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Planning & Environment Decisions Wales

Adroddiad	Report
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Arolygydd a benodir gan Weinidogion Cymru	**an Inspector appointed by the Welsh Ministers**
Dyddiad: 25.10.2021	**Date: 25.10.2021**

TOWN AND COUNTRY PLANNING ACT 1990

SECTION 62D

APPLICATION BY CHRIS JACKSON OF RENEWABLE ENERGY SYSTEMS LIMITED

LAND AT UPPER OGMORE, BETWEEN ABERGWYNFI, BLAENGARW, AND NANT-Y-MOEL, BRIDGEND AND NEATH PORT TALBOT

COMMONS ACT 2006

SECTION 16

APPLICATION BY THE DUCHY OF LANCASTER, JONATHAN PUGH AND

BRIDGEND COUNTY BOROUGH COUNCIL

LAND AT MYNYDD LLANGEINOR COMMON, GARW VALLEY AND OGMORE VALLEY, BRIDGEND

Cyf ffeil/File ref: DNS/3213662_DNS and DNS/3213662_S16COMMON

List of Abbreviations:

ASIDOHL	Assessment of the Significance of the Impact of Development on Historic Landscapes
BBNP	Brecon Beacons National Park
BEMP	Biodiversity Enhancement Management Plan
Bridgend CBC	Bridgend County Borough Council
CEMP	Construction Environment Management Plan
CIEEM	Chartered Institute for Ecology and Environmental Management
CMS	Construction Method Statement
CROW Act	Countryside and Rights of Way Act 2005
CTMP	Construction Traffic Management Plan
DNS	Development of National Significance
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
ES	Environmental Statement
ESF	Energy Storage Facility
Future Wales	Future Wales: *The National Pla*n 2040 (2021)
Ha	Hectares
LCA	Landscape Character Area
LDP	Local Development Plan
LEMP	Landscape Environmental Management Plan
LIR	Local Impact Report
LPA	Local Planning Authority
LVIA	Landscape and Visual Impact Assessment
Neath Port Talbot CBC	Neath Port Talbot County Borough Council
NRW	Natural Resources Wales
OSS	Open Spaces Society

The Inspectorate	Planning Inspectorate
PAC Report	Pre-Application Consultation Report
PPW	Planning Policy Wales

SAC	Special Area of Conservation
SAM	Scheduled Ancient Monument
SINC	Site of Importance for Nature Conservation
SLA	Special Landscape Area
SoCG	Statement of Common Ground
SPA	Special Protection Area
SPG	Supplementary Planning Guidance
SSSI	Site of Special Scientific Interest
S106	Section 106 Agreement
TAN	Technical Advice Note
The 1990 Act	The Town and Country Planning Act 1990 (as amended)
The 2015 Act	The Planning (Wales) Act 2015
The Commons Act	The Commons Act 2006
The DNS Procedure Order' or '2016 Order	The Developments of National Significance (Procedure) (Wales) Order 2016
The DNS Regulations	The Developments of National Significance (Wales) Regulations 2016
The EIA Regulations	The Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017
The Habitats Regulations	The Conservation of Habitats and Species Regulations 2010
The Procedure Order	The Developments of National Significance (Procedure) (Wales) Order 2016
UK	United Kingdom
WG	Welsh Government

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Application A - DNS Application Ref: APP/DNS/3213662_DNS[1]

Site address: Land at Upper Ogmore, between Abergwynfi , Blaengarw and Nant-y-Moel, Bridgend and Neath Port Talbot

- The application, 2 November 2020, was made under section 62D of the Town and Country Planning Act 1990, as amended by the Planning (Wales) Act 2015.
- The applicant is Chris Jackson of Renewable Energy Systems Limited.
- The application was confirmed as valid on 10 December 2020.
- Site visits were held on 15 April 2021 and 29 September 2021 and hearings held on 23, 24 and 29 June 2021.
- The proposed development comprises seven horizontal axis wind turbines (four with a maximum tip height of 149.9m and three with a maximum tip height of 130m), improved site entrance, new access tracks, crane hardstanding, control building and substation compound, electricity transformers, underground cabling, energy storage containers, drainage works and upgrades to a forestry track and associated felling.

Summary of Recommendation: That planning permission be granted subject to conditions.

Application B – Commons Application Ref: DNS/3213662_S16COMMON[2]

Site address: Mynydd Llangeinor Common, Garw Valley and Ogmore Valley, Bridgend

- The application was made under Section 16 of the Commons Act 2006 on 31 October 2020.
- The application was made by the Duchy of Lancaster, Jonathan Pugh and Bridgend County Borough Council.
- Site visits were held on 15 April 2021 and 29 September 2021 and hearings held on 23, 24 and 29 June 2021.
- The application is for the deregistration and exchange of land at Mynydd Llangeinor Common, Garw Valley and Ogmore Valley, Bridgend.

Summary of Recommendation: That the application be granted and a de-registration and exchange order be made subject to planning permission being granted for DNS Application Ref: APP/DNS/3213662_DNS.

Preliminary Matters

1. As set out above there are two applications at the above address, one submitted under section 62D of the Town and Country Planning Act 1990[3] and one under Section 62F of the Town and Country Planning Act 1990 (as amended by the Planning (Wales) Act 2015) in relation to the application made under Section 16 of the Commons Act 2006[4].
   Whilst the applications have both been submitted under Reference: DNS/3213662, I have attributed the application for a Development of National Significance (DNS) a suffix of _DNS and the application made under Section 16 of the Commons Act 2006 a suffix of _S16COMMON. To avoid duplication, I shall consider both schemes together in this Report, albeit with separate recommendations.

2. The details of the applicants in respect of application Ref:DNS/3213662_S16COMMON were amended through the application process to include Bridgend County Borough Council

[1] Hereinafter referred as the DNS Application
[2] Hereinafter referred as the Common Land Application
[3] Ref: DNS/3213662_DNS otherwise referred as the DNS application
[4] Ref: DNS/3213662_S16COMMON otherwise referred as the Common Land Application which is to be considered under Section 62F of the Town and Country Planning Act 1990 – "Developments of national significance: secondary consents".

(hereinafter referred as Bridgend CBC). This was necessary to reflect the fact that the land to be deregistered is crossed by a publicly maintainable public right of way. I am satisfied that there is no prejudice in this respect.

3. The then Planning Inspectorate wrote to the applicant with a Notice of Acceptance under Article 15(2) of the Developments of National Significance (Procedure) (Wales) Order 2016 (the Procedure Order) on 10 December 2020[5]. The submitted DNS application was subject to appropriate pre-application consultation and was accompanied by a Pre-Application Consultation Report (PAC Report). Upon confirmation of the validity of the application, the Inspectorate undertook the specified consultation and publicity measures as required by the Procedure Order. Written representations were received in response to the applications from two Local Planning Authorities (LPAs), statutory bodies and interested parties. These submissions included Local Impact Reports (LIRs) from Bridgend and Neath Port Talbot County Borough Councils (Bridgend CBC and Neath Port Talbot CBC).

4. Based on an assessment of the pre-application documentation, the application submission documents and the representations received, including the LIRs, it was determined that the application should proceed via the hearings procedure. This was confirmed in accordance with the requirements of Section 319B of the 1990 Act via a letter dated 11 February 2021.

5. Notwithstanding such a determination, the Inspectorate received a proposal to vary the DNS application under Article 27 of the DNS Procedure Order on 10 February 2021. The application to vary the DNS application followed an acknowledgement from the applicant that an error occurred in the original submission. Specifically, the submitted documents indicated that part of the land located within the application boundary was within the administrative area of Rhondda Cynon Taf County Borough Council, despite the fact that the notification of intention to submit a DNS and the subsequent DNS application only specified Bridgend County Borough Council and Neath Port Talbot County Borough Council as relevant Local Planning Authorities (LPAs).

6. The submitted variation proposed to omit the land within Rhondda Cynon Taf from the application boundary, thus regularising the error on the originally submitted application. It also proposed amendments to the site address and description of development outlined on the original application form. The implications of such a variation were fully considered within the timescales prescribed by the Procedure Order and I found that the changes to the site address and description of development did not fundamentally alter the scheme. Rather, they simply provide a more concise and practical description of the proposed development. I also found that the nature of the development would not be substantially altered by the proposed amendments to the site boundary. As a consequence, the proposed variation was accepted under Article 27(5) of the Order.

7. Further information was also sought from the applicant under Regulation 15 of the DNS Regulations[6]. This information related to matters arising from the LIRs and the then imminent publication of Future Wales: *The National Plan to 2040*. Such information was requested in conjunction with the 28 day period prescribed for the applicant to submit any further details in respect of the variation of the application[7]. A 5-week public consultation exercise was subsequently held between 31 March 2021 and 4 May 2021[8]. As part of that consultation, the Inspectorate sought representations in respect of: *the variation of the DNS application; and the additional representations submitted by the applicant in response to the request for further*

[5] Document 1: Planning Inspectorate - Notice of Acceptance, 10 December 20
[6] Document 2: Planning Inspectorate – Letter, dated 17 February 2021
[7] Under Article 27(7) of the 2016 Order
[8] Documents 2 & 3: Planning Inspectorate – Letter, dated 17 February 2021; and
Planning Inspectorate – Letter, dated 31 March 2021 (respectively)

information under Regulation 15 of the DNS Regulations. Revised LIRs were received in response to that consultation exercise, along with written submissions from Cadw, NRW and BT Group.

8. In light of the provisions of Article 27(7), the request for further information under Regulation 15 and the need for the aforementioned 5-week consultation exercise, the Inspectorate decided that it would be appropriate to suspend the determination period for 11 weeks. This was confirmed by a letter dated 17 February 2021. The determination period resumed on 5 May 2021.

9. The full details of the hearings, including detailed '*Matters and Issues Agendas*', were sent out via a letter dated 26 May 2021. All participants were invited to submit Hearing Statements at least two weeks prior to the respective hearings. Hearings were held in respect of the following matters: *Planning Policy Framework; Landscape and Visual Impact; Noise Impact; Ecology/ Biodiversity; Miscellaneous Matters; Common Land (Secondary Consent Application)*; and *Planning Conditions/ Obligations*. All other matters were addressed via means of written representations. As set out above, the Hearings took place on 23, 24 and 29 June 2021. An unaccompanied site visit took place on 15 April 2021, with a follow up unaccompanied site visit undertaken on 29 September 2021, after the close of the Hearings.

10. A number of '*Hearing Documents*' referred at the respective hearings were submitted via email[9]. These included a revised set of planning conditions. It also became clear that, for the proposed biodiversity enhancements to be given due weight in the assessment of the application, a planning obligation was necessary. The need for such works inevitably resulted in delays to the process, with various iterations submitted and subject of formal consultation exercises. To allow sufficient time for such work to be completed, the determination period was again suspended, under Section 62L of the 1990 Act, between 13 June 2021 and 13 September 2021[10]. A completed Unilateral Undertaking[11] relating principally to biodiversity enhancements, a Statement of Common Ground (SoCG)[12] in respect of that planning obligation and a SoCG in respect of the suggested planning conditions[13] were submitted to the Planning Inspectorate on 9 September 2021, with a separate letter dated 7 September 2021[14] setting out Natural Resources Wales' (NRW) position in respect of the submitted unilateral undertaking.

11. The evidence supporting the DNS application indicates that the scheme would necessitate diversions to public rights of way[15], including both temporary and permanent diversions to footpaths[16], and a permanent diversion of a bridleway[17]. Nevertheless, such proposals do not form part of an application for secondary consent and would instead be subject of a subsequent application, under Section 257 of the 1990 Act. Such matters do not, therefore, fall within the scope of the applications subject of this Report.

12. This Report sets out the process undertaken in respect of the requirements under the Environmental Impact (EIA) Regulations[18]. It also includes a description of the site and surrounding area and a summary of the development proposed. The relevant planning policy framework has been appraised, taking into account policy changes made after the submission of

[9] Refer Annex C of this Report
[10] Refer Documents 4, 5 and 6: Planning Inspectorate Letter, dated 30 June 2021; Planning Inspectorate Letter, dated 29 July 2021; and Planning Inspectorate Letter, dated 16 August 2021
[11] Document 7: Applicant - Completed Unilateral Undertaking, dated 9 September 2021;
[12] Document 8: SoCG in respect of the Unilateral Undertaking, dated 9 September 2021
[13] Document 9: SoCG in respect of the suggested Planning Conditions, dated 9 September 2021
[14] Document 10: NRW – Letter, dated 7 September 2021
[15] Figure 12.1 of ES
[16] Footpath Ref: FP31OGV and Ref: FP103GWV
[17] Bridleway Ref: BW64GWV
[18] Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017

the application. The cases of the main parties, statutory bodies and interested parties have been summarised for ease of reference. Main considerations have subsequently been identified and a detailed appraisal of the proposals has led to recommendations for both the DNS application and the application for secondary consent. Planning conditions and a planning obligation have been provided in respect of the DNS application should Ministers be minded to approve the applications. All references have been set out as footnotes, with Annex D setting out a list of documents referred within the Report.

Environmental Impact Assessment (EIA)

13. The submission was accompanied by an Environmental Statement (ES). The ES comprises the following volumes: Volume 1: *Non-technical Summary*; Volume 2: *Main Text*; Volume 3: *Figures*, and Volume 4: *Technical Appendices*. The ES has been prepared using the following structure: Chapter 1: *Introduction*; Chapter 2: *Design Evolution and Alternatives*; Chapter 3: *Proposed Development*; Chapter 4: *Planning and Policy Context*; Chapter 5: *Landscape and Visual*; Chapter 6: *Ecology and biodiversity*; Chapter 7: *Cultural Heritage*; Chapter 8: *Geology, Hydrogeology and Hydrology*; Chapter 9: *Traffic and Transport*; Chapter 10: *Acoustic*; Chapter 11: *Shadow Flicker*; Chapter 12: *Socioeconomic, Public Access, Land Use*; and Chapter 13: *Schedule of Mitigation*.

14. The ES was found to contain the level of information identified in Regulation 17 and Schedule 4 of The Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017 (hereinafter referred as the EIA Regulations) and was therefore declared complete for the purposes of those regulations.

The Site and Surroundings

15. The proposed Upper Ogmore Wind Farm and Energy Storage Facility, hereinafter referred to as the '*proposed development*', would be located on agricultural land to the south of the A4107, between Blaengwynfi, Nantymoel and Blaengarw. A small portion of the application boundary, relating to off-site access upgrades on an NRW forestry track, is located in Neath Port Talbot CBC. The location of the proposed development is illustrated in Figure 1.2: *Planning Application Boundary*, as amended through the application to vary the scheme. The evidence indicates that the application site covers an area of approximately 380.6 hectares (ha), around 362ha of which is located within Bridgend CBC and some 18.6ha in Neath Port Talbot CBC[19].

16. The application site is centred on the summit of Werfa, from which point the land plateaus, sloping gently down in all directions though only marginally to the northern boundary which follows the administrative boundary across the upland. The plateau drops sharply at the valley edges, with small watercourses draining the site to both the south-east and south-west. The land comprises primarily upland grassland used for rough grazing. The site boundary adjoins coniferous plantations to the east, west and north, although there is no woodland on the site save for that around the forestry access track. The majority of the application site is designated as registered common land. Being unenclosed upland grazing, most of the site is open access land under the provisions of the Countryside and Rights of Way Act 2005 (CROW Act), with the exception of the enclosed pastures in the east. The land includes a network of public rights of way that traverse the site, as well as a bridleway.

17. The site is within relative close proximity to operational wind farms including: Llynfi Afan immediately to the west of the site incorporating 12No. wind turbines; Pant-y-Wal/ Fforch Nest some 5.8km to the south-east comprising 29No. turbines; and the 76No. wind turbine scheme at

[19] As reduced through the application to vary the scheme

Pen y Cymoedd which is located some 6.5km to the north. The summit of Werfa features an OS trig point and two communications masts within a fenced compound that is accessed via a track

from the A4107 and serviced by a low-voltage overhead power line on wood poles which runs from the Garw Valley. A series of vertical axis wind turbines were formerly located to the south of the masts, but only the foundations now remain.

18. The north-eastern boundary follows the A4107, which connects the Afan Valley with the A4106, which in turn connects the Ogmore Valley with the Rhondda Valley. The planning application boundary also includes 3.6km of forestry track, with an area of 22ha, to the north of the site, which will be used as part of the abnormal load access route. This existing forest track runs between stands of commercial conifer plantation and is managed by NRW.

19. There are no land-use allocations affecting the application site. The site is however located within a non-statutorily designated Special Landscape Area (SLA). The Brecon Beacons National Park (BBNP) is located approximately 12km to the north of the site and the Rhondda Landscape of Special Historic Interest is located to the north on the opposite side of the A4107.

The Proposal

The DNS Application

20. The DNS application seeks planning permission for the construction and operation of a wind farm comprising 7No. three-bladed horizontal axis wind turbines that would effectively constitute an extension to the operational Llynfi Afan wind farm constructed on land to the north and west of the application site. Four of the turbines proposed in this case would have a maximum tip height of 149.9m[20], with three turbines incorporating a maximum tip height of 130m[21]. The evidence indicates that, in total, the seven turbines proposed would have an installed capacity of approximately 25.2MW.

21. The submitted ES clarifies that planning permission is specifically sought for:

- Seven three-bladed horizontal axis wind turbines, four of up to 149.9 m tip-height and three of up to 130 m tip height – Refer Figure 3.1: *Infrastructure* and *Layout* Figure 3.2: *Typical Wind Turbine Elevation*;
- Turbine foundations and hardstanding areas at each turbine location for use by cranes erecting and maintaining the turbines – Refer Figure 3.3: *Wind Turbine Foundation* and Figure 3.4: *Crane Hardstanding General Arrangement*;
- Approximately 4.3 km of new access track – Refer Figure 3.5: *Access Track Typical Details*;
- An upgraded site entrance off the public road – refer Figure 3.9: *Site Entrance*;
- Wind farm substation compound containing electrical apparatus and a control building – refer Figure 3.6: *Substation Building and Compound* and 3.13: *Typical Wind farm Communication Mast Details*;

[20] Turbine Ref: T3, T4, T5 and T7
[21] Turbine Ref: T1, T2 and T6

- Energy storage containers – Refer Fig 3.7: *Energy Storage Layout Plan* and 3.8: *Energy Storage Elevations*;
- On-site electrical and control network of underground (buried) cables[22];
- Temporary construction compound - Refer Fig 3.10: *Temporary Construction Compound Layout Plan*;
- Permanent and temporary drainage works;
- Two borrow pits are proposed as a potential source of site won rock for use primarily in the construction of new tracks and hardstandings. The location of the borrow pit areas of search are shown on Figure 3.1: *Infrastructure Layout* and Fig 3.11: *Indicative Borrow Pit Details*;
- Off-site road improvement works along forestry track and possible short diversion of the forestry track- Refer Figure 9.3: *Forestry Track Widening Pen Y Cymeodd Wind Farm to Site* and Figure 9.4: *Typical Forestry Track Widening Detail*;
- Associated forestry felling (up to a maximum of 8.6ha) to accommodate upgrades to forest track; and
- Ancillary works.

22. The application site would incorporate both the wind farm and the Energy Storage Facility (ESF). A detailed plan of the position of the turbines and other infrastructure is shown on Figure 3.1: *Infrastructure Layout* of the ES, although the application proposes some flexibility in respect of the micro-siting of the wind turbines and routes of on-site access tracks and associated infrastructure. Specifically, 50m flexibility is requested for infrastructure positioning to assist in the mitigation of any potential environmental effects. The application states that the micro-siting of infrastructure would not encroach into environmentally constrained areas but could, for example, assist in avoiding unrecorded archaeological features which might be revealed during construction. Micrositing is also necessary to minimise and mitigate the impacts upon nearby telecommunications infrastructure.

23. A new site access would be created on the southern side of the A4107[23]. No construction traffic is proposed to enter the site from the south along the A4061. It is proposed that a Construction Traffic Management Plan (CTMP) would be submitted for approval. It is anticipated that construction of the Wind Farm would take 10 months. Construction of the ESF would take approximately 6 months which, due to grid constraints, is likely to take place at a later date than the Wind Farm. Construction works are proposed to take place between the hours of 0700-1900 Monday to Friday and 0700– 1300 on Saturdays, although those matters would need to be controlled via a planning condition and thus addressed later in this Report.

24. The proposed development would have a temporary operational lifetime of approximately 35 years from the date of commissioning, after which the above ground infrastructure would be removed and the land reinstated. The application is also supported by a unilateral undertaking which, amongst other things, sets out a series of obligations in respect of ecological enhancements.

[22] Off-site grid connection does not form part of the application as its final route will be determined by the District Network Operator (Western Power Distribution) [23] Figure 3.9 of the ES

The Common Land Application

25. The secondary application submitted under Section 16 of the Commons Act 2006 seeks to deregister some 16.81ha of common land to facilitate the development. The proposal would result in the de-registering of common land consisting primarily of upland grassland used for rough grazing.

26. To off-set the deregistration of common land, the application proposes to register some 16.81ha of replacement land that directly borders the existing common. The replacement land would be available from the start of the construction period, with the evidence indicating that grazing will be able to continue around the wind farm infrastructure once the construction works have been completed. The replacement land comprises semi-improved grassland with areas of improved grassland, marshy grassland and flush habitats. The evidence indicates that the replacement land would develop into an acid and marshy grassland mosaic, reflective of the common land that would be occupied by the proposed development, when taken out of active agricultural improvement.

Policy Framework

National Policy

27. Future Wales: '*The National Plan 2040*' (hereinafter referred as 'Future Wales') was published on 24 February 2021 and now forms an important and integral part of the development plan framework for the area. Future Wales acknowledges the impacts of a climate and ecological emergency and identifies key priorities, risks and opportunities to achieve the sustainable management of natural resources, including addressing climate change and biodiversity decline.

28. Future Wales recognises Wales' potential to generate energy from renewable and low carbon sources, including on-shore wind energy. It provides support for large scale projects and seeks to facilitate a planning system that provides a strong lead for such development. Specifically, Future Wales strongly supports the principle of developing renewable and low carbon energy from all technologies. It also states that decision makers must give significant weight to the need to meet both Wales' international commitments and Welsh Government's (WG) target to generate 70% of consumed electricity by renewable means by 2030 in order to combat the climate emergency.

29. To assist in achieving its aims, Future Wales identifies '*Pre-assessed Areas for Wind Energy*', where WG has already modelled the likely impact upon the landscape and found them to be capable of accommodating such development in an acceptable way. Through Policy 17: '*Renewable and Low Carbon Energy and Associated Infrastructure*', Future Wales outlines a presumption in favour of large-scale wind energy development in these areas, subject to the tests set out at Policy 18: *'Renewable and Low Carbon Energy Developments of National Significance'.*

30. The tests set out in Policy 18 include, but are not limited to, requirements for there to be: *no unacceptable adverse visual impacts on nearby communities and individual dwellings; no unacceptable adverse impacts on national statutory designated sites for nature conservation (and the features for which they have been designated), protected habitats and species; biodiversity enhancement measures to provide a net benefit for biodiversity; no unacceptable adverse impacts on statutorily protected built heritage assets; no unacceptable adverse impacts by way of shadow flicker, noise, reflected light, air quality or electromagnetic disturbance; no unacceptable adverse impacts on the transport network; acceptable provisions relating to the decommissioning of the development at the end of its lifetime, including the removal of infrastructure and effective restoration.* Cumulative impacts of existing and consented renewable energy schemes should also be considered.

31. The latest iteration of PPW (Edition 11, 2021) includes a factual update of Edition 10 and removes some content which is now contained in Future Wales. It seeks to protect and enhance landscapes, habitats, biodiversity, geodiversity and the historic environment in their own right. Amongst other key issues, it identifies the long term and chronic decline of biodiversity and habitat loss. PPW describes the benefits of renewable and low carbon energy, as part of the overall commitment to tackle the climate emergency and increase energy security, as of paramount

    importance. In this context it explains that the planning system should integrate development with the provision of additional electricity grid network infrastructure, optimise energy storage and maximise renewable and low carbon energy generation. PPW confirms that Future Wales sets out WG's policies for the determination of renewable energy schemes of 10MW and more under the Developments of National Significance procedure.

32. PPW is supplemented by Technical Advice Notes (TANs) which provide additional detail on a variety of topics. Of particular relevance to this case are: TAN 5: *Nature Conservation and Planning* (2009); TAN 6: *Planning for Sustainable Rural Communities* (2010); TAN 11: *Noise* (1997); TAN 12: *Design* (2016); TAN 18: *Transport* (2007); TAN 23: *Economic Development* (2014); andTAN 24: *Historic Environment* (2017). It is clearly material to note that TAN 8: *Planning for Renewable Ener*gy (TAN8) was revoked and effectively superseded by the publication of Future Wales.

33. The Environment (Wales) Act 2016 includes a requirement for Welsh Ministers to reduce emissions in Wales by at least 80% by 2050. The Well-being of Future Generations (Wales) Act 2015 (hereinafter referred as the WBFG Act) is concerned with improving the economic, social, environment and cultural well-being of Wales. The legislative aims of the WBFG are reflected within both PPW11 and Future Wales.

