13.1 **Materion Eraill** **Other Matters**

Rhif y Cais: **38C185C** Application Number

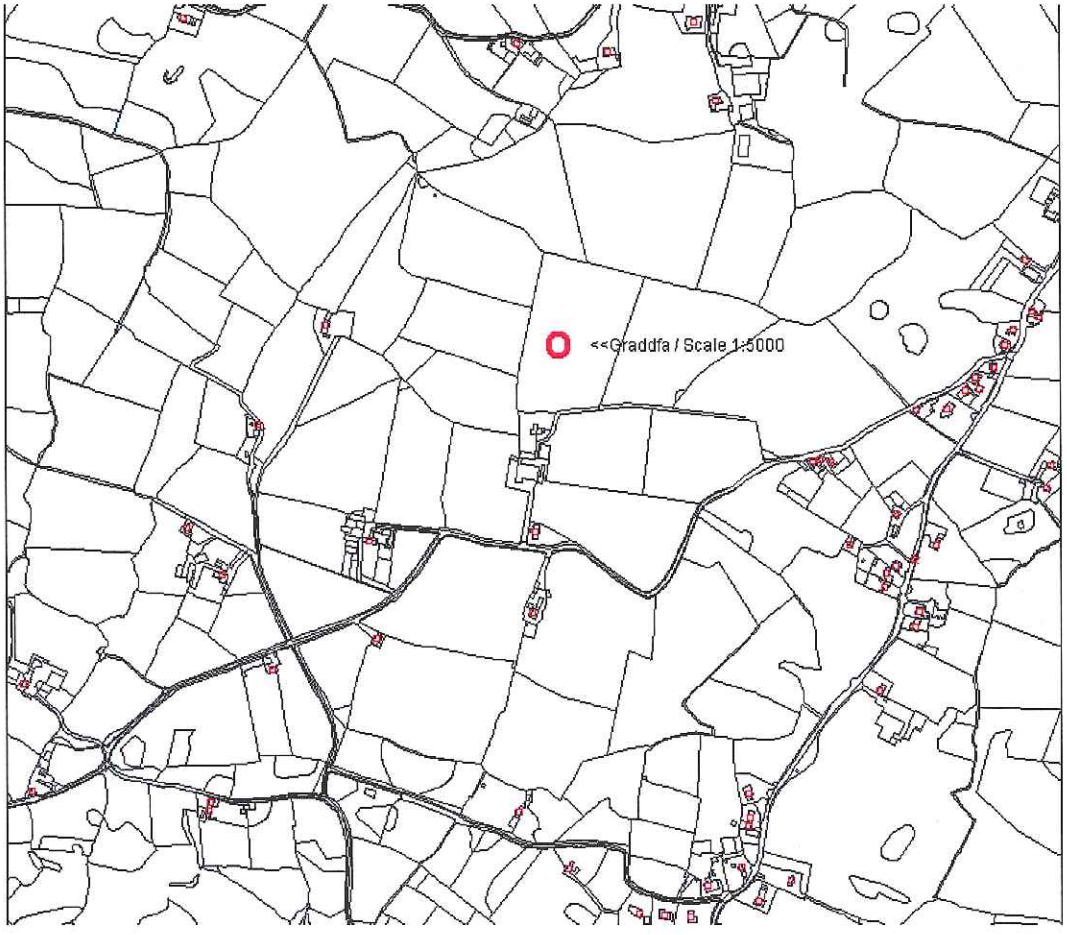
Ymgeisydd Applicant

Mr Tom Jones
c/o Aspire Planning Ltd
Second Floor Offices
15 Boulevard
Westorn-Super-Mare
North Somerset
BS22 9RY

Cais llawn ar gyfer codi un twrbin gwynt gyda uchder hwb hyd at uchafswm o 24.6m, diamedr rotor hyd at 19.2m a uchder blaen unionsyth fertigol hyd at uchafswm o 34.2m ar dir yn

Full application for the erection of one wind turbine with a maximum hub height of up to 24.6m, rotor diameter of up to 19.2m and a maximum upright vertical tip height of up to 34.2m on land at

Maes Mawr, Llanfechell



Planning Committee: 03/07/2013

Report of Head of Planning Service DPJ()

Recommendation:

Permit

Reason for Reporting to Committee:

The application was originally reported to the committee as it has been decided that delegated powers will not be used in connection with wind turbine developments. The applicant was at the time also a councillor of the Isle of Anglesey Council.

The application was scrutinised by the Monitoring Officer as required under paragraph 4.6.10.4 of the Constitution.

It was resolved to convene a site visit at the Planning Committee in October 2012.

A resolution to approve the planning application was made by the Planning Committee in November 2012.

Planning permission was not formally released whilst formal complaints were considered by the Council's Monitoring Officer. The matter was also referred to the Public Services Ombudsman for Wales who decided not to investigate. A legal challenge was subsequently made to the High Court, the challenge was refused and since the last Planning Committee in June the claim has been withdrawn.

In the course of the above events the applicant's appealed for non-determination. Jurisdiction on the application is now with the Planning Inspectorate and the application is being reported back to the Planning Committee for the following reasons:

- For member's information as planning permission was not released following the resolution of the Planning Committee for the reasons detailed above.
- Since the resolution to approve by the Planning Committee in November 2012 the council has adopted Supplementary Planning Guidance on Onshore Wind Energy (January 2013). This is a material consideration which is assessed in the main body of the report below.
- In the response to publicity section of this report the complaints received following the resolution to grant planning permission are listed and where appropriate addressed in the committee report.
- The Planning Committee was requested in June to make a resolution as regard the local planning authority's position in relation to the appeal. The Committee wished to refuse planning permission on the basis that they considered the turbine unacceptable on the following grounds:
    1. Landscape impact.
    2. Visual impact.
    3. Creates visual pollution.
    4. Effect on health.
    5. Residential amenity.
    6. Proximity to residential properties.

