positioned outside of the 92m buffer recommended by NatureScot, the report concludes that collision impacts on the species would not affect the integrity of the local population of the species and the impact is therefore deemed to be moderate negative with any resultant effects being not significant.
- 8.10 A number of other bat species were identified within the application site. These include, Soprano Pipistrelle, Nathusius Pipistrelle, Noctule and Leisler's bat, Lesser Horseshoe, Serotine, Myotis species and Brown long-eared bats. The collision vulnerability of these species varies from high to low. However, the applicant's submission concludes that the low level of activity in conjunction with the positioning of turbines away from primary habitats and PRF means the impact from the proposed development on all species would be minor negative and any resultant effect not significant on the integrity of the local population.
- 8.11 Volume 1, table 6.26 details the provision of mitigation measures to reduce the magnitude of residential effects for all IEFs to which they apply, in the short and long term. No significant residual effects are predicted as a result of the construction and operation of the proposed development.
- 8.12 In relation to birds, it is acknowledged that wind turbines present three main areas of potential risk to birds:
1. Direct habitat loss resulting from the construction of the wind farm and associated infrastructure;

2. Temporary or permanent displacement due to disturbance during the construction and operations phases and barrier effect which result in the birds altering their migration routes to avoid wind farms; and
 3. Death due to collision or interaction with the rotating turbine blades, overhead wires, guy lines and fencing. Whilst the collision risk varies depending on a number of factors, such implications are of particular relevance where sites are known to support raptors of large concentrations of wildfowl.
- 8.13 The applicant's submission acknowledges that the proposal (during both construction and operational phases) has the potential to adversely affect defined populations of bird species, particularly those protected by inclusion in Annex I of the Birds Directive and Schedule 1 of the Wildlife and Countryside Act 1981 (as amended), as a result of direct habitat loss, disturbance or displacement or collision with turbines or through cumulative effect.
- 8.14 The submission confirms the application is supported by a desk study, field surveys, vantage point surveys, breeding bird surveys, breeding raptor surveys and Nightjar surveys undertaken in 2020 and 2021, covering the application site and a 500m, 1km and 500m buffer respectively. The data collected was then subject to collision risk modelling, to predict the number of individuals per target species that have the potential to collide with the wind turbine rotors.
- 8.15 Table 7.13 of the submission provides a determination of important ornithological features (IOF) occurring within the proposed development site. Of the most species recorded, it is concluded that the potential effect as a result of collision on Herring and Lesser Black-Backed gull, would be of low negative magnitude and not significant with the collision risk to red kite being low magnitude and not significant.
- 8.16 In relation to cumulative effects, the proposal has been considered relative to 12 other developments which are listed at 7.8.3 of the submission. Of these, 6 of the developments are solar and 6 comprise windfarms varying in size from 3 to 12 turbines.
- 8.17 The Council's Ecology Officer has reviewed the submitted reports and has provided the following response:
- 8.18 *"The report does acknowledge cumulative effects, however, since this report has been produced it has become apparent there are additional*

proposed wind farms for other sites within Blaenau Gwent, resulting in a potential increase in wind turbine numbers. If all DNS windfarms were in operation this would evidently result in scale of magnitude change, resulting in long term negative effects through habitat fragmentation and increased collision risks (and direct effects upon local population sizes). Sites included within cumulative effects analysis includes Mynydd Carn Y Cefn and Myndydd Llanilleth; it does not include the Abertillery and Trecelyn wind farms which would create up to 40 wind turbines. This would present a considerable turbine presence across upland and moorland habitat which are characteristic landscapes associated with Blaenau Gwent.

- 8.19 *Although the surveys help to form a robust baseline and approach there are still concerns regarding the negative impacts upon bird and bat species that are found locally to this area.*
- 8.20 *There are no further details or information on how noise and movement of blades will have a negative impact on species. The noise and movement of the blades has the potential to cause disturbance to and potentially displacement of sensitive species such as birds and bats. This has not been considered in either the Chapter 6 Ecology or Chapter 7 Ornithology Assessment or Chapter 12 Noise. Therefore, it is still felt that there is a moderate, negative risk to bat species in particular to more sensitive species.*
- 8.21 *The report suggests that it has addressed the issue of reptiles in the EclA in the Ecology Chapter- section 6.5. However, there is no detailed mitigation strategy in relation to reptiles and the potential harm as a result of the proposed development. 6.2.3 states: "In addition, particular attention has been paid to the lists of habitats and species of principal importance, as given in Section 7 of the Environment (Wales) Act 2016. It is considered that insufficient information regarding reptile mitigation has been provided as part of the EMP and the development will have a negative impact as a result.*
- 8.22 *Significant concerns are raised that that insufficient consideration has been given to passerines, especially ground nesting upland specialists such as stonechats and skylark. Skylark populations are often underestimated. Their display flight of this species makes them susceptible to turbine strike. Any further survey work should have considered this species as they are a Red Listed, LBAP and s7 priority species. The report focuses mainly on target species event though it states at 7.2.10 "In addition, consideration should be given to LBAP*

species (taken here to also include Section 7 listed birds)". As such it is anticipated that the proposal would have a negative impact on passerines.

- 8.23 *Consideration should also be given to the associated implications of associated infrastructure such as access roads which have the potential to encourage more off roaders, leading to a habitat degradation, disturbance and displacement and the permanent loss of s7 habitat and disturbance and/or displacement of protected and priority species. This has not been considered. As such it is anticipated that the proposal will have a negative impact on the ecology, biodiversity and ornithological value of the area.*
- 8.24 *Chapter 5 section 5.8.4 suggests that underlying peat to be removed. It does not indicate what is being done with the peat afterwards and it seems a little counter intuitive that peat will be removed, releasing carbon stored, in order to create a platform for the crane pad. It is anticipated that such works would have a negative impact on the area as a result.*
- 8.25 *It has been considered that effective mitigation measures have not been detailed: more details are required for CEMP, EMP (including monitoring and clearly stating net benefits) and Species Protection Plan (SPP).*
- 8.26 *Following review, it is considered that ecological mitigation specified as part of the proposal are inadequate and disproportionate relative to the scale of the development. It is therefore anticipated that the proposal would have a negative impact on the biodiversity and ecological value of the site and wider area."*
- 8.27 **To conclude it is considered that the information provided within the application submissions is insufficient / inadequate to allow a full assessment to be made of the impact this proposal and the cumulative effects of other DNS applications in the immediate vicinity, would have upon biodiversity, most notably on bats and schedule 1 species recorded on the site. Accordingly, it is anticipated that the proposal would have a negative effect of the biodiversity and ecological value of the site.**

8.28 **Landscape and Visual Impact Assessment (LVIA)**

8.29 The Landscape and Visual Impact report submitted seeks to take into consideration:

- Direct and indirect effects on landscape character and changes to the landscape;
- Effects on visual amenity of the study area and from selected viewpoints, including changes to the composition of views and the perception and response by receptor grounds to these changes;
- Potential cumulative visual effects resulting from the intervisibility and sequential visibility with consented or submitted wind farms within the study area and
- Effects during the construction, operation and decommission phases of the proposed development.

8.30 Four out of five of the turbines (T2-T5) and the infrastructure proposed would be located within the Pre-Assessed Area (PAA) for wind, as defined by Future Wales: the national plan 2040. Turbine 1 would be positioned north of the PPA designation boundary. Although outside of the designation, it is considered that the positioning of turbine 1 would be view in relation to the wider development and as a stand-alone feature would not have any greater impact that the remainder of the proposal.

8.31 In designating PAAs, the Welsh Government has undertaken an assessment to provide certainty where in principle, developments would be acceptable. Policy 17 identifies that there is a presumption in favour of large-scale on-shore wind energy development in PAAs subject to the criteria in policy 18. The criteria include for example that there are no unacceptable adverse visual impacts on the surrounding natural environment, nearby communities and individual dwellings and that the cumulative impacts of existing and consented renewable energy schemes should also be considered.

8.32 The supporting text associated with Policy 18 provides the following:

8.33 “Irrespective of location or scale, the design and micro-siting of proposals must seek to minimise the landscape and visual impact, particularly those in close proximity to homes and tourism receptors. Both within and outside Pre-Assessed Areas, communities should be protected from significant cumulative impacts to avoid unacceptable situations whereby, for example, smaller settlements could be potentially surrounded by large wind schemes.”

- 8.34 BGCBC LDP Policy DM4 Low and Zero Carbon Energy seeks to support Low and Zero Carbon Energy subject to a number of criteria. In particular, these include:
- Appropriate monitoring and investigation can demonstrate that the development will not have any unacceptable adverse impact on nature conservation and the character and appearance of the landscape;
 - The proposal can be safely accessed to permit regular maintenance without an unacceptable adverse impact to the environment or the public rights of way network;
 - They will not have an unacceptable adverse impact on local amenity by reason of noise emission, visual dominance, shadow flicker, reflected light, the emission of smoke, fumes, harmful gases, dust, nor otherwise cause pollution to the local environment;
 - Local receptors of heat and energy from the proposal are identified and, where appropriate, are connected to/benefit from the facility; and
 - Provision has been made for the removal of all infrastructure from, and reinstatement of the site following termination of the use.
- 8.35 As detailed in Appendix 3 TACP, a landscape consultant, was commissioned by BGCBC and Torfaen County Borough Council (TCBC) to assess the sensitivity and potential capacity of their landscapes to wind and solar development. The study (Sensitivity and Capacity Study for Renewable Energy Development, Blaenau Gwent CBC and Torfaen CBC, October 2021) follows on from the Carbon Trust Renewable and Low Carbon Energy Assessments that were completed for each Authority in 2020 and which identify potentially suitable areas for both wind and solar power generation.
- 8.36 For the purpose of the study a large turbine is deemed to comprise a hip height of 151m to 180 metres at a spacing of 0.2km² per turbine with a small group comprising 1-3 turbines.
- 8.37 Landscape Assessment Units (LAU) comprising consistent landscape types were developed from LANDMAP landscape aspect areas and visual and sensory data to provide the basis for the assessment.
- 8.38 The landscape capacity assessment identifies the quantity and type of development that can be accommodated within a given landscape assessment units (LAU) based upon:

- 8.39
- The overall sensitivity to renewable energy development derived from the landscape and visual sensitivity assessments.
 - Operational and consented renewable energy development within and adjacent to each LAU. This also includes consideration of the PAA;
 - The size of each LAU i.e., there may be scope for a larger number of developments within larger LAUs before a capacity threshold is reached. depending on current land use, aspect and topography all of which may be limiting factors to accommodating further development.
 - The agreed development typologies.
- 8.40
- The proposed site is located within LAU 13 which is described as large scale, primarily upland character area with simple form, elevated rounded ridge and undulating topography. The landcover is generally open upland moorland, with reclaimed land and forestry, scattered farmsteads and an industrial estate in the northern section. The undeveloped ridgeline is partially visible from valleys either side and other high points, although the undulating land is less prominent to the north. With regards to visibility of quality of view the area generally comprises open landscape with forestry blocks and topography framing and controlling views in and out. The southern ridge of Cefn Manmoel falls within the Pre-Assessed Areas for wind development.
- 8.41
- The assessment identifies that the landform and visual qualities of the area would be able to accommodate a certain amount of change, with a strong contrast between the northern section, which is likely to be less sensitive than the less disturbed southern section. Being mindful that there are no turbines in the LAU, the landscape sensitivity was registered as medium with careful consideration needing to be given to cumulative effects relative to the wider PAA designation and existing wind turbines within Crown Industrial estate, Rassau Industrial Estate Bryn Back Park and the two turbines to the on the south-western of the current application site.
- 8.42
- As specified above the application site is located within the Cefn Manmoel Special Landscape Area (SLA). It is also adjacent to the SLAs of Mynydd Bedwellty, Rhymeny Hill and Dirhowy Sides and Myydd Can-y-Cefn and Cefn yr Arail as defined by policy ENV2 of the BGCBC LDP. SLAs are designated to protect areas that are considered to be important to the overall landscape, history, culture, biodiversity and geology of the County Borough. The designation of these landscape

areas has been undertaken as a local level, using a regionally agreed methodology and takes into consideration factors such as:

- Prominence;
- Spectacle- dramatic topography and views;
- Unspoilt areas- pre-industrial patterns of land use;
- Remoteness and tranquillity;
- Vulnerability and sensitivity to change;
- Locally rare landscape; and
- Special landscapes

8.43 Policy ENV2 specifies the following:

8.44 “Development within the defined Special Landscape Areas will be expected to conform to the highest standards of design, siting, layout and materials appropriate to the character of the area.”