34. Whilst not strictly policy, WG has also published guidance in respect of applications for consent under the Commons Act which provides advice in relation to the determination of common land casework[23]. Amongst other things, it seeks to ensure that the stock of common land is not diminished and that any deregistration of registered land is balanced by the registration of other land of at least equal benefit.

Development Plan Policy

35. As set out above, the proposed Upper Ogmore Wind Farm would be located primarily within Bridgend CBC, with works associated with improvements to access tracks also located on land north of the A4107, in Neath Port Talbot CBC. As such, both the adopted Bridgend County Borough Council Local Development Plan (LDP) (2013) and the adopted Neath Port Talbot LDP (2016) form part of the development plan for the area covered by the DNS application.

36. The relevant policies of the adopted Bridgend LDP are as follows:

    - Policy SP2: *Design and Sustainable Place Making;*
    - Policy SP3: *Strategic Transport Planning Principles;*
    - Policy SP4: *Conservation and Enhancement of the Natural Environment*;
    - Policy SP5: *Conservation of the Built and Historic Environment*;
    - Policy SP6: *Minerals*;

[23] Welsh Government Common Land Consent Guidance (August 2014)

- Policy SP8: *Renewable Energy*;
- Policy PLA4: *Climate Change and Peak Oil*;
- Policy PLA5: *Development in Transport Corridors*;
- Policy PLA9: *Development Affecting Public Rights of Way*;
- Policy PLA11: *Parking Standards*;
- Policy ENV1: *Development in the Countryside*;
- Policy ENV3: *Special Landscape Areas (2) Northern Uplands*;
- Policy ENV4: *Local/Regional Nature Conservation Sites*;
- Policy ENV5: *Green Infrastructure*;
- Policy ENV6: *Nature Conservation*;
- Policy ENV7: *Natural Resource Protection and Public Health*; • Policy ENV9: *Development in Mineral Safeguarding Areas*; and
- Policy ENV18: *Renewable Energy Developments*.

37. Bridgend CBC also has adopted Supplementary Planning Guidance (SPG) documents that are of relevance, including: SPG 19: '*Biodiversity and Development: A Green Infrastructure Approach*'; SPG 12: '*Sustainable Energy*'; and SPG 20: '*Renewables in the Landscape*'. These are intended to inform the preparation of applications for renewable energy development. A description of the local designations within the vicinity is set out in detail below, under the Bridgend CBC LIR section of this Report.

38. The development plan for the Neath Port Talbot area is the Neath Port Talbot Local Development Plan (LDP) (2016). The policies of particular relevance are:

- Policy SP1: *Climate Change;*
- Policy SP2: *Health;*
- Policy SP3: *Sustainable communities;*
- Policy SP4: *Infrastructure;*
- Policy SP6: *Development in the Valleys Strategy Area;*
- Policy SP13: *Tourism;*
- Policy SP14: *The Countryside and Undeveloped Coast;*
- Policy SP15: *Biodiversity and Geodiversity;*
- Policy SP16: *Environmental Protection;*
- Policy SP17: *Minerals;*
- Policy SP18: *Renewable and Low Carbon Energy;*
- Policy SP20: *Transport Network;*
- Policy SP21: *Built Environment and Historic Heritage;*

- Policy SC1: *Settlement limits;*
- Policy I1: *Infrastructure Requirements;*
- Policy EN6: *Important Biodiversity and Geodiversity Sites;*
- Policy EN7: *Important Natural Features;*
- Policy EN8: *Pollution and Land Stability;*
- Policy M1: *Development in Mineral Safeguarding Areas;*
- Policy RE1: *Criteria for the Assessment of Renewable and Low Carbon Energy Development;*
- Policy TR2: *Design and Access of New Development*; and
- Policy BE1: *Design*.

39. The following Neath Port Talbot approved SPG documents are also relevant to the application:

Planning Obligations (October 2016); *Pollution* (October 2016); *Open Space & Greenspace* (July 2017); *Renewable and Low Carbon Energy* (July 2017); *Design* (July 2017); *Landscape & Seascape* (May 2018); *Biodiversity and Geodiversity* (May 2018); and *The Historic Environment* (April 2019).

The Case for the Applicant

The DNS Application

40. As set out above, the submitted DNS application was supported by an ES, which included a nontechnical summary, along with other supporting documents that included a Planning Statement, Design and Access Statement and PAC Report. The ES sets out the design evolution of the scheme and the considered alternatives. It also sets out a detailed account of the proposed development, provides a summary of the planning and policy context and incorporated detailed topic based evidence. The relevant chapters of the ES are set out at paragraph 13 of this Report.

41. Further information was submitted with the application to vary the DNS application. That information included amendments to the planning application boundary, including detail of the widening of the forestry track. Consequential amendments were also proposed to the information set out in the ES. These are summarised in the applicant's letter that set out the intention to vary the application, dated 10 February 2021[24].

42. Following receipt of the LIRs, a request for further information under, Regulation 15 of the DNS Regulations 2016, was issued by the Inspectorate[25]. The applicant responded by submitting a number of documents entitled '*Response to Local Impact Reports*' that included a response to the following matters: *Landscape and Visual; Traffic, Transport and Access; Biodiversity; Peat and Hydrology; Noise; Cultural Heritage;* and *Contamination*. A '*Further Addendum to the Planning Statement*', and a '*Planning Policy Review*' reflecting the implications of the publication of Future Wales, was also provided[26].

[24] Document 11: RES Letter setting out intention to vary DNS application, dated 10 February 2021
[25] Document 2
[26] Subsequently referred as the further information received March 2021

43. The applicant provided Hearing Statements addressing the matters and issues identified on the Hearing Agendas[27] and contributed to the submission of a number of SoCGs to assist the discussions at the Hearings. The applicant also provided further clarification during the course of the Hearings in the form of Hearing Documents[28]. This information clarified certain matters

discussed at the Hearings. Furthermore, a further revised set of planning conditions[29] and a completed planning obligation[30] were received following the close of the Hearings. These documents were accompanied by SoCGs[31]. The planning obligation, in the form of a Unilateral Undertaking submitted under Section 106 of the 1990 Act, seeks to provide a mechanism to deliver proposed biodiversity enhancement measures. I have summarised the substantive arguments in support of the applicant's case below.

Need, Benefits and Policy Context

44. The applicant contends that the publication of Future Wales and PPW (Edition 11, 2021) represents a strategic change of direction in the context of the delivery of renewable energy schemes, referring specifically to the need to meet challenging renewable energy targets through the planning system. The proposed development would be located within a '*Pre-assessed Area for Wind Energy*' (Area 9). In accordance with the provisions of Future Wales there should, therefore, be a presumption in favour of such large-scale onshore wind in this instance, subject to compliance with the tests set out at Policy 18 of Future Wales.

45. The development would have a capacity of approximately 25.2 MW and would therefore provide enough renewable energy to power nearly 22,000 homes[32]. It is also anticipated that the development would reduce CO2 emissions by over 38,500 tonnes each year, thus offering substantial environmental benefits. The applicant also contends that the development would offer significant socioeconomic benefits, including those associated with job creation during the construction phase and business rates payable during the operational phase.

Landscape and Visual

46. The submitted Landscape and Visual Impact Assessment (LVIA) assessed the effects of the proposed development on landscape character and visual amenity, using a 15km study area. The assessment has been undertaken in accordance with all relevant published guidance on the topic, and has involved desk-based and field-based assessments. The approach and scope of the assessment is set out in ES was agreed through consultation with the respective LPAs and the baseline includes landscape and visual receptors. The landscape is described through observations made in the field, drawing on published landscape character assessments and the LANDMAP database. Representative viewpoints have been selected to assess a range of visual receptors. The viewpoints were agreed through consultation.

47. The LVIA concludes that significant effects on landscape character are likely to be experienced across an area extending no more than 2 km from the proposed turbines, and much less to the north and west. This includes consideration of the operational turbines within the study area, which is why effects are predicted to be more extensive to the south and east, and less extensive to the north and west. The presence of Llynfi Afan wind farm has an existing effect on the landscape, and the additional effect of the proposed development would be limited across Werfa and the

[27] Document 12: Planning Inspectorate Letter, dated 26 May 2021
[28] As referred at Annex C of this Report
[29] Dated 28 July 2021
[30] Dated 9 September 2021
[31] Documents 8 and 9
[32] ES Chapter 12: *Socioeconomics, Land Use and Public Access*

upper Afan Valley. To the south-east, the effect on the Ogmore valley would be larger, due to turbines being introduced on to a currently open skyline, on the opposite side of the valley to the existing Pant y Wal turbines.

48. The viewpoint assessment undertaken as part of the LVIA identifies significant operational effects on sensitive receptors up to 4.8 km from the proposed development, with effects judged as major being limited to within 2km. The LVIA is clear that direct views towards the site experienced by

some receptors within Nant-y-Moel could be significantly affected. However, the applicant submits that a significant effect in visual terms does not mean that such effects are sufficiently adverse to warrant a refusal of planning permission.

49. Specifically, the applicant states that there may be a point at which effects at very close range on a large number of properties are so significantly adverse as to outweigh the desirability of harnessing the resource. This would involve combining the effects of visual impact with other potential causes of concern such as noise, traffic and shadow flicker. It is the applicant's case, however, that none of the dwellings assessed would experience oppressive or overbearing impacts that would make the dwelling an unattractive place to live. It is accepted that the effects of the proposed development would be locally significant, but there would not be '*unacceptable adverse visual impacts'* which comprises the test set out in Policy 18 of Future Wales.

Ecology and Biodiversity

50. The ecological assessment set out in the ES considers potential effects on habitats and protected species at the construction, operational and decommissioning phases of the development. Consultation with consultees, including NRW, has been extensive throughout the assessment process and baseline data was collected between April 2014 and July 2020. Survey work at the site to inform the assessment has included: *An extended Phase 1 Habitat Survey of the site and proposed access route; A Phase 2 botanical survey of an area of higher quality habitat; Vantage point bird survey (two years); A targeted honey buzzard survey; A Moorland breeding bird survey; A wintering bird walkover survey; A targeted breeding merlin survey; A bat activity survey (seasonal walked transect and automated detector); A bat roost survey; a great crested newt survey;* and *a Water vole survey*.

51. The applicant contends that the assessment work has had regard to the relevant legislative and policy provisions. There are no sites designated for ecological interest on the site and it is stated that it is unlikely that any designated sites would be affected by the development.

52. The applicant's evidence accounts for measures designed into the development and those that will be committed through a Construction Environment Management Plan (CEMP). The construction phase would result in the loss of small areas of improved grassland, acid and marshy grassland and wet modified bog. However, the assessment indicates that this would have a minimal impact on the habitats present.

53. A range of bird species typical of upland moorland habitats were recorded during the surveys, and included red kite, goshawk, peregrine, merlin, kestrel and golden plover. The majority of recorded flights involved single birds. The assessment has concluded that effects of displacement and collision risk are likely to be minimal. Use of the airspace by kestrel indicates that it is possible that an effect on the local population would occur if other wind farms in the area are also impacting on the population.

54. Bat survey work recorded low-level activity for Nathusius' pipistrelle, common pipistrelle, soprano pipistrelle, long-eared bat species and species in the genus Myotis. No evidence of use of the buildings within the Werfa Mast compound by roosting bats was found. The overall risk to all

species of bat recorded at Upper Ogmore has been assessed as being 'low' in accordance with assessment methods outlined in current industry standard guidance. Whilst a curtailment regime is not considered necessary, turbine blades would be pitched out of the wind (feathered) to reduce their rotation speeds to below 2 rpm when idling.

55. Overall, construction and operational phase ecological and ornithological effects are considered to be localised and capable of being addressed through a CEMP and/ or Environmental Management Plan (EMP), with necessary biodiversity enhancements also secured through the imposition of planning conditions and the completed planning obligation. The enhancement measures would

include a natural sediment management initiative, wider habitat creation works and water vole conservation works. It is therefore submitted that the development would not have an unacceptable impact upon ecological and biodiversity interests.

Cultural Heritage

56. Cadw and the Glamorgan Gwent Archaeological Trust were consulted on the scope of the cultural heritage assessment, the study area and the methodologies to be used. The assessment principally involved site visits and consultation of readily available archaeological and historical information from documentary and cartographic sources. The major repositories of information included: *information held by the Glamorgan Gwent Historic Environment Record on known archaeological sites, monuments and findspots within 1km of the Site; maps and documents held by the Glamorgan Archives and online; the National Heritage List for Wales curated by Cadw; aerial photographs held by the Central Register for Aerial Photography in Wales; and records made during a site visit in May 2017 and July 2018*.

57. The application site contains three designated historic assets and a further 284 designated historic assets are within the 10km study area. There are four known non-designated historic assets within the site and a further 85 within 1km of the Site. Through design, there are no designated historic assets or known non-designated historic assets within the footprint of the proposed development. Accordingly, the development would not have a direct effect on any designated or known nondesignated historic assets and there would be no physical change to any of these assets.

58. Whilst it is possible that the development would have a direct effect on other previously unknown archaeological remains, the site has a generally low archaeological potential. Although it is not possible to determine the sensitivity of unknown remains, the available evidence suggests that any such assets would be of at most low sensitivity.

59. The indirect effect on heritage assets, as result of the proposed development, has been assessed as small, reverting to neutral upon decommissioning, in all cases, except for two scheduled monuments. The indirect impact of the development on these two monuments is assessed as medium, reverting to neutral upon decommissioning.

60. The relevant chapter of the ES was updated to reflect the variation of the scheme. However, this removed the need for any potential diversion of the alignment of the existing track on the western side of the Bachgen Carreg Round Cairn, scheduled monument GM234, to a route curving further to the east. A cultural heritage management plan is proposed to ensure that the boundaries of the scheduled monuments are clearly marked during construction to prevent any accidental damage. This will remain relevant for all monuments within or bordering the application area, including the Bachgen Carreg Round Cairn. Therefore, subject to conditions, it is contended that no heritage assets would be unacceptably affected by the proposed development.

Geology, Hydrogeology and Hydrology

61. Possible impacts on water and geology have been identified. Such impacts relate principally to the potential for erosion and sediment transport, pollution affecting ground water and surface water quality and alteration of natural surface and groundwater flows as a result of construction activities. The sensitive features on and around the site include watercourses, drainage ditches and the groundwater system.

62. The site is located on a thin covering of clay, gravel and cobbles, overlaying mudstones, siltstones, sandstones and coal seams, between the catchments of the Afon Garw to the west and the Ogwr Fawr to the east. There is no licensed groundwater or surface water abstraction in the vicinity of the site. However, private water supplies take water from springs and wells close to the site for domestic and farm use. An assessment was undertaken to review the potential effects on sensitive features during construction, operation and decommissioning. Potential effects such as reduction in available water, fuel or chemical spills, alteration of flow patterns and contamination of surface and groundwater were considered.

63. Mitigation to reduce or eliminate potential effects has been undertaken through careful design of the project and during construction would be managed according to best practise guidelines, including environmental monitoring. These factors have been considered in the assessment of potential effects. Particular attention was paid to the risk of affecting private water supplies, pollution prevention and interruption of surface water flows. With the necessary mitigation in place, it is considered that the proposed development would have only negligible to minor impacts on the water hydrology and hydrogeology of the area.

Traffic, Transport and Access

64. An assessment of the potential impact on traffic and transport has been undertaken, involving consultation with the local Highway Authorities, Network Rail, and South Wales Trunk Roads. The proposed access route for abnormal loads (turbine components) is from Swansea Docks, which has been used previously for wind farm component deliveries. From Swansea Docks, the route will travel east on the A483, joining the M4 at Junction 42 and leaving at Junction 43 onto the A465 heading 30km northeast towards Hirwaun. The route exits the A465 onto the A4061 to the Pen y Cymoedd Wind Farm site access, the route continues along the Pen y Cymoedd Wind Farm / NRW Forestry tracks (off the public highway), exiting onto the A4107 eastbound for approximately 1km to the proposed site access.

65. A Construction Traffic Management Plan (CTMP) would be agreed in consultation with the relevant highway authorities. Works would be completed in accordance with the approved details, thereby minimising any temporary disruption to road users. The route for transporting abnormal loads is not the subject of any significant objection and such trips would be scheduled to occur during off-peak periods. Such matters could be secured through planning conditions. The construction phase would result in a short-term increase in traffic levels on identified sections of the A4107, A4061, and A465. However, such impacts are considered to be acceptable, subject to the above mitigation measures, not least because the increase in traffic levels would be insignificant relative to existing traffic flows using the highway network.

Noise Impact

66. An assessment of the acoustic impact from both the construction and operational phases of development has been undertaken. Account has been had to the nearest residential properties. The operational noise impact was assessed according to the guidance described in the '*The Assessment and Rating of Noise from Wind Farms*', referred to as 'ETSU-R-97', as recommended for use in relevant planning policy. The assessment provides a robust basis for assessing the noise impact of a wind farm and also adopts the latest recommendations of the Institute of

Acoustics '*Good Practice Guide to the Application of ETSU-R-97 for the Assessment and Rating of Wind Turbine Noise*'.

67. The background noise levels used as the basis for the limits are not permitted to include any contribution from wind farm noise and the derived ETSU-R-97 permitted noise levels is the allowed totality of wind farm noise in an area. Where there is an existing wind farm, noise limits for any additional development are required to take account the noise from the existing site by being set at a level which prevents overall wind turbine noise level from exceeding the ETSU-R-97 limits.

68. Background noise data consists of new measurements undertaken by RES at three locations. Existing measurements were carried out in connection with the Llynfi Afan development at four locations. Because of the proximity of the three new measurement locations to existing operational sites, corrections were made to the measured data from these locations to remove any influence of existing wind turbine noise. No correction was required for the other four sites as there was no contribution from existing turbine noise at the time of the measurements. In terms of assessment, the applicant notes that no exceedances of the limits are shown for the development operating in isolation and this was confirmed via the SoCG submitted in advance of Hearing Session 1[33].

69. The applicant notes that the relevant guidance enables a cumulative operational noise assessment to be carried out in one of two ways. These are by either: comparing predicted cumulative noise levels with overall ETSU-R-97 limits; or establishing the remaining noise budget available for the site operating in isolation, once account is taken of the existing wind farms, and compare this with predicted noise levels with the site operating in isolation. The latter can be used to inform noise limits in planning conditions which can only, under normal circumstances, be applied to a development operating in isolation.

70. Both approaches require assumptions to be made about noise from the existing sites. The most conservative assumption is that all existing sites, built or unbuilt, are operating at their planning limits. This is said to be highly unrealistic because there is no physical possibility of an existing wind farm operating at its limits at all locations, at all wind speeds and under all wind direction conditions where the normal ETSU-R-97 noise limits have been applied to an existing development. The least conservative assumption is that all existing consented to wind farms are operating at their predicted noise levels, which already include a degree of conservatism.

71. The controlling property approach is where the predicted levels are corrected upwards such that they just meet the limits at the most critical property. The specific approach which has been taken in the ES to noise from the existing sites is explained in ES paragraphs 10.132 to 10.149 and the results of cumulative predictions are compared with the derived noise limits with results showing predicted exceedances at six locations for the day-time period. An example mitigation strategy is provided in the ES which would prevent these exceedances occurring. Other strategies may be equally appropriate with the eventual strategy needing to await final turbine choice.

72. Appendix 10.8 of the ES included planning conditions on noise that have been based on the noise budget methodology described above. However, following concerns raised through the LIRs in respect of the cumulative noise assessment, the applicant now proposes a simplified and more robust approach to the quantification of noise from the existing sites, whereby the noise from these sites is based purely on the predicted noise level, which already includes a 2dB margin for uncertainty, plus an additional 3dB uncertainty factor, bringing the total allowance for uncertainty up to 5dB. An additional 3dB of uncertainty is said to be equivalent to assuming double the number of turbines on each site.

[33] Document 13: Statement of Common Ground - Hearing Session 1, 18 June 2021

73. The applicant contends that the 5dB uncertainty allowance, on top of the original 2dB allowance, as suggested by Bridgend CBC, is unnecessary to protect the local community. In coming to this conclusion, reference is made to the '*Good Practice Guide to the Application of ETSU-R-97 for the Assessment and Rating of Wind Turbine Noise*' which states that, in adopting such a methodology, it has to be demonstrated that sufficient headroom, which is defined as between 5dB and 10dB, exists between the noise levels used in the cumulative assessment and the consented noise levels for the existing wind farms. Furthermore, it is submitted that there is little evidence to suggest that the existing wind farms are operating above the levels assumed in its calculations and that the noise complaints referred by Bridgend CBC remain unresolved or associated with a mechanical fault that has been resolved.

74. Utilising this methodology, the applicant has produced tables of limits for 12 wind direction sectors based on the remaining noise budget once the noise from existing development, calculated as described above, has been subtracted from the overall ETSU-R-97 noise limits available. The wind farm would be acceptable in noise planning terms subject to the noise limits proposed being met. Those noise limits could be complied with through appropriate curtailment on the individual turbines. Evidence has been submitted to demonstrate that the approach of adopted different noise limits for different wind directions and speed is widely accepted across the United Kingdom (UK)[34] and no more restrictive in terms of energy production than that presented in the ES. It is also submitted that such an approach would be perfectly feasible to monitor and enforce.

75. A construction noise assessment, incorporating the impact due to increased traffic noise, indicates that noise levels at the nearest residential properties could exceed construction noise criteria, although mitigation measures have been identified. An acoustic assessment of the proposed energy storage facility in accordance with BS 4142: 2014 shows that the impact would be low and the levels insignificant in comparison to the cumulative wind farm noise levels.

Shadow Flicker

76. There is no Welsh-specific guidance on shadow flicker. However, the '*Update to Shadow Flicker Evidence Base*' (2011)[35] provides relevant advice. Having regard to the advice in that document, and the allowance of a 50m micro-siting proposed in this instance, there are no inhabited houses within 1100m of any wind turbine and thus no flicker is predicted. It is therefore submitted that the proposed development would not cause a material reduction to residential amenity owing to shadow flicker.

Public Access/ Rights of Way

77. Being unenclosed upland grazing, most of the site is open access land, with the exception of the enclosed pastures in the east. There are however several public rights of way crossing the site. It is the applicant's intention to secure permanent diversions to bridleway BW64GWV and footpath FP103GWV in order to maintain a suitable distance from the wind turbines. The proposed diversions are shown at ES Figure 12.1: *Public Rights of Way Diversions*. The permanent diversions represent an increase in length of approximately 260m over the existing footpath and bridleway. Furthermore, a temporary diversion to footpath FP31 OGV is proposed during the construction period to maintain a suitable set back distance from the proposed borrow pits. These details are also illustrated at Figure 12.1 of the ES. The temporary diversion represents an increase in length of approximately 100m over the existing footpath.

78. Both the permanent and temporary diversions proposed follow similar terrain to the existing routes and do not encroach into any environmental constraints. Should planning permission for the

[34] Refer Annex C of this Report - Hearing Document Nos 1- 5 arising from Hearing Session 1
[35] Published by the then Department for Energy and Climate Change (DECC)

proposed development be granted, the applicant intends to submit an application to divert the relevant public rights of ways under the relevant provisions of the 1990 Act.

Telecommunications

79. There is potential for the final layout of the proposed turbines to cause interference with the BT Telecoms Tower at Werfa. However, there is no objection from BT Group on behalf of the Home Office in respect of such matters, subject to the imposition of a planning condition involving the operators at the micro-siting stage. Other mitigation measures would be delivered through the management of the users, as set out in the Statement of Common Ground agreed with BT Group[36].

The Common Land Application

80. The applicant's case in respect to the application submitted under Section 16 of the Commons Act 2006 is set out in the submission documents, as supplemented by the further information submitted in March 2021 that included a '*Response to Comments Submitted by the Open Spaces Society*'. The applicant also submitted a Hearing Statement in respect of the common land application.

81. In summary, the applicant seeks to de-register 16.81ha of common land to facilitate the proposed development and temporary construction area. To off-set this, the applicant has secured 16.81ha of replacement land directly bordering the existing common which would be available from the start of construction. The replacement land comprises semi-improved grassland with areas of improved grassland, marshy grassland and flush habitats. When taken out of active agricultural improvement, the replacement land would develop into an acid and marshy grassland mosaic, reflective of the common land occupied by the Proposed Development.

82. The proposed changes to the common land are illustrated in Figure 12.2 a and b: *Common Land Swap Plans* of the ES. The applicant has reached agreement with the active commoners to compensate them for any temporary disturbance during construction.

Local Impact Reports (LIR)

Bridgend County Borough Council

83. Despite not being submitted within the statutory 5 weeks, Bridgend CBC submitted an LIR which was accepted by the Planning Inspectorate on 4 February 2021. That document, as supplemented by Bridgend CBC's "*Response to PINS Reconsultation Letter of 26 March 2021*", Hearing Statements 1- 4 and the associated SoCGs, outlines the likely local impacts. A separate addendum to the LIR sets out the local impacts associated with the application for secondary consent under the Commons Act 2006. The principal local impacts identified are summarised below.

