

APPLICATION NO: 13/0663/10 (CHJ)
APPLICANT: REG Windpower Ltd.
DEVELOPMENT: Installation of three wind turbines and construction of associated infrastructure on upland. The maximum height to blade tip of each turbine will be 146.5m above existing ground level. Infrastructure associated with the wind turbines includes: 1. onsite access tracks, laybys and turning areas, with ditch culverts where required; 2. permanent crane hardstanding areas and external switchgear buildings for each turbine; 3. substation; 4. underground onsite electrical cabling; 5. creation of two temporary construction compounds and laydown areas (Environmental Statement Addendum received 9th December 2014)
LOCATION: CRAIG YR ABER, LAND TO THE NORTH EAST OF FORCH-ORKY, TREORCHY, CF42 6TF
DATE REGISTERED: 27/06/2013
ELECTORAL DIVISION: Maerdy, Treherbert, Treorchy

RECOMMENDATION: Grant

Reasons:

The proposed development is within Strategic Search Area F (as defined by Technical Advice Note 8: Planning For Renewable Energy). The development is set against the context of the existing turbines at Maerdy and, while being visually prominent (particularly from Treorchy) do provide a valuable contribution to Wales's renewable energy targets as well as helping to facilitate the development of the Former Maerdy Colliery Site which is identified as a Strategic Site in the LDP.

While the RECOMMENDATION is made very much "on balance" National Planning Policy suggests a presumption in favour of renewable energy projects and it is considered that, taken as a whole, there are more positive benefits resulting from the scheme than negative impacts.

SITE APPRAISAL AND APPLICATION DETAILS

This application is for the development of a wind farm. The wind farm comprises three wind turbines, with a total generating capacity of up to 9MW (based on three wind turbines each with a capacity of up to 3MW).

The main components of the scheme include:

- The installation of three turbines (with a maximum height to blade tip from existing ground level of 146.5m);
- Construction of permanent ancillary development comprising:
- Site access tracks including the re-profiling of the existing tip to provide a new access crossing in lieu of the existing bridge ;
- Permanent crane hardstanding areas and external switchgear buildings for each turbine;
- A substation and underground onsite electrical cabling;
- Creation of two temporary construction compounds and laydown areas.

Consent is being sought for an operating period of up to 25 years. At the end of this period, unless a further planning permission is granted, the turbines and associated buildings would be dismantled and removed. The hard surfaces would be covered and landscaped. The applicant has advised that they anticipate that the wind farm will take up to 15 months to construct.

The wind farm consists of three wind turbines, each with a hub height of 100m and a tip height of 146.5m. Each turbine base will comprise a steel reinforced concrete base slab measuring approximately 20m by 20m (400m²), ranging from 0.5m deep at the outside edges to 1.5m deep in the centre, with a central upstand section upon which the turbine will be placed. The foundations will be founded at a depth of 2.5m to 3m and backfilled with spoil over the foundation. The top 0.5m of the upstand section will remain above ground.

In addition to the foundation, crane hardstanding areas will be constructed adjacent to each turbine. They will be constructed from semi-permeable crushed stone up to 750mm deep; measuring approximately 50m by 20m (creating an area of 1,000m²) will be required adjacent to each turbine location to assist during construction and decommissioning of the turbines. These areas will be present for the lifetime of the wind farm, for use during turbine maintenance. This is required in order to secure a stable base on which to lay down the turbine components and to position the two cranes necessary to lift the tower sections, hub and blades into place.

The applicant has pointed out that each wind turbine would have a 3MW installed capacity producing electricity equivalent to the annual consumption of 1700 UK households. Underground cables would link to turbines to each other and a windfarm substation. The substation houses the point of connection between the wind farm and the grid line owned by the local distribution network operator (Western Power Distribution). The substation will comprise a single storey building with a pitched roof, measuring approximately 5.5m to the ridge, 18m long and 12m wide. It will be unmanned except during maintenance. Four car parking spaces would also be provided to the side of the building.

The proposed grid connection is likely to be to an existing substation located opposite the Avon Factory on the northern outskirts of Maerdy. The connection

will be overland from the site across the former Maerdy Colliery site, to connect to the substation via the Avon Access Road. The section of the Avon Factory Road where the connection would run is lightly used, only serving the factory itself and access to the colliery site. As such, the roadworks required to install the connection within the public highway is limited.

Turbines 1 and 2 are spaced 310m apart and Turbines 2 and 3 are 270m apart. Members may recall that planning permission (11/0198) has previously been granted for a wind farm on land adjoining the site for 8 wind turbines (known as the "Maerdy Wind Farm") and their associated infrastructure. This development has now been constructed and is fully operational. The closest turbine in the Maerdy windfarm (Turbine 6) is 550m away. Overall the proposal extends the Maerdy array 1.1km to the south east. The Maerdy turbines are between 350m-550m apart and so appear slightly wider spaced.

Initially, two site access points were included within the proposal in order to allow flexibility regarding the access route used. While both access points were assessed as part of the scheme subsequent discussions with the applicant suggested that the western access (through the existing Forestry Commission (now NRW) tracks may not be available in the preferred construction timescales required therefore the application was amended to provide the sole access through the alternative eastern access which runs through the Former Maerdy Colliery Site (FMCS).

This access route runs from the public highway adjacent to the Avon Engineered Rubber Ltd factory at the northern extent of the village of Maerdy, through the FMCS to the top of Mynydd Maerdy. In order to enable this access, the existing track through the former colliery site and bridge over the Nant y Calch will require upgrading. Originally it was proposed that these access upgrade works would comprise the forming of an embankment approximately 8m in height, together with the removal of an existing bridge structure and replacement with a structure suitable to accommodate the alignment of abnormal loads together with anticipated vehicle loadings. Following subsequent discussions with the Council's Engineering Section it was concluded that the provision of a new replacement bridge with its associated maintenance costs and safety considerations, would not represent the best long term solution for the Council therefore negotiations took place to secure an alternative scheme to provide a culverted infill solution in line with a scheme that the Council itself proposed several years earlier (which was the subject of a formal Feasibility Study undertaken through the provision of grant funding by the Welsh Government). While the scale of the Council's own scheme was larger than the works required providing access for the development, the provision of the proposed access to serve the construction of the three turbines will mean that the Council will have to do proportionately less to complete the scheme. The works required by this development (the engineering details) can be provided through the imposition of a condition while the remainder of the scheme would be the subject of a separate planning

application by the Council (Engineering Section) at a later stage (not related to the determination of this application) .

At a wider level, the route taken by abnormal loads will be to the site from the delivery port (most likely to be Swansea Docks) via the M4 motorway to the A470 at junction 32 and then on to the A4058 at Pontypridd, then on to the A4233 at Porth, and thereafter north on A4233 to Maerdy. The precise details of the access to the site would be the subject of a further condition requiring the submission of details in co-ordination with the Council's Highway Section and the Welsh Government and Police Authority who are required to accompany these abnormal loads.

Under Schedule 2 of the Town and Country Planning (Environmental Impact Assessment) Regulations 1999), the application requires 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. It consists of four volumes, which, amongst other chapters, fully consider the following:

Ground Conditions and Hydrology - This considers the effects of the proposed windfarm on surface water (i.e. Hydrology) and on groundwater (i.e. Hydrogeology). Ground Conditions refer to the bedrock and drift deposit conditions, processes and features. The two are clearly linked.

Avian and non-avian Ecology - These sections describe and evaluate the current nature conservation interest of the site, assess the predicted residual impacts of the proposed development and present potential mitigation measures.

Traffic and Transportation - This section assesses the impact of Heavy Goods Vehicles travelling to and from the site during the construction phase of the proposed development. There would be minimal traffic impact if the windfarm becomes operational.

Noise Assessment – This section primarily considers the noise from the proposed operational windfarm and its impact on residential amenity.

Cultural Heritage - This assesses the impact of the proposed development on Listed Buildings and their setting, archaeology, scheduled ancient monuments and their setting, Landscapes of historic value etc.

Landscape and Visual Assessment - This produces an evaluation of landscape and visual effects. The chapter includes impacts on:

- Landscape character, caused by changes in the elements, characteristics and qualities of the landscape; and

- Visual amenity, including effects upon potential viewers and viewing groups caused by change in the appearance of the landscape as a result of the wind farm.

The key steps in the methodology were as follows:

- Zones of theoretical visibility (ZTVs) were prepared for the hubs and tips of the turbines based on a turbine height of 146.5m to blade tip and 100m to hub as 'worst case' dimensions. ZTVs were prepared for distances up to 35km from the turbines;
- The wind farm site and surrounds were analysed in terms of character and sensitivity;
- Viewpoints across the ZTV were selected as representative of the range of views and types of viewer likely to be affected by the wind farm, selected in consultation with CCW and RCT, and the character/ sensitivity of each view was determined;
- Existing views from settlements were considered and residential properties within 1.5km were divided into groups for assessment;
- Wireline and photomontage images of the wind farm from the viewpoints were prepared;
- The magnitude of change to landscape character and views (including residential views for properties up to 1.5km from a turbine) was predicted; and
- The level of significance of impact on the landscape and visual resource was evaluated.

A Cumulative Landscape and Visual Impact Assessment has also been carried out which aims to provide a clear picture of the likely significant cumulative impacts arising as a result of the Abergorki Wind Farm in conjunction with other wind farm developments. The emphasis in the ES that it is an assessment of the additional impact of Abergorki Wind Farm rather than the combined impacts of all proposals together.

Telecommunications, Television and Aviation - This section considers interference with telecommunication networks (e.g. television, mobile phones, and emergency services) and radar systems (i.e. for aviation).

Socio-economic Impacts - This section assesses the potential impact of the proposed windfarm on the socio-economic and community issues of the local area (e.g. direct effects such as job creation or indirect effects such as increased spending in the area by people working at the site). Other effects considered are the impact of the development on tourism and recreation in the area and how it affects land use and agriculture in the immediate vicinity.

The application was subject to some changes (principally referred to above) through the process and these changes were captured through the submission of

Supplementary Environmental Assessment (SEI) where relevant sections of the original ES were updated to reflect these changes.

SITE APPRAISAL

The total area of the site boundary was originally (approximately) 138.9 hectares. The removal of one of the two accesses originally proposed has resulted in a reduction of the original site area however additional land was included to take into account the land required to provide the alternative to the existing bridge (including the land and tip material required to provide it). Accordingly the site area, as currently proposed is 103.6 hectares.

The site is located at the top of the Rhondda Valleys, to the west of Maerdy (Rhondda Fach valley) and to the north of Treorchy (Rhondda Fawr valley). The old Maerdy Coal Tip (part of the former Maerdy Colliery site) lies immediately to the east and north of the site, and a steep valley to the south and west. Tynwydd Forest lies approximately 1km further to the west. The plateau is on high ground (approximately 450m above ordnance datum (AOD)) above the populated Rhondda Fach and Rhondda Fawr valleys. The site boundary adjoins that of the consented Maerdy Wind Farm (eight turbines), to the northwest.

The site lies within Strategic Search Area F as designated through the Welsh Government's Technical Advice Note 8: Planning for Renewable Energy.

The site is located on an open ridge above Craig yr Aber which defines the edge of Cwm Orci, a tributary valley of the Rhondda Fawr. The ridgetop is around 450m AOD. The steep slopes of Craig y Aber fall 100m between 430m AOD to 330m AOD around the mountain fence. The slopes ease off slightly falling to around 180m AOD on the floor of the Rhondda Fawr and 280m AOD at the closest valley floor point in the Rhondda Fach. The total height of the valley sides are therefore 270m and 170m respectively. The upland rises to the north to 516m AOD in the forest plantation and falls to the south to around 400mAOD around the Ferndale wind farm. The ridgetop skylines are prominent from the valley floors defining and enclosing the steep sided valleys.

The ridge top is open acid grassland used as sheep grazing with underlying peat and Pennant sandstone bedrock. The slopes support mosaic acid grassland with clumps of rushes, bracken, purple grass and heath.

The nearest major settlements are Treorchy (1.45km to the south west) and Maerdy (915m to the south east). Fforch-Orky farmstead at 725m and Fforch Isaf at 825m lie on the valley slopes to the south west.

Adjacent there is the Maerdy wind farm with eight turbines with height to blade tip of 145m. Beyond, the consented wind farm of Pen y Cymoedd, with 76 of the same size turbines, arcs around to the north and west at the head of the valleys. The consented (and currently under construction) Mynydd Bwlfa wind farm of

nine turbines between 119 m and 125m high lies to the north east set back from Cwm Dare, and the existing Ferndale wind farm consisting of eight 74m high turbines lies on the ridge to the south. It should be noted that only two of the four consented wind farms have been implemented / partially constructed / fully constructed and so the full effects of all these wind farms together may not yet have been appreciated by residents and others in this area.

PLANNING HISTORY (relevant but on adjoining land)

11/0198	Erection of 8 wind turbines with a maximum height to blade of 145m together with ancillary infrastructure and the erection of a 95m anemometer mast which is to be incorporated with the access tracks, substation, cabling, crane pads, construction compound and ancillary infrastructure previously permitted under application 06/1865.	Granted 10/11/11
10/1082	Erection of a 33kV overhead line supported by wood pole	Raise no objection 22/11/2010 – Granted in December 2010.
06/2136	Temporary anemometer mast	Granted 05/02/07
06/1865	Windfarm comprising 8 wind turbines with a maximum blade tip of 125m; access tracks, substation, anemometer mast, crane pads, construction compound and associated infrastructure.	Granted 02/02/09

CONSULTATION

Transportation Section – No objections subject to conditions

Swept Path Analysis

A swept path analysis (see Appendix 9.1: Abnormal Load Assessment) has been undertaken for the route from Porth to the colliery access track. The vehicles to be used in the swept path analysis are bespoke generic vehicle combinations as follows:

- Blade transport – assumes 50m length blade with 9m rear overhang;
- Base tower – assumes 18m tower section with 1m rear overhang;
- Top tower - assumes 30m tower section with 1.6m rear overhang; and
- The configuration for the Nacelle transport.

Route through Maerdy

Due to the presence of tight horizontal bends on the A4233 in the centre of Maerdy on the approach to the access road leading to the automotive parts factory and then the derelict former colliery site, it is proposed to utilise the residential streets of Ceridwen Street, North Terrace, Wrgant Place with a re-opened link from Wrgant Place onto the factory access road that offers a straighter more direct route.

