

**ITEM NO:** 3

**WARD NO:** Llanrhaeadr Yng Nghinmeirch

**APPLICATION NO:** 25/2012/0445/ PFT

**PROPOSAL:** Installation of a 10kw wind turbine on a 15m tower for domestic use

**LOCATION:** Wern Uchaf Nantglyn Denbigh

**APPLICANT:** Mr Ken Howatson

**CONSTRAINTS:**

**PUBLICITY UNDERTAKEN:** Site Notice - Yes  
Press Notice - No  
Neighbour letters - No

**REASON(S) APPLICATION REPORTED TO COMMITTEE:**  
**Scheme of Delegation Part 2**

- Recommendation to grant / approve – Town / Community Council objection

**CONSULTATION RESPONSES:**

**NANTGLYN COMMUNITY COUNCIL**

“Nantglyn Community Council held a public meeting on Thursday 14 June to permit the community to comment on the planning application for a Small Scale Domestic Wind Turbine at Wern Uchaf, Nantglyn. This meeting was called in view of past interest in the community in Wind Turbines.

The primary concern expressed was about noise levels made by these small turbines and the quality of the sound produced. The location of this specific turbine will reduce its impact but it was felt that this must be kept under review and the machinery maintained to prevent increases in sound produced by worn parts. It was drawn to our attention that noise problems developing in a similar size turbine in a village close by had resulted in its removal.

The second objection raised was the issue of whether this was a commercial or domestic project. If the turbine is being paid for and installed by a company set up to generate electricity using wind power it was suggested that it should be considered as a commercial venture and application considered as such. On the other hand the use of a proportion of the electricity on site and the size of the turbine suggest it is a domestic scale piece of equipment. It was felt that the granting of permission for this turbine should preclude subsequent applications for further turbines on the same farm.

The final concern was one of precedents. It was agreed I think by all there, that this is a unique location and that few others sites in the parish would meet the criteria. Hence, whilst not wishing to prevent the current proposal we did not wish this to be seen as supporting any subsequent proposal.”

**COUNTRYSIDE COUNCIL FOR WALES (CCW)**

No objection.

**ROYAL SOCIETY FOR THE PROTECTION OF BIRDS**

No response received.

**NATS (EN ROUTE) PUBLIC LIMITED COMPANY (NERL)**

No safeguarding objection.

MINISTRY OF DEFENCE  
No objection.

AIRBUS  
No aerodrome safeguarding objection.

## **DENBIGHSHIRE COUNTY COUNCIL CONSULTEES**

### **TECHNICAL OFFICER (POLLUTION)**

If the application is approved, planning conditions to control noise impacts should be applied in order to safeguard the amenity of local residents.

### **BIODIVERSITY OFFICER**

No objection. Turbine is to be situated a sufficient distance from any features that could be used by bats, and due to small size of turbine does not anticipate any impacts on birds.

## **RESPONSE TO PUBLICITY:**

No representations received as a result of the public consultation:

**EXPIRY DATE OF APPLICATION: 25/06/2012**

## **REASONS FOR DELAY IN DECISION (where applicable):**

- delay in receipt of key consultation response(s)

## **PLANNING ASSESSMENT:**

### **1. THE PROPOSAL:**

#### 1.1 Summary of proposals

- 1.1.1 The proposal is to erect a single XZERES 442SR 10kW wind turbine on agricultural land at Wern Uchaf, Nantglyn. The aim of the turbine is to provide electricity for domestic purposes. The application submission includes the following documents:
- Design and Access Statement (DAS)
  - Feasibility Study
  - XZERES 442SR Wind Turbine – Planning Support Document
  - Location, Site and Elevation Plans
- 1.1.2 The turbine would be mounted on a grey 15m galvanized steel monopole tower. The proposed 3 blade rotor has a diameter of 7.2m and a maximum tip height of 19m. The blades would be white with grey edging. The turbine has a tail-vane which would be no longer than 5m.
- 1.1.3 No new access tracks are proposed; the field where the turbine is to be sited can be accessed via a farm gate off the A543. The gateway to the field has a standard gate suitable for large farm vehicles and the contractor can supply and install the turbine over a 3-5 day period.
- 1.1.4 The turbine would be connected to the electricity distribution grid via the existing grid connection at Wern Uchaf, which is housed within the existing domestic garage. No additional ancillary buildings to house meter/control equipment are proposed. The necessary cabling for the turbine will be laid in an underground trench approx. 540m in length which will run in a straight line from the turbine back to the domestic garage.

