

PWYLLGOR CYNLLUNIO
CYFARFOD: 1 Tachwedd 2000
Agenda Eitem: 2

DEDDF CYNLLUNIO TREF A GWLAD 1990
CYNLLUNIO TREF A GWLAD (DATBLYGIAD CYFFREDINOL)
GORCHYMYN 1995 - HYD HEDDIW
DEDDF CYNLLUNIO A IAWNDAL 1991
RHEOLIAD HYSBYSEBU CYNLLUNIO TREF A GWLAD 1994
DEDDF CYNLLUNIO (ADEILADAU RHESTREDIG A CHADWRAETH)
1990
CEISIADAU AM GANIATAD DATBLYGU

Adroddiadau ac argymhellion gan Swyddogion i'w hystyried a'u datrys gan Awdurdod Cynllunio'r Sir.

Bydd pob cais am y cynigion a nodir yn yr adroddiad hwn ar gael i'w archwilio gan Aelodau o'r Pwyllgor cyn ac yn ystod y cyfarfod lle ystyrir y ceisiadau.

Gellir gweld y Papurau Cefndir i bob cais, gan gynnwys ffurflenni, cynlluniau, gohebiaeth, Cynllun Datblygiad a dogfennau arweiniad yn ystod yr oriau swyddfa arferol.

Copiau ar gael gan y Pennaeth Gwasanaethau Cynllunio

FFERM WYNT TIR MOSTYN / FOEL GOCH CAIS CYNLLUNIO 25/710/99/PF

1. CYFLWYNIAD

1.1 Adroddiad yw hwn am y cais cyntaf am fferm wynt sydd wedi ei gyflwyno i Gyngor Sir Ddinbych ers y daeth y Cyngor i rym ym 1996.

1.2 Mae hwn yn gais swmpus ac mae'n codi nifer o faterion sensitif am ddefnyddio tir sydd raid eu hystyried yn llawn cyn dod i benderfyniad. Mae'r cais wedi cynhyrchu swm sylweddol o ymateb gan gyrff statudol a non-statudol a gan unigolion preifat.

1.3 Mae'r adroddiad yn ceisio amlinellu'r prif bwyntiau perthnasol wrth ystyried y cais. Bydd yr adroddiad yn egluro'r cynigion, fframwaith y polisi cynllunio ac arweiniad y llywodraeth, ymateb gan yr rhai yr ymgynghorwyd â nhw ac unigolion, a phwysedd materion cynllunio fel a ganlyn :-

- Adran 2** - Amlinelliad o'r cynnig
- Adran 3** - Datblygiad y cais/cynnwys y cais/trefn dewis safle
- Adran 4** - Cyfyngiadau
- Adran 5** - Hanes Cynllunio
- Adran 6** - Ymateb i'r Ymgynghori
- Adran 7** - Ymateb i'r cyhoeddusrwydd
- Adran 8** - Polisi ac Chanllawiau Cynllunio
- Adran 9** - Prif ystyriaethau cynllunio
- Adran 10** - Prif gasgliadau
- Adran 11** - Argymhelliad

1.4 Tra bod yr adroddiad yn un eang mae cyfyngiadau faint o ddefnyddiau ellir eu cynnwys o'i fewn. Mae'r holl bapurau cefndir, gan gynnwys y dogfennau cais, ymateb gan y rhai yr ymgynghorwyd â nhw a gan unigolion ar gael i'w harchwilio yn y dull arferol cyn y cyfarod o'r Pwyllgor.

1.5 Bydd Aelodau yn ymwybodol bod cais a gyflwynwyd i Gyngor Bwrdeisdref Sir Conwy am fferm wynt 26 Tyrbein yn Pentrefoelas wedi ei gyfeirio i gael penderfyniad gan y Cynulliad Cenedlaethol ym mis Mehefin 2000, yn union cyn ei ystyried gan Bwyllgor Cynllunio'r Awdurdod. Rheswm y Cynulliad am alw am y cais, o dan Adran 77 o'r Ddeddf, oedd bod y materion cynllunio arfaethedig yn fwy na phwysigrwyd lleol yn unig. Mae safle Pentrefoelas tua 12 km (7 milltir) i'r gorllewin o safle Tir Mostyn. Rwy'n ymwybodol y gofynnwyd i'r Cynulliad gan unigolion iddynt ystyried cais Tir Mostyn yn yr un modd a gofynnwyd i'r Cynulliad hefyd roi cyngor ar hyn i arbed gwaith gan yr awdurdod cynllunio lleol fyddai'n cael ei daflu allan wedyn. Adeg paratoi'r adroddiad hwn ni chafwyd cyswllt ffurfiol gan y Cynulliad i gadarnhau neu wrthod eu hawl i wneud hyn.