The swept path analysis shown on drawing MWF/2 shows the abnormal loads can be transported along this route that with traffic management and temporary remedial works in place is achievable.

Route through Ferndale

The swept path analysis shows that the blade transporters are unable to get through the two bends in the centre of Ferndale. A number of route options have been considered by the developer and their preferred route is the Western Access Option 2 which utilises Craig Terrace, Regent Street, Union Street, Lake Street and Rhondda Road.

The swept path analysis shown on drawing MWF/5 shows that all loads can get through. This would result in remedial works to temporarily remove bollards and street furniture on kerb build outs together with surface protection to allow for the overrun of footways by the long delivery vehicles.

However, there is a lack of information in relation to the substantial overrun of footways and how these are to be protected which raises concerns in terms of the damage that would be caused to services such as fibre optics, water, and gas etc. that are found at a shallow depth.

Similarly, the routes through Tylorstown / Pontygwaith (see drawing MWF/7) and Porth (see drawing MWF/8) would result in the substantial overrun of footways and street furniture that would require protection and temporary removal and reinstatement accordingly.

Abnormal Loads

This would result in 21 abnormal load trips over 44 days, leading to an average of approximately 1 trip per day (2 movements).

Construction HGV Traffic

The construction traffic would be in the region of: -

- Worst case concrete pour day 116 HGV movements per day;
- Worst case normal day 38 HGV movements per day; and
- Average case normal day 18 HGV movements per day.

Construction Period

This would be for a 15 month construction period..

Council's Land Reclamation and Engineering Section – No objections subject to conditions.

Public Health and Protection Section – No objections subject to conditions.

Countryside, Landscape and Ecology – No objections subject to the conditions recommended.

Virtually all the Windfarm infrastructure lies within SINC designations and the EIAs acknowledges these impacts. The key habitat issue for this wind farm is focused on those peat habitats (blanket bogs, valley mires, flushes).

The Turbine and infrastructure locations have been advised by detailed peat assessment work. T1 and T2 do affect the edges of important peat features and the track connections to the east of the site, west into the Maerdy Land Reclamation site and between T1 and T2 will all affect areas of peat.

The EIA has included bat survey work and assessment of otter, badger, water vole, reptiles and amphibians. Together with birds the principal species concern is bats. Of the species recorded only those belonging to the higher flying Eptesicus/Nyctalus genus were considered a high risk only two bats belonging to this genus were recorded. The bat assessment concludes that the upland wind farm site is considered to be of relatively low importance for bats. Given its location and the similar conclusions for neighbouring upland wind farms, I think the assessment of low impact on bats is reasonable.

The scheme impacts are unlikely to have unacceptable impact on the protected species identified in the EIA, however mitigation via conditions and the Habitat Management Plan is required to off-set residual impacts.

The EIA has been accompanied by/with appropriate breeding and winter bird survey/assessment. These identified a number of Target Species (grey heron, lapwing, green sandpiper, snipe, hobby, peregrine red kite and hen harrier) of greatest susceptibility to collision impacts and additional secondary species of a lesser susceptibility (common buzzard, kestrel, sparrowhawk, lesser black backed gull, herring gull, crossbill, raven). The findings of low impact in the EIA are consistent with other wind farm schemes in the area. In reality the impacts of the wind farm on birds will only become more apparent in the future, after a number of years of operation, and therefore concern remains that bird assessment is based on generalised models without the capacity to fully interpret specific local implications.

Natural Resources Wales (NRW) – no objection subject to conditions and a section 106 agreement or appropriately worded conditions are attached to the

permission to secure the biodiversity mitigation scheme, a Habitat Management Plan and a Pollution Prevention Method Statement.

Due to the size and siting of the turbines they consider that there will be an overbearing impact on the valley settlements below and a number of significant local landscape and geological features. Given their size and location, close to the edge of the prominent ridge, it is considered that they will adversely affect a number of local landscape features and that they will have an overbearing impact on the valley settlements below. Notwithstanding these concerns they have not objected and consider that these matters are predominantly local issues to be considered by the Council.

As well as having impacts on local landscape character and amenity, the positioning of turbines relatively close to the ridge/break of slope will also lead to further detrimental impact on the Rhondda Landscape of Special Historic Interest. However, in the context of existing schemes, and given that this part of the Historic Landscape is sited within the SSA, NRW do not consider that the adverse impacts on the Historic Landscape will be significant. They therefore have no objections to the proposal in that context.

Cadw – No Objections. Consider that the three turbines are likely to have a negligible impact on Scheduled Ancient Monuments (SAMs) within a radius of 5km. It is considered that there will be a negligible impact on the setting of Castell Nos however, given the surrounding setting, the impact would not be so severe that they would raise any significant concerns. Highlight the importance of considering the cumulative impact of wind turbines.

Glamorgan Gwent Archaeological Trust – The development will require archaeological mitigation. Breaking new ground during construction within the scheme has the potential to encounter and or destroy any previously unrecorded buried archaeological remains. In order to mitigate archaeologically the proposals, we recommend that all ground disturbing work should be undertaken under archaeological supervision, in order to identify and record the features and any finds that are encountered.

Ofcom – Ofcom have advised that their policy is not to advise or get involved with any planning applications.

Arqiva (responsibility for providing BBC and ITV's transmission network) – No Objections.

Atkins (responsible for providing wind farm/ turbine support services to the Telecommunications Association of the UK Water Industry) – No Objections.

Vodafone UK – No Objections.

Welsh Water – No objection subject to the applicant using the eastern access (the one that is proposed)

Civil Aviation Authority – no response

Campaign for the Protection of Rural Wales – The organisation has concerns regarding wind turbine developments in upland areas. The construction of this development could result in a range of environmental impacts including the loss of land supporting biodiversity interests, soil quality and quantity and impacts on the water environment. It will also alter the traditional landscape.

Neath Port Talbot County Borough Council – No Objections.

Brecon Beacons National Park Authority – Raise no objections but raise significant concerns over the cumulative impact on wind farm development and other large development, proposed, consented and operational along the southern fringe of the National Park.

Merthyr Tydfil County Borough Council – No Objections.

Bridgend County Borough Council – No Objections.

Caerphilly County Borough Council – No Objections.

MOD (Ministry of Defence) – No Objections.

Ramblers – no response received.

Royal Society for the Protection of Birds (RSPB) – no response received.

The Coal Authority – satisfied that the applicant has properly investigated the risks associated with past mining activity and offer no objection.

Due to the changes made during the course of the application, Supplementary Environmental Information (SEI) was submitted by the applicant. This was subject to a further consultation exercise but the changes only related to relatively minor aspects of the scheme as a whole and were unlikely to have attracted any additionally significant comments. Those responses that were received were substantially similar to those already provided.

PUBLICITY

The application has been advertised through the use of direct neighbour notification letters, the erection of site notices and via a press notice.

Seven **objections** had been received which are summarised as follows:

- Concerns that the proposed development would limit the access to the area for walkers and damage the character of the area which is enjoyed by walkers.
- Object to any more wind turbines being given consent in the area as a significant number of turbines have already been consented and the objector considers that this is enough.
- Concerns regarding the impact of the existing wind farms on bird life and other wildlife and concerns that the proposed development will exacerbate this.
- The turbines will be visibly obtrusive and will be seen in their entirety from the centre of Treorchy particularly from the train station. The proposed turbines will be an eyesore.
- Objections on the basis that this will result in an overconcentration of wind turbines given the previously approved planning applications for turbines in the surrounding area.
- Concerns regarding damage to the environment with particular regard to peat.
- Comments that the work to the peat to install other wind turbines has resulted in the water in the Rhondda River to turn dark brown. This is thought to be from the peat and concerns are raised regarding its impact on the ecology of the area.
- Objections raised on the grounds of noise in relation to nearby residential properties as the noise limits will be breached. The levels used by the applicant are incorrect as they have assumed that the resident is financially involved with the scheme when they are not. Therefore the noise impact exceeds what is normally considered acceptable in accordance with policy.
- Objections raised on grounds of visual impact and the consequential effect on the living conditions of nearby local residents. The turbines will be placed so close to the ridge edge above the residential property at such a scale that they will appear overwhelming to the residential property.
- The proposal will create a sense of encirclement around the existing nearby property, where there are already several consented schemes underway. The proposed scheme is considered to overwhelm the valley which is a small valley with steep sides. Abergorki wind farm will be visible from the main entrance into Fforch-isaf Farm and will be the primary view

for the occupiers and their visitors accessing the dwelling. Abergorki wind farm will be much more visible from this viewpoint than Maerdy wind farm is which is considered unacceptable.

- One resident has objected for the following reasons: Wind turbines are not very efficient and coal fired power stations are not eliminated; the electricity they generate cannot be stored for use when demand is greater; low frequency noise is not regulated; environmental effects on wildlife; reduction in property values; detrimental to public health; the local community is not guaranteed access to the community fund; the development will not bring local jobs; bill costs will not be reduced.
- The landowner has written to advise that they have not provided access rights to the developer to cross their land as part of the proposed western access route. They have also advised that they are not financially involved with the proposal (whether this information was correct or not, Committee is advised that this “western” access has now been removed from the scheme)
- Maerdy Windfarm Ltd has confirmed that they are in control of a large portion of the proposed western access to the scheme and therefore they argue that this route is not available to the applicant. (similarly, whether this information was correct or not, Committee is advised that this “western” access has now been removed from the scheme)
- Renewable Energy Partnerships have submitted a substantive objection to the application which deals with issues relating to traffic and transport impacts, noise concerns, landscape and visual impacts, residential amenity and the impact on the existing Maerdy wind farm. The full letter is attached as Appendix A.

66 “standard” letters (3 different versions) in **support** of the application have also been received which are summarised as follows:

- The use of wind energy will generate important long-term benefits for the environment, and its continued expansion as a power source is essential for addressing the issue of climate change.
- It is pleasing to note such developments are keen to inwardly invest into the local community and, in particular, Ferndale Community School.
- Supporting renewable energy projects like the Abergorki Wind Farm is an important step towards taking responsibility for our local electricity generation and consumption. I therefore wish to register support for this planning application.

- In addition to this I believe that the community fund initiative is an excellent way to give back to the community in which the wind farm effects.
- It is important to take responsibility in creating a safe and sustainable environment for the future generations and I believe that this project is a good way to ensure this. I would encourage you to approve this application.
- This will be a very good education training area for my pupils – and Abergorki has promised to continue to support my school and its projects to aid pupil development.

POLICY CONTEXT

Section 54A of the Town and Country Planning Act 1990 (as amended) has now been superseded by Section 38 of the Planning and Compulsory Purchase Act 2004 which restates the fundamental principle of the planning process that all applications are determined in accordance with the development plan in force for the area unless material considerations indicate otherwise.

In addition to the development plan policies, a fundamental material consideration is contained within Planning Policy Wales and Technical Advice Note (TAN) 8: Planning for Renewable Energy.

There are references to renewable energy projects in a number of other Technical Advice Notes, Governmental policies and advice publications and the Council's own policies and publications, the principal aims of which are to reduce the reliance on fossil fuels and to encourage the use of other (non-fossil fuel) sources of energy.

This section deals with the principal policies to be taken into account when considering this application. There is a significant overlapping of policies in a plethora of documents ranging from both primary and secondary legislation to Governmental and the Council's own publications. It is not possible to reproduce or summarise all of the information contained within them and therefore an assessment of the most relevant policy context and information has been included.

The principal policies in the foregoing publications are reproduced (or summarised as appropriate) below for Committee's consideration.

Rhondda Cynon Taf Local Development Plan

Paragraph 4.19 states, "The strategy seeks to mitigate and adapt to the impacts of climate change by ensuring the efficient use of resources, supporting

renewable energy resources, protecting biodiversity, managing waste effectively, promoting development in accessible locations, focusing new housing away from areas of flood risk and improving energy efficiency in the design of new buildings. Equally important is the need to protect the countryside and unique landscape of Rhondda Cynon Taf from urbanisation and incremental loss”

Policy CS1 confirms that in respect of the Northern Strategy Area the emphasis will be on building strong sustainable communities. The policy lists nine ways that this will be achieved. These include as (3) ensuring the removal and remediation of dereliction by promoting the re-use of under used and previously developed land and buildings (6) encouraging a strong, diverse economy which supports traditional employment and promotes new forms of employment in the leisure and tourism sectors and (7) protecting the cultural identity of the Strategy Area by protecting historic built heritage and the natural environment.’.

Policy CS3 identifies the 8 Strategic Sites which include (as 1) the Former Maerdy Colliery Site. The aim of this policy is to provide sustainable growth for these sites through the development of a mixture of large scale residential, employment, retail and recreational purposes.

Policy NSA4 specifically relates to the Former Maerdy Colliery Site. In accordance with Policy CS3 (above) land is allocated at the FMCS for the construction of 1 hectare of employment land (B1 and/or B2), visitor centre and an area of informal recreation contained in an historic landscape.

Policy NSA25 lists nine Special Landscape Areas (including Cwm Orci within which the application site is located). It requires that development within the SLA will be expected to conform to the highest standards of design, siting, layout and materials appropriate to the character of the area.

Policy AW4 confirms that the Council, will where appropriate seek planning obligations in respect of certain forms of development, including renewable energy schemes (12).

Policy AW5 gives general criteria for new development, including the effect of development on a site and surrounding area (criteria 1a.).

Policy AW7 provides for the protection of sites of historic importance and facilities including public rights of way.

Policy AW8 seeks to protect the natural heritage of the plan area by only permitting development which will not unacceptably impact on features of importance to landscape or nature conservation (SINC).

Policy AW10 does not permit development proposals that would cause or result in an unacceptable risk of harm to health and/or local amenity because of issues such as noise and air and light pollution.

Policy AW12 permits the development of small/medium sized wind turbines (between 5MW and 25MW), where it can be demonstrated that there is no unacceptable effect upon the interests of soil conservation, agriculture, nature conservation, wildlife, natural and cultural heritage and landscape importance, public health and residential amenity. Development proposals should be designed to minimise resource use during construction, operation and maintenance.

Policy AW13 permits proposals for large wind farm development, where the boundary is within the SSA, it is sited on a predominantly flat, extensive area of upland, is located a minimum of 500m from the nearest residential property, will not have an unacceptable impact on the visual quality of the wider landscape, will minimise and where possible enhance public access to the countryside, will not impact on areas of nature conservation value and will protect the Brecon Beacons National Park.

Policy AW14 seeks to safeguard mineral resources from development which would hinder their extraction. In this case the site lies within an area identified under AW14.2, which refers to the safeguarding of Sandstone resources.