#### 1.2 Description of site and surroundings

- 1.2.1 The site is in a rural upland location within open countryside approximately 3km to the south west of the village of Nantglyn. Gorsedd Bran commercial

woodland lies immediately to the west of the A543 which forms the western boundary of the agricultural field in which the turbine would be sited.

- 1.2.2 Wern Uchaf is an isolated farm complex and the turbine would be sited in an agricultural field approximately 260 metres to the south of the main farmhouse. The nearest residential properties are Nant Gwyn approximately 560m to the north east, Hafodwen approximately 800m to the east, and Rhiwiau approximately 1km to the north east.

### 1.3 Relevant planning constraints/considerations

- 1.3.1 In planning policy terms the site lies in the open countryside and is not affected by any statutory landscape of nature conservation designations.
- 1.3.2 The site lies within the Clocaenog Forest Strategic Search Area (SSA). In accordance with TAN8, large scale wind farm development in Wales should be directed to within SSA boundaries.
- 1.3.3 The operational Tir Mostyn windfarm and the consented Llyn Brenig windfarm are approximately 2.5km and 2km to the south east of the application site.
- 1.3.4 Gorsedd Bran Round Barrows Scheduled Ancient Monument lying approximately 750m to the west. The north-eastern boundary of the Mynydd Hiraethog (Denbigh Moors) SSSI and Historic Landscape is approximately 500m to the west of the site. A Public Right of Way runs approximately 220 metres to the north, however there are no rights of way that affect the application site.
- 1.3.5 The Denbighshire Landscape Strategy shows the application site lies within the north western section of the Denbigh and Derwen Hills LANDMAP Character Area which is defined as hill and scarp slopes with enclosed pasture. This is within 100m of the boundary with the adjoining Llyn Brenig and Moorland / Forest LANDMAP Character Area. which is defined as exposed upland moorland, wooded upland and plateau.

### 1.4 Relevant planning history

- 1.4.1 The application site is immediately adjacent to the refused Gorsedd Bran windfarm site, and approximately 2.5km to the north west of the operational Tir Mostyn windfarm and 2km to the north west of the consented Brenig windfarm.

### 1.5 Developments/changes since the original submission

- 1.5.1 None

### 1.6 Other relevant background information

- 1.6.1 Wind turbines of this scale are eligible for Feed-in Tariffs (FITs), which is a government backed financial incentive designed to encourage renewable electricity generation.
- 1.6.2 To date, a total of 87 wind turbines have been granted planning permission within the County. There is a map of all consented / operational wind turbine development in the County as at 1 June 2012 at the front of this report.

## **2. DETAILS OF PLANNING HISTORY:**

- 2.1.1 25/2007/0642 (Gorsedd Bran windfarm). Application for the construction of 13 wind turbine generators (up to 125m in overall height) c/w electrical control room & compound area, new and improved access tracks, underground cabling, 80m anemometry mast, ancillary works and equipment; temporary construction works; new vehicular access from the minor country road; removal of conifer fores. 2.5-3MW turbines, at Gorsedd Bran, Nantglyn. refused at Planning Committee 02/04/08 and dismissed at Appeal 18/11/09.

Legal Challenge dismissed by Court of Appeal in December 2010. The reasons for refusal which were upheld at Appeal were unacceptable landscape and visual impacts (incl. cumulative impacts) and unacceptable cumulative noise impacts when considered in combination with the Tir Mostyn windfarm.

- 2.1.2 25/1999/0710 (Tir Mostyn windfarm). Application for the development of a windfarm consisting of 25 turbines (49m tower, 52m rotor diameter), 2 met masts (40m) and associated works. 850kW turbines at Tir Mostyn, Nantglyn. Called in and granted by Welsh Government 19/12/2002.
- 2.1.3 25/2007/0565 (Brenig windfarm). Application for the construction and operation of a wind farm comprising of sixteen wind turbines with a maximum tip height not exceeding 100m, along with transformers, access tracks, on-site switchgear and metering building, two anemometry towers and associated construction and operational infrastructure (max capacity will not exceed 50MW) at Llyn Brenig, Nantglyn. Granted at Planning Committee 06/04/09.