8.45 The landscape and visual impact assessment in support of the application considers the operational effects of the proposed development on landscape character within a study area up to 45km from the site. A total of 148 landscape character areas (LCA) were initially identified with six being the subject of major-moderate significant effects.

8.46 Significant cumulative effects on landscape character in addition to consented wind farm developments were also identified from three LCAs. Whilst significant cumulative effects on landscape character in addition to submitted and scoping stage proposals were identified from 6 LCAs.

8.47 LCA 28- Mynyddoedd Llangatwg and Llangynidr has been identified as being affected by all four category assessments. LCA 29- Mynydd Llangynidr by three and LCAs 1, 3 and 4 (Mynydd Manmoel, Sirhowy, Ebbw Far and Ebbw Fach Valleys and Mynydd Carn-y-Cefn respectively) effected by operational and submitted schemes.

8.48 Within the 45km study area, 24 viewpoints were identified to assess visual amenity. Significant individual effects because of the proposed development are predicted for 10 of the assessed viewpoints with 8 of the viewpoints being located within 5km of the proposed development.

8.49 Significant effects from the proposed development in addition to consented wind farm development likely to occur at two viewpoints – VP11 B4560 (BBNP) and VP21- Mynydd Llangynidr. Significant effects

from the proposed development in addition to scoping stage wind farm development will occur at 4 of the assessed viewpoints.

- 8.50 The report acknowledges that the proposal would result in the introduction of prominent and additional key features, especially with regard to the Manmoel LCA; would add to the existing cumulative developments which are broadly located across upland areas to the south of the study area, would serve to accentuate other existing man-made vertical elements and intensify the interruption of the skyline, resulting in an indirect influence on the medium to close-distance setting of the landscape and a reduction in the aesthetic and perceptual qualities relating to openness and remoteness.
- 8.51 In relation to the Residential Visual Amenity Assessment (RVAA) it is noted in the submission that there are approximately 4300 residential properties in the study area with these subsequently split into 27 representative groups/ individual properties. Of these the Stage 4 assessment determined that the residential visual amenity threshold would be breached for 8 of the study groups/ individual properties.
- 8.52 It is considered by the Council that the number of receptor dwellings in the study area, the density of occupation in conjunction with location specific environmental, topographical and social conditions, it is anticipated that the introduction of substantial new manmade prominent and dominant structures with moving parts into the landscape and skyline would lead to a visual prominence and dominance of turbines that would have a negative impact upon residential visual amenity areas within BGCBC. This is compounded by the fact that the proposal seeks consent for an operational life for a period of 50 years. Concerns are raised that this would be an excessive period of time for residents to experience such impacts. ¹
- 8.53 It is noted from the submission that a number of walking and cycle routes would be affected with a major- moderate to moderate impacts which would diminish in significance as users move away from the site.
- 8.54 Following review, the Council's Landscape Officer has provided the following comments:

¹ It is noted that the applicant's Design and Access Statement refers to the scheme having a lifetime of up to 50 years from commissioning to decommissioning and an operational life of up to 50 years.

- 8.55 *“The Landscape and Visual Impact part of the report is robust and helps to identify the potential physical and visual impacts when assessing the potential for adverse effects upon the landscape, including acknowledging cumulative effects of other wind turbines in the landscape.*
- 8.56 *Most of the physical effects appear to be of low/medium impact long-term (50 year) as the footprint of the turbines and associated infrastructure are relatively small in a landscape scale and are mostly reversible. Some of the new access roads to service the wind turbines having a more moderate-significant physical impact.*
- 8.57 *Whilst the design included reducing potential landscape and visual effects by removing a turbine and decreasing their height; these structures as proposed remain an uncharacteristic, large-scale industrial feature within this area of the landscape, which in compliance with Policy 18 of Future Wales 2040, should only be permitted where they can demonstrate that they will not have any unacceptable adverse impact on the character and appearance of the landscape.*
- 8.58 *It is considered that the proposal will have a negative visual impact upon the SLAs. The erection of turbines within the SLAs would lead to industrialisation in areas designated in part of their remoteness, naturalness, wilderness and tranquillity, contrary to other Welsh Government and LDP policies that seek to protect and enhance the natural environment whilst ensuring peoples physical and mental well-being is maximised.*
- 8.59 *At least four of the eight local SLAs have proposals for wind turbines, reducing the opportunity for experiencing landscapes which are natural, remote and tranquil in an otherwise densely populated urban environment.*
- 8.60 *The proposal will have a negative impact upon existing and future sustainable tourism and leisure opportunities for the local population and tourists using the network of footpaths through the SLAs. Some of these public rights of way could also require diverting to ensure users are outside any recommended radii of the wind turbines.*
- 8.61 *These significant adverse visual effects would be experienced locally by residents, tourists and other receptor groups. The visual impact will be detrimental when viewed in conjunction with other existing and proposed wind turbines visible in the landscape. The proliferation and*

visual impact of these structures will change the areas distinctive, remote, natural, wild and tranquil landscape of panoramic open skylines, characterised by a sense of exposure and sense of place into one of industrialisation, becoming dominated by the introduction of these uncharacteristic large-scale elements due to their scale and proximity.

8.62 *Finally, since this report was produced it has become apparent there are additional proposed wind farms for other sites within Blaenau Gwent, resulting in a potential increase in wind turbine numbers. If all DNS windfarms were in operation this would evidently result in scale of magnitude change. This would present a considerable turbine presence across at least four of Blaenau Gwent's eight Special Landscape Areas, designated in part for their distinctive, remote, natural, wild and tranquil landscapes with panoramic open skylines, characterised by a sense of exposure and sense of place."*

8.63 **In conclusion whilst it is acknowledged and appreciated that the principle of onshore windfarm has been positively established within a PAA as defined by Policy 17 of Future Wales, Policy 18 specifies that proposals must seek to minimise the landscape and visual impact, particularly those in close proximity to homes and tourism receptors. Both within and outside Pre-Assessed Areas, communities should be protected from significant cumulative impacts to avoid unacceptable situations whereby, for example, smaller settlements could be potentially surrounded by large wind schemes. With regard to the detail submitted as part of the current proposal, it is anticipated that the raised topographical height of the development in conjunction with the scale of the turbines, close proximity to a number of densely populated settlements and the cumulative effect of the numerous turbines proposed in the immediate vicinity would lead to a proliferation of turbines in SLAs areas specifically designated for their prominence, remoteness and tranquillity. As such it is anticipated that overall, the impact on the landscape and visual amenity of the BGCBC area would be negative.**

8.64 **Cultural Heritage**

8.65 The Archaeological and Cultural Heritage Study Area comprises two spatial levels. Firstly, an Immediate Study Area, comprising the site as defined by the application boundary and access track for which the potential for direct physical impacts from ground works has been

assessed and constraint mapping which seeks to avoid impacts on known assets and secondly, a Wider Study Area. This area has been defined comprising a zone in which indirect (mostly visual impacts) from the turbines might affect designated historic assets susceptible to significant change.

- 8.66 Following consultation, it is noted that Glamorgan Gwent Archaeological Trust have provided the following response to the proposal:
- 8.67 *“The assessment meets current professional standards and has gathered information relating to the historic environment from all relevant sources. It has also assessed the likely impact of the proposed development against that information. The report details the known historic assets within the proposed development area, and those external to the proposed development area but within the wider study area and therefore upon which the development may have a visual impact, on the assets or their setting. Scheduled Monuments aside, the assessment concludes that there is a ‘high adverse’ effect on three round cairns (Domen Fawr I, II and III), as well as on Cefn Manmoel Dyke C and D, Cefn Manmoel enclosure and a boundary stone (Table 9.9).*
- 8.68 *Accordingly, an archaeological field evaluation was carried out (CPAT report no. 1957, dated July 2023), composed of four trenches. The results indicated that the cairns were likely to date to the Bronze Age. As a result, Turbine 1 has been moved in order to avoid any direct impact on the features. Additionally it is proposed to fence off the identified features and structures in order to prevent accidental damage, as well as to carry out recording of groundworks, archaeological monitoring during the construction phase and re-commencement and post felling surveys to locate/identify assets. We concur with such an approach.*
- 8.69 *A written scheme will need to be compiled by the archaeological contractor, detailing the exact scope and methodology of the work, and submitted to us for approval.*
- 8.70 *We therefore recommend that a condition requiring the applicant to submit and implement a detailed written scheme of investigation for a programme of archaeological work to protect the archaeological resource should be attached to any consent granted by the Ministers.*

- 8.71 *We envisage that this programme of work would include the mitigation works noted above. It should also include detailed contingency arrangements including the provision of sufficient time and resources to ensure that any archaeological features or finds that are located are properly investigated and recorded; it should include provision for any sampling that may prove necessary, post-excavation assessment and analysis, reporting and possible publication of the results.*
- 8.72 *To ensure adherence to the recommendations we recommend that the condition should be worded in a manner similar to model condition 24 given in Welsh Government Circular 016/201”*
- 8.73 With regards to cumulative effect, it is noted that the study has focused on Pen Bryn Oer, Blaentillery Farm, Eurocaps and the consented schemes at Coed y Gilfach Farm as well as 15 single turbines operation or consented, but has failed to consider the DNS proposals of Mynydd Carn Y Cefn, and Abertillery These schemes present a considerable turbine presence and intrusion across the study and context area. Concerns are therefore raised that the submission provides insufficient information to allow a full assessment to be made of the impact this proposal and the cumulative effects of other DNS applications in the immediate vicinity.
- 8.74 **Based on the submission and the comments provided by Glamorgan Gwent Archaeological Trust it is anticipated subject to conditions that the proposal could have a neutral impact on historical assets within the immediate study area. However, it is considered that insufficient consideration has been giving to DNS proposals at scoping and submitted stage that fall within the wider study area. It is therefore considered that the impact on the cultural heritage of the are would be negative.**
- 8.75 **Hydrology, Geology and Hydrogeological**
- 8.76 The hydrological study area utilised as part of the submission is larger in extent that the application site boundary and includes the upper and lower reaches of watercourse catchments that cover the proposed development area. Designated site and relevant developments are considered from the perspective of assessing any hydrological linkages or cumulative effects.
- 8.77 Regarding private water supply, the report identifies 3 private water supplies that might be affected by the proposed development. The

applicant proposes, post consent, to verify the abstraction location, supply infrastructure and possible monitoring of the private water supplies during construction and a baseline surface water monitoring prior to construction starting. As the proposal could have a negative impact on water supply it is recommended that the three private water supplies are confirmed and revised information provided on the impact of the development on the private water supplies prior to a decision being made with a further scheme of post construction monitoring secured by condition.