Planning Policy Wales (Edition 7, July 2014)

1.1.1: PPW sets out the land use planning policies of the Welsh Government (WG). It is supplemented by a series of TANs.

1.2.1: The planning system manages the development and use of land in the public interest contributing to the achievement of sustainable development. It should reconcile the needs of development and conservation, securing economy, efficiency and amenity in the use of land, and protecting natural resources and the historic environment. A well functioning planning system is fundamental for sustainable development.

1.4.4: WG is required to make a contribution to the International, EU and UK targets for greenhouse gas emission reduction.....The planning system will play an important role in tackling climate change and reducing greenhouse gas emissions.

3.1.2: Applications for planning permission.....should be determined in accordance with the approved or adopted plan for the area, unless material considerations indicate otherwise. Material considerations could include current circumstances, policies in an emerging development plan, and planning policies of WG and the UK Government. All applications should be considered in relation to up to date policies.

3.1.8: When determining planning applications local planning authorities must take into account any relevant view on planning matters expressed by neighbouring occupiers, local residents and any other third parties. While the substance of local views must be considered, the duty is to decide each case on its planning merits.

Sections 3.6 and 3.7 give general advice on the use of planning conditions and planning obligations.

4.3.1: Tackling climate change is identified as one of a number of principles in underpinning WGs approach to its planning policy for sustainable development.

4.5.1: Tackling climate change is a fundamental part of delivering sustainable development. Climate change is one of the most important challenges facing the world and WG has made a commitment to tackling climate change, resolving that the Government and people of Wales will play the fullest possible part in reducing its carbon footprint.

Chapter 5 sets out WGs position in seeking to conserve and improve natural heritage and the coast

5.1.1: Attractive and ecologically rich environments are important, both for their own sake and for the health and the social and economic well-being of individuals and communities.

5.1.4: It is important that biodiversity and landscape considerations are taken into account at an early stage in both development plan preparation and development management

5.1.5:NRW has a statutory role in....development management and will provide specific advice on landscape and nature conservation issues.

5.3.11 **Non-statutory designations**, such as Special Landscape Areas or Sites of Interest for Nature Conservation, should be soundly based on a formal scientific assessment of the nature conservation, landscape or geological value of the site. Local non-statutory sites can add value to the planning process particularly if such designations are informed by community participation and reflect community values. Local planning authorities should apply these designations to areas of substantive conservation value where there is good reason to believe that normal planning policies cannot provide the necessary protection. Such designations should not unduly restrict acceptable development.

5.3.12 Designating an **Environmentally Sensitive Area** does not directly affect the status of the area in planning terms. However, the features which contributed to the designation of such areas may be important in formulating planning policies or making development management decisions.

5.3.13: advises on the use of LANDMAP in informing the decision making process.

5.5.1: Biodiversity and landscape considerations must be taken into account in determining individual planning applications and contributing to the implementation of specific projects.

5.5.2: When considering development proposals local planning authorities should consider environmental impact, so as to avoid, wherever possible, adverse effects on the environment.

5.5.3: In some cases it will be necessary to refuse planning permission on conservation grounds. However, local planning authorities must always consider whether environmental issues could be adequately addressed by modifying the development proposal or by attaching appropriate planning conditions or obligations.

5.5.4: For all planning applications likely to result in disturbance or harm to a protected species....local planning authorities should seek the advice of NRW and should always consult them before granting permission. (para 5.5.11 also relates).

6.1.1: It is important that the historic environment – encompassing archaeology and ancient monuments, listed buildings, conservation areas and historic parks, gardens and landscapes – is protected.

7.2.2: Local planning authorities are required to ensure that the economic benefits associated with a proposed development are understood and that these are given equal consideration with social and environmental issues in the decision-making process, and should recognise that there will be occasions when the economic benefits will outweigh social and environmental considerations.

11.1.5: Managing and adapting to climate change will be critical to the future of sustainable tourism in Wales. Predicted changes in climate change across the world may affect the tourism market in Wales.

11.1.13: Local authorities should seek to protect and enhance the rights of way network as a recreational and environmental resource.

Chapter 12 sets down WGs position in respect of Infrastructure and Services and Section 12.8 within deals specifically with Renewable & Low Carbon Energy. It is considered that this Section is the most relevant in the consideration of this application.

12.8.1: The UK is subject to the requirements of the EU Renewable Energy Directive. These include a UK target of 15% of energy from renewables by 2020. The UK Renewable Energy Roadmap sets the path for the delivery of these targets, promoting renewable energy to reduce global warming and to secure future energy supplies. The WG is committed to playing its part by delivering an energy programme which contributes to reducing carbon emissions as part of our approach to tackling climate change whilst enhancing the economic, social and environmental wellbeing of the people and communities of Wales in order to achieve a better quality of life for our own and future generations. This is outlined in the WG's Energy Policy Statement *Energy Wales: A Low Carbon Transition (2012)*.

12.8.2: Planning policy at all levels should facilitate delivery of both the ambition set out in Energy Wales: A Low Carbon Transition and UK and European targets on renewable energy. The Renewable Energy Directive contains specific obligations to provide guidance to facilitate effective consideration of renewable energy sources.....The issues at the heart of these duties are an established focus of planning policy in Wales, and in this context both local planning authorities and developers should have regard in particular to the guidance contained in TAN8 – Planning for Renewable Energy and Planning for Renewable Energy – A Toolkit for Planners. The WG will however consider the preparation of further targeted guidance where appropriate.

12.8.3: Confirms that the consenting process for renewable energy projects in Wales depends on the size and location of the proposed renewable development.

12.8.4: Identifies that for the planning system in Wales the key area of responsibility is onshore development of less than 50MW.

12.8.6: The Welsh Government's aim is to secure an appropriate mix of energy provision for Wales which maximises benefits to our economy and communities, whilst minimising potential environmental and social impacts. This forms part of the WG's aim to secure the strongest economic development policies to underpin growth and prosperity in Wales recognising the importance of clean energy and the efficient use of natural resources, both as an economic driver and a commitment to sustainable development.

12.8.7: Confirms, for the purposes of planning policy what the term 'renewable energy' covers. This includes wind energy.

12.8.8: Confirms that the Welsh Government is committed to using the planning system to optimise renewable energy production.

12.8.9: 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. Specifically they should make positive provision by.....considering the contribution that their area can make towards developing and facilitating renewable and low carbon energy, and ensuring the development plan policies enable this contribution to be delivered.....ensuring that development management decisions are consistent with national and international climate change obligations, including contributions to renewable energy targets and aspirations.

12.8.10: Local planning authorities should...ensure that international and national statutory obligations to protect designated areas, species and habitats and the historic environment are observed....ensure that mitigation measures are

required for potential detrimental effects on local communities whilst ensuring that the potential impact on economic viability is given full consideration.

12.8.12: In the short to medium term, wind energy continues to offer the greatest potential (for activities within the control of the planning system in Wales) for delivering renewable energy. Wales has an abundant wind resource and power generation using this resource remains the most commercially viable form of renewable energy. The Welsh Government accepts that the introduction of new, often very large structures for onshore wind 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.

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

12.8.14: An integrated approach should be adopted towards planning renewable and low carbon energy developments and additional electricity grid network infrastructure.

12.8.15: The impacts from renewable energy developments and associated infrastructure will vary depending on their type, location and scale.

12.9.1: Local planning authorities should plan positively for all forms of renewable and low energy development using up to date and appropriate evidence.

Section 12.10 Sets out WGs position in respect of Development Management and Renewable and Low Carbon Energy.

12.10.1: In determining applications for renewable and low carbon energy development and associated infrastructure local planning authorities should take account:

1. the contribution a proposal will play in meeting identified national, UK and European targets and potential for renewable energy, including the contribution to cutting greenhouse gas emissions;
2. the wider environmental, social and economic benefits and opportunities from renewable and low carbon energy development;
3. the impact on the natural heritage, the coast and the historic environment;
4. the need to minimise impacts on local communities to safeguard quality of life for existing and future generations;
5. ways to avoid, mitigate or compensate identified adverse impacts;

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

12.10.3: Developers for renewable and low carbon energy developments should seek to avoid or where possible minimise adverse impacts through careful consideration of location, scale, design and other measures.

12.10.4: Local planning authorities should, where relevant, consider the likely impact of proposed renewable and low carbon development on existing or other proposed renewable and low carbon energy developments and sources. In such cases they should consider amendments so as to render them acceptable.

12.10.5: The WG supports the principle of securing sustainable community benefits for host communities through voluntary arrangements. Such arrangements must not impact on the decision making process and should not be treated as a material consideration unless it meets the tests set out in Circular 13/97.

13.13.1: Noise can affect people's health and well being and have a direct impact on wildlife and local amenity. Noise levels provide an indicator of local environmental quality. The objective of a policy for noise is to minimise emissions and reduce ambient noise levels to an acceptable standard.

13.15.1: Noise can be a material planning consideration, for example in proposals to use or develop land near an existing source of noise or where a proposed new development is likely to generate noise. Local planning authorities should make a careful assessment of likely noise levels and have regard to any relevant Noise Action Plan before determining such planning applications and in some circumstances it will be necessary for a technical noise assessment to be provided by the developer.

13.15.2: Special consideration is required where noise-generating development is likely to affect a protected species, or is proposed in or near statutorily designated areas.....The effect of noise on the enjoyment of other areas of landscape, wildlife and historic value should also be taken into account.

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

This TAN relates to the land use planning considerations of renewable energy, however, UK and national energy policy provide its context. It covers all aspects

of renewable energy and therefore not all of it is of direct relevance to the consideration of this application.

The TAN is written in 2 parts comprising the main report advice and a series of 6 annexes. Annex A includes the WG Policy Statement on Renewable Energy which states that “...onshore wind will be the main large-scale technology capable of achieving our 2010 target. In the longer term, the Severn Barrage with its tremendous renewable energy potential could also be of significant interest” ; Annex B refers to “Community Benefits”; Annex C includes a description of “Renewable Energy Technologies”; Annex D relates to a “Potential Methodology for Local Planning Authorities with Strategic Search Areas”; with Annexes E and F containing a “Glossary of Terms” and a list of “Contacts”.

Para 2.14 of TAN8 states “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”.

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

1. The provision of energy from renewable sources is an important component of the UK Government energy policy. The target is to produce 10% of electricity from renewable energy sources by 2010.
2. The Welsh Government has a target of 4TWh of electricity per year to be produced by renewable energy by 2010 and 7TWh by 2020. The 4TWh target equates to a requirement to have 1500MW installed by 2010. Wales currently has around 550MW. To meet the target around 1000MW of additional capacity is required.
3. To meet these targets WG has advised that 800MW of capacity is required from on-shore wind sources with 200MW from offshore and other renewables.
4. The core purpose of this TAN is to deliver these targets within the agreed timescales.
5. WG state that on-shore wind offers the greatest potential to meet these targets in the short to medium term. To meet this requirement the WG have concluded that large scale (over 25MW) on shore wind farms should be concentrated into areas called Strategic Search Areas (SSA's).
6. The TAN acknowledges that not all land within a SSA is going to be suitable but WG is satisfied that sufficient land has been allocated within these areas to meet their targets.
7. The TAN advises that Councils should refine the SSA to guide developers to the most appropriate locations within the SSA but does not preclude land outside of, but close to, the SSA from being considered.
8. There are 7 SSA's designated within Wales. The area that includes Rhondda Cynon Taf is SSA 'F' (Coed Morgannwg).

The SSA's have been chosen to meet the following characteristics:

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

The TAN does not rule out on-shore wind projects in other areas outside of the SSA's and advises that some previously developed (brownfield) sites may be suitable for up to 25MW which should be encouraged.

The TAN advises that most areas outside of SSA's should remain free from large wind power schemes and that Councils should consider the potential for cumulative impact and establish suitable criteria for separation distances between wind farms.

There is opportunity to achieve community benefits through major wind farm development. Some benefits can be justified as mitigation for the impact of the scheme while developers may offer benefits not directly related to the planning process.

The TAN outlines other forms of renewable energy technologies but acknowledges that it is likely that they will provide only a small proportion of the overall target. These technologies include Biogas, bio fuels for vehicles, combined heat and power plants, community heating, energy from waste, fuel crops, hydro power, methane, solar thermal and solar photo voltaic power.

The principles of TAN 8 (including reference to the SSA's) should be incorporated into Development Plans which should also promote high standards of fuel efficiency as well as other forms of renewable energy technologies that are likely to come forward during the plan period.

Of the Annexes to the TAN, Annex C has the greatest relevance to the generation of renewable energy by wind in so far as it briefly outlines current technologies highlighting some of the specific considerations of relevance to the development control process in the determination of this application. The information can be summarised as follows:

Turbine Technology

Most turbines have rotors that rotate about a horizontal axis. They convert the kinetic energy of the wind that passes through the swept area of the rotor into electrical energy by means of a rotor generally comprising 3 blades, a mechanical drive train and an electrical generator. The height of the turbine is normally at least twice the length of the blade. The blades need to be far enough from the ground to minimise turbulence and to increase the energy capture of the wind turbine.

Wind turbines are usually defined by the “rated capacity” which is measured in kilowatts (kW) or megawatts (MW). The “rated capacity” equates to the maximum electrical output. The power output is proportional to the cube of the wind speed. A doubling of wind speed will result in an approximate eight-fold increase in power output. A turbine on a site with an annual average wind speed of 6 metres per second (m/s) will only produce half as much energy as the same machine on the site with an average wind speed of 8 m/s.

A 45 metre high turbine with a 100kW output will generate enough electricity to supply 64 homes. A 65 metre high turbine with a 500kW output will supply 320 homes. A 95 metre high turbine with a 1MW output will power 640 homes while a 145 metre high turbine with a 2MW output will power 1281 homes. (all figures based on an average UK household consumption of 4100 kWh/year).

The blades are generally the largest single item that is transported to a wind farm during construction as they are manufactured in one piece, unlike the tower which is usually sectional. The blades are attached to the hub which is in turn attached to the main shaft that drives the generator. The generator, any gearbox and a yaw drive are housed within a nacelle. The yaw drive turns the rotor to face the wind. The nacelle is mounted on the tower.

