

RECOMMENDATION : SECTION 106

REFERENCE: P/14/293/FUL

APPLICANT: PENNANT WALTERS (PYWX) LIMITED
C/O PAUL VINING HIRWAUN HOUSE HIRWAUN INDUSTRIAL ESTATE
HIRWAUN, ABERDARE

LOCATION: PANT-Y-WAL WIND FARM EAST OF OGMORE VALLEY BRIDGEND

PROPOSAL: 12 WIND TURBINES(36MW),ACCESS TRACK & ASSOC. WORKS FOR
25 YEAR PERIOD

RECEIVED: 29th April 2014

SITE INSPECTED: 10th September 2014

APPLICATION/SITE DESCRIPTION

This application seeks full planning permission for an extension of the existing Pant-y-wal wind farm, comprising 12 wind turbines and including anemometer mast, substation and control building, access tracks and all associated building and engineering operations. The wind farm would have a working life of 25 years after which it will be decommissioned. The overall construction period for the wind farm extension will be approximately 16 months, with HGV deliveries to the site occurring over a period of about 12 months and delivery of the abnormal indivisible loads (AILs) over a period of about four months.

The site lies to the south of the high point on the ridge of Mynydd William Meyrick and to the west and north-west of the existing wind farm at Pant-y-wal on Mynydd Maesteg. The site is a broad, gently rising spur, with a high point in the north, with the land dropping steeply into the valleys beyond the site boundary. It comprises open moorland, bordered by conifer plantations to the south and north-east and is used predominantly for grazing. The nearest settlements are: Price Town approximately 0.75km to the north-west; Ogmore Vale and Wyndham approximately 1km to the west; Nant-y-moel approximately 1.5km to the north-west; Evanstown and Gilfach Goch approximately 3km to the south-east.

Approximately two-thirds of the site is designated as open access land under the Countryside and Rights of Way Act 2000, the far eastern section and extreme southwest being exempt. Large areas of Ogmore Forest (to the south) and the forestry to the north-east are designated as public forest and the site is crossed by a number of public rights of way connecting the valleys on either side of the site.

Access to the development will be via the existing infrastructure that served as the construction access and is currently the operational access for the Pant-y-wal wind farm. The site entrance is on the A4093 to the east of Glynogwr and the track runs for a distance of 11km.

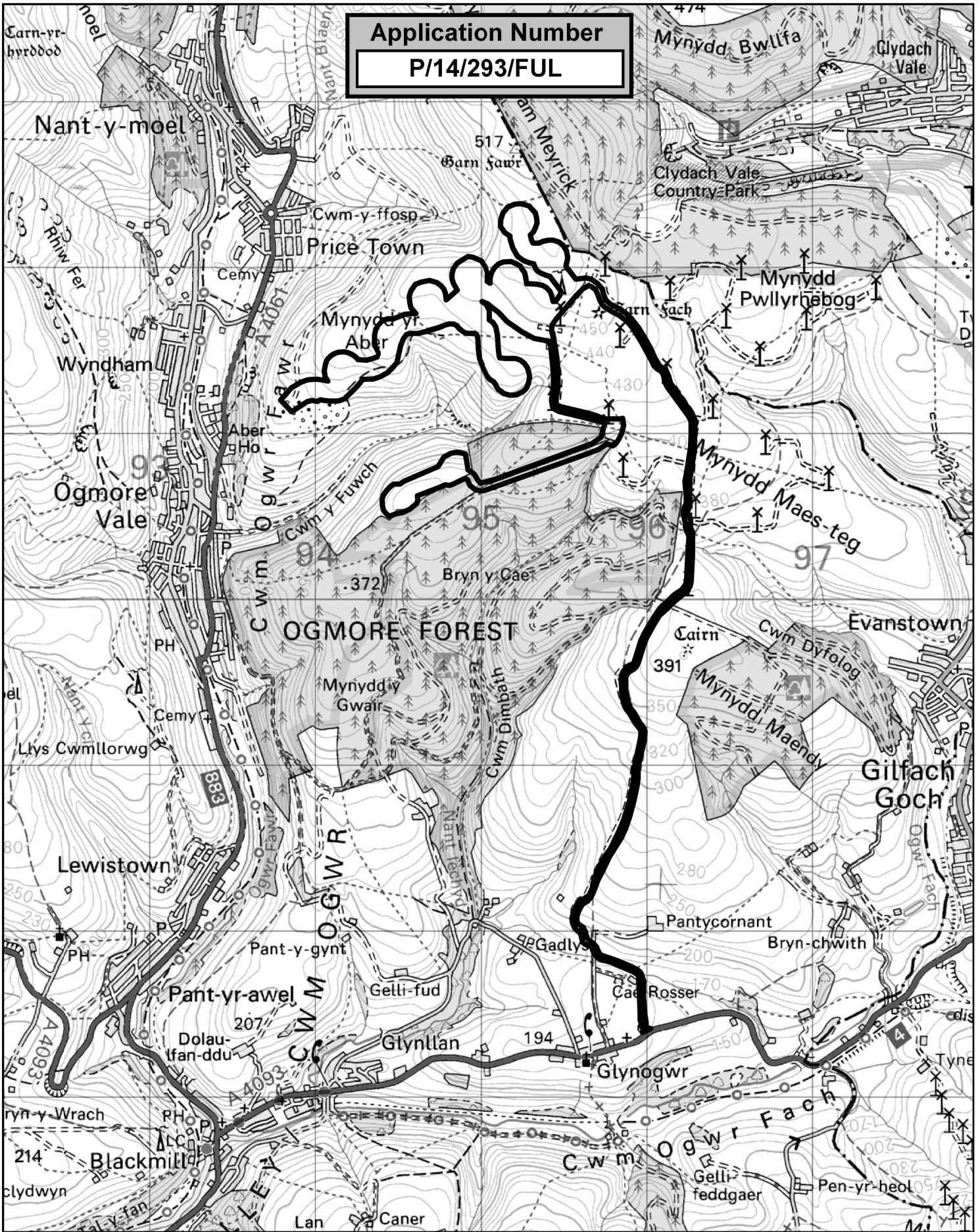
The individual components of the application and the layout of the site are described in more detail below:

WIND TURBINES

Wind turbines convert the kinetic energy of wind into electrical energy. Air passing over the blades of a wind turbine causes them to rotate. This low speed rotational motion is stepped up via a gearbox and converted into electrical energy by a generator located inside the nacelle (hub) of the turbine. The voltage is converted to a high voltage by a unit transformer, located either within the nacelle or at the base of the turbine, for transmission across the wind farm to a

Application Number

P/14/293/FUL



Scale 1:30,000

Date Issued:
26/03/2015

Development-Mapping
Tel: 01656 643176

Mark Shephard

Corporate Director-Communities

Communities Directorate,
Bridgend County Borough
Council, Civic Offices,
Angel Street,
Bridgend CF31 4WB.

C:/Drive/Plandraw/new MI layouts/
Committee DC Plan

(c) Crown Copyright and database rights
(2015) Ordnance Survey (100023405)

(c) Hawlfraint a hawliau cronfa ddata'r Goron
(2015) Rhif Trwydded yr Arolwg Ordnans
(100023405)

(c) Cities Revealed Aerial Photography
copyright, The GeoInformation Group (2009)

Cyngor Bwrdeistref Sirol



substation which is then, usually, connected to the National Grid.

An Ordnance Survey extract plan indicating the position of the proposed turbines (A-K) will be displayed at committee. Turbines 1-21 on the plan form the existing Pant-y-wal/Fforch Nest wind farm. The proposed turbines are generally located alongside sections of new access tracks which will be constructed as 'branches' from the existing infrastructure. The most northerly 'limb' of the new access track will serve turbines I and J with turbine G and H sited adjacent to a parallel section of track just to the south-west. Turbines A-F (six turbines) lie to the west of the existing windfarm with turbines A and B located on the ridge of Mynydd yr Aber, which forms the upland backdrop to the Ogmore Valley. Turbine A is approximately 600m from the nearest properties in Pricetown and Turbine B is approximately 750m from the nearest properties also in Pricetown with the access track located slightly closer. Turbines C-F will be more closely related to the existing windfarm and the proposed turbines to the north-west (G-J).

Turbines K and L are located on a ridge separated from turbines A and B by Cwm y Fwch, which forms a more complex topography in comparison with the open plateau on which the remaining turbines are located. Ogmore Forest provides a backdrop to Turbines K and L and through which the access track to them passes.

As a result of negotiations in respect of concerns regarding the visual impact of certain turbines, the applicant company has confirmed that they will accept a planning condition removing Turbines A and K from the scheme as approved. Furthermore, the developer is also prepared to accept a condition limiting the output from each turbine to 2.5MW, instead of the maximum 3.0MW per turbine for which permission was sought. The effect would be to reduce the capacity of the proposed development from a maximum of 36MW (12 x 3.0MW) to a maximum of 25MW (10 x 2.5MW).

The turbine will be of the horizontal axis type with a rotor consisting of three blades. The blades are mounted to the turbine hub or nacelle, at height of up to 80m and the turbine has a maximum height of 125m.

The turbine foundation design will be traditional, reinforced concrete gravity foundations, approximately 17m in diameter. Foundations will sit on a competent formation typically comprising weathered rock strata. The application allows for the turbines to be micro-sited within a radius of 50m. The micro-siting allows for small changes in position to optimise the turbine layout to suit the selected turbine and to minimise impacts during construction. In particular, micro-siting may be used to:

- * minimise disturbance of peat discovered during construction;
- * avoid localised geotechnical features encountered during excavation;
- * minimise the influence of topographic features on turbines; and
- * maximise energy yield by minimising wakes and optimising turbine positions.

The application site plans allow for an area of 100m radius from the centre of each turbine, which allows for both micro-siting and the over sail area of the rotor blades. Each turbine requires an area of hardstanding, approximately 25 x 35m, to be built adjacent to the turbine foundation. This provides a base on which to lay down turbine components ready for assembly and erection, and to site the two cranes necessary to lift the tower sections, nacelle and rotor into place. The crane hardstanding will be left in place following construction in order to allow for the use of similar plant should any major components need replacing during the operation of the wind farm.

ELECTRICITY SUBSTATION AND CONTROL BUILDING

The extension to the wind farm will require a separate substation, which will connect the turbines to the off-site grid connection. The substation will be located to the west of the turbines and will

comprise an enclosure of approximate dimensions 45m by 60m (270 square metres). The enclosure will contain the main equipment (isolators, circuit breakers, transformers); a building which will house the switchgear, meters, protection and control equipment and welfare facilities for visiting staff; and a hardstanding. The enclosure will be securely fenced, for safety.

ANEMOMETER MAST

A new permanent anemometer mast will be required to serve the proposed extension and will be sited close to the proposed substation. The mast will be 80m high and will be supported by guy wires. Temporary anemometer mast(s) will also be positioned at selected turbine locations for short durations of three to six months. These temporary masts are used to calibrate the turbine locations against the permanent anemometer mast.

SITE ENTRANCE

The extension to the wind farm will be accessed via the existing site entrance, which is located on the A4093, east of Glynogwr. This entrance was designed and constructed to serve the existing windfarm and no improvements are proposed. The entrance to the site will be supervised and controlled throughout the construction period.

CONTRACTOR'S COMPOUND

A temporary contractor's compound, approximate dimensions 50m x 70m (3500 square metres) will be provided within the extension site. Wheel washing facilities will be installed at this point and the contractor's management system will ensure that vehicles leaving the site pass through this facility. A smaller facility, to control access to the site and for receiving certain deliveries will be provided at the site entrance.

ACCESS TRACKS AND CABLING

The access tracks serving the existing Pant-y-wal wind farm will be used to gain access to the site of the proposed extension. The existing tracks are of recent construction and no further works to them are proposed. New extensions to the existing tracks will be required to serve the proposed turbines and total approximately 5.5km in length. They include the track to Turbines L and K (turbine omitted), a substantial portion of which comprises an existing forestry track through the Cwmogwr Forest. The tracks would be constructed to a width of approximately 5.0m and a depth of approximately 0.3m, increasing where necessary to reflect ground conditions. Passing bays will be provided at regular intervals to ensure the safe passage of vehicles during deliveries.

SURFACE WATER DRAINAGE

New access tracks will be constructed on a scraped excavation. Any surface water run-off containing soil from construction will flow to track-side drainage channels, dug as the track is constructed. Water containing sediment will either infiltrate back into sub-surface layers from the base of the ditches or through surface vegetation. Where necessary, trackside drainage will be lined with a geotextile layer to prevent washout of soils and to assist in the removal of sediment.

CONSTRUCTION PROGRAMME

The overall construction period for the wind farm extension will be approximately 16 months, with HGV deliveries to the site occurring over a period of about 12 months and delivery of the abnormal indivisible loads (AILs) over a period of about four months.

The construction process will consist of the following operations:

- * construct temporary storage compound and temporary site offices;
- * construct site access tracks with field gates and temporary fencing where required;
- * carry out site investigation and ground treatment works at each turbine location;
- * excavate for turbine foundations;
- * construct turbine foundations, to include hardstanding for crane pads;
- * build substation and install internal equipment;
- * construct connection to the National Grid;
- * excavate trenches and lay power and instrumentation cables alongside access tracks;
- * erect turbines;
- * commission turbines;
- * carry out land reinstatement;
- * remove temporary accommodation; reinstate temporary compound area and clear site.

ENVIRONMENTAL IMPACT ASSESSMENT

The applicant has correctly determined that the proposal would, under Schedule 2 of the Town and Country Planning (Environmental Impact Assessment) Regulations 1999, require an Environmental Impact Assessment (EIA) to be undertaken. Such assessments are necessary if a development is likely to have significant effects on the environment. As such, an Environmental Statement (ES) was submitted with the application. The ES sets out the results of the EIA undertaken to consider the environmental effects of the proposed scheme and comprises the following elements:

Volume 1 - the ES Written Statement including tables;

Volume 2 - the application plans and other figures including viewpoints, photomontages and wireline drawings;

Volume 3 - List of Appendices

Volume 4 - List of Ecology Reports

The ES contains chapters on landscape and visual impact, nature conservation and biodiversity, archaeology and cultural heritage, physical conditions (geology, hydrology and hydrogeology), noise, traffic and transportation, land use and socio-economics, electromagnetic interference, aviation and public safety, shadow flicker and planning policy framework. The early chapters of the ES also detail the background of site selection and describe how the scheme evolved from conception. In addition a detailed description of the site and project is provided which is summarised in the first part of this report above.

An ES Non-Technical Summary (NTS) has been produced, giving a summary of each of the technical chapters.

A Planning Statement also supports the application as does a Design and Access Statement (DAS).