Landscape and Visual Impact

84. The Council accepts that the LVIA is based upon a well-established methodology. It is also acknowledged that the assessment carried out for the purposes of the DNS application is more site specific and up to date than that which informed the Council's SPG document entitled SPG20: *Renewables in the Landscape* (2015).

[36] Document 14: SoCG between RES and BT Group, dated 23 June 2021

85. It is the Council's view that the proposed development would have a negative impact on the Northern Uplands Special Landscape Area (SLA) and Mynydd Llangeinwyr Uplands Landscape Character Area (LCA) when considered against the requirements of Policy SP4 and ENV3 of the adopted Bridgend LDP. Nevertheless, it is accepted through Document 15[37] that the concerns around the impacts of the development upon the Mynydd Llangeinwr Uplands LCA and Northern Uplands SLA, and the capacity for the landscape to accommodate additional large scale wind farm development, appear to be '*nullified*' by the provisions of Future Wales.

86. Policies SP2 and ENV18 of the adopted Bridgend LDP (2013) provide the local policy framework for assessing visual and cumulative impacts which are said to be a consideration under Policy 18 of Future Wales. In this respect, the Council contends that the proposed turbines and those already erected as part of the Pant y Wal and Llynfi Afan schemes will be an '*unavoidable presence*' in views from the communities and properties at the northern end of the Ogmore Valley. In terms of cumulative impact it is submitted that the proposed turbines, given their scale, number and location, would '*reduce the overall pleasantness of the views*' that residents enjoy of their surroundings to a degree that possible conflict with both local and national policies would be engaged. It is therefore the Council's view that the proposed development would have a negative impact on the outlook of residents of the Upper Ogmore Valley and the users of the recreational receptors at Mynydd Llangeinwyr and Craig Ogwr.

Traffic, Transportation and Access

87. The Council is satisfied that, subject to the imposition of suitably worded planning conditions that would, amongst other things, secure a CTMP, the impact upon traffic, transportation and access, including highway safety, would be neutral. Impacts associated with the diversion of public rights of way would be subject to separate applications under Section 257 of the 1990 Act as amended.

Ecology

88. A detailed assessment of the ecological impacts was undertaken as part of the Council's LIR and a further assessment was undertaken as part of Document 15. The Council considers that the baseline is not adequate to assess the proposal. The principal concerns can be summarised as follows.

89. The phase 1 habitat survey for the main site is said to be out of date. Whilst it is appreciated that site walkovers were completed in 2020, the phase 1 habitat survey was not updated after 2018. Chartered Institute for Ecology and Environmental Manageent (CIEEM) advice '*On the Lifespan of Ecological Reports and Surveys*' states that ecological surveys aged between 18 months to 3 years *'may need to be updated. The professional ecologist will need to issue a clear statement, with appropriate justification, on: the validity of the report; which if any of the surveys need to be updated; and the appropriate scope, timing and methods for the update survey(s)'.* In the absence of a clear statement with appropriate justification, it is the opinion of BCBC that the habitat data is out of date and needs to be reviewed. It is noted that management is unlikely to have changed, but confirmation that the habitats recorded remain unchanged is recommended.

90. The National Vegetation Classification (NVC) survey is considered out of date. The Council is therefore unable to confidently rely on the information presented in the ES in relation to vegetation impacts. The survey effort in relation to the Honey Buzzard survey is not considered to be in line with standard survey methods, but it is acknowledged that the upland ridge location of the site provides '*suboptimal breeding habitat for honey buzzard locally*'. It is noted that no flights of honey

[37] Document 15: Bridgend CBC – '*Response to PINS Reconsultation Letter of 26 March 2021*'

buzzard were observed during targeted survey work in 2014, or during standard vantage point survey work in 2014, 2015 and 2020.

91. The wintering bird survey is also considered out of date meaning that it is difficult to establish whether the results are still applicable, especially in light of any local bird population changes. No suitable information has been presented to assess wild bird habitat in light of the conservation of habitats and species regulations. It is the opinion of this Council that further assessment is necessary so that mitigation and/ or habitat compensation can be established.

92. A loss of bird habitat is recognised on the main site and it is also considered inevitable given vegetation clearance for the track widening part of the scheme. In response, the applicant suggests that the loss of habitat for ground-nesting birds would be compensated for through land swap of 16.81 ha of improved pasture. The Council considers that a habitat creation scheme

    would be required on the '*compensation land*' to ensure that it would develop into an acid and marshy grassland mosaic, reflective of the common land lost to the development.

93. The walked bat survey transect was out of date but the applicant has referred to Scottish National Heritage (SNH) guidance which indicates that transects are not recommended. The Council is not aware of such advice, although it is aware that vantage point and walked transects can be used to complement the static detector data gathered. The site is assumed to be of importance for reptiles, with the Council aware of numerous records of reptiles. It is noted that good practice measures will be applied via a CEMP. The Council considers that this is likely to be appropriate, but only for the main development site.

94. The Councils previously highlighted the potential cumulative impact on the kestrel population. The applicant suggests that local funded initiatives could be implemented to off-set the local-level impact. This would be secured through the signed unilateral undertaking. The Council is concerned that the scheme does not include a commitment to bird or bat monitoring. Raptor monitoring should be undertaken alongside carcass searches to enable assessment of success or otherwise of the mitigation and any need for further remedial action. Whilst a scheme for monitoring could be secured by condition, there appears to be a reluctance on the part of the applicant to undertake such works. A similar commitment to bat monitoring should be considered.

95. Further assessment of peat impacts from the scheme should be undertaken, along with a review of the cumulative impacts in relation to the upland peat resource of the area. Concerns relate to the fact that the access track bisects the deepest surveyed peat on site and that turbine T3 would be installed on peat over 0.5m deep[38]. The ES states that floating track design would be used if necessary, although the Council contends that little evidence has been submitted to demonstrate that floating tracks work with no long term hydrological effects. The Council has concerns regarding the applicant's contention that the wind farm infrastructure would only affect a small discrete area of peat. Furthermore, it is submitted that there is a lack of detail in respect of the peat depth probing methodology. Specific management of excavated peat is said to include storage, which should be avoided. A failure to assess the cumulative impacts upon the upland peat resource remains a concern, as does the outcome of the carbon balance assessment which is based on incomplete data.

96. The Council maintains that the current siting and design of the development has the potential to impact the hydrological connectivity of adjacent peat bodies, which could have wide ranging impacts. No such assessment has accompanied the recent reports. The mitigation offered does not include any measures to maintain peatland hydrology connectivity, measures to maintain and

[38] Figure 8.1 of ES

improve water level in peat deposits to prevent degradation or erosion, or measures to prevent preferential flow path ways that change or impact peatland hydrology. The Council considers that mitigation measures should be revisited accordingly.

97. The Council is broadly supportive of the identified measures of ecological enhancement, it is considered that the choice and implementation of such measures should be subject of a feasibility study. The Council is satisfied that the unilateral undertaking secures adequate control over the areas where ecological enhancement works are proposed and considers that appropriate enhancement works could be approved and implemented accordingly.

98. Notwithstanding this position, the Council remains concerned that the impacts of the development on ecological/ biodiversity interests have not been fully appraised. Without a proper assessment of the impacts, the level of mitigation/ compensation required is unknown. For this reason it is considered that the development could potentially have a negative impact on biodiversity and, thereby, be contrary to national and local planning policies.

Noise Impacts

99. The Council's position in respect of noise impact has evolved through the application process. The submitted LIR is therefore supplemented by Bridgend CBC's '*Response to PINS Reconsultation Letter of 26 March 2021*'[39], its Hearing Statement for Hearing Session 1 and the associated SoCG[40].

100. The SoCG relating to Hearing Session 1 confirms that it is agreed that the relevant baseline noise measurements for the purposes of the assessment of operational noise are those described in the ES which, for the avoidance of doubt, were carried out by RES at 3 locations (two in Nant-y-moel and 1 in Blaengarw) and at 4 locations by Hayes McKenzie in connection with the Llynfi Afan development (Abergwynfi, Croserw, Blaen-Cwmdu Farm and Blaengarw). The way in which they have been assigned to the various operational noise assessment locations, identified on Figures 10.1 and 10.2 of the ES, and as described in ES Table 10.15, is agreed, as is the way the limits on overall (cumulative) wind turbine operational noise level have been derived from these measurements.

101. The operational noise assessment for the proposed development acting in isolation is agreed. It is also agreed that it is the cumulative noise impact which takes precedent because of the requirement in ETSU-R-97 that the limits it specifies apply to all wind farm noise. The operational noise assessment for the proposed development acting cumulatively with other wind farms in the area is not however agreed. The assessment in the ES, which is based on predicted levels of the turbines from the Upper Ogmore Wind Farm (as opposed to the noise limits that are being requested) and an assumption that noise from the existing developments just meets their consented limits at critical properties is not agreed.

102. A revised approach proposed by RES in which the existing developments are assumed to operate at their predicted noise levels, including the normal 2dB uncertainty plus an additional 3dB uncertainty is not agreed by BCBC. A revised approach proposed by BCBC in which the existing developments are assumed to operate at their predicted noise levels, including the normal 2dB uncertainty plus an additional 5dB uncertainty is not agreed by RES. BCBC consider that the additional uncertainty allowance is necessary given recent noise complaints associated with the Llynfi Afan and Pant-Y-Wal extension Wind Farms.

[39] Document 15
[40] Document 13

103. It is agreed that operational noise limits on the proposed development for each affected property can be derived by subtracting the assumed noise level from all other wind farm development, which is currently not agreed, from the overall (cumulative) noise limits agreed above.

104. It was agreed at the Hearings that the noise limits may be different for different wind directions because of the variation in existing noise level with wind direction for existing development. It is also agreed that the wind farm will be acceptable in noise planning terms if these limits can be met, providing the assumed noise level from all other wind farm development is accepted.

105. It is agreed that the wind farm would be acceptable in noise planning terms, subject to the noise conditions being imposed. It is agreed that such noise limits as can be complied with through appropriate curtailment on the individual turbines and that compliance can be demonstrated by measurement as required. Construction noise could also be satisfactorily mitigated through the use of planning conditions.

Heritage Assets

106. Bridgend CBC is satisfied that, subject to planning conditions, the impacts on cultural heritage assets would be neutral.

Shadow Flicker

107. Consistent with the Council's records, the ES confirms that there are no inhabited houses within 1100m of any of the proposed turbines. The impact of the development with regard to shadow flicker would therefore be neutral.

Common Land Section 16 Application

108. Bridgend CBC's LIR: *Addendum Report* states that the applicant has identified the relevant interests and activities on the common land, and ensured that the commoners would not be disadvantaged. With regard to public access, access rights over the open replacement land would be identical to the common land. The construction works would only require temporary fencing and access would be available around this. Full replacement land would be provided to ensure that there is no detriment to the public or the commoners during construction and operational phases.

109. The applicant's evidence recommends that the agricultural husbandry and management of the semi improved land within the replacement land be ceased upon the granting of the de-registration order, with the said land allowed to naturally revert to upland pasture in the ensuing period prior to commencement of works on the wind farm development. The Council would support that approach. The existence of rights of ways and bridleways across the release land is acknowledged and it is intended that diversions will be sought under the planning act following the determination of the DNS application.

110. The Council is therefore of the opinion that the impacts of a secondary consent would be neutral.

Bridgend CBC LIR: Summary of Local Impacts

111. Overall it is considered that the proposed development will have a negative impact on the Northern Uplands Special Landscape Area and Mynydd Llangeinwyr Uplands Landscape Conservation Area; a negative impact on the visual amenities of residents in the northern part of the Ogmore Valley; and a negative impact on biodiversity interests on the site. As set out above, the Council also has concerns regarding noise impacts and potential conflict with Policies SP2 and ENV7 of the adopted LDP unless its suggested planning conditions are imposed. The impact of the development with regard to drainage, traffic, transportation and access and shadow flicker is neutral, subject to the imposition of the recommended conditions.

112. Bridgend CBC has reviewed the submitted information relating to the current proposal and considers that even with appropriate controls secured through the recommended planning conditions, the impacts of the development as a whole would be negative. This will need to be considered as part of an overall assessment of the planning balance having regard to the accepted benefits arising from the production of renewable energy at the site.

Neath Port Talbot County Borough Council

Landscape and Visual Impact

113. Neath Port Talbot CBC does not substantively disagree with the content or findings of the applicant's LVIA which confirms that: there would be no significant effects on landscape character areas within the area covered by Neath Port Talbot CBC; and that significant (moderate) effects on views within Neath Port Talbot will be limited to road users and recreational users at the hairpin bend on the A4107 (Viewpoint 1) and residential receptors in the uppermost part of Blaengwynfi (Viewpoint 6). Other visual effects in the area of Neath Port Talbot are not considered to be significant. The Council considers that the introduction of seven substantial new manmade

structures within the area would inevitably have a negative impact. However, it recognises that views would largely be read in conjunction with the existing Llynfi Afan wind farm.

Highway Impacts

114. The majority of the route proposed for transporting abnormal loads within NPT would be upon forestry tracks. The route would utilise the Pen Y Cymmoed access tracks before going onto NRW forestry tracks which would require widening. The route would come off the forestry track and run along a small section of the A4107 within NPT, before leaving the administrative area. A swept path analysis of the critical turbine component delivery vehicles has been undertaken. Works to the public highway would be limited to the temporary removal of street furniture.

115. The Highways Authority has no objection to the proposal subject to planning conditions being imposed. As such, the Council considers that the development would have a neutral impact upon the highway network subject to approved Construction Method Statement (CMS) and CTMPs being implemented. The Council therefore finds no conflict with Policies SP20 and TR2 of the adopted NPTCBC LDP.

Biodiversity

116. A detailed assessment of the impact of the access track widening scheme, and any potential impacts to the ecology/peat resources of NPT, was undertaken as part of the LIR. A further assessment was undertaken as part of the addendum to that document[41]. Concerns have been identified in respect of a number of the surveys and reports. Moreover, the Council considers there to be a lack of assessment against NPTCBC planning policies.

117. The assessment in relation to the importance of ecological receptors and the approach taken to assess their significance is not considered to have followed best practice. As such, there are significant concerns that the levels assigned misrepresent the importance of such receptors. It is considered that there is very little justification included in relation to the significance of impact assigned and it is therefore difficult to establish the actual impact as relates to ecological receptors that are required to be fully considered under both the legislative and policy framework. Limited quantitative information is presented, therefore the extent of the different types of habitat/ habitat supporting species impacted by the scheme is unknown.

[41] NTPCBC Local Impact Report - Addendum

118. It is not clear whether the full peat resource on the site has not been surveyed and there is little evidence to support the applicant's conclusion that no hydrological impacts would occur. Evidence to indicate whether there would be any impacts on off-site peat resources is also considered to be lacking. The siting of the turbines appears to encroach onto areas of deep peat and the reliance on the use of floating tracks has not been justified. The Council is therefore concerned about the impact on peat resources, hydrological impacts, mobile species and cross boundary habitats.

119. In summary, the Council considers evidence to be insufficient/ inadequate to allow a full assessment to be made of the impact the proposal would have upon biodiversity interests, most notably the impacts on the access track widening scheme. Accordingly, the Council contends that the proposal would have a (significant) negative impact.

Noise Impacts

120. In terms of operational noise from the proposed development, the acoustic assessment demonstrates that predicted noise levels at residential properties in Neath Port Talbot would not exceed the derived noise limits across all wind speeds. This should not be interpreted that operational noise would be inaudible or masked by background noise under all conditions, but that the levels of noise from the development acting in isolation are acceptable under ETSU-R-97 and associated guidance.

121. In relation to cumulative noise during daytime periods, the noise limits are predicated to be exceeded. To mitigate the exceedance in levels the applicant proposes a turbine management strategy which would ensure that the wind farm complies with the daytime noise limits to all properties at all wind speeds. Provided this mitigation is secured through an appropriate condition, the Council is satisfied that there would be no unacceptable impact in relation to cumulative noise.

122. In terms of construction noise, it is anticipated that there would be an increase above 55dB(A) on Saturdays between 1300-1900 at two locations in NPT. At all other times, predicted noise from worst case combination of increased traffic and site construction noise would not exceed relevant criteria and therefore no negative impacts are expected. The submissions indicate that such impacts could be mitigated and the noise levels reduced to an acceptable degree by reducing the number of construction activities occurring simultaneously, restricting the distance of construction activities from identified properties or reducing construction traffic as required.

123. Nonetheless, Neath Port Talbot CBC recommends limiting construction activities to between 8:00am and 18:00pm Monday to Friday, 8:00am and 1:00pm on Saturday, and for no work to be conducted Sundays, night time periods, and bank holidays. Subject to the suggested planning conditions being imposed, Neath Port Talbot CBC considers that there would be a neutral impact. The development would thus be compliant with Policies BE1 and EN8 of the adopted NPTCBC LDP.

Contamination

124. Whilst there are full site investigations and information referring to the main site, the Council is concerned regarding the level of information in respect of the areas where the access track is proposed to be widened. In the absence of such information, the Council considers that it is unable to fully assess the impact of the development. To mitigate such concerns, standard conditions are recommended to allow an assessment to be made of the land contamination impacts prior to the commencement of any works. Subject to such conditions, it is considered that any land contamination issues would be neutralised.

Cultural Heritage

125. Given the changes proposed through the variation of the DNS Application, Neath Port Talbot CBC's LIR Addendum effectively supersedes those comments made in the original LIR. There are two scheduled monuments within NPT near to the access track, namely GM330 Pebyll Ring Cairn and GM234 Bachgen Carreg Round Cairn. Subject to a suitably worded planning condition that would ensure the protection of schedule monument GM234 during the construction phase, the LPA would agree with the findings of the updated report on Cultural Heritage matters[42] that the impact upon cultural heritage assets would be neutral.

Public Rights of Way

126. Footpaths 1 and 7, along with Bridleway 2 and 20, enter the application site. It is necessary for these public rights of way to be protected at all times and that no alteration or change of condition to the PROW is to be undertaken without further consultation with the Council. This could be ensured through the use of planning conditions. As the proposed development does not adversely affect any of the rights of way within the area covered by NPTCBC, the impact is considered neutral, subject to necessary planning conditions being imposed.

Shadow Flicker

127. As there are no inhabited houses within 1100m of any of the proposed turbines, no shadow flicker is predicted. As such it is considered that the proposal would have a neutral impact in terms of shadow flicker.

Renewable Energy

128. Through Future Wales, the WG has emphasised its strong support for the principle of developing renewable and low carbon energy from all technologies and at all scales to meet our future energy needs. It further emphasises through Policy 17 that, in determining planning applications for renewable and low carbon energy development, decision-makers must give significant weight to the need to meet Wales' international commitments and our target to generate 70% of consumed electricity by renewable means by 2030 in order to combat the climate emergency. It is noted that the proposed development is for a Wind Farm of up to 25.2MW. Accordingly, and having regard to Future Wales, the Council considers that the proposal would have a positive effect on meeting identified targets for Renewable Energy.

Common Land Application

129. Both the common land to be de-registered, and the proposed replacement common land, lies wholly outside of the administrative boundary of NPTCBC. As such, the proposal comprising the secondary application would have a neutral impact on the area covered by NPTCBC.

Neath Port Talbot CBC LIR: Summary of Impacts

130. NPTCBC considers that, provided appropriate controls are in place through the recommended conditions, the impacts of the development as a whole would be negative. Those impacts would need to form part of an overall assessment of the planning balance, having regard to identified benefits arising from the production of renewable energy at the site.

[42] Document 16: Further information received from Applicant, Appendix F, *Cultural Heritage Update by HCUK Group,* dated March 2021

Other Statutory and Interested Party Representations

Responses to the DNS Application

131. A number of other consultation responses have been received in respect of the DNS application. These can be summarised as follows.

Natural Resources Wales (NRW)

132. NRW has significant concerns with the proposed development as submitted. However, it is satisfied that those concerns could be readily resolved through planning conditions requiring: the submission and approval of a Construction and Environment Management Plan (CEMP); and the submission and approval of a Landscape and Environmental Management Plan (LEMP) or similar.

133. The site has sensitive hydrological receptors including unnamed tributaries leading towards the Afon Garw, Afan Afan and Ogwr Fawr, and peat accumulations present within the locality of the site. In addition, NRW notes that the development site is also with close proximity of the Mynydd Ty Isaf Special Site of Scientific Interest (SSSI). The protected site is at a slightly lower elevation. With the movement of large vehicles through the site entrance, there is the potential for dust, mud and silty run-off to move onto the SSSI. To prevent this from happening, NRW require that suitable pollution prevention measures are implemented on site.

134. NRW notes the intention to produce a CEMP. This should include, but not be limited to:

- Construction methods: details of materials, how waste generated will be managed.
- General Site Management: details of the construction programme including timetable, details of site clearance; details of site construction drainage, containments areas, appropriately sized buffer zones between storage areas (of spoil, oils, fuels, concrete mixing and washing areas) and any watercourse or surface drain.
- Biodiversity Management: details of tree and hedgerow protection; invasive species management; species and habitats protection, avoidance and mitigation measures.
- CEMP Masterplan: details of the extent and phasing of development; location of landscape and environmental resources; design proposals and objectives for integration and mitigation measures.
- Control of Nuisances: details of restrictions to be applied during construction including timing, duration and frequency of works; details of measures to minimise noise and vibration from piling activities, for example acoustic barriers; details of dust control measures; measures to control light spill and the conservation of dark skies.
- Resource Management: details of fuel and chemical storage and containment; details of waste generation and its management; details of water consumption, wastewater and energy use
- Traffic Management: details of site deliveries, plant on site, wheel wash facilities
- Pollution Prevention: demonstrate how relevant Guidelines for Pollution Prevention and best practice will be implemented, including details of emergency spill procedures and incident response plan.
- Details of the Borrow Pit Management Plan.

135. The CEMP should be implemented as approved during the site preparation and construction phases of the development.

136. In terms of protected species, NRW notes that ecological surveys of the wind farm site have been undertaken and have recorded bats and water voles on the site. The ES confirms that targeted water vole surveys were undertaken in June 2016 and August 2016, with a further survey visit in May 2020. It further confirms that all watercourses within 100 m of the existing NRW Forestry track were also searched for signs of water vole during the Phase 1 surveys in October 2016 and June 2020. Figure 3.1: *Infrastructure Layout* confirms that the infrastructure would avoid watercourses, and this is re-affirmed by the applicant's rebuttal to the submitted LIRs[43]. However, some loss of wetland habitats would occur (4.3 % of marshy grassland / mosaic and >1 % of wet modified bog mapped within the site).

137. NRW is satisfied with the current level of survey work undertaken. In consideration of the wider areas of wet habitat potentially impacted by the proposed development, the Phase 1 habitat map[44] indicates that these areas are sub-optimal and limited in extent. As such, NRW is satisfied with the proposals for pre-construction checks as the application proposes.

138. There is no licensing provision of the intentional destruction of water vole habitat. A licence may only be issued for conservation purposes and would only be required if water voles or their habitat

    are likely to be affected. In this instance any licence application would need to demonstrate a conservation benefit to water voles. In view of the records of water voles for the area, the wind farm proposals should include measures to ensure that water voles are given appropriate consideration in the long-term management of the site.

139. The ES makes references to proposals for an Ecological Management Plan (EMP), to include a water vole conservation strategy, to be agreed with statutory consultees prior to construction commencing. NRW notes that the water vole section of Table 13.1 only focusses on construction mitigation. There does not appear to be any proposals to address the habitat loss, or measures to manage the site long-term to benefit the species.

140. In view of the records of water voles for the area, NRW advises that the wind farm proposals should include measures to ensure that water voles are given appropriate consideration in the long-term management of the site. This should be addressed through a LEMP to ensure necessary landscape and environmental management measures are agreed prior to commencement and implemented to ensure the site's landscape and environmental features are adequately managed long term.

141. The LEMP should include:

    - Details of habitats, landscape, environmental and ecological features present or to be created at the site
    - Details of the desired conditions of features (present and to be created) at the site
    - Details of scheduling and timings of activities
    - Details of short and long-term management, monitoring and maintenance of new and existing landscape, environmental and ecological features at the site to deliver and maintain the desired condition

[43] Document 17: Further information received from Applicant, Appendix C *Ecology Update by BSG Ecology*, dated March 2021)
[44] Figure 6.6: *Phase 1 Habitat Map* of ES

- Details of monitoring of landscape and ecological features
- Details of replacement measures should any landscape or environmental features die, be removed or become seriously damaged or diseased within 2 years of completion of development
- Details of management and maintenance responsibilities
- Details of timescales, length of plan, the method to review and update plans (informed by monitoring) at specific intervals as agreed.
- Detailed methods for all species and habitat protection including aftercare and including timescales for each element;
- Detailed methods for all habitat re-instatement measures include detailed timescales for each element;
- The identification of appropriate ecological awareness training for site staff and contractors in respect of the presence of protected and sensitive species and the importance of species mitigation measures.
- Details of specific methods to mitigate impacts on habitats and protected species.

