

SECTION A – MATTERS FOR DECISION

Planning Applications Recommended For Approval

<u>APPLICATION NO:</u> P2014/0825	<u>DATE:</u> 20/10/2014
PROPOSAL:	Installation of 11 wind turbines with a maximum tip height of 145m to generate up to 33 MW, together with ancillary development including substation and control building, on site underground electrical cables, stone site access tracks, temporary construction compounds, turbine foundations and temporary crane pads. (Amended application which seeks a reduction in the number of turbines from 13 to 11, an increase in maximum tip height of turbines from 120m to 145m)
LOCATION:	Foel Trawsnant, Bryn, Port Talbot
APPLICANT:	Mr Stuart Watcham - Pennant Walters (FoelT) LTD
TYPE:	Full Plans
WARDS:	Bryn & Cwmavon; Cymmer; Pelenna

BACKGROUND

Members may recall that this application was brought to planning committee previously on 6th June 2017 (see [Committee Report](#)). At that time, the application sought permission for 13 turbines at a height of 120m, and Planning committee resolved to grant permission subject to the signing of a section 106 agreement in relation to a community benefit fund, habitat management plan and de commissioning bond.

Since the above resolution, and prior to any legal agreement being finalised or decision issued, the applicant has been in discussion with Officers in respect of proposed changes to the scheme. As a consequence, the application has been amended to reduce the number of turbines to 11 (was 13) and increase their height to 145m (was 120m), with such amended application the subject of a new Environmental impact assessment.

The application has been out to public consultation and is now being brought before Planning Committee again due to its Strategic Importance and for purposes of consistency, having regard to the previous resolution at Committee.

It should also be noted that, had the application been received now, the scale of application would make it a 'Development of National Significance' (DNS) which would be determined by the National Infrastructure Directorate within PINS. Nevertheless this scheme remains to be considered locally by Neath Port Talbot Council.

SITE AND CONTEXT

The site of the proposed Foel Trawsant Wind Farm is located approximately 2.3km to the north-west of Maesteg, Bridgend (albeit the site lies entirely within the Neath Port Talbot Local Authority area). The development site lies between approximately 250m and 371m AOD altitude and occupies a position toward the northern end of the higher ground between the Afan and Llynfi Valleys.

The site is located on land which include habitats such as semi improved grassland, mire communities, as well as areas of upland heath and acid grass land. The majority of the land is used for grazing livestock (a use which can continue after the development has been constructed).

Access to the site will be via the B4282, between Bryn and Maesteg and will utilise an existing forestry track. There are a number of public rights of way that cross the site, and there is designated open access land.

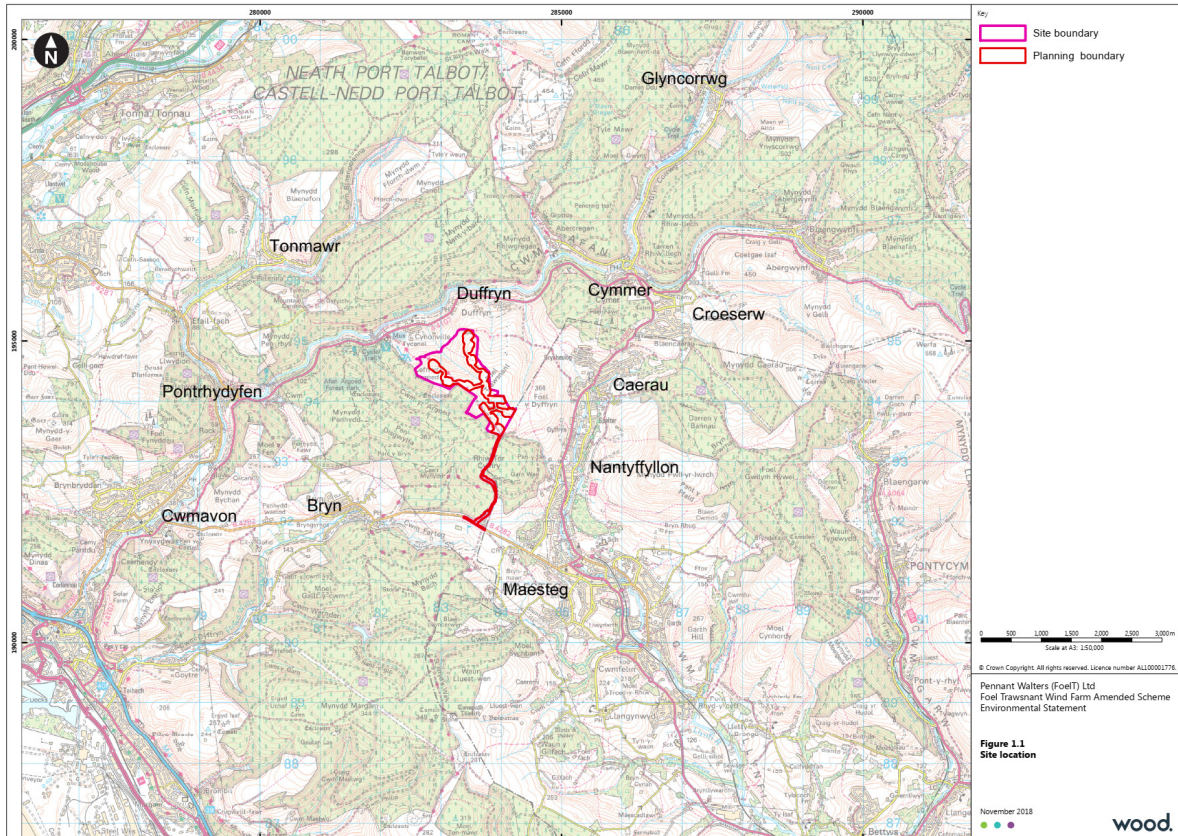
All of the 11 proposed turbines will be located within the refined Strategic Search Area (SSA) 'F' identified within the adopted Local Development Plan, as well as within a Special Landscape Area (SLA). The location plan below shows the site boundary and identifies the surrounding communities.

DESCRIPTION OF DEVELOPMENT

The application (as amended) seeks full planning permission for the construction of 11 no. wind turbines with a maximum hub height of 100m and height to blade tip of 145m.

Associated ancillary development including unit transformers at each turbine, access routes, transformers, electricity sub-station, and two temporary site compounds also form part of the application for consent.

Plan 1: Location Plan



Each turbine will have a maximum power output of 3MW. As such the electrical output of the proposed wind farm is anticipated to be up to a maximum of 33MW. This would be sufficient on average to supply the equivalent of the domestic electricity needs of approximately 19,717 homes.

The proposed wind farm is designed to have an operational life of 25 years and permission is sought for this period of operation only. After this period the applicant proposes to fully restore the site to its original condition.

The application is accompanied by an Environmental Statement (ES) (and Non-Technical Summary) which deals with a range of issues, but primarily deals with the following:-

1. Introduction
2. Approach to Environmental Impact Assessment
3. Scoping and Consultation
4. Wind Farm Site Selection and Design
5. Description of the Proposed Development
6. Legislative and policy overview
7. Landscape and Visual impact assessment

8. Historic Environment
9. Non avian ecology
10. Ornithology
11. Noise
12. Water Resources and Ground Conditions
13. Traffic and Transport
14. Socio-economics including Recreation and Tourism
15. Shadow Flicker
16. Aviation and Telecommunications
17. Cumulative effects

Cumulative Effect

It is noted that the assessment of cumulative effects in the ES indicate that wind farms that fall within the scope of the cumulative assessment are as follows:

- Ffynnon Oer: 16 operational turbines, 91m high, approximately 3km to the north.
- Pen y Cymoedd: 76 consented turbines, 145m high, a minimum of 3km to the north and extending to the northeast
- Afan Llynfi: 12 consented turbines, 118m high, 4 km to the east
- Mynydd Brombil: 5 turbines, 100m high, 7 km to the southwest.

All plans / documents submitted in respect of this application, including visualisations, can be viewed on the [Council's online register](#).

CONSULTATIONS (relating to the amended scheme)

Glamorgan Gwent Archaeological Trust: No objection subject to Archaeological watching brief

Cadw: Advise that Cefn yr Argoed Scheduled Ancient Monument would experience short term impact when forestry trees are removed.

CAA: no reply therefore no observations to make

BBC: no reply therefore no observations to make

Swansea Airport: no reply therefore no observations to make

Joint Radio Commission (JRC): no reply therefore no observations to make

National Grid Plant Protection: No reply therefore on observations to make

National Resources Wales: No objection subject to conditions

Wales and West Utilities: No objection

RSPB: No reply therefore no observation to make

Ministry of Defence: No objection subject to condition

Head of Engineering and Transport (Highways): No objection subject to conditions

Head of Transport and Highways (Drainage): No objection subject to conditions

Biodiversity Unit: No objection subject to conditions

Footpaths: Raised concerns with the proximity of the turbines to exiting public rights of way.

Contaminated Land: No objection subject to standard conditions relating to land contamination

Welsh Water: No objection

Noise: no objection

Bridges and Structures: advised of historic land slips, aerial tips in close proximity, and the requirement to assess any structures in case of damage from deliveries.

Coal Authority: Advised that coal mining legacy potentially poses a risk to the proposed development and that intrusive works are required to be undertaken in order to establish the exact situation regarding coal mining legacy

Bridgend County Borough Council: No objection in terms visual impact within the existing landscape and surrounding area. However Bridgend highways section has a concern that the route goes through their Authority and not NPT.

OFCOM: no reply therefore no observations to make

Mid and West Wales Fire and Rescue Service: No objection, and has given general advice relating to fire fighting.

REPRESENTATIONS

The proposal was originally advertised by means of a press notice and the posting of 6 site notices. The revised scheme was also advertised on site and in the press on Friday 1st March 2019 and Monday 5th August 2019.

In response, to date 4 letters of objection have been received objecting to the proposal for the following reasons (please note only 1 letter of objection has been received in relation to the revised scheme. The other 3 objections related to the earlier scheme, however for clarity the issues raised from all objectors are detailed below):

Visual Impact

- There are already too many turbines planned for this valley. The beautiful area is being spoiled by these *“inefficient, ugly machines”*
- Foel Trawsant is a designated Special Landscape Area which should have protected status. The wind turbines will be visible for many miles across a wide area due to the topography of the site. The Environmental Statement states that two Special Landscape Areas will “sustain significant effects”. There are a substantial number of properties in close proximity to the proposed development whose amenity will be adversely affected.
- There is no information in the report relating to the visual impact on Ty Canol. There have been no viewpoint photographs or illustrations from that property.
- The nearest photomontage to Ty Canol is (viewpoint 2). At best this photograph is misguided and disingenuous.
- The objector at Ty Canol wishes to understand how the development will potentially affect the value of their land.

Noise

- Concerns from the objector at Ty Canol as to why no monitoring was taken from their property
- The ES indicates within section 11.10 that the noise produced at Ty Canol will exceed ETSU-R 97 cumulative limits at Ty Canol and that this is above acceptable levels, and it has been tested from a position further away at Tyn Y Pant Farm

Shadow Flicker

- No testing has taken place at Ty Canol, there are three individuals living at this property with photo/light sensitivity.

Drainage

- The catchment analysis within the ES is incorrect the run off from the access track (byway 37) does not in fact direct into Nant yr Hwyaidd. It now follows byway 37 and falls onto their objectors land (Ty Canol) and property. An increase in run off will cause flooding.
- Concerns that the ES has ignored byway 37 as a water catchment for the development.
- The ES states that at T5 surface run off will flow in a SE direction. This is uphill. It will actually flow down toward Ty Canol
- The ES states T6 - Run off will occur in a NW direction – this is directly onto land at Ty Canol. The objector would like to understand what impact this will have, and what testing has taken place to assess how the new development will impact water run off onto Ty Canol Farm pastureland.
- What measures will be taken to determine how potentially polluted runoff during construction phase can be prevented from entering our land?

Consultation Process

- The objector at Ty Canol had no consultation from the developers

Other

- Negative impact on tourism, biodiversity, access, and the cumulative impact of existing wind farms.

ASSESSMENT

Having regard to the aims and objectives of the Adopted Local Development Plan, and National Planning Policy guidance, it is considered that the main issue in the determination of this application concern the landscape and visual impact of the proposed turbines on the character and appearance of the area. In addition, matters relating to ecology, heritage assets and the cultural heritage, residential amenity, noise and traffic / highway safety implications. And finally, whether any harm identified in relation to all or any of these matters is outweighed by the benefits of the scheme in terms of its contribution to renewable energy production.

Planning Policy Context

UK Energy Policy

The National Renewable Energy Action Plan (2010) and UK Renewable Energy Road Map (July 2011) both recognise the central role of the planning system in delivering the infrastructure required to reduce carbon emission, yet also equally recognise the vital role of the planning system in *“safeguarding our landscape and natural heritage and allowing communities and individuals the opportunity to shape where they live and work.”*

Section 4.5 of the UK National Infrastructure Plan EN-3 (July 2011) recognises the need for large scale renewable energy projects to deliver the ambitious 15% renewable energy targets but caveats this with the need for infrastructure projects to be *“sensitive to place”* and, whilst accepting that there are limitations in the appearance of some infrastructure, applicants ought to demonstrate *“good design in terms of siting relative to existing landscape character, landform and vegetation”*.

Planning Policy Wales (Edition 10, December 2018)

Planning Policy Wales (PPW) sets out the land use planning policies of the Welsh Government (WG), and is supplemented by a series of Technical Advice Notes (TANs).

PPW states the planning system manages the development and use of land in the public interest, prioritising long term collective benefit, contributing to improving the economic, social, environmental and cultural well-being of Wales. It must reconcile the needs of development

and conservation, securing economy, efficiency and amenity in the use of land, ensuring the sustainable management of natural resources and protecting, promoting, conserving and enhancing the built and historic environment.

At para 5.7 PPW advises that the planning system plays a key role in delivering clean growth and the decarbonisation of energy, as well as being crucial in building resilience to the impacts of climate change. The transition to a low carbon economy not only brings opportunities for clean growth and quality jobs, but also has wider benefits of enhanced places to live and work, with clean air and water and improved health outcomes.

At 5.7.16 it further identifies that the Welsh Government targets for the generation of renewable energy are:

- for Wales to generate 70% of its electricity consumption from renewable energy by 2030;
- for one Gigawatt of renewable electricity capacity in Wales to be locally owned by 2030; and
- for new renewable energy projects to have at least an element of local ownership by 2020.

The planning system has an active role to ensure the delivery of these targets. PPW recognises that Wales has an abundant wind resource and, as a result, wind energy is a key part of meeting the Welsh Government's (WG) vision for future renewable energy production.

The Welsh Government has identified Strategic Search Areas (SSAs) which, on the basis of substantial empirical research, are considered the most appropriate locations for large scale on-shore wind farm development over 25MW. This application is considered to be large scale as it is 33MW and is located within a SSA F.

At para 5.9.12 it states that the Welsh Government accepts the introduction of new, often very large structures for on-shore wind needs careful consideration to avoid and, where possible, minimise their impact. The SSAs are the most appropriate locations for large scale wind farm development. Large scale wind energy developments in these areas will be required to contribute to Welsh, UK and European renewable energy targets, mitigate climate change, and deliver energy security.