### **3. RELEVANT POLICIES AND GUIDANCE:**

The main planning policies and guidance are considered to be:

#### **3.1 DENBIGHSHIRE UNITARY DEVELOPMENT PLAN (adopted 3<sup>rd</sup> July 2002)**

- Policy STRAT 1 General
- Policy STRAT 2 Energy
- Policy STRAT5 Design
- Policy STRAT 7 Environment
- Policy GEN 3 Development Outside Development Boundaries
- Policy GEN 6 Development Control Requirements
- Policy ENV 1 Protection of the Natural Environment
- Policy MEW 8 Renewable Energy
- Policy MEW 10 Wind Power

#### **3.2 GOVERNMENT POLICY GUIDANCE**

- Planning Policy Wales (PPW Edition 4, February 2011)
- TAN 8 Planning for Renewable Energy (2005)
- TAN 5 Nature Conservation and Planning (2009)
- TAN 6 Planning for Sustainable Rural Communities (2010)
- TAN 11 Noise (1997)

#### **WELSH GOVERNMENT PRACTICE GUIDANCE**

- Planning Implications Of Renewable And Low Carbon Energy (Practice Guidance 2011)

#### **3.3 Other material considerations**

- Denbighshire Landscape Strategy (2003) / LANDMAP

### **4. MAIN PLANNING CONSIDERATIONS:**

#### **4.1 The main land use planning issues are considered to be:**

- 4.1.1 Principle
- 4.1.2 Context for the development
- 4.1.3 Landscape and visual impact, including cumulative effects of / with other wind turbines
- 4.1.4 Biodiversity and nature conservation
- 4.1.5 Noise and amenity
- 4.1.6 Aviation

#### **4.2 In relation to the main planning considerations:**

- 4.2.1 Principle

### Welsh Government policy and guidance

The UK is subject to the EU Renewable Energy Directive, which includes a target of generating 15% of the UK's total energy demand from renewable energy sources by 2020. Planning Policy Wales (PPW) reaffirms UK and national energy strategies and the Welsh Government is committed to playing its part. PPW refers to the Welsh Government's Energy Policy Statement (2010) and recognises that wind energy generation remains the most commercially viable form of renewable energy in Wales. As illustrated in PPW, the total capacity for energy generation from onshore wind by 2020/2025 is estimated at 2GW.

For planning purposes, PPW defines the following renewable and low carbon energy scales, which is of relevance to the application before Committee:

<b>Scale of development</b>	<b>Threshold ( Electricity and heat)</b>
Strategic	Over 25 MW for onshore wind and over 50 MW for all other technologies
Local Authority - Wide	Between 5MW and 25 MW for onshore wind and between 5 MW and 50MW for all other technologies
Sub local authority	Between 50kW and 5MW
<b>Micro</b>	<b>Below 50kW</b>

This application therefore falls within the 'micro' scale of development in PPW. Micro scale renewable energy projects are considered acceptable developments in principle in all parts of Wales subject to the assessment of site specific impacts.

TAN 8 supplements PPW and provides technical advice and guidance on renewable energy projects; TAN 8 introduced the principle of spatial planning for the delivery of energy policy and identifies 7 Strategic Search Areas (SSAs) where large scale onshore wind developments should be concentrated.

The principle of wind energy development within SSAs is therefore established, subject to the assessment of localised and cumulative impacts.

### Denbighshire Unitary Development Plan (UDP) Policies

The strategic policies contained in the UDP promote a sustainable approach to development, with STRAT 2 supporting the principle of generating energy from renewable sources so far as they are compatible with the Plan's policies.

UDP Policy MEW 8 supports renewable energy development in principle, provided that proposals do not give rise to unacceptable effects on the environmental quality of the locality. Policy MEW 10 is a criteria based policy which specifically deals with wind power developments. It states that wind turbine development will be permitted subject to compliance with the policy criteria.

Policy GEN 6 refers to general development control requirements which applies to all development proposals and ENV 1 relates to the protection of the natural environment. It states "*Development must be designed to maintain or enhance the landscape character of the countryside and biodiversity of the natural environment*".

