

Heading:

REFERENCE NO. 19/2014/0702/PFT

MAES TRUAN

LLANELIDAN

Graham Boase
 Head of Planning & Public Protection
 Denbighshire County Council
 Caledfryn
 Smithfield Road
 Denbigh
 Denbighshire LL16 3RJ

Tel: 01824 706800 Fax: 01824 706709

 Application Site



Date 30/9/2014

Scale 1/2500

Centre = 310992 E 347369 N

This plan is intended solely to give an indication of the LOCATION of the application site which forms the subject of the accompanying report. It does not form any part of the application documents, and should not be taken as representative of the proposals to be considered, which are available for inspection prior to the meeting.

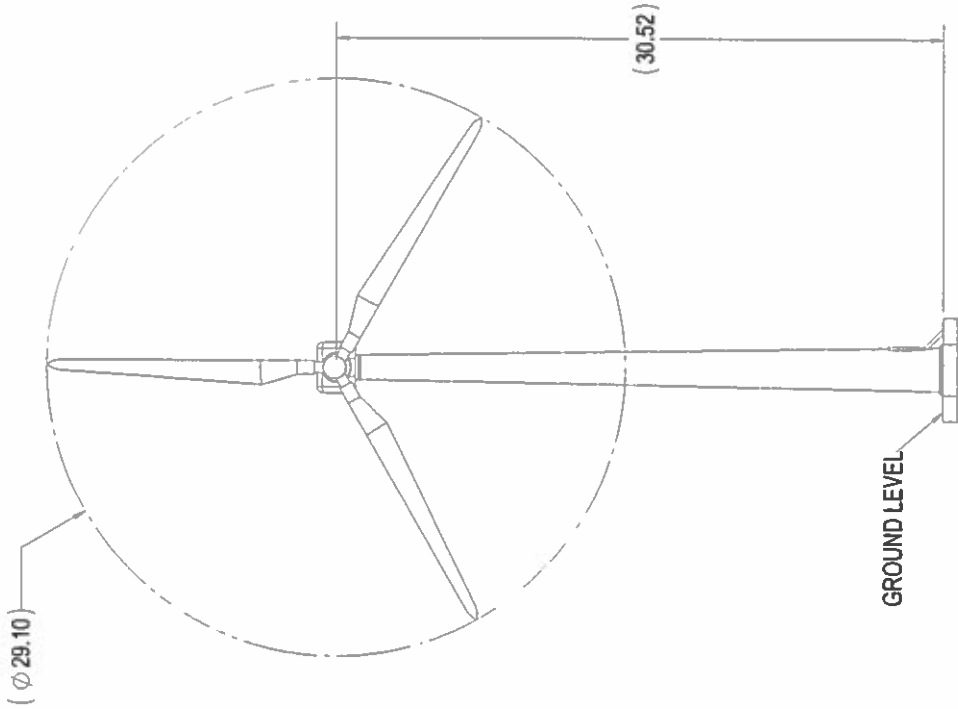


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TURBINE DETAIL



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SCALE 1:250
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DATE 2014-02-25
DRAWN BY RAJESH (CPT)
APPROVED AND CHECKED BY APPROVAL DATE

PROJECT X-Series
THIRD ANGLE PROJECTION



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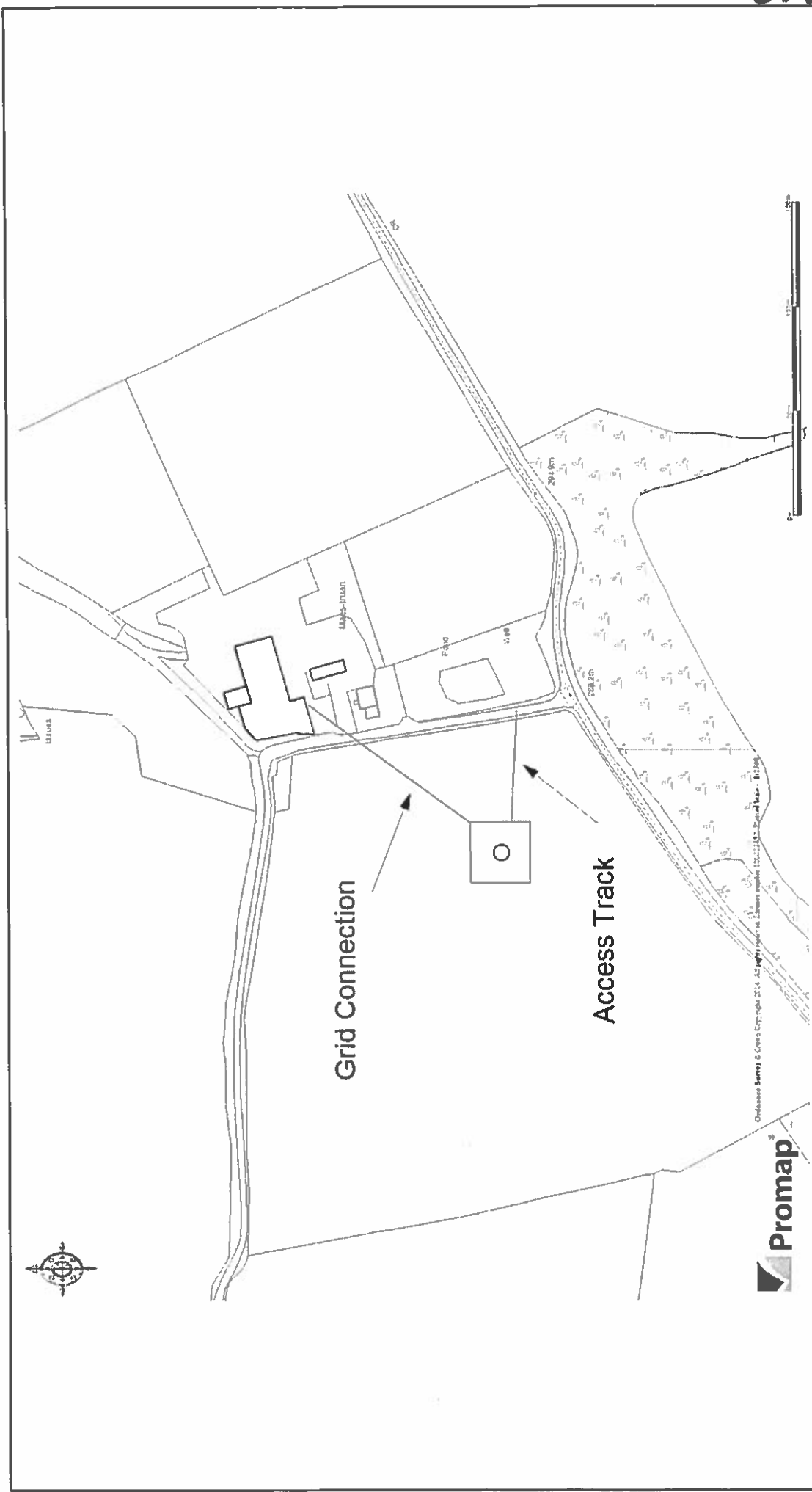
TITLE X29 Elevation, 30m Monopole