Para 5.9.13 states that within and immediately adjacent to the SSAs, there should be implicit acceptance that there will be significant change in landscape character from wind turbine development. Whilst cumulative impact may be a material consideration, it must be balanced against the need to meet the Welsh Government's aspirations for energy in Wales and the conclusions reached fully justified in any decisions taken. Developers will need to be sensitive to local circumstances, including siting and design in relation to local landform, proximity to dwellings and other planning considerations

Para 5.9.16 states when determining applications for the range of renewable and low carbon energy technologies, planning authorities should take into account:

- the contribution a proposal will make to meeting identified Welsh, UK and European targets;
- the contribution to cutting greenhouse gas emissions; and
- the wider environmental, social and economic benefits and opportunities from renewable and low carbon energy development

Para 5.9.17 advises that Planning authorities **should give significant weight** to the Welsh Government's targets to increase renewable and low carbon energy generation, as part of their overall approach to tackling climate change and increasing energy security. In circumstances where protected landscape, biodiversity and historical designations and buildings are considered in the decision making process, only the direct irreversible impacts on statutorily protected sites and buildings and their settings (where appropriate) should be considered. In all cases, **considerable weight** should be attached to the need to produce more energy from renewable and low carbon sources, in order for Wales to meet its carbon and renewable targets (*emphasis added*).

Para 5.9.18 sets out the WGs position in how Planning Authorities need to identify and require suitable ways to avoid, mitigate or compensate adverse impacts of renewable and low carbon energy development. The construction, operation, decommissioning, remediation and aftercare of proposals. The following should be taken into account:

- the need to minimise impacts on local communities, such as from noise and air pollution, to safeguard quality of life for existing and future generations;
- the impact on the natural and historic environment;

- cumulative impact;
- the capacity of, and effects on the transportation network;
- grid connection issues where renewable (electricity) energy developments are proposed; and
- The impacts of climate change on the location, design, build and operation of renewable and low carbon energy development. In doing so, consider whether measures to adapt to climate change impacts give rise to additional impacts.

Technical Advice Note 8: Planning for Renewable Energy – July 2005

TAN8 advises that “The most appropriate scale at which to identify areas for large scale onshore wind energy development is at an all-Wales level. TAN8 (2005) identifies areas in Wales which, on the basis of substantial empirical research, are considered to be the most appropriate locations for large scale wind farm development; these areas are referred to as Strategic Search Areas (SSAs)” (12.8.13).

TAN 8 covers the land use planning considerations of all aspects of renewable energy (not just wind). The TAN is written in 2 parts comprising the main report and a series of 6 annexes.

The principal advice contained within the main body of the report can be summarised as follows:

- The provision of energy from renewable sources is an important component of the UK Government energy policy. The target is to produce 10% of electricity from renewable energy sources by 2010.
- The Welsh Government has a target of 4TWh of electricity per year to be produced by renewable energy by 2010 and 7TWh by 2020.
- On-shore wind offers the greatest potential to meet these targets in the short to medium term. To meet this requirement the WG have concluded that large scale (over 25MW) on shore wind farms should be concentrated into ‘Strategic Search Areas’ (SSA’s).
- The TAN acknowledges that not all land within a SSA is going to be suitable but WG is satisfied that sufficient land has been allocated within these areas to meet their targets.
- The TAN advises that Councils should refine the SSA to guide developers to the most appropriate locations within the SSA but

does not preclude land outside of, but close to, the SSA from being considered.

There are 7 SSA's designated within Wales (with the current site falling within SSA 'F' Coed Morgannwg), which have been chosen to meet the following characteristics:

- large areas with a good wind resource,
- upland areas which contain a predominantly flat plateau,
- generally sparsely populated,
- dominated by conifer plantation or impoverished moor land, has little nature conservation or historic landscape features,
- can accommodate over 25MW and achieve 70MW of installed capacity, and,
- largely unaffected by broadcast transmission or military applications.

TAN 8 has considered cumulative landscape and visual interests at an all-Wales level. The strategy adopted is a means of concentrating the impact of wind turbines in a relatively small proportion of the country in areas that are, on balance technically, practically and environmentally better able to accommodate such impacts than other parts of Wales.

With regard to the 'refinement exercise' for the SSAs, Annex D states that the purposes of undertaking a refinement exercise is to achieve a finer grain of development allocation within it taking into account landscape, visual and cumulative impacts. It is anticipated that refinements/adjustments can be made to the SSA boundaries when they are translated into local planning documents. This will facilitate the inclusion of development on the margins of the SSA's where local conditions recommend. The proposed turbines are located within two of three highest ranking zones in the TAN 8 Annex D Study. These are zones considered necessary to meet the (original) TAN 8 target of 2010. These are zones considered suitable as *'large scale, high relief landscapes capable of accommodating very large scale wind turbines'*

The refined SSA boundary for Neath Port Talbot is contained within the adopted LDP, with the proposed turbines located inside of the SSA boundary.

Other National Guidance

In addition to TAN8 it is considered that the following TANs are of relevance in the determination of this proposal.

Technical Advice Note 5: Nature Conservation and Planning (2009) provides supplementary advice to the policies set out in PPW in respect of nature conservation issues. It sets out the criteria against which a development will be judged having regard to the relative significance of international, national and local nature conservation designations. Paragraph 6.2.1 advises that the presence of protected species is a material consideration when a local planning authority is considering a development proposal that, if carried out, would be likely to result in disturbance or harm to the species or its habitats.

Technical Advice Note 6: Planning for Sustainable Rural Communities (July 2010) provides practical guidance on the role of the planning system in supporting delivery of sustainable rural communities in particular to local authorities in rural economies and agriculture. Paragraph 2.1.1 acknowledges that the planning system must respond to the challenges posed by climate change, for example by accommodating the need for renewable energy generation.

Paragraph 2.2.1 states that *“new development can help to generate wealth to support local services ensuring that communities are sustainable in the long term”. A key question for local authorities when determining applications is whether the proposed development enhances or decreases the sustainability of communities...*”

Paragraph 3.1.2 confirms that planning authorities should support diversification of the rural economy as a way to provide local employment opportunities. Paragraph 3.7.2 recognises that many economic activities can be sustainably located on farms.

Technical Advice Note 11: Noise (1997) identifies the need to ensure that noise generating developments (such as wind farms) do not cause unacceptable levels of disturbance. In relation to wind farms, TAN 11 refers to the more detailed guidance set out in TAN 8 and the need to comply with ETSU guidance on noise.

Technical Advice Note 12: Design (2016) calls for a holistic design response to sustainable development. In doing so, the delivery of good design should be fit for purpose and delivers environmental

sustainability, economic development and social inclusion. It calls for an interactive approach involving a proactive planning system with consideration given to such issues as landscape design, layout, density, scale and appearance.

Technical Advice Note 15: Development and Flood Risk (2004) sets out the responsibilities and requirements of the various parties in the development process and seeks to ensure that flood risk, surface water and foul water drainage arrangements are properly considered during the planning process.

Technical Advice Note 18: Transport (2007) explains how transport impacts should be assessed and mitigated.

Technical Advice Note 19: Telecommunications (2002) explains that there can be two types of radio interference from the proposed development; electrical interference and physical interference that:

'Large prominent structures such as tower blocks, cranes, warehouses or wind farms, can cause widespread disruption to television and other telecommunications services due to the physical obstruction or reflection of the wanted signals. Digital television signals are far more robust than analogue and, as viewers change to digital over time; offer the prospect of the elimination of such problems as interference caused by reflections from structures. Local planning authorities will need to satisfy themselves that the potential for interference has been fully taken into account in the siting and design of such developments, since it will be more difficult, costly and sometimes impossible to correct after the event.'

Technical Advice Note 23: Economic Development (2014): provides guidance on planning economic development at a strategic level; working with neighbouring authorities and relevant stakeholders; identifying and assessing economic benefits of development proposals and establishing an evidence base to help prepare economic development policies for LDPs.

Other relevant Policy guidance includes:

- Renewable energy route map for Wales (2008)
- UK Renewable Energy strategy (2009)
- One Wales: One Planet (The Sustainable Development Scheme of the Welsh Government) (May 2009)

- A Low Carbon Revolution Wales' Energy Policy Statement (WAG) (March 2010)
- Climate Change Strategy for Wales (WG) (October 2010)
- Practice Guidance – Planning Implications of Renewable and Low Carbon Energy Development (WG) (2010)
- Energy Wales: A Low Carbon Transition (March 2012)
- Energy Wales: A Low Carbon Transition Delivery Plan (March 2014)
- (WG) Study into the Potential Economic Impact of Wind Farms and Associated Grid Infrastructure on the Welsh Tourism Sector (2014)
- (WG) Low Carbon Energy Generation in Wales (Update study of low carbon Energy) (Nov 2015)
- Well-being of Future Generation (Wales) Act 2015
- Achieving a low carbon pathway to 2030 (WG consultation doc 2018)

Ministerial Letter (John Griffiths) July 2011

In his ministerial letter of July 2011, John Griffiths, the then Minister for Environment and Sustainable Development, set out the revised capacities for each of the SSAs (derived from a report by Garrad Hassan (June 2005 – Energy Assessment of TAN8 Wind Energy Strategic Areas)). This increased the total for SSAs to 1666MW, to be achieved as follows (with areas E and F including land within NPTCBC):-

SSA	TAN 8 CAPACITY	GRIFFITHS CAPACITY
A	140	212
B	290	430
C	70	98
D	140	212
E	100	152
F	290	430
G	90	132

While outlining the maximum installation capacities for SSAs (which can be seen to be higher than the indicative capacities outlined in TAN8), he nevertheless accepted that there remains a need “to ensure that windfarm development ***within*** the SSAs is proportionate and balanced with other development needs in these areas.”

Development Plan Policy

Adopted Local Development Plan (LDP)

The existing Development Plan comprises the Neath Port Talbot County Borough Council Local Development Plan (LDP) which was adopted in January 2016 and covers the period 2011-2026. The Development Plan is the primary document for consideration of land use planning in the County Borough, within which the following Policies are of relevance: -

Strategic Policies

- **Policy SP1** **Climate Change**
The causes and consequences of climate change will be addressed.
- **Policy SP2** **Health**
- **Policy SP3** **Sustainable communities**
The conservation of sustainable, healthy and cohesive communities and the conservation of the countryside
- **Policy SP4** **Infrastructure**
Developments will be expected to make efficient use of existing infrastructure and where required make adequate provision for new infrastructure, ensuring that there are no detrimental effects on the area and community.
- **Policy SP6** **Development in the Valleys Strategy Area**
- **Policy SP13** **Tourism**
The economy and prosperity of Neath Port Talbot will be promoted through encouraging continued growth in the tourist sector
- **Policy SP14** **The Countryside and the Undeveloped Coast**
The countryside and the undeveloped coast will be protected and where possible enhanced through the designation and protection of special landscape areas.
- **Policy SP15** **Biodiversity and Geodiversity**
Important habitats, species and sites of geological interest will be protected, conserved, enhanced and managed.
- **Policy SP16** **Environmental Protection**

Air, water and ground quality and the environment generally will be protected and where feasible improved.

- **Policy SP17** **Minerals**
Mineral sites will be safeguarded
- **Policy SP18** **Renewable and Low Carbon Energy**
A proportionate contribution to meeting national renewable energy targets and energy efficiency targets will be made while balancing the impact of development on the environment and communities
- **Policy SP20** **Transport Network**
The transport system and infrastructure will be developed in a safe, efficient and sustainable manner.
- **Policy SP21** **Built Environment and Historic Heritage**

Topic based Policies

- **Policy SC1** Settlement limits
- **Policy I1** Infrastructure Requirements
- **Policy EN2** Special Landscape Areas (EN2/3 - Vale of Neath)
- **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
- **Policy BE1** Design

Principle of Development

As noted above, Strategic Policy SP18 states that “a proportionate contribution to meeting national renewable energy targets and energy efficiency targets will be made while balancing the impact of development on the environment and communities”. **Policy RE1** then provides the following criterion-based policy which allows an assessment of the impacts of proposals for Renewable and Low Carbon Energy development: -

Proposals for renewable and low carbon energy development will only be permitted subject to the following criteria:

1. Large scale wind farm developments (>25MW) will be expected to be located within the boundaries of the refined Strategic Search Areas.
2. Proposals for wind farms of any size outside the SSAs will only be permitted where it is demonstrated that there will be no unacceptable impact on visual amenity or landscape character through the number, scale, size, design and siting of turbines and associated infrastructure.
3. Small scale wind farm developments (<5MW) will be required to demonstrate that impacts are confined to the local scale.
4. All renewable energy or low carbon energy development proposals will be required to demonstrate that:
 - (a) Measures have been taken to minimise impacts on visual amenity and the natural environment;
 - (b) There will be no unacceptable impacts on residential amenity;
 - (c) The development will not compromise highway safety;
 - (d) The development would not interfere with radar, air traffic control systems, telecommunications links, television reception, radio communication and emergency services communications; and
 - (e) There are satisfactory proposals in place for site restoration as appropriate.

All of the proposed wind turbines are located within the 'refined' SSA 'F' boundary identified within the adopted Local Development Plan, and accordingly it is considered that the principle of such renewables development is acceptable under Policy RE1 subject to a detailed assessment of the 'acceptability' of the impacts. This is assessed in turn below, with the 'planning balance', having regard to need, considered subsequently.

Landscape and Visual Effects:

Within and immediately adjacent to SSAs the implicit objective is to accept landscape change i.e. a significant change in landscape character from wind turbine development. Nonetheless, TAN 8 (paragraph 2.4) also recognises that not all of the land within these areas may be technically, economically and/or environmentally suitable for major wind power proposals. As stated in 'Designing Wind Farms in Wales', good landscape design principles need to be followed to ensure that the development is appropriate for the scale and character of the landscape, and there may be a limit on the number or extent of wind farms which can reasonably be accommodated.

Wind farms have to be located on high ground to maximise wind conditions, design efficiency dictates that they have to be of such stature. It is impossible therefore to completely screen such

developments as they will always be visible from surrounding areas at varying distances.

Any judgement about the acceptability of the current proposal must be influenced by an assessment of its impact upon the landscape character and the area's visual amenity. The key to assessment is to consider whether the impact will unacceptably dominate a particular landscape and the degree to which people would be affected by that impact.

Although no longer in effect or able to be afforded weight, the Council's previous Interim Planning Guidance (under the UDP) differentiated between the level of effects – prominent, dominant and overwhelming. Prominent was considered to mean something that can be seen and identified in the landscape without the need for closer examination; 'dominant' to describe the situation where that object draws the observer's eye to the extent that little else is seen, even in an attractive landscape; and 'Overwhelming' to describe a situation where the wind energy development is so close and of such a size as to be likely to make the observer feel uncomfortable and want to move away. The latter two impacts were stated as likely to result in a proposal being refused.

It is considered therefore that the fact that wind farms will be visible from such areas is not a reason for refusal in itself, but careful assessment has to be made relating to the degree of visual impact each site would have. A key factor is considered to be whether turbines would dominate the landscape and the degree to which people would be affected by that impact.

The visual impact of the development has overlapping influence in relation to a number of factors. The development has the potential to affect people within the vicinity of the proposal, whether living, working, travelling through or undertaking leisure activities.

Landscape and Visual Impact Assessment

There are a number of landscape assessment studies which have been carried out within the County Borough including the site. These include LANDMAP 2004, Landscape Assessment based on LANDMAP (2004) and TAN8 SSA refinement study.