142. The LEMP should be carried out in accordance with the approved details.

143. NRW clarifies that all species of British bats are European Protected Species, legally protected under The Conservation of Habitats and Species Regulations 2017 (as amended) (hereinafter referred as the Habitats Regulations). Legal protection relates to the animals themselves and the places they use to rest and breed. Where a European Protected Species is present and development proposal is likely to contravene the legal protection they are afforded, the development may only proceed under licence issued by NRW, having satisfied the three requirements set out in the legislation. One of these requires that the development authorised will 'not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status (FCS) in their natural range'. These requirements are translated into planning policy through Planning Policy Wales (PPW).

144. With respect to birds, NRW welcomes the updated surveys and information provided in the ES Chapter 6: *Ecology and Biodiversity* and associated appendices, including Appendix 6.4: *Collision Risk Analysis V2* in relation to birds, and agrees with its conclusions. The mitigation mentioned in Chapter 6 of the ES, in relation to birds seems appropriate but it is not detailed. However, the detail could be secured through a LEMP.

145. As outlined in PPW, peat bogs are of significant nature conservation interest. NRW notes that consideration has been given to the impacts of the proposals on peat locally. It also understands that no turbines will be located in the vicinity of deep peat (depth greater than 0.5m) and that the access track layout has been developed to avoid areas of deep peat. In areas where unavoidable, consideration is given to installing sections of floating track to be placed across the areas of peat.

146. NRW welcomes the confirmation that the extent of the proposed borrow pit shown in the ES is the worst case maximum area and that the area shown would be the subject of further site investigation to establish the suitability of the stone for use on site. Prior to excavation of a borrow pit, a borrow pit management plan should be produced and included in the CEMP for approval. This should include an assessment of the proposals for addressing hydrology.

147. NRW is satisfied that peat would not be used for track verges and that the bullet point has been removed from the ES Chapter 8: *Hydrology and Hydrogeology, Management of Excavated Peat*,

section 8.84. NRW also advises of other permits and licences that may be necessary under separate legislation, including those relating to foul drainage and water abstraction.

Cadw

148. The designated historic assets located within 5km of the application site include the following scheduled monuments: *GM099 Mynydd Maendy Hillfort; GM231 Clawdd Mawr, Mynydd Caerau; GM232 Mynydd Caerau Round Cairns; GM233 Crug yr Afan Round Cairn; GM234 Bachgen Carreg Round Cairn; GM238 Cairn Lwyd; GM243 Carn y Hyrddod & Neighbouring Cairn; GM246 Bwlch yr Avan Dyke; GM249 Round Cairn 567m East of Bryn Defaid; GM250 Croes y Bwlchgwyn Round Cairn; GM278 Earthwork 360m NNE of Crug yr Avan; GM330 Pebyll Ring Cairn; GM499 Round Barrow on the Werfa; GM500 Bwlch y Clawdd Dyke; GM508 Incline Haulage Systems, Cefn Ynysfeio, Treherbert; GM540 Mynydd Ton Cairns*.

149. It also includes the following Registered Historic Landscapes: *The Rhondda; and Margam Mountain*. Chapter 7 of the submitted ES (Cultural Heritage) is based on an archaeological and heritage desk-based assessment and an '*Assessment of the Significance of the Impact of Development on Historic Landscapes*' (ASIDOHL). The ASIDOHL Report concludes that the proposed development would have a slight but not significant impact on both registered historic landscapes and Cadw concurs with this conclusion.

150. The archaeological and heritage desk-based assessment considers the impact of the proposed development on all of the scheduled monuments and has determined that there would be an adverse impact on seven of them. Cadw agrees with the results of the assessment. At scheduled monuments: '*GM231 Clawdd Mawr, Mynydd Caerau'; 'GM278 Earthwork 360m NNE of Crug yr Avan'; 'GM233 Crug yr Afan Round Cairn';* and *'GM232 Mynydd Caerau Round Cairns'*, the impact is identified as '*very slight*' and '*slight'*. The impact on: *'GM243 Carn y Hyrddod & Neighbouring Cairn'; 'GM246 Bwlch yr Avan Dyke';* and *'GM499 Round Barrow on the Werfa'* would be '*moderate'*. In the assessor's opinion, the moderate impact on the latter three scheduled monuments would constitute as significant.

151. In order to off-set the significant impact of the proposed development on scheduled monuments these scheduled monuments, the applicant proposes to prepare a '*Monument Management Plan*' to be implemented during the construction and operation phase. This plan would include: improving access; the provision of interpretation panels; and management of the monuments during construction and during operation. This would be controlled through the use of a planning condition.

152. Cadw considers the proposed '*Monument Management Plan*' is appropriate and is satisfied that its benefits would reduce the harm caused by the proposed development to an acceptable level. The variation of the scheme altered the route of the proposed northern access track. The variation removes the potential impact of the proposed development upon the setting of scheduled monument '*GM234: Bachgen Carreg Round Cairn*' and is therefore welcomed.

BT Group

153. BT Group submitted a written representation objecting to the proposed development on the basis that it would have an adverse impact upon an existing '*Telecoms Tower*' that forms part of a commercial network and is also proposed to be part of the emergency services network for the Home Office.

154. Nevertheless, a SoCG[45] between BT Group and the applicant was submitted in advance of Hearing Session 2. That SoCG confirmed that BT Group does not oppose the development in

[45] Document 14

principle and does not seek the refusal of planning permission or the deletion of any of the proposed wind turbines. Rather, a planning condition is suggested that would ensure that BT, in consultation with the Home Office, are consulted on the final layout of turbines through the micrositing process. Where possible, this process shall seek to minimise the impact of the turbines on the '*air to ground*' radio coverage for emergency services utilising the BT telecommunications equipment at Werfa. In addition to micro-siting, the balance of mitigation would be delivered through management of end users.

Interested Party Representations

155. A written representation was submitted by Ogmore Valley Community Council. That submission states that it was unanimously agreed by its members that, should the application be approved, a '*Community Support Fund*' should be provided to compensate the residents of the Ogmore Valley for the visual impact on the valley. It is claimed that a similar nearby scheme came with a £100k per annum community fund.

156. Two other written representations were submitted. Both representations objected to the proposed development, citing the following concerns:

- *Effect on landscape character, particularly given the cumulative impact of turbine developments within the area and the perceived reindustrialisation of a mining community;*
  - *Visual impact, including from vantage points within Blaengarw;*
- *Noise pollution;*
- *Effect on local wildlife and habitats, particularly birds;* and
- *Surface water flooding down the valley.*

Responses to Common Land Application

157. A written representation outlining an objection to the common land application was received from the Open Spaces Society (OSS). Specifically, whilst it is acknowledged that the area of the replacement land is the same as that of the release land, the release land is said to be widely dispersed and its removal from the heart of the common would have a severe adverse effect on the landscape and public enjoyment. It is therefore contended that the area of replacement land should be significantly greater to compensate for the loss of public interest.

158. OSS states that the deregistration of linear areas of land, represented by access roads, would make the common vulnerable to fencing, because fences could be erected along the access roads without consent under s.38 of the Commons Act 2006. It is therefore said to be important that the planning application recognises this, and removes Article 4 permitted development rights.

159. A binding commitment to reregister the deregistered areas of common land is necessary once the works are complete (in relation to land needed for temporary work areas) or when the works are decommissioned (in relation to other works: the turbines and access roads).

Planning Appraisal - The DNS Application

Main Considerations

160. Based on the foregoing, I consider the principal matters for consideration in the determination of the DNS application to be:

- *the effect of the proposed development upon landscape character and visual amenity;*
- *the effect of the proposed development upon the living conditions of the occupiers of neighbouring residential properties, having particular regard to noise impact;*
- *the effect of the proposed development upon ecological and biodiversity interests;*
- *the effect of the proposed development upon cultural heritage assets;*
- *the effect of the proposed development upon traffic flows and highway safety, particularly through the construction phase; and finally,*
- *whether any identified harm in respect of the above matters would be outweighed by the benefits and other matters in favour of the scheme, particularly the in-principle policy support for large scale wind farm development and the contribution towards renewable energy generation.*

Landscape Character and Visual Amenity

161. The application site lies some 12km to the south of the BBNP and within the local designation known as the Northern Uplands SLA. The latter designation, which is defined by the adopted Bridgend LDP, extends across the largely open uplands east of the Garw Valley and around the Ogmore Valley. The site is also located within the Mynydd Llangeinwyr Uplands LCA. That designation has been informed by the LANDMAP aspect areas and comprises remote uplands between the Garw and Ogmore Valleys.

162. The application is supported by a comprehensive LVIA that has been prepared by chartered landscape architects. That document considers the likely significant effects on the landscape and overall character of the area and describes: *the landscape and visual baseline; the assessment methodology and significance criteria used in completing the impact assessment; the potential effects, including direct, indirect and cumulative effects; any mitigation measures proposed to address likely significant effects;* and *the residual effects remaining following the implementation of mitigation*.

163. I have no reason to dispute the well-established methodology used in the preparation of that document and it is notable that no significant deficiencies have been identified by the statutory or interested parties in this respect. It is also common ground that the LVIA is more site specific and up to date than the other available evidence, including that which informed Bridgend CBC's adopted SPG document entitled SPG20: *Renewables in the Landscape*. The LVIA has considered both the construction and operational phases of the development.

Landscape Character

164. Localised significant landscape effects are predicted during the construction stage, affecting the site itself and the local area of the Mynydd Llangeinwyr Uplands LCA. These effects would arise from the high level of disturbance across the site due to construction of access tracks and

hardstandings, substation, control building and ESF, and erection of the turbines, and the change this would cause to the open upland character of the site. The evidence indicates that such effects

on the northern part of the Mynydd Llangeinwyr Uplands LCA would be moderate (significant), but would relate to relatively short timescales. Due to local topography, effects on the landscape character of the nearby valleys, and of other adjacent LCAs/aspect areas, would be minor (not significant), reducing to negligible (not significant) at distances over 1-2 km. Similarly, the evidence indicates that the effects of the track widening and construction works to the north of the site would be similar in character to routine forestry operations in such landscapes and would therefore be minor.

165. In terms of operational effects, significant effects on landscape are predicted to occur across the site, where the introduction of seven large turbines would give rise to a major (significant) effect. The effects of the access tracks, substation, control building and ESF would be more localised but would contribute to a major effect at the site level. The effect on the surrounding Mynydd Llangeinwyr Uplands LCA is also anticipated to be major (significant), as the turbines, access tracks, substation, control building and ESF would increase the existing level of human influence arising from the existing mast and Llynfi Afan Wind Farm across the northern part of the LCA. Effects would reduce to minor and not significant in the southern part of this LCA.

166. The development would be located on high ground between the Garw and Ogmore Valleys, and the presence of additional turbines on the skylines would affect the character of these valley landscapes. The effect of the access tracks, substation, control building and ESF would be negligible beyond the site. The scale of the effect on the Ogmore valley would be large due to turbines being introduced at a currently open skyline, on the opposite side of the valley to the existing Pant y Wal turbines. From the Garw valley, turbines would be set further back from the valley side, and the scale of the effect is anticipated to be medium. The level of effect in the northern part of both valleys is judged to be moderate (significant), reducing to minor (not significant) south of Blaengarw in the Garw valley and south of Price Town in the Ogmore Valley. Due to the relationship between the proposed development and the existing Llynfi Afan Wind Farm, effects on landscape character would be more pronounced to the south and east of the site than to the north and west.

167. When viewed from the north and west, the proposed development would be seen behind Llynfi Afan and would not, therefore, change the predominant character of the landscape. Effects on the Mynydd y Gelli LCA directly adjacent to the site are assessed as minor (not significant), mainly due to the fact that this LCA is already occupied by Llynfi Afan Wind Farm. Effects on the Llynfi and Garw Uplands LCA to the south-west are anticipated to be moderate (significant) across a small area at Mynydd Caerau, and not significant elsewhere. The proposed development would appear larger and closer than Llynfi Afan when viewed from the south and east, occasionally emphasising the presence of the existing turbines. Moderate (significant) effects are predicted across the central part of the Mynydd Llangeinwyr Uplands to the south, and Ogmore Forest and Surrounding Uplands LCAs to the east, where the Pant y Wal Wind Farm is already an influence. To the north east, topography would screen views of the proposed development from nearer areas.

168. The operational phase of development would therefore result in significant effects on landscape character across an area extending no more than 2km from the proposed turbines and much less to the north and west. The area where significant effects would occur is approximately bounded by the ridge of Craig Ogwr to the east, the summit of Mynydd William Meyrick, the settlement of Price Town, the south end of the main ridge of Mynydd Llangeinwyr, the settlement of Blaengarw, the summit of Mynydd Caerau, and the hairpin bend on the A4107 to the north. Beyond this area effects on landscape character would reduce to minor or negligible.

169. I have had full regard to the issue of cumulative impacts and was able to observe at the time of my site inspections that the presence of Llynfi Afan wind farm has an existing effect on the character of the landscape. The impact of the proposed development would generally be limited across

Werfa and the upper Afon Valley, although to the south-east the effect on the Ogmore Valley would be greater due to turbines being proposed on a currently open skyline. There are a number of consented yet unimplemented built wind farms, and one unconsented scheme, in the study area. However, these would not be seen within the immediate landscape context and do not form part of the same LCA as the proposed development so would be unlikely to give rise to significant cumulative impacts upon landscape character.

170. In terms of the total cumulative effects, the proposed development would clearly add to the overall number of turbines in the area, and would intensify the local influence of wind energy development. It would however not extend the influence of wind turbines into currently unaffected areas, nor would it introduce wind turbines into a landscape type that is currently unaffected. This would remain the case if consented and planned schemes were included in the baseline. As such, no further cumulative effects on landscape character have been identified, beyond those already discussed in the assessment against the landscape baseline.

171. Concerns have been raised by LPAs that the development would give rise to conflict with Policies SP4: *Conservation and Enhancement of the Natural Environment* and ENV3: *Special Landscape Areas* of the adopted Bridgend LDP. Nevertheless, whilst the development would result in landscape impacts across the northern part of the designated SLA, the open upland character would be largely unaffected despite the addition of vertical elements and associated infrastructure into the landscape. They would also be sited within close proximity to areas where vertical elements are already present to helps accommodate the wind farm into the landscape.

172. As set out previously in this Report, Future Wales now forms an important part of the development plan for the area and provides more up to date policy advice, specifically for DNS applications. The application site has been included within the '*Pre-Assessed Areas for Wind Energy*' identified by WG and Policy 17 of Future Wales clarifies that, within such areas, the WG has already modelled the likely impact on the landscape and has found them to be capable of accommodating development in an acceptable way. I have not seen any cogent evidence to lead me to an alternative conclusion. That same policy also goes on to state that there should be a presumption in favour of large-scale wind energy development in these areas, subject to the criteria set out in Policy 18. For the avoidance of any doubt, Policy 18 expressly omits any test in respect of landscape impacts for wind energy proposals located within the '*Pre-Assessed Areas for Wind Energy*'.

Visual Amenity

173. During construction, significant (moderate) effects are predicted to affect sensitive receptors at locations within 1.5km of the turbines which overlook the site, including those from nearby settlements. These receptors would have views of construction works and disturbance associated with the creation of the access tracks, substation, control building and ESF, as well as turbine erection. Construction activity other than turbine erection is unlikely to be more widely visible, and effects at all other locations are predicted to be not significant. Construction impacts would also be time-limited.

174. The LVIA viewpoint assessment identifies significant operational effects on sensitive visual receptors up to 4.8km from the site, with effects judged as major being limited to within 2km. Minor (not significant) effects were identified at locations up to 11.5km from the proposed development, and effects at more distant viewpoints have been judged to be negligible. These effects arise

principally from the presence of the wind turbines in views, with visibility of the substation, control building and ESF being much more localised.

175. Receptors at Blaengarw and Pontycymer would view the western part of the development above the upper slopes that enclose the valley. As indicated by the LVIA, views are likely to be restricted to three turbines, with only glimpses of other turbine blades. The development would be seen in

the context of the existing Llynfi Afan wind farm in most views. Significant effects (moderate) are predicted at Viewpoint 4 (Parc Calon Lan), and it is likely that similar effects would be experienced by receptors in other parts of Blaengarw with views of the turbines. From Pontycymer, views would be more restricted by intervening topography. Minor (not significant) effects are predicted for Viewpoint 8 (Meadow Street) and effects on other views from this settlement would not be significant.

176. To the east of the site is the Ogmore Valley and the settlement of Nant-y-moel. Effects at Viewpoint 5 are predicted to be major (significant), due to the appearance of the turbines on the skyline that forms part of the setting to the village. Similarly, significant effects are predicted from viewpoints in the eastern part of the settlement, on the valley slope. Receptors at the valley floor area are likely to have more limited views of the proposed development. Open views of the turbines would be available from Price Town, though from slightly further away, and significant effects would be experienced by people moving about this settlement. From both of these settlements, there are views of Pant y Wal Wind Farm to the south east. These turbines and the proposed development would appear on the skyline, but both would occupy a relatively small angle of view, so that viewers would not experience being surrounded by wind turbines.

177. From the linear settlement of Ogmore Vale to the south, views of the proposed development would be limited to one or two turbines seen at the head of the valley, some 3- 5km away. Moderate (significant) effects may be experienced where turbines are viewed in long views along the linear streets in this settlement, though elsewhere the view is likely to be limited by existing buildings, meaning effects would not be significant.

178. To the north-west of the site, the settlements of Blaengwynfi and Abergwynfi have close views of Llynfi Afan Wind Farm. The proposed development would be seen in the same views, behind the existing turbines. The proposed turbines would appear to be visually grouped with the existing wind farm, and effects at Viewpoint 6 in the upper part of Blaengwynfi are predicted to be moderate (significant). Other views from lower down in the settlement, and from Abergwynfi on the south side of the valley, would be more limited, and would not be significant.

179. The LVIA illustrates that there would be limited visibility from the Rhondda to the north-east. Viewers in the settlement of Cwmparc would see only turbine blades, and effects at Viewpoint 9 are predicted to be negligible. From the settlements of Treorchy and Pentre, and Ystrad further south, there would be views of turbine blades and, from locations higher on the valley side, the turbine hubs would be visible low on the skyline. Effects are not predicted to be significant. To the east of Ystrad the settlement of Penrhys lies on higher ground above the Rhondda. However, rising ground and woodland on the western edge of the settlement limits views towards the site. Effects at Viewpoint 13, in open space to the south of the settlement, are assessed as minor (not significant), and effects experienced from within the settlement would be similar or less.

180. The settlement of Maesteg is located around 6km south-west of the site with much of it outside of the zone of theoretical visibility. The higher parts of the settlement to the south-west, as well as Cwmfelin and the hill top village of Llangynwyd, would have views of the proposed development across the wooded foreground hills. Effects on Viewpoints 12 and 14, both located on high ground above the settlements, are assessed as negligible and minor. The proposed development would be seen in the context of, and sometimes behind, Llynfi Afan in these views, and therefore the

scale of change has been assessed as small or imperceptible. Effects on views from within these settlements are not predicted to be significant.

181. Much of the application site is identified as open access land and there are several public rights of way crossing the high ground of Werfa, Mynydd y Gelli and Mynydd Llangeinwyr. Walkers using this area would experience a large scale of change in view during construction and during operation, due to the presence of wind turbines, access tracks, substation, control building and ESF in the local view. Effects are likely to be major (significant) as identified at Viewpoint 2

    Mynydd Llangeinwyr. People walking towards the proposed development on nearby footpaths would also experience significant effects, as recorded at Viewpoint 3 Craig Ogwr to the east. The Sky to Sea long-distance walk passes both Viewpoint 2 and 3, and walkers on this route would experience a major (significant) effect as they pass the development.

182. People accessing walking routes and cycle routes from the A4107 to the north of the site would also have close views of the proposed development, though coniferous woodland is likely to screen views from the trails themselves. Walkers accessing the surrounding hills, such as Mynydd William Meyrick (Viewpoint 7) and Pen y Foel (Viewpoint 10) are predicted to experience moderate (significant) effects where open views of the development are available.

183. At greater distances, significant effects are unlikely, including from the long-distance walks in the west and south of the study area. The Celtic Way and St Illtyd's Walk follow similar routes from north to south, passing through several sections of the zones of theoretical visibility at distances between 7- 15km. Both routes pass through areas of coniferous forestry that would further reduce visibility. Effects on views from this route are expected to be minor at most, with effects at Viewpoint 12, which is on both routes, assessed as negligible.

184. The Ogwr Ridgeway long-distance walk passes through several sections of the zones of theoretical visibility to the south of the site, including Mynydd Baedan and Mynydd y Gaer, and is generally within more open land. Views north would include the proposed development on high ground, in the context of the Llynfi Afan turbines. Effects are predicted to be minor (not significant), as assessed for Viewpoint 14 which is on this route. Further south, the Bridgend Circular Walk passes through sections of the zones of theoretical visibility between 11-15km from the proposed development, around Sarn and the M4. Effects are predicted to be minor (not significant), as assessed for Viewpoint 15 which is on this route.

185. Cyclists using the National Cycle Network Routes 883 and 884 in the Ogwr and Garw valleys respectively would have intermittent views of the turbines as they travel north. These largely offroad routes follow the valley floor and avoid the areas of greater visibility on valley sides. Effects on views are predicted to be moderate (significant) in the northern-most parts of the routes, but not significant over most of their length. People visiting the Brecon Beacons would not experience significant effects due to the distances involved and the intervening wind farms.

186. Views of the development would be available travelling north on the A4061 through the Ogmore valley, with turbines seen on the skyline at the head of the valley. There would be some prolonged views of the turbines and other glimpsed views between Ogmore Vale and Nant-y-moel. Travelling south there would be no view of the proposed development until the hairpin bend south of the A4107 junction. Turning this bend, the proposed development would be fully visible at close range, from the section of road that traverses the head of the valley. Beyond this point there would be no views. Road users are considered to be of lower susceptibility to changes in view, and effects on users of this road would be locally moderate (significant) for the section at the head of the valley.

187. The A4107 runs east to west immediately north of the site. Views of the turbines would be a feature of the route between the hairpin bend and the A4061 junction. Users of this road already

have views of the Llynfi Afan turbines at close range, though the proposed development would increase the amount of development visible. The access tracks, substation, control building and ESF would all be visible from this section of the route. Effects are predicted to be moderate (significant) along a 3km section of this road.

188. In terms of cumulative impact, the majority of the cumulative baseline is made up of wind farms that are already in operation. The interactions of the proposed development and Llynfi Afan Wind Farm are set out above. The proposed development would rarely introduce views of wind turbines where they are not already a feature. For similar reasons, the proposal is not considered to give rise to significant sequential effects on views through the study area, since it would almost always

be seen in the context of an operational development. As with the effects on landscape, effects on views are likely to be greater to the south and east, from where the development would appear in front of and larger than the Llynfi Afan development. From the north and west, the proposed development would generally be seen as part of the existing wind farm. Consented yet unimplemented wind farm developments, as well as unconsented schemes, would not significantly alter the context of the proposed development.

189. Concern has been raised that the development would have potential for visual dominance and overbearing impacts for local communities and recreational users. However, whilst the wind turbines would be an unavoidable presence in views from the communities at the northern end of the Ogmore Valley, with the effects of the proposed development locally significant, the development would generally be seen within the context of the existing wind farm developments. As such, I am generally satisfied that the development would not be overbearing or overly oppressive, either alone or in combination with other wind farm developments, for any community, individual property or recreational user. To this extent, I do not consider that the development would give rise to unacceptable adverse impacts. The development would therefore be broadly compliant with the provisions of Policy 18 of Future Wales. For the same reasons, I also find no fundamental conflict with Policies SP2 or Policy ENV18 of the adopted Bridgend LDP or the provisions of the adopted Neath Port Talbot LDP.

Noise Impact

190. An assessment of the acoustic impact from both the construction and operation of the proposed development has been undertaken, taking into account the identified nearest residential properties. In terms of construction impacts, the evidence indicates that noise levels at the nearest residential properties could exceed construction noise criteria. However, mitigation measures have been identified and could be secured through the imposition of suitably worded planning conditions. An acoustic assessment of the proposed energy storage facility in accordance with BS 4142: 2014 shows that the impact would be low and the levels insignificant in comparison to the cumulative wind farm noise levels.

191. The operational noise impact was assessed according to the guidance described in the '*The Assessment and Rating of Noise from Wind Farms*'[46], as recommended for use in relevant planning policy. The methodology described in this document was developed by a working group comprised of a cross section of interested persons including environmental health officers, wind farm operators and independent acoustic experts. It provides a robust basis for assessing the noise impact of a wind farm and has been applied at the vast majority of wind farms currently operating in the UK. The assessment also adopts the latest recommendations of the Institute of Acoustics '*Good Practice Guide to the Application of ETSU-R-97 for the Assessment and Rating of Wind Turbine Noise*'.