Although not a statutory requirement, the applicant undertook voluntary public consultation on the proposal before submitting the planning application. A public consultation event was held in the

Ogmore Valley Life Centre, Aber Road, Ogmore Vale on Thursday, 13 February 2014 between the hours of 10.00 am and 8.00pm. This choice of venue was suggested by Bridgend County Borough Council as being the most appropriate. The event consisted of an exhibition of the draft wind farm proposals and supporting information and provided an opportunity for members of the public to view the proposals and to comment on them. The event was staffed throughout the day and evening by representatives of Pennant Walters and their planning and landscape consultants.

The event was well publicised in advance by:

- * a display advertisement in the Glamorgan Gazette in week commencing 3 February 2014
- * an individual letter to stakeholders, including two MPs, ten AMs, the Leader and Local Members and the Clerk to the Ogmore Valley Community Council;
- * a letter drop to approximately 2648 households and 86 businesses in the area
- * a press release.

The event was attended by 40 people; 16 provided feedback on the forms provided. Those attending came from the Ogmore Valley, Glynogwr and Gilfach Goch. Attendees included the Chair of the Planning Committee and the Local Member.

RELEVANT HISTORY

P/04/969/ESO ESO provided 17-11-2005
SCOPING OPINION FOR PANT-Y-WAL WINDFARM

P/06/417/FUL APPROVED 04-05-2011
+conditions
WIND FARM OF 10 X 2.5MW WIND TURBINES WITH ASSOC. MAST, SUBSTATIONS, ETC
& NEW ACCESS ONTO A4093 (REVISED ENV. STAT)

P/11/889/OBS NO 09-02-2012
OBJECTION
ERECTION OF 66KV OVERHEAD LINE TO PROVIDE GRID CONNECTION TO PANT Y
WAL WINDFARM

P/12/601/TPN APPROVED 18-09-2012
PROPOSED 15M SLIMLINE TOWER

P/13/73/ESO ESO provided 14-03-2013
REQUEST FOR SCOPING OPINION FOR WIND FARM DEV. OF UP TO 33MW INC. WIND
TURBINES, ACCESS TRACKS & ASSOC. WORKS

P/14/540/RLX
RELAX CONDITION 29 OF P/06/417/FUL RELATING TO NOISE LIMITS

PUBLICITY

The application has been advertised in the press and on site.
Neighbours have been notified of the receipt of the application.
The period allowed for response to consultations/publicity has expired.

NEGOTIATIONS

The application was originally submitted in May 2014 and has been the subject of negotiation in respect of the following matters:

1. Cumulative impacts of noise from existing and proposed wind turbines;
2. Consultation response from Welsh Government Transportation Division;
3. Issues arising from 'Review of Landscape and Visual Impact Assessment' undertaken by TACP on behalf of the Local Planning Authority;

CONSULTATION RESPONSES

Town/Community Council Observations

Notified on 8th May 2014

Ogmore Valley Community Council object to the development for the following reasons:

1. Saturation of the residential area;
2. Noise for the Cwm Community;
3. Footpaths must be looked after and made safe - all footpaths should be marked.

Notified on 8th May 2014

Head Of Street Scene (Highways)

No objections subject to conditions.

Head Of Street Scene (Drainage)

No objection subject to a condition being attached requiring the agreement of a comprehensive drainage scheme for the development.

Group Manager Public Protection

The following observations relate to this application and the two submissions to vary the conditions imposed on the original permissions for the Pantywyl and Fforch Nest Wind farms:

Fforch Nest and Pant Y Wal were originally under the ownership of two different developers. Consequently, the noise limits that were originally set for each individual wind farm were such that when they were both operating together, the combined noise levels would not exceed the criteria specified in the ETSU-R-97 relative to background levels, which is the wind farm guidance that Local Authorities must have regard to. As co-operation between the two operators could not be guaranteed and that a direct apportionment of the noise from each wind farm could not be agreed upon, the maximum permitted noise levels were effectively shared between the two developments.

When dealing with the new extension to the Pant Y Wal wind farm (P/14/293/FUL), the applicant expressed a wish to have one set of noise limits for the wind farms that have existing consents as they are now in the ownership of the same developer. Subsequently, two Section 73 applications were submitted to relax condition 29 of the two original consents. However, the noise levels requested for the Section 73 applications effectively meant there would be an increase of 3dB, which the Public Protection Department objected to.

Upon further meetings between the applicant and officers from Bridgend County Borough Council and Rhondda Cynon Taff, the noise report was resubmitted with 4 sets of revised noise levels for the proposed development and the existing Pant y Wal and Fforch Nest Wind Farms. Without lowering some of the limits to the existing consents, the new development would not be able to meet the cumulative ETSU criteria as they had essentially 'used up' the noise allowance between the other two sites. The fourth sets of limits are in respect of the turbines which fall within Rhondda Cynon Taff. When added together, these 4 sets of proposed noise limits now meet the original ETSU criteria.

On the noise report received in January 2015, the Group Manager Public Protection offered no objection to the development but indicated that the applications submitted to this Council to vary the noise limits (P/14/540/RLX and P/14/541/RLX) should be determined prior to any permission being granted for the additional wind turbines that are subject of this application. Furthermore, to ensure effective control of the cumulative noise levels it is also critical that Rhondda Cynon Taff grant permission for the variation of the noise limits prior to a decision being made on the Pantywal extension.

On the basis that this authority has no control over a decision that is made by another Council, the applicant company commissioned a further noise assessment (March 2015) and this sought to demonstrate that individual and cumulative noise levels for the proposed and existing wind turbines in this authority's control would not exceed the ETSU-R-97 criteria, even if RCT resolved not to allow a variation and relied on the noise levels set under the original planning permission.

The report has been examined in detail and the Group Manager Public Protection has accepted its conclusions and offers no objection to the respective applications subject to conditions and an agreement, that the applicant can no longer operate at the former limits and that all the other noise conditions attached to the original consents still apply.

Rights Of Way Team

No objection subject to conditions.

Natural Resources Wales

No objection subject to conditions.

W.A.G. Highways Network Management

Following extended dialogue with the applicant's transport consultant, the Welsh Government (Transport) directs that a condition be imposed to any consent you may grant requiring the submission of a Traffic Management Plan to show proposals for transporting the abnormal indivisible loads associated with the construction phase of this scheme.

Glamorgan Gwent Archaeological Trust

No objection to the positive determination of the application subject to the imposition of a condition requiring the applicant to submit a detailed programme of investigation for archaeological resource.

Cadw

The advice relates to the impact on scheduled monuments or Registered Historic Landscapes, Parks and Gardens.

All monuments apart from Cairn Lwyd are located to the north of the application site and, in the views to the south, the proposed wind turbines will be seen with a backdrop of the existing wind farm. Whilst this will increase the visual impact of the existing development this will be a slight additional impact on the existing situation. Cairn Lwyd is located some 3km to the west of the proposed development located on high ground. The view towards the turbines is across Ogmere

Vale but with the backdrop of modern conifer plantations. In Cadw's opinion the impact of the proposed turbines on the setting of the monument will be moderate.

This proposal also lies within 5km of the registered historic landscape known as The Rhondda Historic Landscape. The EIA includes an ASIDOHL (Assessment of the Significance of Impacts of Development on Historic Landscape) which identifies that for the majority of the historic character areas of the registered landscape, the impact of the proposed development will be none or slight, however, in three areas (Rhondda Uplands, Parc Cwm Brychinog and Rhondda Fawr) the impact is assessed to be moderate. The overall impact on the registered landscape is determined to be slight

Rhondda Cynon Taff County Borough Council

Having carried out consultation with our internal consultees and reported the matter to our Planning Committee, the response of this Council is to raise an objection to the proposal owing to the highway impact and disruption that the transportation of the abnormal loads would have on the free flow of traffic in particular on the residents of Gilfach Goch and the visual impact of the turbines on the area. Should Bridgend County Borough Council be minded to approve the application however then it is requested that consideration be given to imposing conditions requiring the submission of a Traffic Management Plan, a condition survey from the junction of the A4093 with Cambrian Avenue westwards to the RCT boundary with BCBC and time limit on the delivery of the abnormal loads to the site.

Neath Port Talbot County Borough Council

No objections.

Vale Of Glamorgan Borough Council

No objection to the proposal.

The Coal Authority

No objection subject to conditions.

Wales & West Utilities

No apparatus in the area of inquiry.

Defence Estates

No objection to the proposal.

Nats (National Air Traffic Services) Safeguarding

No objection to the proposal based on the information submitted at the time of the application.

Cardiff Airport

No objection.

Brecon Beacons N.P. Authority

No objection to the proposed development.

Arqiva

No objection to this application.

(ARQIVA is responsible for providing the BBC and ITV's transmission network and is responsible for ensuring the integrity of Re-broadcast links and also to protect its microwave networks)

REPRESENTATIONS RECEIVED

Letters Of Objection Have Been Received From The Following:, .

Cae Rosser Isaf, Glynogwr; Blackmill and Glynogwr Tenants and Residents Association; Garw Valley Community Council; 36 Wyndham Street, Ogmores Vale; 1 Mount Pleasant, Blackmill (3); 2 Mount Pleasant, Blackmill (2); Craig y Felin, Blackmill; The Old Vicarage, Glynogwr; 42 John Street, Nantymoel; 3 Mill Park, Cowbridge; 5 Cwrt Ty Mawr, Ogmores Vale; 5 Tegfan, Nantymoel; Goscar, Glynogwr:

The following is a summary of the objections received:

1. The wind farm is outside the revised SSA boundary of TAN 8 Area F as recommended in ARUP's report - sets a precedent for further development;
2. The recommended capacity has already been exceeded; valley is encircled and saturated with wind turbines;
3. Visual Impact - at 125m to blade tip the 12 turbines proposed are 25% bigger than ARUP's maximum recommended height for this area and significantly bigger than the turbines already constructed in this area, turbines are too large and too close to people's homes and will be alien structures in the environment;
4. Cumulative Impact - the TACP report commissioned by BCBC prior to the approval of the existing windfarm concluded by saying that these developments would create a 'wind farm landscape' and that any further wind farm applications should be 're-viewed with increasing scrutiny'. Residents in this area of north Bridgend and the adjacent RCT community of Gilfach Goch are already sandwiched between two clusters of windfarms - enough is enough!
5. Impacts on residential amenity - noise and impact on health - residents in Gilfach have complained about the noise of the existing turbines and claim they are adversely affecting their health - this development could exacerbate problem. Residents of the Cwm have also complained about vibration during operation. During east or south easterly winds the turbines produce an annoying 'drone' noise.
6. The site has Special Landscape Area status and adjoins a landscape conservation area including a SSSI. The application should be refused - preserve the landscape and wildlife we have left. There will be a loss of bio-diversity and nature conservation opportunities and the potential for trauma and collisions of birds and bats. Environmental report is 'predictive' - further survey work should be undertaken.
7. Turbines are unsightly and are contrary to Council's policy of encouraging tourism in the area;
8. Footpaths and bridleways must be protected - turbines will engulf the footpaths and bridleways;
9. Devaluation of properties;
10. Additional traffic will be generated on the road network serving the site;

11. Shadow Flicker will affect residents within close proximity to the wind farm - an unacceptable nuisance.

12 Development may result in changes to the existing Wyndham Sub-station which could bring new transformers to the site and accordingly closer to neighbouring properties. Electromagnetic fields that are formed around such apparatus are a danger to health.

COMMENTS ON REPRESENTATIONS RECEIVED

Those objections offered by residents and the Community Councils with regard to conflicts with planning policy (outside the SSA), landscape and visual impacts (including cumulative impact), losses of amenity (including shadow flicker), impacts on bio-diversity and ecology, tourism and highway safety are considered in the following section of this report.

The remaining objections are addressed as follows:

1. Representations have been received from residents regarding low frequency noise and vibration associated with the existing wind turbines and this being exacerbated by the new development. Technical Advice Note: 8 - Planning for Renewable Energy indicates that there is no evidence the ground transmitted low frequency noise from wind turbines is at a sufficient level to be harmful to human health. A comprehensive study of vibration in the vicinity of modern wind farm was undertaken in the UK in 1997. Measurements were taken on site and up to 1km away in a wider range of wind speeds and directions. The study found that:

* Vibration levels 100m from the turbines were a factor of less than those recommended for human exposure in critical buildings, (i.e. laboratories for precision measurement).

* Tones above 3 Hz were found to attenuate rapidly with distance - the higher frequencies attenuating at a progressively increasing rate.

On the basis of the lack of evidence there are no grounds to consider rejecting the application on the basis of low frequency noise and vibration.

2. Footpaths and bridleways are protected under other legislation. The observations of the Rights of Way Officer have been forwarded to the applicant's agent.

3. Devaluation of property is not a material planning consideration.

4. A resident who lives close to the existing sub-station in Wyndham has expressed concern that the development of the turbines and the associated grid connection may result in further development in the sub-station complex and the potential for any new apparatus to cause health problems. The sub-station lies outside the application site and future improvements may be subject to separate planning permissions. Statutory undertakers do however enjoy extensive permitted development rights and any the installation of new equipment/erection of new buildings may not require planning consent. The impact of any associated electromagnetic field on human health lies outside the control of the Local Planning Authority and would be governed by other legislation.

APPRAISAL

The applicant has provided a comprehensive assessment of the proposed development (through the submission of an Environmental Statement (ES)) and it is on the basis of this information, local and national policy, technical guidance (TAN 8), the responses of statutory and

other consultees and third party public responses that this proposal is to be considered.

There are a wide range of policy documents relating to wind farms and renewable and low carbon energy and these include policies at both a UK and Welsh Government level and at a local development plan level. They are all generally consistent in that they support the development of renewable energy, subject to a range of environmental considerations against which any application should be assessed.

It has been assessed that the main issues in the consideration of this application are the acceptability of the proposed wind farm having regard to local and national policy, the effect of the proposal on landscape character and value, in terms of visual effects and cultural heritage, the impact on ecology and nature conservation, the effect on residential amenity of those nearest households and communities, the effect on surface and ground water systems, socio-economic and tourism interests, existing infrastructure/communications systems, aviation interests and highway/traffic/access issues.

The likely level of impact and any harm must be balanced against the benefits of the proposal and the contribution it would make to the generation of renewable energy.

LOCAL AND NATIONAL POLICY

Section 38 of the Planning and Compulsory Purchase Act 2004 requires that where the development plan is material to the determination of a planning application 'the determination must be made in accordance with the plan unless material considerations indicate otherwise.'

The Bridgend Local Development Plan 2006-2021 (LDP) was adopted by the Council in September 2013 and is the starting point for the assessment of this application.