In respect of the LANDMAP visual and sensory aspect, the site lies within the Foel Trawsnant Special Landscape Area (Policy EN2 refers) which is designated due to its high value landscape in terms of its underlying geology, cultural and historic heritage, ecology, visual amenity and sense of place.

When considering its impact the Planning Department must consider the effects on the site itself, Landscape Designations and residential visual amenity.

Landscape effects

Out of the 15 landscape receptors, significant effects would be experienced by 4 of them as follows:

- **Local landscape designations - Neath Port Talbot Special Landscape Area (SLA) 6: Foel Trawsnant;** The ES states that this SLA would host the proposed turbines plus most of the access tracks and the ancillary ground level elements and will therefore sustain some direct effects. The operational turbines would be dominant or at least prominent landscape elements across the SLA. One of the stated qualities of the SLA is the absence of development which would be lost although it is likely that the associated qualities relating to the sense of exposure and bleakness will be retained. The operation of Foel Trawsnant would result in a high magnitude of landscape change.
- **Local landscape designations- Bridgend Special Landscape Area 1: Foel y Dyffryn;** The easternmost of the proposed turbines would be close to the western edge of this SLA. The turbine array would alter the visual backdrop to the setting of the urban area along the floor of the Llynfi Valley although it would not alter the role of the upland landscape within the SLA in contributing to this backdrop. Nevertheless the western part of this SLA would be within the wind farm landscape resulting from the nearby presence of the turbines and their movement hence the predicted medium magnitude of landscape change.
- **Visual and sensory aspect areas (VSAA)- CynonVS473: Mynydd Baedan (northern part only);** ZTV coverage is concentrated in the closest northern part and more extensively in the more open southern parts where effects would be incremental to those associated with turbines at other wind farms and a sense

of separation would be maintained. For the small proportion of this VSAA at its northern end, the proposed turbines would be prominent, potentially dominant landscape elements with the movement and possibly the sound of the turbines' operation altering some perceptual and aesthetic attributes. When assessing the VSAA as a single landscape receptor it is concluded that the magnitude of landscape change would be medium.

- **Visual and sensory aspect areas - NPTVS358: Foel Trawsnant.** Some abundant landscape elements would be lost, mainly improved grassland areas and new landscape elements introduced, principally the 11 turbines themselves. Their proximity, scale and movement would ensure that they would become the dominant landscape elements across all but the north-east of the VSAA.

The landscape assessment concludes that overall the landscape surrounding the proposed Foel Trawsnant Wind Farm would have the capacity to accept the 11 proposed turbines. There would be a limited number of significant landscape effects upon the same four landscape receptors assessed as being subject to significant landscape effects in the 2014 LVIA for the approved scheme. Whilst two local landscape designations would be subject to significant effects, this should be considered in the context of the extensive distribution of local landscape designations in this part of south Wales, including large parts of Strategic Search Area F (SSA F). Given Foel Trawsnant's location within both the original and refined boundaries of SSA F, this degree of landscape change would be in accordance with the implicit objective of TAN 8 to accept landscape change within and immediately adjacent to SSAs.

Similarly whilst significant effects have been concluded for two of the five assessed Visual and Sensory Aspect Areas this is a relatively small figure for a medium-sized wind farm development and should not be interpreted as the site being inappropriate for a wind farm development of this specification. Overall the landscape assessment concludes that the Foel Trawsnant site is suitable to accommodate the scale of wind energy development that is proposed.

Following the initial consultation (upon the original scheme of 13 turbines), the neighbouring borough of Bridgend raised a concern over the proximity of the turbines to the populated areas Nantyffyllon, Caerau

and Maesteg. However upon consultation on the revised scheme Bridgend County Council has advised that *“Whilst the development is located in close proximity to populated areas on an elevated site above Nantfyllon, Caerau and Maesteg, the reduction in the number and overall increase in the size of the turbines is not considered to have a significantly adverse visual impact within the existing landscape and surrounding area. As such the proposed amendments are considered to comply with national policy in Planning Policy Wales and Technical Advice Note 8 and Policies ENV18 & SP2 of the Bridgend Local Development Plan.”*

With regard to the Special Landscape Area designation within NPT, it is notable that the Strategic Search Area within the LDP was designated (refined from the TAN8 boundary) in full knowledge of the local landscape character, such that there was a degree of expectation that large-scale renewables infrastructure would be acceptable in principle in this area, not least due to its time limited (temporary) nature. In this regard, while there would undoubtedly be significant impacts on the landscape, they would nevertheless comply with the objectives of Policy RE1.

The area predicted to sustain significant landscape effects as a result of the development lies adjacent to SSA F, with neither the Foel y Dyffryn SLA nor the northern-most part of the Llangynwyd Rolling uplands LCA extending beyond approximately 1km from the SSA boundary. As such, the level of landscape effect arising from Foel Trawsnant Wind Farm is considered to be generally in accordance with the expectations of Welsh national policy. That significant landscape effects would be restricted to the immediate environs of SSA F is a reflection of the appropriateness of siting of the wind farm set back from the plateau edge to the east and the effectiveness of this design in limiting potential landscape effects.

Visual Effects

Out of the 63 individual or grouped receptors that have been assessed, significant effects are restricted to 27 receptors as follows:

- Designated long distance footpaths: Coed Morgannwg Way and St. Illtyd’s Walk along which it has been assessed that significant visual effects would be experienced from locations along a maximum of 6km of the route shared by these two regional trails (Coed Morgannwg Way and St. Illtyd’s Way);

- Sustrans cycle route: National Route 885 from which it has been assessed that significant visual effects would be experienced from less than 1km of the route;
- Prominent elevated locations and viewpoints: Foel Trawsnant; Foel y Dyffryn; Mynydd Pwll-yrllwrch; Rhiw Tor Cymry; Mynydd Penhydd & Pen Disgwylfa; Moel Gallt y cwm, Mynydd Bach & Waun Lluest-wen and Mynydd Pen-rhys, Mynydd Nant-y-bar & Mynydd Rhiwgregan.
- Settlements: Brynheulog (properties to the north-west beyond 1.5km), Caerau (11 properties beyond 1.5km) and Abercregan (31 properties).
- Groups of private residential properties within 1.5km of a turbine: Ty'n-y-pant Farm, Nant-yrhwyaid Farm, north-west Brynheulog (28 properties), Cynonville (a single property) and Neuadd-wen (a single property).
- Locally promoted walking, cycling and mountain biking routes: Tarren Forgan Trail, Afan Woodland Walk, River and Railway Walk, Argoed Walk and Penhydd Trail.
- Groups of PRow and open access land within 3km of a turbine: Area A – Foel Trawsnant, Area B – higher ground to the north and east of the Llynfi Valley and Area F – elevated areas to the south and south-west of the proposal site.
- Outdoor recreational and public amenity area: Maesteg Golf Course.

The conclusions of the visual assessment for the proposed amended scheme at Foel Trawsnant concur with those of the 2014 LVIA with the exception of a small number of number of receptors. The limited number of receptors for which the conclusions of the visual assessment differ from those presented in the 2014 LVIA include the following:

- **River and Railway Walk** – a greater certainty with regard to the baseline and imminent future baseline as a result of the scheduled felling of woodland through which the Walk is routed has increased the magnitude of change when compared to the scheme assessed in 2014 which would give rise to significant visual effects.
- **Penhydd Trail** - The magnitude of change is consistent with that presented in the 2014 LVIA for the approved scheme although the sensitivity of visual receptors has been amended in accordance with GLVIA3 hence the level of effect has increased and is significant.

- **Group ID M: Neuadd-wen (~8 properties)** - This conclusion varies from that presented in the 2014 LVIA whereby significant visual effects were predicted at both No. 53 Afan Road and Crud-yr-Awel, with significant visual effects now predicted at Crud-yr-Awel only as a result of the omission of turbines 12 and 13 from the amended scheme. The Foel Trawsnant Wind Farm amended scheme therefore represents a beneficial change in comparison with the approved scheme.
- **Maesteg Golf Course** - This magnitude of change is consistent with that presented in the 2014 LVIA for the approved scheme although the sensitivity of visual receptors has been amended in accordance with GLVIA3 hence the level of effect has increased and is significant.

The small proportions of each of the groups of visual receptors that are predicted to experience significant visual effects is a reflection of the appropriateness of the proposal site to this scale of wind energy development. The location of the proposed wind farm, set back from the edges of a steep sided elevated area, results in views of the wind farm being wholly unavailable to many close and middle-distance visual receptors that might otherwise be expected to experience significant visual effects.

While the impacts on these receptors has been assessed as being likely to sustain significant level of visual effect, this is to be expected for this scale of development. In this respect, whilst it is accepted that the wind farm would be highly prominent, it is not considered that the influence of the turbines would be such that it would subjugate that of all the other urban and rural elements in the expansive views available from this location. The significance of these impacts is also considered below as part of the overall 'planning balance'

National Landscape Designations

The most extensive national landscape designation in the defined study area is the Brecon Beacons National Park over half of whose area is located within it. However, the ES states that the operation of the proposed development would have minimum effects upon the National Park and its key characteristics, due to a minimum separation distance of 14km and the low level of potential visibility from locations within the National Park. The turbine array would be discernible from less than 6% of the National Parks total area, with separation distances in excess of 17km, such that the distant presence of the turbines could only ever

result in minor incremental effects in the National Parks southern setting. This assessment is accepted.

With regard to the two national designations that are found in the Gower, Officers accept the conclusions that : the separation distance of at least 25 km would be sufficient to ensure a minimal presence for the development; that the low level of the Glamorgan Heritage Coasts would ensure that the proposed turbine array could only be discernible from a moderate proportion of the Heritage Coast; that a minimum separation of 17km would result in the turbines only ever being very minor landscape elements; and their location to the north would ensure that they would not affect the key relationship between the seascapes and the coast.

Cumulative effects

The ES includes a cumulative assessment of impacts in order to evaluate the effects that could be generated were Foel Trawsnant Wind Farm to become operational along with some or all of the other wind farms that are either already operational, have been consented or are proposed i.e. within the planning system, in an extended 60 km radius cumulative study area.

Wind farms that fall within the scope of the cumulative assessment are as follows:

- Ffynnon Oer: 16 operational turbines, 91m high, approximately 3km to the north.
- Pen y Cymoedd: 76 consented turbines, 145m high, a minimum of 3km to the north and extending to the northeast
- Afan Llynfi: 12 consented turbines, 118m high, 4 km to the east
- Mynydd Brombil: 5 turbines, 100m high, 7 km to the southwest.

The applicant's assessment concludes that, given the separation distances between wind farm developments, "the relationship between the other wind farms in this scenario and Foel Trawsnant Wind Farm would be too weak to give rise to any significant cumulative landscape effects". With regards cumulative visual effects, potential visual interactions between the developments at Foel Trawsnant and Mynydd Marchywel and Mynydd Brombil have been assessed as not being significant, either due to intervening forestry or built form, or separation distances. It is therefore concluded that the introduction of Foel

Trawsnant Wind Farm into this scenario would not result in any significant cumulative effects.

The influence of the proposed turbines upon the surrounding landscape and upon views would be limited. Whilst significant effects would occur (as is almost inevitable with commercial-scale wind turbines), such effects would be localised in extent and the incremental influence of the turbines upon the wider landscape would not be notable. As such, the presence of the 11 proposed turbines at Foel Trawsnant would not exceed the capacity of the landscape to accommodate such development and would also be in accordance with the implicit objective of TAN 8 to accept landscape change within and immediately adjacent to SSAs.

Residential Visual Amenity

It is widely accepted that the ‘Lavender Test’ conceived by the Inspector in the appeal decision at Burnthouse Farm (Cambridgeshire) and adopted in a large number of Inspector’s decisions since is the appropriate test to apply when considering the physical impact of turbines on the amenity of nearby properties.

This represents a “transparent and objective approach to assessing visual impact”, with Mr. Lavender, in determining the effect of a windfarm on receptors in the Enifer Downs appeal, considering that “when turbines are present in such number, size and proximity that they represent an overwhelming and unavoidable presence in main views from a house or garden, there is every likelihood that the property concerned would come to be widely regarded as an unattractive and thus unsatisfactory (but not necessarily uninhabitable) place in which to live”.

The residential visual assessment for Foel Trawsnant Wind Farm includes 15 groups of residential properties and six more isolated individual properties. Out of these 2 individual properties and 3 groups of properties could experience significant effects shown below:

- Ty Canol Farm
- Ty Canol Farm annex
- Tyn Y Pant Farm **significant**
- Nant Yr Hwyaid Farm **significant**
- Hendre Owen Farm

- Penylan Farm
- Group A 28 properties **significant**
- Group B 86 properties
- Group E 37 properties
- Group G 67 properties
- Group H 84 properties
- Group I 212 properties
- Group K 150 properties
- Group L 46 properties **significant**
- Group M 8 properties **significant**

The Landscape visual assessment shows that 84 properties that could experience some significant effects, however it should be noted that this is less than the previous scheme which was 115 properties.

The total number of properties that could experience significant effects is, however considered to represent a small number of properties when placed in the context of the relatively densely populated nature of the surrounding area. There are approximately 2,000 residential properties within 1.5 km of a proposed turbine location. Moreover, the applicants have submitted a detailed review of potential effects upon 'residential visual amenity' at these properties which considers the full range of views.

In relation to the comments raised by an objector at Ty Canol who has stated that there is no information in the report relating to the visual impact on their property and that there have been no viewpoint photographs or illustrations from that property, it is noted that the purpose of the photomontages is to provide a visual interpretation of the wind farm development; unfortunately these cannot be provided for every property within the area and would tend to be taken from densely populated areas or areas that would have the most visual change. The scope of the visual impact assessment including view points and photomontages was agreed with NPTCBC.

The visual assessment shows that Ty Canol was identified as a visual receptor in appendix 7E of the ES (property ID 1 and 2 Ty Canol Farm and annexe) the assessment of the effects upon the receptor was summarised as follows:

“The wireframe images in appendix 7G indicate that five of the turbines at the Foel Trawsant wind farm amended scheme would be theoretically visible from these properties forming an irregular array across approximately 30° of the eastern horizon. Such views would only be available from the upper storey south-east facing windows of the farmhouse and the south-east facing gable window of the annex and would be subject to additional screening/filtering by scrub on the hillside. No views of the turbines would be available from lower storey windows or from other areas within the curtilages of these properties. Whilst Turbine 6 may appear relatively prominently on the south-eastern horizon and may give rise to a Medium magnitude of visual change in views from three upper storey windows, the turbines would not be visible in the majority of views experienced by the residents of these properties. As a result, it is assessed that this situation would result in an overall Low magnitude of visual change. This conclusion accords with the findings of the 2014 LVIA for the approved scheme.

This shows the property would experience a low level of visual change, this is also the reason a photomontage was not required from this property at the scoping stage of the ES.

In terms of the nearest photomontage (viewpoint 2) being ‘misguided and disingenuous’ Viewpoint 2 has been provided to show views near to the Afan valley visitors centre. Whilst there are trees and bushes the view should read in conjunction with the wireframe which shows the turbine with the terrain removed. The assessment states the area would experience a medium magnitude landscape change and landscape effects would be not significant. It is considered that the assessment meets expected standards.

In terms of how the visual impact of the development would affect land values; this is not a material planning consideration.