1.6 Fel ymateb i geisiadau gan Aelodau i weld y safle a ffermydd gwynt eraill trefnwyd ymweliad i Tir Mostyn, y mast sengl wrth Hafod Ucha, Cerrigydrudion, a fferm wynt Carno (Powys) ar 19 Hydref 2000. Bu 13 Aelod ar yr ymweliad. Pwrpas yr ymweliad oedd canfod y ffeithiau a gweld y safle a lleoliad y cais, gweld y tyrbeiniau sydd yno'n barod a fferm wynt sydd ger llaw. Rhaid cydnabod bod y tyrbeiniau ar y safleoedd hyn o wahanol faint, math a nifer na'r rhai a gynigir ar gyfer Tir Mostyn. Roedd y tywydd y diwrnod hwnnw yn gawodydd yng Ngherrigydrudion ac yng Ngharno, roedd digon o wynt i ganiatau'r i'r tyrbeiniau weithio ar y ddwy safle ac yn Tir Mostyn roedd hin sych a chllir.

Nid yw'r atodiad y cyfeiriwyd ato yn yr adroddiad ar gael yn Gymraeg ac mae hynny yn unol â Chynllun Iaith Gymraeg y Cyngor

APPENDIX

2. OUTLINE OF THE PROPOSALS

2.1 The application seeks permission to erect a total of 25 wind turbines, each with a hub height of 49 metres (160 feet) and a rotor diameter of 52 metres (170 feet), and to develop associated infrastructure including a switch room (substation), two 40 metre (131 feet) high anemometer (wind monitoring) masts, and the excavation of borrow pits to provide material for altered and improved accesses and circulation roads.

2.2 The application was originally submitted in September 1999 when a total of 33 turbines were proposed (50 metre hub height, 48 metre rotor diameter), but this was revised between June and August 2000.

2.3 The site area totals some 188 ha (464 acres) and is split into three separate land parcels, at Tir Mostyn and Foel Goch, hills which lie to the east and north east of Llyn Brenig. This is 3km south of Nantglyn, 8km south west of Denbigh and 8km north east of Cerrigydrudion. All three land parcels lie within the administrative boundary of Denbighshire, the southernmost parcel at Foel Goch touching on the boundary with Conwy County Borough. The site location and layout are shown on Plans 1 and 2 at the back of this report.

2.4 The three parts of the site stretch over a total of 4km from north to south, the two northernmost at Tir Mostyn being close together with a 1km gap to the southernmost parcel at Foel Goch. Plan 2 shows the relationship between the sites. The proposals in relation to each of the parcels are:

- a) The northernmost area at Tir Mostyn, immediately south of the B4501 Denbigh – Cerrigydrudion road, and the property Garreg Lwyd, covers approximately 90 ha (222 acres) of open grassland and would contain 8 turbines. Vehicular access to the site would be from upgraded field entrances, one off the B4501 near Garreg Lwyd, and two off the minor road from Saron through Clocaenog Forest towards Llanfihangel Glyn Myfyr. The land slopes up from the B4501 to the south, and the turbines would be sited on the highest part of this site, between the 420m and 460m contours. A stone walled, slated roof switch room (substation) building measuring 8m x 10m would be erected 100 metres south of the B road, alongside the new access track. Land immediately to the south west is afforested, and land to the south east across the minor road has recently been cleared of trees.
- b) The 'central' area at Tir Mostyn lies immediately to the south of the land referred to in (a) is roughly triangular in shape, and covers approximately 35 ha (86 Acres) of grassland completely surrounded by forest, and would contain 7 turbines. Vehicular access would be from a single upgraded field entrance off the Saron – Llanfihangel road which runs through Clocaenog Forest. The land slopes up from the road to the west, and the turbines would be sited between the 450m high and 470m contours. A 40m wind monitoring mast is proposed near the south-western boundary of the site at the 460m contour.
- c) The southernmost area, at Foel Goch lies immediately to the west of the Saron – Llanfihangel road, 1.5km to the east of Llyn Brenig, and covers some 63 ha (156 acres) of grassland, and would contain 10 turbines. Vehicular access would be from three upgraded field entrances off the minor road. The land slopes up to the west from the minor road, to the top of Foel Goch at an elevation of 519m, the summit trig point being on the western boundary of the site. The turbines would be sited between the 470m and 500m contours. A 40m high wind monitoring mast is proposed near the western boundary of the site at the 500m contour. Land to the west is open heather moorland, there is afforestation to the north and north west, and an area of cleared forest to the east.