The LDP Vision will be delivered through four strategic LDP objectives which seek to address the national, regional and local issues facing the County Borough. These four strategic objectives are at the centre of the LDP and form the basis for its policy development. Promoting, conserving and enhancing the natural historic and built environment of the County Borough and contributing towards the energy needs of Wales, with a focus on the promotion of renewable energy are two measures of achieving one of the strategic objectives of protecting and enhancing the environment.

The application site is located in the countryside and should be assessed in the context of Policy ENV1 which strictly controls development except for specific identified purposes. Policy ENV1 (6) identifies utilities infrastructure as an appropriate exception. Paragraphs 4.1.11 and 4.1.12 of the LDP, which expand upon Policy ENV1, make it clear that whilst certain development maybe appropriate in the countryside, the policy forms the starting point for assessment and all proposals will need to satisfy other relevant policies in the LDP.

The LDP will ensure that the County Borough's energy requirements are fully satisfied whilst having the minimum impact on the environment and local communities. Accordingly, Strategic Policy SP8 - Renewable Energy states:

'Development proposals which contribute to meeting national renewable energy and energy efficiency targets will be permitted where it can be demonstrated that there will be no significant adverse impacts on the local environment and communities.'

Development for renewable energy will therefore be encouraged in principle. The location of the development will however need to be balanced against its impact on the environment (including the landscape) and nearby communities.

Policy ENV18 provides a robust basis for assessing renewable energy schemes. It states:

'Proposals for renewable energy development will be permitted provided that:

1. In the case of wind farm developments of 25MW or more, the preference will be for them to be located within the boundary of the refined Strategic Search Area;
2. The availability of identified mineral resources or reserves will not be sterilised;
3. Appropriate monitoring and investigation can demonstrate that the development will not have any significant impacts on nature conservation;
4. Appropriate arrangements have been made for the preservation and/or recording of features of local archaeological, architectural or historic interest;
5. They can be safely accessed to permit regular maintenance without detriment to the environment or the public rights of way network;
6. They will not detrimentally affect local amenity by reason of noise emission, visual dominance, shadow flicker, reflected light, the emission of smoke, fumes, harmful gases, dust, nor otherwise cause pollution to the local environment;
7. They will not lead to electromagnetic disturbance to existing transmitting and receiving systems (which includes navigation and emergency services), thereby prejudicing public safety;
8. Local receptors of heat and energy from the proposal are identified and, where appropriate, are connected to/benefit from the facility;
9. Provision has been made for the removal of all infrastructure from and reinstatement of the site following termination of the use.'

The proposed development will be examined against each criterion of the above policy as follows:

Criterion 1: In the case of wind farm developments of 25MW or more, the preference will be for them to be located within the boundary of the refined Strategic Search Area;

The Welsh Government's aim is to secure an appropriate mix of energy provision for Wales, whilst minimising potential environmental and social impacts. Planning Policy Wales confirms that the UK is subject to the requirements of the European Union Renewable Energy Directive 2009, which includes a UK target of 15% of energy from renewables by 2020. The Welsh Government is committed to playing its part by delivering an energy programme which contributes to reducing carbon emissions as part of the approach to tackling climate change. Planning policy at all levels should facilitate delivery of the ambition set out in Energy Wales, (Energy Wales: A Low Carbon Transition 2012) and UK/EU targets on renewable energy.

Planning Policy Wales, (Paragraph 12.8.12 refers) states that wind energy continues to offer the greatest potential for delivering renewable energy. It is accepted that the introduction of new, often very large structures needs careful consideration to avoid and where possible minimise their impact. However, the need for wind energy is a key part of meeting the Welsh Government's vision for future renewable electricity production as set out in the Energy Policy Statement (2010) and should be taken into account by decision makers when determining such applications. Welsh Government is committed to using the planning system to, inter alia, optimise renewable energy generation and paragraph 12.8.9 of Planning Policy Wales (Edition 7) states that: local planning authorities' should facilitate the development of all forms of renewable and low carbon energy to move towards a low carbon economy to help to tackle the causes of climate change'.

Local planning authorities should also ensure that international and national statutory obligations to protect designated areas, species and habitats and the historic environment are observed, and ensure that mitigation measures are required for potential detrimental effects on local communities.

Planning Policy Wales, (Paragraphs 12.8.13 and 12.8.14) refers to Technical Advice Note 8: Planning for Renewable Energy (2005) which defines Strategic Search Areas (SSAs) as the most appropriate locations for large scale wind farm development. Development of a limited number of large scale wind energy developments in these areas will be required to contribute significantly to the Welsh Government's onshore wind energy aspiration for 2GW in total capacity by 2015/17. Within the SSAs, whilst cumulative impact can be a material consideration, it must be balanced against the need to meet the Welsh Government's aspiration 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 in relation to local landform, proximity to dwellings and other planning considerations.

TAN 8: Planning for Renewable Energy refers specifically to onshore wind energy and confirms that, for efficiency and environmental reasons amongst others, large scale (over 25MW) onshore wind developments should be concentrated into seven SSAs. It should be noted that the application site lies partly within and partly immediately adjacent to SSA F: Coed Morgannwg - turbines A, B, K and L lie outside the SSA.

In 2005 Bridgend County Borough Council collaborated with other councils to commission an Annex D study of SSAs E and F (TAN 8 Annex D Study of Strategic Search Areas E and F: South Wales Valleys, Arup, December 2006 refers). The consultants provided recommendations on the proposed refinement of the boundaries of Strategic Search Areas.

The locally refined Strategic Search Areas are now shown on the LDP Proposals Map and are seen by the Council as the preferred location within the County Borough for large scale wind energy developments and areas within which there is a general acceptance of landscape change. This application however proposes an extension of the existing wind farm onto land that is adjacent to or outside the refined SSA. Members should be aware however that Policy ENV18 does not prevent wind energy developments outside the refined SSA nor does it state a limit on generating capacity. The LDP indicates that, in such locations, the Council will operate a case-by-case approach to such schemes. Where development proposals can be justified, careful attention to landscape issues will need to be considered in accordance with Policy SP2 as well as the criteria of Policy ENV18.

The applicant's agent in the Environmental Statement recognises that the development lies outside the refined SSA boundary but argues that the policy does not preclude favourable consideration of the proposal. Furthermore, it is claimed that the development has the benefits of being (i) sited within/adjacent to a defined SSA; (ii) containing the locational advantages and characteristics associated with an SSA; (iii) the Welsh Government's encouragement (a) to the industry to focus attention on the SSAs and (b) to local planning authorities to generally respond positively to such developments; and (iv) the ability to make an important contribution to meeting the assessed potential for energy production from the SSA.

Reference has also been made by the applicant's agent to the proposed application site being within a zone which was not defined as an 'unacceptable zone' on the basis of either (a) cumulative landscape and visual impacts or (b) intrinsic landscape sensitivity, value or visual characteristics in the 2006 Arup Study. The study report did however note that turbines on the northern and western edges of this zone are likely to have a dominating effect on settlements in Ogmere Vale. This is a matter that will be considered later in this report.

On the basis of local and national policy there is no objection in principle to the development of a large scale wind energy project on land that is adjacent to the refined Strategic Search Area,

(SSA). Accordingly, the proposal accords with criterion 1 of Policy ENV18.

Criterion 2: The availability of identified mineral resources or reserves will not be sterilised;

The application site is located on a sandstone resource which is afforded a level of protection under Policy ENV9 which states:

'Development proposals within mineral safeguarding areas, either permanent or temporary, will need to demonstrate that:

1. If permanent development, the mineral can be extracted prior to the development, and/or the mineral is present in such limited quantity or quality to make extraction of no or little value as a finite resource; and

2. In the case of residential development, the scale and location of the development e.g. limited infill/house extensions, would have no significant impact on the possible working of the resource; and

3. In the case of temporary development, it can be implemented and the site restored within the timescale the mineral is likely to be required'.

The policy accepts that temporary development will be acceptable where the proposal can be implemented and the site restored within the timescales the mineral is likely to be required. Paragraph 4.3.1 of the LDP identifies that in 2009, the aggregates reserves for Bridgend was estimated at 40 years. In light of this and other preferable sites for quarrying before this site could be realistically considered, this development is acceptable in the context of Policy ENV9 (3) and criterion 2 of Policy ENV18.

Criterion 3: Appropriate monitoring and investigation can demonstrate that the development will not have any significant impacts on nature conservation;

The potential impact of the wind farm development on the ecology and biodiversity of an area as well as any effect on protected species is a material consideration and this approach is supported by relevant national policy (Planning Policy Wales, Technical Advice Note (Wales) 5: Nature Conservation and Planning, Technical Advice Note 8: Planning for Renewable Energy (Annex C, Para 2.22 to Para 2.23 Ecology and Ornithology refers) and local policy, (Strategic Policy SP4- Conservation and Enhancement of the Natural Environment: Development, Policy EN4:Local/ Regional Nature Conservation Sites and Policy EN6: Nature Conservation of the LDP refers).

The specific chapter on nature conservation and biodiversity in the ES describes and evaluates the nature conservation interest of the application site and the immediately surrounding area, both in terms of habitats and species including ornithology. It assesses the potential impacts of the proposed extension to the Pant-y-wal wind farm on these interests and outlines the mitigation and/or compensation measures required to offset such impacts.

The following surveys and assessments were undertaken and are reproduced as technical appendices to the ES:

Extended Phase 1 habitat survey (WYG, 2014);
National Vegetation Classification survey (WYG, 2014);
Bat activity survey (WYG, 2014);
Breeding bird survey (WYG, 2014);
Vantage point survey and collision risk modelling (WYG, 2014);

Section 5.7 of the chapter on Nature Conservation and Bio-diversity confirms that the proposed

development has undergone a number of design iterations in response to various environmental constraints identified during the EIA process; the applicant's agent maintains that the final layout aims to avoid or reduce impacts on important habitats and species as far as possible, whilst taking into account other environmental and technical constraints. The design mitigation included with reference to ecology is summarised below:

- * The turbine and infrastructure layout has been developed to avoid as many of the areas of important habitat as possible (wet heath/ mire vegetation);

- * Design mitigation to minimise hydrological impacts, which could in turn reduce impacts on aquatic ecological receptors; this has included micro-siting of turbine and infrastructure to avoid impacts to deep peat (greater than 0.5m) where possible;

- * Buffer zones of 50m around surface watercourses were included where feasible in the turbine layout design to ensure turbine construction activities do not occur in these areas;

The ES characterises and predicts the potential impacts on ecological features, taking into account the design mitigation but does not consider any further mitigation measures, during the construction/operation phases of the wind farm development. Impacts on non-statutory designated sites, habitats and protected species, (including reptiles, bats, otters and birds) are assessed in detail in the Environmental Statement. No significant impacts on any statutory and non-statutory designated site are predicted. Although impacts on habitats are permanent they are relatively small in comparison to the total resource found within the proposed development area and in the wider landscape. All other impact on other habitats and protected and notable plant species are not considered significant.

The impact on species, including bats, reptiles, otters and protected avian is also not significant as the loss of the related habitat is minimal. No significant impact on the conservation status of the species is likely. The collision risk modelling statistics show that collision with turbines will account for the potential deaths of one buzzard, one red kite and three ravens over the 25 year life span of the wind farm. Based on this information no significant impacts on the conservation status of any recorded primary target species is predicted. Given the relatively low number of recorded bat flights in the proposed turbine area, collision impacts are unlikely.

The ES also evaluates, insofar as it is possible, the significance of potential impacts on important ecological receptors during the decommissioning of the wind farm development after 25 years of operation. The level of impact will depend on the species present and the size and location of their populations at the time and cannot be predicted at this stage. Updated surveys would be undertaken prior to decommissioning taking place to inform an up-to-date assessment of potential impacts on protected faunal species. This matter will be covered by suitably worded planning conditions.

Notwithstanding the limited impacts on biodiversity interests, measures are proposed to avoid or reduce significant impacts on important ecological receptors, to ensure compliance with the relevant legislation and, in certain cases, to provide ecological enhancements. An Ecological Landscape and Mitigation Plan (ELMP) is currently in place for the current operational Pant-y-Wal wind farm, which covers the protection measure of important features and schedule of mitigation, management and monitoring measures to be employed for the wind farm. It is intended this is used as an outline to be updated and extended across the proposed extension area, allowing a single plan to cover both areas. Again the submission of the 'Mitigation Plan' will be covered by the imposition of a pre-commencement planning condition. Micrositing, to comply with all relevant buffers for bats and avoidance of peat, the submission and agreement of a 'Construction Environmental Management Plan (CEMP) which will include all details of construction techniques and ecological mitigation and a Habitat Management Plan (HMP) will also be addressed by suitably worded planning conditions.

No specific mitigation is considered to be required during the operation phase of the development, however, the (HMP) will continue to be delivered through the operation of the wind farm.

The ES confirms that no significant impacts are predicted during the construction, operation and decommissioning phases if the proposed mitigation, compensation and enhancement measures are implemented as detailed and this will be secured through planning conditions as set out above.

Natural Resources Wales have considered, inter alia, the Nature Conservation and Biodiversity chapter of the ES and has offered no objection to the application. NRW have stated:

'The site contains areas of Section 42 Priority habitat/BAP habitats, namely wet heath, marshy grassland and wet flushes. There are localised areas of deep peat present, as well as several upland streams. Our main concern regarding wind farms on these types of habitats is the potential to disrupt the hydrological pathways as a result of the construction of new tracks and hard standings, and this disruption can result in the drying out and permanent loss of these wet habitats.

The Environmental Statement concludes that the vast majority of these wet habitats will be avoided, and that design and construction methods will safeguard the hydrology. However, no specific information provided on these measures, and how exactly this will be achieved, and no information is provided on specific habitat mitigation or enhancement measures. The ecology chapter states that a Construction Environmental Management Plan (CEMP) and Habitats Management Plan (HMP) will be provided and agreed at a later stage. The CEMP should consider the methods of construction and hydrological implications of all tracks that affect areas of peat land in particular. We note the reference to the use of peat for surface dressing and formation of bunds alongside tracks. Peat should be used in this way as a last resort as it will quickly dry out and oxidise if it is not kept wet or placed in areas with a suitable hydrological regime. Whilst we welcome the undertaking by the applicant to provide a detailed Habitat Management Plan for approval post consent we would welcome further information in relation to the proposals for habitat mitigation and enhancement. There is currently no information regarding the area to be subject to improved management and no information regarding the likely nature of that management aside from a statement referring to reduced grazing. In addition we have reviewed the approved ELMP for the existing and adjacent Fforch nest windfarm upon which the applicants is proposing to base the HMP for this proposal. Whilst the plan suggests a number of positive proposals for mitigation and enhancement of habitats they are all referred to as 'possibilities' and it is unclear what is actually being delivered or proposed'.