8.78 Based on the above it is anticipated that the proposal would have a negative effect on the three private water supplies identified by the submission and it is recommended that additional information be submitted prior to determination of the proposal.

8.79 Coal Mining Risk Assessment

8.80 As part of the application site is located within a High-Risk Coal Field Area, a Coal Mining Risk Assessment has been submitted as part of the proposal. Following consultation, the Council's Geo-Technical Officer has provided the following comments:

8.81 *"It is considered that the report provides a thorough and detailed desk study review of the site and surrounding area's mining constraints, setting out the mining related risks identified and providing recommendations on how these risks can be investigated and mitigated.*

8.82 1. Risks

8.83 *The Coal Mining Risk Assessment (CMRA) identifies the following mining related risks:*

a. Past deep recorded mining: records show mining was at a depth of between 70m bgl and 530m bgl in the area, last worked in 1959. Movement from these workings should by now have ceased.

b. Past shallow unrecorded mining: although the Coal Authority has no record of past shallow mining within the area, the CMRA suggests there is a high probability of unrecorded shallow mineworkings within the development site, particularly underneath turbines T1 and T2.

c. Mine entries: multiple mine entries (shafts and adits) with no treatment details within the development area, however no known mine entries at the turbine locations. Shafts are shown to be located within the location of the planned access road at the northern end of the site.

d. Mine gas: the CMRA states it is possible for gas pathways to be present within the ground.

e. Fault reactivation: Turbine locations T3 and T4 are in closest proximity to mapped fault structures.

f. Landslides: The CMRA report also addresses landslides, noting that there are 5 recorded landslides within the site and 9 additional landslides within 500m of the site boundary. The CMRA states that consideration should be given to how major changes in ground conditions could affect the ground stability. Therefore, a slope stability assessment must be undertaken prior to development of the site to ascertain the stability of the slopes within the site and surrounding area and show how the proposed development will impact on the local ground conditions. The slope stability assessment should provide recommendations as to how the development can be designed, constructed and operated without adversely affecting the ground stability of the site and surrounding areas.

8.84 *2. Investigation*

8.85 *The CMRA concludes that a detailed site investigation is required at each turbine location and planned access tracks. It recommends the GI is designed for Geotechnical Category 3 structures, noting that the ground investigation methods will need to adapt to the prevailing ground conditions on site, i.e. depending on the thickness of the made ground and depth of the solid geology, some investigation methods will be more suitable than others. Determining thickness of made ground and depth of bedrock will be key to determining the best foundation type for the turbines.*

8.86 *The made ground and solid geology will need to be sampled and tested against geotechnical testing suites. The submission states that for the solid geology of the site, a rock mass assessment should be carried out detailing compressive strength and discontinuity spacing (faults).*

8.87 *Sampling and testing of groundwater, soils and rock are advised. BGCBC would add that given the potential for gas pathways to be*

present, gas monitoring should be undertaken during the ground investigation and post ground investigation to determine and characterise the gas situation of the site.

8.88 *BGCBC points out the potential for tipped material/ Made Ground to be present on site and this will need to be suitably investigated to determine depth, and sampled and tested against geotechnical and geo-environmental testing suites.*

8.89 *3. Mitigation for Development/ Risk Control*

8.90 *The CMRA provides solutions to improving ground conditions once the full ground investigation is complete, including treatment for mine entries and mining voids. All ground treatment and mitigation works must be carried out prior to the development of the site.”*

8.91 **In relation to the CMRA, it is considered that the document provides a detailed review of the ground stability related risks within and near to the development site. In principle, subject to conditions securing full and detailed ground investigations that will provide the applicant with a detailed ground model that identifies the risks spatially within the site and allows the applicant to determine how the site can be safely constructed and operated with regard to ground stability and existing mining constraints identified, it is anticipated that the proposal will have a neutral impact on the land stability of the area.**

8.92 **Traffic and Transport**

8.93 Access to the proposed development will be from the public road, Manmoel Road. From the north, Manmoel Road can be reached from Tredegar Road- and Beaufort Road (A4047), which in turn link to the A645 (T) via Bryn Serth. Manmoel Road can also be accessed from the south with links to the A4046 at Cwm and the B4251 at Oakdale. However, this route consists of long section of single-track carriageway where passing opportunities are limited. The submission advises that this not considered suitable for construction traffic and as such the Traffic Management Plan, will prohibit construction traffic from using this route.

8.94 Abnormal Indivisible Loads (AILs) associated with the wind turbines will travel from the port of entry at Swansea to the sit boundary via the

A483, M4, A465(T), Bryn Serth Road, Beaufort Road and Manmoel Road.

- 8.95 During an assumed 10-month construction period, it is anticipated that peak traffic generation will occur in months four, when it is estimated that an average of 111 vehicles movement per day will occur (73 HGV movements and 38 cars/ LGV movements). The impact assessment indicates that all traffic levels will not exceed the 30% threshold for total traffic or HGV flows at any point within the study area, other than on Manmoel Road.
- 8.96 Although traffic flow on Manmoel Road is predicted to increase by 125% during the busiest construction month and HGV traffic to increase by 6174% this is directly reflective of the very low level of traffic present under baseline conditions.
- 8.97 Although the sensitivity of Manmoel Road and Common Land and PRow users as receptors is high, leading to a moderate effect for severance, driver and pedestrian delay, amenity fear and accidents and safety, it is noted that the impacts will be temporary and reversible, lasting for the duration of the build only.
- 8.98 Following consultation, the Council's Highways Manager has provided the following comments:
- 8.99 *"Whilst it is acknowledged that the majority of the preferred transport route for any AIL's falls outside the jurisdiction of Blaenau Gwent, it is noted in documents 'Chapter 11 Traffic and Transport' and 'Appendix A11' that the impact of construction traffic on local roads – namely Bryn Serth Road, Manmoel Road and Beaufort Road (A4047) has been considered.*
- 8.100 *BGCBC as highway authority, would require that any future Construction Traffic Management Plan (CTMP) stipulates that construction traffic is to only access/exit the works site via the junction of Manmoel Road at the A4047 (Beaufort Road) in a north-easterly direction. And not a 50/50 east/ west split as proposed (ref: Chapter 11: Construction Traffic Distribution – Figure 11.3). This would ensure that no construction traffic would travel through the residential area of Tredegar that is predominantly covered by an existing 7.5T environmental weight restriction. In view of this information the applicant will need to clarify that the % impact will not exceed the 30%*

threshold for HGV flows and can still be scoped out as per the EIA guidelines (ref: Table 11.10: 2026 Baseline and Peak Development Construction Traffic Flows & % increase).

- 8.101 *It is noted that the anticipated turbine components' port of entry to the UK will be at Swansea. From Swansea Docks the anticipated route for AIL's will be – A483 Fabian Way; M4 Junction 42 to Junction 43; A465 (T) to Rassau; Bryn Serth Road; Beaufort Road and Manmoel Road. The applicant is advised that any highway mitigation 'temporary' works as identified in 'Environmental Statement – Appendix A11' and any other highway works subsequently deemed necessary to facilitate the transport of AIL's will need to be agreed with each Highway Authority, with any accommodation works subject to a Section 278 Agreement of the Highways Act 1980.*
- 8.102 *Appendix A11: Traffic and Transport: A11.2: Swept path Analysis: It is noted that on Sheet 3 (Page A11-23) that at the junction of Manmoel Road/ Beaufort Road (A4047) a large temporary vehicle over-run area is required across an existing grassed verge. The applicant is advised that whilst it is understood that the required parcel of land is in council ownership it is not deemed as highway verge and separate consent will be required.*
- 8.103 *Chapter 11: Additional Mitigation: 11.8.3: It is noted that the applicant states they 'will cover the cost of abnormal wear and tear on roads not designed for that purpose' and 'that this is imposed by planning condition'; the highway authority agrees with this, in particular that Manmoel Road over its full length as access road be specifically identified."*
- 8.104 **As such, based on the above, subject to conditions and secondary consents, it is anticipated that the development would have a neutral impact upon the highway network and upon highway and pedestrian safety.**
- 8.105 **Noise**
- 8.106 To assess the noise impact from the proposal the applicant has carried out a noise impact assessment using government approved guidance ETSU-R-97 and the Institute of Acoustics Good Practice Guides.
- 8.107 In order to determine the existing background noise climate, the applicant has carried out noise monitoring in the vicinity of sensitive

receptors. This data has then been compared to background noise levels at varying wind speeds with the predicted noise impact from the turbine at the nearest sensitive receptor (NSR) at 10 locations.

- 8.109 From this assessment the applicant has concluded that, when operating in isolation, the proposed development would meet the derived noise limits with the exception of NSR 3 and 5. With regard to NSR3, the derived noise limits would be exceeded during the night-time period for wind speeds of 7ms^{-1} - 9ms^{-1} . For NSR5, the derived noise limits would be exceeded during the daytime period for wind speeds of 5ms^{-1} - 8ms^{-1} and the nighttime period for windspeeds between 7ms^{-1} - 10ms^{-1} . As a result, suitable mitigation would need to be agreed and developed to reduce operational noise levels.
- 8.110 With regard to the cumulative assessment, the submission indicates an increase in noise levels and the addition of an exceedance at NSR5 during the daytime period at a windspeed of 9ms^{-1} . As a result, a suitable mitigations strategy would need to be developed to reduce cumulative noise levels.
- 8.111 Following review, the Councils Environmental Health Officer has advised that the conclusions of the submission appear robust and as such no objection is raised to the proposal on the grounds of noise. However as detailed, mitigation will need to be secured by condition for the two locations identified.
- 8.112 **Subject to the approval and implementation of appropriate noise mitigation measures, it is anticipated that the development would have a neutral effect.**
- 8.113 **Health and Public Safety**
- 8.114 Shadow Flicker
- 8.115 The applicant has carried out an assessment of the likelihood of shadow flicker arising from the proposed development, analysing 50 receptor locations situated in the vicinity of the site.
- 8.116 The 'real case' assessment indicates that that 12 receptors (R1, R2, R3, R18, R19, R20, R36, R37, R38, R41, R42 and R43) could theoretically exceed the maximum allowed 30 minutes/ day or 30 hours/ year of shadow flicker. Whilst it is noted that the results do not account for factors such as screening, orientation of the affected dwellings or

function of the room, the applicant has recommended that a condition be imposed requiring the submission and agreement of a shadow flicker protocol to reduce effects to below the maximum allowed, prior to commissioning of the proposed development.