2.5 The submission confirms the land areas forming part of the application are owned by the properties Garreg Lwyd, Hafod Ty Du, Bryn Mulan Farm, and Meifod. The owners of these properties have been formally notified of the submission by the applicants' agents, and the local planning authority has been forwarded the relevant Certificates of Ownership required under Article 7 of the Town and Country Planning (General Development Procedures) Order 1995.

2.6 The application sites cover land within the administrative areas of Nantglyn Community Council, Cyffylliog Community Council, Efenechtyd Community Council and Llanrhaeadr Y.C. Community Council.

2.7 The submission indicates that each of the turbines proposed would be capable of an output of 850kw making a total of 21.25Mw output. The turbines have conical, tubular steel towers with a diameter of 3.3m at the

base, and 2.0m at the top, containing an internal access ladder to the main rotor assembly section. The rotor consists of three glass fibre blades attached to a nacelle (outer casing) which contains the generator, gearbox and outer operating equipment. The main components of a turbine are illustrated in Plan 5. The turbines are spaced between 300 and 500 metres apart. The blades would rotate at a maximum speed of 26 revolutions a minute, and in a clockwise direction when viewed from the front. It is understood the turbines would 'cut in' (begin rotating) at a wind speed of 4 m/second, and would automatically 'cut out' at a wind speed of 25 m/second.

2.8 Electricity produced by each turbine would pass through a transformer at the base of each tower, then via underground cables to the 'connection' building (referred to variously as a 'switch' or 'substation' building), south of Garreg Lwyd. All cabling on the northern and southern end of the site and between parts of the site would be buried under ground. The electricity would then be transferred to the MANWEB grid through a metering point, and then via a new overhead line connection to the grid, which the applicants state would follow the B4501 from the site to a main switch room at Denbigh (a distance of some 8 km). There are no specific details of this overhead line route as it is stated that this would form part of a separate application, but an indicative Grid Connection Route is shown on the submitted plans.

2.9 Access to the site for construction vehicles is proposed from two routes : one from the A5 along the B4501 via Cerrigydrudion and past Llyn Brenig, and onto the northernmost land parcel at Tir Mostyn at an improved entrance 100m to the east of Garreg Lwyd; and one from the A543 Denbigh – Bylchau – Pentrefoelas road, along the B4501 near Llyn Bran and on to the same access point into the site near Garreg Lwyd.

2.10 The construction period is indicated to be 32 weeks, with favourable weather conditions. The wind farm would be commissioned only when all the turbines and the grid connection were in place. Construction would take place in a clearly defined sequence, commencing with the upgrading of access tracks and the creation of the site compound, progressing through the construction of turbine foundations, the switch room (substation), the line connection to the switch room and other electricity and communication cables, the erection of turbine towers, the nacelles and blocks and final site reinstatement, the removal of the temporary compounds and the clearing of the site. Windjen advise that the project would be carried out under the supervision of their engineers and that it is expected the construction of the site roads and foundations would be carried out by local companies.

2.11 The submission indicates that at the end of the 25 year operational lifetime, the wind turbines can be easily removed and the foundation blocks covered by earth, so that all signs of the wind farm are removed. It states the costs of decommissioning will be met by the salvage value of the components and copper wire. Site tracks may remain in use for the landowner if required.

The applicants

2.12 The proposals have been submitted on behalf of Windjen Power Limited. The application documents state Windjen are a member company of the Dewi Jones Holdings group of companies which includes sister companies such as DJ Construction, and Jennings' Plant Services. It states that DJ Construction have been involved in the construction of 140 turbine installations for third parties, and are a major local employer.