[46] Referred as 'ETSU-R-97'

192. In accordance with such guidance, the background noise levels used as the basis for noise limits are not permitted to include any contribution from wind farm noise and the derived ETSU-R-97 permitted noise levels is the allowed totality of wind farm noise in an area. Where there is an existing wind farm, noise limits for any additional development are required to take account the noise from the existing site by being set at a level which prevents overall wind turbine noise level from exceeding the ETSU-R-97 limits.

193. The relevant baseline noise measurements for the purposes of the assessment of operational noise in this case are those described in the ES. For the avoidance of any doubt, these were carried out at three locations: two in Nant-y-moel and one in Blaengarw. Furthermore, background noise data also includes existing measurements carried out at four locations in respect of the Llynfi

Afan development. These include locations at Abergwynfi, Croserw, Blaen-Cwmdu Farm and another location in Blaengarw. Due to the proximity of the three new measurement locations to existing operational sites, corrections were made to remove any influence of existing wind turbine noise. No correction was required for the other four sites as there was no contribution from existing turbine noise at the time of the measurements.

194. The operational noise assessment for the proposed development acting in isolation is agreed with the respective environmental health departments and I have no reason to raise concerns in respect of such evidence. It is relevant to note in this respect that there are no exceedances of the limits for the proposed development acting alone. However, given the requirement in ETSU-R-87 for noise limits to apply to noise arising from all wind farms in the area, there is no doubt that it is the cumulative noise levels that represent the more significant assessment in this case.

195. It is noted that well-established guidance enables a cumulative operational noise assessment to be carried out either by comparing predicted cumulative noise levels with overall ETSU-R-97 limits or by establishing the remaining noise budget available for the site operating in isolation, once account is taken of the existing wind farms, and comparing this with the predicted noise levels with the site operating in isolation. The latter can be used to inform noise limits in planning conditions which can only, under normal circumstances, be applied to a development operating in isolation.

196. Both approaches require assumptions to be made about noise from the existing sites. The most conservative assumption is that all existing sites, built or unbuilt, are operating at their planning limits. However, this is highly unrealistic because there is no physical possibility of all existing wind farms operating at their limits at all locations, at all wind speeds and under all wind direction conditions where the normal ETSU-R-97 noise limits have been applied to an existing development. The least conservative assumption is that all existing consented wind farms are operating at their predicted noise levels, which already include a degree of conservatism. The controlling property approach is where the predicted levels are corrected upwards such that they just meet the limits at the most critical property.

197. The ES sets out the original approach advocated by the applicant[47], with the results of the cumulative predictions compared with derived noise limits. This illustrated predicted exceedances at six locations for the day-time period. However, an example mitigation strategy is provided that would prevent those predicted exceedances occurring. Other strategies may be equally appropriate, dependent on the final choice of turbines. The ES also included suggested planning conditions relating to noise that were based on the noise budget methodology described above.

198. Nevertheless, following concerns raised through the LIRs in respect of the cumulative noise assessment, the applicant proposed an approach whereby the noise from existing wind farms is based purely on the predicted noise levels, which are said to already include a 2dB margin for

[47] Paragraphs 10.132 to 10.149

uncertainty, plus an additional 3dB uncertainty factor. This approach stems from paragraph 5.4.11 of '*The Good Practice Guide to the Application of ETSU-R-97 for the Assessment and Rating of Wind Turbine Noise*' which states that, in cases where there is significant headroom (e.g. 5 to 10dB) between the predicted noise levels from the existing wind farm and the total ETSU-R-97 limits, where there would be no realistic prospect of the existing wind farm producing noise levels up to the total ETSU-R-97 limits, agreement could be sought with the LPA as to a suitable predicted noise level. This should include an appropriate margin to cover factors such as potential increases in noise from the existing wind farms.

199. The Councils do not object to the principle of such an approach and are satisfied with the application of the lower range of 5dB headroom between the predicted noise levels from existing wind farms and the ETSU-R-97 limits. However, Bridgend CBC objects to the applicant's contention that the lower 5db headroom should be calculated by taking the 2dB uncertainty margin factored into the predictions associated with the existing wind farms plus an additional 3dB uncertainty factor. Rather, the Council advocates that a 5dB uncertainty allowance should be added to current predictions, over and above any uncertainty margin already built into the predicted noise levels at existing developments. In support of this position, the Council has indicated that the Llynfi Afan may be operating near to its limits and that compliance monitoring shows that sound power levels from turbines at the Pant-Y-Wal/ Fforch Nest sites may be higher than manufacturer's data. It also notes that existing wind farms could legally operate up to their consented limits and cites two relatively recent noise complaints associated with operating wind farms.

200. The applicant contests the Council's position in respect of such matters, stating that the suggested approach would be unnecessarily conservative. In coming to this conclusion, the applicant notes that the Council's concerns in respect of the operational noise levels at Llynfi Afan have been demonstrated to be erroneous and that no cogent evidence has been provided to corroborate its concerns in respect of existing operational noise levels at Pant-Y-Wal/ Fforch Nest. Furthermore, the applicant points to the fact that, of the two noise complaints referred by the Council, one has been confirmed to relate to a mechanical fault on an existing turbine which has since been resolved. The other relates to a '*live complaint*' which had not been substantiated at the time of the Hearing. Reflective of the unresolved nature of this particular matter, alternative planning conditions have been submitted to reflect the noise limits flowing from the respective approaches to calculating headroom[48].

201. In considering this issue, I share the Council's concerns regarding the principle of simply applying 3dB to the current predictions on the basis that 2dB has already been applied to the existing wind farms. Indeed, questions over the exact uncertainty allowance used in respect of existing developments were raised at the Hearings and I have not seen any cogent evidence that provides the assurance that noise levels at existing sites would not increase in future. In coming to this conclusion, I am mindful that existing wind farms could lawfully operate up to their consented limits. I therefore find that, on the basis of the available evidence, the Council's approach, which assumes that the existing sites are operating at their predicted noise levels for each sector with an additional 5 dB uncertainty added, is necessary to protect the local community from unacceptable noise impacts.

202. The curtailment necessary to meet the suggested noise limits would inevitably limit the energy yield relative to an unrestricted scheme and the approach advocated by Bridgend CBC would clearly represent a greater restriction than that suggested by the applicant. However, the applicant has confirmed that the reduction using the Council's approach, at some 2.9152 GWh/ annum or

[48] Document 18: Applicant - Suggested Planning Conditions, dated 28 July 2021 as supplemented/ updated by Document 9

770 homes per year[49], would not impact upon the viability of the scheme. Neither would it be a significant reduction in yield compared to that arising from the applicant's methodology which would stand at a reduction of some 2.2626 GWh/ annum or 660 homes per annum.

203. The operational noise limits for each affected property can be derived by subtracting the assumed noise level from all other wind farm development from the overall cumulative ETSU-R-97 noise limits. Utilising this methodology, the proposal seeks to provide different noise limits for six wind direction sectors. Despite initial concerns being raised by the Councils with regards to the proposed consideration of wind direction, evidence[50] has been submitted to demonstrate that it represents a feasible approach that would meet the tests set out in WG Circular 16/2014. Indeed, the monitoring of wind direction has been proven to be no more difficult to monitor than wind speed and such an approach has been successfully adopted elsewhere in the United Kingdom (UK). Such evidence has satisfied the Councils' concerns and I have no reason to reach a different conclusion.

204. Therefore, the proposed development would be acceptable in noise planning terms subject to the noise limits proposed being met and I am satisfied by the evidence that the noise limits identified could be complied with through appropriate curtailment on the individual turbines. I therefore find that the proposed development would not cause material harm to the living conditions of the occupiers of nearby residential properties by reason of noise impact. I also find that it would be compliant in this respect with the aims of both PPW and Policy 18 of Future Wales. It would also be broadly consistent with the aims of the relevant LDPs, including Policies SP2 and ENV18 of the adopted Bridgend LDP and Policies BE1 and EN8 of the adopted Neath Port Talbot LDP.

Ecology and Biodiversity

205. PPW, Future Wales and TAN5 identify the planning system's role in helping reverse the decline in biodiversity and increasing the resilience of ecosystems, at various scales, by ensuring appropriate mechanisms would be in place to both protect against loss and to secure enhancement. Addressing the consequences of climate change should be a central part of any measures to conserve biodiversity and the resilience of ecosystems. It identifies the importance of supporting biodiversity, ensuring the protection of statutorily designated sites and protected and priority species, and to secure the enhancement of, and improvements to, ecosystem resilience by improving diversity, condition, extent and connectivity of ecological networks. Policy 9 of Future Wales provides specific advice in respect of such matters by identifying the importance of enhancing biodiversity and the resilience of ecosystems.

206. Policy 17 of Future Wales sets out a presumption in favour of large scale wind energy developments, such as that proposed in this case, within the '*Pre-assessed Areas for Wind Energy*' subject to the criteria of Policy 18 being satisfied. Policy 18 provides a criteria based policy for renewable and low carbon energy development of national significance, such as that proposed in this instance, with criterion 3 seeking to prevent adverse effects on the integrity of internationally designated sites. Criterion 4 of that same policy seeks to prevent unacceptable adverse impacts on national statutory designated sites for nature conservation, protected habitats and species and criterion 5 requires such proposals to include biodiversity enhancement measures to provide a net benefit for biodiversity.

207. Policies SP4: *Conservation and Enhancement of the Natural Environment*, ENV4: *Local/ Regional Nature conservation Sites*, ENV5: *Green Infrastructure* and ENV6: *Nature Conservation* of the adopted Bridgend LDP form part of the planning policy framework set out at a local level. Those policies are supplemented by SPG19: *Biodiversity and Development*. Policies SP15: *Biodiversity*

[49] Derived using the annual UK average domestic household consumption of electricity published by BEIS

[50] Hearing Documents 2, 3, 4 and 5 of Hearing Session 1 – Refer Annex C of this Report

and Geodiversity, SP16: *Environmental Protection*, EN6: *Important Biodiversity and Geodiversity Sites* and EN7: *Important Natural Features*, along with the SPG document entitled '*Biodiversity and Geodiversity'* provide policy advice for developments within Neath Port Talbot.

Designated Sites

208. There are no sites designated for ecological interest on the application site. The nearest internationally important site is the Blackmill Woodlands Special Area of Conservation (SAC) and SSSI located approximately 7.2km south of the site, and the nearest Special Protection Area (SPA) is the Severn Estuary SPA, located approximately 34km south-east of the site. There is no evidence to suggest that the development would have an adverse impact on sites of international importance. There are four statutory sites of nature conservation within 5km. These include Mynydd Ty-isaf SSSI, Cwm Cyffog SSSI, Blaenrhondda Road Cutting SSSI, and Cwm Du Woodlands SSSI. There are also eight local authority designated Sites of Importance for Nature Conservation (SINCs) within 2km of the site and an additional five sites that meet SINC criteria within Neath Port Talbot

209. The site has sensitive hydrological receptors including unnamed tributaries leading towards the Afon Garw, Afan Afan and Ogwr Fawr and has peat accumulations present within the locality of the site. The Mynydd Ty-isaf SSSI is located immediately north of the site to the north of the A4107 and has a slightly lower elevation than the application site. Suitable prevention measures would therefore be necessary to prevent the movement of dust, mud and silty run-off from the site. Such measures could be adequately provided through a CEMP which could be secured through the imposition of a suitably worded planning condition. Subject to a comprehensive CEMP, I am satisfied that the aforementioned national and local sites would not be subject of unacceptable adverse impacts.

Habitats and Species

210. The ecological assessment considers potential effects on habitats and protected species at each of the construction, operational and decommissioning phases of the development. Despite no objections from NRW, significant concerns have been raised through the LIRs in respect of the survey work. In particular, the Councils' ecologists contend that there is a lack of an up to date baseline to effectively assess the ecological impacts.

211. The Phase 1 Habitat Survey generally accords with best practice and the surveys were undertaken at an appropriate time of year. At the time the application was accepted, the survey was within the age range of 2- 3 years recommended by the CIEEM[51] and was supplemented by site walkovers that enabled the applicant's ecologists to confirm that land management practices and upland habitats had not materially changed in the intervening period. Similarly, whilst the National Vegetation Classification (NVC) Survey is some years old, the Phase 1 Habitat Survey confirmed no change of these habitats and the proposal aims to minimise impacts on areas of deep peat.

212. The Honey Buzzard Survey deviates from established guidance although it is generally agreed that the site provides suboptimal breeding habitat for the honey buzzard. Moreover, there are no records of honey buzzards being recorded locally. The Winter Bird Survey is again some years old. However, the age of the data is consistent with established guidance and has been partially updated by vantage point survey work undertaken in 2020. Whilst a full update would have been advantageous, NRW has confirmed that it would have been unlikely to show any significant

[51] CIEEM Advice Note on the Lifespan of Ecological Reports and Surveys (April 2019)

change given the nature of the site and the extent of the works being proposed and I have no reason to come to a different conclusion on this particular matter.

213. A range of bird species typical of upland moorland habitats were recorded during the surveys, and included red kite, goshawk, peregrine, merlin, kestrel and golden plover. The majority of recorded flights involved single birds. The assessment has concluded that effects of displacement and collision risk are likely to be minimal. Use of the airspace by kestrel indicates that it is possible that an effect on the local population will occur if other wind farms in the area are also impacting on the population. However, the combination of the CEMP, EMP and completed unilateral undertaking would ensure that an off-site area of enhanced kestrel habitat would be provided to provide both mitigation and enhancement in respect of such matters.

214. Bat survey work was undertaken in 2019 and the static detector surveys meet the minimum level required by established survey guidance. The walked transect surveys have not been updated, although NRW have confirmed that they are a complementary survey method to the static detector surveys that are discretionary. Having regard to the evidence available in this case, NRW has not requested such updates and I am satisfied that the submitted evidence is proportionate. The bat survey work recorded low-level activity for Nathusius' pipistrelle, common pipistrelle, soprano pipistrelle, long-eared bat species and species in the genus Myotis. No evidence of use of the buildings within the Werfa Mast compound by roosting bats was found. The overall risk to all species of bat recorded at Upper Ogmore has been assessed as being low. Whilst a curtailment regime is not considered necessary, turbine blades would be pitched out of the wind (feathered) to reduce their rotation speeds when idling.

215. Concerns have been raised by the Councils in respect of Great Crested Newt. However such concerns regarding false negative results are largely anecdotal. NRW considers the eDNA surveys of ponds within 250 metres if the site boundary to be appropriate and in accordance with published guidance.

216. Neath Port Talbot CBC has expressed concern regarding the impacts on water vole and reptiles during the widening of the access track and NRW has noted that the water vole survey work does not fully accord with best practice. Nevertheless, NRW is satisfied with the water vole surveys undertaken in June 2016, August 2016 and May 2020 and the development has been designed to avoid watercourses and could be subject to pollution prevention measures for those habitats. Furthermore, a detailed approach to avoiding impacts on such habitats and species, including that at the access track, could be secured through a CEMP and/ or EMP. Such management arrangements could require pre-construction survey work, with necessary mitigation measures agreed prior to commencement of development. Such an approach could also ensure that the site's environmental features are adequately managed in the long term. As such, I am therefore satisfied that such an approach would be both proportionate and reasonable.

217. The LIRs have indicated that insufficient consideration has been given to stag's horn and clubmoss. Whilst the Council has indicated that such species have been recorded along the access track, the applicant states that their evidence does not indicate a need for further investigation. In light of the available evidence, I am satisfied that the approach advocated through the requirements of the CEMP to be proportionate and appropriate. The construction phases would result in the loss of small areas of improved grassland, acid and marshy grassland and wet modified bog. However, the evidence indicates that this would have a minimal impact on the habitats present. Concerns have been raised regarding the felling of trees along the access track. However, the evidence suggests that this would be kept to a minimum and would only affect actively managed commercial plantation approaching felling age.

218. Neath Port Talbot CBC has raised concern regarding an area of modified bog ('Black Bog') resulting from the widening of the access track. However, the area of bog is some 35 metres

distant from the track and maximum widening in this location would only be some 0.4 metres. There is an existing trackside drainage ditch between the track and the bog. However, I have not seen anything to lead me to conclude that any impacts on surrounding vegetation could not be adequately controlled through a CEMP. Concerns have been raised in respect of hydrological impacts. However, having regard to the extent of the widening and the fact that the majority of the track is already 'made ground', I have not seen any cogent evidence to lead me to conclude that the widening of the access track would result in a material change to hydrological flows. The CEMP also offers a degree of control over such matters.

219. The development would have an impact on peat bogs which are identified within national policy as features of significant nature conservation interest. However, consideration has been given to the impacts of the proposals on peat locally and no turbines would be located in the vicinity of deep peat (depth greater than 0.5m). The proposed site access would utilise an existing field entrance and avoid the deepest areas of peat. It is the only suitable location that is safe for access to the site from the public highway, without impacting on the Scheduled Ancient Monument GM246. The evidence indicates that the section of track that crosses a deeper area of peat (up to 0.8m deep) would have minimal hydrological impact on the peat bodies given the local topography, presence of the A4107 and proximity to watercourses. The track would also be floated over the peat with flow balancing pipes and large stone installed to maintain flows.

220. Particular attention has been paid to the risk of affecting peat, surface water hydrology and receiving watercourses during the design of the infrastructure layout and in the impact assessment. The length of floated track over the deeper peat (0.4 to 0.8m) would be approximately 110m. The Councils have raised anecdotal evidence regarding the use of such methods, although RES has indicated that it has constructed several floating tracks over peat at wind farm sites with no long-term hydrological effects. Nonetheless, NRW has confirmed that it is supportive of this approach. All other concerns could be satisfactorily addressed through a CEMP and EMP, including the requirement for a 'Borrow Pit Management Plan' that would include an assessment of, and proposals for, addressing the issue of hydrology. Overall, construction and operational phase ecological and ornithological effects would be localised and would not amount to unacceptable adverse impacts.

221. Ecological enhancements that would include a natural sediment management initiative, wider habitat creation works and water vole conservation works would also be provided through a Biodiversity Enhancement Management Plan (BEMP), deliverable through the signed unilateral undertaking. Whilst exact details would need to be the subject of a feasibility study, I am satisfied that the identified works provide a framework that would commit the developer to carry out such works. Indeed, the solicitor for Bridgend CBC has confirmed that the document is sufficient to ensure that ecological enhancement works are carried out and I am satisfied that the undertaking meets the legislative and policy tests for planning obligations.

222. On this basis, and having regard to the wider environmental benefits that would arise from the production of renewable, low carbon energy, I find that the development would be in general conformity with the aims of national policy, including Policy 18 of Future Wales which requires biodiversity enhancement measures to provide a net benefit for biodiversity. I also find that, subject to mitigation measures, there would be no material conflict with the aforementioned policies of the adopted Bridgend and Neath Port Talbot LDPs.

Cultural Heritage

223. The application is supported by an Archaeological and Heritage Desk Based Assessment and an Assessment of the Significance of the Impact of the Development on the Historic Landscape[52],

[52] Chapter 7: *Cultural Heritage* of the ES, as supplemented and amended by the Cultural

prepared by qualified professionals. The evidence indicates that there would be a slight, but not significant, impact on the following Registered Historic Landscapes: *The Rhondda; and Margam Mountain*. Cadw concurs with this assessment and I have no reason to come to a different conclusion.

224. Cadw also agrees with the applicant's evidence in respect of the impact upon the numerous scheduled monuments located within 5km of the application site. In particular, the impact upon scheduled monument 'GM231 Clawdd Mawr, Mynydd Caerau', 'GM278 Earthwork 360m NNE of Crug yr Avan', 'GM233 Crug yr Afan Round Cairn', and 'GM232 Mynydd Caerau Round Cairns' has been found to be 'very slight' and 'slight'. The impact upon *GM243 Carn y Hyrddod & Neighbouring Cairn', 'GM246 Bwlch yr Avan Dyke'* and *'GM499 Round Barrow on the Werfa'* has been assessed as '*moderate',* although such impacts would be significant.

225. Nevertheless, it is agreed that the significant impacts of the proposed development on these scheduled monuments could be adequately off-set by the preparation of a '*Monument Management Plan*' that could be required by a planning condition and implemented during the construction and operational phases. Such a plan would include: improving access; the provision of interpretation panels; and management of the monuments during construction and during operation. Therefore, subject to the preparation of a '*Monument Management Plan*', the harm caused by the proposed development is considered to be acceptable.

226. The evidence indicates that Glamorgan Gwent Archaeological Trust identified some archaeological potential within the footprint of the development at the pre-application stage. Nevertheless, no objection has been raised to the submitted application and I am satisfied that a satisfactory scheme of mitigation could be secured through the imposition of a suitably worded planning condition.

227. There would not therefore be any unacceptable impacts on heritage assets and, therefore, no material conflict with national or development plan policy, including Policy SP5 of the adopted Bridgend LDP and Policy SP21 of the adopted Neath Port Talbot LDP.

Traffic and Highway Safety

228. The principal issues in respect of traffic and highway safety relate to construction traffic. The proposed access route for abnormal loads[53] (turbine components) is from Swansea Docks, which has been used previously for wind farm component deliveries. From Swansea Docks, the loads would travel east along the A483, joining the M4 at Junction 42 and leaving at Junction 43 onto the A465 heading 30km northeast towards Hirwaun. The route would exit the A465 onto the A4061 to the Pen y Cymoedd Wind Farm site access, before continuing along the Pen y Cymoedd Wind Farm / NRW Forestry tracks (off the public highway), exiting onto the A4107 eastbound for approximately 1km to the proposed site access.

229. The abnormal load route would avoid areas of concern outlined through pre-application discussions. The proposed access onto the A4107 includes the provision of visibility splays that would be acceptable given the geometry of the carriageway. Nonetheless, junction warning signs and a temporary speed limit of 40mph along the A4107 would be agreeable to the highway authority and could form part of a wider CTMP that could include a construction strategy and details of all temporary traffic management measures.

230. Subject to certain details being agreed and implemented through planning conditions, I am therefore satisfied that there would not be any unacceptable traffic or highway implications arising

Heritage Update, Appendix F of the 'Submitted Further Information', dated 17 March 2021

[53] Figure 9.1 of the ES

from the development. The development would therefore be generally consistent with the aims of national and local planning policy relating to such matters.

Other Material Considerations

231. The application is supported by a shadow flicker assessment[54] that has been prepared using a well-established methodology. That assessment identifies that there would be no inhabited houses within 1,100 metres of any proposed turbines, meaning that no shadow flicker is predicted. As nothing has been submitted to counter such evidence, no mitigation measures would be necessary in respect of such a matter.

232. Neath Port Talbot CBC raised concerns regarding potential land contamination along the stretch of access track that is proposed to be widened. The applicant's Geo-environmental Preliminary Assessment[55] identified past and current industrial land uses in the vicinity of the proposed development works, which primarily consist of pits and quarries. An historical refuse heap dating from 1877 was identified, located 150m in the downhill direction from the proposed works. It is noted that the pits and quarries are likely to have been used to extract stone for the construction of the existing tracks, and that any infill is unlikely to consist of contaminants due to their locations within a forestry area.

233. The areas proposed for track widening is expected to be limited to several tens of square metres in area and less than one metre in depth. Existing drainage would be reinstated adjacent to the widened areas such that the hydrology would be unchanged. In the context of the low risk of land contamination from past and present industrial land uses within the area of influence, combined with the minor nature of the proposed development works, I am not convinced that the potential impact of land contamination to be anything other than very low and that a further assessment and development of a conceptual site model is unjustified. I also find that it would be disproportionate in this case to impose conditions more normally associated with major construction works in areas of known significant historic industrial use. However, a condition dealing with unexpected land contamination is justified.

Benefits & Other Matters in Favour of the Development

234. The preceding sections of this Report outline the significant in-principle policy support for developing renewable and low carbon energy from all technologies and at all scales to meet our future energy needs. This is reflected in both national and development plan policy, including the recently published Future Wales. Indeed, Future Wales states that, when determining planning applications for renewable and low carbon energy development, decision-makers must give significant weight to the need to meet Wales' international commitments and WG's target to generate 70% of consumed electricity by renewable means by 2030 in order to combat the climate emergency.

235. The development proposed in this case is estimated to produce sufficient energy to power nearly 22,000 homes each year over its operational lifespan and to displace some 38,500 tonnes of CO2 a year, equivalent to an estimated 29,200 newly registered cars. This represents a substantial contribution to the production of energy from a renewable resource and to the reduction in greenhouse gas emissions. Such a contribution would clearly result in substantial environmental benefits and would be significant in the context of the Welsh Government targets and its commitment to address the climate emergency.

236. In addition to such contributions, the battery storage facility provided by the proposed container units would ensure that the supply of energy generated by the development can be controlled to

[54] Chapter 11 of the ES
[55] Included in the Pre-Application Consultation (PAC) Report, Appendix 4

add greater flexibility to address issues between peak demand and supply. The benefits of an increased use of energy storage to provide a balance in this respect is recognised as a significant benefit in national planning policy. In accordance with the aims of national planning policy, the contributions towards an efficient and clean supply of energy weigh substantially in favour of the development.