Taken together, the policies contained in the UDP provide support in principle for renewable energy development subject to the detailed assessment of localised impacts, taking into account the cumulative impact and spread of wind turbine development of varying scales throughout the County.

#### 4.2.2 Context for the development

When determining planning applications for renewable energy development, PPW requires local planning authorities take into account a range of factors including the

contribution a proposal will play in meeting identified targets for renewable energy generation, including the contribution to cutting greenhouse gas emissions.

Therefore the benefits of the scheme in terms of offsetting the electricity demand of farm and the contribution to renewable energy generation targets need to be carefully weighed against any adverse impacts associated with this development.

The applicant wishes to install the turbine to provide renewable electricity for the farmhouse and for daily farm operations. The turbine proposed has a rated generation capacity of 10kW, and therefore falls within the definition of a micro turbine, and is considered to be of an acceptable size for a domestic turbine.

Furthermore, the turbine will be connected to the grid via the existing single phase supply at the farmhouse, and the electricity generated will therefore preferentially be used on-site; any surplus electricity will be exported to the grid.

In conclusion, given the generating capacity of the turbine and the grid connection arrangement ensuring the electricity generated is preferentially used on site, Officers are satisfied that the proposed turbine is of an acceptable scale for domestic purposes.

#### 4.2.3 Impact on landscape and visual amenity, including cumulative implications

Detailed Unitary Development Plan policies relevant to the visual and landscape impact associated with wind energy development are policy GEN 6 and policy MEW 10. GEN 6 requires consideration of ii) *the effect of development on the form and character of surrounding landscape*; iii) *the effect on prominent views into, out of, or across any area of open countryside*; iv) *incorporating existing landscape features and taking account of site contours and changes in levels and avoids prominent skylines*; and v) *the impact on residential amenity*.

MEW 10 (iii) *requires that proposals do not unacceptably harm the character and appearance of the landscape*, (viii) *requires that proposals would not lead to an unacceptable cumulative visual impact in an area where zones of visibility (with other wind turbine development) overlap, and that particular attention will be paid to the potential proliferation of such developments in any one area*; and vii) *the proposal does not cause unacceptable harm to the enjoyment of the landscape*.

PPW and TAN 8 provide the strategic policy framework for assessing wind energy development and contain some specific guidance on the detailed consideration of landscape and visual impact to assist local planning authorities determine planning applications. TAN8 Annex D states that within SSAs, the implicit objective is to accept landscape change i.e. a significant change in landscape character from wind turbine development. However, given the increasing number of consented wind turbine developments within and on the periphery of the SSA, it is imperative that cumulative effects are fully considered when planning applications are assessed.

The Denbighshire Landscape Strategy is based on the LANDMAP study, which provides useful background material on the essential characteristics and quality of the landscape of the County. The application site lies on the western edge of the "Denbigh and Derwen Hills" Character Area where the Visual and Sensory evaluation is identified as 'High'.

A landscape impact assessment has not been submitted with the application, but given the scale of the development, Officers do not feel it is necessary in this instance given that the site is not affected by a statutory or local landscape designation.

The application site is not within a designated landscape area nor it is within a landscape classified as having an 'outstanding' overall evaluation in LANDMAP. The application site is more than 500m from the Mynydd Hiraethog (West Denbigh Moors)

Historic Landscape and is separated from it by a belt of conifer trees which will act as a screen. CCW have raised no objection to the application in terms of its impact on the Historic Landscape.

When viewing the application site from the north and from the east (including views from Nantglyn village and from neighbouring properties) the turbine would be viewed against the woodland backdrop, which Officers consider would lessen the visual impact. Furthermore, the turbine would be located in a field which is adjacent to the main farmhouse, and Officers feel that the turbine would therefore appear to be well related to the main farm complex, rather than appearing as an isolated turbine in open countryside. The nearest residential property is over 500m from the site, and it is not considered that the proposed turbine would have any unacceptable adverse impacts on the visual amenity of neighbours.