On 1st September 2014, the applicant's agent submitted an 'Outline Habitat Management Plan', a copy of which has been forwarded to Natural Resources Wales for comment. No further observations have been received.

Subject to conditions that will secure the mitigation measures to minimise the effects and introduce ecological enhancements, the development complies with criterion 3 of Policy ENV18 and by extension all other relevant local and national policies.

Criterion 4: Appropriate arrangements have been made for the preservation and/or recording of features of local archaeological, architectural or historic interest;

The ES assesses the effects of the proposed development on archaeological and cultural heritage features and resources. Where required, mitigation measures are proposed to reduce identified significant effects of the proposed development during construction and operation. The ES confirms that the strategic development of the Pant-y-Wal wind farm extension has involved the iterative consideration of potential effects of alternative layouts of the site. The likely significant effects of the scheme on archaeology and heritage have been considered in terms of

construction, operational and decommissioning effects and are summarised as follows:

1. No direct effects on designated sites during the construction phase;
2. Limited visibility of construction of some of the turbines from the Nantymoel conservation area, but not of the supporting infrastructure - the significance of effect will be minor or moderate.
3. Limited impact on the four Grade II listed buildings within a 1km buffer of the development site;
4. St Cein's Church is Grade II* - the proposed development will not be visible from the churchyard because of the rise of the ground to the north-east from the church, and wide views do not form part of the site's character. The impact is considered to be of Minor (Negative).
5. The shepherd's hut which is of post medieval date is likely to be demolished as a result of the development. To reduce the impact of the development upon the shepherd's hut, it is recommended that the building be recorded prior to demolition in a manner suitable to its significance. Should foundations be present, provision should be made for a watching brief during removal. This will be carried out by a suitably qualified archaeologist in accordance with a written scheme of investigation agreed with Glamorgan Gwent Archaeological Trust.
6. The water channel and road are of local interest, however, due to the unknown state of preservation it is deemed of Low value. The proposed development is likely to result in the removal of these assets where they fall within the application site. The impact of the development on the water course and road can be mitigated by implementing archaeological evaluation in the form of a strip, map and sample on the areas which fall within the development site. Provision should be made for further sampling and recording, should significant archaeological remains be identified. The results of the archaeological mitigation will be subject to post-excavation analysis and publication in a format suitable to the significance of remains.
7. Heritage assets that lie outside the application site have also been considered - Garn Fach is a cairn of regional significance - safeguarding measures are detailed within the mitigation section to prevent damage or loss through construction; the Lockheed Hudson crash site (WWII site) - safeguarding measures are outlined in the mitigation section to prevent damage or loss through construction; In order to mitigate any damage to Garn Fach and the Lockheed Hudson crash site, it is recommended that suitably robust fencing be used to protect these areas. The placement should be made in consultation with an archaeologist in order to appropriately determine the extent of the asset. These areas should be suitably signposted and the locations of the assets be incorporated to any construction site inductions to avoid any accidental damage to these sites.
8. A number of scheduled and undesignated monuments fall within the ZTV (Zone of Theoretical Visibility) and their setting has been considered as receptors for indirect effect. Carn yr Hyrddod, Garn Llwyd, Garn Fawr, Garn Fach and Crug yr Afan are prehistoric burial cairns on raised ground close to the proposed development respectively. The settings of the cairns will be temporarily diminished, rather than permanently compromised.
9. The proposed development will have no direct or indirect physical impact on the Special Historic Landscape (SLA) of the Rhondda. The development will have an indirect, visual impact upon sixteen of the thirty-six character areas of the registered landscape (HLCAs). The significance of visual impact upon three of these areas (30, 32 and 34) has been assessed as Moderate. On the remaining thirteen of those affected, the significance of visual impact has been assessed as Slight. The overall effect of the proposed development upon the Special Historic Landscape has been assessed as of Slight significance.
10. There will be no direct effects on any designated sites during decommissioning.

11. The excavations for the access roads and construction compound are unlikely to require significant excavation and therefore, are unlikely to penetrate to archaeological levels. Effects on buried archaeological remains due to these features are considered to be not significant.

12. Should significant archaeological remains be identified during the topsoil stripping and intrusive ground works for the turbine bases and crane pads, an appropriate level of recording and sampling of remains to a level appropriate for their significance should be undertaken. The results of the archaeological mitigation will be subject to post-excavation analysis and publication in format suitable to their significance.

Glamorgan Gwent Archaeological Trust considers that the proposed works will require archaeological mitigation but do not object to the positive determination of this application. A condition will need to be imposed requiring the applicant to submit a detailed programme of investigation for the archaeological resource.

CADW has not raised any objections to the development in the context of the historic environment.

Subject to the imposition of a condition that will require the applicant to submit a detailed programme of investigation for the archaeological resource the development complies with criterion 4 of Policy ENV18 and all other relevant local and national policies.

Criterion 5: They can be safely accessed to permit regular maintenance without detriment to the environment or the public rights of way network;

The main transport implications for this development will be associated with the movements of commercial Heavy Goods Vehicles (HGVs) to and from the site during the construction phase of the development.

The route considered within the accompanying ES for use by construction traffic to and from the proposed site, is the A4119 and A4093. The roads form part of the main road network within Bridgend and the adjoining authority of Rhondda Cynon Taff County Borough Council and have been assessed and mitigation measures introduced for use by AILs (Abnormal Indivisible Loads) as part of the construction requirements of the existing wind farm.

The proposed extension to the wind farm will thereafter be accessed via the existing site entrance, which is located on the A4093, east of Glynogwr. The access tracks serving the existing Pant-y-Wal wind farm will be used to gain access to the site of the proposed extension. New extensions to the existing tracks will be required to serve the proposed turbines and will utilise in part, sections of existing forestry track through the Cwmogwr Forest.

Estimates of traffic generation associated with the construction phases of the project relate to the following activities: delivery and subsequent removal of plant and equipment to site for access track construction, site compound etc.; delivery of road stone for construction of access tracks; delivery of road stone for areas of crane operation; delivery of road stone for compound base areas, substation base area; delivery of transformer and substation equipment; delivery of cable used to connect the turbines; delivery of sand to backfill cable trenches; ready-mix concrete delivered to the site for construction of the turbine bases; formwork and reinforcing steel delivered to the site for construction of the turbine bases; delivery of turbine base rings; delivery and removal of mobile cranes used to erect the turbines; and delivery of the turbine equipment.

The ES summarises the traffic generation impacts as follows:

The percentage impact exercise shows that on days with no concrete deliveries, the impact of traffic does not warrant a detailed assessment of effects;

Furthermore, on days with concrete deliveries, the impact of the traffic on the A4119 does not warrant a detailed assessment of effects.

On days with concrete deliveries, the impact assessment indicates that during the highest month (month 8) the impact on the A4093 will be above the threshold test.

Looking at the other two months (6 & 7) when concrete deliveries will occur, the percentage impacts will be 30.4% and 37.8% indicating that the impact of the traffic on the A4093 will be above the threshold test in months 6 and 7.

The period of time that the impact will be above the threshold is temporary (7 - 9 weeks) and assessment of the A4093 shows that the road is of sufficient width and alignment to facilitate the expected HGV movements.

Mitigation measures would include the installation of wheel washing facilities on site to avoid vehicles carrying mud onto the public highway, deliveries of abnormal loads to be limited for quiet periods and with police escorts if appropriate, specific travel routes and time periods to and from the site to be defined for delivery vehicles and the implementation of a Traffic Management Plan to regulate overall vehicle movements.

The Head of Street Scene (Highways) has offered no objections to the scheme subject to conditions. Furthermore Welsh Government (Transport) has withdrawn their initial objection but have directed that a condition be imposed requiring the submission and agreement of a Traffic Management Plan (TMP) to show proposals for the transporting the AILs associated with the construction phase of this scheme. The TMP will include proposed timescales and delivery schedules as well as numbers, dimensions, weights, axle distribution etc. of delivery vehicles. The imposition of such a condition should address to some extent the objections offered to the proposed development by Rhondda Cynon Taff Council.

Subject to the imposition of the aforementioned condition (Traffic Management Plan) and the observations received from the Head of Street Scene (Highways), the development complies with criterion 5 of Policy ENV18 and all other relevant local and national policies.

In a separate response, the Rights of Way Officer has submitted observations regarding the implementation of the new internal access roads with regards to the Rights of Way network, a copy of which has been forwarded to the applicant's agent for consideration. A condition will be imposed to safeguard users of the Rights of Way network.

Criterion 6: They will not detrimentally affect local amenity by reason of noise emission, visual dominance, shadow flicker, reflected light, the emission of smoke, fumes, harmful gases, dust, nor otherwise cause pollution to the local environment;

Each aspect of potential impact on local amenity will be considered in detail with reference to the submissions in the ES, responses from consultees and with regard to objections received from local residents and the community councils.

Noise is a material planning consideration in the determination of wind farm applications and forms an important part of the submitted environmental statement accompanying this application. It should be noted that a number of the responses received have expressed concerns regarding noise associated with the existing and proposed wind turbines.

An assessment to establish the noise effects of the proposals with regard to identified sensitive receptors has been undertaken. A technical report, which provides a detailed noise assessment of the operational phase of the development in accordance with ETSU-R-97 (ETSU-R-97 is a document written by a Noise Working Group (NWG) of developers, noise consultants, environmental health officers and others set up in 1995 by the Department of Trade and Industry

(DTI) through the Energy Technology Support Unit) and existing planning permission criteria, is provided and forms part of the appendices to the ES. In addition, the cumulative effects of the proposals with the existing Pant-y-Wal and Fforch Nest wind farms have been considered within the assessment.

Following consideration of the technical data that accompanied the submitted noise assessment, the Group Manager Public Protection initially expressed the following concerns to the development:

'I would advise that section 5.7 on pages 9 & 10 of the Noise Assessment Report refers to the cumulative noise assessment. When the noise limits were originally set for the Fforch Nest and the original Pant-Y-Wal windfarms, the noise levels to be achieved at each receptor were reduced by 3dB, so that the combined contribution from both wind farms would not exceed the ETSU-R-97 criteria. When I had a discussion with the noise consultant, it was agreed that if the windfarm was operating as one site, instead of 2 individual sites, the noise criteria could then be increased by 3dB so the overall noise level would still not exceed the noise limits that had been set. However, this was subject to the developer obtaining consent to formally amending the individual limits for the site to this combined level. I made it clear that unless the consent was already granted, the individual limits for the site would still apply. I understand from our conversation that the developer hasn't even made a Section 73 application to formalise the arrangement. If this is the case, the cumulative noise impact should be re-submitted taking into account the individual limits set for the site. If this exceeds the ETSU criteria, mitigation measures must also be included. I should also be obliged if the noise consultant could provide confirmation of the following details, in addition to resubmitting the cumulative noise impact assessment if there has been no formalised agreement to combine the existing two sites:

* The measured LA90 background levels which have been used to derive the ETSU criteria for the site;

* Confirmation of whether the cumulative impact assessment was carried out using the sound power levels of the proposed turbines or the maximum limits they have derived in Table 5.12 and 5.13. If the suggested maximum limits in Tables 5.12 and 5.13 have not been used, this also needs to be taken into account.'

On 14th January 2015, a revised technical report detailing the potential noise impact, associated with the erection of 10 wind turbines (A & K now omitted), on identified sensitive receptors and including a cumulative wind turbine noise assessment to consider the effects of nearby proposed or consented developments including the wind farms at Pant-y-Wal, and Fforch Nest. The assessment compares predicted, combined and cumulative noise levels from the existing Pant-y-Wal and Fforch nest wind farms and proposed Pant-y-Wal extension with the existing ETSU-R-97 noise limits and provides four sets of proposed noise conditions for all three existing and the one proposed sets of turbines.

In response the Group Manager Public Protection has confirmed the following:

'Fforch Nest and Pant Y Wal were originally under the ownership of two different developers. Consequently, the noise limits that were originally set for each individual wind farm were such that when they were both operating together, the combined noise levels would not exceed the criteria specified in the ETSU-R-97 relative to background levels, which is the wind farm guidance that Local Authorities must have regard to. As co-operation between the two operators could not be guaranteed and that a direct apportionment of the noise from each wind farm could not be agreed upon, the maximum permitted noise levels were effectively shared between the two developments.

When dealing with the new extension to the Pant Y Wal wind farm, the applicant expressed a wish to have one set of noise limits for the wind farms that have existing consents as they are

now in the ownership of the same developer. Subsequently, two Section 73 applications were submitted to relax condition 29 of the two respective consents. However, the noise levels requested for the original Section 73 applications effectively meant there would be an increase of 3dB, which the Public Protection Department objected to.

Upon further meetings between the applicant and officers from Bridgend County Borough Council and Rhondda Cynon Taff, the noise report was re-submitted with 4 sets of revised noise levels for the proposed development and existing Pant y Wal and Fforch Nest Wind Farms. Without lowering some of the limits to the existing consents, the new development would not be able to meet the cumulative ETSU criteria as they had essentially 'used up' the noise allowance between the other two sites. The fourth set of 'limits' is in respect of the turbines which fall within Rhondda Cynon Taff. When added together, these 4 sets of proposed noise limits now meet the original ETSU criteria.

On the noise report received in January 2015, the Group Manager Public Protection offered no objection to the development but indicated that the applications submitted to this Council to vary the noise limits (P/14/540/RLX and P/14/541/RLX) should be determined prior to any permission being granted for the additional wind turbines that are subject of this application. Furthermore, to ensure effective control of the cumulative noise levels it is also critical that Rhondda Cynon Taff grant permission for the variation of the noise limits prior to a decision being made on the Pant y Wal extension.

On the basis that this authority has no control over a decision that is made by another Council, the applicant company commissioned a further noise assessment (March 2015) and this sought to demonstrate that individual and cumulative noise levels for the proposed and existing wind turbines in this authority's control would not exceed the ETSU-R-97 criteria, even if RCT resolved not to allow a variation and relied on the noise levels set under the original planning permission.

The report has been examined in detail and the Group Manager Public Protection has accepted its conclusions and offers no objection to the respective applications subject to conditions and an agreement that the applicant can no longer operate at the former limits and that all the other noise conditions attached to the original consents still apply.

Turning to the second part of criterion 6 'Visual Impact', this section will also consider 'Landscape' with reference to the relevant sections in the ES and having regard to the assessment undertaken by TACP on behalf of Bridgend County Borough Council.

Wind farms by their very nature are likely to raise issues in terms of their visual appearance and their setting within the landscape. The cumulative impact of the proposal with other wind farm developments (operational and consented) must also be considered. The potential impact of the development on the surrounding landscape, as well as its visual impact, forms a significant part of the submitted ES.