Having regard to the above, whilst it is acknowledged that the number of turbines which would be visible will vary depending on the location of the properties, this detailed assessment concludes that no residential properties would sustain effects upon their residential visual amenity such that the proposed turbines could be considered to be overbearing. Accordingly, Officers have concluded that the impacts on individual properties would not result in any specific property which would fail the ‘Lavender Test’ in terms of it becoming an “unsatisfactory (but not necessarily uninhabitable) place in which to live”.

Summary of Landscape and Visual Effects

The applicants have concluded that “the influence of the proposed turbines upon the surrounding landscape and upon views would be limited. Whilst significant effects would occur (as is almost inevitable with commercial-scale wind turbines), such effects would be localised in extent and the incremental influence of the turbines upon the wider landscape would not be notable. As such, the presence of the 11 proposed turbines at Foel Trawsnant would not exceed the capacity of the landscape to accommodate such development”.

Having regard to the above, it is considered that there would be some significant adverse effects both on the landscape and on visual amenity. The site is, however, located within a Strategic Search area (SSA F) where the implicit objective of TAN 8 is to accept landscape change, and Policy RE1 seeks to direct such large-scale renewables development. In this respect, while the planning balance will be assessed below, it is considered that the impacts of development on the area are, given the scale of the proposal, relatively limited and in line with expectations for such renewables development.

Noise Assessment

Noise issues relating to the potential impact of this wind farm scheme have been assessed in the ES, with operational noise assessed in accordance with the ETSU-R-97 Guidance for the daytime period, as recommended by Technical Advice Note 8 (TAN8).

The assessment modelled the predicted noise levels at eight residential properties in the area surrounding the site of the proposed wind turbines, and concluded that the operational noise levels from the wind farm would lie within the noise limits prescribed by the ETSU Guidance. It thus concluded that the relatively high separation distances between the construction activities and the nearest receptors is sufficient to ensure that any construction or decommissioning noise effects will be minimised. A cumulative assessment of the proposed development and Ffynnon Oer Wind Farm, Pen y Cymoedd Wind Farm, and Llynfi Afan Renewable Energy Park similarly demonstrated that all projects can operate concurrently without creating a significant noise effect at the nearest sensitive receptors.

In relation to the concerns raised from an objector (at Ty Canol Farm) the following comments are made:

The reason why no monitoring was taken from the objectors property (Ty Canol Farm) was that the noise consultant acting on behalf of the developer advised that the resident at Ty Canol refused them access for noise monitoring on several occasions, as such a proxy location has to be used. This was also the case at Nant yr Hwyaid.

In terms of the ES indicating that the noise produced at Ty Canol will exceed ETSU-R 97 cumulative limits at Ty Canol and that this is above acceptable levels, the Environmental Health Officer (Noise) has assessed the revised information and has confirmed that there is a predicted exceedance of the ETSU-R-97 noise limits at Ty Canol at 6, 7 and 8 metres per second wind speed detailed in Table 11.11 on page 257 of the Environmental Statement. This prediction, however, is an artificial worst case scenario, calculated with the receptors directly downwind from each turbine at the same time, and as such is not a real world scenario as the wind does not blow in 11 different directions at the same time.

The Cumulative Turbine Noise assessments in Tables 11.13 and 11.14 includes noise from other surrounding wind farms, and most importantly the directivity of the proposed wind turbine noise due to wind direction is taken into account in this assessment. Consequently, predicted maximum turbine noise levels at Ty Canol are predicted to be 2.8 to 3.6dB below ETSU-R-97 Derived Noise Limits at wind speeds of 6, 7 and 8 metres per second.

The Environmental Health Officer (Noise) as such has concluded that they do not object to the proposal subject to conditions that will control noise levels during construction and operation of the development. As such the development subject to these conditions is not considered to have an adverse impact on the nearest residential properties.

Traffic and Transport

The ES assesses the likely significant effects of the proposed development with respect to Traffic and Transport. It should be read in conjunction with the Construction Traffic Management Plan (CTMP)

The proposed access route will run along 12.4km of the A4063 starting from junction 36 of the M4 to Maesteg town centre and the junction with

the B4282. The road varies in standard along the 12.4km. The road starts off as a good standard dual carriageway road from junction 36 of the M4 to the junction with the B4281 (1.4km in total). The road then heads north and becomes a rural standard single carriageway road with variable speed limits and speed reduction measures (such as signage) as it passes through villages on the way to Maesteg. Street lighting is present in urban sections of the road and where they are not, retro-reflective roads studs are provided. The route follows the A4063 until it reaches the A4063/B4282 junction at Cwmfelin, where the blade Abnormal Indivisible Load (AIL) vehicles will take a right turn onto the B4282 Mill Street, Bridgend Road. All other construction vehicle will remain on the A4063 passing through Maesteg town until a left turn at the B4282 Neath Road junction.

In terms of impacts on traffic, it is considered that during the operational phase once the wind turbines are functional that the amount of traffic associated with the scheme would be minimal.

Until such time however, the construction activities will be restricted on site to exclude Sundays and Bank holidays and any construction vehicle movements outside the hours of 07.00 to 19.00 Mondays to Fridays on 08.00 to 13.00 on Saturdays.

The total number of movements (in/out) is stated as 6088 (of which 121 are one-way AILs for turbine delivery – 242 total including return trip), the majority relating to delivery of stone and concrete.

A 12 month construction programme is expected, with total monthly movements ranging from 20 to 1104. The maximum traffic impact will be construction month 4 which relates to stone for access track and compound base deliveries. Turbine delivery will take place during months 7-10; during these months there will be 11 AIL movements per turbine (22 2-way movements, albeit no longer than an AIL). It is anticipated that three turbines would be delivered to site during months 7, 8 and 9, and 2 turbines during month 10. Therefore, the maximum number of AIL (one way) movements in one month would be 33 during month 7 8 and 9. Based on a 22-day month (as used in the TMP and ES assessments) this would equate to 2 AIL movements per day although this may vary depending on agreements with South Wales Police, the South Wales Trunk Road Agency, Neath Port Talbot CBC and Bridgend CBC.

Post Construction

Visits to the site to carry out preventative and reactive maintenance shall only amount to one or two visit per week. It is the construction period whereby environmental effects from traffic maybe anticipated.

Head of Engineering and Transport Assessment

In view of the above the supporting documents have been carefully considered by the Head of Engineering and Transport (Highways) who has confirmed that they do not object to the proposal.

They have requested that conditions be imposed to ensure that delivery routes are undertaken in accordance with the Construction Traffic Management Plan, temporary TRO's dilapidation survey and structural assessment of structures along the route. The Local Authority's Bridges and Structures Officer have also advised that depending on the weight and axle configuration of the delivery vehicles it may be necessary for the developer to pay the costs associated with structural assessments of Highway structures along the route. It is considered that these requirements can be imposed via suitably worded conditions.

Bridgend County Council Highways Officer has advised that the route has been used before by similar loads (Mynydd Brombil), however following the trial run of the abnormal, additional highway works were identified as necessary, which were not indicated within the swept path analysis, and this should be considered. They have advised that the heavy lift mobile cranes to assemble the turbines can usually involve the use of several cranes (up to 130 tonnes in weight). These can place an enormous strain on the bridge assets / roads and typically travel to and from the site on a daily basis as required. As such Bridgend highways section has advised that they would prefer traffic to go via NPT, and stated that before they can agree that the route can be used again they need robust justification as to why a route through NPT cannot be used.

Whilst the Local Planning Authority can sympathise with their concerns and the disruption this type of development has during construction, it is considered that the choice of route needs to be made based upon the appropriate needs of the development as opposed to the administrative area within which such a route may lie. In this respect, the route identified runs through Bridgend's area, and is along public roads which have been used recently by another wind farm development. It is thus

the Local Planning Authority's responsibility to assess the route that has been proposed by the developer and not direct the applicant to consider an alternative route that avoids a neighbouring Authority.

In light of the comments raised by Bridgend and due to the larger components, it is considered that a condition can be imposed to ensure the abnormal indivisible loads (AIL) can safely negotiate the route. This will be imposed via a AIL test run report and an AIL test run. This would identify any additional works that have not been identified within the CTMP. Subject to such conditions it is not considered that any objection can be made to the choice of AIL / traffic route,

The Traffic and Transport environmental effects of the Foel Trawsnant amended scheme have been assessed to be not significant. An assessment of the effects has been undertaken using GEART and the increase in HGV traffic has been considered to be negligible. It has therefore been derived that the effects of the Foel Trawsnant amended scheme at all receptors is negligible–It is therefore concluded that the proposal during the construction, operational and decommissioning phases of the wind farm there will not be any unacceptable impact upon highway and pedestrian safety which cannot be mitigated by condition.

Shadow Flicker

In terms of shadow flicker, the ES confirms that potential effects were considered at the scoping stage.

Shadow flicker occurs when the alignment of the sun, wind turbine and sensitive receptor's occurring during certain climatic conditions. Shadow flicker does not generally create disturbance outdoors as light is reflected from all directions. Therefore animals and sensitive receptors outside are unlikely to experience shadow flicker.

The ES confirms that up to 32 properties have been identified which have the potential to experience some level of shadow flicker. Therefore mitigation measures should be put in place to switch off turbines during conditions when shadow flicker may occur, thus protecting residential amenity. In order to ensure that the proposal will not result in adverse impacts on residential amenity it is considered that an adequately worded condition to address shadow flicker from the development be added to the decision notice should planning permission be granted.

It is noted that the objection raised by the occupier of Ty Canol farm has stated that no testing has taken place at Ty Canol and that there are three individuals living at this property with photo/light sensitivity. As stated earlier in this section, a detailed Shadow flicker assessment has been undertaken and within this study Ty Canol was identified as a property with potential to experience shadow flicker and included in the assessment as receptor ID 29 (within table 15.3).

The assessment in this section concluded that “receptor 29 could also experience shadow flicker effects from turbine 6 for an average duration of 25.8 minutes from late February to mid-March between the hours of 08.15 and 08.49, and between late-September and mid-October between 07.52 and 08.26. In total the property could experience up to 18.3 hours per year of potential shadow flicker. Based on the significance criteria presented in Section 15.9, the effect on this property would be low and therefore not significant according to Table 15.6 of the ES

In terms of photo sensitive epilepsy, the report identifies that research has been carried out to determine whether shadow flicker from wind turbines can cause seizures in photo-sensitive epilepsy sufferers (e.g. Harding G, Harding P, and Wilkins A, [2008]: Wind turbine, flicker, and photosensitive epilepsy: Characterizing the flashing that may precipitate seizures and optimizing guidelines to prevent them. The report further goes on to state that “Epilepsia sufferers are usually sensitive to flickering light at frequencies from 3Hz– 60Hz. For a typical 3-blade, 45m rotor diameter wind turbine the maximum rotational speed will be less than 20 revolutions per minute so the blade passing frequency is 60rpm, or 1Hz; this is well below the 3Hz–60Hz sensitivity range.

The report states that the proposed turbines will operate at varying speeds, up to 15 RPM. As the turbine rotors will have three blades, each blade will pass a particular point no more than 45 times a minute, which equates to a maximum frequency of 0.75 Hertz. This is much lower than the 3-30 Hertz frequency range generally thought to risk triggering photo-sensitive epilepsy. It is also noted in the DECC Report (2011) that *“on health effects and nuisance of the shadow flicker effect, it is considered that the frequency of the flickering caused by the wind turbine rotation is such that it should not cause a significant risk to health”*.

To conclude it is considered that the applicant has fully assessed the impacts upon shadow flicker on all properties, including the

complainant's property, and has identified that the effect upon the property would be low. Nevertheless a condition to address shadow flicker from the development is recommended.

Ecology and Ornithology

Technical Advice Note 5: Nature Conservation and Planning states that; Biodiversity conservation and enhancement is an integral part of planning for sustainable development. The planning system has an important part to play in nature conservation. The use and development of land can pose threats to the conservation of natural features and wildlife. Past changes have contributed to the loss of integrity of habitat networks through land-take, fragmentation, severance, disturbance, hydrological changes and other adverse impacts.

But development can also present significant opportunities to enhance wildlife habitats and the enjoyment and understanding of the natural heritage. The planning system needs to be watchful of the cumulative effects of a series of small, perhaps occasional, apparently insignificant losses from the natural world, which can combine to seriously deplete the natural heritage, including essential hydrological and ecological systems; small scale opportunities for habitat creation and enhancement can be significant and can build into major contributions over time.

In addition it states; the development control process is a critical stage in delivering the protection and enhancement of nature conservation required by PPW. The following can help to achieve these objectives:

- adopting the five-point approach to decision-making - information, avoidance, mitigation, compensation and new benefits;
- ensuring that planning applications are submitted with adequate information, using early negotiation, checklists, requiring ecological surveys and appropriate consultation
- securing necessary measures to protect, enhance, mitigate and compensate through planning conditions and obligations;
- carrying out effective planning enforcement;
- identifying ways to build nature conservation into the design of new development.

TAN 5 confirms that through the use of conditions, the delivery of a number of positive benefits to biodiversity beyond those of simply avoiding adverse effects are possible, including;

- The submission and agreement of a landscape scheme so that greater attention can be given to issues such as species composition;
- The maintenance of landscape planting for a five-year period, or longer, where the need for this can be justified;
- Habitat enhancement;
- The restoration and aftercare of a site where a positive approach to restoration and after-use required by conditions can produce significant biodiversity benefits in terms of habitat creation and enhancement.

The Local Authority's ecologist has reviewed the ES and the subsequent information and advised that they have no objection to the proposal subject to conditions relating to the submission of an environmental management plan that includes all mitigation measures as set out in table 9.12 in the ES. This can be imposed via a suitably worded condition.

They have also advised if works are needed to extend or widen existing forest tracks, botanical surveys should be carried out to identify any priority species and appropriate action taken to maintain species. Other recommendations made include Ecological Clerk of Works, micro siting and decommissioning.

NRW have advised that they have no objection in terms of ecology subject to conditions as recommended in table 10.9 of the ES being imposed. These relate to a site manager and ecological adviser independent of the contractor acting as a clerk of works being employed to avoid damage or destruction of nests during construction, to submit pre-construction surveys for breeding crossbill and mitigation to avoid disturbance (if required) and to protect breeding nightjar from disturbance. These can be imposed via suitably worded conditions. They have also suggested a legal agreement in relation to the Habitat management plan.

In conclusion, it is considered that the ES and subsequent information demonstrate that the proposal will not have a significant impact on ecological interests. Therefore, subject to the imposition of the suggested conditions and S106 requirements and appropriate mitigation measures and positive habitat management will outweigh any negative ecological effects of the proposal. Some of the ecological mitigation will need to be undertaken via a S106 agreement as the land

lies outside the application site boundary (albeit within the control of the applicant). The development is therefore considered to accord with Policies SP15, SP16 and EN6 of the Adopted Local Development Plan.

Socio-Economics including recreation and tourism

In respect of tourism, in addition to many Studies relating to Scotland, the Welsh Government Study into the Potential economic Impact of Wind Farms and associated Grid Infrastructure on the Welsh Tourism Sector (Regeneris 2014) found no evidence of significant impacts either locally or in areas where there are established wind farms or nationally. Indeed existing studies and research on the effects of wind farms on tourism suggest that the presence of a wind farm does not generally deter visitors or impact on the decisions to revisit and that wind farms can be tourist attractions in their own right.

In addition, whilst the scale of the proposal means that it is likely to impact upon the visual experience of walkers close to the site there is no evidence to suggest that wind farms in areas of high scenic value have experienced reductions in tourism demand.