2.13 Windjen indicate that they have been established to develop and promote wind energy in Wales, and that with DJ Construction, they have secured 8 contracts under the Government's Non Fossil Fuel Obligation (NFFO) to pursue windfarm developments. The Tir Mostyn project was the subject of approval under the NFFO 4 round of Contracts in 1996. The Non Fossil Fuel Obligation system is explained in detail in Section 8.4 of the report.

3. PROGRESSION OF THE PLANNING APPLICATION/CONTENTS OF THE SUBMISSION

The Original Proposals

3.1 As noted in para. 2.2 of the report, the application was originally submitted in September 1999, and has been amended in stages between June and August 2000. The proposal received in September 1999 was for the following developments:-

- 33 wind turbines, each with a 50 metre (163 feet) hub height and 48 metre (157 feet) rotor diameter. (13 turbines in the northernmost land parcel at Tir Mostyn, 6 in the central land parcel, and 14 in the southernmost land parcel at Foel Goch).

- 2 wind monitoring masts (40m (131 feet) height).
- A switch room (substation) building.
- Access tracks and improvements to existing access onto public roads.
- Borrow pits for material to surface the access tracks.

The original application included the following plans and supporting documents:

- The Part 1 and Part 2 application forms and Ownership Certificates
- A 4 page Non Technical Summary.
- An Environmental Statement (required to comply with the Environmental Assessment Regulations 1995)
- 1:2500 scale plans showing the site layout
- A 'Typical Details' booklet.

3.2 A comprehensive consultation exercise was undertaken on the original application, and the proposals were publicised by way of a press notices, site notice posted on each of the three land parcels, by notification to owner/occupiers of properties within some 3.2km (2 miles) of the application site, and by way of a press release. Some 250 individual letters were received following this publicity exercise. The response to publicity section of this report looks in detail at representations on the application.

3.3 Following evaluation of the proposals, consultation responses, an appraisal of the Environmental Statement by the Institute of Environmental Management and Assessment, and the individual representations, the applicant's agents were requested in February and April 2000 to furnish additional information to allow the application to be properly considered by the Local Planning Authority. The request related to the clarification of details in the supporting documents and plans, including the methodology and presentation of information in the Environmental Statement, and mitigation measures proposed in conjunction with the development. Additional documents and plans were received between June and August 2000, listed in para. 3.4 of the report, and these form the basis of the application to be considered by the Committee.

The revised proposals and the applicants' submissions

3.4 The proposals to be considered by the County Council comprise an extensive volume of plans and supporting documents:-

- Amended Part 1 and Part 2 application forms and ownership certificates
- An amended 4 page Non Technical Summary
- An Environmental Statement
- 1:2500 scale plans showing the site layout
- Accompanying document with further information (Revisions/amendments/additions to the Environmental Statement)
- A 'Typical details' booklet
- Addendum 1 – Planning Appraisal
- Addendum 2 – The Potential effect on Black Grouse and suggestions for mitigation measures
- Addendum 3 (i) – Cumulative Impact Assessment
(ii) – Figures and Photomontages
- Addendum 4 – Acoustic Assessment

3.5 Following receipt of the amended documents between June and August 2000, a reconsultation exercise was undertaken with relevant statutory and non-statutory bodies, including those who had been consulted originally, and who had forwarded representations to the Authority. The amended proposals were publicised by way of a press notice, site notices on each of the 3 land parcels, and notification to all individuals who had responded on the original application. The plans and documents including the Environmental Statement have been available for inspection in the Library in Denbigh and in the planning office in Ruthin, and

copies have been sent to the Community Councils in the locality. The response to publicity on the amended application is outlined in section 7 of the report.

Outline of the documents forming the submission:-

3.6 The Non-technical summary is a 4 page outline of the proposals, and summarises the applicants' case in support of the grant of permission, which is:-