8.117 Following review of the information submitted, BGCBC's Environmental Health Officer has confirmed that the conclusions appear robust and as such raised no objection to the development subject to a condition requiring the submission of a shadow flicker protocol. Subject to the detailed being secured and implemented, the anticipated impact of the development would be neutral.

8.118 Ice Throw

8.119 In relation to the implications of ice throw it is noted that the turbines have been located away from occupied buildings and roads. However, as the proposed development is located on publicly accessible land, some residual risk remains.

8.120 In mitigation the submission confirms that the turbines proposed as part of the current proposal will be fitted with climatic detection systems and passive/ active de-icing solutions, with details to be submitted to and approved in writing and implemented prior to the start of commercial operation. Subject to these details being secured, it is anticipated that the effect of the proposal with regard to this consideration would be neutral.

8.121 Climate

8.122 The carbon balance assessment submitted it is noted that over the expected 48 years that the proposed development is likely to be generating electricity, this could result in an expected CO₂ emission saving of over 1,271,520 tonnes of CO₂ when replacing fossil fuel electricity generation.

8.123 Based on historical Government published data, the submission anticipates that the proposed development could generate around 61,320 megawatt hours (MWh) of electricity per year or 61,320,000 kWh 47. This is equivalent to the annual electricity needs of 19250 average UK homes, or approximately 59% of households in Blaenau Gwent. Although the proposal would create carbon emissions due to the loss of an area of peat and the construction

phase, having regard to Future Wales, it is considered that this proposal would have a positive effect on meeting identified targets for Renewable Energy.

8.124 Being mindful of the raised topographical height of the development in conjunction with the steeply sloping sides either side of the site, relative to the close proximity of a number of settlements and the scale of the proposed turbines, consideration should be given to the implications on public safety to the toppling of a turbine.

8.125 Socioeconomics

8.126 It is noted from the submission that the proposed development has the potential to create job opportunities at a local, regional and national level throughout the life cycle of the project and for the proposal to generate financial benefits both at the local and national level.

8.127 Further positive supply chain impacts on local, regional and national levels are also expected with the vast majority of direct and indirect benefits from the construction of the proposed development likely to be realised within Wales, with BGCBC and CCBC enjoying benefits at the local level.

8.128 The Blaenau Gwent Destination Management Plan 2016-2019 (Blaenau Gwent County Borough, 2016) sets out the approach to developing the visitor economy in Blaenau Gwent. This approach has been revised and updated in the Blaenau Gwent Destination Management Plan 2020-25.

8.129 Although the latest local wide tourism data available as set out in the Welsh Government's Tourism Profile – Wales Local Authorities 2011-2019 (Welsh Government, 2021b) advises that BGCBC experiences a less than average income from domestic and international tourism, it is noted that the site is crossed by numerous public rights of way (PRoW), which include local, national and long distance footpaths plus a promoted cycle route that serve the local community.

8.130 Following consultation BCCBC's Rights of Way Officer has noted that a 75m blade length has been included within the design process in order to ensure separation from public rights of way and that temporary closures will be sought where necessary during the construction phase with safety signs erected during construction and future operation of the

site. Active management may also be required during the construction period.

- 8.131 It is noted from the submission that the existing track from Tredegar Road will be used for construction and maintenance purposes resulting in the surface being upgraded to facilitate these activities. After construction is complete the site tracks will be left in place for routine maintenance of turbines and for multi-use trails leading to improved recreational access for walking as the land is classed as open access under the Countryside Right of Way Act 2000.
- 8.132 **In summary it is anticipated that the creation of jobs at a local, regional and national level throughout the life cycle of the project and the financial benefits both at the local and national level would be positive.**
- 8.133 **Although the proposal would have an impact on the existing PRoWs with diversion and active management necessary during construction, it is noted that the development has been designed to minimise impact on users. Being mindful of the improvements to be made to existing tracks, on balance it is anticipated that the proposal will have a neutral impact on PRoW users.**
- 8.134 **Minerals**
- 8.135 The site falls within aggregates and coal safeguarding areas identified under Policy M1. Policy DM19 (Mineral Safeguarding) sets out the criteria for assessing development proposals. Although safeguarding of coal resources is now not required under national policy set out in PPW11, the safeguarding of aggregate resources is required under national policy as set out in policy DM19. The submitted documents do not address minerals safeguarding or these policy requirements.
- 8.136 The British Geological Survey Aggregates Safeguarding Map of Wales indicate the application site lies within an area of Category 1 High Specification Aggregate (Sandstone and Igneous Rocks).
- 8.137 Policy DM19 states that development proposals will not be permitted where they would permanently sterilise important mineral resources within Aggregate and Coal Safeguarding Areas, unless:
- 8.138 (a) The mineral resource is recovered before development commences; or

- (b) The developer satisfactorily demonstrates that the extraction of the mineral is impracticable, uneconomic or environmentally unacceptable; or
- (c) The scale and location of the development would have no significant impact on the possible working of the resource: or
- (d) It is temporary development and can be implemented and the site restored within the timescale the mineral is likely to be required.

8.139 The purpose of safeguarding is to ensure that known resources are not needlessly sterilised by permanent development. The applicant should therefore provide evidence to demonstrate that the aggregate resources would not be sterilised in line with the DM19 exception criteria.

8.140 Sandstone and igneous rocks are hard rock deposits which typically require deeper extraction consisting of blasting. Given the nature of the development (and need for stable foundations), it is unlikely that criterion (c) would apply. It is noted that consent is sought for the proposed development to have an operational life span of 50 years. If prior extraction of the resource is not proposed or extraction is not demonstrated as being impracticable, uneconomic or environmentally unacceptable to satisfy criteria A or B, the applicant would need to demonstrate the development would not sterilise the possible future working of the resource. Given the time limited nature of the proposal, a condition requiring the restoration of the site should be secured. It is noted that such a condition would also be required in line with policy DM4 (g).

8.141 In conclusion the proposal has not considered minerals safeguarding and requirements of LDP policy DM19. Further justification should be provided that demonstrates how the proposed wind farm development would satisfy mineral safeguarding requirements under Policy DM19 and national policy. Failure to provide this information would result in the proposal having a negative impact on the designation.

8.142 Secondary Consent Requirements

8.143 The development will need to be the subject of secondary consent. These include the following-

8.144 1. Under Section 38 of the Commons Act 2006, consent will be required to carry out any restricted work on land registered as

common land under the Commons Registration Act 1965 Common Land.

- 8.145 It is considered that the development as proposed, including all associated infrastructure will reduce free access across the land and will result in the provision of hard-surface areas that has the potential to detrimentally effect soil and peat composition. Concerns are raised that the proposal will affect the special features of the area which are:
- Prominence;
 - Spectacle- dramatic topography and views;
 - Unspoilt areas- pre-industrial patterns of land use;
 - Remoteness and tranquillity;
 - Vulnerability and sensitivity to change;
 - Locally rare landscape; and
 - Special landscapes
- 8.146 **It is anticipated that the proposal may have a negative impact in terms of recreation, grazing rights, nature conservation and the openness of the area in addition to the above.**
- 8.147 2. Under section 16(1) of the 2006 Act secondary consent will be required for the permanent removal of approximately 10.28 hectares of existing common to accommodate the turbines, tracks and associated infrastructure.
- 8.148 **It is noted from the submission that the replacement land offered would be larger in area than the land sought for release. Subject to the land characteristics of the replacement area being similar, as set out in the applicant's Common Land Report, it is anticipated that the impact of the proposal would be neutral.**
- 8.149 3. The temporary diversion/ stopping up of any public rights of way as required by Section 257 of the Town and Country Planning Act 1990 or Section 118/ 119 of or Highways Act 1980.
- 8.150 **With appropriate consultations, given the limited period of time that access would be restricted, it is anticipated that the impact is likely to be neutral.**
- 8.151 4. As the works seek to provide an area of hardstanding in excess of 100sqm, the application will require sustainable drainage systems (SuDS) consent for surface water disposal as detailed by Flood and Water Management Act 2010 (the 2010 Act).

8.152 **The SuDS regime will consider the appropriateness of the measures to be provided. As part of the application the developer would have a duty to provide betterment in terms of surface water run-off from the site in addition to biodiversity, ecology and amenity benefits. It is therefore anticipated that the impact of the development would be positive.**

8.153 5. Under section 278 Of the Highways Act 1980, Temporary Traffic Regulation Orders (TTRO) will be required for each section of the route where the police may need to stop or hold traffic to allow the AIL vehicles to pass. This may involve applying to multiple highway authorities for TTROs.

8.154 **With appropriate consultations, given the limited period for which TTROs would be required, it is anticipated that the impact is likely to be neutral.**

8.155 6. Under the Historic Environment (Wales) Act 2016 Scheduled Monument Consent may be required for any works that would disturb a scheduled monument or the ground within a scheduled monument.

8.156 **It is anticipated that any disturbance to a Scheduled Monument will have a negative impact on the historic environment. Cadw will provide advice if there is appropriate mitigation.**

9.0 SUMMARY

9.1 **BGCBC has reviewed the submitted information relating to the current proposal and anticipates that the impacts of the development as a whole would be negative, with concerns raised that the application lack sufficient information to allow full and reasoned assessments with regard to biodiversity, cultural heritage, private water supplies and minerals. In this respect additional information is required before BGCBC can provide a review of how these works would impact on these subject areas. It is requested that these issues be considered prior to determination of the application.**

10.0

PLANNING CONDITIONS

10.1

At this stage, notwithstanding the comments above in respect of the need for additional information and without prejudice to the

determination of the application or the matters raised in this LIR, the following planning conditions are currently recommended (and may be subject to amendment at a later stage).

- 1 The development shall begin not later than five years from the date of this decision.

Reason: To comply with the requirements of Section 91 of The Town and Country Planning Act 1990.

- 2 The development shall be carried out in accordance with the following approved plans and documents:
 - Site location plan GC202218_M_056_A.
 - Site Layout plan GB202218_M_012_D.
 - Coal Mining Risk Assessment Cenin Renewables 21st February 2023.
 - Mine Entry Technical Note Cenin Renewables April 2023.
 - Design and Access Statement Cenin Renewables 18th May 2023.
 - Planning Statement Cenin Renewables June 2023.