In accord with the council's constitution the matter is again being presented to members so that they can consider their resolution.

1. Proposal and Site

The application is made for a single wind turbine with a maximum height to the tip of the blade of 34.2 meters and a maximum rotor diameter of 19.2 meters. The rated power of the turbine is 50KW. The make and model is specified in the planning application which will be installed on a monopole fixed to a concrete foundation sited centrally in a field to the north of the farm. The submitted details indicate that cabling to the electricity network will be underground and the connection point is on the farm complex.

The planning application is supported by the following:

- Residential Amenity Assessment.
- Landscape & Visual Impact Assessment.
- OS Plan indicating the Zone of Theoretical Visibility (ZTV).

- Photomontages.
- Construction Management Plan
- Planning support statement which details amongst other considerations community engagement undertaken by the applicants.

2. Key Issue(s)

- Principle of the development
- Landscape and Visual Impact
- Residential Amenity.

3. Main Policies

Gwynedd Structure Plan
C7 Renewable Energy
D3 Landscape Conservation Area

Ynys Mon Local Plan
31 Landscape
45 Renewable Energy

Stopped Ynys Mon Unitary Development Plan
EP 18 Renewable Energy
EN1 Landscape Character

Planning Policy Wales Edition 5 (November 2012)

Technical Advice Note 6: Planning for Sustainable Rural Communities (July 2010).

Technical Advice Note 8 Renewables (2005)

Practice Guidance: Planning for Renewable and Low Carbon Energy - A Toolkit for Planners', Welsh Assembly Government (2010)

Practice Guidance Planning Implications of Renewable and Low Energy (February 2011)

Supplementary Planning Guidance Onshore Wind Energy Developments (January 2013).

4. Response to Consultation and Publicity

Local Member The application was referred to another local member (as the applicant was formerly the local member for the area) but no formal observations were received.

The new local members for the area have been re-consulted but formal response have been received.

Community Council Object strongly. We have not received any significant technical feasibility or supplementary guidance from the county council to guide us in the siting of wind farms either single or multiple masts. We were however informed of the 1994 information guidelines to the sighting distances to residential properties. This information was presented to us by a member of the public who attended the community council meeting as an observer.

We also wish to state that we will object to any future single turbine development within the Mechell ward. This opinion will remain in place until we have received technical or supplementary information or guidelines from you, or are persuaded by residents to change or minds accordingly.

Highways The Traffic Management Plan "TMP" is satisfactory & an informative as regard a survey of the public highway prior to commencement of the development.

Drainage In formatives recommended.

Environmental Services Conditional permission.

Environmental Advisor No ecological comments on the basis that the blade tips are more than 50 meters

from the hedgerow.

Natural Resources Wales Does not object to the proposal. In our opinion, as explained below, the proposal is not likely to adversely affect natural heritage interests as detailed below:

Protected Sites

The application will not affect, either directly or indirectly, the features, functionality or integrity of any statutory protected sites of ecological, geological or geomorphologic interest.

Landscape

The application site is located approximately 2.3km from the boundaries of the Ynys Môn/Anglesey Area of Outstanding Natural Beauty (AONB). However, in view of the scale of the proposals, CCW believe the turbine is unlikely to have significant adverse impacts on the special qualities or integrity of the AONB.

In assessing the potential impact of the proposed development, consideration should be given to the cumulative impacts of the wind energy development along with other similar developments in the area (either existing, or currently within the planning process).

Environment

Low environmental risk.

MOD Conditional permission.

Arqiva No objections on the grounds of the effect on television reception.

Welsh Water No comments.

Gwynedd Archaeological Planning Service There appears to be no significant archaeological implications in this case.

Response to Publicity

One petition received which the covering letter states is signed by over 300 residents of Llanfechell and Mynydd Mechell in opposition to the erection of commercial wind turbines in the area. The letter states that the number of signatories indicates the strength of feeling of the local population which needs to be considered in arriving at a decision.

91 letters of objections received on the following grounds:

- Adverse effect on the landscape.
- Adverse effect on property values and sales.
- Lack of information provided on the planning application & screening application.
- Issues as regards the community council/local member & notification lack of information in meetings arranged with the community.
- Detrimental visual effect/prominence.
- ZTV shows it will be visible from 10 miles away.
- Noise.
- Health concerns.
- Proximity and the effect on the local school including the distraction of children.
- A wind turbine company has been set up to benefit the local community without consultation with the local community.
- Ornithological Impact.
- Access road leading to the site is narrow with no passing places, roads will need to be built and there will be heavy traffic in constructing the development.
- Effect on business, one letter received from an adjacent caravan site on this basis. Stated that the caravans face in the direction of the turbine.
- Anglesey has its fair share of wind turbines & the writers suggest it may reached its target for renewable energy generation.

- Area already has commercial wind turbines, nuclear power station and pylons.
- There is a known bat colony in the area.
- Damaging to the economy.
- Most people are against onshore wind turbines.
- Proximity of the turbine to residential properties. One writer states the wind turbine would be located only 310 metres from the writer's property at "Bodlwyfan", and it states in the 1994 planning policy that "no turbine shall be sited closer than 400 metres from the nearest dwelling house, with the possible exception of dwellings occupied by the owners of land where it is proposed to locate turbines". I understand that the council are still using this planning guidance for the time being, which makes the site of the wind turbine far to close to my dwelling. Another property at "Henblas" states that they have patio windows facing the turbine.
- Separation distance is less than that required in the Draft SPG.
- The type of turbine proposed is untested and there have been instances of failures.
- Distraction to drivers on the public highway.
- As the turbine is only 50KW it is calculated that on the basis of % operation to capacity it will be unviable.
- The turbine offers no community benefit.
- Precedent as the turbine will be likely followed by others.
- Damage to tourism.
- Turbine is in excess of micro-generation and & is classified as medium in the checklist.
- Writers states that their home will be affected by shadow flicker& this will reduce their enjoyment of their house and garden.
- Quality of the picture reduced.
- Would like to know the route of the power supply.