Below a certain wind (the “cut in”) speed there is insufficient energy in the wind for the turbine to generate electricity. Between the cut in and the rated wind speed the blades of the turbine will be positioned to capture as much energy as possible. Once the rated capacity has been reached the angle of the blades are adjusted to limit the energy capture such that the rated power is not exceeded. The “cut out” wind speed cannot be exceeded as the turbine will stop rotating to protect itself. This is controlled by its own computer system which also monitors performance. If untypical vibration occurs caused by mechanical component imbalance is detected or if connection is lost to the electricity grid, all turbines will undergo an emergency stop.

Other Infrastructure

In addition to the turbines, the required infrastructure of a wind farm consists of adequate road access, on site tracks, turbine foundations, crane hard-standings, one or more anemometer masts, a (temporary) construction compound, electrical cabling and an electricity sub-station and control building.

Connection to the Electricity Grid

Small transformers are required to change the generating voltage to a common site voltage. These transformers are usually housed in the base of the turbine tower but might need a separate housing alongside. The output from individual turbines is normally connected to a sub-station via underground cables.

Responsibility for the routing of electrical cabling onwards from the sub-station to the nearest suitable point of the electricity distribution network is the responsibility of the District Network Operator (DNO) This will be achieved either by a standard 3 wire system on wooden poles or by underground lines. It should be noted, however, that laying high voltage cables underground is usually 6-20 times more expensive than a pole mounted system and would likely be justified for only limited lengths and/or in special circumstances.

Grid Capacity in Wales

There is currently very restricted capacity for further wind-power development in North and Mid Wales. The situation in South and West Wales is somewhat different with there being some significant spare capacity in the distribution and transmission systems that are operated by Western Power Distribution and NGT.

It is understood that a grid connection for the application is in the process of being secured.

Noise

Well designed wind farms should be located so that increases in ambient noise levels around noise-sensitive properties are kept to acceptable levels with relation to existing background noise. This will normally be achieved through good design of the turbines and any existing noise-sensitive development.

Noise levels from turbines are generally low and, under most operating conditions, it is likely that any turbine noise would be completely masked by wind generated background noise.

There are 2 quite distinct types of noise source within a wind turbine;

1. the mechanical noise produced by the gearbox, generator and other parts of the drive train, and
2. the aerodynamic noise produced by the passage of blades through the air.

There has been a significant reduction in mechanical noise since the early 1990's so the latest generation of wind turbines are much quieter than those first installed in Wales. Aerodynamic noise from wind turbines is generally

unobtrusive – it is broadband in nature and in this respect is similar to the noise of wind in trees.

Wind-generated background noise increases with wind speed, and at a faster rate than the turbine noise increases. The noise of the wind farm is therefore more likely to be noticeable at low wind speeds. Varying the speeds of the turbines in such conditions can, if necessary, reduce the sound output from modern turbines.

Low Frequency Noise

There is no evidence that 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 a modern wind farm was undertaken in the UK in 1997 for the DTI. Measurements were taken on site and up to 1km away – in a wide range of wind speeds and directions.

The study found that:

- a) Vibration levels 100m from the turbine were a factor of 10 less than those recommended for human exposure in critical buildings (i.e. laboratories for precision measurement)
- b) Tones above 3.0 Hz were found to attenuate rapidly with distance – the higher frequencies attenuating at a progressively increasing rate.

(Technical Advice Note 11: Noise also provides general guidance on the control of noise from new developments of various kinds).

Safety

Experience indicates that properly designed, erected and maintained wind turbines are a safe technology. The very few accidents that have occurred involving injury to humans have been caused by failure to observe manufacturers' and operators' instructions for the operations of the machines. There has been no example of injury to a member of the public.

The minimum distance between wind turbines and occupied buildings calculated on the basis of expected noise levels and visual impact will usually be greater than required to meet safety requirements.

Landscape and Visual Impact

Annex D relates to Authorities within which is covered by a Strategic Search Area (SSA) and states that the purposes of undertaking a refinement exercise is to achieve a finer grain of development allocation within it taking into account landscape, visual and cumulative impacts. It is anticipated that

refinements/adjustments can be made to the SSA boundaries when they are translated into local planning documents. This will facilitate the inclusion of development on the margins of the SSA's where local conditions recommend.

Proximity to Residential Dwellings

A distance of 500 metres is currently considered a typical separation distance between a wind turbine and residential property to avoid unacceptable noise impacts, however when applied in a rigid manner it can lead to conservative results and so some flexibility is advised.

Landscape and Character Value

The landscape value of an area is an important criterion in judging its suitability for wind turbines development. It is a factor that applies to a particular area rather than a generic landscape type.

Cumulative Landscape and Visual Impact

Cumulative effects are those that occur, or may occur, as a result of more than one wind farm project being constructed. The degree of cumulative impact is a product of the number of and distance between individual wind farms, the inter-relationship between their sub-areas of visual influence, the overall character of the landscape and its sensitivity to wind farms, and the siting and design of the wind farms themselves. It is important to recognise that cumulative effects consist of both those upon visual amenity as well as effects on the landscape. The degree of cumulative impact also gives rise to the notion of thresholds, beyond which impacts may not be acceptable.

In order to justify a threshold based on natural heritage factors, there needs to be clarity over natural heritage objectives. For example, in relation to cumulative landscape impacts, one needs to be clear whether the landscape objective in the area is:

15. To maintain the integrity and quality of the landscape (as may be appropriate within a designated landscape);
16. To maintain the landscape character; or
17. To accept landscape change.

There is an implicit objective in TAN 8 to maintain the integrity and quality of the landscape within the National Park i.e. no change in landscape character from wind turbine development.

In the rest of Wales outside the SSA's, the implicit objective is to maintain the landscape character i.e. no significant change in landscape character from wind turbine development.

Within (and immediately adjacent) to the SSA's the implicit objective is to accept landscape change i.e. a significant change in landscape character from wind turbine development.

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

Ecology and Ornithology

TAN5 – Nature Conservation and Planning, gives advice that should be taken into account when considering any development of land. The development of a wind farm is often a major civil engineering project and thus there are potentially very serious implications for biodiversity. The major ecological impacts are most likely to be associated with site infrastructure rather than the turbines themselves and the advice contained within TAN 5 should cover all aspects of the development – other than the impact of the moving blades upon birds and bats. With such extensive application sites there will very often be opportunities for developers to mitigate for any potential ecological damage and preferably enhance current wildlife habitats.

The impact of the moving blades upon bats and birds is a common concern but in most cases will not lead to significant numbers of deaths or injuries. “Bird strike” is most likely to occur if a wind turbine is erected directly in a migration path or where there is a high concentration of a particular species for feeding. Early consultations with the Countryside Council for Wales and RSPB are essential and most sites are likely to require a breeding bird survey in the spring and a winter survey as a minimum requirement.

Archaeology

Welsh Office Circular 60/96 – Archaeology and Planning gives advice on issues relating to archaeology. Care should be taken to ensure that relevant procedures are followed in preparing planning submissions, dealing with applications and pre/during construction.

Proximity to Highways

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

There is no evidence that motor vehicle accidents have been caused as a result of drivers being distracted by the movement of wind turbine blades. Wind turbines should not be treated any differently from other distractions faced by a driver.

The British Horse Society has suggested a 200m exclusion zone either side of public bridleways in order to avoid wind turbines frightening horses. This is not a statutory requirement and the circumstances pertaining at any particular site should be taken into account.

Proximity to Power Lines

Wind turbines should be separated from overhead power lines in accordance with the Electricity Council Standard.

Electromagnetic Production and Interference

A wind turbine can interfere with the electromagnetic transmission in two ways – by emitting an electromagnetic signal itself, and by interfering with other electromagnetic signals. The very low level of electromagnetic radiation produced by the turbine itself poses no greater threat to health than do most domestic appliances.

Provided careful attention is paid to siting, wind turbines should not cause any significant adverse effects on communication systems that use electromagnetic waves as the transmission medium (television, radio, microwave links, etc.) Specialist organisations responsible for the operation of the electromagnetic links typically require a 100m clearance either side of a line of sight link from the swept area of turbine blades, though individual consultations would be necessary to identify each organisation's safeguarding systems.

Shadow Flicker and Reflected Light

Under particular circumstances the sun may pass behind the rotors of a wind turbine and cast a shadow over neighbouring properties. The shadow flicks on and off as the blades rotate. This can be disturbing for the affected residents or even have the potential of being a health problem for people who are photosensitive epileptics. The problem is seasonal and only lasts for a few hours per day, but needs to be investigated where any potential exists. Developers should provide an analysis of the potential for shadow flicker impacting upon any nearby properties.

Turbines can also cause flashes of reflected light, which can be visible for some distance. It is possible to ameliorate the flashing but it is not possible to eliminate it. Careful choice of blade colour and surface finish can help reduce the effect.

Icing

The build up of ice on turbine blades is unlikely to present problems on the majority of sites in Wales. Even where icing does occur the turbines' own vibration sensors are likely to detect the imbalance and inhibit the operation of the machines.

Protecting Aviation Interests

Developments within a specified radius of major airports and aerodromes are subject to mandatory consultation with the Civil Aviation Authority (CAA) and/or the Ministry of Defence (MoD). The CAA will inform the applicant of any civilian airfields that are likely to be affected but it is the responsibility of the applicant/planning authority to consult the airfield management in question.

Lights are only required on structures that are over 150 metres high.

The MoD uses a large tract of Mid Wales for low flying training and consultation with the Ministry will be required for any proposals lying within a Tactical Training Area.

Any large structure is liable to show up on radar, but wind turbines can present a particular problem as they can be interpreted by radar as a moving object. Preliminary discussions with the National Air Traffic Service (NATS) have indicated that there are no significant problems likely for wind farm development in the SSA.

Glossary

Kilowatt (kW) – 1000 watts
Megawatt (MW) – 1000 kilowatts
Gigawatt (GW) – 1000 megawatts
Terawatt (TW) – 1000 gigawatts

LANDMAP

LANDMAP is the national information system, devised by the Countryside Council for Wales, for taking landscape into account in decision-making.

LANDMAP is a unique system, allowing information about landscape to be gathered, organised and evaluated into a nationally consistent data set.

LANDMAP Information is collected in a structured and rigorous way that aims to be as objective as possible. Its database contains both relatively objective information – such as rock type and historical information – and more subjective information, such as sensory responses and cultural interpretation.

LANDMAP information can also be combined with contextual socio-economic information.

In addition to TAN8 it is considered that the following TANS are of relevance.

TAN5: Nature Conservation and Planning (September 2009)

TAN11: Noise (October 1997)

TAN12: Design (July 2014)

TAN15: Development and Flood Risk (July 2004)

TAN16: Sport, Recreation and Open Space (January 2009)

TAN18: Transport (March 2007)

TAN23: Economic Development (February 2014)

Wales Spatial Plan (2008 Update)

This document builds on the originally adopted 2004 Plan. The WSP is important to WG as it helps deliver the priorities set out in 'One Wales'. The WSP is the overarching framework and integrative tool for Wales and provides an important underpinning in a whole range of matters, including reducing annual greenhouse gas emissions.

Energy Wales: A Low Carbon Transition (March 2012)

One Wales: One Planet (The Sustainable Development Scheme of the Welsh Government) (May 2009)

A Low Carbon Revolution Wales' Energy Policy Statement (WAG) (March 2010)

Climate Change Strategy for Wales (WG) (October 2010)

Practice Guidance – Planning Implications of Renewable and Low Carbon Energy Development (WG) (2010)

ETSU-R-97

This was 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 ETSU (the **E**nergy **T**echnology **S**upport **U**nit).

The aim of the Working Group was to provide information and advice to developers and planners on the environmental assessment of noise from wind turbines. The report represents the consensus view of the group of experts who, between them, have a breadth and depth of experience in assessing and controlling the environmental impact of noise from wind farms. This consensus view has been arrived at through negotiation and compromise and in recognition of the value of achieving a common approach to the assessment of noise from wind turbines.

This document describes a framework for the measurement of wind farm noise and gives indicative noise levels thought to offer a reasonable degree of protection to wind farm neighbours, without placing unreasonable restrictions on wind farm development or adding unduly to the costs and administrative burdens on wind farm developers or local authorities.

National Policy Statement for Renewable Energy Infrastructure (EN-3)
Department for Energy and Climate Change, Approved 18th July 2011

1.1.1 Electricity generation from renewable sources of energy is an important element in the Government's development of a low-carbon economy. There are ambitious renewable energy targets in place and a significant increase in generation from large-scale renewable energy infrastructure is necessary to meet the 15% renewable energy target.

2.7.20 In the case of onshore wind farms, it is likely that this flexibility will be needed in relation to the dimensions of the turbines, including tip height, hub height and rotor diameter. This may extend to other details of the turbine design, including the necessary size of any external cabins that may be required. In some specific circumstances, applicants may not know the precise layout of wind turbines, such as where the site is covered by forestry at the time of the application.

Ministerial Letter

In July 2011 John Griffiths AM, (then) Minister for Environmental and Sustainable Development at the Welsh Government wrote a letter to Welsh LPAs providing clarification on the maximum installed capacities for each SSA in context with the WGs energy policy aspirations set out in "a Low Carbon Revolution" which identifies Wales' sustainable energy potential to 2020/2025. A written statement by the First Minister dated 17 June 2011 also reflects the content of the Minister for Environment and Sustainable Development's letter.

The letter states:

“The potential estimated in the Low Carbon Revolution Energy Policy statement was based on the maximum capacities that we considered appropriate for the SSAs in Tan 8 in 2005. The maximum capacities of the SSAs as provided for and referenced in TAN 8, were assessed by independent consultants Garrad Hassan and provide for almost 1700 megawatts of onshore wind across all our SSAs. The remaining 300MW are anticipated to come from a combination of developments under 25MW, brownfield sites as well as community and local schemes and a contribution from micro-generation. We remain committed to achieving this potential”.

“For ease of reference, the identified maximum capacities for each of the SSAs as identified by Garrad Hassan were as follows:, SSA F 430 MW,”

“You will be aware that the UK Government has issued National Policy Statements for Renewable Energy Infrastructure for consideration by Parliament, which will provide the primary basis for decisions by the Infrastructure Planning Commission (IPC) on projects over the devolved threshold of 50MW in Wales. Nevertheless we expect all decision makers in Wales, including the IPC and its successor, to recognise our spatially specific policy outlined in TAN 8 and to respect the fact that the Strategic Search Areas have a finite environmental capacity and output should not exceed the maximum levels as assessed in 2005 and outlined above.”