Unless otherwise specified or required by conditions 3-34 listed below.

Reason: To clearly define the scope of this permission.

- 3 This planning permission shall endure for a period of 50 years from the date when electricity is first exported from the wind turbines to the electricity grid ('First Export Date'). Written notification of the First Export Date shall be provided by the developer to the Local Planning Authority no later than 1 calendar month after that event.

Within 50 calendar years from the date when electricity is first generated to the grid, or within 12 months of the cessation of electricity generation by the wind turbine facility, whichever is sooner, the wind turbine facility and all associated works/equipment above ground shall be dismantled and removed from the site and the land restored to its former condition in line with the restoration plan to be approved as part of condition 4.

Reason: This is a temporary development with a maximum duration of 50 years and in accordance with LDP Policy DM4 Low and Zero Carbon Energy.

- 4 Not later than 12 months prior to the end of this permission, a decommissioning and site restoration scheme, informed by a full ecological survey of the site, shall be submitted for the written approval of the Local Planning Authority.

The decommissioning and site restoration scheme shall make provision for, the removal of the wind turbines and associated above ground infrastructure approved under this permission and details of the depth to which the wind turbine foundations will be removed.

The survey report shall be submitted to and approved in writing by the Local Planning Authority prior to the commencement of decommissioning and then implemented as approved. The report shall include ecological mitigation measures, as appropriate, based on the ecological assessment findings to be followed during decommissioning and for a period of 5 years from the completion of the decommissioning and restoration.

The approved scheme shall be fully implemented within 12 months of the expiry of this planning permission, unless otherwise agreed in writing by the Local Planning Authority.

Reason: To ensure that obsolete structures do not adversely affect the environment in the interests of the character, visual amenity and ecological value of the area and in accordance with LDP policies DM1 New Development and DM4 Low and Zero Carbon Energy.

- 5 In the event that a wind turbine hereby permitted fails to produce electricity supplied to the grid for a continuous period of 12 months, a scheme shall be submitted to the Local Planning Authority for written approval within 3 months of the end of the 12-month period, for the repair or removal of the turbine. The scheme shall include, as relevant, a programme of remedial works where repairs to the turbine are required. Where removal is necessary the scheme shall include a programme for removal of the turbine and associated above ground works approved under this permission, details of the depth to which the wind

turbine foundations will be removed and for site restoration measures following the removal of the relevant turbine. The scheme shall thereafter be implemented in accordance with the approved details and timetable.

Reason: In the interests of the character and appearance of the area and in accordance with LDP Policy DM1 New Development and DM4 Low and Zero Carbon Energy.

- 6 No development, including vegetation clearance, shall commence until a micro-siting protocol has been submitted to and approved in writing by the local planning authority. The protocol shall also accord with the joint agency guidance on 'Bats and Onshore Wind Turbines – Survey, Assessment and Mitigation' (Nature Scot et al, August 2021) and in particular paragraph 7.1.2 thereof with any turbine locations not in accordance with joint agency guidance requiring additional measures to safeguard bat populations to be agreed, submitted to and approved in writing by the Local Planning Authority.

The protocol shall set out a methodology for deciding on micro-siting of all elements of the development hereby approved to minimise the impact of the development. The protocol shall provide for the detailed layout of the turbines to be submitted to and approved in writing by the Local Planning Authority subject to all turbines, being located within 50m of the locations shown on the approved plans and internal wind farm tracks and other infrastructure within 100m.

The specific location of the turbines, access tracks and associated infrastructure relative to the recorded habitats shall be submitted to and approved in writing by the Local Planning Authority prior to the erection of the first turbine. The details shall clarify the extent of the permanent/temporary land take and/ or changes that would result in degradation and or loss of habitat.

A plan showing the position of the turbines and tracks established on the site shall be submitted to the Local Planning Authority within one month of the First Export Date.

Reason: To ensure that an approved turbine micro-siting plan is implemented, to protect bats and birds affected by the

development in accordance with LDP policy DM14 Biodiversity Protection and Enhancement.

- 7 All the wind turbines shall be of a three bladed configuration and not exceed an overall hub height of 105m and blade tip height of 180m. The turbines shall not display any prominent name logo, symbol, sign or advertisements on any external surface. The specification, colour and finish of the turbines shall be submitted to and approved by the local planning authority prior to their erection.

Reason: In the interests of visual amenity and in accordance with LDP policy DM1 New Development.

- 8 Prior to commencement of development details of:
 - a. the wind turbine foundations.
 - b. crane hardstanding/ pads.
 - c. internal site track cross sections.
 - d. cable trench details and locations and;
 - e. switch room and substation floor plans and elevations

shall be submitted to and approved in writing by the Local Planning Authority. The development shall proceed in full accordance with the approved plans and maintained as such thereafter, unless otherwise agreed in writing by the Local Planning Authority.

Reason: In the interests of the character and appearance of the area, the ecological and biodiversity value and to preserve archaeological features within the application site boundary. In accordance with LDP policies SP11 Protection and Enhancement of the Historic Environment, DM1 New Development and DM4 Low and Zero Carbon Energy.

- 9 No on-site development works shall be undertaken until:
 - a. an assessment of the capacity and impact on all structures along those parts of the highway network which shall be utilised during the construction of the development including bridges, culverts, retaining walls, embankments, and;
 - b. details of any improvement works required to such structures as a result of construction of the development have been submitted to and approved by the Local Planning Authority.

The required improvement works identified in the assessment shall be completed prior to the commencement of any Abnormal Indivisible Load (AIL) deliveries to the development site.

Reason: In the interests of the highway safety and free flow of traffic in accordance with LDP Policies DM1 New Development and DM4 Low and Zero Carbon Energy.

- 10 Condition surveys of all highway features along those parts of the highway network which shall be utilised during the construction of the development shall be undertaken prior to, during and on completion of the construction phase of the development. The survey reports shall be submitted to the Local Planning Authority within 28 days of the surveys being completed.

Reason: In the interests of the highway safety and free flow of traffic in accordance with LDP policies DM1 New Development and DM4 Low and Zero Carbon Energy.

- 11 Prior to the commencement of development works, a scheme to provide for the remediation of any incidental damage directly attributable to the development to the parts of the highway network which will be utilised during the construction of the development including street furniture, structures, highway verge and carriageway surfaces shall be submitted to and approved by the Local Planning Authority. The scheme shall be implemented as approved throughout the construction phase of the development.

Reason: In the interests of the highway safety and free flow of traffic in accordance with LDP policy DM1 New Development.

- 12 Abnormal Indivisible Loads (AILs) associated with the development shall be delivered strictly in accordance with a Traffic Management Plan (TMP) as shall be agreed with the relevant Highway Authority. The TMP shall be submitted to and approved in writing by the Local Planning Authority prior to the commencement of any works. The TMP shall include:
 - a. Proposals for transporting AILs from their point of entry to the Welsh trunk road network to the site that minimise any impact on the safety and free flow of trunk road traffic.

- b. Evidence of trial runs that mimic the movement of the worst case AILs along the access route where appropriate, at the discretion of the Highway Authority.
- c. Number and size of AILs, including loaded dimensions and weights.
- d. Number and composition of AIL convoys, including anticipated escort arrangements.
- e. Methodology for managing trunk road traffic during AIL deliveries, including identification of passing places and holding areas as necessary.
- f. Convoy contingency plans in the event of incidents or emergencies.
- g. Estimated convoy journey durations and timings along the route, including release of forecast traffic queues.
- h. Swept path analysis modelling the movement of the worst case AILs at all potential horizontal and vertical constraints along the access route where appropriate, at the discretion of the Highway Authority.
- i. Proposals for the temporary or permanent modification of any affected street furniture along the access route and details of how this would be managed.
- j. Plans for the reinstatement of any temporary works after completion of the construction phase.
- k. Land ownership must be clarified on all drawings showing proposed highway modifications. The developer shall be responsible for the acquisition and reinstatement of all third party land including re-instatement of boundary features.
- l. Proposals to liaise with all relevant stakeholders and members of the public regarding construction traffic and AIL movements.
- m. Consideration of the cumulative impact of other abnormal load generating schemes proposing to use all or part of the same access route.
- n. The appointment and role of a transport coordinator to administer the abnormal indivisible load delivery strategy.
- o. Means of control of timing of delivery of AIL movements.
- p. Temporary traffic diversions and traffic hold points.
- q. Details of banksmen and escorts for abnormal loads.
- r. Management and maintenance of layover areas, junctions, passing places, public rights of way and welfare facilities while AIL deliveries take place.
- s. Details of temporary signage and

- t. Details of any alterations to any works that are carried out to enable AIL movements.

AILs associated with the maintenance and decommissioning of the development shall leave the site strictly in accordance with a TMP as shall be agreed with the relevant highway authority. The TMP shall be submitted to and approved in writing by the local planning authority prior to the commencement of any removal, replacement of decommissioning works.

Reason: In the interests of the highway safety and free flow of traffic in accordance with LDP policy DP1 New Development.

- 13 Prior to the commencement of development details of any foul water drainage system for the site shall be submitted to and approved in writing by the Local Planning Authority. The drainage system shall be completed in accordance with the approved details prior to the first export date and shall be managed and maintained thereafter in accordance with the agreed management and maintenance plan.

Reason: In the interests of protecting the water quality, ecology, and amenity of the area in accordance with LDP Policy DM1 New Development and Policy DM4 Low and Zero Carbon Energy.

- 14 Prior to the commencement of development, a Construction Method Statement (CMS) to include a Construction Environmental Management Plan (CEMP) shall be submitted to an approved in writing by the local planning authority. The report shall include but not be limited to:
 - a. Site Health & Safety Plan.
 - b. Method Statements and Risk Assessments to include for environmental considerations, practical and physical measures, best available techniques and sensitive working practices, to avoid or reduce impacts during construction.
 - c. Sympathetic construction methodology with regard to weather and ground conditions.
 - d. Consent and Regulation Approvals e.g., discharge of planning conditions, Sustainable Drainage Systems (SuDS) Rights of Way etc.
 - e. Pre-construction Survey Work Undertaken.
 - f. Turbine Specification.
 - g. Construction Schedule.

- h. Temporary Construction Compound.
- i. Monitoring- Hydrological and Geotechnical, and Archaeology.
- j. Access Management Plan.
- k. Emergency Procedures.
- l. Responsible persons and lines of communication.
- m. Hours of working.
- n. The parking of vehicles of site operatives and visitors.
- o. Wheel washing.
- p. Storage of plant and materials during construction.
- q. The erection and maintenance of security hoarding.
- r. Site lighting.
- s. Material and waste management plan including storage and management of soil, fuel oil and chemical storage, recycling and disposal of waste.
- t. Details of Public Right of Way closure and signage and
- u. Pollution Prevention and control Plan.

The development shall proceed in full accordance with the approved details and shall be maintained as such throughout the construction and decommissioning periods.