PARALLEL NO	REVISION	DATE	SHEET
1005626	1	07/Mar/2014	1 / 1

REV.	PAGE	DESCRIPTION	DATE	ASSIGNEE	ECO
1		Final Release	26-Feb/2014	DS	1994

1. The first part of the text discusses the importance of maintaining accurate records of all transactions and the role of the auditor in ensuring the integrity of the financial statements.

SITE PLAN



JOB:	Installation of a 30.5m to hub (45.07m to tip) wind turbine with control box and all associated works
CLIENT:	Mr A. Jones
TITLE:	Site Plan
LOCATION:	Maestruan, Llanelidan, Ruthin, Denbighshire, LL15 2RN
SCALE:	1:2500
DATE:	Jun-14
DRAWING NO:	RJC/RBJ/01
DRAWN BY:	RB

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 Roger Parry & Partners LLP
 The Property Experts



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ITEM NO:

WARD: Llanfair Dyffryn Clwyd / Gwyddelwern

WARD MEMBER(S): Cllr Hugh Evans

APPLICATION NO: 19/2014/0702/ PFT

PROPOSAL: Installation of a wind turbine 30.5m hub height and 45.07m to blade tip, control box and associated works

LOCATION: Maes Truan Llanelidan Ruthin

APPLICANT: Mr A Jones

CONSTRAINTS:

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

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

- Recommendation to grant / approve – 4 or more objections received
- Referral by Head of Ward Councillor

CONSULTATION RESPONSES:

LLANELIDAN COMMUNITY COUNCIL “The Members of Llanelidan Community Council have no objections to the above Planning Application received for observations on both 2nd July and 27th August 2014”.

**CLWYDIAN RANGE AND DEE VALLEY AREA OF OUTSTANDING NATURAL BEAUTY
JOINT ADVISORY COMMITTEE**

“The JAC objects to this application. A turbine of this size will be visible from a number of significant vantage points in the AONB and will introduce an intrusive and discordant feature into the landscape. It will have a harmful effect on the setting of the AONB and impact on views from the protected landscape and its associated sense of tranquillity, which are recognised special qualities of the Clwydian Range and Dee Valley AONB.

The JAC considers the LVIA to be flawed in its conclusion that there is very little impact on the protected landscape, and is also of the view that the selection of additional photomontage viewpoints from the AONB are unrepresentative of the likely impact from the higher ground of the protected landscape. In addition, the JAC is very concerned about the potential impact on the sense of place and views from the important heritage asset of Caer Drewyn Hillfort.

The committee notes that there is an extant permission for a 19.8m high turbine at Maes Truan and considers this to be the maximum size unit which can be accommodated on this site in such close proximity to the AONB. The JAC’s favoured option for renewables at this site would be a combination of the currently permitted wind turbine in conjunction with a suitably designed roof mounted solar PV installation on the extensive range of outbuildings on the site.”

NATURAL RESOURCES WALES – No comments received at the time of drafting report.

AIRBUS – No aerodrome safeguarding objection.

NATS – No safeguarding objection.

MOD – No comments received at the time of drafting report.

DENBIGHSHIRE COUNTY COUNCIL CONSULTEES –

Head of Highways and Infrastructure

- Highways Officer – no objection in principle, subject to works being carried out in accordance with the construction and installation document.

- Footpaths Officer – No Public rights of Way are directly affected by the proposal, but a Public Bridleway does exist 150m away from the site. Reference to the British Horse Society's April 2010 advisory note is made, where it advises a separation distance between turbines and bridleways of three times the tip height or at least 200m (whichever is the greater). However, this minimum separation distance may not be appropriate in all situations and sites should be considered independently.

Pollution Control Officer – Has concerns that the turbine would be too loud at the financially involved property called Maes Truan.

The Noise Assessment provided has not assessed the noise at financially involved properties. Based on Officers simple distance calculation it would be 47.4dBLA90 and therefore exceed the 45dBLA, 10min noise limit (which is the limit advised in ESTU R 97 guidance for financially involved properties.

Additional information should be requested to assess the noise at this location, and if necessary, mitigation measures should be proposed. If no information is forthcoming and consent is granted, would advise that a planning condition is applied to limit the noise from the turbine to 35dB at unrelated properties and 45dB at the two financially involved properties (with other standard noise conditions) to ensure residential amenity is protected.

Ecologist – No objection in principle. Turbine would be more than 50m away from any habitat features likely to be used by bats or birds and the site itself is agriculturally improved with relatively low ecological value. Creation of access tracks should avoid removal of hedgerows; if hedgerow / vegetation removal is required, should be carried out outside of main bird breeding season.

RESPONSE TO PUBLICITY:

In objection

Representations received from:

The RT HON David Jones MP/AS

Balfours with Berringtons on behalf of Nantclwyd Estate (O)

M. & J. Brooker, Bryn Ysguboriau, Llanelidan (O) x 3

Pauline Baines, Ty Newydd, Cae Du, Corwen (O)

Mr Idwal Hughes, Casgen, Highgate, Bryneglwys (O)A. Hughes, Casgen, Highgate, Bryneglwys (O) x 2

Sue Hughes, c/o Casgen, Highgate, Bryneglwys (O)

A Hughes-Jones, Troed yr Allt, Waen, Nantglyn (O)

I.W. & R.M. Owen, Pwll Pridd, Bryneglwys (C)

Summary of planning based representations in objection:

Principle:

- Larger than consented 15kW turbine. Proposed turbine is disproportionate for location.