Impacts on Rights of Way

As stated earlier in this report bridleway 39 and footpath 40 cross the site. Although the Rights of Way Officer did not object to the proposal on the original consultation, they have now advised that bridleway 39 and footpath 40 could be adversely affected by the siting of the turbines, especially the bridleway as the turbines could potentially scare horses making the bridleway unsafe for users, which in turn could also prevent the bridleway being used for its intended purpose.

Turbines 1 to 6 run along the bridle way and turbine 11 is adjacent to the footpath, these are sited the following distance from these public rights of way:

Turbine No	Distance from Bridleway 39 (approx.)
Turbine 1	57m
Turbine 2	55m
Turbine 3	53m
Turbine 4	58m
Turbine 5	124m

Turbine 6	92m
	Distance from footpath 40 (approx.)
Turbine 11	30m

Technical Advice Note 8 provides guidance in relation to the siting of wind turbines and their proximity to footpaths and bridle ways.

Paragraph 2.25 states *“It is advisable to set back all wind turbines a minimum distance, equivalent to the height of the blade tip, from the edge of any public highway (road or other public right of way) or railway line.*

Paragraph 2.27 also states *“The British Horse Society, following internal consultations, has suggested a 200m exclusion zone either side of public bridle ways in order to avoid wind turbines frightening horses. This is not a statutory requirement and the circumstances pertaining at any particular site should be taken into account.”*

The applicant has been advised of the comments made from the Rights of Way Officer relating to the proximity of the turbines, and they have advised that they are aware of this and have identified this potential conflict within the ES. As such they have suggested within the ES that Rights of Way 39 and 40 can be permanently diverted to ensure a 145m set off distance is retained. Whilst this is still under the 200m exclusion zone suggested by the British Horse Society in terms of the bridleway, this is not a statutory requirement and site circumstances should be taken into account.

In this case it is considered that bridleway 39 is not frequently used and as such a reduction in the offset distance of 145m would need to be balanced against the need for renewable energy which is strongly emphasised within Planning Policy Wales 10. Although the overall planning balance is considered later in the report, specifically in respect of the PRow impacts it is considered that the policy imperative for renewables would outweigh the requirement to provide a 200m exclusion zone to the bridleway. In this respect an exclusion zone of 145m (to match the overall height of the turbines) is considered to be acceptable and could be imposed via a condition to ensure the rights of way are permanently diverted prior to the erection of the turbines that are affected (listed within the table above). The rights of way officer has also recommended that the public rights of way are protected at all times during construction.

Members should note that applicant has advised that they would make the application to divert the footpath subject to planning permission being granted and are aware of the timescales of such an application. A condition is recommended to require a formal diversion to be agreed prior to specified turbines being erected and to ensure the footpath is diverted prior to the first beneficial use of those turbines.

Water Resources and Ground Conditions

The ES assesses the likely significant effects of the proposed development with respect to water resources and ground conditions, including hydrology, hydrogeology and the water quality of the proposed development.

Natural Resources Wales (NRW) have noted the extent of the proposed pollution prevention guidance as detailing within the ES, and the suggestion for these measures to be set out within a Construction Environment Management Plan (CEMP), which they support. NRW has advised that the biggest risk from a pollution viewpoint occurs during construction. Due to the scale of the development and to ensure the watercourses on and adjacent to the site are protected, the developer should plan the works carefully, so that contaminated water cannot run uncontrolled into any of the pristine headwaters of the watercourses (including ditches). As such NRW recommends a condition be imposed for the submission and subsequent implementation of a CEMP. This can be imposed via a suitably worded condition.

The Head of Engineering and Transport (Drainage) have indicated that they do not object to the proposal subject to adequate measures being put in place to ensure that there are no adverse impacts on surface water drainage. In order to ensure that appropriate measures are put in place a condition is recommended requiring a surface water drainage strategy.

The following comments are made in relation to the comments made by a resident at Ty Canol relating to Drainage; their main concerns relate to the potential effects of surface water generated from construction and operation of the proposed development on their holding

Chapter 12 of the ES provided a detailed and comprehensive assessment of potential effects on water resources and ground

conditions arising from the proposed development. The Scope of this development was agreed with the Local Authority and NRW

Runoff calculations were provided in Table 12.5 of the ES. Further information was requested by The LPA Drainage Officer as part of their Regulation 19 request. who requested that these calculations be checked. The regulation 19 response stated:

“In the ES chapter (12) a value of standard percentage runoff (SPR) value 0.5 was used, based upon a hydrology of soil type 5 classification manually derived from the flood studies report (NERC, 1975). The SPR has been checked and updated to 0.37 based on the latest Wallingford UK SuDS Tool which incorporates a Soil Type 3 classification across the site from their digitised Winter Rainfall Acceptance Map (WRAP). This results in a reduction in the calculated greenfield runoff (Qbar) rate from 16 l/s/ha to 8.35 l/s/ha.

Greenfield or rural runoff rates at the site have been estimated using the Institute of Hydrology Report 124 (1994) (IoH124) method, using the UK SuDS Tool. During the remainder of the ES Chapter 12 there are references to the use of SuDs which will ensure that runoff is attenuated to pre development (greenfield runoff rates which will be taken into account and adhered to as part of the drainage design requirement.” (which has been conditioned).

This Applicant has advised that the ES confirms that the runoff from the proposed development will be maintained at greenfield rates, thereby mitigating any potential effects upon the Ty Canol Holding.

Mineral Safeguarding/ Coal Legacy

The development is located with a Mineral Safeguarding Area covered by Policy M1 of the Neath Port Talbot Local Development Plan. The location of the development falls within a safeguard Category 1 sandstone resource and coal resource.

Policy M1 states: *“Development proposals within mineral safeguarding areas will only be permitted where it can be demonstrated that:*

- 1. The mineral concerned is no longer of any value or potential value; or*
- 2. The mineral can be extracted satisfactorily prior to the development taking place; or*

- 3. In the case of temporary development, it can be implemented and the site restored within the timescale that the mineral is likely to be needed;*
- or*
- 4. There is an overriding need for the development; or*
- 5. The scale and location of the development would have no significant impact on the possible working of the resource.”*

In this case the wind farm development is considered to be temporary development and therefore would not sterilise the recourse, furthermore the windfarm only takes up a small amount of the safeguarding zone and the mineral safeguard zone is within the SSA where guidance states wind farms of this size should be located.

In terms of coal legacy; the Coal Authority has advised that the application site falls within the defined Development High Risk Area; therefore within the application site and surrounding area there are coal mining features and hazards which need to be considered in relation to the determination of this planning application.

The Coal Authority have advised that their records indicate that the site has been subject to historic recorded underground coal mining at shallow depth and is also likely to have been subject to historic unrecorded underground coal mining at shallow depth associated with thick coal seam outcrops.

The applicant has obtained appropriate and up-to-date coal mining information for the proposed development site and has used this information to inform the Coal Stability Risk Assessment by James Associates (June 2014), which appends the Environmental Statement (December 2018, prepared by Wood Environment & Infrastructure Solutions Ltd). The Coal Authority has advised that the Coal Stability Risk Assessment correctly identifies that the application site may have been subject to past coal mining activity and makes appropriate recommendations that intrusive site investigation works be undertaken to confirm ground conditions to identify any necessary remedial/mitigation measures.

The applicant is aware of this and advised that they would ensure that the exact form of any intrusive site investigations, including those relating to the recorded mine entries, are agreed with The Coal Authority's Licensing and Permitting Department as part of their permit application. The findings of these intrusive site investigations should

inform any mitigation measures which may be required in order to ensure the safety and stability of the proposed development.

A condition can be imposed to ensure these intrusive works are undertaken prior to the commencement of development.

Land Contamination

The Local Authority's Land contamination Officer has raised no objections, albeit noting that the site is within a coal mining high risk area. The submitted coal authority report also recommends 'technical advice relating to both the investigation of coal and former coal mines and their treatment should be obtained before beginning work on site'. As such a desk study will be needed as a minimum to assess the potential risks to human health. As such standard land contamination conditions can be imposed.

Land Stability

The Local Authority's Structures section have advised that the site lies to the east (and uphill) of two dormant historical landslips AA21 (1 hectare in size) & AA22 (19 hectares in size). Whilst these are outside the area of the site the developer should satisfy themselves that should they become active that site will not be affected.

They have also advised that the site is approx. 400m west of the Dyffryn Rhondda Aerial Tips. These are disused coal tips and the developer should satisfy themselves that should they become active that site will not be affected.

As part of the REG 19 information the applicant has advised that they are aware of the historic land slips and are satisfied that they do not pose a risk to the wind farm. They have also advised in terms of the Aerial tip that a stability appraisal of the coal tips was undertaken by James Associates in 2010 which confirmed that they exhibit acceptable stability both in the short and long term. The applicant is therefore satisfied that they do not represent any risk to the proposed wind farm development.

Historic Environment

Cultural Heritage has been extensively covered within the ES. In summary, there are no Registered Parks and Gardens within 5km of the

proposed development, there are however 24 Listed Buildings within 2km of the application site.

The ES concluded that the proposed development would not result in any significant direct effects resulting from the disturbance to archaeological remains during the construction of the Foel Trawsnant Wind Farm amended scheme. There are a number of identified historic assets within the planning boundary, but the avoidance of known assets outside of the proposed development footprint and provision for an archaeological watching brief will avoid any significant effects. An assessment of effects on the settings of off-site historic assets has also been completed, with a number of scheduled monuments identified as being potentially subject to significant effects. It is concluded that none of these would be subject to a significant adverse effect. Cefn yr Argoed Camp (GM245) would be approximately 214m from the nearest turbine. It is currently surrounded by commercial forestry which is planted right up to the monument boundary and this would entirely screen it from the proposed turbines. However, assuming a start of construction in 2020 and with a 25 year operational period, turbines would be visible from the monument for a period of in the region of 5-9 years.

Cadw advises that they agree with the content of the cultural heritage chapter of the Environmental Statement in that the proposed wind farm will not have more than a low impact on the settings of any scheduled monument or registered historic landscape apart from scheduled monuments Nant Herbert Camp and Cefn yr Argoed Camp. They agree that there will be a moderate, but not significant, impact on the setting of Nant Herbert Camp and that there will be no impact on the setting of Cefn yr Argoed Camp until around 2037- 2041 when the removal of the trees surrounding it will cause a high and significant impact on its setting. However, they note that the Forest Design Plan for the Coed-Cymoedd Forest District indicates that replanting will then occur. As such there will be a period in the future that that the monument will be exposed and experience a short term significant impact. This impact will occur until the area is replanted or the wind farm removed in either instance it is considered that any impact would be short term and cease when the wind farm is de-commissioned or when the trees are re planted.

With regard to archaeology, in order to ensure the impact on the archaeological resource is minimised a condition requiring the applicant to submit a written scheme of investigation for a programme of work to protect the resource will be attached to any consent granted.

Sections 16 (2) and 66 (1) of the Planning (Listed Buildings and Conservation Areas) Act 1990 requires the decision maker to have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses. As such the LPA give the SAM considerable importance and weight, albeit noting that Cadw has raise no objections in this regard

Telecommunications and Aviation Assessment:

Radar and Aviation Safeguarding

In terms of radar and aviation equipment both the MOD and CAA were consulted as part of the ES. The MOD advised they had no objection and the CAA did not respond, as such the ES concluded that the development would not conflict with any radar or aviation equipment. The MOD has commented on this application and has no objection however have advised that if planning permission is granted they would like to be advised of the following:

- the date construction starts and ends;
- the maximum height of construction equipment;
- The latitude and longitude of every turbine.

This can be imposed via a suitably worded condition.

Telecommunication links

The ES notes that if a reduction in television reception quality occurs in the surrounding area, it is most likely to be noticed when the proposed wind farm becomes operational. Should planning permission be granted and to mitigate any problems with reception arising, the developer would assess current television signals in advance of development and mitigate post-development problems to television reception arising where effects are attributable to the proposed wind farm. Consultation suggests adverse effects may not occur, as Ofcom did not identify any fixed point to point link running across the site. However in the unlikely event that interference does occur, this would likely be localised. This could be controlled by planning condition that would require the developer to meet the cost of investigating and effectively rectifying any problems should they arise and to implement solutions in a timely manner so as to minimise any inconvenience to residents.

The Joint Radio Commission (JRC) has identified a fixed microwave link and a 460Hz scanning telemetry link which cross the site. These links follow the same path.

The Joint Radio Commission (JRC) are the only infrastructure or aviation consultee to have responded with an objection to the proposed development, due to the impact of the wind turbines on their scanning telemetry infrastructure. Following the initial objection, a coordination study was commissioned from JRC that sought to identify the precise nature of the objection and identify any potential solutions. The summary of the assessed effects on the JRC operated infrastructure were as follows:

- The proposal does not meet JRC criteria for UHF Telemetry links with respect to six turbines.
- The proposal with 50m micrositeing does not meet JRC criteria for 15 GHz class 4H links with respect to three turbines.
- The proposal with a reduced 20m micrositeing for Turbine 5, 6 and 11 does meet JRC criteria for 15 GHz class 4H links.
- The proposal with 50m micrositeing does meet JRC criteria for 26 GHz class 2 links.

The developer is in discussion with JRC to identify appropriate measures to avoid or reduce effects on the scanning telemetry link. The measures to be incorporated are to be finalised but have been agreed in principle with the developer. With the measures in place there would be no significant effects on telecommunications assets. As such a pre-commencement condition can be imposed to ensure a report is submitted to the LPA identifying the necessary measures to ensure there is no unacceptable impact upon their apparatus. The developer will then ensure these measures are put in place. It is therefore considered that subject to an appropriately worded condition the development would not have any unacceptable impact in terms of Aviation and telecommunication links.

Other

As identified earlier in this report, a number of objections were received in response following the publicity exercise. In response to the main issues raised which have not been addressed elsewhere in this report, the following comments are made:

In relation to the objector at Ty Canol not being consulted in writing and having no consultation from the developers; the application has been consulted in accordance with the Town and Country Planning (Development Management Procedure) (Wales) Order 2012. In terms of there being no contact from the developer, this is not a planning matter; however the developer did contact the occupiers of Ty Canol in 2012 to undertake noise testing which was refused.

Assessment having regard to the benefits of renewable energy (“the planning balance”)

The earlier parts of this assessment have concluded that there would be some significant impacts arising from this development. These impacts are assessed below having regard to the benefits of renewable energy, and in the context of Policy RE1 which requires that there are no ‘unacceptable impacts’.

As emphasised earlier in this report, National Policy supports the increased use of renewable energy both to address the concerns about climate change and to deliver national diversity of energy supplies, thus ensuring the UK is not dependent on any one type of fuel or power source.

Nationally, the UK has committed to sourcing 15% of its total energy from renewable sources by 2020 (UK Renewable Energy Strategy (2009) and projections suggest that by 2020 about 30% or more of electricity generation could come from renewable sources. The UK Renewable Energy Roadmap Update (2013) also emphasises that the UK Government remains committed to the delivery of further renewable energy, noting that the UK has made “very good progress” against the 15% target introduced in the 2009 EU Renewable Energy Directive. In 2012, 4.1% of UK energy consumption came from renewable sources, up from 3.8% in 2011.