Reason: To safeguard local amenity interests, the ecological value of the application site and wider area and to ensure that the impacts of the construction and decommissioning phases of the development are appropriately and adequately addressed where they are not protected by other regulatory processes in accordance with LDP Policy DM4 Low and Zero Carbon Energy and DM14 Biodiversity Protection and Enhancement.

- 15 No development, including site clearance, shall take place until an Ecological Management Plan to including monitoring and net benefits has been submitted to and approved in writing by the Local Planning Authority. The plan shall include (but not be limited to):
- a. A plan showing wildlife and habitat protection zones.
 - b. Species Protection Plan
 - c. Habitat Management Plan
 - d. Dry Heath and Acid Grassland restoration plan
 - e. Details of development and construction methods within wildlife and habitat protection zones and measures to be taken to minimise the impact of any works.
 - f. Timing and location of works relative to breeding and nesting birds.

- g. Details of phasing of construction.
- h. The times and locations during construction when specialist ecologists need to be present on site to oversee works.
- i. Details of a monitoring, recording and reporting regime for the site.
- j. A programme of annual bracken reduction.
- k. Methods to control grazing pressures.
- l. Details of net benefits and
- m. The role and responsibilities on site of an Ecological Clerk of Works (ECoW) or similarly competent person.

The Ecological Management Plan shall then be implemented in full accordance with the timings approved by the local planning authority and maintained throughout the operational period of the development.

Reason: In the interests of the ecological value of the application site and wider area and to ensure the protection of species listed under Section 7 of the Environment Act (Wales) 2016 as well as those listed on the Red List (Birds of Conservation Concern Wales) is confirmed prior to construction and where necessary remedial measures are implemented for their protection and in accordance with LDP Policy DM1 New Development, Policy DM4 Low and Zero Carbon Energy and DM14 Biodiversity Protection and Enhancement.

- 16 During the construction and operation of the development hereby approved, the results of monitoring reports as set out in the Ecological Management Plan, together with any mitigation and including a timetable for implementation shall be submitted to and approved in writing by the Local Planning Authority. Mitigation shall be carried out in accordance with the approved details, and within agreed timescales.

Reason: To ensure the protection of species listed under Section 7 of the Environment Act (Wales) 2016 as well as those listed on the Red List (Birds of Conservation Concern Wales) is ongoing through the construction and operational phases and where necessary remedial measures are implemented for their protection and in accordance with LDP Policy DM1 New Development, Policy DM4 Low and Zero Carbon Energy and DM14 Biodiversity Protection and Enhancement.

- 17 Before any foundations of any turbine are laid/set, a detailed scheme for the post-construction monitoring of bats and birds at all turbines shall be submitted to an approved in writing by the Local Planning Authority. The scheme shall build upon the principle set out in Appendix 6.7 of the applicant's submission and accord with the joint agent guidance 'Bats and Onshore Wind Turbines- Survey, Assessment and Mitigation' (Nature Scot et al, August 2021). It shall include (but not be limited to):
- a. Methods for data gathering and analysis.
 - b. Location of monitoring.
 - c. Timing and duration of monitoring.
 - d. Appropriate persons and equipment to carry out monitoring.
 - e. Timing and format for presenting and dissemination of monitoring results including submission to all data relevant databases.
 - f. Remedial measures to reduce any impacts identified through monitoring including in respect of turbine curtailment and
 - g. Contingency prescriptions that will be carried out in the event of failure to undertake required surveillance.

The scheme shall be implemented in accordance with the approved details upon commencement of operation of one or more of the turbines.

Reason: To ensure a scheme of post-construction bat and bird monitoring and mitigation is implemented to protect bats and birds affected by the development area in accordance with LDP Policy DM1 New Development, Policy DM4 Low and Zero Carbon Energy and DM14 Biodiversity Protection and Enhancement.

- 18 Before any foundations of any turbine are laid/set details of a turbine curtailment protocol shall be submitted to and approved in writing by the Local Planning Authority. The protocol shall build upon the outline proposals set out in Appendix 6.7 of the applicant's submission and be informed by the joint agency guidance 'Bats and Onshore Wind Turbines- Survey, Assessment and Mitigation' (Nature Scot et al, August 2021). It shall provide for the operation of any turbine to cease immediately in circumstances prescribed by the protocol and in any event whenever the monitoring carried out pursuant to condition 17 shows activity levels at any turbine to be moderate or above to medium and high-risk collision species, using the

Ecobat methodology, until a turbine curtailment programme has been submitted to and approved in writing by the local planning authority. When operation is re-commenced it shall accord with the approved turbine curtailment programme.

The protocol shall provide for the turbine curtailment programme to include provision for ongoing monitoring of the effects of the programme on bat and bird injuries, fatalities and activity at the site, and shall provide for the preparation of an adjusted curtailment programme to accord with the results recorded. Where monitoring shows that the impact on bats and birds is unacceptable, in the reasonable opinion of the Local Planning Authority, operation shall cease immediately until the adjustment curtailment programme has been submitted to and approved in writing by the Local Planning Authority. Upon recommencement of operation of the turbine, the turbine operation shall comply with the adjusted curtailment programme as approved.

The turbine blades on all turbines shall at all times be feathered to reduce rotation speeds to below 2 rpm while idling, in accordance with paragraph 7.1.3(a) of the joint agency guidance 'Bats and Onshore Wind Turbines – Survey, Assessment and Mitigation' (Nature Scot et al, August 2021).

Reason: To secure a scheme of post-construction turbine curtailment is implemented to protect bats and birds affected by the development in accordance with LDP Policy DM1 New Development, Policy DM4 Low and Zero Carbon Energy and DM14 Biodiversity Protection and Enhancement.

- 19 **This condition was recommended by Natural Resources Wales (NRW) for a recent DNS windfarm proposal. Further clarification should be sought from NRW as to whether the wording of this condition is appropriate.**

No development or phase of development, shall commence until a water quality monitoring plan for the protection of water quality in the watercourses has been submitted to and approved in writing by the Local Planning Authority. The water quality monitoring plan should include:

- a. Details of the monitoring methods including any baseline monitoring prior to start of construction.
- b. Timescales for construction.

- c. Timescales for submission of monitoring and interpretative reports to the Local Planning Authority during construction.
- d. Details of triggers for specific action and any necessary contingency actions, for example the need to stop work, introduction of drip trays, make use of spill kits and shut-off valves.

The water quality monitoring plan shall be carried out in accordance with the approved details during the site preparation and construction phases of the development.

Reason: A construction water quality monitoring plan should be submitted to ensure necessary monitoring measures are approved prior to commencement of development or phase of development and implemented to manage any potential adverse impacts of construction on water quality in watercourses in accordance with LDP Policy DM1 New Development and Policy DM4 Low and Zero Carbon Energy.

- 20 **This condition was recommended by Natural Resources Wales (NRW) for a recent DNS windfarm proposal. Further clarification should be sought from NRW as to whether the wording of this condition is appropriate.**

Prior to the beneficial operation of the development or phase of development, a long-term monitoring plan for water quality (watercourses and ground water within the site) shall be submitted and approved in writing by the Local Planning Authority. The long-term monitoring plan should include:

- a. Details of the methods and triggers for action to be undertaken.
- b. Timescales for the long-term monitoring and curtailment mechanisms (e.g. a scheme of monitoring for 3 years unless the monitoring reports indicate that subsequent monitoring is or is not required).
- c. Timescales for submission of monitoring reports.
- d. Details of any necessary contingency and remedial actions and timescales for actions.
- e. Details confirming that the contingency and remedial actions have been carried out.
- f. The monitoring plan shall be carried out in accordance with the approved details, within the agreed timescales.

Reason: A long term water quality monitoring plan should be submitted prior to beneficial operation, to ensure necessary monitoring measures are approved to manage any potential adverse impacts as a result of development on water quality. In accordance with LDP Policy DM1 New Development.

- 21 No development shall take place until a phase 2 geo-technical site investigation has been carried out in accordance with a methodology first submitted to and approved in writing by the Local Planning Authority and which shall include the geographical scope of the site investigation. The results of the site investigation shall be submitted to the Local Planning Authority before any development begins. If any land instability issues are found during the site investigation, a report specifying the measures to be taken to remediate the site to render it suitable for the development shall be submitted to and approved in writing by the local planning authority. Remedial measures shall be carried out prior to the first beneficial use of the development in accordance with the approved details and retained in perpetuity.

Reason: In the interests of health and safety and to ensure the development does not cause or exacerbate any land stability issues on the site or wider area in accordance with LDP Policy DM1 New Development.

- 22 If during the course of development, any unexpected land instability issues are found within the geographical scope of the site investigation which were not identified in the site investigation referred to in condition 21, additional measures for their remediation in the form of a remediation scheme shall be submitted to and approved in writing by the Local Planning Authority. The remediation of the site shall incorporate the approved additional measures which shall be retained in perpetuity.

Reason: In the interests of the health and safety and to ensure the development does not cause or exacerbate any land stability issues on the site or wider area in accordance with LDP Policy DM1 New Development.

- 23 Prior to the beneficial operation of the development or phase of development, a verification plan demonstrating completion of works set out in the approved remediation strategy and the effectiveness of the remediation required by condition 21, shall be submitted to and approved in writing by the Local Planning Authority. The report shall include results of monitoring carried out in accordance with the approved verification plan to demonstrate that the site remediation criteria have been met. It shall also include a long-term monitoring and maintenance plan for longer-term monitoring of land stability, maintenance and arrangements for contingency action, as identified in the verification plan. The long-term monitoring and maintenance plan shall be carried out in accordance with the approved details.

Reason: To ensure the methods identified in the verification plan have been implemented and completed and the risk associated with the site has been remediated prior to beneficial operation, and to ensure that the development can be carried out safely without unacceptable risks to workers, neighbours and other offsite receptors. In accordance with LDP Policy DM1 New Development.

- 24 If during the course of development, any unexpected land contamination issues are found within the geographical scope of the site investigation, additional measures for their remediation in the form of a remediation scheme shall be submitted to and approved in writing by the Local Planning Authority. The remediation of the site shall incorporate the approved additional measures which shall be retained in perpetuity.

Reason: In the interests of the health and safety and to ensure the development does not cause or exacerbate any contamination of the wider area, in accordance with LDP Policy DM1 New Development.

- 25 Prior to the beneficial operation of the development or phase of development a verification plan demonstrating completion of works set out in the approved remediation strategy and the effectiveness of the remediation required by condition 24, shall be submitted to and approved in writing by the Local Planning Authority. The report shall include results of sampling and monitoring carried out in accordance with the approved verification plan to demonstrate that the site remediation criteria

have been met. It shall also include a long-term monitoring and maintenance plan for longer-term monitoring of pollutant linkages, maintenance and arrangements for contingency action, as identified in the verification plan. The long-term monitoring and maintenance plan shall be carried out in accordance with the approved details.

Reason: To ensure the methods identified in the verification plan have been implemented and completed and the risk associated with the contamination at the site has been remediated prior to beneficial operation, to prevent both future users of the land and neighbouring land are minimised, together with those to controlled waters, property and ecological systems, and to ensure that the development can be carried out safely without unacceptable risks to workers, neighbours and other offsite receptors. In accordance with LDP Policy DM1 New Development.