57 letters received supporting the planning application on the following grounds:

- Size & centrality of the turbine.
- The Nuclear power station is of a significant scale in the area being 1.5 miles from the site.
- The power station is connected by two lines of large pylons which can be seen from the proposed site.
- In the area there are 3 wind farms which can be seen & are significantly larger.
- The development comprises a small quiet turbine which complies with renewable energy policies & it should be supported.

Following the resolution to approve the application at the November 2012 Planning Committee a number of complaints were made to the council's Monitoring Officer the main grounds were as follows.

- The resolution was in contravention of 1994 Supplementary Planning Guidance for Wind Energy developments, in terms of the nearest dwelling and the new Draft SPG stipulations with regard to height.
- I would like to officially complain about the way the above meeting was conducted. A full investigation into whether correct procedures were followed and also how some councillors voted. Also, please investigate All conflicts of interests in this matter. I understand that councillors are required leave the room if they have an interest in the application in hand. This did not happen in this case.
- The committee report incorrectly categorised the turbine between micro-generation and sub-regional in terms of classification. Contended that the wind turbine should be classified as a medium sized turbine.
- A petition with 320 names against wind turbines in the area of Llanfechell and 160 letters of objection were ignored.
- Photo-montages are misleading.

These complaints have been responded directly in accord with the council's complaints procedure, where applicable they are considered in the committee report below. One of the complainants also referred the matter to the local government ombudsman who decided not to investigate the matter.

5. Relevant Planning History

38C185A/SCR Screening opinion for the erection of a wind turbine with a maximum hub height of up to 25 metres, rotor diameter of up to 8.5 metres and a maximum upright vertical tip height of up to 29.25 meters. EIA not required 06.09.11.

38C185B/SCR Screening opinion for the erection of a wind turbine with a maximum hub height of up to 32 metres, rotor diameter of up to 29 metres and a maximum upright vertical tip height of up to 46.5 meters. EIA not required 15.11.11.

38C185D/SCR Screening opinion for the erection of a 50kw wind turbine with a hub height of 24.6m, rotor diameter of 19.2m and upright vertical tip height of 34.2m EIA Not required 09.08.12.

6. Main Planning Considerations

Screening Opinion

Screening opinion 38C185D/SCR and dated 09.08.12 is relevant to the application subject to this report. This screening opinion concluded that an EIA was not required for the proposed development. As explained in the introduction of this report an appeal against non-determination has been validated and as part of this process a formal screening direction will also be issued by the Welsh Government.

Principle of development

Policy C7 of the Gwynedd Structure Plan states:

"There will be a presumption in favour of renewable energy projects provided that the impacts upon the locality are acceptable to the local planning authority. Where applicable, the proposals should be supported by an environmental assessment."

Policy 45 of the Ynys Mon Local Plan states:

"Renewable energy projects will be permitted where it can be clearly demonstrated that there will not be any unacceptable impact on i. Landscape character, ii. Sites of international, national or local importance for nature conservation, iii. species which are of nature conservation importance iv. the standard of amenity enjoyed by the resident and tourist population and vi. Essential public services and communications.

Policy 8B- Energy Developments of the Stopped Ynys Mon Unitary Development Plan states:

"Applications for the development of renewable and non-renewable energy resources will be permitted where it can be demonstrated that there will be no unacceptable adverse impact upon the environment. Preference will be given to the development of clean and renewable energy sources, but proposals for non-renewable energy projects will be permitted if they encourage the maximum use of energy efficiency within their design.

Policy EP18 (Renewable Energy) of the Stopped UDP states renewable energy projects will be permitted where it can clearly be demonstrated that there will not be any significant adverse impact on the listed criteria.

Section 12.8 (Renewable and Low Carbon Energy) of Planning Policy Wales (5th Edition) gives strong support for renewable energy projects in line with the Welsh Assembly Government's Energy Policy Statement (2010), paragraph 12.8.1 states:

"...It explains our aim by 2050, at the latest, to be in a position where almost all of our local energy needs can be met by low carbon electricity production. Our approach is to reduce energy consumption and improve energy efficiency first and maximise renewable and low carbon energy generation at every scale across Wales..."

Paragraph 12.8.2 states:

"...Planning policy at all levels should facilitate delivery of both the Assembly Government's overall Energy Policy statement, and UK and European targets on renewable energy..."

Section12.10.1 reproduced below highlights matters that should be taken into account in dealing with renewable and low carbon energy development and associated infrastructure by the local planning authority. This covers the positive aspects such as contribution to meeting national, UK and European targets and wider environmental, social and economic benefits. It also highlights the need to consider impact on the natural heritage, the coast and the historic environment and the need to minimise impacts on local communities. Other matters such as mitigation and infrastructure matters i.e. grid connection and

transportation network are also highlighted within this section as follows:

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

- *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;*
- *the wider environmental, social and economic benefits and opportunities from renewable and low carbon energy development;*
- *the impact on the natural heritage (See Section 5.5), the Coast (See Section 5.6) and the Historic Environment (See Section 6.5);*
- *the need to minimise impacts on local communities, to safeguard quality of life for existing and future generations;*
- *ways to avoid, mitigate or compensate identified adverse impacts;*
- *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 (see 4.2);*
- *grid connection issues where renewable (electricity) energy developments are proposed; and*
- *the capacity of, and effects on, the transportation network relating to the construction and operation of the proposal.*

Paragraph 12.8.15 states the impacts from renewable energy developments and associated infrastructure will vary depending on their type, location and scale. This requires different policy and development control considerations. A table is provided at Figure 12.3 (Renewable and low energy scales for planning purposes). At 50KW the turbine subject to this report is at the threshold between a Sub Local Authority and Micro development in PPW.