As set out earlier in this report, the latest edition of PPW (edition 10) clearly supports the policy aims set out in the Energy Policy Statement (2010) to facilitate the delivery of renewable energy targets. Paragraph 5.9.17 of PPW states that Planning authorities **should give significant weight** to the Welsh Government’s targets to increase renewable and low carbon energy generation, as part of our overall approach to tackling climate change and increasing energy security. In circumstances where protected landscape, biodiversity and historical designations and buildings are considered in the decision making

process, only the direct irreversible impacts on statutorily protected sites and buildings and their settings (where appropriate) should be considered. In all cases, considerable weight should be attached to the need to produce more energy from renewable and low carbon sources, in order for Wales to meet its carbon and renewable targets (emphasis added).

Notably, at para 5.7.8 PPW also states that “the benefits of renewable and low carbon energy, as part of the overall commitment to tackle climate change and increase energy security, is of **paramount importance**”.

The proposal would have an installed capacity of 33 MW towards the UK target of 15% of energy to be derived from renewable sources by 2020. This is a significant benefit of the scheme which must weigh heavily in its favour.

Neath Port Talbot Council has, over the years, demonstrated considerable support for the Welsh Government’s policies and targets for renewable energy, and has approved and hosts a number of major renewable energy schemes including a significant number of on-shore wind, biomass and solar schemes. The Council’s support and commitment towards such schemes has, however, been dependent upon the appropriateness of such development having regard not only to national policy imperatives, but also to local and site-specific circumstances. In considering each case on its respective planning merits, therefore, it is necessary to consider local or wider impacts arising from any development proposals and to balance these against the benefits of generating electricity from renewable onshore wind.

The approach of the Council in this regard is consistent with national policy which, whilst recognising the important role wind energy has in achieving energy security and meeting established targets for energy generation from renewables, does not give an open invitation to site wind farms without regard to their impacts, even within Strategic Search Areas.

In particular, the drive towards renewable energy by onshore wind is balanced in PPW and TAN8 both of which emphasise the need for proposals to comply with adopted Development Plan policy and for decision-makers to have regard to local circumstances and other planning considerations.

The latest edition of PPW (edition10) states The Welsh Government accepts the introduction of new, often very large structures for on-shore wind needs careful consideration to avoid and, where possible, minimise their impact. The SSAs are the most appropriate locations for large scale wind farm development. Large scale wind energy developments in these areas will be required to contribute to Welsh, UK and European renewable energy targets, mitigate climate change, and deliver energy security. (para 5.9.13 PPW) states that within and immediately adjacent to the SSAs, there should be implicit acceptance that there will be significant change in landscape character from wind turbine development. Whilst cumulative impact may be a material consideration, it must be balanced against the need to meet the Welsh Government's aspirations for energy in Wales and the conclusions reached fully justified in any decisions taken. Developers will need to be sensitive to local circumstances, including siting and design in relation to local landform, proximity to dwellings and other planning considerations

TAN 8, whilst recognising that in the short term onshore wind provides the greatest potential to increase renewable energy in Wales and that, in general, onshore wind farms should be concentrated within Strategic Search Areas (SSAs), nevertheless goes on to state that "Not all of the land within SSAs may be technically, economically and/or environmentally suitable for major wind power proposals" (para 2.4)". This guidance remains pertinent whether or not the capacity for each SSA has been met.

The proposition that the acceptability of windfarm development, even in SSAs, is to be considered on a site-specific basis is also supported by the letter from John Griffiths, AC/AM, Minister for Environment and Sustainable Development (July 2011) which, while outlining the maximum installation capacities for SSAs which were higher than the indicative capacities outlined in TAN8, nevertheless accepted that there remains a need *"to ensure that windfarm development **within** the SSAs is proportionate and balanced with other development needs in these areas."*

Nevertheless, while TAN 8 explains that within (and immediately adjacent) to SSAs, "the implicit objective is to accept landscape change i.e. a significant change in landscape character from wind turbine development." this does not automatically mean that all wind farms even within SSAs are appropriate or acceptable, either in themselves or when considering the need to adopt such a balanced approach.

This view was endorsed by the appeal Inspector at Hirwaun (PINS ref. **APP/L6940/A/07/2058755**) who, whilst noting that “the imperative of delivering on-shore wind energy production is clear” and accepting that “the TAN makes it clear that there is a need to balance the conflicting objectives of increasing production against landscape protection”, nevertheless noted that “*this need - even within an SSA - does not justify a ‘development at all costs’ approach*”.

In this case, the application site is located inside of the TAN 8 SSA boundary and the refined SSA identified in the adopted LDP. TAN 8 indicates (at para 2.4) the ‘broad brush’ nature of the SSA boundaries and emphasises that “it is a matter for local planning authorities to undertake local refinement within each of the SSAs in order to guide and optimise development within each of the areas”. This refinement process has been formally ratified through the adopted LDP.

Having regard to this, the question is the degree that landscape change is acceptable, given that national guidance states that damage should be minimised.

Sections 16 (2) and 66 (1) of the Planning (Listed Buildings and Conservation Areas) Act 1990 requires the decision maker to have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses. The above report identifies that Cefn yr Argoed Camp (GM245) However, assuming a start of construction in 2020 and with a 25 year operational period, turbines would be visible from the monument for a period of in the region of 5-9 years, though partially screened by the rising ground east of the monument. This impact this will occur until the area is replanted or the wind farm removed in either instance it is considered that any impact would be short term.

The balance struck by national planning policy is reflected in adopted LDP policy, primarily through **Policy RE1 – Criteria for the Assessment of Renewable and Low Carbon Energy Development** – which supports the need for renewable energy in locations where development does not have unacceptable impacts and emphasises the need, when appraising and determining such proposals, to satisfy all the specified criteria which include the need to minimise impact on visual amenity, the natural environment, historic environment, residential amenity, highway safety and the proposal would not interfere with radar, air traffic control, telecommunications, television reception or radio communications.

Onshore Wind - Current Need / Provision

While the (then) Secretary of State (SoS), Amber Rudd, in announcing the end of new subsidies for onshore wind on 18th June 2015, stated that “*we now have enough onshore wind in the pipeline for onshore wind to play a significant part in meeting our renewable energy commitments*”, the Welsh Government remain committed to the delivery of renewable energy through suitably deployed wind farms. Indeed, PPW10 and the recent draft National Development Framework (NDF) Consultation indicates a continued firm commitment to renewable energy provision in Wales.

In Wales, the Ministerial letter of July 2011 provided clarity on the issue of **maximum** installation capacities for onshore wind within the Strategic Search Areas (SSAs) identified in TAN 8 in 2005. These indicate identified maximum capacities of a total of 1666 megawatts of onshore wind across all our SSAs (the remaining 300+MW to come from smaller schemes, micro-generation etc.).

The 2018 TAN 8 Review of Wind Farm Development confirms that there was (at April 2018) a total of **944.5 MW** of operational or consented wind power within SSAs with a further **225.5MW** outside SSAs. Making an operational and consented post-2005/ TAN8 Total of 1170MW).

Pre-2005 operational farms add a further 293.8MW (116.7MW within SSAs and 177.1MW outside) to the total. A further 505.5 MW (386MW within SSAs) was ‘awaiting determination’

The latest edition of PPW states that “*Planning authorities should give **significant weight** to the Welsh Government’s targets to increase renewable and low carbon energy generation, as part of our overall approach to tackling climate change and increasing energy security.*” (Emphasis added)

This demonstrates that Wales is being reasonably successful in bringing forward appropriate onshore wind projects within SSAs, but there still remains a need for new windfarms to meet national targets, tackle climate change and increase energy security.

Current Position in respect of SSA F

Based on the WG 2018 Update the current position (at April 2018) in SSA F is as follows:

Awaiting Determination (MW)	Consented (MW)	operational		Grand Total (MW)
		pre-2005	post-2005	
39	24	32.0	314.5	409.5

The ‘operational and consented’ Post-2005 total within SSA ‘F’ at April 2018 is **338.5MW**, which is some way short of the maximum capacity (430 MW) identified in the Ministerial Letter dated July 2011.

Accordingly, as was the case for the previous resolution (for up to 39MW) there remains ‘headroom’ within SSA ‘F’ before the maximum capacity (430 MW) identified in the Ministerial Letter dated July 2011 is reached.

In the context of this need and the levels of harm identified in this report it is concluded that the benefits of the proposal in meeting the acknowledged need for further onshore wind energy, which is a policy imperative of Welsh Government, positively weighs in the planning balance. Therefore, it is considered that the site’s location in SSA F, means that it is well placed to speedily contribute to the target for wind energy production, as well as the potential shortfall across Wales in achieving future Welsh Government targets in this respect.

It is therefore concluded that there is an overriding need for this development, and any benefits in terms of additional energy generation would outweigh any harm identified earlier in this report in respect of landscape, historic environment, visual and ecology matters.

For this reason, the proposal accords with Policies SP4, TR2, BE1, EN6 and EN7 but also Policy RE1 – Criteria for the Assessment of Renewable and Low Carbon Energy Development – given that the impacts of the development would be acceptable, in themselves and within the wider context of the generally permissive policy approach towards renewables.

Community Benefit

Developers in consultation with local planning authorities should take an active role in engaging with the local community on renewable energy proposals. Experience has shown that there are opportunities to achieve community benefits through major wind farm development. Local Planning Authorities, where reasonably practical, should facilitate

and encourage such proposals. However, such contributions should not enable permission to be given to a proposal that otherwise would be unacceptable in planning terms.

TAN 8 Renewable Energy (2005) considers “Community Involvement and Benefits” and recognises the opportunities that large developments provide in making contribution that benefit the community. These include where developers offer benefits not directly related to the planning process. However, such contributions should not impact on the decision making process, and as stated above should not enable permission to be given to a proposal that otherwise would be unacceptable in planning terms.

Notwithstanding the above, for Members’ information the applicant has had extensive and positive discussions with the Council regarding community benefit, which is expected to result in a contribution of £5000 per installed MW per year (amounting to up to £165k per year) which will be secured through a separate community legal agreement.

Summary

This summary has been provided for Members to see the key differences between the original scheme that had a resolution to grant permission at planning committee held on the 6th June 2017

Original scheme	Amended scheme
13 wind turbines up to (39Mw)	11 wind turbines up to (33Mw)
Max tip height 120m	Max tip height 145m
Landscape impact	Landscape impact
4 out of all the receptors assessed would have significant effects	The same 4 receptors would have significant effects
Residential Visual Amenity	Residential Visual Amenity
115 residential properties which could experience significant effects	83 residential properties which could experience significant effects
Cumulative Impact	Cumulative impact
No unacceptable cumulative impact	No unacceptable cumulative impact
Transport	Transport
Majority of route through Bridgend County Council, no significant impact	Majority of route through Bridgend County Council, no significant impact

Historic Heritage	Historic Heritage
Short term impact upon Scheduled ancient monument	Short term impact upon Scheduled ancient monument
Community benefit	Community benefit
£195,000 per annum based on £5,000 per Mw	£165,000 per annum based on £5,000 per Mw

CONCLUSION

All environmental information submitted within the ES and the Supplementary Environmental Information along with the comments of statutory consultees on the information supplied, and the comments, observations and representations provided by members of the public have been taken into consideration in this recommendation. In addition, all the relevant European directives, legislation and regulations have been taken into account.

The submitted scheme demonstrates that there are no unacceptable detrimental effects in relation to Ecology, Archaeology, Hydrology and Hydrogeology, Geology, Mining and Mineral Resources, Noise, Traffic, Transportation and Access, Electromagnetic Interference and Aviation. In relation to Socio-Economic effects there are limited short term benefits in relation to employment.

Having regard to the landscape and visual impacts identified earlier in this report and the location of the proposed windfarm, it is considered that the siting of the turbines would have significant landscape and visual impacts, nevertheless the level of harm associated with the development would be outweighed by its contribution to the target for wind energy production.

The proposal is therefore considered to accord with Planning Policy Wales, TAN8: Renewable Energy, and Policies SP1, SP4, SP15, SP16, SP18, SP20 TR2, BE1, SP18, RE1, EN6, EN7, and EN8 of the Neath Port Talbot Adopted Local Development Plan.

RECOMMENDATION: **APPROVAL** subject to a section 106 agreement with the following heads of terms:

1. To ensure the completion of ecological works which includes the following:
 - The submission of Habitat Management Plan (HMP). The HMP shall be substantially in accordance with the Outline Habitat Management Plan dated July 2016 and implemented within the site boundary area marked on Figure 3.1 of that document for a minimum of 15 years after commissioning of the wind farm, and shall include, although not limited to:
 - Details of all habitat creation and management works, including locations and methods.
 - Details and programme of ecological mitigation and enhancement success monitoring including habitat and species monitoring; along with details mechanisms to undertake remedial action if significant issues are reported by monitoring.
 - Details of bird monitoring in line with the Scottish Natural Heritage Guidance on Methods for Monitoring Bird Populations at Onshore Wind Farms 2009
 - Details of bat monitoring in line with the most up to date guidelines
 - The developer, or landowner where most appropriate, shall undertake the works detailed in the HMP and shall ensure that appropriate funds are available to do so.
 - An ecological steering group shall be set up to advise on the HMP works; this shall include representatives from Pennant Walters (FoelT) Ltd and NPTCBC. Details of the terms of reference for the group shall be included in the HMP. The group shall meet a minimum of once every 2 years starting the first year of HMP implementation.
2. To secure a bond to cover the scenario that the applicant cannot fulfil its obligation for the decommissioning of the scheme.
3. To secure a community benefit fund to the sum of £165,000 per annum for the lifetime of the development.

And the following conditions:

CONDITIONS

Time Limit Conditions

(1) The development hereby permitted shall be begun before the expiration of five years from the date of this permission.

Reason

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

(2) The permission hereby granted shall endure for a period of 25 years from the date when electricity is first exported from The Foel Trawsnant Wind Farm. Written confirmation of the first export date shall be sent to Local Planning Authority within one month of the first export date.

Reason:

In the interest of visual amenity, safety and to accord with Policy RE1 of the Neath Port Talbot Local Development Plan and Supplementary Planning Guidance entitled Renewable and Low Carbon Energy dated July 2017.

Approved Plans

(3) The development shall be carried out in accordance with the following approved plans and documents:

- 40217-Shr214 Site Layout Location Plan
- 40217-Shr215 Wind turbine - elevations
- 40217-Shr216 Substation Control building – plans and elevations
- 40217-Shr217 Transformer Housing - Plan and elevations
- 40217-Shr218 Turbine Pad Foundation plan and cross section
- Construction Traffic Management Plan

Reason:

In the interests of clarity.

Pre-Commencement Conditions

(4) Before beginning any development at the site, you must do the following: -

a) Notify the Local Planning Authority in writing that you intend to commence development by submitting a Formal Notice under Article

24B of the Town and Country Planning (Development Management Procedure) (Wales) Order 2012 (DMPWO) in the form set out in Schedule 5A (a newly inserted Schedule) of the DMPWO (or in a form substantially to the like effect); and

b) Display a Site Notice (as required by Section 71ZB of the 1990 Act) in the form set out in Schedule 5B (a newly inserted Schedule) of the DMPWO (or in a form substantially to the like effect), such Notice to be firmly affixed and displayed in a prominent place, be legible and easily visible, and be printed on durable material. Such Notice must thereafter be displayed at all times when development is being carried out.

Reason:

To comply with procedural requirements in accordance with Article 24B of the Town and Country Planning (Development Management Procedure) (Wales) Order 2012 (DMPWO) and Section 71ZB of the Town and Country Planning Act 1990.