- 26 No development shall take place until the applicant, or their agents or successors in title, has secured agreement for a written scheme of historic environment mitigation which has been submitted by the applicant and approved by the Local Planning Authority. Thereafter, the programme of work will be fully carried out in accordance with the requirements and standards of the written scheme.

Reason: To identify and record any features of archaeological interest discovered during the works and to mitigate the impact of the works on the archaeological resource. In accordance with LDP Policy DM4 Low and Zero Carbon Energy and SP11 Protection and Enhancement of the Historic Environment.

- 27 Prior to the commencement of development details of a climatic detection system and de-icing mechanism shall be submitted to and approved in writing by the local planning authority. The development shall only be operated in accordance with the approved details unless otherwise approved in writing by the Local Planning Authority.

Reason: To prevent ice throw, in the interests of public safety in compliance with LDP policy DM1 New Development.

- 28 Prior to the commencement of development details of mechanism and or control module to reduce shadow flicker shall be submitted to and approved in writing by the Local Planning Authority. The development shall only be operated in accordance with the approved details.

Reason: In the interests of residential amenity. In accordance with LDP Policy DM4 Low and Zero Carbon Energy.

- 29 Prior to the commencement of development, details of a mechanisms and or control module to reduce noise immissions for NML 3 and NML 5 shall be submitted to and approved in writing by the local planning authority. The development shall only be operated in accordance with the approved details.

Reason: In the interests of residential amenity. In accordance with LDP Policy DM4 Low and Zero Carbon Energy.

- 30 The rating level of noise imissions from the combined effects of the wind turbines (including the application of any tonal penalty) when determined in accordance with the attached Guidance Notes (Appendix B), shall not exceed the values for the relevant integer wind speed set out in Appendix A, at any dwelling which is lawfully existing or has planning permission at the date of this permission.

- a. The wind farm operator shall continuously log power production, wind speed and wind direction, all in accordance with Guidance Note 1(d) (Appendix B). These data shall be retained for a period of not less than 24 months. The wind farm operator shall provide this information in the format set out in Guidance Note 1(e) (Appendix B) to the Local Planning Authority on its request, within 14 days of receipt in writing of such a request.
- b. No electricity shall be exported until the wind farm operator has submitted to the Local Planning Authority for written approval a list of proposed independent consultants who may undertake compliance measurements in accordance with this condition. Amendments to the list of approved consultants shall be made only with the prior written approval of the Local Planning Authority.

- c. Within 21 days from receipt of a written request from the Local Planning Authority following a verified complaint to it from an occupant of a dwelling alleging noise disturbance at that dwelling, the wind farm operator shall, at its expense, employ a consultant approved by the Local Planning Authority to assess the level of noise imissions from the wind farm at the complainant's property in accordance with the procedures described in the attached Guidance Notes (Appendix B). The written request from the Local Planning Authority shall set out at least the date, time and location that the complaint relates to and any identified atmospheric conditions, including wind direction, and include a statement as to whether, in the opinion of the Local Planning Authority, the noise giving rise to the complaint contains or is likely to contain a tonal component. The assessment of the rating level of noise imissions shall be undertaken in accordance with an assessment protocol that shall previously have been submitted to and approved in writing by the Local Planning Authority. The protocol shall include the proposed measurement location identified in accordance with the Guidance Notes (Appendix B) where measurements for compliance checking purposes shall be undertaken, whether noise giving rise to the complaint contains or is likely to contain a tonal component, and also
- d. The range of meteorological and operational conditions (which shall include the range of wind speeds, wind directions, power generation and times of day) to determine the assessment of rating level of noise imissions. The proposed range of conditions shall be those which prevailed during times when the complainant alleges there was disturbance due to noise, having regard to the written request of the Local Planning Authority under paragraph (c), and such others as the independent consultant considers likely to result in a breach of the noise limits.
- e. Where a dwelling to which a complaint is related is not listed in the table (Appendix A) attached to these conditions, the wind farm operator shall submit to the Local Planning Authority for written approval proposed noise limits selected from those listed in the Table to be adopted at the complainant's dwelling for compliance checking purposes. The proposed noise limits are to be those limits selected from

the Tables specified for a listed location which the independent consultant considers as being likely to experience the most similar background noise environment to that experienced at the complainant's dwelling. The rating level of noise imissions resulting from the combined effects of the wind turbines when determined in accordance with the attached Guidance Notes (Appendix B) shall not exceed the noise limits approved in writing by the Local Planning Authority for the complainant's dwelling.

- f. The wind farm operator shall provide to the Local Planning Authority the independent consultant's assessment of the rating level of noise imissions undertaken in accordance with the Guidance Notes (Appendix B) within 2 months of the date of the written request of the Local Planning Authority for compliance measurements to be made under paragraph (c) unless the time limit is extended in writing by the Local Planning Authority. The assessment shall include all data collected for the purposes of undertaking the compliance measurements, such data to be provided in the format set out in Guidance Note 1(e) (Appendix B). The instrumentation used to undertake the measurements shall be calibrated in accordance with Guidance Note 1(a) (Appendix B) and certificates of calibration shall be submitted to the Local Planning Authority with the independent consultant's assessment of the rating level of noise imissions.
- g. Where a further assessment of the rating level of noise imissions from the wind farm is required pursuant to Guidance Note 4(c) (Appendix B), the wind farm operator shall submit a copy of the further assessment within 21 days of submission of the independent consultant's assessment pursuant to paragraph (d) above unless the time limit has been extended in writing by the Local Planning Authority.

Reason: In the interests of the amenity of the area. In accordance with LDP Policy DM1 New Development and DM4 Low and Zero Carbon Energy.

- 31 Should the wind turbines be identified as operating above the parameters specified in the condition 30 and Appendix A, the wind turbines will be modified, limited, or shut down as required to ensure compliance with this condition. These measures shall

be applied until such time as maintenance or repair is undertaken sufficient to reduce the absolute noise level of the operating turbines to within the parameters specified.

Reason: In the interests of the amenity of the area. In the interests of the amenity of the area. In accordance with LDP Policy DM1 New Development and DM4 Low and Zero Carbon Energy.

- 32 Once the Local Planning Authority has received the independent consultant's noise assessment required by condition 30 f , including all noise measurements and any audio recordings, where the Local Planning Authority is satisfied of an established breach of the noise limits set out in Tables appended to condition 30, upon notification by the Local Planning Authority in writing to the wind farm operator of the said breach the wind farm operator shall within 21 days propose a scheme of remediation for the written approval of the Local Planning Authority. The scheme shall be designed to mitigate the breach and to prevent its future recurrence and shall specify the timescales for implementation. The scheme shall be implemented as reasonably approved by the Local Planning Authority and according to the timescales within it. The scheme as implemented shall be retained thereafter unless otherwise agreed in writing with the Local Planning Authority.

Reason: In the interests of the amenity of the area. In the interests of the amenity of the area. In accordance with LDP Policy DM1 New Development and DM4 Low and Zero Carbon Energy.

- 33 The turbine model shall not exceed the parameters hereby approved (blade tip height 180m). In the event that the proposed turbines model for installation differs from the machine utilised in ES Chapter 12 Noise, a revised noise impact assessment report shall be submitted, demonstrating that predicted noise levels indicate likely compliance with the noise condition levels stated in Appendix A prior to the erection of the first wind turbine. Should the revised assessment show that the limits stated in Tables 1 and 2 of Appendix A be exceeded, a scheme of mitigation shall be submitted to and approved in writing by the relevant Local Planning Authority, demonstrating how compliance with the limits stated in Tables 1 and 2 of Appendix A will be achieved. The

scheme of mitigation shall be implemented in full prior to the turbines being brought into beneficial use and shall be retained for the lifetime of the development.

Reason: In the interests of visual and residential amenity by ensuring an acceptable noise level for the occupants of noise sensitive properties. In the interests of the amenity of the area. In accordance with LDP Policy DM1 New Development and DM4 Low and Zero Carbon Energy.

- 34 **The following condition was suggested as part of recent DNS windfarm proposal. Consideration should be given to the response of Cardiff Airport.**

No turbines shall be erected until a scheme for the mitigation of impact of the wind turbines on the operation of Cardiff Airport primary surveillance radar (the “radar mitigation scheme”) has been submitted to and approved in writing by the Local Planning Authority. The development shall thereafter be operated fully in accordance with the approved radar mitigation scheme throughout the operational life of the development.

Reason: To ensure no unacceptable impacts on radar operations in accordance with Policy 18 (8) Future Wales.

Appendix A – Noise limits. Conditions 30, 31 and 32.

Location	Table 1 – Daytime - Noise limits expressed in dB LA90,10-minute as a function of the measured wind speed (m/s) at 10 meter height as determined within the site averaged over 10 minute periods.										
			Measured wind speed at 10 m height, m/s								
	Easting	Northing	4	5	6	7	8	9	10	11	12
NML 1 - 18b High Street	316657	208524	39	39.5	40.1	41	41.9	42.9	44	45	45.9
NML 2 – 28 York Avenue	316801	207889	40.4	40.6	41	41.7	42.5	43.3	44.3	45.3	46.2
NML 3 – The Bush Inn	317053	206785	43.6	43.9	44.3	45	45.7	46.6	47.5	48.4	49.3
NML 4 – 22 Coed-y-Garn	317776	206476	45.1	45.6	46.4	47.4	48.6	49.8	51.1	52.3	53.3
NML 5 – Troed-Rhiwr-Clawdd farm	317343	206189	37.7	38.4	39.4	40.7	42.2	43.8	45.4	46.9	48.4
NML 6 – Pochen Houses	316137	204704	38.1	39.5	41.2	43.2	45.4	47.6	49.7	51.7	53.5
NML 7 – 2 Railway Cottages	315679	205946	39.1	40.2	41.4	42.7	44	45.4	46.7	47.9	48.9
NML 8 – 59 Troedrhiwgw air	315699	206907	44.3	44.8	45.7	46.7	47.9	49.1	50.4	51.7	52.9
NML 9 – 2 Cooper Beech Drive	315491	207149	36.8	37.9	39.4	41	42.8	44.6	46.4	48.2	49.9
NML 10 – 27 St James Park	315235	207963	36.8	38.1	39.6	41.4	43.4	45.4	47.5	49.4	51.2

Location	Table 2 – Nighttime - Noise limits expressed in dB LA90,10-minute as a function of the measured wind speed (m/s) at 10 meter height as determined within the site averaged over 10 minute periods.										
			Measured wind speed at 10 m height, m/s								
	Easting	Northing	4	5	6	7	8	9	10	11	12
NML 1 - 18b High Street	316657	208524	43	43	43	43	43	43	43	43	43.8
NML 2 – 28 York Avenue	316801	207889	43	43	43	43	43	43	43.5	44.9	46.1
NML 3 – The Bush Inn	317053	206785	43	43	43	43	43	43	44	45.4	46.8
NML 4 – 22 Coed-y-Garn	317776	206476	43	43	44.1	45.3	46.7	48.1	49.4	50.7	51.8
NML 5 – Troed-Rhiwr-Clawdd farm	317343	206189	43	43	43	43	43	43	43	44.3	46.4
NML 6 – Pochen Houses	316137	204704	43	43	43	43	43	45	47.7	50.4	52.9
NML 7 – 2 Railway Cottages	315679	205946	43	43	43	43	43	43	44.7	46.3	47.7
NML 8 – 59 Troedrhiwg wair	315699	206907	43	43	43	43.7	45.3	47.2	49.2	51.2	53.1
NML 9 – 2 Cooper Beech Drive	315491	207149	43	43	43	43	43	43	44	46.5	48.8
NML 10 – 27 St James Park	315235	207963	43	43	43	43	43	43	44.4	47	49.7

Appendix B – Noise Guidance Notes. Condition 30.