- In terms of planning policy
 - Planning policies in the relevant development plans are supportive in principle to the development of renewable energies, including wind power.
 - The site is not covered by national, regional, or local designations.
 - The Government is committed to 10% of the UK's electricity being contributed by renewable energies, together with a 20% cut in CO₂ by the year 2010. This project is in harmony with such an initiative. The proposed wind turbines will generate enough electricity to supply 15,380 homes with no polluting emissions being generated.
 - Local Agenda 21 was adopted following the Rio Earth Summit in 1992. It is the challenge to local authorities to respond to the Earth Summit's call for action. Policies and commitments made by national governments on sustainable development rely on local authorities for their implementation.
 - The proposal for wind turbines at Tir Mostyn and Foel Goch is supportive of both government targets and the aims of the Local Agenda 21.
- In terms of Ecology
 - The project will not have a significant detrimental effect on the ecology, hydrology, or fauna of the site.
- In terms of noise
 - The propagation of noise from the site has been assessed. These levels meet the criteria set within the report 'The Assessment and Rating of Noise from Wind Farms ETSU Report ETSU-R-97.
- In terms of archaeology
 - No significant archaeological sites or monuments have been identified on site.
- In terms of landscape and visual effects
 - Some change will occur to the existing conditions during the construction and operation of the site.
 - Visibility will be most prominent within a 5km radius of the site, beyond which visibility is scattered up to a distance of 14km to the higher ground of the Clwydian range. At such a distance the wind turbines would not form dominant features within the landscape.
 - The panoramic large scale of the landscape within which the wind turbines are being proposed, coupled with the strong influence man has had on the landscape both on and surrounding the proposed site, presents an area with the ability to accommodate the scale and nature of the development.
- In terms of Electro magnetic interference
 - All statutory consultees have been consulted with no objections raised. The BBC have

indicated the possibility of interference on the RBL link between Moel-y-Parc and Cerrig-y Drudion. The developer would undertake to remedy any such effect by a unilateral agreement or similar legally binding document.

- In terms of people and safety
 - No rights of way cross the site. At no time during the construction or operation of the site will safety be compromised.

The Environmental Statement is a 77 page document with maps and appendices describing the development, existing planning policy, the needs for and benefits of the proposed windfarm, and a detailed appraisal of the specific impact of development in terms of noise and landscape, ecology, ornithology, hydrology, archaeology, and public amenities. Sections of the original Environmental Statement have been superseded by the Addenda and Accompanying Document referred to in paragraph 3.4.

The 'typical details' booklet contains information on the proposed means of road/access construction, turbine base construction, anemometer masts, borrow pits and the switch room/substation building.

Addendum 1 – Planning Appraisal is a 40 page document prepared for Windjen by Dulas Limited and Albro Planning and Environmental. It does not form part of the Environmental Statement, but seeks to set out the main planning framework within which it is considered the County Council is likely to make its decision on the proposals. The Conclusions are that the very limited effect of the proposal are overwhelmingly outweighed by the substantial benefits of the proposal in terms of its contribution to national targets for renewable energy generation, local employment, and financial contributions to the area.

Addendum 2 – The potential effect on Black Grouse and Suggestions for mitigation measures is a 4 page report by a Dr. Steve Percival analysing the potential effects of the windfarm on the local black grouse population, specifically the effect of disturbance, direct habitat loss, and mortality through collision with turbines or associated structures. The conclusions are that there is a small risk of disturbance to the lek site and a very small/negligible risk of mortality through collision. It is stated that given this lack of specific information on black grouse at existing windfarms and the high conservation importance of the species in Wales, measures should be taken to ensure the net result of the development is a conservation gain for the species even if some displacement did occur. A series of suggestions for habitat enhancement are suggested.

Addendum 3 Vol. 1 – Cumulative Impact Assessment is a 45 page appraisal by Enviros Aspinwall of the Cumulative Impact of the windfarm in relation to landscape and visual amenity. It takes account of other proposed and existing windfarms including the one being handled by Conwy for turbines at Pentrefoelas, recently called in by the National Assembly. The Assessment looks in detail at the existing landscape, distribution of windfarms the proposed development, assesses the residual effects, environmental consequences and potential cumulation effects. The Conclusion is that the Tir Mostyn windfarm in the context of the proposed Pentrefoelas windfarm will change the landscape and visual baseline conditions; but the topography of the area and Clocaenog Forest ensure the windfarms do not appear visually associated in short to intermediate length views, and would appear self-contained within the respective landscape character areas. It states the general impression when travelling through the landscape and that 'simultaneous visibility' will be obtained from elevated areas of the Clwydian Range and Berwyn Mountains over 17km from the site (where the windfarms would only be discernible in good weather conditions, and in the context of Clocaenog Forest). The final comment is that the landscape in terms of scale, topography, and character has the capacity to absorb and accommodate the Tir Mostyn windfarm, and there would not be any significant cumulative effect on the landscape or visual amenity in relation to the Hafotty Ucha turbine and the proposed windfarm at Pentrefoelas.