- Effectiveness of turbines questioned, in terms of energy and environmental cost to produce.
- Too big.
- Out of character with sheepfarm / disproportionate to the energy needs of the farm.
- Turbine is designed to make money rather than to meet the needs of the farm.
- Industrialisation of countryside.
- No details of grid connection.

Landscape and visual impact and setting of AONB:

- Whilst not within specific landscape designation, will have significant impact on natural landscape and will have a significant impact on Clwydian Range and Dee Valley AONB as evidenced by ZTV plan.
- Application fails to take into account the effect on the landscape character and amenity of the area, however it would have a significant effect on landscape and visual amenity.
- Only receptors referred to in the application are motorists and walkers and does not take into account residents and those who live in adjoining properties.
- Turbine would be visible over an area stretching from Gellifor in north to Llandrillo in south – significant level of visual impact.
- Industrialisation of farmland.
- Hedgerows and trees are seasonal – therefore not well vegetated area.
- Caer Drewyn viewpoint misleading – not taken from higher ground, therefore underestimates the impact on this important viewpoint. From further up the path, the turbine would be clearly visible and would silhouetted against the sky.
- Out of scale with local landscape.
- Will create a greater visual impact than a similar sized static structure.

Impact on Listed Buildings and Parks

- Application fails to take into account impact on listed buildings, including Derwen Hall, Clawdd Newydd (Grade II* listed) and Nantclwyd Hall and Park despite both areas falling within the zone of visual influence shown on ZTV plan. Will therefore affect the character and setting of listed buildings and parks which has failed to have been taken into account by application documents.

Residential amenity:

- Clearly visible from principal windows of neighbouring properties.
- Spoil tranquilly and peace of countryside for local residents.
- Too close to residential properties.
- Disturb sleep and cause related health issues.
- Cause shadow flicker at neighbouring properties.

Noise (including comments on noise assessment / noise data):

- Neighbouring properties less than 600m away – noise impact
- Turbine sound power rating data is unreliable, is based on tests carried out in 1999 in Scandinavia and turbine model has undergone significant design revisions since. Turbine is now manufactured in a different country by a different manufacturer and therefore there is no proven evidence for this turbine's performance in Britain.
- Background noise levels have not been measured.
- Noise assessment refers to 'existing turbine' however there is no existing turbine in location expressed.
- Concern raised regarding grid references used for assessment.
- Noise at financially involved properties not assessed. ETSU-R-97 recommends for financially involved properties, a higher noise limit is permitted, but no evidence to demonstrate that the higher limit can be complied with.
- Not all properties close to the site have been included in noise assessment.

Amplitude modulation (AM):

- Turbines are either 'pitch' or 'stall' control. X-29 turbine proposed is a 'stall' control turbine and therefore can cause greater problems with AM. AM can be experienced up to 1.5km.

Cumulative effects:

- Needs to be considered in context of other granted and proposed turbine development in vicinity
- Proliferation of turbines in area already exert impact and landscape and visual amenity and impact on listed buildings and parks.

Air safety:

- Low flying aircraft seen in area.

Private water supplies:

- Impact on private water supplies not considered.

Highways impact:

- Disruption to road access to neighbouring properties.

Lack of consultation:

- Neighbours not consulted in advance of application being submitted.

In support

Representations received from:

J Ceiriog Jones, Cilgoed, Derwen (S)

Summary of planning based representations in support:

Renewable energy generation:

- Will provide clean renewable energy for local electricity network. Renewable energy is better than nuclear power.

EXPIRY DATE OF APPLICATION: 21/08/14

REASONS FOR DELAY IN DECISION (where applicable):

- timing of receipt of representations
- additional information required from applicant
- re-consultations / further publicity necessary on amended plans and / or additional information
- awaiting consideration by Committee

PLANNING ASSESSMENT:

1. THE PROPOSAL:

1.1 Summary of proposals

- 1.1.1 The application is for the erection of 1 no. Endurance X-29 225kW turbine. The turbine would be a three blade horizontal axis turbine, with a hub height of 30.5m and a blade tip height of 45m and a rotor diameter of 29.1m. Each blade is approximately 14.5m in length.
- 1.1.2 The blades and nacelle colour would be signal white (RAL9003) and the tower colour would be painted traffic white (RAL9016).
- 1.1.3 The turbine foundation would be 9.2m x 9.2m and would be to a depth of 2.1m
- 1.1.4 A small control cabinet measuring 2.2m x 1m x 2m would be located adjacent to the turbine and the grid connection would be via the nearby 11kV 3 phase electricity overhead line.

1.2 Description of site and surroundings

- 1.2.1 The site is approximately 3km to the south of Llanelidan and 3.5km to the north-east of Gwyddelwern.
- 1.2.2 The site is an agricultural field adjacent to the Maes Truan farm complex which is currently used as pasture.
- 1.2.3 There are a number of individual residential properties in the locale of the site, with the following within 1km radius of the proposed turbine: Cefn y Wern approximately 555m to the north-west; Ty'n y Pant approximately 565m to the north-east; Bryn Ysguboriau approximately 650m to the west; Hafoty Wen approximately 800m to the south-west and Bryn Tangor approximately 830m to the south.
- 1.2.4 There are 2 'financially involved' properties which are Maes Truan, to the north-east and Ty'n y mynydd approximately 250m to the north.

1.3 Relevant planning constraints/considerations

- 1.3.1 The site is outside of defined development boundaries in the open countryside.
- 1.3.2 The site is 1.2m to the west of the Clwydian Range and Dee Valley AONB boundary.

1.4 Relevant planning history

- 1.4.1 The applicant has extant permission for a 15kW turbine in the adjacent field. The permission is extant, but has not been implemented.

1.5 Developments/changes since the original submission

- 1.5.1 Additional photomontage from a viewpoint within the AONB and a noise assessment were submitted and were the subject of a re-consultation exercise.