Guidance Notes for Noise Conditions

These notes are to be read with and form part of the noise condition. They further explain the condition and specify the methods to be employed in the assessment of complaints about noise immissions from the wind farm. The rating level at each integer wind speed is the arithmetic sum of the wind farm noise level as determined from the best-fit curve described in Guidance Note 2 of these Guidance Notes and any tonal penalty applied in accordance with Guidance Note 3. Reference to ETSU-R-97 refers to the publication entitled “The Assessment and Rating of Noise from Wind Farms” (1997) published by the Energy Technology Support Unit (ETSU) for the Department of Trade and Industry (DTI).

Guidance Note 1

(a) Values of the LA90,10 minute noise statistic should be measured at the complainant’s property, using a sound level meter of EN 60651/BS EN 60804 Type 1, or BS EN 61672 Class 1 quality (or the equivalent UK adopted standard in force at the time of the measurements) set to measure using the fast time weighted response as specified in BS EN 60651/BS EN 60804 or BS EN 61672-1 (or the equivalent UK adopted standard in force at the time of the measurements). This should be calibrated in accordance with the procedure specified in BS 4142: 1997 (or the equivalent UK adopted standard in force at the time of the measurements). Measurements shall be undertaken in such a manner to enable a tonal penalty to be applied in accordance with Guidance Note 3.

(b) The microphone should be mounted at 1.2 – 1.5 metres above ground level, fitted with a two-layer windshield or suitable equivalent approved in writing by the Local Planning Authority, and placed outside the complainant’s dwelling. Measurements should be made in “free field” conditions. To achieve this, the microphone should be placed at least 3.5 metres away from the building facade or any reflecting surface except the ground at the approved measurement location. In the event that the consent of the complainant for access to his or her property to undertake compliance measurements is withheld, the wind farm operator shall submit for the written approval of the Local Planning Authority details of the proposed alternative representative measurement location prior to the commencement of measurements and the measurements shall be undertaken at the approved alternative representative measurement location.

(c) The LA90,10 minute measurements should be synchronised with measurements of the 10-minute arithmetic mean wind and operational data logged in accordance with Guidance Note 1(d), including the power generation data from the turbine control systems of the wind farm.

(d) To enable compliance with the conditions to be evaluated, the wind farm operator shall continuously log arithmetic mean wind speed in metres per second and wind direction in degrees from north at hub height for each turbine and arithmetic mean power generated by each turbine, all in successive 10-minute periods. Unless an alternative procedure is previously agreed in writing with the Planning Authority, this hub height wind speed, averaged across all operating wind turbines, shall be used as

the basis for the analysis. All 10 minute arithmetic average mean wind speed data measured at hub height shall be 'standardised' to a reference height of 10 metres as described in ETSU-R-97 at page 120 using a reference roughness length of 0.05 metres . It is this standardised 10 metre height wind speed data, which is correlated with the noise measurements determined as valid in accordance with Guidance Note 2, such correlation to be undertaken in the manner described in Guidance Note 2. All 10-minute periods shall commence on the hour and in 10- minute increments thereafter.

(e) Data provided to the Local Planning Authority in accordance with the noise condition shall be provided in comma separated values in electronic format.

(f) A data logging rain gauge shall be installed in the course of the assessment of the levels of noise immissions. The gauge shall record over successive 10-minute periods synchronised with the periods of data recorded in accordance with Note 1(d).

Guidance Note 2

(a) The noise measurements shall be made so as to provide not less than 20 valid data points as defined in Guidance Note 2 (b).

(b) Valid data points are those measured in the conditions specified in the agreed written protocol under paragraph (d) of the noise condition, but excluding any periods of rainfall measured in the vicinity of the sound level meter. Rainfall shall be assessed by use of a rain gauge that shall log the occurrence of rainfall in each 10 minute period concurrent with the measurement periods set out in Guidance Note 1. In specifying such conditions the Local Planning Authority shall have regard to those conditions which prevailed during times when the complainant alleges there was disturbance due to noise or which are considered likely to result in a breach of the limits.

(c) For those data points considered valid in accordance with Guidance Note 2(b), values of the LA90,10 minute noise measurements and corresponding values of the 10- minute wind speed, as derived from the standardised ten metre height wind speed averaged across all operating wind turbines using the procedure specified in Guidance Note 1(d), shall be plotted on an XY chart with noise level on the Y-axis and the standardised mean wind speed on the X-axis. A least squares, "best fit" curve of an order deemed appropriate by the independent consultant (but which may not be higher than a fourth order) should be fitted to the data points and define the wind farm noise level at each integer speed.

Guidance Note 3

(a) Where, in accordance with the approved assessment protocol under paragraph (d) of the noise condition, noise immissions at the location or locations where compliance measurements are being undertaken contain or are likely to contain a tonal component, a tonal penalty is to be calculated and applied using the following rating procedure.

(b) For each 10 minute interval for which LA90,10 minute data have been determined as valid in accordance with Guidance Note 2 a tonal assessment shall be performed on noise immissions during 2 minutes of each 10 minute period. The 2 minute periods should be spaced at 10 minute intervals provided that uninterrupted uncorrupted data

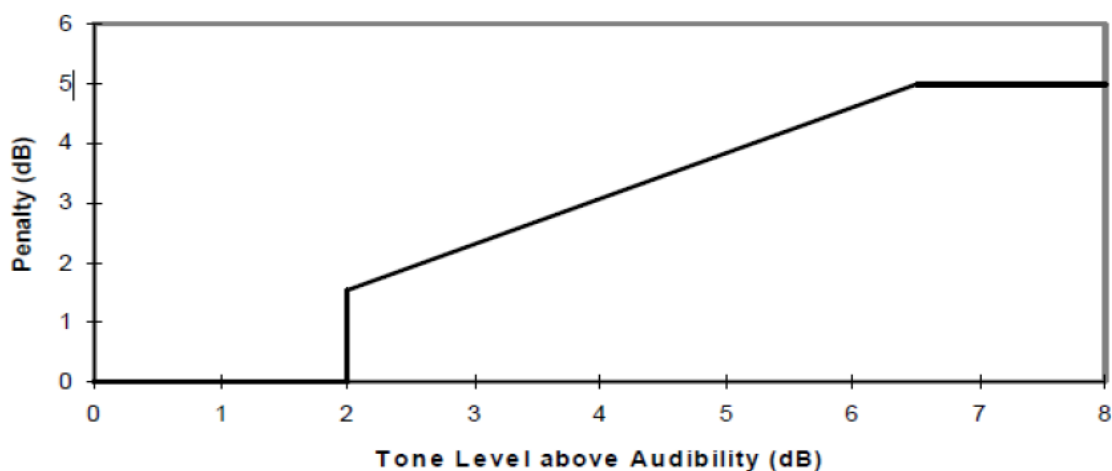
are available (“the standard procedure”). Where uncorrupted data are not available, the first available uninterrupted clean 2 minute period out of the affected overall 10 minute period shall be selected. Any such deviations from the standard procedure, as described in Section 2.1 on pages 104-109 of ETSU-R-97, shall be reported.

(c) For each of the 2 minute samples the tone level above or below audibility shall be calculated by comparison with the audibility criterion given in Section 2.1 on pages 104-109 of ETSU-R-97.

(d) The tone level above audibility shall be plotted against wind speed for each of the 2 minute samples. Samples for which the tones were below the audibility criterion or no tone was identified, a value of zero audibility shall be used.

(e) A least squares “best fit” linear regression line shall then be performed to establish the average tone level above audibility for each integer wind speed derived from the value of the “best fit” line at each integer wind speed. If there is no apparent trend with wind speed then a simple arithmetic mean shall be used. This process shall be repeated for each integer wind speed for which there is an assessment of overall levels in Guidance Note 2.

(f) The tonal penalty is derived from the margin above audibility of the tone according to the figure below.



Guidance Note 4

(a) If a tonal penalty is to be applied in accordance with Guidance Note 3 the rating level of the turbine noise at each wind speed is the arithmetic sum of the measured noise level as determined from the best fit curve described in Guidance Note 2 and the penalty for tonal noise as derived in accordance with Guidance Note 3 at each integer wind speed within the range specified by the Local Planning Authority in its written protocol under paragraph (d) of the noise condition.

(b) If no tonal penalty is to be applied then the rating level of the turbine noise at each wind speed is equal to the measured noise level as determined from the best fit curve described in Guidance Note 2.

(c) In the event that the rating level is above the limit(s) set out in the Tables attached to the noise conditions or the noise limits for a complainant's dwelling approved in accordance with paragraph (e) of the noise condition, the independent consultant shall undertake a further assessment of the rating level to correct for background noise so that the rating level relates to wind turbine noise immission only.

(d) The wind farm operator shall ensure that all the wind turbines in the development are turned off for such period as the independent consultant requires to undertake the further assessment. The further assessment shall be undertaken in accordance with the following steps:

(e). Repeating the steps in Guidance Note 2, with the wind farm switched off, and determining the background noise (L_3) at each integer wind speed within the range requested by the Local Planning Authority in its written request under paragraph (c) and the approved protocol under paragraph (d) of the noise condition.

(f) The wind farm noise (L_1) at this speed shall then be calculated as follows where L_2 is the measured level with turbines running but without the addition of any tonal penalty:

$$L_1 = 10 \log \left[10^{L_2/10} - 10^{L_3/10} \right]$$

(g) The rating level shall be re-calculated by adding arithmetically the tonal penalty (if any is applied in accordance with Note 3) to the derived wind farm noise L_1 at that integer wind speed.

(h) If the rating level after adjustment for background noise contribution and adjustment for tonal penalty (if required in accordance with note 3 above) at any integer wind speed lies at or below the values set out in the Tables attached to the conditions or at or below the noise limits approved by the Local Planning Authority for a complainant's dwelling in accordance with paragraph (e) of the noise condition then no further action is necessary. If the rating level at any integer wind speed exceeds the values set out in the Tables attached to the conditions or the noise limits approved by the Local Planning Authority for a complainant's dwelling in accordance with paragraph (e) of the noise condition then the development fails to comply with the conditions.