Addendum 3 – Vol. 2 Figures and photomontages is a series of maps and photomontages to be read in conjunction with the application and the Cumulative Impact Assessment. It includes maps showing the indicative Grid Connection route, the predicted visibility of the Tir Mostyn windfarm, and the Pentrefoelas windfarm, the cumulative visibility of both windfarms, and a number of photomontages and wireframe perspective views from viewpoints in the area around the site, showing the likely visual

impact of the wind turbines.

Addendum 4 – Acoustic Assessment is a 26 page assessment of the predicted noise emissions of the windfarm development prepared by Hayes McKenzie Partnership. It looks at the potential acoustic impact of the scheme on the surrounding area and on any nearby dwellings, based on a number of factors, including the type of turbines proposed, the type of noise produced, and measurements of existing noise levels at selected dwellings neighbouring the development, which have been identified as potentially the most sensitive. The conclusions are that taking account the relevant Technical Guidance, ETSU-R-97, other British Standards and the recommendations of the DTI's Noise Working Group:

1. The predicted noise levels indicate that for all operating wind conditions of the wind farm, Turbine noise will meet the Lower Daytime Absolute Noise Limit and be limited to + 5 dB(A) above the prevailing background noise when above 35 dB LA90, for all dwellings except Hafotty Las where an exceedence of less than 0.3 dB LA90 is predicted.
2. Dwellings which are more remote from the proposal will experience even lower levels of turbine noise.
3. Internal noise levels due to the operation of the wind farm are expected to not exceed 32 dB Laeq during high wind speed conditions at any neighbouring dwelling with windows open for ventilation. Lower levels will occur with windows closed.

Accompanying document with further information is a 12 page document revising and adding to sections of the original Environmental Statement. It provides details on matters such as the wind monitoring masts and collation of data to assess the viability of the site, the question of the Grid connection, construction details, borrow pits, environmental benefits, site selection criteria, archaeology, and electromagnetic interference. The final section includes a general specification of the wind turbine type proposed on the site (Vestas V52-9=850kw).

Site selection

3.8 The application documents outline the basis of site selection procedures involved in windfarm proposals.

- * Potential wind energy sites are usually determined from desk top studies of available information on likely wind speeds, and from follow up site visits to verify information and constraints. The main criteria against which sites are assessed as viable are:-
 - a suitable average wind speed;
 - a readily assessable and economically priced connection to the local or regional electricity grid
 - a good existing access, or one that can easily be provided to the highway network.
- * Then, potential sites are assessed in respect of:-
 - radio telecommunications interference;
 - planning policy;
 - other localised impact, e.g. nature conservation, landscape quality, proximity of dwellings, archaeology, safety considerations.
- * The 'Accompanying Document' forming part of the application indicates that in setting out to determine suitable site locations for wind energy developments, Windjen, whilst considering the scale of development in the context of the locality and environment has adopted a policy of siting that precludes development in sites of Special Scientific Interest (SSSI's), National Parks, and Areas of Outstanding Natural Beauty.
- * It is stated that the decision to advance the development of this particular site was made after careful consideration of over 40 sites in Wales and other parts of the United Kingdom, many of the sites under initial consideration were precluded from further investigation as the basic criteria were not met.

- * The suitability of the Tir Mostyn site has been determined following consideration of the criteria, and confirmation of wind regime information by on-site monitoring, consultation with the local electricity company, and site inspection by Windjen's own engineering personnel. The viability of the site is confirmed by the allocation of the NFFO 4 power purchase contract.
- * The submission advises that during the initial elimination process, an additional three sites were considered in the administrative area of Denbighshire:-
 - One near Trelawnyd – eliminated as it was within the Clwydian Range AONB
 - A site near Llandyrnog, eliminated as it was in the AONB, but also because of lack of suitable access
 - A site near Henllan, eliminated in light of poor access and grid connection problems.

4. CONSTRAINTS

4.1 Planning Status of the site

The application site is located within a Special Landscape Area, defined in the Clwyd County Council Structure Plan, First Alteration. The Special Landscape Area covers the majority of rural Denbighshire.