“Our future well being, both material and social, will be dependent on achieving sufficient supplies of affordable low carbon energy. This move to a low carbon economy is an essential part of our commitment as a Government to sustainable development. Done successfully it will strengthen our economic well-being, improve the environment and help to address key social issues such as fuel poverty, and we look to work with our key partners to help us deliver this.”

(Committee is advised that the above quotes are considered to be the most relevant from the Minister’s letter).

The principal considerations in this letter are that, for the first time since the introduction of TAN 8 in 2005 there would appear to be both a “floor” and a “ceiling” to the amount of renewable energy (from wind turbines) that is to be provided within each of the SSA’s. In the case of SSA F (the one which affects RCT) TAN 8 introduced a minimum capacity of 290 MW (the “floor”) while the Minister’s reference to the Garrad Hassan study introduces a 430 MW limit (the “ceiling”).

The letter specifically refers to decisions taken outside of Wales (those over 50 MW) by the Infrastructure Planning Commission (IPC) and asks that such bodies (or their successors) respect the approach taken by the Welsh Government in

seeking to provide a “spatial” approach to meeting its renewable energy targets through the identification of SSA’s.

To put this into context the figures below show the wind farm applications received within SSA ‘F’.

In Planning

Abergorki (RCT) – the subject of this planning application
3 x 3MW = **9MW**

Mynydd Brombil (NPT)
5 x 2MW = **10MW**

Foel Trawsnant (NPT)
13 x 3MW = **39MW**

Total – 58MW

Consented

PantyWal Extension (BCBC)
10 x 2.5MW = **25MW**

Single turbine extension to Maerdy (RCT)
1 x 3MW = **3MW**

Pen y Cymoedd (RCT and NPT) – under construction
76 x 3MW = **228MW**

Mynydd Bwlfa (RCT) – under construction
9 x 2.5MW = **22.5MW**

Mynydd y Gelli (NPT and BCBC)
12 x 2MW = **24MW**

Total – 302.5MW

Operational

Ffynon Oer (NPT)
16 x 2MW = **32MW**

Maerdy (RCT)

8 x 3MW = **24MW**

PantyWal (BCBC and RCT)

21 x 2.5MW = **52.5MW**, comprising:
4 x 2.5MW (Fforch Nest within BCBC)
7 x 2.5MW (Fforch Nest within RCT)
10 x 2.5MW (PantyWal within BCBC)

(Note for Members: all three elements above are now collectively known as PantyWal)

Total – 108.5MW

These figures mean that, within SSA F, there is **469MW** (assuming the turbine sizes quoted above) either consented, operational or in planning of which the most significant proportion of which would be generated by the scheme at Pen y Cymoedd. Just taking the consented and operational figures this total reduces to **411MW**.

Within the '5km buffer zone' of SSA 'F' there are the following:

In Planning

None

Consented

Mynydd Portref Extension (RCT)

6 x 2MW = **12MW**

Headwind Taff Ely (RCT)

7 x 2 or 2.5MW = **14-17.5MW**

Operational

Taff Ely (RCT)

20 x 0.45MW = **9MW**

Mynydd Portref (RCT)

11 x 0.85MW = **9.35MW**

Ferndale (Arts Factory) (RCT)

8 x 0.8MW = **6.4MW**

(In respect of the 9MW generated from Taff Ely it is considered that this figure should be reasonably discounted from the existing installed capacity in terms of

the current policy position since it pre-dates TAN8. The TAN8 targets were on top of installed capacity as at July 2005. Given that Headwind Taff Ely would replace Taff Ely it is considered appropriate that this should be considered as 5-8.5MW).

(Note for Members: the Headwind Taff Ely scheme is a repowering scheme for Taff Ely – the existing 20 turbines will be decommissioned and removed and replaced with 7 larger turbines, so you will not get a situation of having both).

The above 'within the 5km buffer zone' schemes add 20.75-24.25MW of consented and operational capacity (Mynydd Portref, Ferndale and Headwind Taff Ely), with a further 12MW (this current application, Mynydd Portref Extension) in planning. This gives a 'within the 5km buffer zone figure of 32.75-36.25MW.

In respect of the SSA having reached its "environmental capacity" when it has totalled 430MW of energy within its boundary (see above reference to the "Ministerial Letter") there is no agreement either amongst LPAs or Wind Farm developers over what precisely should be taken into account when arriving at a total figure.

It was hoped that, as the capacity within SSA F was nearing its "ceiling", (the debate as to what should be included largely relates to consented schemes that have not been built or schemes that are "in planning" and not yet determined) the Planning Inspectorate would help to clarify the mechanism for determining that figure, but recent appeal decisions have not offered any clarification of this position.

Therefore, for the purposes of determining this (relatively small) application Committee is advised to consider the relevant merits of the scheme as a whole rather than trying to establish a level where it is considered that a balance has been exceeded.

REASONS FOR REACHING THE RECOMMENDATION

Section 38(6) of the Planning and Compulsory Purchase Act 2004 requires that the planning application for Abergorki Wind Farm should be determined in accordance with the provisions of the Development Plan unless material considerations dictate otherwise.

This section of the report identifies the relevant development plan policies for the purposes of S38(6) and discusses the other policy and material considerations which apply to this development. It then provides an assessment of the proposal against the Development Plan policies and material considerations, drawing on the findings documented in the ES.

The principal (and principle) issues in the consideration of this application are the impact of the development on the surrounding landscape, towns and villages, the impact of the construction process on the ecology of the area, transportation issues, and the economic / regeneration benefits associated with the scheme.

Committee is advised that large or complex schemes will rarely satisfy all of the criteria set out in the variety of policy and advice guidance that surrounds a particular type of development and therefore a weighing up of all material considerations will be required in order to reach a decision.

Committee is also advised that in setting out the considerations that need to be taken into account the nature or complexity of the issue concerned may generate a greater or lesser amount of explanatory text than another section. That is not to say that the longer the section, the more weight (either for or against) should be given. For example, normally ecological issues generate a significant amount of supporting text however, if the applicant has carried out the proper surveys at the correct time of year and have proposed the appropriate avoidance / mitigation of features of interest then this may only warrant a short paragraph stating that the respective consultee(s) are satisfied with the submitted details (possibly subject to conditions or a S106 Agreement). Similarly, a topic area (such as Visual Impact in this case) may generate a significant amount of supporting text to fully apprise Members of what is quite a complex issue – especially in the case of a wind farm development where there are no universally accepted criteria for assessment. That is not to say that this topic area should be given greater weight than any other. It is for Committee to decide what weight to give to the respective material considerations when reaching a decision.

Visual Impact

To assist in the assessment of this (and other) wind farm applications (which are inherently complicated), the Council (as LPA) commissioned a Chartered Landscape Architect (Simon White of White Consultants) to review the proposed scheme and its landscape and visual effects (LVIA).

Members may be aware that this consultant, along with ARUP developed a set of criteria which has been previously used to assess (in July 2007) five submitted wind farm developments (Hirwaun, Maerdy, Fforch Nest, Trane Farm and Mynydd Portref). The same consultant was also employed to undertake a review of the LVIA (and ecological impacts) of the Pen Y Cymoedd wind farm proposal.

Given the close proximity of these two wind farm proposals (Abergorki and Maerdy as well as those others previously assessed) and the similarities in terms of the height of the turbines, it was considered important to gain consistent independent professional advice to aid Committee in the determination of this application.

The criteria (developed conjointly by Arup and White Consultants) are considered reasonable to test the potential acceptability of this proposal however, **Committee is advised that they are not statutory criteria nor are the thresholds for acceptability absolute. Research would indicate that there are not any universally accepted criteria for assessing wind farm impact however, given the implications of TAN 8 it is considered to provide a robust basis for an assessment.**

Committee is also requested to note that it is unlikely that any large scale wind farm proposal could meet all of the suggested criteria; however these criteria are seen to represent an appropriate “yardstick” against which wind farm proposals received within the County Borough could be consistently appraised.

The criteria used for this assessment are:

Policy Criteria

- *To accord with National SSA's (as identified in TAN 8);*
- *To accord with the refined SSA's;*
- *To avoid detracting from the character of designated Special Landscape Areas.*

It must be acknowledged that it is not possible to either hide turbines or mitigate their presence by normal landscaping means. Given the presumption in favour of wind farm development within the SSA (as opposed to land outside of it) Arup prepared a list of criteria aimed at assessing the effect of the proposal. These include:

Visual Criteria

- *To prevent the experience, within a settlement, of being in a wind farm landscape;*
- *To prevent the experience, within a residential dwelling, of being in a wind farm landscape;*
- *To avoid detrimental effects upon the experience of visitors and those engaging in recreation, to enjoy the landscape.*

Landscape Criteria

- *To minimise the adverse effects upon sensitive local landscape character and to avoid distortion of the sense of scale;*
- *To avoid over dominant effects on the skyline, and minimise breaking skylines when viewed from sensitive landscapes and viewpoints;*
- *To protect the character and setting of the Brecon Beacons National Park;*
- *To accord with the Study Zone E & F assessment of the LANDMAP Landscape Character sensitivity.*

A comprehensive assessment of the impact of the construction, operational and de-commissioning periods of proposal windfarm on both the landscape and the wide range of potential visual receptors within the study area are included in the ES.

At both the UK Government and Welsh Government level there is a wide range of policy statements supporting the need to combat climate change and increase the production of renewable energy. They are all generally consistent in that they support the development of renewable energy subject to the usual environmental considerations.

As stated above, TAN 8 specifically provides guidance as to the potential locations for on-shore wind farms. Paragraph 2.2 points out that 'large scale (over 25MW) onshore wind developments should be concentrated into particular areas defined as Strategic Search Areas (SSAs)'.

WG make it very clear that it sees the construction of on-shore (land based) wind farms as the principal means of achieving renewable and low carbon energy targets.

To achieve this target WG have set out 7 Strategic Search Areas (SSAs) throughout Wales. Committee is advised that all 3 turbines are located within SSA F (Coed Morgannwg).

Committee is advised that this application, per se, is not "large scale" insofar as it will only generate up to 9MW (assuming 3MW turbines are used). It has been referred to as an extension to Maerdy wind farm and, in combination with that particular development, would make it a "large scale" wind farm however it should be noted that it is not the same applicant and, in fact, the owners of the Maerdy wind farm have actually objected to this scheme. However, notwithstanding this, the SSA is considered to be (by TAN 8) the most appropriate location for wind turbine development.

A fundamental principle of TAN 8 (paragraph 8.5) is that "*within (and immediately adjacent) to the SSAs, the implicit objective is to accept landscape change i.e. a significant change in landscape character from wind turbine development*".

However Committee is also advised that TAN 8 states (paragraph 2.4) that "*not all the land within these Areas may be technically, economically and/or environmentally suitable for major wind power proposals*".

Annex D of TAN 8 points out that it is a matter for local planning authorities to undertake local refinement within each of these areas to try to establish the optimal location to site turbines.. The refinement of Strategic Search Area F (Coed Morgannwg), which is the SSA relating to this application, has been

undertaken and reported to a meeting of the Cabinet on 18th June 2007. Cabinet resolved to note the refinement Study as a background paper.

While this study *is* a material planning consideration in the assessment of the proposal it is *not* Supplementary Planning Guidance (SPG) nor has it been the subject to public consultation therefore, in itself, **it can only be afforded (very) limited weight in the decision making process.** This has been established through several public inquiries into wind farm development within RCT)

Although it should only be given limited weight, the refinement study includes the application site within “Zone 40” which is classified as an “unacceptable zone” due to intrinsic landscape sensitivity, value or visual characteristics. The sensitivity of the zone is stated as being medium-high and the specific summary states that the ‘*area has the sensitivity above because it is a narrow linear ridge unable to conceal wind turbines from the adjacent valley floors...*’ It is considered that the proposal will affect these landscape characteristics.

Committee is advised that the site is located within the Cwm Orci Special Landscape Area (SLA). This area is designated as such through the LDP.

Special Landscape Areas are non-statutory (local) designations. Planning Policy Wales states that “*local non-statutory sites can add value to the planning process particularly if such designations are informed by community participation and reflect community values. Local planning authorities should apply these designations to areas of substantive conservation value where there is good reason to believe that normal planning policies cannot provide the necessary protection. Such designations should not unduly restrict acceptable development*”

Committee is advised that, while this is a specific consideration in respect of weighing up the impact on the landscape, the LDP designation was made having regard to the fact that the designation sits within SSA F and that it was likely that the area may be subject to wind farm applications. It is therefore advised that the designation, *per se*, is not a reason to justify the refusal of the application (i.e. just because it lies inside the designation) but it is the assessment of the impact on the specific areas of interest that is a principal consideration.

Members may wish to note that most schemes that have been approved (within RCT) have been designed to be located on the plateau away from valley edges, especially steep sided edges. Some developments have been either refused or modified where turbines are particularly prominent or in close juxtaposition with steep glaciated landforms. These include the appeal decision at Hirwaun (Mynydd Bwllfa) where smaller turbines 110m high and around 80m from the edge of the scarp slope were rejected. Proposed turbines in the Pen y Cymoedd scheme overlooking Rhondda Fawr were also negotiated out of the final layout. Committee may also wish to note that three turbines in the Llynfi Afan (Neath

Port Talbot and Bridgend) scheme closest to the settlements and the edge of the valley side/break of slope were removed after consideration at appeal.

Design and layout

A key principle of windfarm design is to make adjoining turbines the same size, type and colour, with similar spacing and layout (TAN 8 Annex D study SSA F, Annex J1). The current proposal should be seen as an extension to the (relatively) recently built Maerdy Wind Farm, and this has been undertaken in this case in respect of size although the location of the turbines are generally closer together than the Maerdy turbines.

Abergorki wind farm is also linear in character and located on the edge of a ridge as opposed to set back from the plateau edge in contrast to the Maerdy wind farm turbines.

The turbines do not correspond to the Annex J1 aims and guidelines in respect of optimising the location of a wind farm in respect of siting turbines back from the edge of plateaux or valley sides. The guidance suggests that a distance of around five times its height to blade tip from the top of break of slope where possible. This is often difficult to achieve given the current size of turbines. However, two of the three proposed turbines are less than one height/length from the break of slope. This is very close and differs from the approach taken with Maerdy wind farm of setting turbines back onto the plateau.