NOTE: Templates of the required Notice and Site Notice are available to download at www.npt.gov.uk/planning

(5) No development shall take place, including vegetation clearance, until such time as a Construction Environmental Management Plan (CEMP) has been submitted to and approved in writing by the Local Planning Authority. The CEMP shall provide full details of the works to be undertaken including the construction timetable, details of the means of avoidance and inter alia, mitigation of any impacts on species and habitats as set out in table 9.12 in the Environmental Statement, and the pollution prevention measures to be implemented during the site preparation and construction phases of the development. The CEMP shall be implemented as approved.

Reason:

In the interests of biodiversity and the amenity of the area as a whole and to ensure the development complies with Policy EN7 of the Neath Port Talbot Local Development Plan.

(6) No development shall commence until an Abnormal Indivisible Load Test Run (AILTR) has been undertaken and an Abnormal Indivisible Load Test Run Report (AILTRR) has been submitted to and approved in writing by the Local Planning Authority. Prior to undertaking the AILTR a scheme shall be submitted to and approved in writing by the Local Planning Authority outlining the scope of the AILTR which shall include:

- a) the proposed route(s);
- b) time(s) and date(s) of the test run;
- c) type of vehicles to be used;
- d) the methods of recording the test run; and
- e) a schedule of the road works required including details of any vegetation and trees to be cut back or removed to enable the test run to be undertaken.

The AILTR shall be undertaken as approved.

The AILTTRR shall include:

- a) a written summary of the dry run;
- b) copies of records as agreed in (d) above;
- c) a schedule of additional works not previously listed in (e) above; and
- d) a conclusion.

Reason:

In the interest of highway and pedestrian safety and to accord with Policies TR2, RE1 of the Neath Port Talbot Local Development Plan and Supplementary Planning Guidance entitled Renewable and Low Carbon Energy dated July 2017.

(7) No development shall commence until a scheme has been submitted to and approved in writing by the Local Planning Authority detailing intrusive site investigations for the mine entries and shallow coal workings which shall include the following:

- (a) the submission of a report of findings arising from both of the intrusive site investigations;
- (b) the submission of a layout plan which identifies appropriate zones of influence for the mine entries on site, and the definition of suitable 'no-build' zones;
- (c) the submission of a scheme of treatment for the mine entries on site for approval;
- (d) the submission of a scheme of remedial works for the shallow coal workings for approval; and

The scheme as approved, including any remedial works identified by the site investigations shall be undertaken in accordance with the approved details .

Reason:

In the interest of coal mining legacy on the site, which is located within a High Risk Area, in accordance with Policy EN8 of the Neath Port Talbot Local Development Plan.

(8) No development shall commence until written confirmation has been provided to the Local Planning Authority confirming that the necessary aviation bodies such as the Ministry of Defence and the Civil Aviation Authority have been given written notice of the proposed date of commencement and completion of the development and the maximum extension of height of any construction equipment or structures and the height of any Ordnance Survey locations of the turbines.

Reason:

In the interest of aviation safety and to accord with Policy RE1 of the Neath Port Talbot Local Development Plan and Supplementary Planning Guidance entitled Renewable and Low Carbon Energy dated July 2017.

(9) No development shall commence 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 submitted by the applicant 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, as required by Planning Policy Wales and Policy SP21 of the Neath Port Talbot Local Development Plan.

(10) No development shall commence until a Construction Method Statement has been submitted to and approved in writing by the Local Planning Authority. The construction of the development shall only be carried out in accordance with the approved Statement. The statement shall be implemented and maintained for the duration of the construction works and shall address the following matters:

- A full drainage scheme for the management of surface water. This shall detail both the temporary and permanent drainage strategy and include details of the hydraulic calculations to control flow rates and detail measures to be implemented.
- Details of the timing of the works and methods of working for cable trenches and foundation works
- Disposal of surplus material
- The construction of the access into the site and the creation and maintenance of the visibility splays and to include temporary speed reduction measures in the vicinity of the site access
- Wheel cleaning facilities

- Arrangements for keeping the site entrance and adjacent public highway clean.
- All activities associated with the construction of the development shall be carried out 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.
- A scheme for the protection and conservation of soil at the site in order to prevent pollution of the water environment. The scheme shall include the pollution prevention techniques to be deployed during the construction and restoration phase.
- Details of the timing of works and methods of working for cable trenches and foundation works.
- Details of the timing of works and construction of construction compound and substation
- Dust management.
- A construction noise management plan (including identification of access routes, locations of material lay-down areas, details of equipment to be employed, operations to be carried out, mitigation measures and a scheme for the monitoring of noise).
- Temporary site illumination.
- Post-construction restoration and reinstatement of the working areas including removal of construction equipment and the construction compound.
- Details of any proposed temporary site compounds for storage of materials, machinery and operative/visitor parking within the site, to include the siting of temporary buildings and all means of enclosure and oil/fuel and chemical storage.
- Details of the method of borrow pit working including means of extraction, handling, storage and re use of soil, drainage control and restoration.
- A scheme for recycling/disposing of waste resulting from construction works.
- Arrangements to prevent wildlife becoming trapped in excavation works.
- Programme of works
- Working site speed limit
- Hours of working on site

Reason:

In the interest of highway and pedestrian safety, the environment, and the amenity of residents, and to ensure accordance with Policies BE1, EN8 and TR2 of the adopted Neath Port Talbot Local Development Plan.

(11) No development shall commence until a surface water drainage strategy has been implemented in accordance with details that shall first have been submitted to and approved in writing by the local planning authority. Before these details are submitted an assessment shall be carried out of the potential for disposing of surface water by means of a sustainable drainage system in accordance with the principles set out in Appendix 4 of TAN 15 (or any subsequent version), and the results of the assessment provided to the local planning authority. The drainage strategy shall include:

- a) information about the design storm period and intensity, the method employed to delay and control the surface water discharged from the site and the measures taken to prevent pollution of the receiving groundwater and/or surface waters;
- b) a timetable for its implementation; and
- c) Provide a management and maintenance plan for the lifetime of the development.
- d) Additional information identified within item 9 of the further Environmental Information dated June 2019.

Reason:

In the interest of good land drainage and ensure the development complies with Policy SP16 and BE1 of the Neath Port Talbot Local Development Plan.

(12) No development shall commence until a scheme for the protection of Public Rights of Way during the construction period within the site and including safety signage 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 details.

Reason:

In the interest of safety and to protect rights of way.

(13) Turbines 1, 2, 3, 4, 5, 6 and 11 shall not be constructed until such time as the applicant has provided written confirmation that formal approval has been granted for the diversion of bridleway 39 and footpath 40 to ensure a separation distance of no less than 145m from the base of each respective turbine. The diversions shall be fully implemented prior to the first beneficial use of the above turbines and retained as such thereafter.

Reason:

In the interest of safety to members of the public and horses and to ensure the wind turbines are set public rights of way are not adversely affected by the proximity of wind turbines and to accord with Policy RE1 of the Neath Port Talbot Local Development Plan and Supplementary Planning Guidance entitled Renewable and Low Carbon Energy dated July 2017.

(14) No development shall commence until a dilapidation survey of the proposed route(s) (the scope and type to be first agreed by the local Planning Authority in consultation with Bridgend CBC) shall be carried out by the developers and submitted to and agreed in writing by the Local Planning Authority. A further survey shall be undertaken within two months of removal of all temporary works on the site and any damage to the highway identified as being due to the increased volume of construction vehicles shall be repaired by the developer in accordance with a scheme to be agreed in writing within the Local Planning Authority.

Reason:

In the interests of highway safety accordance with Policies BE1, and TR2 of the adopted Neath Port Talbot Local Development Plan.

(15) No development shall commence until a scheme has been submitted to and approved in writing by the local planning authority (in consultation with Western Power Distribution (WPD) and the Joint Radio Company) providing for the mitigation of the impact of the development on any telecommunications links operated by WPD. The scheme shall be implemented as approved in writing by WPD.

Reason

To ensure telecommunication links are not adversely affected and to ensure telecommunication links are not adversely affected and to accord with Policy RE1 of the Neath Port Talbot Local Development Plan and Supplementary Planning Guidance entitled Renewable and Low Carbon Energy dated July 2017

(16) No turbine shall be erected on site until a scheme to secure the investigation and mitigation (including a programme of works) of any electro-magnetic interference with television reception caused by the operation of the turbines has been submitted to and approved in writing

by the Local Planning Authority. The scheme shall provide for the alleviation of any interference with television reception caused by the operation of the wind farm which is notified to the developer within 12 months of the First Export Date. The scheme shall be implemented as approved.

Reason:

In the interests of residential amenity and to ensure telecommunication links are not adversely affected and to accord with Policy RE1 of the Neath Port Talbot Local Development Plan and Supplementary Planning Guidance entitled Renewable and Low Carbon Energy dated July 2017

(17) No development shall commence on site until an assessment of the nature and extent of contamination affecting the application site area has been submitted to and approved in writing by the Local Planning Authority. This assessment must be carried out by or under the direction of a suitably qualified competent person in accordance with BS10175 (2011) 'Investigation of Potentially Contaminated Sites Code of Practice' and shall assess any contamination on the site, whether or not it originates on the site. The report of the findings shall include:

(i) a desk top study to identify all previous uses at the site and potential contaminants associated with those uses and the impacts from those contaminants on land and controlled waters. The desk study shall establish a 'conceptual site model' (CSM) which identifies and assesses all identified potential source, pathway, and receptor linkages;

(ii) an intrusive investigation to assess the extent, scale and nature of contamination which may be present, if identified as required by the desk top study;

(iii) an assessment of the potential risks to:

- human health,
- groundwater and surface waters
- adjoining land,
- property (existing or proposed) including buildings, crops, livestock, pets, woodland and service lines and pipes,- ecological systems,
- archaeological sites and ancient monuments; and
- any other receptors identified at (i)

(iv) an appraisal of remedial options, and justification for the preferred remedial option(s).

Reason:

To ensure that information provided for the assessment of the risks from land contamination to the future users of the land, neighbouring land, controlled waters, property and ecological systems is sufficient to enable a proper assessment, and to ensure compliance with Policies SP16 and EN8 of the Neath Port Talbot Local Development Plan.

(18) No development shall commence on site until a remediation scheme to bring the site to a condition suitable for the intended use by removing any unacceptable risks to human health, buildings, other property and the natural and historic environment shall be prepared and submitted to and agreed in writing with the Local Planning Authority. The scheme shall include all works to be undertaken, proposed remediation objectives, remediation criteria and site management procedures. The measures proposed within the remediation scheme shall be implemented in accordance with an agreed programme of works.

Reason:

To ensure that risks from land contamination to the future users of the land and neighbouring land are minimised, together with those to controlled waters, property and ecological systems, and to ensure that the development can be carried out safely without unacceptable risks to workers, neighbours and other offsite receptors, and to ensure compliance with Policies SP16 and EN8 of the Neath Port Talbot Local Development Plan.

(19) In the event additional works are required to extend or widen existing forest tracks, such works shall not be undertaken until such time as botanical surveys identifying any priority species and detailing appropriate action taken to maintain such species, have been undertaken and the results submitted to and approved in writing by the Local Planning Authority. The works shall be carried out in accordance with the agreed details.

Reason

To ensure priority species are survey and protected if any forestry tracks are to be widened and to accord with Policies EN7 and RE1 of the Neath Port Talbot Local Development Plan and Supplementary Planning Guidance entitled Renewable and Low Carbon Energy dated July 2017

(20) No development shall commence until a suitably qualified Ecological Clerk of Works has been employed to oversee all of the ecological aspects of the works, as set out within the ES.

Reason

To ensure all the ecological aspects and mitigation set out within ES are adhered to and to accord with Policies EN7 and RE1 of the Neath Port Talbot Local Development Plan and Supplementary Planning Guidance entitled Renewable and Low Carbon Energy dated July 2017

(21) No development shall commence until details of the external finish of the turbines hereby permitted have been submitted to and approved in writing by the Local Planning Authority. Development shall be carried out in accordance with the approved details.

Reason:

In the interest of visual amenity and to accord with Policy RE1 of the Neath Port Talbot Local Development Plan and Supplementary Planning Guidance entitled Renewable and Low Carbon Energy dated July 2017.

Action Conditions

(22) Prior to beneficial use of the proposed development commencing, a verification report which demonstrates the effectiveness of the agreed remediation works carried out in accordance with condition 18 shall have been submitted to and agreed in writing by the Local Planning Authority.

Reason:

To ensure that risks from land contamination to the future users of the land and neighbouring land are minimised, together with those to controlled waters, property and ecological systems, and to ensure that the development can be carried out safely without unacceptable risks to workers, neighbours and other offsite receptors and to ensure compliance with Policies SP16 and EN8 of the Neath Port Talbot Local Development Plan.

(23) In the event that contamination is found at any time when carrying out the approved development that was not previously identified, work on site shall cease immediately and shall be reported in writing to the Local Planning Authority. A Desk Study, Site Investigation, Risk Assessment and where necessary a Remediation Strategy must be

undertaken in accordance with the following document:- Land Contamination: A Guide for Developers (WLGA, WAG & EAW, July 2006). This document shall be submitted to and agreed in writing with the Local Planning Authority. Prior to occupation of the development, a verification report which demonstrates the effectiveness of the agreed remediation, shall be submitted to and agreed in writing with the Local Planning Authority.

Reason: To ensure that risks from land contamination to the future users of the land and neighbouring land are minimised, together with those to controlled waters, property and ecological systems, and to ensure that the development can be carried out safely without unacceptable risks to workers, neighbours and other off site receptors, and to ensure compliance with Policies SP16 and EN8 of the Neath Port Talbot Local Development Plan.

(24) The shadow flicker control system, as set out within the mitigation measures, section 15.13 of the ES shall be fully implemented prior to the first beneficial use of the wind farm and retained in perpetuity.

Reason:

The Control system will reduce the effects of shadow flicker to less than 30 minutes per day and/or 30 hours per year, which would ensure that shadow flicker does not unacceptably affect existing residents and to accord with Policy RE1 of the Neath Port Talbot Local Development Plan and Supplementary Planning Guidance entitled Renewable and Low Carbon Energy dated July 2017.

(25) None of the wind turbines hereby permitted shall be operated until a written scheme has been submitted to and approved in writing by the Local Planning Authority, setting out a protocol for the assessment of shadow flicker in the event of any complaint to the local planning authority from the owner or occupier of any dwelling (defined for the purposes of this condition as a building within Use Class C3 of the Use Classes Order) which lawfully exists or had planning permission at the date of this permission. The written scheme shall be implemented in accordance with the approved details.

Reason

To ensure that shadow flicker does not unacceptably affect existing residents and to accord with Policy RE1 of the Neath Port Talbot Local Development Plan and Supplementary Planning Guidance entitled Renewable and Low Carbon Energy dated July 2017.

(26) Any associated infrastructure and tracks shall minimise impacts on S7/BAP habitats and avoid deep peat deposits no greater than 0.5m in depth.

Reason

In the interest of ecology and protection of the peat resource and to ensure accord with Policy EN7 and RE1 of the Neath Port Talbot Local Development Plan and Supplementary Planning Guidance entitled Renewable and Low Carbon Energy dated July 2017.