The Landscape and Visual Assessment (LVIA) is presented with separate sections dealing with effects on landscape, effects on visual amenity and cumulative effects. The LVIA references the appropriate local and national policies and is illustrated by plans and photographs, photomontages etc.

Planning Policy Wales Edition 7 generally aims to promote the development of renewable energy resources, subject to the acceptability of the impacts of the development proposals on the environment, in its own right or cumulatively with other similar developments. Technical Advice Note (TAN) 8 (2005) confirms that the seven Strategic Search Areas (SSAs) are where large scale wind farms should be located. The application site lies partly within and partly immediately adjacent to the southern part of Strategic Search Area F: Coed Morgannwg (SSA F). The Annex D Study resulted in parts of the originally defined SSA F being omitted from the 'Refined

Boundary'. The application site lies adjacent to the refined boundary used by this Authority in the south-eastern part of the refined SSA F area.

Local policy seeks to control development in the countryside and requires that, where appropriate, development is of the highest quality possible, whilst respecting and enhancing local character and distinctiveness and landscape character and being of an appropriate scale, size and prominence. Furthermore, policies seek to prevent development that will have an adverse impact on the integrity of the County Borough's countryside and the character of its landscape (Policies SP2 SP4 and ENV1 of the LDP refers). The existing wind farm and the proposed extension are located within the Northern Uplands Special Landscape Areas (SLA)(Policy ENV3 refers). Development in an SLA will only be permitted where:

- * It retains or enhances the character and distinctiveness of the SLA;
- * The design of the development reflects the building traditions of the locality in its form, materials and details and/or assimilates itself into the wider landscape;
- * The proposed development is accompanied by a landscape assessment which takes into account the impact of the development and sets out proposals to mitigate any adverse effects.

Policy ENV3 also seeks to protect the settings of an SLA with consideration of the views from those areas to the settlements of the County Borough.

The LVIA assesses the effects of the proposed wind farm extension on both the landscape and on the views available to people and hence their visual amenity.

The value attached to the landscape receptors is established by, first, considering policies and designations for the landscape and LANDMAP evaluations. LANDMAP is the national information system, devised by the Countryside Council for Wales (now Natural Resources Wales), for taking landscape into account in decision-making - there are 5 LANDMAP aspects: Visual & Sensory, Geological Landscape, Landscape Habitats, Historic Landscape and Cultural Landscape. All five LANDMAP Aspects were addressed, as relevant to the site and its landscape context in relation to the effects of the proposals. In addition, site-specific studies of the landscape of the site and its context were undertaken to identify the aspects of its physical components, characteristics and qualities that would be sensitive to the proposed development.

The LVIA confirms that the main findings of the assessment of landscape effects were that Major adverse effects throughout the life of the development would only occur on the Visual & Sensory aspect of the study site itself and its characteristic fine distant views from the higher land. In accordance with LANDMAP visual and sensory data, the application site has qualities of exposure and wildness and is an attractive largely unspoilt upland area (existing wind turbines and associated works aside) with a strong sense of place and good views. The effects during the operational period would be due to the change in the upland character to one containing large industrial structures and would be long term.

While the long term effect during operation on the LANDMAP Visual & Sensory aspect of the study site landscape was identified as adverse by the applicant's LVIA, the effect on views was assessed as neutral, because the views would still be available but likely to be filtered or framed by the proposed turbines, as can be experienced in the existing wind farm. For the other LANDMAP aspects of the site, the effect would be Negligible at all stages.

Major adverse effects for the short term of the construction period were identified for the landscape character of the site, arising from construction activity and ground disturbance, reducing to Moderate long term once the wind farm was in operation. Site features and vegetation would be affected to a Moderate degree during construction and public paths and access to a Minor degree, in both cases assessed as adverse effects.

No major effects were identified on the landscape context. The greatest effect identified was Moderate adverse or neutral and long term during operation of the wind farm, on the character of the setting of the settlements in the adjacent Ogmores Valley, on the overall landscape character and on the landscape of the Special Landscape Area.

Effects on visual amenity were identified by considering the Zone of Theoretical Visibility (ZTV) of the proposed wind farm and locations where views of the development would be offered. The location and scale of the turbines result in visual impact of varying degrees for different settlements within the Zone of Visual Influence. Visual effects may be modified by factors such as the openness or channelling of views and the sensitivity of the receptors, (the landscape, residents etc.) experiencing those views. It is not possible to define distances at which turbines would be prominent, dominant or overwhelming, though there is a close correlation between the degree of visual impact and distance.

The representative viewpoints, thirty in total, indicate the effect of the application on a range of receptors including residents and visitors as well as workers and recreational users of public open spaces. The LVIA identifies those locations where the visual effects were assessed as major or moderate and these are summarised as follows:

* Residents with direct or open views, oriented towards the development site:

For residents in nearby settlements in Ogmores Vale and Wyndham with open or direct views, the development would be a new feature in the view from parts of the settlements. For other residents with open views in Ogmores Vale and Nantymoel, the long term presence of the wind turbines during operation was assessed as a Major effect.

* Residents with partial or oblique or interrupted views; glimpsed or intermittent views:

Residents in Nantymoel with oblique views would experience no more than Moderate visual effect at any stage.

* Users of access land and open forest:

For users of access land within and adjacent to the development there would be Major visual effects at all stages. For users of other access land on the ridges to the south and south-west and within 5km of the study site, the effects during construction and decommissioning would be Moderate short term and Major long term during operation. For users of access land to the west, in Clydach Vale Country Park (RCT) and Werfa Mountain, the effects would be Moderate.

* Users of long distance footpaths:

Several long distance footpaths cross the zone of theoretical visibility of which the Ridgeway Walk follows high points and ridges to the south. The greatest effect assessed was Major long term during operations for parts of the route within 5km. Moderate visual effects were assessed during operations up 10km distance.

* Users of bridleways/public rights of ways:

The effect on views from the bridleway as it crosses the ridge to the southeast of the study site and the nearest public paths would be Major at all stages, but from a short length of the route. For other bridleway users crossing Werfa Mountain to the north and the southern end of Mynydd Llangeinwyr, views would be available from parts of the routes and the effect would be Moderate at all stages.

For people using local green spaces within 2km of the development, users of the open forest, public rights of way and cycle tracks and travellers along the road, a scenic route or accessing

visitor attractions, the visual effect would be no more than Moderate at any stage.

For other groups of viewers including users of cycle routes, visitors to the Rhondda LSHI, Margam Burrows, Ogmere Castle and Lady of Penrhys shrine, and travellers on roads, the visual effects would be Minor or Negligible at any stage.

The cumulative landscape and visual effects of the proposed development in conjunction with others, existing, under construction, consented and in planning has been examined. The main cumulative effects of the development would be with the existing Pant-y-Wal wind farm, enlarging its presence in the landscape as one larger wind farm. Interaction with other wind farms in the wider cumulative study area is however limited. It is concluded that development would be well contained within its local landscape.

In view of the major landscape and visual implications of the development, the Local Planning Authority commissioned TACP (UK) Ltd to review the Landscape and Visual Impact Assessment (LVIA) which forms part of the Environmental Statement and to review landscape capacity for the upland area of the proposed wind farm extension located at Pant y Wal, Bridgend. The TACP (UK) Ltd report advises on whether the LVIA has been carried out in accordance with appropriate guidance and that the conclusions are reasonable and valid. It considers the method used to undertake the LVIA, the comprehensiveness and accuracy of the assessments, reasonableness of conclusions and consideration of the proposals within the wider context of cumulative impact and landscape capacity of the location. The report includes an introduction, a review of the site and proposed development, a review of the Landscape Assessment (Methodology and Results), a review of Visual Effects (Methodology and Results), review of cumulative effects, policy context and a review of the capacity within SSA F and a final discussion and concluding section.

TACP has reviewed the method of landscape assessment and has suggested that the change in landscape effects on the Ogmere Valley have been underestimated. Furthermore, the emphasis of the landscape assessment on the site and local context appears to underestimate the impact on the character of the Mynydd y Aber and Cwm Ogwr which have different character, influences and sensitivity to change. Our consultant has confirmed that the majority of the turbines are located in the LANDMAP Visual Sensory aspect area CynonVS496 Mynydd Maesteg and form part of the visual context of the existing wind farm on the main upland plateau. The character of the area is one of exposed upland with some attractive views both within and out. The wind farm on Mynydd Maerdy is also visible to the south. This landscape character area is already influenced by wind turbines and, whilst the proposed turbines extend the wind farm element in the character area to the north west, it is considered not to have a significant adverse change to the overall character of the area.

Turbine A is located in Cynon VS550 Mynydd y Aber. This area covers the steep westerly facing slopes of the quite narrow Ogmere valley. It forms the boundary of the urban/rural interface and therefore provides an important rural backdrop to the settlements of Ogmere Valley (CynonVS148). Turbine A lies on the scarp slope approximately 600m from Price Town and is located within the visible context of the settlement and is therefore considered to have a high sensitivity to wind farm development. Turbines K and L are located in CynonVS148 Cwm Ogwr, which is classified as a mosaic lowland valley, and is a narrow enclosed valley with a wooded character. Mynydd y Aber and Mynydd Maesteg form an important backdrop to the settlements along Ogmere Valley. The visual connection to CynonVS550 and CynonVS496 is important to these valley settlements as they form the scenic setting to the valley landscapes and therefore the aspect area is considered to have a high sensitivity to wind farm development.

In terms of visual effects, the consultant acknowledges that the location and scale of the turbines result in visual impact of varying degrees for different settlements within the ZVI. Within the application site three of the twelve 125m high turbines are less than 1km from the settlement of Pricetown.

Most settlements affected by the development occur along the valley floors with the turbines elevated on the plateau and consequently the views are intermittent and limited by topography, landscape elements and structures. The roads and open spaces provide opportunities for viewing the turbines. Properties rising above the slopes would experience views of the turbines to greater effect. The development pattern of the settlements generally results in streets of terraced style housing that are focussed on the valley roads which generally restrict direct views from properties. However, where streets run perpendicular to the valley or where open spaces exist with views towards the hills, that form an important backdrop to these valley settlements, the turbines can appear a dominant or overwhelming feature within the view. Distance proves to be a significant factor in determining the degree of visual impact on settlements.

The proposed turbines A and K are generally the most visible from the settlements of Ogmere Valley. The valley sides are steep and the proximity and scale of the turbines becomes a significant visual feature within the backdrop to the settlements. The visual effect is heightened by the movement of the turbines especially where the blades are partially obscured.

In summary, it is considered that the main component of the application fits within the existing landscape and visual context with the majority of the proposed turbines for the extension being located on the open exposed plateau of Mynydd William Meyrick. These will generally be viewed as part of the existing wind farm. However turbines A, K and L are located in a more complex topography. Turbines A and K are the closest to the settlements and are most visible and Turbines A and B are less than 1km from settlements within Ogmere Valley.

The consultant's report has been the subject of discussion with the applicant's agent who recognises the influence of the visibility of turbines A and K on viewers in the settlements of Ogmere Vale. As indicated in the introduction to this report, the applicant company has agreed to the imposition of a condition removing Turbines A and K from the scheme. The removal of these dominant turbines would reduce the overall impact of the wind farm on the Ogmere Valley.

Residents have requested that consideration be given to omitting additional turbines other than just A and K. With reference to the photomontages and wire frame diagrams and topographical features, it is considered that the proposed turbines will be prominent from certain viewpoints in the Ogmere Valley. With the omission of turbines A and K, the remaining turbines would be set back far enough from the plateau edge for them not to loom over the valley. At no viewpoint within the built up areas of the Ogmere Valley is it considered that the proposed turbines (excluding A and K) would be so dominant that they would have an unpleasantly, overwhelming presence. It is considered that they would not have an unacceptable impact.

To further enable an assessment of the impact of the turbines on the Ogmere Valley and, in response to comments offered by Members at the Committee site inspection, additional annotated photomontages from viewpoints BC08 and BC16 have been submitted. The annotations of the turbine references have also been colour coded to represent the amount of the turbine towers visible in each view. Markers were added to the turbine models in the computer model from which the visualisations were generated at ground level and at the quarter, half and three-quarter points on the towers between ground level and nacelle (hub) level.

At the Committee site inspection, Members viewed the site from 4 locations in the Ogmere Valley. Turbine visibility has been calculated as follows:

Viewpoint BC01 (Site Inspection VP1):

Turbine B: Up to 50% (40m) of tower (and blade) visible
Turbine C: None of tower visible, (only blade)
Turbine D: Up to 25% (20m) of tower (and blade) visible
Turbine E: Up to 75% (60m) of tower (and blade) visible
Turbine F: Blades only visible

Turbine G: None of tower visible, (only blade)
Turbine H: Up to 50% (40m) of tower (and blade) visible
Turbine I: Blades only visible
Turbine J: None of tower visible, (only blade)
Turbine L: Up to 25% (20m) of tower (and blade) visible

Viewpoint BC08 (Site Inspection VP 2):

Turbine B: Blades only visible
Turbine C: Blades only visible
Turbine F: Blades only visible
Turbine I: Blades only visible

Viewpoint BC16 (Site Inspection VP 3):

Turbine B: Up to 50% (40m) of tower (and blade) visible
Turbine C: Up to 50% (40m) of tower (and blade) visible
Turbine D: Blades only visible
Turbine F: Up to 50% (40m) of tower (and blade) visible
Turbine G: Up to 25% (20m) of tower (and blade) visible
Turbine H: Blades only visible
Turbine I: Blades only visible
Turbine J: Up to 75% (60m) of tower (and blade) visible
Turbine L: Up to 50% (40m) of tower (and blade) visible

Viewpoint BC12 (Site Inspection VP 4):

Turbine B: Up to 75% (60m) of tower (and blade) visible
Turbine C: Up to 50% (40m) of tower (and blade) visible
Turbine D: Up to 25% (20m) of tower (and blade) visible
Turbine E: Blades only visible
Turbine F: Up to 25% (20m) of tower (and blade) visible
Turbine G: Blades only visible

Some Members expressed some concerns as to the accuracy of the viewpoint and wireline drawings. The applicant's agent has produced a detailed statement regarding accuracy of photography and visualisations.

APPRAISAL CONTINUED

The consultant has also offered guidance with regard to the wider policy context and, in particular, the capacity of Strategic Search Area F to receive any additional development. This is a matter that has also been highlighted by a number of respondents, including residents and the respective community councils.