The proposed turbine is small in scale, with a maximum tip height of 19m. The turbine would be over 2km away from the Tir Mostyn windfarm and the consented Brenig windfarm, and whilst the Tir Mostyn windfarm is clearly visible from the application site, given the size and scale of the turbine proposed it is not considered that the development would give rise to unacceptable cumulative landscape impacts when considered in combination with other wind energy development in the vicinity.

In concluding on the issue of landscape and visual impact, Officers consider the proposal would not give rise to adverse cumulative impacts, and any potential negative visual impacts will be mitigated by the scale of the development and the proximity of the site to the area of woodland to the west. Officers therefore consider the proposal accords with UDP policies GEN6 i), iii), v) and MEW10 vii), viii).

#### 4.2.4 Biodiversity and nature conservation

The general requirement to consider the impact of development on biodiversity interests is set out in PPW Chapter 5, TAN 5, UDP policies STRAT 1, STRAT 7, GEN 6 and ENV 6 and SPG 18. Specific to wind turbine development is policy MEW 10 criterion x) which states that wind turbine development will be permitted provided that *'There is no unacceptable effect on nature conservation.'* Policy ENV 6 deals with species protection and states *'development which would unacceptably harm species given special protection by law will not be permitted unless appropriate steps can be taken to secure their protection'*.

Both CCW and the Council's Biodiversity Officer have no objection to the proposal.

The application site is agricultural land which is outside of any statutory or local nature conservation designation and as the proposed turbine would be positioned away from linear features, it is unlikely to have an adverse impact on bats. Due to the small size of the turbine, it is also unlikely that the proposed development would have any adverse impact on birds. No alterations or amendments to the site access are proposed, and it is considered unlikely that any trees or hedgerows would be damaged during the construction phase.

In Officers' opinion it is reasonable to conclude that the proposal would not have any adverse impacts on biodiversity and nature conservation interests, and therefore does not conflict with policy ENV 6 and MEW 10 criterion x).

#### 4.2.5 Noise and amenity

Policy GEN 6 and MEW 10 seek to ensure development does not impact on residential amenity. The latter requires that particular consideration has to be given to noise and shadow flicker. TAN 11 relates to the assessment of noise in relation to development proposals. The general guidance is that local planning authorities should ensure noise-generating development does not cause an unacceptable degree of disturbance, but in some instances it may be acceptable to allow noise-generating activities near to noise sensitive receptors.

ETSU-R-97 is industry standard for the Assessment and Rating of Noise from Wind Farms. It is important to ensure that predicated operational noise levels fall within the established limits of ETSU-R-97. For single turbines ESTU-R-97 proposes that a simplified noise condition may be suitable and recommends that noise is limited to an  $LA_{90,10min}$  of 35dB (A) up to wind speed of 10m/s at 10m height and considers that this condition alone would offer sufficient protection of amenity, and background noise surveys would be unnecessary.

The nearest residential property is over 500 metres away from the application site. Site specific noise assessments have not been carried out, however the Council's Technical Officer (Pollution) is satisfied that planning conditions can be imposed to ensure the noise generated by the wind turbine would not have an unacceptable impact on the amenity of neighbouring dwellings.

The incidence of shadow flicker depends on the position of the sun in the sky. It only occurs at certain times and tends to only affect nearby buildings within 130 degrees either side of north which are within 10 rotor diameters of a turbine. The likelihood of shadow flicker occurring and the duration of such an effect depends on a range of factors, including the time of the year, the size of the turbine, the direction and speed of the wind and the relative cloud cover.

The proposed turbine has a blade diameter of 7.2m and therefore shadow flicker may occur within 72m of the proposed turbine. Given that there are no properties (not even the applicant's property) within 10 rotor diameters of the turbine, it is highly unlikely that shadow flicker would occur. However, as a precautionary measure, a condition can be imposed to ensure any incidence of shadow flicker experienced by nearby properties can be controlled.

Subject to the inclusion of conditions, it is reasonable to conclude that the proposal would comply with policy GEN 6 criterion v) and MEW 10 criterion iv) and v).

#### 4.2.6 Communication and aviation

In certain locations wind turbines can affect communication and aviation infrastructure which may also need to be addressed. Airbus, who operate Hawarden Airport, the NATS (en route) public limited company (who are responsible for civilian en-route air traffic control over the UK) and the Ministry of Defence have been consulted on this application.