(27) Micro-siting of all turbines shall adhere to the following:

- avoid deep peat deposits greater than 0.5m in depth
- Maintain a minimum 50m standoff between turbine blade tips and nearest point of linear/foraging features.
- Maintain a minimum of 145m between any public right of way or bridle way (existing or as diverted)
- Turbine 5, 6 and 11 shall be limited to 20m micro-siting
- Ensure the tips of any blade tips of any turbine remain within the application site boundary (red line).

Reason

In the interest of ecology, rights of ways, telecommunications and clarity and to ensure accord with Policy EN7 and RE1 of the Neath Port Talbot Local Development Plan and Supplementary Planning Guidance entitled Renewable and Low Carbon Energy dated July 2017.

(28) The development shall be carried out in substantial accordance with the principles and mitigation measures as set out within the Environmental Statement and Supplementary Environmental Information accompanying the application.

Reason

The proposed development is the subject of an Environmental Impact Assessment and due regard must be had to the principle impacts of the development in the preparation of detailed design and the operation of the site. Any material alteration to the proposal may have an impact which has not been assessed by the process. And to accord with Policy RE1 of the Neath Port Talbot Local Development Plan and Supplementary Planning Guidance entitled Renewable and Low Carbon Energy dated July 2017.

(29) Within 25 calendar years from the date when electricity is first generated to the grid, or within 12 months of cessation of electricity generation by the wind farm facility, whichever is sooner, the wind farm and all associated works/equipment shall be dismantled and removed from the site and the land restored to its former condition in accordance with the decommissioning and site restoration scheme as approved by the Local Planning Authority.

Reason:

To ensure satisfactory restoration of the site and to accord with Policy RE1 of the Neath Port Talbot Local Development Plan and Supplementary Planning Guidance entitled Renewable and Low Carbon Energy dated July 2017.

(30) No later than 12 months before the expiry date of the planning permission hereby granted a decommissioning and site restoration scheme shall be resubmitted to and approved in writing by the Local Planning Authority. The scheme shall include:

- Details of the removal of all the wind turbines and the surface elements of the development plus one metre of the turbine bases below ground level;
- A de-construction method statement;
- Details of measures to prevent/minimise impacts upon important habitats and species including any protected species surveys;
- Details of all habitat restoration measures including methods and any seed mixes.

The scheme shall be fully implemented as approved.

Reason:

To ensure satisfactory decommissioning and restoration of the site and to accord with Policy RE1 of the Neath Port Talbot Local Development Plan and Supplementary Planning Guidance entitled Renewable and Low Carbon Energy dated July 2017.

(31) If during the course of development, any unexpected land instability issues are found which were not previously identified, measures for their remediation in the form of a remediation scheme shall be submitted to and approved in writing by the Local Planning Authority. The remediation of the site shall incorporate the approved measures which shall be retained thereafter.

Reason

In the interest of safety and to accord with Policy EN8 of the Neath Port Talbot Local Development Plan

(32) In the event of any wind turbine failing to produce electricity supplied to the local grid for a continuous period of 12 months, then it will be deemed to have ceased to be required, the turbine and its ancillary equipment shall be dismantled and removed from site within 3 months of the deemed cessation date and site restored to its former condition.

Reason:

In the interest of visual amenity and to accord with Policy RE1 of the Neath Port Talbot Local Development Plan and Supplementary Planning Guidance entitled Renewable and Low Carbon Energy dated July 2017.

(33) The proposed access of the B4282 shall be metalled for the first 20 metres measured from back edge of highway and provided with drainage to prevent surface water discharging onto or over the highway.

Reason:

In the interest of highway and pedestrian safety and to ensure compliance with Policy TR2 of the Neath Port Talbot Local Development Plan.

Regulatory

(34) The blades of all the approved wind turbines shall rotate in the same direction.

Reason:

In the interest of visual amenity and to accord with Policy RE1 of the Neath Port Talbot Local Development Plan and Supplementary Planning Guidance entitled Renewable and Low Carbon Energy dated July 2017.

(35) Unless required for health and safety purposes, or for aviation purposes, no part of the Development shall display any name, logo, sign or advertisement or means of illumination without the prior written approval of the Local Planning Authority.

Reason:

In the interest of visual amenity and to accord with Policy RE1 of the Neath Port Talbot Local Development Plan and Supplementary Planning Guidance entitled Renewable and Low Carbon Energy dated July 2017.

(36) The turbines shall not be illuminated and there shall be no illumination on the site after the construction period unless required by law.

Reason:

In the interest of visual amenity and to accord with Policy RE1 of the Neath Port Talbot Local Development Plan and Supplementary Planning Guidance entitled Renewable and Low Carbon Energy dated July 2017.

(37) All vehicular movements shall be in accordance with the Construction Traffic Management Plan dated November 2018, and in line with item 4.6 there shall be no construction traffic movements during the following periods:

- no construction traffic movements on Sundays and Bank Holidays;
- no construction traffic movements outside the hours of 07:00 to 19:00 Mondays to Fridays; and
- no construction traffic movements outside the hours of 08:00 to 13:00 on Saturdays.

Reason: In the interest of highway and pedestrian safety and to ensure compliance with Policy TR2 of the Neath Port Talbot Local Development Plan.

(38) Any gate or barrier erected across the main access off the B4282 shall be set back a minimum 20 metres from the nearest edge of the metalled highway.

Reason:

In the interest of highway and pedestrian safety and to ensure compliance with Policy TR2 of the Neath Port Talbot Local Development Plan.

(39) All electricity and control cables between the turbines and the site control building shall be laid underground and alongside tracks which are constructed on the site as part of the development. Any variation shall be submitted to and approved in writing before development commences. Development shall be carried out in accordance with the approved details.

Reason:

In the interest of visual amenity and to accord with Policy RE1 of the Neath Port Talbot Local Development Plan and Supplementary

Planning Guidance entitled Renewable and Low Carbon Energy dated July 2017.

(40) The rating level of noise emissions from the combined effects of the wind turbines (including the application of any tonal penalty) when determined in accordance with the attached Guidance Notes (to this condition), shall not exceed the values for the relevant integer wind speed set out in, or derived from, the tables attached to this condition at any dwelling which is lawfully existing or has planning permission at the date of this permission and:

a) The wind farm operator shall continuously log power production, wind speed and wind direction, all in accordance with Guidance Note 1(d). These data shall be retained for a period of not less than 24 months. The wind farm operator shall provide this information in the format set out in Guidance Note 1(e) to the Local Planning Authority on its request, within 14 days of receipt in writing of such a request.

b) No electricity shall be exported until the wind farm operator has submitted to the Local Planning Authority for written approval a list of proposed independent consultants who may undertake compliance measurements in accordance with this condition. Amendments to the list of approved consultants shall be made only with the prior written approval of the Local Planning Authority.

c) Within 21 days from receipt of a written request from the Local Planning Authority following a complaint to it from an occupant of a dwelling alleging noise disturbance at that dwelling, the wind farm operator shall, at its expense, employ a consultant approved by the Local Planning Authority to assess the level of noise emissions from the wind farm at the complainant's property in accordance with the procedures described in the attached Guidance Notes. The written request from the Local Planning Authority shall set out at least the date, time and location that the complaint relates to and any identified atmospheric conditions, including wind direction, and include a statement as to whether, in the opinion of the Local Planning Authority, the noise giving rise to the complaint contains or is likely to contain a tonal component.

d) The assessment of the rating level of noise emissions shall be undertaken in accordance with an assessment protocol that shall previously have been submitted to and approved in writing by the Local Planning Authority. The protocol shall include the proposed

measurement location identified in accordance with the Guidance Notes where measurements for compliance checking purposes shall be undertaken 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 emissions. The proposed range of conditions shall be those which prevailed during times when the complainant alleges there was disturbance due to noise, having regard to the written request of the Local Planning Authority under paragraph (c), and such others as the independent consultant considers likely to result in a breach of the noise limits.

e) Where a dwelling to which a complaint is related is not listed in the tables attached to these conditions, the wind farm operator shall submit to the Local Planning Authority for written approval proposed noise limits selected from those listed in the Tables to be adopted at the complainant's dwelling for compliance checking purposes. The proposed noise limits are to be those limits selected from the Tables specified for a listed location which the independent consultant considers as being likely to experience the most similar background noise environment to that experienced at the complainant's dwelling. The rating level of noise emissions 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 Local Planning Authority for the complainant's dwelling.

f) The wind farm operator shall provide to the Local Planning Authority the independent consultant's assessment of the rating level of noise emissions undertaken in accordance with the Guidance Notes within 2 months of the date of the written request of the Local Planning Authority for compliance measurements to be made under paragraph (c), unless the time limit is extended in writing by the Local Planning Authority. The assessment shall include all data collected for the purposes of undertaking the compliance measurements, such data to be provided in the format set out in Guidance Note 1(e) of the Guidance Notes. The instrumentation used to undertake the measurements shall be calibrated in accordance with Guidance Note 1(a) and certificates of calibration shall be submitted to the Local Planning Authority with the independent consultant's assessment of the rating level of noise emissions.

g) Where a further assessment of the rating level of noise emissions from the wind farm is required pursuant to Guidance Note 4(c), the wind

farm operator shall submit a copy of the further assessment within 21 days of submission of the independent consultant's assessment pursuant to paragraph (d) above unless the time limit has been extended in writing by the Local Planning Authority.

Table 1: Noise Limits

Location	Noise limit Period	Noise limit in dB LA90, 10 min at Standardised 10m height Wind Speed (m/s)									
		4	5	6	7	8	9	10	11	12	
R1 Tonnau defaid	Day (0700-2300)	40.1	40.6	41.0	41.4	41.7	42.1	42.3	42.6	42.8	
	Night (2300-0700)	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	44.5	
R2 Pen Y Lan	Day (0700-2300)	40.1	40.6	41.0	41.4	41.7	42.1	42.3	42.6	42.8	
	Night (2300-0700)	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	44.5	
R3 Sunnyview	Day (0700-2300)	33.6	26.8	37.2	37.9	38.8	39.9	41.3	42.9	44.8	
	Night (2300-0700)	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	
R4 Teras Griffiths	Day (0700-2300)	36.6	36.8	37.2	37.9	38.8	39.9	41.3	42.9	44.8	
	Night (2300-0700)	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	
R5 Hedre Owen Farm	Day (0700-2300)	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.5	
	Night (2300-0700)	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	46.0	
R6 Tyn Y Pant Farm	Day (0700-2300)	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	47.1	
	Night (2300-0700)	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	47.4	
R7 Nant yr Hwyaid farm	Day (0700-2300)	53.7	54.3	55.0	55.9	56.7	57.6	58.4	59.1	59.7	
	Night (2300-0700)	54.0	54.3	54.8	55.4	56.2	57.3	58.8	60.7	63.0	
R8 Ty Canol	Day (0700-2300)	36.5	37.0	37.6	38.6	39.8	41.2	42.9	44.9	47.1	
	Night (2300-0700)	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	47.4	
R9 Neuadd-wen	Day (0700-2300)	39.3	39.6	40.1	40.7	41.4	42.4	43.2	44.3	45.5	
	Night (2300-0700)	43.0	43.0	43.0	43.0	43.0	43.0	43.2	44.5	46.0	

Table 2: Coordinate locations of the properties listed in Table 1

Property Name	Easting	Northing
R1 Tonnau defaid	284994	193601
R2 Pen Y Lan	284781	193054
R3 Sunnyview	285331	194626

R4 Teras Griffiths	285213	194602
R5 Hedre Owen Farm	283610	195530
R6 Tyn Y Pant Farm	282515	195007
R7 Nant yr Hwyaid farm	282737	195073
R8 Ty Canol	282316	194987
R9 Neuadd-wen	283168	195414

Note to Table 2: The geographical co-ordinates references are provided for the purpose of locating dwellings to which a given set of noise limits applies.

Guidance Notes for Noise Conditions

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

Guidance Note 1

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

(b) The microphone should be mounted at 1.2 – 1.5 metres above ground level, fitted with a two-layer windshield or suitable equivalent approved in writing by the Local Planning Authority, and placed outside

the complainant's dwelling. Measurements should be made in "free field" conditions. To achieve this, the microphone should be placed at least 3.5 metres away from the building facade or any reflecting surface except the ground at the approved measurement location. In the event that the consent of the complainant for access to his or her property to undertake compliance measurements is withheld, the wind farm operator shall submit for the written approval of the Local Planning Authority details of the proposed alternative representative measurement location prior to the commencement of measurements and the measurements shall be undertaken at the approved alternative representative measurement location.

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

(d) To enable compliance with the conditions to be evaluated, the wind farm operator shall continuously log arithmetic mean wind speed in metres per second and wind direction in degrees from north at hub height for each turbine and arithmetic mean power generated by each turbine, all in successive 10-minute periods. Unless an alternative procedure is previously agreed in writing with the Planning Authority, this hub height wind speed, averaged across all operating wind turbines, shall be used as the basis for the analysis. All 10 minute arithmetic average mean wind speed data measured at hub height shall be 'standardised' to a reference height of 10 metres as described in ETSU-R-97 at page 120 using a reference roughness length of 0.05 metres . It is this standardised 10 metre height wind speed data, which is correlated with the noise measurements determined as valid in accordance with Guidance Note 2, such correlation to be undertaken in the manner described in Guidance Note 2. All 10-minute periods shall commence on the hour and in 10- minute increments thereafter.

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

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

Guidance Note 2

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

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

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

Guidance Note 3

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

(b) For each 10 minute interval for which $L_{A90,10min}$ data have been determined as valid in accordance with Guidance Note 2 a tonal assessment shall be performed on noise emissions during 2 minutes of each 10 minute period. The 2 minute periods should be spaced at 10 minute intervals provided that uninterrupted uncorrupted data are available ("the standard procedure"). Where uncorrupted data are not available, the first available uninterrupted clean 2 minute period out of the affected overall 10 minute period shall be selected. Any such

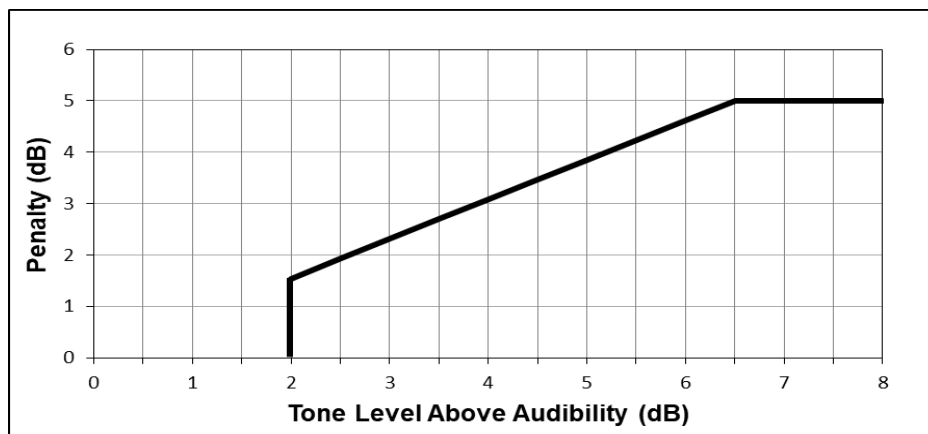
deviations from the standard procedure, as described in Section 2.1 on pages 104-109 of ETSU-R-97, shall be reported.

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

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

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

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



Guidance Note 4

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

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

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

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

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

(f) The wind farm noise (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:

$$L1 = 10 \text{ Log}_{10} \{10^{(L2/10)} - 10^{(L3/10)}\}$$

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

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