National policy in the form of the Climate Change Act 2008 introduced a long term legally binding framework to tackle climate change. There is a government requirement to set a limit on the UK's net greenhouse gas emissions. There is a long term target of reducing carbon dioxide (CO₂) emissions by 34% by 2020 and by a minimum of 80% below 1990 levels by 2050. Through the Wales Energy Policy, the Welsh Government is committed to responding to the adoption of renewable energy production strategies. The Energy Policy Statement (2010) set the aim of, by 2050, meeting almost all of Wales' local energy needs from low carbon energy production.

A Renewable Energy Assessment and Energy Opportunities Plan produced by Bridgend County Borough Council and updated in November 2011 acknowledged that parts of the County were located within SSA F for large scale wind energy projects outlined in TAN 8. A refinement

exercise carried out by Ove Arup and Partners (Arup Report 2006) identified zones within the SSA and calculated the generation capacity of these zones.

SSA F Coed Morgannwg is located primarily within Bridgend and Rhondda Cynon Taff and an 'indicative generating capacity' of 290MW was identified, which equates to 150 turbines of 100m in height. This compares to the maximum capacity cited by the Gerrad Hassan Study, as referenced in the Minister's letter (John Griffiths) of July 2011 for SSAF of 430MW.

The Arup Report recommended that the largest turbines would be best accommodated within the northern parts of SSA F and on landform between 400-500m AOD. The proposed application proposes large-scale turbines adjacent to or outside the refined SSA F Zone 32 Mynydd William Meyrick.

The Arup Report noted that, for Zone 32, turbines on the northern and western edges of this zone are likely to have a dominating effect on settlements of Ogmere Vale. The Arup Report states that a refined/modified SSA has to be acceptable in accordance with the TAN 8 criteria which have particular relevance to landscape and visual effects. The Arup Report calculated the generation capacity of parcels of land, or zones, within the SSA. The capacity of Zones 31-34, collectively known as North of Evanstown, was 31MW. The existing Pant-y-Wal and Fforch Nest wind farms are located in this area. The PYWE lies adjacent to it. The existing Pant-y-Wal and Fforch Nest wind farms have a combined capacity of 35MW and therefore already exceed the identified capacity for this area.

The consultant has calculated that, in SSAF as a whole, there is currently between 423.9MW and 390.8MW either consented, operational or in planning. It should be noted that the maximum capacity for SSA F of 430MW is predominantly met and would be exceeded by the proposed development.

In view of the aforementioned comments it has been necessary to establish the current position in terms of 'capacity' and consultation with the neighbouring authorities and Welsh Government has been undertaken. The applicant's agent has also commented and has referred to the Ministerial letter of July 2011 which confirmed that the identified maximum capacity for SSA F (Coed Morgannwg) was 430MW. In assessing the extent to which this capacity has been achieved, the applicant's agent argues that account should be taken of wind farms that are: (a) operational; (b) under construction; and (c) consented but not yet built. Wind farms that are 'in planning' should, it is argued, be excluded because they may not receive planning permission and are, therefore, uncertain.

In SSA F wind farms falling into these three categories are as follows:

Operational:

- * Ffynnon Oer: 32.0MW
- * Pant-y-wal: 25.0MW
- * Fforch Nest: 27.5MW
- * Maerdy: 24.0MW

Under construction:

- * Mynydd Bwllfa: 22.5MW
- * Pen y Cymoedd: 228.0MW

Consented but not built:

- * Mynydd y Gelli/Llynfi Afan: 24.0MW

Total: 383.0 MW

It should be noted that Ffynnon Oer (32.0MW) was consented prior to the publication of TAN 8 and that the output from Pant-y-wal/Fforch Nest combined is constrained by export to a maximum of 46.0MW (a shortfall of 6.5MW). Whichever figure is chosen, therefore, it falls well short of the 430MW maximum capacity referred to by the Minister.

The applicant's agent acknowledges that there is some debate as to whether, in making this assessment, regard should be had to the wind farms that lie outside the SSA but within a 5km 'buffer' of its boundary. The reference to 5km comes from paragraph 2.2 of Annex D of TAN 8, being the study area 'recommended to allow consideration of technically feasible areas for possible wind turbines.' The buffer zone was not used for assessing the maximum capacity of the SSAs as identified by Garrard Hassan.

There is no guidance from the Welsh Government as to whether or not turbines within the 5km buffer should be included or excluded. This lack of guidance was recognised by the Planning Inspectors in recent appeal decisions (Mynydd y Gelli decision and the Inspector's report on Bryn Llywelyn).

In the Bryn Llywelyn case, the Inspector reported both sides of the debate and, in doing so, acknowledged that:

'On a strict interpretation, it is arguable that, as the finite environmental capacity relates to the defined SSA, any turbines outside the SSA should not be counted.'

In that case, it was not necessary for the Inspector to consider the effect of turbines within the 5km buffer as he concluded that the capacity of the related SSA would be exceeded anyway.

If turbines within the 5km buffer of SSA F are included, the maximum figures would be as follows:

Operational:

* Mynydd Portref: 9.35MW

* Ferndale : 6.40MW

Consented:

* Headwind Taff Ely (extra): 5.00 - 8.50MW

* Mynydd Portref extension: 12.00MW

Total: 32.75 - 36.25MW

Even in this (worst-case) scenario, the maximum capacity of SSA F is not exceeded, as the following shows:

* Maximum capacity of SSA F	430.00MW
* Turbines in SSA F	383.00MW
* Surplus capacity	47.00MW
* Turbines in 5km buffer	32.75/36.25MW
* Surplus capacity	10.75/14.25MW

The applicant's agent maintains that figures for turbines within the 5km buffer should be treated with caution. The Ferndale wind farm (6.40MW) pre-dates TAN 8 and only four of the turbines in the recently-consented Mynydd Portref extension lie within the 5km buffer: the remainder (8.00MW) lie outside it. Excluding these would increase the surplus capacity to 25.15/28.65MW,

which is greater than the 25MW for the current application.

The applicant's agent also draws attention to paragraph 2.14 of TAN 8, which appears under the heading - 'Onshore Wind in Other Areas' (that is, outside the SSAs):

'There will also be opportunities to re-power and/or extend existing wind farms which may be located outside SSAs and these should be encouraged provided that the environmental and landscape impacts are acceptable.'

It appears from this that re-powering and extensions outside the SSAs should properly be treated as additions and, in recognition of that, Headwind Taff Ely and Mynydd Portref Extension should be omitted from the calculation.

The applicant's agent has concluded that, whichever figures are used, the maximum capacity of 430MW for SSA F has not yet been exceeded. Furthermore, approving the current planning application subject to conditions would add a maximum of 25MW and this would not lead to the maximum capacity for SSA F being exceeded.

The worst-case scenario, that being the inclusion of all turbines within the 5km buffer and those turbines in the Mynydd Portref extension which lie outside the 5km buffer, has also been considered. In this scenario the capacity of 430 MW would be slightly exceeded. Attention has however been drawn to a number of appeal decisions whereby exceeding the SSA capacity was not regarded by Inspectors as a decisive issue or a reason that should prevail when determining the appeals.

It is considered that the policies of the LDP should be the starting point for considering the merits of this planning application. Its adoption post-dates the Ministerial letter of July 2011 which would have been taken into account by the Council in its formulation of Policy ENV18 and by the Inspector who examined the plan (in 2012-13). The policy makes no reference to the capacity limits of either SSA F or the refined SSA shown on the LDP Proposals Map. Policy ENV18 allows for large scale (25MW or more) wind farm developments to be approved both inside the much smaller, refined SSA and outside it. The explanatory text to the policy (at paragraph 4.6.9) confirms that, for schemes located outside the refined SSA, the Council will operate a case-by-case approach.

In this case, it is considered that a reasonable assessment would conclude that the capacity of SSA F is not exceeded by the proposal. Even on a worst-case scenario (which counts turbines outside both the SSA and the 5km buffer) the capacity figure for SSA F would be only slightly exceeded. This would not be sufficient to justify the refusal of an otherwise acceptable scheme especially when the development plan criteria, as set out in Policy ENV18, are met and these include all relevant environmental and amenity criteria.

Allowing for proposed mitigation, the effects of the development on landscape and visual amenity would be restricted to residents in nearby settlements and users of some access land and routes within and near the site. Cumulative landscape and visual effects, such as visual intrusion on settlements, valued landscapes and routes, have been assessed and are not considered to be significant.

Shadow flicker has the potential to cause nuisance and disturbance to occupants of affected properties and buildings and this has been highlighted by objectors as grounds for objecting to the proposed development.

Wind turbines, in common with all structures, cast shadows in sunny conditions. The shadows vary in position and length according to the direction of the sun, the height of the turbine and its angle in the sky. The rotating blades of wind turbines can cast moving shadows on the ground, as they pass in front of the sun, resulting in changes in light intensity, a phenomenon referred to

as 'shadowing'. When the shadow of a moving turbine blade is cast across small apertures, such as the windows of a property, people within the property may experience the apparent flicking on and off of the blades shadow. This is known as shadow flicker.

A study has been undertaken to identify whether shadow flicker is likely to occur at residential properties in the vicinity of the proposed wind turbines. The analysis identified three turbines with the potential to cause shadow flicker events on properties - Turbines A, B and C. Due to the location of the properties in relation to the turbines all shadow flicker events would occur during the morning; there are no evening events. Turbine A causes shadow flicker on 79 days per year (21.6%), Turbine B for 95 days (26%) and Turbine C for 27 days (7.4%). The higher level of shadow flicker occurrences anticipated from Turbine A is due to its location being closer to more properties. Being located the furthest away from a property, Turbine C has the lowest number of predicted events. Turbine B lies between the other two turbines both geographically and in terms of predicted shadow flicker events.

As significant effects are identified, mitigation measures are proposed which is the shutdown of the wind turbine(s) that are causing the shadow flicker effects. This can be achieved using a photosensitive device linked to the turbine control mechanisms to measure the intensity of sunshine occurring at a particular moment. If the intensity is sufficient to cause a shadow flicker effect and the time and date coincide with dates and times when shadow flicker is calculated to occur, the wind turbine(s) would be shut down immediately. Shut down would continue until the time period when shadow flicker would occur has passed or until sun intensity reduces to a level where shadow flicker would not occur. The omission of Turbine A from the scheme will reduce further the 'shadow flicker' effects on the related properties. A planning condition will also be imposed to ensure the implementation of the proposed mitigation.

Wind turbines, as with any large structures, can potentially interfere with electromagnetic signals, particularly television and radar. Turbines also have the ability to affect radar performance and interfere with communication networks. Construction activity will also have to take cognizance of existing ground-based infrastructure and aviation safeguarding requirements

Consultation with all the relevant organisations has taken place and no adverse comments have been received.

Where interference to television reception is predicted developers are frequently required to submit and agree a scheme to rectify any problems. In the majority of cases developers have been able to remove the interference. Interference on communication systems is considered to be negligible as this is more easily avoided by the wind farm design following consultation with the relevant bodies.

In this case the ES has not identified any adverse impacts and has indicated that extensive consultation had been carried out with organisations that may be affected by electromagnetic interference with no objections received.

All organisations with aviation interest have been consulted and none have objected to the development.

The issue of ground instability has been raised in the objections. Planning Policy Wales indicates that the responsibility for determining the extent and effects of any ground instability or risk rests with the developer. It is therefore for the developer to ensure that the land is suitable for the development proposed (Policy ENV7 of the LDP is relevant).

The ES sets out the methodology and findings of any interactions between the proposed wind farm development and the existing geological, hydrogeological and hydrological environment on site. The legislative and policy context is clearly stated as is the methodology and sources of data. Baseline conditions are described with reference to site history, topography and ground

conditions. The hydrogeology and hydrology characteristics of the site are described with reference to information provided by Natural Resources Wales and a site evaluation. Records of water abstraction licences have been noted as have the private water supplies that may be located within the zone of influence of the wind farm. Detailed peat surveys were also undertaken and informed the baseline assessment. The initial design of the site was then optimised to have regard to constraints related to existence of peat, geotechnical features (e.g. slope stability, shallow coal mining and coal spoil stability). A series of measures are proposed to mitigate any adverse impacts of the development and they include:

- * Drainage ditches to be constructed on up-gradient edge of trackways, with arising soils used as bund on down-gradient side.
- * Silt traps designed into all drainage ditches where necessary and where in close proximity to peat or watercourses.
- * Sustainable urban drainage measures are to be included in the design of the infrastructure.
- * Use of clay lining to upslope (eastern) edge of trackway or crane-pad construction in order to prevent formation of preferential pathways.
- * Use of impermeable breaks along sloping trackways to prevent creation of preferential pathways.
- * Retention and restoration of peat elsewhere on site.

Potential approaches to mitigation through a Construction Environmental Management Plan are to include:

- * Working practices based on PPG notes, such as appropriate chemical storage in areas of hardstanding and bunded to hold 110% of the storage capacity, high standards of maintenance of all machinery to reduce risk of leakage, contingency plans for spillages etc.
- * Use of sheeting on any temporary stockpiles of mining waste and reinstatement of the colliery spoil with vegetation cover as soon as possible.
- * Temporary diversion of streamflow flow during construction through use of a sump and pump to bypass the section of channel being constructed over/ under;
- * Construct tracks and trenches in small stretches in order to minimise the exposure or base soil.
- * Programme for and implementation of regular maintenance of silt traps and other mitigation measures.

The applicant has designed the layout of the turbines in order to minimise potential geological and surface/ ground water effects. The presence of peat and marshy ground has resulted in the relocation of certain turbines and the realignment of the access track and excavations will be positioned away from known peat /boggy areas. The mined areas were considered to be at sufficient depth to minimise impact on ground surface. Boreholes will be sunk at each turbine location in order to confirm ground conditions and foundation design. Any shallow mine entries alongside the access track will be assessed as part of the access road construction. All turbines will be located at sufficient distance from steep slopes to avoid any stability issues. There would be designated areas to be identified for fuel storage and concrete truck washout.

The applicant has also indicated that suitable ground investigation reports will be undertaken prior to development, however, this is not considered to be an issue in this case. No adverse

observations have been received from the Natural Resources Wales or any other consultee.

It is considered therefore that the implementation of specific mitigation measures during the construction phase will ensure that any impacts will be minor and quickly controlled, with no significant negative impact.

A number of residents have expressed concerns that the unsightly turbines are contrary to the Council's policy of encouraging tourism in the area. Chapter 10 of the ES acknowledges that the development of a wind farm may have impacts on land use and socio-economic interests including land classification, impact on farming, forestry, public access, employment and tourism.