Practice Guidance – Planning Implications of Renewable and Low Carbon Energy (February 2011) which can be regarded as a material consideration contains a different classification in relation to wind turbine technologies in Table 3.1. In terms of the "Typical Turbine Rating" the turbine would be classed as Small. In terms of a Typical Turbine Height (to blade tip) the turbine would be of a Medium scale. A note in relation to the table states – The scales are not definitive and are used for illustration purposes only.

The council's Supplementary Planning Guidance Onshore Wind Energy refers to Practice Guidance – Planning Implications of Renewable and Low Carbon Energy (February 2011). At 6.8 and 6.9 of the SPG it categorises turbines of up to 65 meters to blade tip as medium and states "For the purpose of clarity in relation to different types of applications the council will use this height range categorisation to define small, medium and large turbines as a basis for dealing with onshore wind turbine applications."

The previous planning committee report in November categorised the proposed turbine at 50KW being at the threshold between a Sub Local Authority and Micro development. Given the adoption of the SPG in January 2013 the report considers the turbine with a tip height of up to 34.2 m and 50 kw on the basis of it being a medium scale in accord with the SPG Onshore Wind Energy 2013.

The SPG Onshore Wind Energy 2013 replaces the Wind Energy SPG (1994) which was considered in the report to the November Planning Committee. This means that no weight can now be attributed to the Wind Energy SPG (1994). As regard the weight to be attributed to be attributed to the SPG Onshore Wind Energy (2013) it is a material consideration having been subject consultation and a resolution to adopt by the council. This SPG was subject to two public consultations and was amended in response to comments received during the second consultation periods. The revised version was subsequently approved by the council on the 24th January 2013, subject to additional amendments in relation to:

- separation distances;
- 2km buffer to the AONB and height restrictions;
- cumulative impact on the community; and a formal requirement for a bond to decommission the site.

Inspectors in subsequent appeal decision have attributed very limited weight to amendments to the SPG listed above.

Technical Advice Note 8 Renewables (2005) (paragraph 14) states the Assembly Government has a target

of 4TWh of electricity per annum to be produced by renewable energy by 2010 and 7TWh by 2020. In order to meet these targets the Assembly Government has concluded that 800MW of additional installed capacity is required from onshore wind sources.

Paragraph 2.12 of TAN 8 states the Assembly Government expects local planning authorities to encourage, via their development plan policies and when considering individual planning applications, smaller community based wind farm schemes (generally less than 5 MW).The development subject to this report can be regarded as small but it is not a community based scheme.

Paragraph 2.13 states:

"Most areas outside SSAs should remain free of large wind power schemes. Local planning authorities may wish to consider the cumulative impact of small schemes in areas outside of the SSAs and establish suitable criteria for separation distances from each other and from the perimeter of existing wind power schemes or the SSAs."

Section 2 of Technical Advice Note 6: Planning for Sustainable Rural Communities contains the following guidance:

"2.1.1 The planning system has a key role to play in supporting the delivery of sustainable rural communities. It can help to ensure that appropriate development takes place in the right place at the right time by making sufficient land available to provide homes and employment opportunities for local people, helping to sustain rural services. Simultaneously, the planning system must respond to the challenges posed by climate change, for example by accommodating the need for renewable energy generation. It must also protect and enhance the natural and historic environment and safeguard the countryside and open spaces. The overall goal for the planning system is to support living and working rural communities in order that they are economically, socially and environmentally sustainable. Planning authorities should seek to strengthen rural communities by helping to ensure that existing residents can work and access services locally using low carbon travel and obtain a higher proportion of their energy needs from local renewable sources."

In relation to farm diversification Technical Advice Note 6: Planning for Sustainable Rural Communities contains the following guidance:

3.7.2 Many economic activities can be sustainably located on farms. Small on-farm operations such as food and timber processing and food packing, together with services (e.g. offices, workshop facilities, equipment hire and maintenance), sports and recreation services, and the production of non-food crops and renewable energy, are likely to be appropriate uses.

The policies listed above provide a presumption in favour of renewable energy developments subject to detailed considerations. The impacts from renewable energy developments will also vary depending on their location and scale and require different policy and development control considerations. Given the adoption of the SPG in January 2013 the report considers the turbine with a tip height of up to 34.2 m and 50 kw on the basis of it being a medium scale. The principle of the development is still considered acceptable subject to detailed considerations below.

Landscape and Visual Impact

As explained in the introduction of this report member resolved that they considered the proposed turbine unacceptable, the following grounds were included in the reasons:

1. Landscape impact.
2. Visual impact.
3. Creates visual pollution.

The planning application is supported by a Landscape and Visual Impact Assessment (LVIA) and map illustrating the Zone of Theoretical Visibility for 10km.

The proposal would be located within an Area designated as a Special Landscape Area under the provisions of policy 31 of the Ynys Mon Local Plan, D3 of the Gwynedd Structure Plan and EN1 of the Stopped Ynys Mon Unitary Development Plan.

The Supplementary Planning Guidance (SPG), Onshore Wind Energy Development introduces a 2 km buffer around the AONB.

The application site is approximately 2.3 kms from the edge of the AONB at the closest point in proximity to Llanfairynghornwy, and approximately 1km from the Conservation Area at Llanfechell. It is at approximately 40 metres AOD, in open farmed landscape of medium sized field enclosures, inland of the coastal landscape.

The proposed turbine is within an area where there is a strong visual and landscape influence from wind farms and energy infrastructure. From the site there are views of wind turbines at Rhys y Groes at approximately 2.5 kms from the proposed site and of the wind turbines at Llyn Alaw at 3.5kms from the site. The 132kv pylons are visually prominent energy infrastructure close to the site; Wylfa nuclear power station is also visible.