1.6 Other relevant background information

- 1.6.1 The permission for the 15kW turbine will remain extant until January 2015, however the supporting information submitted with the application states that, should planning permission be granted for the proposed turbine, this permission would be abandoned.
- 1.6.2 Representations have raised concerns regarding the grid reference included on consultation letters issued by the Council and the grid reference referred to in the noise assessment. Officers have subsequently checked the grid references used for the purposes of the noise assessment and are satisfied that they correlate with the site plan submitted with the application.

2. **DETAILS OF PLANNING HISTORY:**

- 2.1 19/2009/1501 Erection of 1 no. 15kW turbine on a 15m mast. Maes Truan, Llanelidan.
Granted 21/01/2014

3. **RELEVANT POLICIES AND GUIDANCE:**

The main planning policies and guidance are considered to be:

The main planning policies and guidance are considered to be:
Denbighshire Local Development Plan (adopted 4th June 2013)

Policy PSE5 – Rural economy

Policy VOE1 - Key areas of importance

Policy VOE2 – Area of Outstanding Natural Beauty and Area of Outstanding Beauty

Policy VOE5 – Conservation of natural resources

Policy VOE9 – On-shore wind energy

Policy VOE 10 – Renewable energy technologies

3.1 Supplementary Planning Guidance

3.2 Government Policy / Guidance

Planning Policy Wales Edition 7 July 2014

Technical Advice Notes

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

3.3 Other material considerations

Denbighshire Landscape Strategy (2003) / LANDMAP

Conwy and Denbighshire Landscape Sensitivity and Capacity Assessment for Wind Energy Development, Final Report May 2013

ESTU R 97 and 'A good practice guide to the application of ETSU-R-97 for the assessment and rating of wind turbine noise' (IOAGPG)

4. MAIN PLANNING CONSIDERATIONS:

In terms of general guidance on matters relevant to the consideration of a planning application, Planning Policy Wales Edition 7, July 2014 (PPW) confirms the requirement that planning applications 'should be determined in accordance with the approved or adopted development plan for the area, unless material considerations indicate otherwise' (Section 3.1.2). PPW advises that material considerations must be relevant to the regulation of the development and use of land in the public interest, and fairly and reasonably relate to the development concerned., and that these can include the number, size, layout, design and appearance of buildings, the means of access, landscaping, service availability and the impact on the neighbourhood and on the environment (Sections 3.1.3 and 3.1.4).

The following paragraphs in Section 4 of the report therefore refer to the policies of the Denbighshire Local Development Plan, and to the material planning considerations which are considered to be of relevance to the proposal.

4.1 The main land use planning issues in relation to the application are considered to be:

- 4.1.1 Principle
- 4.1.2 Context for the development
- 4.1.3 Landscape and visual impact (including impact on AONB)
- 4.1.4 Noise
- 4.1.5 Shadow flicker
- 4.1.6 Ecology
- 4.1.7 Highways
- 4.1.8 Aviation and Radar
- 4.1.9 Other matters

4.2 In relation to the main planning considerations:

4.2.1 Principle

Planning Policy Wales (PPW) reaffirms UK and Welsh Government energy policy and recognises that wind energy generation remains the most commercially viable form of renewable energy in Wales. The principle of wind energy development is therefore set out in national planning policy. This application falls within the 'sub local authority' scale of development in PPW.

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.

TAN 8 makes reference to smaller scale (less than 5MW) schemes in para.2.11 - 2.14, however this puts the onus on local planning authorities to define what is meant by 'smaller scale' schemes. It also refers to the need for local planning authorities to consider the cumulative impact of smaller schemes in areas outside of the defined Strategic Search Areas and the need to strike the right balance between the desirability of renewable energy and landscape protection. Whilst that balance should not result in severe restriction on the development of wind power capacity, TAN8 acknowledges there is a case for avoiding a situation where wind turbines spread across the whole of a county.

Denbighshire Local Development Plan Policies

LDP Policy VOE 9 supports the principle of on shore wind turbine development subject to an assessment of environmental and sustainability impacts. The turbine would fall within the sub-local authority scale of development, which VOE 9 indicates will only be permitted within the Clocaenog Forest Strategic Search Area where they do not prejudice the development of strategic/large schemes; and, outside the Area of Outstanding Natural Beauty, Conservation Areas, World Heritage Site and Buffer Zone, and other sites designated for ecological, historic, landscape, or other value, and where they do not adversely affect the setting of these areas.

Policy VOE 10 offers general support for proposals which promote the provision of renewable energy technologies, providing they are located so as to minimise visual, noise, and amenity impacts and demonstrate no unacceptable impact on the interests of nature conservation, wildlife, natural and cultural heritage, landscape, public health and residential amenity.

Policy VOE 9 and 10 provide support in principle for renewable energy development subject to the detailed assessment of localised impacts, which is set out in the remainder of this report.

4.2.2 Context for the development

TAN 6 supports national planning policy on sustainable rural communities and section 3.7 focuses on farm diversification. It states that “*When considering applications for farm diversification projects, planning authorities should consider the nature and scale of the activity*”. It goes on to state that “*many economic activities can be sustainably located on farms. Small on-farm operations such as..... renewable energy, are likely to be appropriate uses*”. Therefore the principle of installing a wind turbine may be a valid farm diversification activity, subject to consideration of the nature and scale of the activity.

LDP policy PSE 5 supports employment proposals for both conversion and new build outside settlement limits providing a number of tests are met.

The DAS states the proposal is a farm diversification scheme. The turbine is sited close to the farm complex. No details of the energy consumption on site are provided, but the objectives of the proposed development are stated to be to support the continued viability of the farm business, provide electricity to offset the energy use on the farm and help reduce the carbon footprint of the business.

TAN 6 does not quantify what is meant by a ‘small on-farm renewable energy operation’, however the Council has previously given weight to the farm diversification merits of turbines with a tip height of less than 50m which are proposed on farms, so Officers would conclude that some weight can be apportioned to the farm diversification merits of the scheme, however Officers would also suggest the benefits need to be carefully balanced against other material considerations.