In terms of optimising wind turbine design and size, the guidelines suggest that where possible, it should be considered not using wind turbines higher than a third of the height of the landform they are placed on where the break of slope and height is well defined. Again, this is difficult to achieve and other approved wind farms have exceeded this rule of thumb. However, they are for most part set back from the relevant edges so that the full height of the turbine is not easily seen against a landform from lower levels at least. The Hirwaun (Mynydd Bwlfa) wind farm was rejected at appeal partly due to this issue. These 146.5m high turbines are located in juxtaposition to the 100m high very steep slopes of Craig y Aber and a total of 270m high valley side at Treorchy. It is considered that they would breach the indicative guidelines.

Landscape and Visual Impact Assessment (LVIA)

The Zones of Visual Influence (ZVI) maps, photomontages and wireframe diagrams submitted with the ES, indicate that the proposed windfarm (and/or parts thereof) would be clearly visible from a wide variety of viewpoints.

The applicant's own description of impacts on Treorchy are said to be very limited due to the alignment of streets parallel to the proposal. While views of the turbines would be blocked by the existing street patterns, the overall assertion

could be challenged as there are a variety of views from a number of streets that will either face the development or present gaps in the frontages (such as at road junctions, children's' play areas, car parks, etc,) where views would be clear.

It has been assessed that the effects on Treorchy will be significantly adverse. The effect on Maerdy is also significant but likely to be lesser as the proposal is sited on the western edge of the ridge and Maerdy windfarm is located primarily to the east. The effects on the users of open access land on Mynydd Maerdy and on users of the public footpath to the west in Fforch Orky are stated to be of major significance.

With regard to the landscape impact of the proposal, the turbines will be taller than the Craig yr Aber landform. Overall, it has been considered that the applicant's own assessment of landscape impact appears to be inconsistent and a significant effect on the landscape would be expected.

The effect on the moderate value Landscape Habitats aspect area CynonLH066 which is of moderate sensitivity is stated as minor with a negligible significance of effect. This is justified by the small geographical extent of the impact.

The effect on the moderate value Visual and Sensory aspect area CynonVS738 which is of moderate sensitivity is stated as small with a minor significance of effect, although major around the site itself. Maerdy and Ferndale wind farms are also within the area. The LANDMAP description and delineation of this area is poor, and does not do justice to the qualities of these ridges and hills including the wide, open views across the coalfield plateau. Committee is advised that LANDMAP is a tool for assessing the landscape and is a document "owned" by the former CCW (now NRW). NRW suggest in their consultation response that the scheme does not perform very well however have resolved not to object in respect of the application.

A criticism of the applicant's submission is that the effect of the proposal on Cwm Orci Special Landscape Area (SLA) is "described" rather than formally "assessed" in terms of significant effects or otherwise in the applicant's Landscape and Visual Impact Assessment. The value of the area is stated as being concentrated in the valley rather than the tops, based on LANDMAP aspect values. Although the LVIA acknowledges that the turbines would be prominent and conspicuous in views in and around the SLA, the majority of the special qualities are stated to remain unaffected, presumably including the steep craggy sides. The strategic criterion of need in the SLA statement mentions the prominence of the area with the edges of the valley overlooking Treorchy. It is considered that the key policies of retaining the hidden character and general air of remoteness is mentioned but not addressed in terms of effects. Whilst Maerdy wind farm does impinge on the area (with Turbine 6 within its boundaries) the effect on the area will be significantly extended and exacerbated by the Abergorki turbines, all of which are in the area but much closer to the ridge edge. It is

considered that these turbines reduce the apparent scale and over-dominate the craggy sides of the valley affecting its perception and also adversely affect the area's air of remoteness. Having regard to this, the effects of the proposal on the SLA have therefore been considered to be adverse and significant.

The visual effects of the proposal are accepted in the LVIA as significant viewpoints in Treorchy, Maerdy and the A4233 viewpoint to the east. However, the LVIA suggests that there are no significant effects on settlements. The effects on users of Treorchy cemetery which is important to the local community and sensitive were not addressed in the original assessment. Having regard to the additional view point carried out by the applicant from Treorchy Cemetery, which is considered to be a sensitive receptor, the nearest turbine is around 1.3km away and could be described as a dominant moving feature on the skyline drawing the eye and significantly reducing tranquillity in the cemetery. They also diminish the apparent scale of the landform of Craig yr Aber and adversely affect its imposing character as a 'natural' backcloth to the cemetery. Though the existing Maerdy turbines can be seen they are further away and are set back from the edge of the plateau which means that they do not dominate the landscape or the view. The proposed turbines, which are closer to the viewer and closer to the ridge edge, appear much larger and have a significantly greater effect. That effect would be likely to be significant and adverse. **Committee is advised that a specific wire frame and photomontage of the effect of the turbines on Treorchy cemetery will be provided as part of the Committee presentation.**

The effects on the living conditions in terms of residential visual amenity in and around properties at Fforch Orky, Fforch Isaf and some properties on the edge of Treorchy are accepted as significant. It is considered that the effects on these properties are somewhat understated in the submission by the applicant.

In conclusion, it has been advised that the landscape impact of the turbines would dominate the perception of the SLA's character as very large structures extending along the prominent ridge above the steep craggy sides which are also primary features. The proposal has significant adverse effects on local landscape character including the perception of the scale of Craig y Aber and the hanging valley of Cwm Orci. With respect to geological landscape aspect area CynonGL026 the effects are underestimated and would be significant, affecting the glacial hanging valley. In terms of the visual and sensory aspect area VS738, the proposal would also have cumulative additional and combined significant effects on the area as it allows tall turbines to stray onto the ridge. The Maerdy windfarm remains on the plateau and Ferndale on the ridge has much smaller turbines – about half the size, which are therefore more in scale with the ridge, although prominent.

Members will note that connection between the turbines and the substation would be via underground cables and therefore there would be no visual impact.

Committee is advised that most of the comments above are derived from White Consultants assessment of the scheme. The consultants were not requested to offer any opinions as to whether this application should be approved or refused (nor have they) but were specifically asked (as has been the case of all other wind farm applications) to provide a detailed assessment of the performance of the wind farm. It is clear from these comments that there is significant concern over the impact of these three turbines on the landscape and surrounding area. It is considered that, based on these comments, there would be sufficient grounds to refuse this application however, Committee is reminded of the advice given earlier that it is unlikely that any wind farm application could meet all of the indicative criteria for acceptability and that any decision that is reached must have regard to all of the material considerations pertinent to the scheme.

Committee is also advised that although many of the comments made by NRW echo those made by White Consultants, they have not objected to the scheme and therefore, should the application be refused, would not assist the Council in defending its decision in the event of an appeal / Public Inquiry.

Cumulative assessment

The preceding section dealt with the performance of the scheme largely in isolation. This section deals with the assessment of cumulative impact i.e. the effect of the development in combination with *existing* development. The Council has been advised (by White Consultants) that the issue of cumulative assessment has not been explored by the applicant as a cumulative effect but as an additional Landscape Visual Impact Assessment (LVIA) effect with the existing development taken as a baseline. It has been asserted that the cumulative impact carried out by the applicant does not address the combined effects of existing as well consented and the proposal. It is therefore considered to be limited in scope.

As a general statement, the cumulative impacts of all wind farms are stated as significant with or without Abergorki wind farm. The proposal is stated as being perceived as part of a group of turbines including Maerdy, Pen y Cymoedd and Mynydd y Bwllfa wind farms and will add to the '*cumulative incremental change from a small proportion of additional turbines*'. It is true that looked at on a broad scale, looking across the coalfield plateau at a high level, the extension of three turbines appears to be relatively small compared to the wind turbines to the north, although it does mark an extension to the south.

The proposed turbines are stated as being consistent with Maerdy and '*well balanced in the context of the plateau landform upon which both are located...*' however, it is considered that Maerdy is set back in a *cluster* from the edge of the adjoining plateau (although Turbine 6 is more prominent than the rest of the group).

The proposal is for a *line* of turbines located where the plateau begins to narrow to a ridge. The ridge top is around 570m wide between steep slopes around Abergorki and narrows further to around 300m wide to the south. As stated above the turbines are located on the western edge of the ridge adjacent to Craig yr Aber and therefore have a greater effect on the valley side. It has been disputed therefore that Abergorki wind farm is consistent with Maerdy wind farm in anything apart from its proximity and size of turbine. It is considered that Abergorki wind farm will have a different layout and more adverse relationship with landscape character and landform.

The effect on the visual and sensory aspect area (CynonVS738) is said not to be significantly affected as it has Ferndale and Maerdy within it. It could be argued that cumulatively, the turbines do contribute to a further additional adverse effect on the area as they are placed on the ridge rather than the plateau and are almost twice the size of the Ferndale turbines, therefore having a greater effect on the area's qualities. The combined effect of the three wind farms is also considered to be significantly adverse.

The effect on Cwm Orci SLA is not specifically addressed by the applicant. The proposal is stated as not significantly changing the perception of SLAs or their special qualities. It is considered that the proposal significantly extends the line of turbines of Maerdy wind farm within the Cwm Orci SLA and both additionally and in combination has a significant adverse effect on its perception and special qualities.

The overall cumulative effect of all existing and proposed development in combination against a baseline of no turbines is not explored. In the LVIA, the baseline of other existing wind farms is repeatedly used as a justification for the proposal. This is only considered to be a fair approach if the cumulative assessment properly addresses the issue of combined cumulative effects with the existing development. In the two further scenarios of wind farms consented but not constructed and at planning application stage it appears that just the *additional* effect of the proposal is assessed, and not the combined effect. On the whole, this proposal would be the closest and most dominating of the windfarms in and around Treorchy, despite its smaller size.

The Brecon Beacons National Park Authority (BBNP) have not objected to this particular development however has expressed significant concern over the likely cumulative impacts from the number of wind farm developments around the southern fringe of the Park. While there is some merit for the concern expressed by the BBNP the nature of development that has been approved and is taking place on its southern fringe (Pen y Cymoedd, Mynydd Bwlfa, Maerdy, Maes Gwyn, Ffynon Oer, Llynfi Afan, etc.) is largely the result of the designation of SSA F in TAN 8. The TAN made it clear that development within the National Park would not be expected however it made land around the southern coalfield

plateau the most likely target for wind farm applications. Each of the submitted applications (certainly within RCT) had specific regard to the impact on the BBNP (its setting and “special qualities”) and each were found to be acceptable in respect of the magnitude of any impact. The siting of an additional three turbines as part of this scheme is unlikely to have any significantly adverse impact on the setting and special qualities of the BBNP as to warrant its refusal. Again, as no objection has been received from the Park Authority it is unlikely that they would participate in any appeal proceedings in the event of a refusal.

In conclusion, it is accepted that the effects of this proposal are local. Landscape change is accepted in and around SSAs and where other turbines are present in views. However, this proposal is located in a highly prominent location especially when viewed from Treorchy and the Rhondda Fawr with no mitigation possible due to site constraints. It therefore it could be interpreted that it is a wind farm in an inappropriate location dominating local landform with significant adverse effects on nearby settlements and residents and users of the cemetery as well as walkers and other upland users.

Again, most of the above is taken from the written assessment by White Consultants. If Committee was resolved to refuse the scheme there would be sufficient basis for doing so if it was considered that an additional 3 turbines to those already present (Maerdy and Mynydd Bwlfa) as well as the 76 under construction at Pen Y Cymoedd would “tip the balance”. Committee is advised that the lack of a “proper assessment” is not a reason, in itself, to refuse the application – it is the consequence of any additional turbines on the landscape that is the key issue.

The impact on residential amenity (Noise and disturbance) and Shadow Flicker

Noise is a material consideration in the determination of wind farm applications and an objection has been received which raises concerns regarding the noise impact on nearby residential properties. TAN 8 at Annex C (paras 2.14 – 2.17) advises on issues of noise and low frequency noise. The Environmental Statement (ES) submitted presents an assessment of the noise impact of the proposed Abergorki wind farm on the residents of nearby dwellings and other noise sensitive properties during both the wind farm’s construction and its operation. The ES also considers the cumulative noise impact from other nearby wind farm proposals (Maerdy, Pen y Cymoedd and Mynydd Bwlfa).

The results indicate that the predicted noise levels, at the surveyed points, are within the acceptable guidelines recommended for daytime and night time limits. Notwithstanding the above, if Members are minded to permit this application it is recommended that appropriate conditions are attached which control and, if requested, monitor the levels of noise emitted from the site.

The ES also demonstrates that ETSU-R-97 noise limits appropriate to the cumulative noise situation are predicted to be achieved at all wind speeds at all of the assessment locations. Furthermore, the calculations of cumulative noise levels assume that all receptors are downwind of all wind turbines. When a receptor is upwind of a turbine, this, in practice, results in a reduction in the noise levels experienced. Therefore, for the assessment locations considered, these cumulative predicted noise levels are unlikely to fully occur in practice for most conditions. Three of the four assessment locations are to the west and south west of most turbines and will not be downwind of the turbines under the prevailing UK wind conditions of south westerly winds.

Members will also note that there has been no objection from the Public Health and Protection Section subject to relevant conditions being imposed. The application is therefore considered to be compliant with national policy in relation to the noise impacts.

Shadow flicker from wind turbines is relatively rare and only has the potential to occur within a certain distance from the turbine to the affected property. The ES concludes that this will not occur in this proposal.

There will be an element of disturbance throughout the construction period of the wind farm however these can be minimised through the use of conditions. The wind farm is unlikely to cause any disturbance in its operational phase (25 years) but the decommissioning phase is likely to lead to similar disturbances to the construction phase but can, again, be mitigated through condition.

The impact on ecology and nature conservation

Natural Resources Wales (NRW) and the Council's Ecologist have fully considered the ES and the impact of the scheme on the principal habitats of concern.

The principal habitats are considered, by the ES, to be modified blanket bog and valley mire habitats based on deep peat.

These conclusions are echoed by the Council's Ecologist. Both the Ecologist and CCW (now NRW) request that the relevant ecological conditions imposed on the previous permission (at Maerdy) be updated and attached to any new permission. In order to obtain additional control over the Habitat Management Plan, it is recommended that this should be captured and translated into a Section 106 agreement. The applicant has proposed to include this within a Unilateral Undertaking (a type of S106 agreement). At the time of writing this report the UU had not been received however the applicant has given assurances that it will be completed by the date of Committee)

It is considered that the site performs relatively well in respect of ecological and nature conservation impacts and is considered to comply with relevant LDP policies listed in the Policy Context section of this report. Therefore, there is no objection to the proposal in these respects.