The proposed turbine would not have a significant adverse cumulative landscape impact, although it may form part of views of other sites and approved turbines. It would not have a significant impact on the AONB; there would be no views from Llanfechell Conservation Area. It's impact would be largely of local significance by virtue of its proximity to Mynydd Mechell and Llanfechell. While it would not be an overbearing structure due to its size and distance from the settlements, it would be a prominent built structure and would have a moderate adverse cumulative impact due to the presence of other energy infrastructure.

Residential Amenity & Health Considerations

Member also considered the proposed turbine unacceptable on the following grounds:

4. Effect on health.
5. Residential amenity.
6. Proximity to residential properties.

The application is accompanied by a detailed assessment of the impacts on the residential amenities of surrounding properties.

A number of the objection letters received are made on the basis of proximity to the nearest residential properties including the village and the school.

Annex D of TAN 8 lists factors which should typically be reviewed to identify "technically feasible areas" for the development of onshore wind energy schemes. At paragraph 3.4 is states "500M 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 again advised"

In paragraph 7.9.8 the council's SPG states in the absence of guidance, this document presents the local approach to be taken towards wind turbine development in Anglesey. On medium scale wind turbines (between 20.1 m and 65m tip height) at Table 4 the SPG states that there should be a minimum separation distance from residential or tourist properties of 500 meters or 20 times tip height (in meters) (whichever is the greatest).

As explained previously in this committee report limited weight has been attributed by Planning Inspectors to the amendments introduced during the meeting that led to the Council's adoption of the SPG. The lack of public consultation about the additional amendments, which include the separation distances in paragraph 7.9.8 described above, is cited as a reason for the Inspector's conclusions about the weight that can be afforded to this aspect of the SPG.

The application is accompanied by an assessment of the impacts on the residential amenities of surrounding properties. The proposed turbine is around 312 meters from the nearest residential property or 283 meters to the nearest point of the garden. In order to assess the proposal's conformity with the development plan and other material planning considerations officers have assessed the impact on the visual amenity of surrounding residential properties. On the basis of the size of the proposed turbine and distances from these properties it is not considered that the resident's visual amenity is affected to an unacceptable degree.

Objections have also been received on the basis of the proximity and the effect on the local school including the distraction of children. The turbine would be visible from the school grounds and would be prominent and significant in movement. However, at 500 metres from the school playing field, it would not have an overbearing impact on the school.

Annex C of Technical Advice Note 8 provides advice on Shadow Flicker and Reflected light. Shadow flicker

is only found to occur within properties up to 10 rotor diameters of a turbine and within 130 degrees either side of north at these latitudes in the UK. There are no residential properties within this area in this case and shadow flicker nuisance is not expected to occur within any residential properties as a result of the development, a condition has, however, been recommended on a precautionary basis.

Annex C goes on to state turbines can also cause flashes of reflected light, which can be visible for some distances. The guidance states that reflected light can be mitigated by the choice of blade colour and a condition has been recommended on the colour to mitigate impacts to mitigate the impacts.

The application has also been assessed by the council's Environmental Services Section who do not consider that the development will have an unacceptable impact in terms of noise subject to the conditions recommended.

Members included the effect on health amongst their reasons why they considered the proposed turbine unacceptable. Appendix 1 provides Public Health Wales information sheet on various health issues and wind turbines, which members are urged to consider before contesting an appeal on this ground.

Other Policy and Material Considerations

In terms of the provisions of the SPG (adopted January 2013) the following matters are now material in relation to the application:

- Community Engagement – the applicants have submitted a community engagement statement as part of their Planning Support statement and this is considered suffice the requirements of the SPG.
- Limiting any planning consent to 2 years and this has been recommended in the proposed conditions below.
- A formal requirement for a bond to decommission the site – this was added to the SPG and has not been subject to formal consultation and as explained previously it can be attributed little weight on this basis. Planning Policy Wales at section 12.10.6 refers to the need to consider mechanisms to mitigate impacts including decommissioning. In this instance it is considered that for a single turbine of this scale a planning condition is satisfactory.
- Community Benefit and Developer Contributions. In accord with TAN 8 the SPG makes clear that where appropriate developers should liaise directly with local communities regarding possible associated community benefits rather than the council. The absence or presence of any contribution to local communities is not an issue which will be considered by the council in its determination of whether planning permission should be given.

The applicants have indicated the connection point to the national electricity grid is within the area of the farm holding, a connection to the national grid will be the subject of a separate application to the statutory undertaker.

The Ministry of Defence have no objections to the development subject to conditions.

No objections are raised by Natural Resources Wales or the council's Environmental Adviser on the grounds of the effect on protected species or other grounds as per their consultation responses.

The effects of the development on tourism is a material consideration. The Isle of Anglesey Council commissioned research on "The Impact of Wind Turbines on Tourism" which has been weighted in making the recommendation below.

7. Conclusion

Members have resolved to object to the proposed turbine on the grounds listed in the report.

It is your officers view that in landscape and visual impact terms the proposed turbine would not have a significant adverse cumulative landscape impact. It would not have a significant impact on the AONB. It's impact would be largely of local significance by virtue of its proximity to Mynydd Mechell and Llanfechell.

In terms of visual amenity, shadow flicker/reflected light and noise officers consider that the proposal is acceptable subject to conditions. The Public Health Wales information sheet provides information on the various health issues and wind turbines, which members are urged to consider before contesting an appeal on this ground.

8. Recommendation

It is recommended that the Planning Inspectorate are informed that the local planning authority do not wish to contest the appeal, and that if they are minded to approve the appeal that the following conditions should be considered:

(01) The development hereby approved shall commence not later than two years from the date of this approval.

Reason: To comply with the requirements of Section 91(1) of the Town and Country Planning Act 1990.

(02) The planning permission is for a period not exceeding 25 years ("the 25 year period") from the date that the development is first connected to the electricity grid ("the grid"). The dates of (a) first connection to the grid and (b) of the full operation of the turbine "the commissioning" shall be notified in writing to the local planning authority within 28 days of each of these 2 events occurring.