4.2 The Foel Goch section of the site is bordered immediately to the west by the Mynydd Hiraethog Site of Special Scientific Interest. This SSSI was designated by the Countryside Council for Wales in 1988 and extends from Nantglyn to Llyn Brenig, on the east, to Pentrefoelas in the west and Gwytherin in the north. It has been designated for the upland heathland, blanket bog communities, an oligotrophic lake (Llyn Alwen), and the upland breeding bird assemblage associated with these unimproved upland habitats.

4.3 The westernmost corners of the two Tir Mostyn sections of the site border immediately onto an area of land stretching to the eastern shore of Llyn Brenig, which is designated as an Historic Landscape in the Glyndwr District Local Plan.

4.4 There is no specific planning status accorded to the area including the application site in the Denbighshire Unitary Development Plan.

4.5 Plans 3A and 3B at the back of this report illustrates the designations referred to. The significance of the designations is reviewed in detail in section 9 of the report dealing with the main planning considerations.

5. RELEVANT PLANNING HISTORY

There are no records of any planning applications relating to the three land parcels on which it is proposed to develop the windfarm

6. CONSULTATION RESPONSES:

6.1 The responses referred to in the following section are in relation to the revised submission for 25 turbines and associated amended / new documentation received between June and August 2000, unless indicated otherwise.

1. NANTGLYN COMMUNITY COUNCIL
 "The Council are against the proposal of a windfarm at Foel Goch because -
 - i. The noise from the turbines
 - ii. Spoiling the views of the landscape
 - iii. Loss of value to property"
2. EFENECHTYD COMMUNITY COUNCIL
 "No observation".

3. LLANRHAEADR Y.C. COMMUNITY COUNCIL
"No objections from the Council. Draw attention to the public footpath next to Foty Ddu, towards the direction of Bwlch Du, crossing the site."
4. CYFFYLLIOG COMMUNITY COUNCIL
"Resolved that the letter dated 15 March 2000 regarding observations on the planning application remains unaltered, i.e. our decision stands".

The March 2000 letter stated:

"Members voted unanimously opposing the planning application and make the following observations against the application:

- A. The fear of the application would open the path for future applications.
- B. The effect of such planning would have of properties within the area.
- C. The uncertainty of the route of distribution."

5. DENBIGH TOWN COUNCIL
"The following concerns and observations were made:
 - (1) The Council supported the need to look for and develop alternative energy sources.
 - (2) The need for extensive consultations to take place with the local community was recommended.
 - (3) Concern was expressed as to the visual impact the windfarm would have on an area of particular natural beauty."
6. LLANFIHANGEL GLYN MYFYR COMMUNITY COUNCIL
"Following the Council's meeting, there was no objection to the application". (Original comments).
7. CERRIGYDRUDION COMMUNITY COUNCIL
"The Community Council are concerned that the impact on Television Reception is not properly addressed within the application. It should be noted that residents within a wide area of the location have for many years put up with sub-standard TV reception prior to the installation of relay masts. To be faced with the possibility of an adverse and deteriorating effect on reception will not doubt be extremely worrying for people of the locality". (ORIGINAL COMMENTS)
8. CONWY COUNTY BOROUGH COUNCIL
The Director of Planning has advised that formal observations can not be forwarded until after the next planning committee meeting on November 15th, hence refers to comments on the original scheme which expressed objections due to the routing of construction traffic through Cerrigydrudion. Notes that there appears to be limited consideration of these concerns in the amended details, and feels it likely that members would still object on grounds of impact of construction vehicles along King Street, Cerrigydrudion (unless large vehicles were directed off the A5 along the A543 at Pentrefoelas, then on to the B4501 towards the site), and on grounds of interference with television reception (unless a suitable obligation was put in place to monitor and rectify any problems).
9. SNOWDONIA NATIONAL PARK AUTHORITY
Request that views expressed in respect of the original application be taken into account. The original application was considered by the Authority's Planning Committee in March 2000 when it was resolved not to object as the proposal would not be seriously detrimental to the enjoyment of the National Park because of the distance from the Park boundary and especially because of the distance of the site from areas of popular access within the Park.
10. RUTHIN AND DISTRICT ASSOCIATION
The amendments to not significantly affect the views of the Association expressed on the original proposals, which concluded that the contribution to electricity production which the proposed windfarm would bring has to be balanced with the effect it would have on the physical environment and the likely precedent which would be set.

11. COUNCIL FOR THE PRESERVATION OF RURAL WALES
(Denbighshire Branch)
Objects for similar reasons as on the original application. Notes the deletion of seven turbines nearest Nantglyn village, but the effect of the rest on the landscape will remain as before.