4.2.3 Landscape and visual impact (including the impact on the AONB)

LDP policies relevant to the visual and landscape impact associated with wind energy development are policy VOE 9 and VOE 10. These policies require due consideration of impacts, including cumulative impact on the surrounding area and community, which includes landscape and visual impact. With regards to sub-local authority scale developments, VOE 9 specifically requires consideration of the potential impact on the setting of an AONB and other designated sites. Policy VOE 1 requires development proposals to maintain and, wherever possible, enhance these areas for their characteristics, local distinctiveness, and value to local communities in Denbighshire: Local areas designated or identified because of their natural landscape or biodiversity value.

The Conwy and Denbighshire Landscape Sensitivity and Capacity Assessment for Wind Energy Development is a material consideration. Within the Sensitivity and Capacity Study, the proposed turbine is within Landscape Unit D5 (Edeirnion Hills), which is in Landscape Strategy Area 3. The Edeirnion Hills Landscape Unit is characterised as being a medium scale landscape comprising a complex pattern of rounded and interlocking hills and valleys and has an overall medium-high sensitivity to wind energy developments due to the number

of sensitive visual receptors, some prominent skylines and inter-visibility with adjoining high value landscapes included the Clwydian Range and Dee Valley AONB. The presence of existing wind turbines within both this area and adjacent landscape units slightly reduces the sensitivity of the local landscape to further wind energy development

The Design and Access Statement includes a landscape assessment and is supported by a number of photomontages from local views mostly from along the public highway. An additional viewpoint from to represent the view from the Caer Drewyn Hillfort was also provided on request.

The landscape section of the Design and Access Statement has considered the impact on the landscape and on visual amenity, and concludes that the proposed turbine would not result in a significant change in the view for residents in the settlements of Gwyddelwern, Corwen, Carrog and Brynelgwys. For individual properties within 1km of the proposed turbine, their sensitivity to change has been evaluated as medium, with the overall effect to these properties considered to be moderate / minor, however the Design and Access Statement does not specify which individual properties have been assessed or what factors were used to carry out the assessment on residential visual amenity.

The visual appraisal section considers the impact on the 6 no. viewpoints selected, which are all viewpoints from along the public highway and represent low sensitivity receptors (i.e. motorists and walkers). No assessment of sensitive receptors such as residential properties, listed buildings, or viewpoints from within the AONB have been considered.

On the matter of the impact on the AONB, the submission documents consider the impact on views from within the AONB will be limited as the ZTV plan provided shows that there will only be minor visibility from areas within the AONB.

A cumulative impact has not been carried out as the only consented turbine within 5km of the site is the extant permission on land in the applicants ownership, which should planning permission be granted, the applicant has confirmed they will not be implementing the extant.

There have been a number of public objections received raising concerns relating to the landscape and visual impact of the proposal, and the AONB JAC have also stated the Caer Drewyn Hillfort viewpoint provided has not be taken from higher ground, and therefore it does not represent the impact of the development at this important viewpoint within the AONB.

Similarly, public objections have raised concerns regarding the lack of assessment of sensitive receptors such as listed buildings, and residential properties, as the landscape assessment provided by the application has primarily focussed on the impact from views along the public highway. Objections have also stated the supporting documentation has not considered the impact on landscape character, and therefore the submission has not adequately assessed the impact on landscape and visual amenity.

The Council's landscape consultant considers the main issues are the effect of the proposal upon the character and visual amenity of the surrounding landscape and the implication of cumulative landscape impacts in relation to existing and consented wind development in the area.

Extent of study area and ZTV – the 15km Zone of Theoretical Visibility (ZTV) plan is insufficient for the purposes of the Landscape and Visual Impact Assessment, however the 5km ZTV map is of a sufficient scale.

Landscape Assessment – The proposed development would consist of a new vertical element in the landscape. The site lies on a slight plateau at the base of the northern slopes to Moel Truan, part of a ridge of hills which run east-west and lie to the north of the Afon Morwynion valley and the A5104 corridor. The site falls within the *Hills South of Llanelidan* LANDMAP Visual and Sensory Aspect Area. Moel Truan (the hill) and Maes Truan (the plateau) have little influence on neighbouring aspect areas. Listed buildings and scheduled ancient monuments are within the zone of theoretical visibility and would have views of the turbine

and the overall evaluation for the Cultural Landscape aspect area for the *Uplands to the west of Vale of Clwyd* is deemed to be high.

- Local scale (within 2km): The development, the wind turbine would likely be a prominent feature and would have a slight to moderate detrimental impact on the local area. At a total height of 45 m, the wind turbine would be slightly out of scale with agricultural buildings, dwellings and mature trees in the vicinity of Maes Truan. The proposed turbine would be in a prominent location in the field to the south-east and at a higher elevation to the farm dwelling.
- Intermediate scale (2km – 5km): The development, at an intermediate scale, the wind turbine would likely be a noticeable feature. The strongly undulating landscape and field boundary hedgerows would help to restrict the influence on certain areas. The intermediate area would include operational small wind turbines. From the AONB at Caer Drewyn in Corwen the northward view features infrastructural elements such as National Grid pylons, small scale operational turbines in the vicinity of Gwyddelwern, large scale operational wind turbines within Clocaenog SSS-A and industrial elements at Clawdd Poncen.
- Distant scale (5-15km): The development, at a distant scale the turbine would have a negligible influence on upland areas to the east and south. Within neighbouring LANDMAP visual and sensory character areas are operational medium and large scale wind turbines and a consented very large scale wind farms at Derwydd Bach in Melin-y-Wig and Clocaenog Forest. Views from uplands such as the Llantysilio ridge and Berwyn plateau already take in operational windfarms within the Clocaenog SSA-A.