237. The proposal also offers economic and social benefits. Specifically, it is estimated that the proposed development would involve a capital spend of £22.49 million (nominal prices), of which £8.18 million (nominal prices) will be realised in Wales. It is estimated that the 10-month construction phase would create or sustain an estimated 104- 86 job years of employment, £3.442.81 million in wages and £3.52-£2.93 million in GVA to the Welsh economy. The development is also expected to create or sustain the equivalent of 35 direct job years of employment, £1.49 million in direct wages and £4.58 million in direct GVA over its 35-year operational lifespan. The development would also provide significant tax revenues.

Planning Conditions and Obligations

238. Planning conditions have been the subject of change through the application process. Specifically, a SoCG in respect of planning conditions and obligations, dated 18 June 2021, was submitted in advance of Hearing Session 3. That document set out the main parties' position in respect of planning conditions and formed the basis for the discussion at the Hearing Session. However, an amended schedule of planning conditions was subsequently submitted[56] to reflect the matters arising from the hearings. That document was accompanied by a draft unilateral undertaking, dated 23 July 2021, and was the subject of a period of consultation.

239. A number of matters of dispute between the parties remained, particularly in respect of the draft unilateral undertaking. Following a prolonged period of suspension, as detailed above[57], a completed unilateral undertaking, submitted under the provisions of Section 106 of the 1990 Act, was submitted on 9 September 2021[58]. That document was accompanied by a SoCG[59] that set out the parties' position in respect of the unilateral undertaking and a further SoCG[60] updated the parties' position in respect of the suggested planning conditions. An additional representation[61] was received separately from NRW in respect of the unilateral undertaking.

240. I have considered the suite of suggested planning conditions and the associated SoCGs and, having had regard to the advice in WG Circular 16/2014: *The Use of Planning Conditions for Development Management* (October 2014), have adjusted the wording of some of the conditions in the interest of clarity and precision. Those conditions that meet the relevant tests are set out, with reasons, at Annex A of this Report. The plan illustrating biodiversity enhancements[62] has been omitted from the approved plans given that full details would need to be subject of a feasibility study and subject of approval prior to commencement of development, reflective of the comments received from Bridgend CBC and NRW. Condition No.24 has been amended to reflect this change.

241. Given the limited extent of construction work proposed along the access track and the lack of any cogent evidence to indicate that contaminated material is likely to be observed during construction, a condition dealing with unexpected contamination is considered proportionate. Condition No.24,

[56] Document 18
[57] Refer 'Preliminary Matters' section of this Report
[58] Document 7
[59] Document 8
[60] Document 9
[61] Document 10
[62] Drawing 02959_RES-IMP_DR_EN_001 (Rev 5) – Biodiversity Enhancements

which relates to the need for an EMP, reflects as far as possible the position agreed between the parties. Suggested clauses relating to CEMP mitigation are not however considered necessary given that they would be addressed by Condition No.19. Similarly suggested clauses relating to wild bird habitat have not been included given that sufficient replacement land would be provided through the replacement common land. Indeed, coupled with the works deliverable through the EMP and unilateral undertaking, I am satisfied that such provision would sufficiently compensate for habitat loss along the access track. The suggested peat conservation scheme would not be proportionate given the nature of the scheme and the commitments of the CEMP.

242. Despite the applicant's arguments, I consider the restriction on the hours of construction suggested by the Councils to be necessary, as set out at Condition No.27 at Annex A. As set out above, the reference to operational noise limits throughout the recommended noise conditions

relate to those advocated by Bridgend CBC. Recommended Condition No.37 is necessary given that the noise assessment is based on a candidate turbine and it is likely to take several months to carry out compliance measurements to ensure that that the limits at the range of wind speeds, and a different wind directions, are met. Should a different turbine be chosen, with higher sound levels or a different tonality, local residents would potentially suffer adverse noise implications for a prolonged period of time whilst noise compliance measurements are undertaken. Furthermore, should such issues be incapable of being satisfactorily mitigated, there is potential for turbines to be incapable of generating the energy that has formed the basis of this application.

243. The effect of the signed unilateral undertaking would be to require a BEMP that would, amongst other things, provide ecological enhancements on land outside of the application boundary. The unilateral undertaking was prepared following a period of consultation with both Bridgend CBC, Neath Port Talbot CBC and NRW and I am satisfied that such covenants meet the tests set out in national policy and the statutory tests set out under the Community Infrastructure Regulations 2010 in that they are reasonable and necessary to satisfy the requirements of development plan policy. I have therefore attributed it weight in coming to my conclusions in respect of ecology and biodiversity.

Planning Balance and Conclusions - DNS Application

244. Based on the foregoing, I have found that the development could be accommodated within the landscape in an acceptable manner. This reaffirms the site's positioning within a '*Pre-Assessed Area for Wind Energy*' where the likely impacts on the landscape have been modelled and found to be acceptable. The visual effects of the development would be locally significant. However, the turbines would be largely seen within the context of existing wind farm developments. I have considered cumulative impacts and, for the reasons set out above, I am satisfied that they would not be overbearing or oppressive for any community, individual or recreational user, either alone or in combination with other developments. To this extent, the development would not give rise to unacceptable adverse visual impacts and would therefore be broadly compliant with the provisions of Policy 18 of Future Wales and other LDP policies.

245. It has been demonstrated that cumulative noise impacts could be effectively mitigated through the imposition of suitably worded planning conditions. I therefore find that the development would not cause any material harm to the living conditions of the occupiers of nearby residential properties by reason of noise impact. The development would therefore be generally consistent with relevant development plan policies and the provisions of PPW.

246. The development would not have an unacceptable adverse effect on any internationally designated site. Furthermore, subject to conditions, there would be no unacceptable adverse

impacts on nationally designated sites for nature conservation, habitats or species. There would clearly be some localised impacts, including those arising from the widening of the forestry track. However, given the scale of the works necessary, I have not seen anything to lead me to believe that such impacts could not be mitigated to an acceptable level. Ecological enhancement measures could be provided through the submitted unilateral undertaking and associated suite of planning conditions and wider environmental benefits would arise from the production of renewable, low carbon energy. The development would clearly impact upon peat bogs which are of significant nature conservation interest. However, such impacts have been minimised through design and would be subject of mitigation measures secured through conditions.

247. The effects of the proposed development upon cultural heritage assets would need to be mitigated through planning conditions. However, subject to such mitigation, the impacts have been found to be acceptable. There would not, therefore, be any policy conflict in this respect. Similarly, the development would not give rise to any unacceptable traffic or highway safety issues subject to

certain details being agreed and implemented through planning conditions. The development would therefore be compliant with the aims of national and local planning policy in this respect.

248. It is clearly material to note that the proposed development would assist in realising WG's support for developing large scale renewable and low carbon energy to meet future energy needs. Indeed, it would make a valuable contribution towards meeting renewable energy targets and would assist in combatting the climate emergency. The battery storage facility that forms an integral element of the overall scheme would also provide necessary flexibility that is supported by national policy. In addition, the development would offer social and economic benefits as outlined above. Such factors weigh substantially in favour of the development and significantly outweigh the localised harms identified.

249. In considering this application, I have considered the duty to improve the economic, social, environmental and cultural well-being of Wales, in accordance with the sustainable development principle, under section 3 of the Well-Being of Future Generations (Wales) Act 2015 (WBFG Act). I have taken into account the ways of working set out at section 5 of the WBFG Act and consider that this decision is in accordance with the sustainable development principle through its contribution towards one or more of the Welsh Ministers well-being objectives, as required by section 8 of the WBFG Act.

Appraisal - The Common Land Application

Main Considerations

250. As set out previously in this Report, the secondary application submitted under Section 16 of the Commons Act 2006 seeks to de-register some 16.81ha of common land to make way for the proposed wind farm infrastructure and to provide temporary construction areas. The proposal would result in the deregistration of common land consisting primarily of upland grassland that is in use for rough grazing. To off-set the deregistration of common land, the application proposes to register some 16.81ha of replacement land that directly borders the existing common. The replacement land would be available from the start of the construction period, with the applicant's evidence indicating that grazing and public access would be able to continue around the wind farm infrastructure once the construction works have been completed.

251. The WG has published guidance (hereinafter referred as 'the guidance') in respect of applications for consent under the Commons Act which provides advice in relation to the determination of common land casework[63]. Amongst other things, it seeks to ensure that the stock of common land is not diminished and that any deregistration of registered land is balanced by the registration of other land of at least equal benefit[64]. I shall consider the proposal within the context of this advice. In coming to a recommendation on the common land application, I shall also have regard to the objections submitted by the OSS and the context set by the recommendation in respect of the above DNS application.

252. Based on the foregoing, and having considered the requirements of Section 16(6) of the Commons Act 2006, I consider the main considerations in the determination of the common land application to be:

- *The effect on the interests of those persons having rights in relation to, or occupying, the release land;*
- *The effect on the interests of the neighbourhood;*
- *The effect upon matters of public interest[65];*
- *Whether a more acceptable outcome could be achieved by adopting a different approach; and*
- *Whether any identified harm would be justified by other relevant matters, including the benefits arising from the development proposed through the associated DNS application.*

The effect on the interests of those persons having rights in relation to, or occupying, the release land

253. The release land forms part of Common Land CL26 illustrated on ES Figures 12.2a & b: *Common Land Swap Plans*. The release land comprises the area of land to be deregistered from the common land register to facilitate the development subject of the DNS application. In particular,

[63] Welsh Government Common Land Consents Guidance (August 2014)
[64] Paragraph 3.4, Welsh Government Common Land Consents Guidance (August 2014)
[65] Section 16(8) of the 2006 Act provides that the public interest includes the public interest in respect of: nature conservation; the conservation of the landscape; the protection of public rights of access to any area of land; and the protection of archaeological remains and features of historic interest.

the de-registration of the release land is required to allow for the following components of the proposed wind farm development: *four wind turbine towers; new site tracks between T1, T2, T3 and T7; drainage works; swales and drainage ditches next to the access tracks; on site electrical network of underground cabling; marker posts and signposts for diversions of footpaths; fencing of works; tracks for vehicular access; crane assembly areas; laydown areas; cable tranches; spoil storage; wooden poles carrying and electricity line connecting the development to the network (west of turbine T1; and the diversion and undergrounding of existing overhead electricity lines (south of turbine T7).*

254. Full details of the rights over the release land are set out in the '*Register of Common Land*'[66]. These are given in terms of rights of pasture for the numbers of cattle, sheep or horses specified and the right to cut and take away fern and bracken and to take stone from the common surface. The register also reveals rights to shoot, fish and keep poultry. The rights are shown to be distributed between 22No. rights' holders and the common is used predominantly for the grazing of sheep. The rights to graze are exercised by active graziers and, over the last four years, these have amounted to 13No. regular active graziers. There is no recent use for taking bracken or stone from the land.

255. The evidence indicates that the majority of the common is under-grazed and this is confirmed by the flora and fauna on the land, and the condition of the upland dry and wet heath habitat. The southern part of the common has been overgrazed by horses and has been periodically and regularly burned resulting in a lesser extent of heath material and a lesser diversity of species. Consultation processes have identified the active graziers and provided details of their usage. The applicant has also identified three new graziers, each of whom have acquired rights with the acquisition of their holding. The details of the consultation exercises undertaken are set out in the application submission document entitled '*Common Land Report*', with that same document also setting out full details of how the common is hefted and what impact the development would have on those hefts.

256. There has been no objection from the owners of the release land and the applicant has reached agreement with each of the active commoners. The area of the proposed replacement land is equal to the area of the release land, providing an equivalent amount of land over which to graze their livestock as they currently enjoy, and would revert naturally to upland pasture, consistent with the wider areas of common land. The evidence indicates that there would not be any financial detriment to the graziers.

257. The common is accessible to the public under the relevant provisions of the Law of Property Act 1925 and the CROW Act and, given that the proposal seeks to deregister the release land, the public would no longer have the right to enjoy the land in the way that it currently does. Such a loss to public rights would, to a certain degree, be compensated by the provision of an equivalent area of replacement land that is contiguous with the wider common. However, in light of the widely dispersed and linear nature of the release land, I find that there would be a minor negative impact in respect of public access. In terms of other rights over the land, the Duchy of Lancaster leases the Werfa Mast to BT and it is in turn sublet to South Wales Fire and Rescue Services and Bridgend CBC. Written consent for the applicant to use the access track has been provided by all parties and no objections have been raised in respect of their rights over the land.

258. Taking into account the mitigation proposed through the provision of replacement common land, grazing compensation during construction, and the set-back distances of the turbines from the existing communications masts and infrastructure, I find that the proposal would not unacceptably

[66] Part of the application submission documents

interfere with the interests of those graziers and commoners with rights over the common land or those exercising their rights of common over it. However, for reasons outline above, and

elaborated on further below, there would be a minor negative impact with respect to loss of public access for those that utilise the release land for recreational purposes.

Interests of the Neighbourhood

259. There is no definition of neighbourhood in the Commons Act, although the guidance requires consideration to be given to whether the works would mean that local people would be prevented from using the common in the way that they are used to. Furthermore, the guidance requires consideration to be given to whether the works would interfere with the future use and enjoyment of the land as a whole.

260. The common is accessible to the public under Section 193 of the Law of Property Act 1925 and the CROW Act. Given the proposal to deregister the release land, the neighbourhood would no longer have the rights to use the common in the way that they are used to. The release land clearly forms an integral part of the common land and I have sympathy with the OSS's concerns regarding the widely dispersed and linear nature of the release land. Indeed, the four turbine sites and access tracks, including the diverted Werfa Mast access track, would be fenced off during the construction period in the interest of public safety and the safety of grazing livestock. Whilst the evidence indicates that the fencing would be temporary only, with such areas eventually providing enhanced access across the common, the application seeks the deregistration of this common land meaning that, if successful, it would not subsequently be subject of the restrictions and rights afforded by the Commons Act. The alleged practical benefits over the accessibility of the release land following the completion of the construction phase therefore needs to be considered with caution.

261. Nonetheless, it is material to note that the temporarily fenced areas would not prevent access to the land to the south, west and north of the working area, thus allowing the neighbourhood to enjoy the common as a whole. The identified concerns also need to be considered within the context that the replacement land would be registered as common land and would be subject to the rights this currently affords. The replacement land abuts the existing common and would offer an equivalent area of land that the general public does not currently have access to. The registering of this land would, to this limited extent, offer a benefit to the neighbourhood that needs to be weighed against the harm arising from the deregistration of the release land.

262. There is no doubt in my mind that the registering of the replacement land would, in part, offset the harm incurred as a result of the proposed deregistration of the release land. However, the fencing of the release land during construction, and the potential for prolonged fencing given that it would no longer be subject of the controls of the Commons Act 2006, leads me to conclude that there would be a minor negative impact on the interests of the neighbourhood arising from the removal of the release land from the common. In coming to this conclusion, I have been mindful of its linear and widely dispersed nature. I have considered whether a condition could restrict fencing following the completion of the construction phase. However, given that the application seeks to deregister the release land, it would be unreasonable to impose a condition that would, in effect, result in similar restrictions to land within a common.

The Public Interest

Nature Conservation

263. I have found previously in this Report that the wind farm development that necessitates the deregistration of the release land would not have an unacceptable adverse impact on features of ecological importance and no ecological concerns have been raised by statutory consultees in

respect of the common land application. Nevertheless, the flora and fauna of the replacement land is described in the applicant's Common Land Report, with the evidence indicating that the replacement land would revert naturally to upland pasture, reflective of the wider areas of common

land that would be occupied by the proposed development, should the agricultural husbandry and management of the semi improved land cease. As such, and in the absence of any evidence to the contrary, I find that there would not be a negative impact on the public interest in these terms.

Landscape

264. The release land is widely dispersed and linear in nature, reflective of the fact that the deregistration is necessary to facilitate access routes to wind farm infrastructure. As such, it would inevitably have an effect on landscape character. Nonetheless, the release land is influenced by existing windfarm development within the wider area. Notwithstanding this, overall landscape impacts have been assessed as part of the DNS application and, consistent with the application site's location within a WG defined '*Pre-Assessed Area for Wind Energy*'[67], it has been found that the site is capable of accommodating the proposed wind turbines and associated infrastructure in an acceptable manner. As such, and bearing in mind the fact that the replacement land directly abuts the common and incorporates similar topographical features, I am satisfied that there would be no unacceptable landscape impacts on the public.

Public Rights of Access

265. I have concluded above under the '*Interests of the Neighbourhood*' that, despite the proposed mitigation in the form of the replacement land, the proposal would have a minor negative impact on the interests of the neighbourhood by reason of its effect on those wishing to use the common land for recreation and access. For these same reasons, the proposal would also have a minor negative impact in regards to public rights of access.

Archaeological Remains and features of Historic Interest

266. The issue of archaeological remains and features of historic interest has been considered above in respect of the DNS application. On the basis of the evidence before me, I am satisfied that public interest would not be unacceptably affected in these terms.

Public Interest Conclusion

267. Overall, I conclude in relation to matters of public interest that there would be a minor negative impact in respect of the public rights of access.

Alternative Scheme

268. It is necessary to consider whether a more acceptable outcome could be achieved by adopting a different approach to the proposed deregistration and provision of replacement common land. Based on the available evidence, and bearing in mind the nature of the development, and the fact that the release land comprises the area strictly necessary to occupy the wind farm infrastructure and undertake necessary construction, I am satisfied that there is no alternative scheme before me that would reduce the overall impacts.

Other Relevant Matters, including the Benefits of the Development

269. The '*Planning Appraisal – DNS Application*' section of this Report sets out the benefits and other matters in favour of the proposed wind farm development. This outlines the significant in-principle policy support for developing renewable and low carbon energy to meet future needs. Indeed,

[67] Future Wales, Policy 17

national policy states that significant weight should be attributed to the need to meet Wales' international commitments and WG's target of generating 70% of its consumed electricity by renewable means by 2030 in order to combat the climate emergency. As previously stated, the application site is also located within a WG defined '*Pre-Assessed Area for Wind Energy*' where there should be a presumption in favour of large scale wind energy development[68].

270. The development proposed is estimated to produce sufficient energy to power nearly 22,000 homes each year of its lifespan and displace some 38,500 tonnes of CO2 per year. This would significantly contribute towards efforts to combat the climate emergency and should therefore attract substantial weight. In addition, the development would provide significant social and economic benefits. Collectively, such matters weigh substantially in favour of the common land application.

Balancing Exercise and Overall Conclusions - Common Land Application

271. Based on the foregoing analysis, I have found that the application would lead to a minor negative impact on the rights and interests of the neighbourhood and the public with regard to public access and recreation. However, despite only being a temporary form of development with a lifespan of some 35 years, I consider that the overall public benefits of the development subject of the DNS application would significantly outweigh such concerns.

272. Therefore, having considered all matters raised, I conclude that the application should be allowed and a deregistration and exchange order made, subject only to planning permission being granted for the development proposed through the DNS application.

[68] Future Wales, Policy 17

Recommendations

Application A - DNS Application Ref: APP/DNS/3213662_DNS

273. That the application be allowed and planning permission be granted for the development proposed under the DNS application, subject to the planning conditions set out at Annex A.

Application B - Common Land Application Ref: DNS/3213662_S16COMMON

274. That the application be granted and a de-registration and exchange order be made, subject to planning permission being granted for the DNS application with Ref: APP/DNS/3213662_DNS.

Richard E. Jenkins
INSPECTOR

ANNEX A – Schedule of Planning Conditions - DNS Application

1. The development shall be begun within 5 years from the date of this permission.

   REASON: To comply with Section 91 of the Town and Country Planning Act 1990.

2. The development shall be carried out in accordance with the following list of approved plans and in accordance with the recommendations and measures contained within the following approved supporting documents:

   - Figure 1.2 Planning Application Boundary, Drawing No: 02959D2405-03;
   - Figure 2.2 Turbine Layout, Drawing No: 02959D2227-04;
   - Figure 3.1 Infrastructure Layout, Drawing No: 02959D1001-03;
   - Figure 3.2 Wind Turbine Elevation, Drawing No: 02959D2903-01;
   - Figure 3.3 Wind Turbine Foundation, Drawing No: 02959D2303-01;
   - Figure 3.4 Crane Hardstanding General Arrangement, Drawing No: 02959D2302-01;
   - Figure 3.5 Access Track Typical Details, Drawing No: 02959D2301-01;
   - Figure 3.6 Substation Building and Compound, Drawing No: 02959D2230-01;
   - Figure 3.7 Energy Storage Layout Plan, Drawing No: 02959D2217-02;
   - Figure 3.8 Energy Storage Elevations, Drawing No: 02959D2218-02;
   - Figure 3.9 Site Entrance, Drawing No: 02959D2407-01;
   - Figure 3.10 Temporary Construction Compound Layout Plan, Drawing No: 02959D2237-02;
   - Figure 3.11 Indicative Borrow Pit Details, Drawing No: 02959D2235-01;
   - Figure 3.12 Cable Trench Details, Drawing No: 02959D2241-01;
   - Figure 9.3 Forestry Track Widening Details 1-12, Drawing No: 02959D2404-04;
   - Figure 9.4 Typical Forestry Track Widening Detail, Drawing No: 02959D2304-01;
   - Figure 12.2b Common Land Swap Plan, Drawing No: 02959D2223 – Revision 6.

   REASON: To ensure that the development is carried out in accordance with the approved documents, plans and drawings submitted with the application.

3. The permission hereby granted shall expire 35 years from the date when electrical power is first exported ('first export date') from the development to the electricity grid network. Written confirmation of the first export date shall be provided to the Local Planning Authority no later than one calendar month after the event.

   REASON: In the interests of the character and appearance of the area - Policies SP2, SP4, ENV3 and ENV18 of the adopted Bridgend LDP.

4. Within 35 years and six months following the date of first export, or within six months of the cessation of electricity generation by facility, whichever is the sooner, the turbines and all associated infrastructure and works hereby approved shall be removed from the site and the land returned to its former agricultural status, in accordance with a decommissioning and site restoration scheme which has first been submitted to and approved in writing by the Local Planning Authority.

The decommissioning plan shall include pollution control measures. All existing and new planting implemented as part of the approved scheme shall be retained. The developer shall notify the Local Planning Authority in writing no later than one month following cessation of power production. The approved restoration scheme shall be implemented in full within 12 months of the cessation of electricity generation.

REASON: In the interest of the character and appearance of the area - Policies SP2, SP4, ENV3 and ENV18 of the adopted Bridgend LDP.

5. If any wind turbine fails to produce electricity to the grid for a continuous period of 12 months, the wind turbine and its associated ancillary equipment shall be removed from the site within a period of 6 months from the end of that 12 month period.

   REASON: In the interest of the character and appearance of the area - Policies SP2, SP4, ENV3 and ENV18 of the adopted Bridgend LDP.

6. No wind turbine shall be erected and no external transformer unit installed until details of the make, model and external appearance (including colour and surface finish) of the wind turbines and any unit transformer housing have been submitted to and approved in writing by the Local Planning Authority. The development shall be carried out and retained in accordance with the approved details.

   REASON: In the interest of the character and appearance of the area - Policies SP2, SP4, ENV3 and ENV18 of the adopted Bridgend LDP.

7. All wind turbines blades shall rotate in a clockwise direction.

   REASON: In the interest of the character and appearance of the area - Policies SP2, SP4, ENV3 and ENV18 of the adopted Bridgend LDP.

8. Notwithstanding the design or colour approved by the Local Planning Authority pursuant to Condition No.6, above, all wind turbines shall be of a 3 bladed configuration and shall be of a semimatt finish and shall not display any prominent name, sign, symbol or logo on any external surfaces.

   REASON: In the interest of the character and appearance of the area - Policies SP2, SP4, ENV3 and ENV18 of the adopted Bridgend LDP.

9. Except during installation and maintenance, the turbines shall not be illuminated. There shall be no permanent illumination on the site at any time.

   REASON: In the interest of the character and appearance of the area - Policies SP2, SP4, ENV3 and ENV18 of the adopted Bridgend LDP.

10. Subject to the allowance for micro-siting provided by this condition, the turbines shall be erected at the coordinates indicated on Figure 2.2 Turbine Layout (Reference: 02959D2227-04).

    (i) Variations to the indicated position of any turbine(s) shall be permitted by up to 50 metres in any direction provided it avoids areas of deep peat and ecologically sensitive habitat.

    (ii) In determining the final position of the turbines, the developer must consult BT and, subject to substantive responses to that consultation being provided within 30 days, shall have due regard to minimising impacts of the turbines on delivery of the Emergency Services Network.

    Within 30 days of receipt of BT's consultation responses, the developer shall provide a written explanation of the reasons for the final micro-siting of the Turbines and how any BT consultation responses have been taken into account.

(iii) A plan showing the position of the turbines as built shall be submitted to the Local Planning Authority within one month of the first export date.