Reason: To enable the Local Planning Authority to review the position in the light of circumstances prevailing at the end of the period.

(03) The turbine hereby approved shall not exceed:

34.2 metres	**maximum tip height *(*to the upright vertical tip of an attached blade)**
24.6 metres	**maximum hub height**
19.2 metres	**maximum rotor diameter**
50 kw	**maximum rated power**

No wind turbine shall be installed on site until details of the make, model, design, size, transformer location, power rating, sound levels, external finish and colour of the proposed turbines have been submitted in writing to, and approved in writing by, the local planning authority. The turbine blades shall rotate in the same direction. The development shall thereafter be implemented only in accordance with the approved details.

Reason: To define the scope of the permission having regard to the assessed impact of the development.

(04) At the end of the 25 year period, the turbine shall be decommissioned and all related above ground structures shall be removed from the site. Twelve months before the decommissioning of the turbine, a written scheme for the restoration of the site ("the decommissioning scheme") shall be submitted to the local planning authority for approval in writing. The decommissioning scheme shall make provision for the removal of the wind turbine and associated ancillary equipment to a depth of at least 1m below ground. All decommissioning and restoration works shall be carried out in accordance with the decommissioning scheme as approved and in accord with the timetable therein.

Reason: To ensure a satisfactory appearance upon cessation of the development.

(05) If the wind turbine hereby permitted fails to produce electricity for supply to the grid for a continuous period of 12 months the wind turbine and its associated ancillary equipment shall be removed to a depth of at least 1m below ground and removed from the site and the land shall be reinstated within a period of 6 months from the end of that 12 month period in accordance with a scheme ("the removal scheme") submitted to and approved in writing by the local planning authority prior to the commencement of the development. The developer shall provide written operational data for the turbine to the local planning authority on reasonable written request.

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

(06) Within 12 months of the "the commissioning" and on the written request of the local planning authority including any timescales set out therein; a written scheme to mitigate any incidence of shadow flicker at any affected property including a timetable ("the alleviation scheme") shall be submitted to and approved in writing by the local planning authority. The operation of the development shall thereafter be carried out in accordance with "the alleviation scheme".

Reason: To safeguard the amenities of the occupants of the adjacent dwelling.

(07) All cabling in connection with the development hereby approved shall be installed underground (unless otherwise approved in writing by the local planning authority).

Reason: In the interests of amenity.

(08) The development shall not commence until the following has been submitted to and approved in writing by the local planning authority.

1) The date construction starts and ends.
2) The maximum extension height of any construction equipment.
3) The latitude and longitude of every turbine.

The development shall thereafter be undertaken strictly in accord with the details approved under the provisions of this condition.

Reason: To ensure that military aircraft avoid the area and avoid the danger of collision.

(09) No wind turbine shall be installed on site until confirmation of the following has been submitted to and approved in writing by the local planning authority:

1) The turbine shall only be installed by a suitably qualified person, in accordance with the manufacturer's instructions and the site survey.

2) The wind Turbine shall be serviced in accordance with the manufacturer's recommendations.

3) The cumulative noise from the wind turbine, measured 3.5m from the facade of any occupied neighbouring property not in the ownership of the applicant, shall not exceed 35dB LA90, (10 minutes) up to wind speeds of 9m/s at hub height. Where the most noise sensitive part of any adjacent premises is above ground level, the monitoring location shall be 1m from the facade and a facade correction of -3dB(A) applied.

4) The Wind Turbine shall not be tonal in character.

(10) The development shall thereafter be implemented only in accordance with the approved details.

Reason: In the interests of the amenities of the occupants of neighbouring dwellings.

(11) The development hereby approved shall be constructed strictly in accord with the "Construction Traffic Management Plan" Aspire Planning (June 2012).

Reason: To minimise danger and inconvenience to highway users.

Informatives

The applicant is advised to contact Colin Edwards (Chief Engineer) 01248 752350 to discuss the requirements of a condition survey of the highway network before commencement of any development on the site. The survey will be useful for all parties to provide a record of the condition of the public highway prior to the completion of the development.

9. Other Relevant Policies

Gwynedd Structure Plan
FF11 (Traffic)

Ynys Mon Local Plan
1 (General Policy)
35 (Nature Conservation)

Stopped Anglesey Unitary Development Plan
GP1 (Development Control Guidance)
EN4 (Biodiversity)

Technical Advice Note 5 Nature Conservation and Planning (2009)

Technical Advice Note 11 Noise (1997)

GIG CYMRU NHS WALES | Iechyd Cyhoeddus Cymru Public Health Wales

ENVIRONMENTAL PUBLIC HEALTH INFORMATION SERIES

WIND TURBINES

Non-ionising radiation (power frequency electric and magnetic fields)

What are electric and magnetic fields?

Electric and magnetic fields are present around all appliances, power lines and power generating devices.

The electricity that runs through power lines, houses and schools is in a form called alternating current. Alternating current produces two types of fields or areas of energy — an electric field and a magnetic field. An electric field is produced by voltage and as the voltage increases, the electric field increases in strength. A magnetic field results from the flow of current through wires or electrical devices and increases in strength as the current increases. These two fields together are referred to as electric and magnetic fields, or EMFs.

Electric fields are easily shielded or weakened by walls and other objects, whereas magnetic fields can pass through buildings, humans, and most other materials. Since magnetic fields are most likely to penetrate the body, they are the component of EMFs that are usually studied in relation to cancer. Numerous studies have looked at whether leukaemia, brain tumours, and breast cancer in adults are linked to exposure to magnetic fields in the home. But, there are only a few large studies with long-term, magnetic field measurements.

What effect do electric and magnetic fields have on health?

No consistent association between magnetic fields and leukaemia, brain tumours or breast cancer in women has been established. In addition, there is no evidence that living close to installations producing electrical or the magnetic fields, is associated with increased risk of childhood leukaemia or any other childhood cancer.