Visual Assessment:

- 10 representative photomontage viewpoints and wireline presentations have been submitted, which are satisfactory quality however they represent a best case scenario as photographs were taken in summer months. The nature of the local landscape means that in the winter, when leaves have fallen, views of the development would be more readily available.
- 2 viewpoints represent intermediate views from where the turbine would not be visible. This demonstrates how the undulating terrain affects the visual influence, however views from popular viewpoints such as publicly accessible summits were not assessed. From this assessment the impression given is that the development would be a prominent feature within views up to 2 km distance from the site and a barely noticeable feature between 2 and 5 km distance, should the viewer look for it. There are no visual representations beyond 5 km.
- Maes Truan sits on a plateau. Moel Truan would effectively screen the proposed turbine from the south and south-east. Views from the network of unclassified roads that connect the settlements that surround the Llanelidan hills are available where gaps in mature hedgerow vegetation allow. During winter months, the effectiveness of the screen provided by deciduous vegetation would be greatly reduced.
- There are several scattered dwellings, farms and countryside rights of way that are situated along the network of unclassified roads. Dwellings within the Afon Hesbin/Nant Fawr valleys with local and direct views of the proposal would be very few. Photomontages 1 to 4 represent the main views that are available to local inhabitants.
 - What is clear is that the proposal would introduce a new infrastructural element to an area that suffers no existing view of operational wind turbines. Views from the head of the Afon Hesbin valley are particularly limited and free of major infrastructure, but views from the head of the Nant Fawr valley do feature National Grid pylons.
 - From the local dwellings of Cwm and Cefn-griolen, the view of the proposed turbine would be interrupted by agricultural buildings, but direct views would be available from the building curtilage or farm yard.
 - From Cefn-y-wern, Aber-y-groes and Groes-wen a direct view would be available, but filtered by mature trees, the effectiveness of which would be reduced in winter. It is considered that these three dwellings would be highly sensitive to the development.

- Views would also be available from Bryn ysguboriau, Blaen-cwm and Ty'n y pant (although the latter is no longer contain habitable dwellings), and Ty'n-y-mynydd and Maes Truan are occupied by the applicant. Views would also be available from the curtilage of the small Chapel at Cefn-y-wern, now disused. Apart from Maes Truan, views do not include any other operational wind turbines.
- From public footpaths and bridleways the turbine would be clearly visible where existing views of the proposal site/field are available. An alignment of minor roads, byways, bridleways and footpaths run along the northern ridge of the Nant Fawr/ Afon Hesbin valley would offer uninterrupted views of the turbine.
- Outside of the Hesbin and Nant Fawr valleys, direct views of the turbine would be effectively interrupted by the undulating landform and mature hedgerows that line the unclassified roads. At intermediate distances, views of the hub and blades would be available from higher ground.
- From the major settlement cores, intervening landform would disrupt the views.
- From Caer Drewyn, the proposed turbine may not breach the skyline but it would be positioned at a point where two distinctive ridges appear to meet.

Cumulative Impact:

- The DAS considers that the development would have no cumulative impact when perceived with other operational and consented wind energy schemes. However the DAS fails to mention the 3 operational turbines at Tyn y Celyn in Gwyddelwern, which would be within 5 km of the development and the Wern Ddu turbines are also visible from the Maes Truan plateau.
- The ridge which the proposed turbine would appear on interrupts views of the Clocaenog Forest area beyond, and may also screen the consented developments at Derwydd Bach (Melin-y-Wig), and Clocaenog Forest. Local undulations in terrain interrupt the visibility between Maes Truan and the Tyn y Celyn turbines.
- Cumulative views would be available from the Caer Drewyn summit, but views from the hill fort are extensive. The turbine would be seen as detached from other operational and consented wind energy developments that are concentrated to the north-west. When viewed from the Llantysilio ridge, the proposal would be seen amongst other wind energy developments further afield. When viewed from the Clwydian ridge, the distances involved would make the proposed turbine difficult to distinguish.

Conclusion - The installation of a single small sized wind turbine could reduce the sensitivity of the Edeirnion Hills landscape unit to wind energy development and set an example for future proposals within the area. There are no similar small-scale wind turbines at this south-eastern edge of the Edeirnion hills, the nearest being in Gwyddelwern, in an area which is influenced by the A494 corridor and National grid pylons.

The Landscape Consultants consider that the proposal would have a moderately detrimental impact on an area of high scenic value. The local area is not yet influenced by wind energy development. When viewed from the wider landscape, from the south-west in particular, the turbine would add to the spread of wind turbines in this part of Denbighshire and may set a precedent for further development should it be permitted.

The turbine site is close to the Clwydian Range and Dee Valley AONB. It would affect the setting of the AONB, in terms of inward and outward views, and also those from across the two regions of the AONB. In conclusion, the Landscape Consultant advise the application should be refused.

Having regard to the Landscape Consultant's assessment, consultation responses and the submission documents, Officers consider the proposal would introduce wind energy development to an area which is not yet influenced by wind energy development or other major infrastructure (such as A roads and grid infrastructure). The ridge which the proposed turbine would appear on interrupts views of the Clocaenog Forest area beyond, and may also screen the consented developments at Derwydd Bach (Melin-y-Wig), and Clocaenog Forest. Local undulations in terrain interrupt the visibility between Maes Truan and the Tyn y Celyn turbines. The proposal would therefore contribute to the spread of wind energy development

beyond the Clocaenog Forest SSA-A and have a detrimental visual impact on an area of high scenic quality, and the proposal is therefore contrary to policy VOE9.

4.2.4 Noise

LDP Policy VOE 9 requires due consideration of impacts of wind energy development on the surrounding area and community. VOE 10 states development proposals should demonstrate no unacceptable impact on public health and residential amenity. 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 the industry standard for the Assessment and Rating of Noise from Wind Farms, and is cited in TAN 8 as the relevant guidance on good practice. In May 2013, the Institute of Acoustics published 'A good practice guide to the application of ETSU-R-97 for the assessment and rating of wind turbine noise' (IOAGPG) which Officers consider is also material.

For single turbines ESTU-R-97 proposes that a simplified noise condition may be suitable and recommends that noise is limited to $35\text{dB}_{\text{LA90, 10min}}$ (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. For properties where the occupant has a financial interest in the development, ESTU-R-97 allows a higher level of 45dB limit.

However, where a proposed turbine is adjacent to existing wind turbine development, the application of the simplified noise condition would be inappropriate, as cumulative noise effects need to be taken into account.