REASON: In the interest of the character and appearance of the area - Policies SP2, SP4, ENV3 and ENV18 of the adopted Bridgend LDP and Policies EN6 and EN7 of the adopted Neath Port Talbot LDP.

11. No development shall take place until the proposed means of access onto the A4107 has been laid out as detailed on Drawing No: 02959D2407-01. The means of access shall be completed in permanent materials for a distance of no less than 20 metres from the edge of the classified route A4107.

    REASON: In the interest of the character and appearance of the area and highway safety - Policies SP2, SP3, SP4, ENV3 and ENV18 of the adopted Bridgend LDP.

12. Notwithstanding the details approved under Drawing No: 02959D2407-01, no development shall commence until the proposed means of access onto the A4107 has been laid out with visibility splays of 2.4 metres x 120 metres in both directions.

    REASON: In the interests of highway safety - Policies SP2, SP3 and ENV18 of the adopted Bridgend LDP.

13. No structure, erection or planting exceeding 0.9 metres in height above adjacent carriageway level shall be placed within the required vision splay areas.

    REASON: In the interests of highway safety - Policies SP2, SP3 and ENV18 of the adopted Bridgend LDP.

14. No development shall commence until a scheme of road markings detailing the edge of carriageway across the junction bell mouth has been submitted to and agreed in writing by the Local Planning Authority. The approved scheme shall be completed in permanent materials in accordance with the approved layout prior to the approved development being brought into beneficial use.

    REASON: In the interests of highway safety - Policies SP2, SP3 and ENV18 of the adopted Bridgend LDP.

15. No development shall commence until a scheme for junction warning signs on the Eastbound approach to the proposed site access has been submitted to and agreed in writing by the Local Planning Authority. The approved scheme shall be completed prior to the approved development being brought into beneficial use.

    REASON: In the interests of highway safety - Policies SP2, SP3 and ENV18 of the adopted Bridgend LDP.

16. No works shall commence on site until a scheme has been submitted to and approved in writing by the Local Planning Authority showing a scheme of temporary traffic management including traffic speed reduction measures on the classified route A4107 at and on the approaches to the proposed site access. Such a scheme shall be implemented as approved prior to construction of the proposed access and retained during the construction of the proposed development.

    REASON: In the interests of highway safety - Policies SP2, SP3 and ENV18 of the adopted Bridgend LDP.

17. The entrance/ gates shall be set back not less than 20 metres from the nearside edge of carriageway, with the area between the gates and the edge of highway completed in permanent materials as approved in writing by the Local Planning Authority before any works commence.

REASON: In the interests of highway safety - Policies SP2, SP3 and ENV18 of the adopted Bridgend LDP.

18. No development shall take place, until a Construction Transport Management Plan (CTMP) has been submitted to and approved in writing by the Local Planning Authority. The approved CTMP shall be adhered to throughout the construction period and shall provide for:

    a) The routing of HGV construction traffic to and from the site in order to avoid the A4061 south of its junction with the A4107 and the A4063 south of its junction with the A4107;

    b) details of the number and frequency of HGV movements along the A4107;

    c) the parking of vehicles of site operatives and visitors;

    d) loading and unloading of plant and materials;

    e) storage of plant and materials used in constructing the development;

    f) wheel washing facilities;

    g) measures to control the emission of dust and dirt during construction; and

    h) the provision of temporary traffic and pedestrian management along the A4107.

    REASON: In the interests of highway safety - Policies SP2 and SP3 of the adopted Bridgend LDP and Policy TR2 of the adopted Neath Port Talbot LDP.

19. No development, including any vegetation clearance or tree felling, shall take place until a Construction Environment Management Plan (CEMP) has been submitted to and approved in writing by the Local Planning Authority. The development shall only be carried out in strict accordance with the approved CEMP. The CEMP shall address the following:

    i. Noise and vibration associated with the construction of the development, in accordance with British Standard 5228, 2009: *Code of Practice for Noise and Vibration Control on Construction and Open Sites* - Part 1 - Noise, Part 2 – Vibration;

    ii. The management of foul and surface water, temporary and permanent drainage details and details of the hydrological and hydraulic calculations to control flow rates;

    iii. The protection and conservation of soil in order to prevent pollution of the water environment, including details of the pollution prevention techniques to be deployed during the construction and restoration phases; iv. Details of the timing and methods of works for cable trenches and foundations;

    v. Borrow pit management arrangements; vi. Dust management arrangements; vii. Arrangements for the disposal of surplus materials; viii. A construction noise management plan, including identification of access routes, locations of material laydown areas, equipment to be employed, operations to be carried out, mitigation measures and a scheme for the monitoring of noise;

ix. Temporary site illumination, including measures to reduce light-spill onto sensitive ecological receptors;

x. Access arrangements from the access track onto the A4107 which shall include the maintenance of the existing asphalt surface for the first 20 metres measured back from nearest edge of metalled carriageway, the creation and maintenance of visibility splays and temporary speed reduction measures within the vicinity of the track exit;

xi. Arrangements for wheel cleaning facilities and keeping the site access onto the A4107 and adjacent public highway clean; xii. Details of forestry track widening, including layout plans;

xiii. Arrangements for the protection of breeding birds, reptiles, water vole, and clubmoss populations on both the site and access track, including pre-construction surveys and mechanisms to take remedial action and monitor outcomes;

xiv. Measures to minimise and where possible avoid impacts on areas of wet modified bog and deep peat (over 50cm in depth) on both the site and access track;

xv. Details of the re-use of extracted peat with priority given to support existing peat resources and peat/ bog habitat;

xvi. Methods and timescales for habitat reinstatement in any areas needed temporarily during the construction process; and

xvii. A prescription and timeline for the removal of Japanese knotweed from the vicinity of the access track.

REASON: In the interest of highway safety, the character and appearance of the area and nature conservation - Policies SP2 and SP3 of the adopted Bridgend LDP and Policies EN6, EN7, EN8 and TR2 of the adopted Neath Port Talbot LDP.

20. No development shall take place until a site investigation in respect of land stability has been carried out in accordance with a methodology first submitted to and approved in writing by the Local Planning Authority. 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 undertaken in accordance with the approved details prior to the commencement of the development.

    REASON: In the interests of highway safety - Policies SP2 and ENV18 of the adopted Bridgend LDP.

21. Should any contaminated material be observed during construction which has not been previously identified, then development shall cease and the Local Planning Authority immediately informed. A desk study, site investigation and risk assessment to determine the nature and extent of the contamination should be undertaken in accordance with methodologies which have been first submitted to and approved in writing by the Local Planning Authority. The results of the desk study, site investigation and risk assessment, and 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 action, which may include measures to protect surface and ground water interests, shall be undertaken in accordance with the approved details prior to development recommencing.

REASON: In the interest of public safety and nature conservation – Policies SP2, SP4, ENV6 and ENV7 of the adopted Bridgend CBC LDP and Policies SP16 and EN8 of the adopted Neath Port Talbot LDP.

22. No development shall commence until a scheme for the comprehensive and integrated drainage of the site, including the means of drainage from all hard surfaces and structures within the site and accesses to the local highway network, has been submitted to and approved in writing by the Local Planning Authority. The approved scheme shall be implemented and retained for the duration of the construction works and operation of the development.

    REASON: In the interest of adequate site drainage - Policies SP2, SP4, ENV6 and ENV18 of the adopted Bridgend LDP and Policies SP15, SP16, EN6 and EN8 of the adopted Neath Port Talbot LDP .

23. No development shall take place until a scheme for the protection of public rights of way during the construction period, including safety signage and repair of damage caused during construction, has been submitted to and approved in writing by the Local Planning Authority. During the construction period the development shall be carried out in accordance with the approved scheme.

    REASON: In the interests of the protection of public rights of way - Policies SP2, SP3 and PLA9 of the adopted Bridgend LDP and Policy BE1 of the adopted Neath Port Talbot LDP.

24. No development shall commence, including any vegetation clearance, until an Ecological Management Plan (EMP) has been submitted to and approved in writing by the Local Planning Authority. The EMP shall set out the management and monitoring arrangements for all relevant ecological features, set out detailed enhancement measures proposed and include timescales for implementation. The development shall be carried out in accordance with the approved details. The EMP shall include, but not be limited to, the following:

    a) Description and evaluation of ecological features, present or to be created on site, to be managed;

    b) Details of the desired condition of features, present and to be created at the site, using attributes with measurable targets to define favourable condition;

    c) Aims and objectives of management;

    d) Ecological trends and constraints on site that might influence management and achieving favourable condition of the retained and new features to be created on site;

    e) Identification of appropriate management options for achieving aims and objectives, including management prescriptions;

    f) Details of the monitoring of habitats, species and conservation enhancement measures. Where the results from monitoring show that conservation aims and objectives of the EMP are not being met, the EMP shall set out how contingencies and/ or remedial action will be identified, agreed and implemented so that the development still delivers the fully functioning biodiversity objectives of the originally agreed scheme;

    g) Details of the body or organisation responsible for implementation of the plan, including management and maintenance responsibilities of the EMP and ensure compliance with all relevant regulatory and other requirements, method statements and plans, and to report to the principal contractor and statutory consultees;

h) Preparation of a work scheme detailing the timescale for delivery of the initiatives identified within the EMP, including all species and habitat management and monitoring and habitat aftercare, and a five year rolling programme with specified timescales for each element;

i) Details of the periodic review of effectiveness of the EMP, with a written report submitted to the Local Planning Authority every 5 years, and any revisions to the plan to be agreed in writing by the Local Planning Authority prior to implementation.

The above shall be provided for the following initiatives:

i. Upper Garw Valley - Natural Sediment Management initiative and wider habitat creation works

- Contribute towards implementation of natural sediment management schemes in Upper Garw to reduce the quantity of excess fine sediment entering the river system and improve water quality.
- Slow down water-flow into the catchment.
- Implementation of measures at the head of the Garw Valley (the northern end of Cwm Garw) and along the western side of Mynydd Llangeinwyr.
- Measures shall include installation of gully blocks, channel stuffing and leaky barriers to reduce scour and siltation of watercourse and pools further down the catchment.
- Improvement of water quality, rewetting and reducing erosion of marshy grassland and bog habitats, improvement of habitat for water vole, breeding passerines (such as grasshopper warbler), reptiles and wetland invertebrates.
- Implementation of measures along Mynydd Llangeinwyr, including land which extends over 5.5km to the south of the wind farm, to include biodiversity gain through wetland habitat creation and the erection of kestrel boxes, with associated net benefits to species such as water vole and kestrel.

Locations of initiatives, as indicated on Drawing No.02959-RES_IMP-DR-EN-001, to be agreed in writing with the Local Planning Authority following feasibility work and optioneering study.

ii. Water Vole Conservation Works

- Objective of increasing the extent of optimal habitat for water vole within the application site and, in particular, land in the eastern part of the application area, increasing the size and resilience of the population.
- The feasibility of proposed water vole conservation measures shall be carefully considered and assessed. Measures to include localised water management measures such as gully blocks, channel stuffing, leaky barriers and stock management measures.
- Conservation measures to be submitted to and agreed in writing with the Local Planning Authority.

Locations of initiatives, as indicated on Drawing No.02959-RES_IMP-DR-EN-001 to be agreed in writing with the Local Planning Authority following feasibility work and optioneering study.

iii. Operational mitigation to reduce bird and bat strike

- *Between dusk and dawn between 1 April and 31 October each year, all turbine blades shall be 'feathered' when wind speeds are below the cut in speed of the operational turbines. This shall involve pitching the blades to 90 degrees and/ or rotating the blades parallel to the wind direction to reduce the blade rotation speeds below two revolutions per minute whilst idling.*

REASON: To maintain and improve the appearance of the area in the interests of visual and residential amenity and to promote nature conservation - Policies SP2, ENV5, ENV6 and ENV18 of the adopted Bridgend LDP.

25. No development shall take place until the applicant, or their agents or successors in title, has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation which has been first submitted to and approved in writing by the Local Planning Authority.

    REASON: To identify and record any features of archaeological interest discovered during the works, in order to mitigate the impact of the works on the archaeological resource - Policies SP2, SP5, and ENV18 of the adopted Bridgend LDP and Policy 21 of the adopted Neath Port Talbot LDP.

26. No development shall take place until a Monument Management Plan covering the Designated Historic Assets within the application site has been submitted to and approved in writing by the Local Planning Authority. The Monument Management Plan shall include measures to protect and manage historic assets on site, proposals to improve access to the historic assets including details of interpretation/information panels and a programme of works. The site shall be developed in accordance with the approved Monument Management Plan.

    REASON: To mitigate the impact of the works on the Designated Historic Assets on site - Policies SP2, SP5, and ENV18 of the adopted Bridgend LDP and Policy 21 of the adopted Neath Port Talbot LDP.

27. Construction works which are audible at the boundary of any residential receptor shall not take place outside the hours of 8:00am and 18:00pm Monday to Friday, 8:00am and 1:00pm on Saturday. No construction work shall be conducted on Sundays or Bank Holidays. Outside of these hours, development shall be limited to turbine testing, commissioning works, emergency work and dust suppression.

    REASON: In the interests of the amenities of the area - Policies SP2, ENV7 and ENV18 of the adopted Bridgend LDP and Policies BE1 and EN8 of the adopted Neath Port Talbot LDP.

28. Within 28 days of a written request from the relevant Local Planning Authority, following a complaint alleging shadow flicker from an occupant of a dwelling which lawfully existed or had planning permission at the date of this permission, the wind farm operator shall, at its expense, commission and submit a report to the relevant Local Planning Authority assessing the reported shadow flicker event(s). Where the relevant Local Planning Authority confirms in writing that the incident of shadow flicker is affecting the living conditions of the resident(s), the wind farm operator shall, within 21 days, submit for approval a scheme of mitigation to the Local Planning Authority. The scheme shall be designed to mitigate the event of shadow flicker and to prevent its future recurrence and shall specify timescales for implementation. The scheme shall be implemented as approved.

    REASON: In the interests of the amenities of the area - Policies SP2, ENV7 and ENV18 of the adopted Bridgend LDP and Policies BE1 and EN8 of the adopted Neath Port Talbot LDP.

29. The rating level of noise immissions from the combined effects of the wind turbines hereby permitted (the wind farm) (including the application of any tonal penalty) when determined in accordance with the attached Guidance Notes, shall not exceed the values for the relevant integer

wind speeds set out in Tables A1 to A6 and B1 to B6 (attached to these conditions). Noise limits for dwellings which lawfully exist or have planning permission for construction at the date of this consent but are not listed in the Tables attached shall be those of the physically closest location listed in the Tables unless otherwise agreed in writing by the relevant Local Planning Authority. The coordinate locations to be used in determining the location of each of the dwellings listed in Tables A1 to A6 and B1 to B6 shall be those listed in Table C.

REASON: In the interests of the amenities of the area - Policies SP2, ENV7 and ENV18 of the adopted Bridgend LDP and Policies BE1 and EN8 of the adopted Neath Port Talbot LDP.

30. Within 21 days from receipt of a written request from the relevant Local Planning Authority, following a complaint from the occupant of a dwelling which lawfully existed or had planning permission at the date of this consent alleging noise disturbance at that dwelling from either the operational Llynfi Afan site or the wind farm hereby approved, the wind farm operator of the development hereby approved shall, at its expense, employ an independent consultant approved by the relevant Local Planning Authority to assess the level of noise immissions from the turbines of the hereby approved wind farm at the complainant's property following the procedures described in the attached Guidance Notes.

    REASON: In the interests of the amenities of the area - Policies SP2, ENV7 and ENV18 of the adopted Bridgend LDP and Policies BE1 and EN8 of the adopted Neath Port Talbot LDP.

31. The wind farm operator shall provide to the relevant Local Planning Authority the independent consultant's assessment and conclusions of the rating level of noise immissions undertaken pursuant to Condition No.30, including all calculations, audio recordings and the raw data upon which those assessments and conclusions are based. The data shall be presented in a format that can be independently verified by the relevant Local Planning Authority and demonstrates compliance with each of the Tables A1 to A6 and B1 to B6. Such information shall be provided within 2 calendar months of the date of the written request from the relevant Local Planning Authority, unless otherwise extended in writing by the relevant Local Planning Authority.

    REASON: In the interests of the amenities of the area - Policies SP2, ENV7 and ENV18 of the adopted Bridgend LDP and Policies BE1 and EN8 of the adopted Neath Port Talbot LDP.

32. Where, following receipt of the independent consultant's noise assessment required by Condition No.30, the relevant Local Planning Authority is satisfied of an established breach of the noise limits set out in the attached Tables A1 to A6 and B1 to B6, the wind farm operator shall within 21 days of written notification by the Local Planning Authority, submit a scheme of mitigation for approval. The scheme of mitigation shall include measures to mitigate the breach, measures to prevent its future recurrence and a timetable for implementation. The scheme shall be implemented as approved and shall be retained thereafter unless otherwise agreed in writing by the relevant Local Planning Authority.

    REASON: In the interests of the amenities of the area - Policies SP2, ENV7 and ENV18 of the adopted Bridgend LDP and Policies BE1 and EN8 of the adopted Neath Port Talbot LDP.

33. Where a dwelling to which a complaint is related is not listed in Table C, the wind farm operator shall submit to the relevant Local Planning Authority for written approval proposed noise limits selected from those listed in the Tables A1 to A6 and B1 to B6 to be adopted at the complainant's dwelling for compliance checking purposes. The rating level of noise immissions resulting from the combined effects of the wind turbines when determined in accordance with the attached Guidance Notes shall not exceed the noise limits approved in writing by the relevant Local Planning Authority for the complainant's dwelling.

REASON: In the interests of the amenities of the area - Policies SP2, ENV7 and ENV18 of the adopted Bridgend LDP and Policies BE1 and EN8 of the adopted Neath Port Talbot LDP.

34. The assessment of the rating level of noise immissions shall be undertaken in accordance with an assessment protocol that shall previously have been submitted to and approved in writing by the relevant Local Planning Authority. The protocol shall include the proposed measurement location identified in accordance with the Guidance Notes 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 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 immissions. 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 relevant Local Planning Authority under Condition No.30, and such others as the independent consultant considers likely to result in a breach of the noise limits.

    REASON: In the interests of the amenities of the area - Policies SP2, ENV7 and ENV18 of the adopted Bridgend LDP and Policies BE1 and EN8 of the adopted Neath Port Talbot LDP.

35. Wind speed, wind direction and power generation data shall be continuously logged and provided to the relevant Local Planning Authority within 14 days of any such request and shall be in a format that will allow the relevant Local Planning Authority to enable checks to be undertaken to verify compliance with Tables A1 to A6 and B1 to B6 and in accordance with the attached Guidance Notes. Such data shall be retained for a period of not less than 24 months.

    REASON: In the interests of the amenities of the area - Policies SP2, ENV7 and ENV18 of the adopted Bridgend LDP and Policies BE1 and EN8 of the adopted Neath Port Talbot LDP.

36. For the purposes of demonstrating compliance with the levels stated in Tables A1 to A6 and B1 to B6, during the first 12 months of operation, the wind farm operator shall, at its expense, employ a consultant approved by the relevant Local Planning Authority to assess the level of noise immissions from the wind farm, according to a measurement protocol to be agreed with the relevant Local Planning Authority.

    REASON: In the interests of the amenities of the area - Policies SP2, ENV7 and ENV18 of the adopted Bridgend LDP and Policies BE1 and EN8 of the adopted Neath Port Talbot LDP.

37. In the event that the sound power levels of the proposed turbine model for installation are higher, or the turbine model is more tonal, than the candidate turbine used in the acoustic assessment in Chapter 10 of the Upper Ogmore Wind Farm & Energy Storage Facility - Environmental Statement, a revised noise assessment report shall be submitted prior to the erection of the turbines, demonstrating that the predicted noise levels still indicate compliance with the limits stated in Tables A1 to A6 and B1 to B6. Should the revised assessment show that the limits stated in Tables A1 to A6 and B1 to B6 will 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 state in Tables A1 to A6 and B1 to B6 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 the amenities of the area - Policies SP2, ENV7 and ENV18 of the adopted Bridgend LDP and Policies BE1 and EN8 of the adopted Neath Port Talbot LDP.

38. No development shall commence until details of a nominated representative for the development to act as a point of contact for local residents (in connection with Condition Nos. 30-35), together with the arrangements for notifying and approving any subsequent change in the nominated

representative, have been submitted to and approved in writing by the relevant Local Planning Authority. The nominated representative shall have responsibility for liaison with the relevant Local Planning Authority in connection with any noise complaints made during the construction, operation and decommissioning of the wind farm.

REASON: In the interests of the amenities of the area - Policies SP2, ENV7 and ENV18 of the adopted Bridgend LDP and Policies BE1 and EN8 of the adopted Neath Port Talbot LDP.

Noise Planning Conditions - Tables of Nosie Limits

The limits in each of the six 60 degree sectors are based on the assumptions that the existing sites are operating at their predicted noise levels for each sector, with an additional 5 dB uncertainty added capped at the level set by limits in their planning conditions.

The curtailment required to meet these limits, for the candidate turbine, results in an energy yield of 81.0848 GWh/annum, relative to the base case of no curtailment which results in a yield of 84.0000 GWh/annum. This reduction of 2.9152 GWh/annum would be the equivalent to a loss in the supply of renewable energy to some 770 homes each year (This figure is derived using the annual UK average domestic household consumption of electricity published by BEIS).