The ES suggests that tourism plays a relatively small role in the economy of the county borough. The Council's own tourism strategy acknowledges that tourism will never be the dominant activity in Bridgend, but maintains that it has an important role to play in contributing to local prosperity and quality of life (Bridgend County Tourism Strategy 2011-2016, The Tourism Company, no date, page 31 refers). The ES states that, at present, there is little tourism activity in the area in which the wind farm extension is proposed, although there are footpaths and bridleways in the vicinity from which the development will be seen. Some parts of Bridgend county borough are particularly important for tourism. They include the coastal resort of Porthcawl, the Glamorgan Heritage Coast and Kenfig Nature Reserve. In view of the distance of the application site from these locations, it is considered that the development would have no effect on their tourism potential.

The perception that wind farms negatively affect the tourism of an area has been explored in a series of studies over the last 15 years or so with the conclusion of the leading research being that there will be neither an overall decline in the number of tourists visiting an area nor any overall financial loss in tourism-related earnings as a result of a wind farm development. A 2014 Welsh Government study into the economic impacts of windfarms also confirmed that the case studies have not revealed any evidence of significant impacts on tourism to date.

The ES concludes that the evidence strongly suggests that the proposed extension to the existing Pant-y-Wal wind farm will not negatively affect tourism in the county borough and, in particular, visitor numbers.

It is considered that the overall effect of the proposed wind farm extension on tourism is anticipated to be neutral and would not provide sufficient grounds for refusing planning permission.

The proposed development has been assessed against all local and national policy and all other material considerations. Any negative impacts that have been identified have been balanced against the benefits of the proposal and the contribution it would make to the generation of renewable energy.

CONCLUSION

National policy advocates the provision of wind farms to achieve targets for renewable energy provision. The Welsh Government has stated that good progress is being made towards the 2015/17 targets but meeting the targets beyond will be challenging and there will be a need for more renewable energy projects to meet them. There is a clear policy imperative of both the UK and Welsh Government which is reflected in policies in the Bridgend Local Development Plan.

There can be no doubt that the extension to the Pant-y-Wal wind farm will have some negative effects on the wildness of the site and its natural beauty, albeit the landscape character has already been altered by the presence of the existing wind farm. There would be consequent effects on the recreational enjoyment of the walkers along some access land and routes within

and near the site as there would be on the landscape character and views from built up areas in the Ogmore Valley.

The proposed turbines (with the omission of A and K) would not be so dominant that they would have an unpleasantly, overwhelming and unavoidable presence when seen from residential areas (principally the Ogmore Valley), either on their own or in combination with the existing Pant-y-Wal/Fforch Nets wind turbines. Furthermore, there would be no significant adverse effects on living conditions within homes, subject to conditions, one of which will seek to militate against the effects of shadow flicker. Nor would there be unacceptable effects on residential amenity in streets and gardens. Impacts, including those of operational and construction noise, traffic generation and possible effects on the water environment would be minimised by the use of planning conditions.

The overall planning balance must consider the significant amount of green energy that would be produced by the development which would make a significant contribution towards the Welsh Government aspirations for wind energy in Wales. Though the proposed extension is sited partly within and partly immediately adjacent to the Strategic Search Area, the development lies within the 5km buffer zone where such development is largely supported by national and local policy. The adverse impacts of the development which have been identified would be outweighed by the substantial benefit in the public interest of the renewable energy that will be provided by this development.

When taking all material planning considerations into account the balance of planning judgement is that planning permission be granted subject to the applicant/developer first entering into a Section 106 agreement and subject to the imposition of the conditions below.

RECOMMENDATION

(A) The applicant enters into a Section 106 Agreement to:

(i) Provide a Financial Security to ensure that decommissioning works are carried out following cessation of operation of the development.

(B) The Corporate Director Communities be given plenary powers to issue a decision notice granting consent in respect of this proposal once the applicant has entered into the aforementioned Section 106 Agreement, but not before the applicant has also entered into Section 106 agreements and the planning permissions have been granted for the related Section 73 planning applications P/14/540/RLX and P/14/541/RLX and subject to the following conditions:-

1 The planning permission hereby granted is for turbines: B, C, D, E, F, G, H, I, J and L only as shown on drawing A077143 - Turbine & Track Layout 3.02 dated April 2014. This consent does not relate to Turbines A and K and the associated access tracks.

Reason: For the avoidance of doubt as to the extent of the permission and in the interests of safeguarding the visual amenity and protecting the existing landscape.

2 The permission hereby granted shall endure for a period of 25 years from the date when electricity is first exported from a wind turbine within this site to the electricity grid network ('First Export Date'). Written confirmation of the First Export Date shall be provided to the Local Planning Authority within 1 month of the First Export Date.

Reason: In recognition of the expected lifespan of the wind farm and in the interests of safety and amenity once the plant is redundant.

- 3** Not later than 12 months before the expiry date of this permission, a decommissioning and site restoration scheme shall be submitted for the written approval of the Local Planning Authority. Such scheme will include the management and timing of works and a traffic management plan to address highways issues during the decommissioning period. Full restoration of the wind farm site shall be completed within 24 months of the expiry date of this permission and the site shall be decommissioned in accordance with the scheme.

Reason: In the interests of visual amenity and landscape protection and in the interests of safety and amenity.

- 4** If any wind turbine fails to produce electricity to the grid for a continuous period of 12 months if so instructed by the Local Planning Authority, the wind turbine and its associated ancillary equipment shall be removed from the site within a period of 6 months from the end of that 12 month period.

Reason: In the interests of visual amenity and to ensure that the turbines produce electricity whilst in situ and that they are removed from the land if they cease to function

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

Reason: In the interests of visual amenity and landscape protection.

- 6** All wind turbines blades shall rotate in a clockwise direction.

Reason: In the interests of visual amenity and landscape protection

- 7** The overall height of the wind turbines shall not exceed 125m to the tips of the turbine blades.

Reason: In the interests of visual amenity and landscape protection

- 8** Notwithstanding any design or colour approved by the Local Planning Authority pursuant to condition 5, all wind turbines shall be of a 3 bladed configuration and shall be of a semi-matt finish and shall not display any prominent name, sign, symbol or logo on any external surfaces.

Reason: In the interests of visual amenity and landscape protection.

- 9** The turbines shall not be illuminated and there shall be no permanent illumination on the site at any time

Reason: In the interests of visual amenity and landscape protection

- 10** Subject to the allowance for micro-siting provided in this condition, the turbines shall be erected at the coordinates indicated on the Turbine and Track Layout (Reference: A077143 3-02). Variations to the indicated position of any turbine(s) shall be permitted by up to 30 metres in any direction. A plan showing the position of the turbines as built shall be submitted within one month of the First Export Date.

Reason: To comply with the environmental assessments undertaken of the proposed development and to take account of local environmental conditions.

- 11** All cabling within the site shall be installed underground except where it exits the substation.

Reason: In order to safeguard the amenity of the landscape.

- 12** Construction of the substation shall not commence until exact details of the dimensions, appearance and external finishes of the building and the fencing and surface finish of the compound have been submitted to and approved in writing by the Local Planning Authority. The development shall be constructed in accordance with the approved details.

Reason: In the interests of visual amenity.

- 13** No development shall take place until a Construction and Traffic Management Plan (CTMP) has been submitted to and approved in writing by the Local Planning Authority. The development shall be carried out in compliance with the approved scheme. The CTMP shall include:

i. The proposed construction routes, including routeing plans at 1:2500 scale for all traffic including AIL showing swept path analysis from the point of entry onto the highway network to the site and in reverse for decommissioning;

ii. Construction vehicle routeing plans at 1:2500 scale for all traffic including AIL showing highway mitigation required and land ownership boundaries including identified holding areas, passing areas and layover area. Any highway mitigation shall include supporting HD 19/03 Safety Audit documentation.

iii. Site access highway design plans at 1:2500 scale that shall include supporting HD 19/03 Safety Audit documentation;

iv. Detailed schedules of the management of junctions to, and crossings of, the public highway and other public Rights of Way during delivery of AIL, construction materials and other operating equipment;

v. The provision of delivery schedules detailing the time and date of movements, nature of delivery vehicles including details of AIL vehicle parameters, gross weight, number of vehicles in convoy size, dimensions (width, length, height) and weight (total vehicle with load and axle loading);

vi. Details of AIL escorts, including where and when along the route private vehicles, banksman and Police vehicles escorts will be used;

vii. Informative road signage warning other users of forthcoming construction traffic movements;

viii. An impact assessment of AIL on all highway structures on the affected route, including bridges, culverts, retaining walls, embankments and drainage features;

ix. Provision of temporary signs and traffic control where necessary;

x. There shall be no access to the site other than via the existing access track;

Reason: In the interests of highway safety and the free flow of traffic

- 14** No development shall take place until a Construction Method Statement (CMS) 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 CMS. The CMS

shall be implemented and maintained for the duration of the construction works and shall address the following matters:

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

ii. A full drainage scheme for the management of surface water and foul water. This shall detail both the temporary and permanent drainage strategy and include details of the hydraulic calculations to control flow rates and detail the measures to be implemented.

iii. 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 phases.

iv. Details of the timing of works and methods of working for cable trenches and foundation works.

v. Details of the timing of works and construction of the anemometry mast and construction compound.

vi. Dust management.

vii. Disposal of surplus materials.

viii. A construction noise management plan (including identification of access routes, locations of materials lay-down areas, details of equipment to be employed, operations to be carried out, mitigation measures and a scheme for the monitoring of noise).

ix. Temporary site illumination.

x. The construction of the access into the site and the creation and maintenance of visibility splays.

xi. Wheel cleaning facilities.

xii. Arrangements for keeping the site entrance and adjacent public road clean.

Reason: In the interests of environmental protection and the minimisation of likely significant environmental effects.

- 15** No development shall take place until a site investigation has been carried out in accordance with a methodology first submitted to and approved in writing by the Local Planning Authority. The results of the site investigation shall be submitted to the Local Planning Authority before any development begins. If any land instability issues are found during the site investigation, a report specifying the measures to be taken to remediate the site to render it suitable for the development shall be submitted to and approved in writing by the Local Planning Authority. Remedial measures shall be undertaken prior to the commencement of the development.

Reason: In the interests of safety.

- 16** Should any contaminated material be observed (visual or olfactory), which has not been previously identified, then no further development shall be carried out until the developer

has undertaken a site investigation to determine the nature and extent of the contamination. In the event that contamination is confirmed the developer must liaise with the Local Planning Authority on measures required to protect surface water and groundwater interests. This may include undertaking a risk assessment and derivation of appropriate remedial targets.

Reason: To protect the quality of controlled waters in the area.

- 17** No development shall commence until a scheme for the comprehensive and integrated drainage of the site showing how all surface water, including the means of drainage from all 'hard surfaces' and structures within the site and accesses to the local highway network will be dealt with, including the requirement for Flood Defence Consent, has been submitted to and approved in writing by the Local Planning Authority. The approved scheme shall be implemented and maintained for the duration of the construction works and operation of the development. 'Hard surfaces' includes access tracks within the site, the substation compound, temporary construction and laydown areas, turbine pads and crane pads.

Reason: To ensure that effective drainage facilities are provided for the proposed development and that flood risk is not increased.

- 18** No development shall take place until a scheme for the protection of public Rights of Way during the construction period within the site, 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 scheme.

Reason: to protect the amenity of walkers and other users of the Rights of Way.

- 19** No barbed wire shall be used along the access track.

Reason: To protect the amenity of walkers and other users of the Rights of Way.

- 20** No development shall take place until the applicant, or their agents or successors in title, has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation which has been 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.

- 21** No development shall commence until the archaeological sites identified as being in the development area in the environmental statement have been fenced to a standard agreed with the Local Planning Authority. Throughout the development no works will be undertaken within the area surrounded by the fencing without the written consent of the Local Planning Authority.

Reason: In order to ensure that accidental damage is not caused to the archaeological sites

- 22** No development shall take place until a Construction Environmental Management Plan (CEMP), following the principles set out in the Environmental Statement, 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 mitigation of any impacts on the species and habitats within the development site 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: For the protection of nature conservation interests and in the interests of visual amenity.

23 No development shall take place until a Habitat Management Plan (HMP) covering the application site has been submitted to the Local Planning Authority. The HMP shall make provision for the subsequent submission of detailed phased specific habitat management plans. Construction of any phase of the wind farm shall not commence until the related phase has been agreed in writing by the Local Planning Authority. The approved HMP and any subsequent revisions that are agreed in writing by the Local Planning Authority, shall be implemented for a period commencing from the First Export Date and ending 25 years later, or when the turbines are decommissioned, whichever is the earlier. The HMP shall include proposals for:

- i. Objectives for the management and restoration of the natural habitat;
- ii. Best practice methods for the management and restoration of the natural habitat of the site;
- iii. Ecological management areas defined by a map or maps;
- iv. The restoration and maintenance of the natural hydrological regime of peat bodies, their carbon storage and sequestration potential;
- v. The restoration and maintenance of blanket bog, wet and dry heath and marshy grassland or other suitable natural habitat as appropriate to soil conditions, hydrology and topography, with bog being the objective for deep peat;
- vi. The management of stream corridors for nature conservation potential;
- vii. The management of breeding habitats away from turbines where this does not compromise the objectives for peat and bog;
- viii. The improvement of the biodiversity potential of the site by maintaining and improving wider habitats and ecological functionality, with an emphasis on supporting habitats for appropriate statutory protected species; and
- ix. Provision for monitoring, review and revisions to the HMP where monitoring identifies that the objectives of the HMP are not being achieved.

Reason: To protect and encourage habitats in the interests of biodiversity and visual amenity.

24 Construction work shall only take place between the hours of 07:00 - 19:00 on Monday to Friday inclusive, 07:00 - 13:00 hours on Saturdays with no such working on a Sunday or local or national public holiday. Outside these hours, development at the site shall be limited to emergency works and dust suppression. The receipt of any materials or equipment for the construction of the site, other than turbine blades, nacelles and towers, is not permitted outside the said hours, unless otherwise agreed in writing by the Local Planning Authority having been given a minimum of two working days prior notice of the

occurrence of the proposed event.

Reason: In the interests of the amenities of the area.

- 25** The rating level of noise immissions from the combined effects of the wind turbines (including the application of any tonal penalty) when determined in accordance with the attached Guidance Notes, shall not exceed the values for the relevant integer wind speed set out in, or derived from, Tables 1 and 2 attached to these conditions at any dwelling. For the purpose of this condition a 'dwelling' is defined as a building within Use Class C3 of the Town and Country Planning (Use Classes) Order 1987 which lawfully exists or has planning permission at the date of this consent.

Reason: To protect the amenity of residents.

- 26** 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.

Reason: To protect the amenity of residents.

- 27** 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.

Reason: To protect the amenity of residents.

- 28** Within 21 days from receipt of a written and reasonable 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 immissions 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.

Reason: To protect the amenity of residents.