No objections have been raised by the aviation authorities and therefore Officers are satisfied that the proposal will not have any adverse effects on communication and aviation infrastructure.

## 5. SUMMARY AND CONCLUSIONS:

- 5.1 With regards to the above considerations, it is concluded that the proposal would not give rise to unacceptable adverse impacts on the locality, nor would it result in any adverse cumulative impacts when viewed in combination with the existing wind energy developments in the Clocaenog Forest Strategic Search Area. It is therefore recommended that planning permission is granted.

**RECOMMENDATION: - GRANT -** subject to the following conditions:-

The Conditions are:

1. The development hereby permitted shall be begun before the expiration of five years from the date of this permission.
2. The planning permission shall be for a period of 25 years from the date of the first generation of electricity from the turbines. Written confirmation of the date of the first generation of electricity from the development shall be provided to the Planning Authority no later than 1 calendar month after the event.
3. The location of the turbine shall be in the position indicated on the approved plans.



4. This permission relates solely to the erection of a 3 bladed wind turbine as described in the application plans and drawings with a maximum height to blade tip of 19m from original ground level.
5. The finish of the turbine tower, hub and blades shall be semi-matt, the colour of the tower shall be grey and the colour of the hub and blades shall be white with grey edging.
6. No new external ancillary equipment required in connection with the operation of the turbine, such as metering boxes, switchgear and overhead lines and poles shall be permitted without the prior written approval of the Local Planning Authority.
7. No part of the development shall display any name, logo, sign, advertisement or means of illumination other without the prior written approval of the Local Planning Authority.
8. In the event that the turbine is non-operational for a continuous period of 6 months, it shall be removed from the site and the land restored to its former condition/use within 3 months.
9. Noise from the turbines shall not exceed  $35\text{dB}_{\text{LA90,10min}}$  for wind speeds of up to 10m/s at 10m height when cumulatively measured freefield at the nearest noise sensitive receptor in accordance with ETSU-R-97.
10. If justified complaints of noise nuisance are received by Denbighshire County Council the applicant shall employ a suitably qualified acoustic consultant to undertake a noise assessment. The purpose of the investigation will be to ensure that condition 9 is being complied with, but if this is found not to be the case, then it should recommend mitigation measures that will ensure compliance and these should then be implemented by the applicant. A copy of the report shall be submitted to the Local Authority within 14 days of its completion.
11. The applicant shall temporarily turn the turbine off (braked to stop the rotors) to facilitate noise investigations being undertaken in nearby locations, when requested in writing by the Local Authority. This will be necessary to aid cumulative impact and complaint investigations should they be necessary.
12. If justified complaints of shadow flicker are received by Denbighshire County Council, any turbine producing shadow flicker at any occupied dwelling which existed or was consented at the time that this permission was granted shall be shut down and the blades remain stationary until the conditions causing those shadow flicker effects have passed.
13. No later than 12 months before the expiry of the 25 year operational period of this permission, a scheme for the restoration of the site, including the dismantling and removal of all elements above ground level, and the removal of turbine bases to a depth of 1.0m, shall be submitted for the consideration of the Local Planning Authority. The scheme approved in writing by the Local Planning Authority shall be carried out and completed within 12 months from the date that the planning permission hereby granted expires.

The reasons for the conditions are:

1. To comply with the provisions of Section 91 of the Town and Country Planning Act 1990.
2. For the avoidance of doubt and in order that the Local Planning Authority retains control over the longer term uses of the land.
3. For the avoidance of doubt.
4. For the avoidance of doubt and in the interests of visual amenity.
5. For the avoidance of doubt and in the interests of visual amenity.
6. In the interests of visual amenity.
7. In the interests of visual amenity.
8. In the interests of visual amenity.
9. In the interests of the amenities of occupiers of residential property in the locality.
10. To ensure adequate measures are in place to monitor and assess noise from the turbines in the event of complaints, in the interests of occupiers of residential property in the locality.
11. To ensure adequate measures are in place to monitor and assess noise from the turbines in the event of complaints, in the interests of occupiers of residential property in the locality.
12. In the interests of the amenities of occupiers of residential property in the locality.
13. To ensure the long term reinstatement of the site, in the interests of visual amenity.