Guidelines on exposure are available (see below) and there are concerns about carcinogenic effects below these levels. However, in 2004 the NRPB (now part of HPA) concluded that there is too little definitive data available from studies of health effects to derive exposure guidance.

voluntary code of practices which set out key principles for complying with the ICNIRP guidelines for industry[4].

Limiting exposure to lower frequency electric and magnetic fields – precautionary approach

The Stakeholder Advisory Group on ELF EMFs (SAGE) was set up to explore the implications for a precautionary approach to extremely low frequency electric and magnetic fields (ELF EMFs) and to make practical recommendations to Government.

The First Interim Assessment of the Group considered mitigation options such as the 'corridor option' near power lines, and optimal phasing to reduce electric and magnetic fields[5]. A Second Interim Assessment addressed electricity distribution systems up to 66 kV.

The HPA has given advice to Health Ministers on the First Interim Assessment of SAGE regarding precautionary approaches to ELF EMFs and specifically regarding power lines and property, wiring and electrical equipment in homes[6]. The evidence to date suggests that, in general, there are no adverse effects on the health caused by exposure to ELF EMFs below the guideline levels. The evidence also supports the view that precautionary measures should address solely the possible association with childhood leukaemia and not other more speculative health effects. The measures should be proportionate in that overall benefits outweigh the fiscal and social costs, have a convincing evidence base to show that they will be successful in reducing exposure, and be effective in providing reassurance to the public.

The Government response to the SAGE report is given in the Ministerial Statement by Gillian Merron, then Minister of State, Department of Health, published on 16th October 2009[7]:

Emissions

Possible emissions from wind turbines and wind farms?

Currently, there is no consistent evidence conclusively linking wind turbines and wind farms with adverse health effects arising from emissions of chemicals. When operational, wind generation should not produce chemical emissions, pollutants, or waste products. Installations are therefore highly unlikely to lead to public health impacts associated with emissions of chemicals. There is, however, potential for impacts to arise during the construction and decommissioning phases from the transport of material and equipment (e.g. accidental leaks, spills, and releases).

The potential for noise related emissions in the form of audible environmental noise and inaudible infrasound has also been raised, but again, unequivocal evidence is lacking.

[4] http://www.decc.gov.uk/en/content/cms/what_we_do/uk_supply/consents_planning/codes/codes.aspx

[5] http://sagedialogue.org.uk/
(go to "Document Index" and Scroll to SAGE/Formal reports with recommendations)

[6] http://www.hpa.org.uk/webw/HPAweb&HPAwebStandard/HPAweb_C/1204276682532?p=1207897920036

[7] http://www.publications.parliament.uk/pa/cm200809/cmhansrd/cm091016/wmstext/91016m0001.htm

GIG CYMRU NHS WALES | Iechyd Cyhoeddus Cymru Public Health Wales

ENVIRONMENTAL PUBLIC HEALTH INFORMATION SERIES

WIND TURBINES

Non-ionising radiation (power frequency electric and magnetic fields)

What are electric and magnetic fields?

Electric and magnetic fields are present around all appliances, power lines and power generating devices.

The electricity that runs through power lines, houses and schools is in a form called alternating current. Alternating current produces two types of fields or areas of energy — an electric field and a magnetic field. An electric field is produced by voltage and as the voltage increases, the electric field increases in strength. A magnetic field results from the flow of current through wires or electrical devices and increases in strength as the current increases. These two fields together are referred to as electric and magnetic fields, or EMFs.

Electric fields are easily shielded or weakened by walls and other objects, whereas magnetic fields can pass through buildings, humans, and most other materials. Since magnetic fields are most likely to penetrate the body, they are the component of EMFs that are usually studied in relation to cancer. Numerous studies have looked at whether leukaemia, brain tumours, and breast cancer in adults are linked to exposure to magnetic fields in the home. But, there are only a few large studies with long-term, magnetic field measurements.

What effect do electric and magnetic fields have on health?

No consistent association between magnetic fields and leukaemia, brain tumours or breast cancer in women has been established. In addition, there is no evidence that living close to installations producing electrical or the magnetic fields, is associated with increased risk of childhood leukaemia or any other childhood cancer.

Guidelines on exposure are available (see below) and there are concerns about carcinogenic effects below these levels. However, in 2004 the NRPB (now part of HPA) concluded that there is too little definitive data available from studies of health effects to derive exposure guidance.

However, these results highlighted the uncertainty over evidence in relation to health effects and this and people's concerns led to a recommendation for the UK Government to consider the need for further precautionary measures, particularly with respect to the exposure of children to lower frequency magnetic fields.

Limiting exposure to electric and magnetic fields – general guidance

Therefore, it is sensible to limit exposure to electromagnetic fields and the Health Protection Agency (HPA) have issued advice on this based on an extensive review of the science and a public consultation on its website.

The HPA has recommended that the UK adopts the EMF exposure guidelines published by the International Commission on Non-ionizing Radiation Protection (ICNIRP)[1].

The ICNIRP guidelines are based on the avoidance of exposure to electromagnetic fields (EMF) at frequencies up to 300GHz (gigahertz), which includes static magnetic fields and 50Hz electric and magnetic fields associated with electricity transmission. Current UK Government policy is that the ICNIRP guidelines are implemented in line with the terms of the EU Council Recommendation on limiting exposure of the general public (1999/519/EC)[2].

For static magnetic fields, the latest ICNIRP guidelines (2009) recommend that acute exposure of the general public should not exceed 400 mT (millitesla), for any part of the body. However, the EU Council Recommendation is that a value of 40mT should be used. ICNIRP does recognise that practical policies need to be implemented to prevent inadvertent harmful exposures. These may include people with implanted electronic medical devices and implants containing ferromagnetic materials, and injuries due to flying ferromagnetic objects. These issues can lead to much lower restrictions, such as 0.5mT as advised by the International Electrotechnical Commission.