The applicant has extant planning permission for a 15kW turbine in the adjoining field, however this permission has not been implemented and the applicant has confirmed it is not proposed to pursue this application should consent be granted for the proposed turbine. Therefore the cumulative effects of the consented turbine in combination with the consented turbine have not been assessed.

Should consent be granted for the proposed turbine, the applicant has also confirmed they would be willing to enter into a Legal Agreement to enable the Council to revoke the extant permission under the provision of the 1990 Planning Act without any financial recourse being taken by the applicant.

A detailed noise assessment has subsequently been submitted by the applicant as the initial information did not adequately consider the noise effects of the proposal.

The Noise assessment is based on the noise data from the proposed turbine taken from the document 'Noise study of Norwin 29/225 kW wind turbine, which has been approved by the manufacturer but is currently not warranted. For the purposes of the assessment, an 'uncertainty correction' of 2dB has been applied.

A public objection has raised concerns regarding the validity of the sound power rating which has been applied, given that it was determined in 1999 when the turbine model was being manufactured by a different manufacturer and had been tested outside the UK.

The Public Protection Officer has informally contacted a noise consultant previously retained by the Council, and whilst recognising the sound power rating was evaluated some time ago, is satisfied it is representative of the turbine proposed, and is also satisfied with the methodology applied in the noise assessment.

The noise assessment has assessed the noise impact at 6 no. neighbouring residential properties (Bryn Eithin, Bryn Ysguboriau, Hafoty Wen, Bryn Tangor, Cefn y Wern and Ty'n y Pant), however the assessment has not considered the impact of the proposed turbine at the 2 no. financially involved properties.

The assessment also contains a cumulative noise assessment with what is referred to as an 'Existing Turbine'. However, there is no planning permission at the grid references given for this turbine, nor has an application been submitted for one at the time of drafting this report. An EIA Screening Opinion has, however been issued for a turbine at Hafoty Wen. Whilst proposals for a turbine at this site may be at pre-application stage, as no planning application has been lodged with the Council, Officers consider little weight can be apportioned to the cumulative assessment and have instead focussed on the impact of the proposed turbine alone.

The noise assessment has demonstrated that the noise from the proposed turbine at the 6 unrelated residential properties would not exceed 35dB, and would therefore comply with the ESTU simplified assessment method.

Whilst a number of public objections have raised concerns regarding noise, the Public Protection Officer has not objected to the scheme with respect to the impact on non-related properties, and therefore Officers are satisfied the turbine would not unacceptably impact on the amenity of neighbouring properties in terms of noise.

As noted previously, the noise assessment has not assessed the noise at the financially involved properties. For properties where the occupant has a financial interest in the development, ESTU-R-97 allows a higher level of 45dB limit, and both a public consultation response and the Public Protection Officer has queries whether this noise limit could be achieved for the Maes Truan property given the proximity of the turbine to the farm house. The Public Protection Officer has estimated the noise experienced at Maes Truan would be around 47.4dBLA90 based on a simple distance calculation, but in the absence of further detailed assessment to ascertain what noise levels would be experienced at the financially involved properties, he has advised a planning condition should be applied to limit the noise from the turbine at the financially involved properties to 45dB, in order to protect amenity.

In conclusion, the noise assessment has demonstrated that the 35dB limit could be complied with and therefore the impact on the amenity of neighbouring unrelated properties would be within the acceptable limits. Whilst there is some uncertainty as to whether or not the proposed turbine would be able to comply with the allowable limit for financially involved properties, planning conditions can be applied to limit the noise to 45dB at these properties and therefore the amenity of current and future occupants of these properties can be protected.

Public objections have also raised concerns regarding amplitude modulation (AM). ESTU-R-97 assumes a certain level of AM (blade swish) is intrinsic to the noise emitted by a wind turbine. The position in relation to AM is evolving and research on the issue was published in December 2013 by the trade body RenewablesUK, and model planning conditions were put forward, however this research has yet to been endorsed by the Institute of Acoustics, the UK Government or Welsh Government. Current best practice advises that it would be inappropriate to apply AM planning conditions at this stage as there is no clarity regarding how such conditions could be complied with or monitored in Officer's opinion. It would therefore be unreasonable to apply a planning condition to control amplitude modulation.

In conclusion, it is suggested reasonable to deal with noise issues through conditions if a permission is granted, including the imposition of a condition to limit noise from the turbine at unrelated residential properties to 35dB and noise at the financially involved properties to 45dB. Officers therefore conclude with these controls that the application accords with VOE 9 with respect to noise.

4.2.5 Shadow flicker

LDP Policy VOE 9 requires due consideration of impacts of wind energy development on the surrounding area and community. VOE 10 states development proposals should demonstrate no unacceptable impact on public health and residential amenity.

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 rotor diameter is 30m, therefore the potential impacts should only be experienced up to 300m from the turbine location, and only then within 130 degrees either side of north. Only the two financially involved properties are within 300m of the proposed turbine location, and therefore it is reasonable to conclude that shadow flicker should not occur at any unrelated property.

A number of public consultation responses have raised concerns regarding the potential for the proposed turbine to adversely affect residential amenity and cause shadow flicker. As shadow flicker analysis is not an exact science, and should planning permission be granted, as a precautionary measure Officers would therefore advise a planning condition should be imposed requiring mitigation measures to be applied should the incidence of shadow flicker be experienced by any nearby unrelated properties.

Subject to the inclusion of a planning condition to address shadow flicker, it is reasonable to conclude that the proposal would comply with policy VOE 9 and VOE10 with respect to shadow flicker.

4.2.6 Ecology

The general requirements to consider the impact of development on biodiversity interests are set out in PPW Chapter 5, TAN5, and LDP policy VOE 5. VOE 5 requires due assessment of potential impacts on protected species or designated sites of nature conservation, including mitigation proposals, and suggests that permission should not be granted where proposals are likely to cause significant harm to such interests. This reflects policy and guidance in Planning Policy Wales (Section 5.2). Specific to wind turbine development is policy VOE 9 which requires specific assessment / explanation of impact on biodiversity and mitigation proposals.

An Ecological Assessment has not been provided with the application, however the Design and Access Statement contains a very brief section on ecology.