The impact on Public Rights of Way

With regard to objections raised regarding the location of the proposed turbines in relation to the Rights of Way (PROW), the Council's Countryside Section has confirmed that the proposed turbines will not have an impact on the accessibility of the PROW. The turbine locations will be within the distance recommended in the TAN guidance as the distance of the footpath from the turbine is approximately 150m which is considered acceptable. Again, the proposal performs well in this respect and is compliant with the respective LDP policies.

Cultural Heritage

The effect on the outstanding value Historic Landscape aspect area CynonHL687 which is of high sensitivity is stated (by the applicant) as small with a minor significance of effect. This is justified in the LVIA by the presence of other wind farms in the area and that no historic features are directly affected.

The effect on the high value Cultural Landscape aspect area CynonCL056 which is of moderate sensitivity is stated (by the applicant) as small with a minor significance of effect. This is justified by stating that the proposal will not significantly affect recreational amenity in the context of the other wind farms.

There are no Scheduled Ancient Monuments or Listed Buildings within the site or along the access road. However, within the study area a Post-Medieval semi-permanent upland settlement (or Hafod) is located close to the access track. Two further Scheduled Monuments are located within the survey area. These are Castell Nos (a Medieval Castle), which is located to the east of the site, and the Incline System at Cefn Ynysfeio an industrial structure built at the edge of the survey area beside the Cefn Feio Quarry. The Pont Lluest-Wen Bridge, a Grade II listed building, is also located within the survey area. The application site also lies within the registered area of the Rhondda Landscape of Special Historic Interest (Rhondda LSHI).

It is not considered that the location of the turbines will result in any overall change in effects on the character of the Rhondda LSHI. The consultation response from the Glamorgan Gwent Archaeological Trust has raised no objections to the proposed development subject to conditions and as such the proposal is considered acceptable in regard to the relevant LDP policy.

Hydrology, Geology and Hydrology

Natural Resources Wales and Authority's Drainage Section have raised no objection to this application subject to a number of conditions being imposed. The Planning Statement also concludes that the proposal would not lead to additional significant effects on surface water and groundwater environments than the previously permitted scheme (Maerdy). As such, the proposal is considered LDP policy compliant and acceptable in this respect, subject to conditions.

Traffic and Transportation (Highway Safety)

The Transportation Section has reviewed the application and ES, and its supporting documents. The Section have advised that the preferred route would have been the western access however this has now been removed from the scheme. While the eastern route is more difficult due to the need to negotiate the local villages, no objection has been raised subject to the inclusion conditions, which include a restriction on the times that abnormal loads can be delivered.

Given the above, it is considered that the proposed development would not have any significant impact on highway safety.

Socio Economic Impact

The ES points out that the socio-economic effects would include '*direct effects such as job creation and possible indirect effects such as increased spending in the local economy by those employed on site*'.

It further suggests that other effects would '*include the impact of the development on tourism and recreation in the area and how it affects land use and agriculture in the immediate vicinity*'.

Committee is advised that any employment that is either created or secured through wind farm development would be predominantly through the construction phase. As the development only involves the construction of three turbines (albeit with a significant amount of ground re-profiling to create the new access route to the site) it is unlikely that the proposed development would have any long term economic benefits in terms of job creation.

The proposal does however provide highway improvements (widening) through the Former Maerdy Colliery Site (FMCS). In total, 2.2 km of the access required to serve the wind farm sits within the Strategic Site. While this work is required solely to facilitate access to enable the turbine component parts to reach the application site, the works will be to the appropriate adoptable standard which means that, after the construction period is over, the improvements would remain to serve any future developments in this area without the need for the Council to have to provide this infrastructure.

The applicant has also entered into a Unilateral Undertaking (s S106 agreement) to provide £30,000 towards the preparation of a “master-plan” for the FMCS. While this, of itself, will have little direct impact on job creation, the master-planning process will enable the Council to consider the best way to bring economic activity to this Strategic Site.

In addition, the applicant has also proposed to provide a contribution of £100,000 towards the Council helping to enable some of the aspirations outlined in the aims and objectives of Policies CS3 and NSA 4 of the LDP. .

The improvements of the access will also provide some highway improvements to the FMCS as well as actively contribute to the land reclamation scheme (the feasibility study for which has already been undertaken) which involves the re-profiling of the former tips and the removal and replacement of the semi-derelict bridge (which is currently maintained at the Council's expense) with a culverted embankment which would also be considerably safer than a replacement bridge and remove any future liability costs associated with a bridge.

Finally, the existing land uses on the site would continue through the wind farm development (after the construction period) which means that there would be no loss of economic activity to the application site (any agricultural activity can continue right up to the turbine tower itself.

Members are advised that there is also a significant financial benefit to the Council through the land deal to enable the right of access. The precise details of this transaction are not considered to be a material planning consideration as the negotiated settlement was largely a commercial decision independent of the planning process. However, due to the nature of the reclamation works already undertaken in respect of the FMCS, any “income” that is generated on this site would normally be the subject of 100% “claw-back” by the Welsh Government however, it is proposed that this money will be used towards the advancement of the reclamation of the site (the remaining work required to undertake the restoration that was the subject of the Feasibility Study (referred to earlier in the report), then this would not be the subject of “claw-back” and therefore can be used legitimately for the completion of this scheme – again providing a valuable benefit for the Council. Committee is advised that these works (above and beyond what is required to provide a safe access) is not essential for this scheme to proceed and should therefore be given limited weight in the decision making process.

Community Infrastructure Levy (CIL)

The Community Infrastructure Levy (CIL) was introduced in Rhondda Cynon Taf from 31 December 2014.

The application is for development of a kind that is not CIL liable under the CIL Regulations 2010 (as amended).

Conclusion

As stipulated in TAN8 and as previously acknowledged by granting Maerdy wind farm, there will be a change in landscape character. Many of the policies referred to that are required to be taken into account when reaching a decision requires a valued judgement. For example, a policy that supports development subject to it not having any adverse effect on a particular interest (such as noise, amenity, landscape character, etc.) requires an assessment of the impact. If Committee consider that these impacts are significantly adverse then it would be held that the development is out of accord with that policy and therefore should be refused. Conversely if Members consider that the impact is acceptable then a development is held to be in accord with the policy and therefore should be approved (unless material considerations indicate otherwise).

In terms of the specific performance against the LDP policies, the creation of the access through the FMCS and the provision of the financial contributions for the production of a master-plan / improvements would mean that it complies with policies CS3 and NSA4 (the Strategic Site allocation). The contributions will also mean that the scheme complies with policy AW4. There are other contributions to be made by the developer in terms of "community benefit" however these have been / are to be negotiated outside of the planning system therefore should not be taken into account when reaching a decision. Policy AW7 relates to sites of historic importance and to Public Rights of Way. The consultation responses from GGAT and the Council's PROW section offered no objections to the proposal and are therefore considered to be compliant with that policy. Similarly the consultation response from the Council's Public Health & Protection section means that it is compliant with policy AW10. Policy AW13 specifically relates to large scale wind farm development for which the application is not, strictly speaking, relevant but has been assessed as possibly being seen an extension to the Maerdy wind farm. Any turbine is more than the 500 metre "buffer" from any residential property and it will not impact significantly on the BBNP. The remainder of the criteria contained in this policy as well as those contained in policies NSA25, AW5, AW8 and AW12 refer to the proposed development not having any unacceptable impact (in respect of the criteria listed). The consultation responses from NRW and the Council's Ecologist demonstrate that there is no unacceptable impact on ecology subject to the applicant entering into a S106 Agreement in respect of providing a Habitat Management Plan.

Committee is advised that, at the time of writing the report, the applicant proposes to include this requirement within the Unilateral Undertaking and submit it prior to Committee. If this is done, the application is policy compliant in respect of ecological impact. Similarly, while the Transportation Section would prefer the access to have been through the western access (now removed from the scheme), no objections (subject to conditions) have been made to the proposed scheme therefore it is deemed to be policy compliant in respect of highway safety. Policy AW14 seeks to safeguard mineral resources from development that would prevent their extraction. Committee is advised that the development is in a mineral (sand stone) safeguarding area however there are no plans proposed to extract the mineral and the construction of wind turbines is effectively a temporary consent (albeit for 25 years) which would mean that, should the resource be required, it would not be sterilised after that period (unlike, for example, a housing development which would permanently sterilise the extraction). Accordingly it is considered that the wind farm proposal is policy compliant in this respect.

The biggest issue in the determination of this application is the impact on the landscape and visual amenity. Committee will be aware from the relevant paragraphs above that White Consultants consider that the application performs poorly in this respect. Therefore if Committee is minded to refuse the application then this should be done having regard to these policies. To assist in the assessment of this aspect of the application, a number of photomontages will be made available as part of the Committee presentation. Arguably, the greatest impact (in terms of a view) would be had from Treorchy Cemetery (although there will be a similar view from Treorchy Railway Station). A specific photomontage will be shown illustrating the likely impact. Therefore, in respect of landscape and visual impact, the current proposal needs to be judged against any increase in effect from the existing adjoining / adjacent development. If Committee decide that the additional impact of this view is considered acceptable then it is suggested that all other visual impacts would also be acceptable, in which case the scheme would be compliant with the respective policies and should therefore be approved.

Committee is advised that it is considered that, in terms of landscape and visual amenity, the scheme does not perform well and that the comments made by White Consultants are valid. It is therefore considered that the scheme does not comply with policies AW5, AW8, AW12 and NSA25 of the LDP. However, National Planning Policy found in Planning Policy Wales (Chapter 7) that *“Local planning authorities are required to ensure that the economic benefits associated with a proposed development are understood and that these are given equal consideration with social and environmental issues in the decision-making process, and should recognise that there will be occasions when the economic benefits will outweigh social and environmental considerations”*. In light of this, Committee are advised of the need to look at the proposal “in the round” having regard to the balancing of all competing interests. The Council, as LPA, needs to

balance the negative impacts of the affect on the landscape with the positive benefits associated with the improvements likely to be made in the development of the FMCS – a Strategic Site in the LDP, especially where an element of “pump priming” investment could help to kick start a site where the market hasn’t delivered yet.

It is considered that the weight of argument lies in recommending approval of the proposal.

Committee is advised that the recommendation being made is very much “on balance” specifically when weighing up the significance of impacts on the landscape and affects on the nearby settlements. Committee is reminded of the comments raised by Simon White of White Consultants which emphasise that the site itself does not perform particularly well in respect of the landscape and visual impacts however the proposed development lies **within** the SSA where Welsh Government advice is that landscape change must be accepted.

The scheme, other than in respect of the landscape and visual aspects, performs relatively well and it is acknowledged that there is unlikely to be any site within SSA F (or any other SSA) that is capable of meeting all of the indicative thresholds and therefore all decisions, to a greater or lesser degree, are a matter of balanced judgement.

The submitted information provides comprehensive evidence, which has been rigorously assessed, that the applicant has endeavoured to mitigate against and minimise the detrimental impact of the proposed scheme.

Therefore, it is recommended that planning permission be granted, subject to the following conditions:

RECOMMENDATION: Approve

RECOMMENDATION: Grant

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

Reason: To comply with Sections 91 and 93 of the Town and Country Planning Act 1990.

2. The development hereby approved shall be carried out in accordance with the following approved titled plans/drawing numbers.

28.Red Line & Construction Layout (Drawing: 5624_035_Fig_2-2_Site_Boundary_RevB 26/03/2015);

29.Generic Substation Plan (Drawing: 5624_038_Fig_2-

- 6_Substation_Layout_14/06/13);
30. Generic Turbine Elevation (146.5m tip height) (Drawing:
130614_Abergorki Figure 2.4_Generic Turbine Elevation
Plan_018_0.01;

Reason: In order to define the extent of the permission hereby granted and in order to ensure that the development is carried out in accordance with the approved plans.

3. The permission hereby granted shall endure for a period of 25 years from the date when electricity is first exported from any wind turbine within the Abergorki Wind Farm to the electricity grid network ('First Export Date'). Written confirmation of the First Export Date shall be notified in writing by the developer to the Local Planning Authority within one month of the First Export Date.

Not later than 12 months before the expiry date of the permission, a decommissioning and site restoration scheme shall be submitted for the written approval of the Local Planning Authority. Such a scheme will include for;

- 31. the removal of all surface elements, plus one metre of the turbine bases below ground level, of the wind farm;
- 32. confirmation of the management and timing of works;
- 33. a traffic management plan to fully address highway issues during the period of the decommissioning works;
- 34. any other works of restoration and aftercare, following consultation with other parties, as the Local Planning Authority deem to be reasonable and necessary.

The approved decommissioning scheme shall be implemented and completed within 24 months of the expiry date of this permission.

Reason: To ensure derelict or obsolete structures do not adversely affect the environment in accordance with policies AW5, AW6, AW8, AW12 and AW13 of the Rhondda Cynon Taf Local Development Plan.

4. All of the turbine blades shall rotate in the same direction (as the Maerdy Wind Farm).

Reason: In the interests of visual amenity in accordance with policies AW5, AW6, AW8, AW12 and AW13 of the Rhondda Cynon Taf Local Development Plan.

5. No development shall take place until details of the following have been submitted to, and approved in writing by the Local Planning Authority:

- the make, model, external finish and colour of the proposed turbines; and
- the materials to be used in the construction of any external unit transformer housing.

Development shall be carried out in accordance with the approved details.

Reason: In the interests of visual amenity in accordance with policies AW5, AW6, AW8, AW12 and AW13 of the Rhondda Cynon Taff Local Development Plan.

6. No development shall take place until a programme of archaeological work has been secured in accordance with a written scheme of investigation which has first been submitted by the applicant and approved in writing by the Local Planning Authority. The development shall be carried out in accordance with the approved programme.

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 in accordance with policies AW5 and AW7 of the Rhondda Cynon Taf Local Development Plan.

7. All wind turbines shall be of a 3 bladed configuration and not exceed an overall height of 146.5m to the tips of the turbine blades. The turbines shall not display any prominent name, logo, symbol, sign, advertisement on any external surface unless otherwise agreed in writing by the Local Planning Authority. The turbines shall not be illuminated and there shall be no permanent illumination on the site.

Reason: In the interest of visual amenity in accordance with policies AW5, AW6, AW8, AW12 and AW13 of the Rhondda Cynon Taf Local Development Plan.

8. All electricity and control cables within the site shall be laid underground and alongside tracks which are constructed on the site as part of the development.

Reason: To minimise environmental impact in the vicinity of the site in accordance with policies AW5, AW6, AW8, AW12 and AW13 of the Rhondda Cynon Taf Local Development Plan.