Tables A1 – A6: Noise Limits, Day-Time Hours 0700- 2300

Table A1 – Wind Direction >= 345 and < 45 degrees

	Standardised 10 m Height Wind Speed (m/s)											
Property	1	2	3	4	5	6	7	8	9	10	11	12
	Noise Limit (dB $L_{A90,10\ min}$)											
H1	27.5	27.5	27.5	27.5	29.7	30.7	27.5	27.9	34.2	35.9	35.9	35.9
H2	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5
H3	27.5	27.5	27.5	27.5	30.0	33.9	35.9	36.2	36.2	36.2	36.2	36.2
H4	27.5	27.5	27.5	28.3	30.9	27.6	28.6	29.1	29.9	30.2	30.2	30.2
H5	27.5	27.5	27.5	27.5	30.0	33.9	35.9	36.2	36.2	36.2	36.2	36.2
H6	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.7	29.1	29.1	29.1
H7	27.5	27.5	27.5	29.2	30.2	27.5	28.7	29.2	29.8	30.0	30.0	30.0
H8	27.5	27.5	27.5	27.5	29.0	31.4	27.5	27.9	35.1	35.1	35.1	35.1
H9	27.5	27.5	27.5	27.5	27.5	27.5	27.6	27.5	27.7	29.1	29.1	29.1
H10	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5
H11	27.5	27.5	27.5	29.0	30.3	27.5	28.7	29.2	29.8	30.0	30.0	30.0
H12	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5
H13	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.7	28.9	28.9	28.9
H14	27.5	27.5	27.5	27.5	29.5	30.4	27.5	27.9	33.9	35.7	35.7	35.7
H15	27.5	27.5	27.5	27.5	30.0	33.9	35.9	36.2	36.2	36.2	36.2	36.2

Table A2 – Wind Direction >= 45 and < 105 degrees

	Standardised 10 m Height Wind Speed (m/s)											
Property	1	2	3	4	5	6	7	8	9	10	11	12
	Noise Limit (dB $L_{A90,10\ min}$)											
H1	27.5	27.5	27.5	27.5	29.7	33.6	32.9	32.9	35.9	35.9	35.9	35.9
H2	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5
H3	27.5	27.5	27.5	27.5	27.6	31.5	33.5	33.8	33.8	33.8	33.8	33.8
H4	27.5	27.5	27.5	28.3	32.2	32.5	32.2	34.7	34.7	33.3	33.2	33.2
H5	27.5	27.5	27.5	27.5	27.5	29.0	31.0	31.3	31.3	31.3	31.3	31.3
H6	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	28.9	30.3	30.3	30.3
H7	27.5	27.5	27.5	29.2	32.5	31.5	31.0	34.0	33.6	31.4	31.3	31.3
H8	27.5	27.5	27.5	27.5	29.0	32.9	32.4	32.2	35.1	35.1	35.1	35.1
H9	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.6	29.2	30.3	30.3	30.3
H10	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5
H11	27.5	27.5	27.5	29.0	32.6	31.6	31.2	34.0	33.7	31.7	31.5	31.5
H12	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5
H13	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.8	29.5	30.6	30.6	30.6
H14	27.5	27.5	27.5	27.5	29.5	33.4	33.0	33.0	35.7	35.7	35.7	35.7
H15	27.5	27.5	27.5	27.5	27.5	29.0	31.0	31.3	31.3	31.3	31.3	31.3

Table A3 – Wind Direction >= 105 and < 165 degrees

	Standardised 10 m Height Wind Speed (m/s)											
Property	1	2	3	4	5	6	7	8	9	10	11	12
	Noise Limit (dB $L_{A90,10\ min}$)											
H1	27.5	27.5	27.5	27.5	27.5	31.3	33.3	33.6	33.6	33.6	33.6	33.6
H2	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.7	27.7	27.7	27.7	27.7
H3	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5
H4	27.5	27.5	27.5	27.6	31.5	35.4	35.2	37.1	37.7	37.3	37.0	37.0
H5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5
H6	27.5	27.5	27.5	27.5	27.5	29.4	29.8	27.5	28.7	30.2	30.2	30.2
H7	27.5	27.5	27.5	27.5	31.5	35.2	35.0	37.0	37.6	37.1	36.8	36.8
H8	27.5	27.5	27.5	27.5	27.5	30.2	32.1	32.4	32.4	32.4	32.4	32.4
H9	27.5	27.5	27.5	27.5	27.5	30.6	29.2	27.5	28.7	29.8	30.2	30.2
H10	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5
H11	27.5	27.5	27.5	27.5	31.3	35.2	35.1	37.0	37.4	37.1	36.8	36.8
H12	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5
H13	27.5	27.5	27.5	27.5	27.5	30.1	28.5	27.5	28.8	29.8	30.3	30.3
H14	27.5	27.5	27.5	27.5	27.5	31.2	33.1	33.4	33.4	33.4	33.4	33.4
H15	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5

Table A4 – Wind Direction >= 165 and < 225 degrees

	Standardised 10 m Height Wind Speed (m/s)											
Property	1	2	3	4	5	6	7	8	9	10	11	12
	Noise Limit (dB $L_{A90,10\ min}$)											
H1	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5
H2	27.5	27.5	27.5	27.5	27.5	28.4	30.4	30.7	30.7	30.7	30.7	30.7
H3	27.5	27.5	27.5	27.5	27.5	28.6	30.6	30.9	30.9	30.9	30.9	30.9
H4	27.5	27.5	27.5	27.5	27.5	27.8	29.8	30.2	30.2	30.2	30.2	30.2
H5	27.5	27.5	27.5	27.5	27.5	30.1	32.1	32.4	32.4	32.4	32.4	32.4
H6	27.5	27.5	27.5	27.5	27.5	29.4	30.6	27.6	28.6	29.8	29.8	29.8
H7	27.5	27.5	27.5	27.5	27.5	29.1	31.2	31.5	31.5	31.5	31.5	31.5
H8	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5
H9	27.5	27.5	27.5	27.5	27.5	30.6	30.5	27.5	28.7	29.8	29.8	29.8
H10	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5
H11	27.5	27.5	27.5	27.5	27.5	28.8	30.9	31.2	31.2	31.2	31.2	31.2
H12	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5
H13	27.5	27.5	27.5	27.5	27.5	31.0	30.4	27.5	28.7	29.8	29.8	29.8
H14	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5
H15	27.5	27.5	27.5	27.5	27.5	29.9	31.9	32.2	32.2	32.2	32.2	32.2

Table A5 – Wind Direction >= 225 and < 285 degrees

	Standardised 10 m Height Wind Speed (m/s)											
Property	1	2	3	4	5	6	7	8	9	10	11	12
	Noise Limit (dB $L_{A90,10\ min}$)											
H1	27.5	27.5	27.5	27.5	27.5	28.7	30.8	31.2	31.2	31.2	31.2	31.2
H2	27.5	27.5	27.5	27.5	27.5	28.4	30.4	30.7	30.7	30.7	30.7	30.7
H3	27.5	27.5	27.5	27.5	30.0	33.9	35.9	36.2	36.2	36.2	36.2	36.2
H4	27.5	27.5	27.5	27.5	27.5	27.5	29.1	30.8	29.8	30.0	30.0	30.0
H5	27.5	27.5	27.5	27.5	30.0	33.9	35.9	36.2	36.2	36.2	36.2	36.2
H6	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5
H7	27.5	27.5	27.5	27.5	27.6	28.7	30.0	33.4	30.4	30.0	30.0	30.0
H8	27.5	27.5	27.5	27.5	27.5	28.7	30.7	31.1	31.1	31.1	31.1	31.1
H9	27.5	27.5	27.5	27.5	27.5	27.5	27.7	27.5	28.1	28.1	28.1	28.1
H10	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5
H11	27.5	27.5	27.5	27.5	27.5	28.1	29.6	33.1	29.8	30.0	30.0	30.0
H12	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5
H13	27.5	27.5	27.5	27.5	27.5	27.5	29.3	28.3	28.4	29.7	29.7	29.7
H14	27.5	27.5	27.5	27.5	27.5	28.6	30.7	31.0	31.0	31.0	31.0	31.0
H15	27.5	27.5	27.5	27.5	30.0	33.9	35.9	36.2	36.2	36.2	36.2	36.2

Table A6 – Wind Direction >= 285 and < 345 degrees

	Standardised 10 m Height Wind Speed (m/s)											
Property	1	2	3	4	5	6	7	8	9	10	11	12
	Noise Limit (dB $L_{A90,10\ min}$)											
H1	27.5	27.5	27.5	27.5	29.5	33.1	29.0	27.9	34.9	35.7	35.7	35.7
H2	27.5	27.5	27.5	27.5	27.5	28.4	30.4	30.7	30.7	30.7	30.7	30.7
H3	27.5	27.5	27.5	27.5	30.0	33.9	35.9	36.2	36.2	36.2	36.2	36.2
H4	27.5	27.5	27.5	28.0	31.9	27.5	28.6	29.6	30.4	30.6	30.6	30.6
H5	27.5	27.5	27.5	27.5	30.0	33.9	35.9	36.2	36.2	36.2	36.2	36.2
H6	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5
H7	27.5	27.5	27.5	28.9	32.2	27.5	28.6	29.5	30.3	30.5	30.5	30.5
H8	27.5	27.5	27.5	27.5	28.8	32.7	30.5	28.9	35.0	35.0	35.0	35.0
H9	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5
H10	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5
H11	27.5	27.5	27.5	28.8	32.1	27.5	28.6	29.6	30.4	30.6	30.6	30.6
H12	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5
H13	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5
H14	27.5	27.5	27.5	27.5	29.2	33.0	28.5	27.9	34.7	35.5	35.5	35.5
H15	27.5	27.5	27.5	27.5	30.0	33.9	35.9	36.2	36.2	36.2	36.2	36.2

Tables B1 – B6: Noise Limits, Night-Time Hours 2300-0700

Table B1 – Wind Direction >= 345 and < 45 degrees

	Standardised 10 m Height Wind Speed (m/s)											
Property	1	2	3	4	5	6	7	8	9	10	11	12
	Noise Limit (dB $L_{A90,10\ min}$)											
H1	33.0	33.0	33.0	33.0	33.0	33.6	35.6	35.9	35.9	35.9	35.9	35.9
H2	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H3	33.0	33.0	33.0	33.0	33.0	33.9	35.9	36.2	36.2	36.2	36.2	36.2
H4	33.0	33.0	33.0	33.0	33.0	36.1	38.1	38.5	38.5	38.5	38.5	38.5
H5	33.0	33.0	33.0	33.0	33.0	33.9	35.9	36.2	36.2	36.2	36.2	36.2
H6	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H7	33.0	33.0	33.0	33.0	33.0	36.9	39.0	39.3	39.3	39.3	39.3	39.3
H8	33.0	33.0	33.0	33.0	33.0	33.0	34.8	35.1	35.1	35.1	35.1	35.1
H9	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H10	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H11	33.0	33.0	33.0	33.0	33.0	36.8	38.9	39.2	39.2	39.2	39.2	39.2
H12	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H13	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H14	33.0	33.0	33.0	33.0	33.0	33.4	35.4	35.7	35.7	35.7	35.7	35.7
H15	33.0	33.0	33.0	33.0	33.0	33.9	35.9	36.2	36.2	36.2	36.2	36.2

Table B2 – Wind Direction >= 45 and < 105 degrees

	Standardised 10 m Height Wind Speed (m/s)											
Property	1	2	3	4	5	6	7	8	9	10	11	12
	Noise Limit (dB $L_{A90,10\ min}$)											
H1	33.0	33.0	33.0	33.0	33.0	33.6	35.6	35.9	35.9	35.9	35.9	35.9
H2	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H3	33.0	33.0	33.0	33.0	33.0	33.0	33.5	33.8	33.8	33.8	33.8	33.8
H4	33.0	33.0	33.0	33.0	33.0	36.1	38.1	38.5	38.5	38.5	38.5	38.5
H5	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H6	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H7	33.0	33.0	33.0	33.0	33.0	36.9	39.0	39.3	39.3	39.3	39.3	39.3
H8	33.0	33.0	33.0	33.0	33.0	33.0	34.8	35.1	35.1	35.1	35.1	35.1
H9	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H10	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H11	33.0	33.0	33.0	33.0	33.0	36.8	38.9	39.2	39.2	39.2	39.2	39.2
H12	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H13	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.4	33.4	33.4	33.4	33.4
H14	33.0	33.0	33.0	33.0	33.0	33.4	35.4	35.7	35.7	35.7	35.7	35.7
H15	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0

Table B3 – Wind Direction >= 105 and < 165 degrees

	Standardised 10 m Height Wind Speed (m/s)											
Property	1	2	3	4	5	6	7	8	9	10	11	12
	Noise Limit (dB $L_{A90,10\ min}$)											
H1	33.0	33.0	33.0	33.0	33.0	33.0	33.3	33.6	33.6	33.6	33.6	33.6
H2	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H3	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H4	33.0	33.0	33.0	33.0	33.0	35.4	37.4	37.7	37.7	37.7	37.7	37.7
H5	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H6	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H7	33.0	33.0	33.0	33.0	33.0	35.4	37.3	37.6	37.6	37.6	37.6	37.6
H8	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H9	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H10	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H11	33.0	33.0	33.0	33.0	33.0	35.2	37.2	37.4	37.4	37.4	37.4	37.4
H12	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H13	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.4	33.4	33.4	33.4	33.4
H14	33.0	33.0	33.0	33.0	33.0	33.0	33.1	33.4	33.4	33.4	33.4	33.4
H15	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0

Table B4 – Wind Direction >= 165 and < 225 degrees

	Standardised 10 m Height Wind Speed (m/s)											
Property	1	2	3	4	5	6	7	8	9	10	11	12
	Noise Limit (dB $L_{A90,10\ min}$)											
H1	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H2	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H3	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H4	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H5	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H6	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H7	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H8	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H9	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H10	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H11	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H12	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H13	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.4	33.4	33.4	33.4	33.4
H14	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H15	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0

Table B5 – Wind Direction >= 225 and < 285 degrees

	Standardised 10 m Height Wind Speed (m/s)											
Property	1	2	3	4	5	6	7	8	9	10	11	12
	Noise Limit (dB $L_{A90,10\ min}$)											
H1	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H2	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H3	33.0	33.0	33.0	33.0	33.0	33.9	35.9	36.2	36.2	36.2	36.2	36.2
H4	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H5	33.0	33.0	33.0	33.0	33.0	33.9	35.9	36.2	36.2	36.2	36.2	36.2
H6	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H7	33.0	33.0	33.0	33.0	33.0	33.0	33.6	34.0	34.0	34.0	34.0	34.0
H8	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H9	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H10	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H11	33.0	33.0	33.0	33.0	33.0	33.0	33.4	33.8	33.8	33.8	33.8	33.8
H12	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H13	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H14	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H15	33.0	33.0	33.0	33.0	33.0	33.9	35.9	36.2	36.2	36.2	36.2	36.2

Table B6 – Wind Direction >= 285 and < 345 degrees

	Standardised 10 m Height Wind Speed (m/s)											
Property	1	2	3	4	5	6	7	8	9	10	11	12
	Noise Limit (dB $L_{A90,10\ min}$)											
H1	33.0	33.0	33.0	33.0	33.0	33.4	35.4	35.7	35.7	35.7	35.7	35.7
H2	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H3	33.0	33.0	33.0	33.0	33.0	33.9	35.9	36.2	36.2	36.2	36.2	36.2
H4	33.0	33.0	33.0	33.0	33.0	35.8	37.9	38.2	38.2	38.2	38.2	38.2
H5	33.0	33.0	33.0	33.0	33.0	33.9	35.9	36.2	36.2	36.2	36.2	36.2
H6	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H7	33.0	33.0	33.0	33.0	33.0	36.7	38.3	38.4	38.4	38.5	38.5	38.5
H8	33.0	33.0	33.0	33.0	33.0	33.0	34.7	35.0	35.0	35.0	35.0	35.0
H9	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H10	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H11	33.0	33.0	33.0	33.0	33.0	36.6	38.2	38.3	38.4	38.4	38.4	38.4
H12	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H13	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
H14	33.0	33.0	33.0	33.0	33.0	33.1	35.2	35.5	35.5	35.5	35.5	35.5
H15	33.0	33.0	33.0	33.0	33.0	33.9	35.9	36.2	36.2	36.2	36.2	36.2

Table C: Dwellings

ID	Address	Easting*	Northing*
H1	Brynbedw House	290444	193183
H2	1 Greenfield Terrace	294341	195716
H3	Nantymoel Farm	293130	193296
H4	Bryn Eglur	289909	193514
H5	60 Vale View Terrace	293425	193458
H6	13 Scotch Street	289339	196040
H7	14 Pwllgarn Terrace	290069	193653
H8	Residential Caravan	290722	193207
H9	Abergwynfi	289368	196146
H10	Blaen Cwmdu Farm	287709	192104
H11	Blaengarw	290048	193644
H12	Bryn Coed	287062	195082
H13	40 High Street	289431	196124
H14	30 Queen Street	290404	193174
H15	Ty-Talgarth	293626	193025

*Eastings and northings are included to show approximate location

Guidance for Noise Conditions

These notes are to be read with and form part of the noise conditions. 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 standard thereof). Measurements shall be undertaken in such a manner to enable a tonal penalty to be applied in accordance with Guidance Note 3. These measurements shall be made in such a way to enable a tonal penalty to be applied in accordance with Guidance Note 3 to satisfy that the requirements of Guidance Note 3 shall also be satisfied.

(b) The microphone should be mounted at 1.2 - 1.5 m above ground level, fitted with a two layer windshield (or suitable alternative approved in writing from the relevant 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 3.5m away from the building facade or any reflecting surface except the ground at a location agreed with the relevant Local Planning Authority.

(c) The LA90,10min measurements shall be synchronised with measurements of the 10-minute arithmetic mean wind speed and with operational data logged in accordance with Guidance Note 1(d), including power generation information for each wind turbine, 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 10minute periods. Unless an alternative procedure is previously agreed in writing with the relevant 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 10minute periods shall commence on the hour and in 10- minute increments thereafter.

(e) Data provided to the relevant Local Planning Authority in accordance with the noise condition shall be provided in comma separated values in electronic format with the exception of audio data which shall be supplied in the format in which it is recorded.

Guidance Note 2

(a) The noise measurements shall be made so as to provide not less than 20 valid data points as defined in Note 2 paragraph (b). Such measurements shall provide valid data points for the range of

wind speeds, wind directions, times of day and power generation requested by the Local Planning Authority. In specifying such conditions the relevant Local Planning Authority shall have regard to those conditions which were most likely to have 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 noise limits.

(b) Valid data points are those that remain after all periods during rainfall have been excluded. Rainfall shall be assessed by use of a rain gauge that shall log the occurrence of rainfall in each 10minute period concurrent with the measurement periods set out in Note 1 (c) and is situated in the vicinity of the sound level meter.

(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

Where, in the opinion of the Local Planning Authority, noise immissions at the location or locations where assessment measurements are being undertaken contain a tonal component, the following rating procedure shall be used:

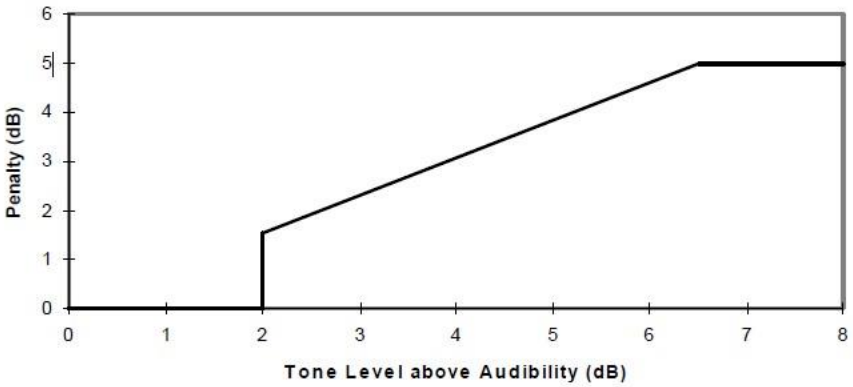
(a) For each 10-minute interval for which LA90, 10-minute data have been determined as valid in accordance with Guidance Note 2 a tonal assessment shall be performed on noise immissions during 2 minutes of each 10-minute period. The 2-minute periods should be spaced at 10-minute intervals provided that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

(b) 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.

(c) The arithmetic average margin above audibility shall be calculated for each wind speed bin where data is available, each bin being 1 metre per second wide and centred on integer wind speeds. For samples for which the tones were below the audibility criterion or no tone was identified, a value of zero audibility shall be substituted.

(d) The tonal penalty shall be derived from the margin above audibility of the tone according to the figure below. The rating level at each wind speed shall be calculated as the arithmetic sum of the wind farm noise level, as determined from the best-fit curve described in Note 2, and the penalty for tonal noise.

(e) 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 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 relevant Local Planning Authority in its written assessment protocol.

(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 Tables A1 to A6 and B1 to B6 attached to the noise conditions or the noise limits for alternative agreed complainant's dwelling, 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 from the site, hereby consented, 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 reasonably requires to undertake the further assessment or any other assessment to determine compliance with Tables A1 to A6 and B1 to B6 as attached. The further assessment shall be undertaken in accordance with the following steps:

i. Repeating the steps in Guidance Note 2, with the wind farm switched off, and determining the background noise (L3) at each integer wind speed within the range requested by the relevant Local Planning Authority in its written request and the approved protocol.

ii. The wind farm noise (L1) at this speed shall then be calculated as follows where L2 is the measured level with turbines running but without the addition of any tonal penalty:

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

iii. The rating level shall be re-calculated by adding the tonal penalty (if any is applied in accordance with Guidance Note 3) to the derived wind farm noise L1 at that integer wind speed.

iv. If the rating level after adjustment for background noise contribution and adjustment for tonal penalty (if required in accordance with note (iii) above) at any integer wind speed exceeds the values set out in Tables A1 to A6 and B1 to B6 or exceeds the noise limits approved by the relevant Local Planning Authority for an alternative agreed complainant's dwelling then the development fails to comply with the conditions.

ANNEX B - APPEARANCES

Hearing Session 1: *Wednesday 23 June 2021*

For the Applicant:

Patrick Robinson	-	Solicitor
Chris Jackson	-	Project Manager
Olivia Heininger	-	Solicitor
David Stewart	-	Planning Consultant
Paul Macrae	-	LVIA Consultant
Andrew McKenzie	-	Noise Consultant
Andrew Birchby	-	Acoustic Specialist

For Bridgend CBC:

Phil Thomas	-	Principal Planning Officer
Helen Williams	-	Principal Officer Shared Regulatory Services

Neath Port Talbot CBC:

Stephen Jenkins	-	Senior Planning Officer

Hearing Session 2: *Thursday 24 June 2021*

For the Applicant:

Patrick Robinson	-	Solicitor
Chris Jackson	-	Project Manager

Olivia Heininger	-	Solicitor
David Stewart	-	Planning Consultant
Vince Savage	-	Technical Leader Wind Farm Impact Assessment
Nick Collis	-	Technical Analyst
Gareth Lang	-	Ecology Consultant
Owain Gabb	-	Ecology Consultant
Mark Crabtree	-	Civil Design Engineer

For Bridgend CBC:

Phil Thomas	-	Principal Planning Officer
Robert Jones	-	Countryside Management Officer

Neath Port Talbot CBC:

Stephen Jenkins	-	Senior Planning Officer
Rebecca Sharp	-	Countryside and Wildlife Team Leader

For Natural Resources Wales (NRW):

Lisa Jones	-	Development Planning Advisor
Bonnie Palmer	-	Senior Development Planning Advisor
Sandra Wells	-	Senior Advisor Species
Richard Facey	-	Specialist Advisor Terrestrial Ornithology
David Reed	-	Senior Advisor Environmental Assessments

For BT Group:

Marcus Nicolaides	-	Solicitor (Planning)
Martin Carter		

Rosie Martindale

Norman Gillan

Duncan Lawson

Hearing Session 3: ***Tuesday 29 June 2021***

For the Applicant:

Patrick Robinson	-	Solicitor
Chris Jackson	-	Project Manager
Olivia Heininger	-	Solicitor
David Stewart	-	Planning Consultant
Kee Evans	-	Solicitor
John Eirian Davies	-	Chartered Surveyor
Andrew McKenzie	-	Noise Consultant
Andrew Birchby	-	Acoustic Specialist
Vince Savage	-	Technical Leader Wind Farm Impact Assessment
Nick Collis	-	Technical Analyst
Gareth Lang	-	Ecology Consultant
Owain Gabb	-	Ecology Consultant
Mark Crabtree	-	Civil Design Engineer

For Bridgend CBC:

Phil Thomas	-	Principal Planning Officer
Robert Morgan	-	Principal Officer Highways Development Control
Helen Williams	-	Principal Officer Shared Regulatory Services

Neath Port Talbot CBC:

Stephen Jenkins	-	Senior Planning Officer
Muttakir Mohammed	-	Pollution Control Officer
Callum Lewis	-	Environmental Health Officer

For BT Group:

Marcus Nicolaides - Solicitor (Planning)

ANNEX C: HEARING DOCUMENTS[69]

Hearing Session 1: Wednesday 23 June 2021

- Document 1 – Institute of Acoustics Bulletin: Wind Farms Cumulative Impact Assessment (dated January/ February 2016)
  – *submitted by applicant via email dated 23 June 2021*

- Document 2 – Communities and Local Government, Wandylaw Farm Decision Notice, dated 10 February 2009
  – *submitted by applicant via email dated 23 June 2021*

- Document 3 – Department for Infrastructure (Northern Ireland), Corlacky Hill Wind Farm Decision Notice, dated 18 February 2016
  – *submitted by applicant via email dated 23 June 2021*

- Document 4 – Report to Scottish Ministers, Stranoch Wind Farm, dated 15 February 2016
  – *submitted by applicant via email dated 23 June 2021*

- Document 5 – Sandy Knowe Wind Farm, Decision Notice, dated 7 July 2020 – *submitted by applicant via email dated 23 June 2021*

Hearing Session 2: Thursday 24 June 2021

- Document 1 – Upper Ogmore Proposed Biodiversity Enhancements Description and Draft Planning
  Conditions
  – *submitted by applicant via email dated 28 June 2021*

- Document 2 – Drawing No. 02959-RES-IMP-DRE-EN-001 – Biodiversity Enhancements – submitted by applicant via email dated 28 June 2021

Hearing Session 3: Tuesday 29 June 2021

- Document 1 - Schedule of Planning Conditions[70], dated 28 July 2021

[69] Documents referred to, or requested to be submitted following, the respective Hearing Session
[70] As amended by Document XX: SoCG Representations relating to the submitted Planning Conditions, dated 9 September 2021

– submitted by applicant via email dated 28 July 2021

- Document 2 – Draft Unilateral Undertaking[71], dated 23 July 2021 – submitted by applicant via email dated 28 July 2021

[71] Superseded by Document XX: Executed Unilateral Undertaking, dated 9 September 2021

ANNEX D - List of Documents referred in the Report

Document 1	Planning Inspectorate - Notice of Acceptance, dated 10 December 2020
Document 2	Planning Inspectorate - Letter, dated 17 February 2021
Document 3	Planning Inspectorate - Letter, dated 31 March 2021
Document 4	Planning Inspectorate - Letter, dated 30 June 2021
Document 5	Planning Inspectorate - Letter, dated 29 July 2021
Document 6	Planning Inspectorate - Letter, dated 16 August 2021
Document 7	Applicant – Completed Unilateral Undertaking, dated 9 September 2021
Document 8	Applicant - SoCG in respect of the Unilateral Undertaking, dated 9 September 2021
Document 9	Applicant - SoCG in respect of the suggested Planning Conditions, dated 9 September 2021
Document 10	NRW – Letter, dated 7 September 2021
Document 11	Applicant – Letter setting out intention to vary DNS application, dated 10 February 2021
Document 12	Planning Inspectorate - Letter, dated 26 May 2021
Document 13	Applicant – SoCG Hearing Session 1, dated 18 June 2021
Document 14	Applicant – SoCG between RES and BT Group (Hearing Session 2), dated 23 June 2021
Document 15	Bridgend CBC – ‘Response to PINS Reconsultation Letter of 26 March 2021’
Document 16	Applicant - Further information received from Applicant, Appendix F: *Cultural Heritage Update by HCUK Group*, dated March 2021
Document 17	Further information received from Applicant, Appendix C: *Ecology Update by BSG Ecology*, dated March 2021)
Document 18	Applicant - Suggested Planning Conditions, dated 28 July 2021