The ICNIRP guidelines give reference levels for public exposure to 50Hz electric and magnetic fields of 5kV m−1 (kilovolts per metre) and 100μT (microtesla), respectively. Known direct effects of these exposures include those of induced currents in the body on the central nervous system (CNS) and indirect effects include the risk of painful spark discharge on contact with metal objects exposed to the field. If people are not exposed to field strengths above these levels, direct effects on the CNS should be avoided and indirect effects such as the risk of painful spark discharge will be small.

The reference levels are not 'limits' but provide guidance for assessing compliance with the basic restrictions and reducing the risk of indirect effects.

Further advice on exposure guidelines for 50Hz electric and magnetic fields is provided on the HPA website[3]. The Department of Energy and Climate Change has also published

[1] http://www.hpa.org.uk/Publications/Radiation/NPRBArchive/DocumentsOfTheNRPB/Absd1502/
[2] http://www.dh.gov.uk/en/Publichealth/Healthprotection/DH_4089500
[3] http://www.hpa.org.uk/webw/HPAweb&HPAwebStandard/HPAweb_C/1195733805036

voluntary code of practices which set out key principles for complying with the ICNIRP guidelines for industry[4].

Limiting exposure to lower frequency electric and magnetic fields – precautionary approach

The Stakeholder Advisory Group on ELF EMFs (SAGE) was set up to explore the implications for a precautionary approach to extremely low frequency electric and magnetic fields (ELF EMFs) and to make practical recommendations to Government.

The First Interim Assessment of the Group considered mitigation options such as the 'corridor option' near power lines, and optimal phasing to reduce electric and magnetic fields[5]. A Second Interim Assessment addressed electricity distribution systems up to 66 kV.

The HPA has given advice to Health Ministers on the First Interim Assessment of SAGE regarding precautionary approaches to ELF EMFs and specifically regarding power lines and property, wiring and electrical equipment in homes[6]. The evidence to date suggests that, in general, there are no adverse effects on the health caused by exposure to ELF EMFs below the guideline levels. The evidence also supports the view that precautionary measures should address solely the possible association with childhood leukaemia and not other more speculative health effects. The measures should be proportionate in that overall benefits outweigh the fiscal and social costs, have a convincing evidence base to show that they will be successful in reducing exposure, and be effective in providing reassurance to the public.

The Government response to the SAGE report is given in the Ministerial Statement by Gillian Merron, then Minister of State, Department of Health, published on 16th October 2009[7]:

Emissions

Possible emissions from wind turbines and wind farms?

Currently, there is no consistent evidence conclusively linking wind turbines and wind farms with adverse health effects arising from emissions of chemicals. When operational, wind generation should not produce chemical emissions, pollutants, or waste products. Installations are therefore highly unlikely to lead to public health impacts associated with emissions of chemicals. There is, however, potential for impacts to arise during the construction and decommissioning phases from the transport of material and equipment (e.g. accidental leaks, spills, and releases).

The potential for noise related emissions in the form of audible environmental noise and inaudible infrasound has also been raised, but again, unequivocal evidence is lacking.

---

[4] http://www.decc.gov.uk/en/content/cms/what_we_do/uk_supply/consents_planning/codes/codes.aspx

[5] http://sagedialogue.org.uk/
(go to "Document Index" and Scroll to SAGE/Formal reports with recommendations)

[6] http://www.hpa.org.uk/webw/HPAweb&HPAwebStandard/HPAweb_C/1204276682532?p=1207897920036

[7] http://www.publications.parliament.uk/pa/cm200809/cmhansrd/cm091016/wmstext/91016m0001.htm

Are there other public health concerns associated with wind turbine / farm emissions?

The most common public health concerns relate to siting of wind turbines close to housing, leading to disturbance from noise (audible and infra sound) and shadow flicker (which occurs when the sun is at low-levels and the sunlight is intermittently blocked by the blades of the turbine, causing a flashing effect).

Infra sound emissions may be man-made (e.g. explosions, machinery, low speed fans and buildings) or natural (thunderstorms, wind and waves).

In 2010, the Independent Advisory Group on Non-Ionising Radiation (AGNIR)[8] reviewed studies of infrasound carried out using animal models and volunteers, subjected to acute, intense exposures, and investigating effects on hearing and balance and on the cardiovascular system.

They found that while very high levels of infrasound may produce acute effects, such as aural pain and body vibration, no ill-effects have been established using levels commonly experienced in the everyday environment. However, they noted the lack of useful epidemiological and clinical data and highlighted that there have been few studies on the effects of longer-term exposure to infrasound;

> *"there is no consistent evidence of any psychological or behavioural effects of acute exposure to infrasound in humans. There is, however, little good quality research and interpretation is complicated because low frequency noise often includes audible as well as infrasonic frequencies. At high levels of infrasound, aural pain and eardrum rupture can occur. There have been few studies on longer-term effects of infrasound in humans, and no ill-effects have been established. Animal studies of infrasound have reported biological effects, mainly after exposures at levels above 100dB, while at levels above 140dB, hearing loss or damage to the ear can occur. At lower levels of exposure, there is a sparse literature and no confirmed biological effects. Few animal studies have investigated the consequences of long-term exposure to infrasound and no adverse effects have been established."*

The report concluded that the general lack of adverse effects with low levels of infrasound does not suggest that further studies should be given a high priority.

In addition, a DTI study[9] in 2006 concluded that there is a consensus that modern upwind turbines are not sources of substantial infra sound and low frequency noise.

Linked to this, and in relation to audible noise, it has also been suggested that the beat like character or 'swish' associated with some turbines, is often mistakenly interpreted as low frequency noise, in an effect known as Amplitude Modulation. However, the frequency of the generated turbine noise is actually well above what would usually be considered to be low frequency.

[8] Health Effects of Exposure to Ultrasound and Infrasound
[9] The measurement of low frequency noise at three UK wind farms,