- 29** The assessment of the rating level of noise immissions shall be undertaken in accordance with an assessment protocol that shall be 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, whether noise giving rise to the complaint contains or is likely to contain a tonal component, and also the range of meteorological and operational conditions (which shall include the range of wind speeds, wind directions, power generation and times of day) to determine the assessment of rating level of noise immissions. The proposed range of conditions shall be those which prevailed during times when the complainant alleges there was disturbance due to noise, having regard to the written request of the Local Planning Authority under condition 28, and such others as the independent consultant considers likely to result in a breach of the noise limits.

Reason: To protect the amenity of residents.

- 30** Where a dwelling to which a complaint is related is not listed in Table 3 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 1 and 2 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 immissions resulting from the combined effects of the wind turbines when determined in accordance with the attached Guidance Notes shall not exceed the noise limits approved in writing by the Local Planning Authority for the complainant's dwelling.

Reason: To protect the amenity of residents

- 31** The wind farm operator shall provide to the Local Planning Authority the independent consultant's assessment of the rating level of noise immissions 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 condition 28, 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 immissions.

Reason: To protect the amenity of residents.

- 32** Where a further assessment of the rating level of noise immissions 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 condition 29 above unless the time limit has been extended in writing by the Local Planning Authority.

Reason: To protect the amenity of residents.

- 33** Once the Local Planning Authority has received the independent consultant's noise assessment required by this condition, including all noise measurements and any audio recordings, where the Local Planning Authority is satisfied of an established breach of the noise limits set out in the attached Tables 1 & 2, upon notification by the Local Planning Authority in writing to the wind farm operator of the said breach, the wind farm operator shall within 21 days propose a scheme for the approval of the Local Planning Authority. The scheme shall be designed to mitigate the breach and to prevent its future recurrence. This scheme shall specify the timescales for implementation. The scheme shall be implemented as reasonably approved by the Local Planning Authority and according to the timescales within it. The scheme as implemented shall be retained thereafter unless otherwise agreed with the Local Planning Authority.

Reason: To protect the amenity of residents.

- 34** For the purposes of demonstrating compliance with the levels stated in Tables 1 & 2,

during the first 12 months of operation, the wind farm operator shall, at its expense, employ a consultant approved by the Local Planning Authority to assess the level of noise immissions from the wind farm, according to the measurement protocol pursuant to condition 29 to be agreed by the Local Planning Authority.

Reason: To protect the amenity of residents.

- 35** Upon request of the Local Planning Authority, following a complaint to it about noise immissions from either the existing Pant Y Wal Wind Farm or the Fforch Nest Wind Farm, the wind farm operator shall, if requested shut down the turbine for such period that the Local Planning Authority reasonably requires, to enable an assessment to be carried out either by a consultant or the Local Authority to determine compliance with the noise limits in Tables 1 and 2 and/or to enable isolated monitoring to be undertaken to determine the contribution of noise from each wind farm.

Reason: To protect the amenity of residents.

- 36** Wind turbines B and C shall not begin operation until a scheme for the avoidance of any shadow flicker effect at any dwelling which lawfully exists or had planning permission at the date of this permission has been submitted to and approved in writing by the Local Planning Authority. The scheme shall be implemented as approved.

Reason: In the interests or residential amenity.

- 37** No turbine shall be erected on site until a scheme to secure 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 protecting the amenity of residents.

* THE FOLLOWING ARE ADVISORY NOTES NOT CONDITIONS

National policy advocates the provision of wind farms to achieve targets for renewable energy provision. The Welsh Government has stated that good progress is being made towards the 2015/17 targets but meeting the targets beyond will be challenging and there will be a need for more renewable energy projects to meet them. There is a clear policy imperative of both the UK and Welsh Government which is reflected in policies in the Bridgend Local Development Plan.

There can be no doubt that the extension to the Pant-y-Wal wind farm will have some negative effects on the wildness of the site and its natural beauty, albeit the landscape character has already been altered by the presence of the existing wind farm. There would be consequential effects on the recreational enjoyment of the walkers along some access land and routes within and near the site, as there would be on the landscape character and views from built up areas in the Ogmore Valley.

The proposed turbines (with the omission of A and K) would not be so dominant that they would have an unpleasantly, overwhelming and unavoidable presence when seen from residential areas (principally the Ogmore Valley), either on their own or in combination with the existing Pant-y-Wal/Fforch Nets wind turbines. Furthermore, there would be no significant adverse effects on living conditions within homes, subject to conditions, one of which will seek to militate

against the effects of shadow flicker. Nor would there be unacceptable effects on residential amenity in streets and gardens. Impacts, including those of operational and construction noise, traffic generation and possible effects on the water environment would be minimised by the use of planning conditions.

The overall planning balance must consider the significant amount of green energy that would be produced by the development which would make a significant contribution towards the Welsh Government aspirations for wind energy in Wales. Though the proposed extension is sited partly within and partly immediately adjacent to the Strategic Search Area, the development lies within the 5km buffer zone where such development is largely supported by national and local policy. The adverse impacts of the development which have been identified would be outweighed by the substantial benefit in the public interest of the renewable energy that will be provided by this development.

When taking all material planning considerations into account the balance of planning judgement is that planning permission be granted subject to the applicant/developer first entering into a Section106 agreement and subject to the imposition of the conditions below.

The notes, table and plan to be read in conjunction with conditions 25-35 further explain these conditions and specify the methods to be deployed in the assessment of complaints about noise immissions from the wind farm and are attached as separate appendix to this decision notice.

MARK SHEPHARD
CORPORATE DIRECTOR COMMUNITIES

Background Papers

None

APPENDIX A

**TO BE READ IN CONJUNCTION WITH
APPLICATION NUMBER P/14/293/FUL OF THE REPORT
OF THE CORPORATE DIRECTOR COMMUNITIES**

PLANNING APPLICATION P/14/293/FUL

TABLES AND SCHEDULE OF GUIDANCE NOTES RELATING TO NOISE CONDITIONS 25-35

Table 1 - Between 07:00 and 23:00 - Noise limits expressed in dB $L_{A90,10\text{-minute}}$ as a function of the measured wind speed (m/s) at 10 meter height as determined within the site averaged over 10 minute periods										
Location	Measured wind speed at 10 m height, m/s									
	3	4	5	6	7	8	9	10	11	12
R1-Price Town	28.8	33.8	36.8	38.8	39.8	40.3	40.6	40.8	40.8	40.8
R2-Ogmore Vale	21.2	25.2	28.2	30.2	31.2	31.7	32.0	32.2	32.2	32.2
R3-Evanstown	17.3	21.5	24.5	26.6	27.8	28.2	28.6	28.9	28.9	28.9
R4-Tonypandy	13.3	17.3	20.3	22.4	23.4	23.9	24.2	24.3	24.3	24.3
R5-Clydach Vale	20.7	24.7	27.7	29.7	30.7	31.2	31.5	31.7	31.7	31.7
R6-Pantycornant	14.4	18.7	21.8	24.0	25.3	25.9	26.1	26.0	25.9	25.8
R7-Gilfach Goch	16.1	20.2	23.2	25.1	26.2	26.7	27.0	27.2	27.2	27.2
R8-Penllwyn Gwent	18.3	22.4	25.4	27.4	28.5	28.9	29.2	29.4	29.3	29.3

Table 2 - Between 23:00 and 07:00 - Noise limits expressed in dB $L_{A90,10\text{-minute}}$ as a function of the measured wind speed (m/s) at 10 meter height as determined within the site averaged over 10 minute periods										
Location	Measured wind speed at 10 m height, m/s									
	3	4	5	6	7	8	9	10	11	12
R1-Price Town	29.8	33.8	36.8	38.8	39.3	40.1	40.6	40.8	40.8	40.8
R2-Ogmore Vale	21.2	25.2	28.2	30.2	31.2	31.7	32.0	32.2	32.2	32.2
R3-Evanstown	17.4	21.4	24.3	26.3	27.2	27.7	28.0	28.2	28.2	28.2
R4-Tonypandy	13.3	17.3	20.3	22.3	23.3	23.8	24.1	24.3	24.3	24.3

Table 2 - Between 23:00 and 07:00 - Noise limits expressed in dB $L_{A90,10\text{-minute}}$ as a function of the measured wind speed (m/s) at 10 meter height as determined within the site averaged over 10 minute periods

Location	Measured wind speed at 10 m height, m/s									
	3	4	5	6	7	8	9	10	11	12
R5-Clydach Vale	20.7	24.7	27.7	29.7	30.7	31.2	31.5	31.7	31.7	31.7
R6-Pantycornant	14.4	18.4	21.4	23.3	24.2	24.7	24.9	25.1	25.2	25.3
R7-Gilfach Goch	16.1	20.1	23.1	25.0	26.0	26.8	27.0	27.0	27.0	27.0
R8-Penllwyn Gwent	18.3	22.3	25.3	27.2	28.2	28.7	29.0	29.2	29.2	29.2

Table 3: Coordinate locations of the properties listed in Tables 1 and 2

Location	Easting	Northing
R1-Price Town	293984	192371
R2-Ogmore Vale	293145	190478
R3-Evanstown	297604	189605
R4-Tonypandy	299202	192186
R5-Clydach Vale	297193	192988
R6-Pantycornant	296086	188025
R7-Gilfach Goch	298100	190433
R8-Penllwyn Gwent	294625	188737

Note to Table 3: The geographical coordinate references are provided for the purpose of identifying the general location of 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 immissions from the wind farm. The rating level at each integer wind speed is the arithmetic sum of the wind farm noise level as determined from the best-fit curve described in Guidance Note 2 of these Guidance Notes and any tonal penalty applied in accordance with Guidance Note 3. Reference to ETSU-R-97 refers to the publication entitled "The Assessment and Rating of Noise from Wind Farms" (1997) published by the Energy Technology Support unit (ETSU) for the Department of Trade and Industry (DTI).

Guidance Note 1

- (a) Values of the $L_{A90,10}$ -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 $L_{A90,10}$ -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 and wind direction at hub height for each turbine and arithmetic mean power generated by each turbine, all in successive 10-minute periods, unless otherwise agreed in writing with the Local Planning Authority. During any noise compliance test, the mean wind speed and wind direction shall also be measured on-site at a height of 10m above ground level. The wind speed measurement shall not be unduly affected by any turbine wake. It is this measured 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. In the event that it is not possible to undertake wind speed measurements at 10m, the wind speed can be measured at another height and converted to a height of 10m according to a method to be agreed with the Local Planning Authority.
- (e) Data provided to the Local Planning Authority in accordance with the noise condition shall be provided in comma separated values in electronic format.

Guidance Note 2

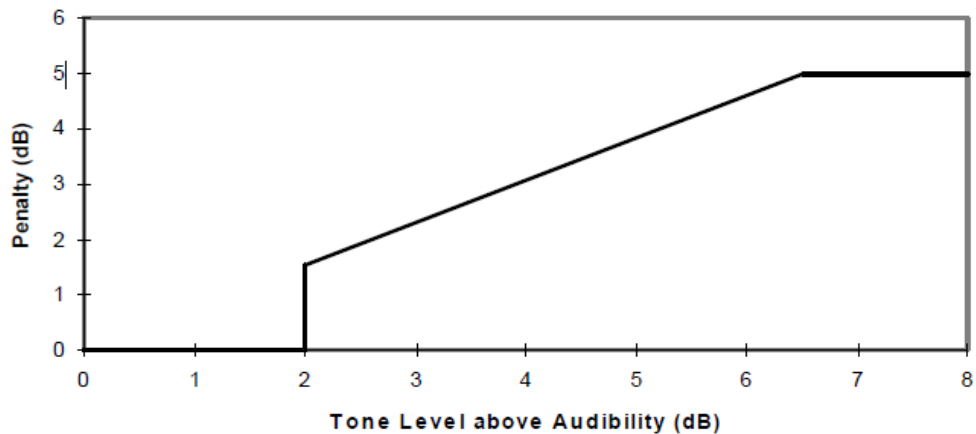
- (a) The noise measurements shall be made so as to provide not less than 20 valid data points as defined in Guidance Note 2.
- (b) Valid data points are those measured in the conditions specified in the agreed written protocol under condition 29 of the noise condition, but excluding any periods of rainfall 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 measurements 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 $LA_{90,10}$ -minute noise measurements and corresponding values of the 10-minute wind speed, as measured at a ten metre height wind speed 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 measured 10m 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 condition 29 of the noise condition, noise immissions at the location or locations where compliance measurements are being undertaken contain or are likely to contain a tonal component, a tonal penalty is to be calculated and applied using the following rating procedure.
- (b) For each 10-minute interval for which $LA_{90,10}$ -minute data have been determined as valid in accordance with Guidance Note 2 a tonal assessment shall be performed on noise immissions during 2 minutes of each 10-minute period. The 2-minute periods should be spaced at 10-minute intervals provided that uninterrupted uncorrupted data are available ("the standard procedure"). Where uncorrupted data are not available, the first available uninterrupted clean 2-minute period out of the affected overall 10-minute period shall be selected. Any such deviations from the standard procedure, as described in Section 2.1 on pages 104-109 of ETSU-R-97, shall be reported.
- (c) For each of the 2-minute samples the tone level above or below audibility shall be calculated by comparison with the audibility criterion given in Section 2.1 on pages 104-109 of ETSU-R-97.
- (d) The tone level above audibility shall be plotted against wind speed for each of the 2-minute samples. Samples for which the tones were below the audibility criterion or no tone was identified, a value of zero audibility shall be substituted.
- (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 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 condition 29 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 condition 30 of the noise condition, the independent consultant shall undertake a further assessment of the rating level to correct for background noise so that the rating level relates to wind turbine noise immission only.
- (d) The wind farm operator shall ensure that all the wind turbines in the development are turned off for such period as the independent consultant reasonably requires to undertake the further assessment or any other assessment to determine compliance with tables 1 and 2 as attached. The further assessment shall be undertaken in accordance with the following steps:
 - (i) Repeating the steps in Guidance Note 2, with the wind farm switched off, and determining the background noise (L_3) at each integer wind speed within the range requested by the Local Planning Authority in its written request under condition 4 and the approved protocol under condition 5 of the noise condition.
 - (ii) The wind farm noise (L_1) at this speed shall then be calculated as follows where L_2 is the measured level with turbines running but without the addition of any tonal penalty:

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

- (iii) The rating level shall be re-calculated by adding the tonal penalty (if any is applied in accordance with Guidance Note 3) to the derived wind farm noise L_1 at that integer wind speed.
- (iv) If the rating level after adjustment for background noise contribution and adjustment for tonal penalty (if required in accordance with note (iii) above) at any integer wind speed 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 condition 30 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 condition 30 of the noise condition then the development fails to comply with the conditions.