The Biodiversity Officer has not objected to the proposal. The turbine would be more than 50m from any habitat feature used by bats or birds and the site has low ecological value. However, should hedgerows or vegetation clearance be required for construct the access or temporary access track, clearance works should take place outside of the bird breeding season.

In light of the comments of the Council's Biodiversity Officer and subject to a planning condition restricting clearance works to outside of the bird breeding season, Officers conclude the scheme would not have an unacceptable impact on nature conservation, and is not in conflict with VOE 5 and VOE 9.

4.2.7 Highways

LDP Policies VOE 9 require due consideration of impacts of wind energy development on the surrounding area and community, including transport impacts.

The Council's Highways Officer has not objected to the application subject to conditions requiring details of the site compound location, vehicular access alterations and a traffic management scheme to be submitted prior to commencement of works.

Subject to pre-commencement conditions being applied requiring the submission of a Construction Method Statement incorporating details of the site compound, vehicular access arrangements and traffic management, which should include the need to upgrade the existing

highway, Officers conclude there would no unacceptable highways issues raised by the proposal.

4.2.8 Aviation and Radar

The impact on aviation and radar equipment is material to the determination of wind turbine applications.

Whilst public consultation responses have raised concerns regarding air safety as low flying aircraft have been seen in the area, no objections from an aviation authority have been received. Specifically, NATS and Airbus has not objected to the scheme, and the MOD, at the time of drafting the report, have not responded to consultation.

In light of the consultation responses from aviation authorities, it is therefore reasonable to conclude that proposed turbine would not have any adverse effects on aviation and radar interests in the area.

4.3 Other matters

Extant permission exists for a 15kW wind turbine on the adjoining field. The submission documents have not considered the cumulative effects of the proposed turbine in combination with the existing permission as the applicant has stated that they would not implement the extant permission should planning permission be granted for the proposed turbine.

However, the permission for the 15kW turbine will remain extant until January 2015, and therefore some control needs to be exerted to ensure this turbine is not constructed should planning permission be granted for the proposed 225kW turbine subject of the current planning application.

Section 97 of the Town and County Planning Act confers powers to the local planning authority to revoke or modify a planning permission at any time before those operations have been completed, however this is a very complicated process and it may be preferable to secure the removal of the extant permission through the Section 106 process should permission be granted. The applicant has confirmed they would be happy to enter into a legal agreement to this effect.

5. SUMMARY AND CONCLUSIONS:

- 5.1 The report sets out a number of considerations Officers suggest are relevant to the determination of this application. As with all wind energy developments, inevitably there will be factors that weigh against and in favour of the grant of planning permission.
- 5.2 Officers retain concerns over the sporadic spread of 'one-off' medium / sub-local authority scale turbines, which will have strategic implications upon the ability to conserve the integrity of wider Denbighshire landscapes in the longer term.
- 5.3 The proposed turbine has been put forward as a farm diversification scheme and would be sited close to the farm complex. The Council has previously given weight to the farm diversification merits of applications which have been put forward as on-farm schemes. This turbine is a larger model to those turbines previously considered to be acceptable forms of farm diversification, however Officers recognise that there is no definition of 'small scale renewable energy operations' referred to in TAN6 and therefore have to conclude that some weight may be attributed to the farm diversification merits, but the benefits need to be considered against other material considerations.
- 5.4 The cumulative effects of the proposed turbine with the consented 15kW turbine in the adjacent field have not been assessed on the basis that, should planning permission be granted, the applicant is willing to enter into an obligation under Section 106 of the 1990 Planning Act to ensure that the extant planning permission for a 15kW turbine (permission reference 19/2009/1501) is not implemented.
- 5.5 The Landscape and visual impact and impact on residential amenity, specifically noise, are considered to be the most significant material considerations.

- 5.6 The proposal is for a turbine with a larger rated capacity than previously consented on-farm turbines in the Gwyddelwern area, however the proposed turbine is nevertheless more likely to be perceived as a single small / medium scale turbine of a similar scale to the operational turbines at Tyn y Celyn farm in Gwyddelwern rather than a commercial scale turbine.
- 5.7 The noise report submitted with the application has demonstrated that the turbine could comply with the 35dB noise limit at unrelated neighbouring properties. Whilst there is uncertainty regarding whether or not the 45dB limit for financially involved properties could be complied with, a planning condition could be applied to restrict the noise from the turbine and therefore measures to protect residential amenity would be in place.
- 5.8 On concluding on the issue of landscape and visual effects, Officers consider the installation of a single wind turbine with a tip height of 45m in this location would be out of scale with the farm buildings, and would be a dominant feature in local views. The proposal would introduce wind energy development into an area which is not yet influenced by wind turbines or other infrastructure, such as A roads and pylons, as the proposed turbine would appear to be visually distinct from other consented and operational turbines in the area. The proposal would therefore have a detrimental visual impact on an area of high scenic value and contribute to the spread of wind energy development beyond the Clocaenog Forest SSA-A and result in wind energy developments encroaching into previously unaffected areas of the county, contrary to LDP policy VOE9.
- 5.9 On balance, whilst the benefits of the scheme in terms of increased renewable energy generation and enabling the farm to reduce its carbon footprint are material, Officers consider the benefits do not outweigh the adverse visual impacts, and therefore recommend the application is refused.

RECOMMENDATION: REFUSE- for the following reasons:-

1. The local planning authority consider the proposal would introduce wind energy development to a rural area which has a high scenic value and is not yet influenced by wind energy development or other major infrastructure. The ridge which the proposed turbine would appear on interrupts views of the Clocaenog Forest area beyond, and may screen views of the consented windfarm developments within the Clocaenog Forest SSA-A. Local undulations in terrain interrupt the visibility between Maes Truan and the operational sub-local authority scale turbines in Gwyddelwern and therefore the proposed turbine would appear to be visually distinct from other consented and operational turbines. The local planning authority considers the proposal would contribute to the spread of wind energy development beyond the Clocaenog Forest SSA-A which would harm the ability to conserve the integrity of wider Denbighshire landscape in the longer term and result in a detrimental visual impact on an area of high scenic quality. The proposal is therefore contrary to policy Local Development Plan VOE9, Planning Policy Wales and TAN8.

NOTES TO APPLICANT:

None