9. Prior to the commencement of development, a Construction Method Statement (CMS), describing the works to be undertaken and pollution prevention measures to be implemented during the construction phase, shall be submitted in writing to be approved (in writing) by the Local Planning Authority. Development shall be implemented in accordance with

the approved Statement. The Statement shall include provisions relating to:

35. The construction period and sequence of development works;
36. Pollution control (including fuel, oil, concrete and chemical storage);
37. Constructional Noise Management Plan;
38. Environmental Management;
39. Details of location of temporary storage compounds;
40. Details of track construction and laying of cables and measures to be implemented to ensure that there are no polluting discharges from tracks and disturbed areas;
41. Provision of any temporary fencing;
42. Details of excavation of turbine bases and of the nature, type and quantity of material required to be imported onto the site for backfilling operations;
43. The management of ground and surface water;
44. The management of foul water;
45. The monitoring of private water abstractions
46. Details of any soil storage and spreading;
47. The provision of any means of temporary site illumination;

Reason: To protect the water environment and minimise environmental impact in the vicinity of the application site in accordance with policies AW5, AW6, AW8, AW12 and AW13 of the Rhondda Cynon Taf Local Development Plan.

10. Construction works on the site shall be confined to the hours of 0800 - 1800hrs on Monday to Friday inclusive, 0800 - 1300 hours on Saturday with no working on a Sunday or national public holiday. Out of these hours works at the site shall be limited to emergency works and dust suppression, unless otherwise first agreed in writing by the Local Planning Authority. The Local Planning Authority shall be informed in writing of emergency works within one working day of occurrence.

Reason: To minimise impact on the amenities of local residents in accordance with policies AW5 and AW10 of the Rhondda Cynon Taf Local Development Plan.

11. Notwithstanding the provision of condition 10 (hours of working), delivery of turbine and crane components may take place outside the hours specified subject to not less than 21 days prior notice of such traffic movements being given to the Local Planning Authority.

Reason: To minimise impact on the amenities of local residents and the local highway network in accordance with policies AW5 and AW10 of the Rhondda Cynon Taf Local Development Plan.

12. No development shall take place until a scheme for the protection of Public Rights of Way during works of construction has been submitted to and approved in writing by the Local Planning Authority. The scheme shall include:

- 48. Provision to ensure that Public Rights of Way maintained with no obstruction to use;
- 49. Measures to prevent any damage to Rights of Way from constructional activity at the site.

Reason: In the interest of public safety in accordance with policies AW5 and AW7 of the Rhondda Cynon Taf Local Development Plan.

13. No development shall take place until a Construction Traffic Management Plan (CTMP) has been submitted to and agreed in writing by the Local Planning Authority.

The CTMP shall include proposals for:

- 50. Construction vehicle routing and site accesses
- 51. The management of junctions to and crossings of the public highway and other public rights of way
- 52. The scheduling and timing of movements and deliveries
- 53. Details of escorts for abnormal loads
- 54. Temporary warning signs and banksman/escort details.
- 55. Details of any remediation works, alterations to road layouts, movement of sign and any other changes required to the highway network

The approved CTMP shall be implemented in the agreed form, unless otherwise agreed in writing by the Local Planning Authority.

Reason: In the interest of highway safety in accordance with policies AW5 and AW10 of the Rhondda Cynon Taf Local Development Plan.

14. The rating level of noise emissions from the combined effects of the wind turbines (including the application of any tonal penalty), when determined in accordance with the attached Guidance Notes, shall not exceed the values for the relevant integer wind speed set out in, or derived from, the tables 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 & 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 in accordance with policies AW5 and AW10 of the Rhondda Cynon Taf Local Development Plan.

15. The wind farm operator shall continuously log power production, wind-speed and wind direction, all in accordance with Guidance Note 1(d). This 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 in accordance with policies AW5 and AW10 of the Rhondda Cynon Taf Local Development Plan.

16. Within 21 days from receipt of a written request from the Local Planning Authority, following a complaint to it from an occupant of a dwelling alleging noise disturbance at that dwelling, the wind farm operator shall, at its expense, employ a consultant approved by the Local Planning Authority to assess the level of noise emissions from the wind farm at the complainant's property in accordance with the procedures 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 complainant relates to and any identified atmospheric conditions, including wind direction, and if possible 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 in accordance with policies AW5 and AW10 of the Rhondda Cynon Taf Local Development Plan.

17. Prior to the commencement of any measurements by the independent consultant to be undertaken in accordance with this condition, the wind farm operator shall submit to the Local Planning Authority for written approval 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 emissions. The proposed range of conditions shall be those which prevailed during times when the complainant alleges there was disturbance due to noise, having regard to the written request of the Local Planning Authority under condition 20, 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 in accordance with policies AW5 and AW10 of the Rhondda Cynon Taf Local Development Plan.

18. Where a dwelling to which a complaint is related is not listed in the tables

attached to these conditions, the wind farm operator shall submit to the Local Planning Authority for written approval proposed noise limits selected from those listed in the Tables to be adopted at the complainant's dwelling for compliance checking purposes. The proposed noise limits are to be those limits selected from the Tables specified for a listed location which the independent consultant considers as being likely to experience the most similar background noise environment to that experienced at the complainant's dwelling. The rating level of noise emissions resulting from the combined effects of the wind turbines when determined in accordance with the attached Guidance Notes shall not exceed the noise limits approved in writing by the Local Planning Authority for the complainant's dwelling.

Reason: To protect the amenity of residents in accordance with policies AW5 and AW10 of the Rhondda Cynon Taf Local Development Plan.

19. The wind farm operator shall provide to the Local Planning Authority the independent consultant's assessment of the rating level of noise emissions undertaken in accordance with the Guidance Notes within 2 months of the date of the written request of the Local Planning Authority for compliance measurements to be made under condition 20, unless the time limit is extended in writing by the Local Planning Authority. The assessment shall include all data collected for the purposes of undertaking the compliance measurements, such data to be provided in the format set out in Guidance Note 1(e) of the Guidance Notes. The instrumentation used to undertake the measurements shall be calibrated in accordance with Guidance Note 1(a) and certificates of calibration shall be submitted to the Local Planning Authority with the independent consultant's assessment of the rating level of noise emissions.

Reason: To protect the amenity of residents in accordance with policies AW5 and AW10 of the Rhondda Cynon Taf Local Development Plan.

20. Where a further assessment of the rating level of noise emissions from the wind farm is required pursuant to Guidance Note 4(c), the wind farm operator shall submit a copy of the further assessment within 21 days of submission of the independent consultant's assessment pursuant to condition 21 above unless the time limit has been extended in writing by the Local Planning Authority.

Reason: To protect the amenity of residents in accordance with policies AW5 and AW10 of the Rhondda Cynon Taf Local Development Plan.

21. 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 and 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 in accordance with policies AW5 and AW10 of the Rhondda Cynon Taf Local Development Plan.

Table 1 – Day-time $L_{A90,T}$ Noise Limits Applicable to Abergorki Wind Farm alone.

Property	Standardised Wind Speed at 10 metres Height, m/s								
	4	5	6	7	8	9	10	11	12
Fforch-Orchy House	43	43	43	43	43	43	43	43	43
Fforch-Isaf Farm	40	40	40	40	40	40	41	41	41
Maerdy	44	44	44	44	45	45	45	45	45
Treherbert	43	43	43	43	43	44	44	44	44

Table 2 – Night-time $L_{A90,T}$ Noise Limits Applicable to Abergorki Wind Farm alone.

Property	Standardised Wind Speed at 10 metres Height, m/s								
	4	5	6	7	8	9	10	11	12
Fforch-Orchy House	43	43	43	43	43	43	43	43	43
Fforch-Isaf Farm	40	40	40	40	40	40	41	41	41
Maerdy	44	44	44	44	44	44	44	44	44
Treherbert	41	41	41	41	41	41	41	41	41

22. Notwithstanding the provisions of conditions 14–21, the wind farm operator shall undertake measurements of noise levels using an appropriately qualified noise consultant during the first year of the operation of the wind turbines in a scheme to be agreed with the Local Planning Authority to demonstrate that compliance with the noise levels in condition 17 are being

met. The data produced in accordance with the scheme shall be forwarded to the Local Planning Authority within 28 days of the measurements being undertaken.

Reason: To protect the amenity of residents in accordance with policies AW5 and AW10 of the Rhondda Cynon Taf Local Development Plan.

23. Prior to the commencement of development, a report indicating a methodology for undertaking a Conditions Survey of Local Roads (CSLR) that could be affected by the proposed development shall be submitted to and approved in writing by the Local Planning Authority. The CSLR should include:

56. The timescales for undertaking the survey's and the method(s) of reporting the findings to the Local Planning Authority;

57. Comprehensive photographs; and

58. Potential compensation arrangements.

The development shall not be brought into use until the final survey (on completion of the development hereby approved) and any compensation arrangements have been submitted to and approved in writing by the Local Planning Authority.

Reason: To ensure that the extraordinary traffic use arising from the proposed development does not have an adverse impact on highway safety in compliance with policy AW5 of the Rhondda Cynon Taf Local Development Plan.

24. In the event that a turbine does not function (i.e. does not supply electricity to the grid for a continuous period of 12 months and, if so instructed by the Local Planning Authority, the wind turbine and its associated ancillary equipment shall be dismantled, and its base removed to a depth of one metre below ground level, and removed from the site within a period of 6 months from the end of that 12 month period, unless otherwise agreed in writing by the Local Planning Authority.

Reason: In the interests of visual amenity and to ensure that the turbines are not obsolete, produce electricity whilst in situ and are removed from the site if they cease to function, in accordance with policies AW5, AW6, AW8, AW12 and AW13 of the Rhondda Cynon Taf Local Development Plan.

25. The wind turbines hereby approved 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: To protect the amenity of residents in accordance with policies AW5 and AW10 of the Rhondda Cynon Taf Local Development Plan.

26. A micro-siting distance of 25m radius is permitted for any turbine, and all associated infrastructure.

Reason: In order that the development is compliant with the environmental assessments undertaken and to take account of surrounding environmental conditions, in compliance with policy AW5 of the Rhondda Cynon Taf Local Development Plan.

27. Trial runs mimicking the movement of the longest and widest anticipated loads recorded with full video coverage to the site from the A4119 and A4093 shall be undertaken in accordance with details to be submitted to and approved in writing to the Local Planning Authority prior to works commencing on site. Where the trial runs demonstrate that alterations to the existing highway or traffic management measures are required in order to enable the safe delivery of abnormal loads any mitigation measures required shall be implemented to the satisfaction of the Local Planning Authority prior to the delivery of the abnormal loads. Upon completion of these deliveries, the alterations to the existing highway and associated street furniture shall be reinstated to the satisfaction of the Local Planning Authority.

Reason: In the interests of highway safety and in accordance with policy AW5 of the Rhondda Cynon Taf Local Development Plan.

28. Prior to any works commencing on the construction of the sub-station building, which forms part of the permission hereby granted, full details of external finishing materials to be used shall be submitted for the written approval of the Local Planning Authority. The sub-station shall be built using the materials specified in the agreed details.

Reason: In the interests of visual amenity in accordance with policies AW5, AW6 and AW8 of the Rhondda Cynon Taf Local Development Plan.

29. No development shall take place until a Species and Habitat Protection and Mitigation Plan for Construction has been submitted and approved in writing by the local planning authority. The plan shall include:

a) An appropriate scale plan showing 'Wildlife Protection Zones' where construction activities are restricted and where protective measures will be installed or implemented;

b) Details of protective measures (both physical measures and sensitive

working practices) to avoid impacts during construction on key species, habitats and water quality;

c) A timetable to show phasing of construction activities to avoid periods of the year when sensitive wildlife could be harmed (such as nesting bird season, reptiles, etc.)

d) Details of specific species, habitat and water quality mitigation measures

e) Persons responsible for:

59. Compliance with legal consents relating to nature conservation;

60. Compliance with planning conditions relating to nature conservation;

61. Installation of physical protection measures during construction;

62. Implementation of sensitive working practices during construction;

63. Regular inspection and maintenance of physical protection measures and monitoring of working practices during construction;

64. Specific species and Habitat Mitigation measures.

65. Provision of training and information about the importance of the 'Wildlife Protection Zones' to all construction personnel on site.

All construction activities shall be implemented with the approved details and timing of the plan unless otherwise approved in writing by the local planning authority'.

Reason: To protect the environment and minimise environmental impact in and in the vicinity of, the application site in accordance with policies AW5, AW6, AW8, AW12 and AW13 of the Rhondda Cynon Taf Local Development Plan

30. No development shall take place until a Peat-Avoidance and Hydrological Mitigation Plan has been submitted and approved in writing by the local planning authority.

The Plan shall include:

66. Details of measures to reduce the impacts of the turbine locations and access track construction across peat and wetland habitats;

67. The measures for maintenance of that mitigation during the operation phase of the Site;

68. Appropriate figures and plans showing hydrological mitigation.

69. Details of the mitigation proposals

70. Details of persons responsible for the maintenance and monitoring of the hydrological mitigation.

The development shall be carried out in accordance with the details approved by this Plan.

Reason: To protect the water environment and minimise environmental impact in the vicinity of the application site in accordance with policies AW5, AW6, AW8, AW12 and AW13 of the Rhondda Cynon Taf Local Development Plan.

31. No development, including any demolition or preparation works, shall take place until a Pollution Prevention Method Statement has been submitted to and approved in writing by the local planning authority. The approved Statement shall be adhered to throughout the construction period. The Statement should include, but not limited to:

71. the location of all wash-down areas and details of how dirty water will be collected;

72. an incident management plan;

73. a plan indicating all storage areas, wash down areas, spill kits and drainage channels and/or pits;

74. details of responsibilities and accountabilities during all stages of construction

75. details of a scheme to treat and remove suspended solids from surface water run-off during construction works

The development shall be carried out in accordance with the details approved in this Statement.

Reason: To protect the water environment and minimise environmental impact in the vicinity of the application site in accordance with policies AW5, AW6, AW8, AW12 and AW13 of the Rhondda Cynon Taf Local Development Plan.

32. Prior to the commencement of any development on site, full engineering details of the proposed access road to serve the development (including proposed tip re-profiling) and a timescale for its completion shall be submitted to, and approved in writing by, the local planning authority. The development shall be carried out in accordance with the approved details and timescale unless otherwise agreed in writing with the local planning

authority.

Reason: In the interests of highway safety in accordance with Policy AW5 of the Rhondda Cynon Taf Local Development Plan.

=====

===