The original CPRW objection was on grounds of visual impact and planning policy contravention. A separate response from the Denbighshire branch deals with a disagreement with Windjen over factual statements in letters sent to Denbighshire Councillors in February 2000.

The Denbighshire branch of CPRW have referred to the application to the CPRW's Consultant (Mr. G. Sinclair), who has sought clarification of a series of questions on planning fees and planning policies applying to the application in preparation for comment on the scheme. At the time of preparing this report, no formal representations have been made on the revised application.

(Conwy Branch)

Object to potential visual impact, cumulative impact, in a SLA, close to an SSSI, impact on wildlife.
(Original comments).

12. THE RAMBLERS ASSOCIATION
Consider the proposed development will be contrary to Local and Unitary Development Plans, and Ramblers Association policies in relation to landscape, natural conservation, and the quiet enjoyment of the countryside. Object on grounds that the proposals would:

- (i) Seriously affect the landscape character (Special Landscape Area) and visual amenity from the Clwydian Range AONB and Snowdonia National Park.
- (ii) Have potential cumulative impact with other wind farm developments.
- (iii) Have an adverse impact on the Mynydd Hiraethog SSSI Breeding Bird Assemblage.
- (iv) Seriously diminish the public's ability for quiet enjoyment of the countryside (facilities at Brenig, Gors Maen Llwyd, Historic Landscape of West Denbigh Moors).
- (v) Conflict with Policy H5 of the Clwyd County Structure Plan : First Alteration, Ramblers Association Wind Turbine Policy, MEW 10iii of the Denbighshire Unitary Development Plan.

13. THE NATIONAL TRUST (Area Manager East Wales)
The National Trust remain of the view that the site in question is inappropriate for a development of this type and scale and wish their original objection to stand, i.e.

Confirm the Trust holds restrictive covenants over land on the Clwydian Range which will be affected by the development. Object on following grounds:

- (i) Impact on views from The Clwydian Mountains
- (ii) Scale of development would intrude/detract from enjoyment of the surrounding countryside
- (iii) Development would industrialise an unspoiled area
- (iv) Precedent

14. FARMING AND RURAL CONSERVATION AGENCY (on behalf of the National Assembly for Wales Agriculture Department)
Advises that the additional details do not appear to affect agricultural interests and do not wish to add to original comments which were to offer no objections but to draw attention to the following agricultural considerations:

- (i) Land quality here is poor, and loss of land would have no impact in terms of the national agricultural interest
- (ii) Poor soils and high rainfall will make long term restoration of the land difficult; any site works should be carried out in summer months
- (iii) No soil should be lost from the site
- (iv) Careful control would be necessary over details of the stripping, working and restoration of borrow pits, how grass swards are to be created and how tracks would be removed

15. COUNTRYSIDE COUNCIL FOR WALES

Welcome the additional information supporting the Environmental Statement, and the reduction in the number of turbines, but do not consider the changes are sufficient to withdraw the substance of previous objections. The specific objections relate to:

(i) **Wildlife** – The 10 turbines at Foel Goch still lie within the 1.5km radius of the Black Grouse lek, and in close proximity to the Mynydd Hiraethog SSSI. Any threat to the Black Grouse should not be permitted. Habitat enhancement is to be welcomed, but this must be in consultation with the RSPB and CCW and subject to a management agreement with the local planning authority prior to the grant of permission. Note that all measures suggested appear to be on land not in the applicant's control and would prefer habitat enhancement on Foel Goch should be investigated first.

(ii) **Landscape and public enjoyment of the countryside** – Whilst noting the reduction in turbine numbers, the diameter of the blades is greater and there would still be very large structures, impacting unacceptably on the public's quiet enjoyment of the area, on the overall landscape quality of the area, on views from the east (AONB and Offa's Dyke Trail) and on the historic landscape of the area. The Environmental Impact Assessment is flawed as it fails to consider the Moel Maelogen Windfarm, hence due weight is not given to views into and from the Snowdonia National Park. The photomontages are of little value in giving an impression of the visual impact of the proposed development, containing significant foreground visual clutter, white sky or grey cloud.

The conclusion is that the proposals are also contrary to Planning Policies in the Clwyd County Structure Plan, the Denbighshire Unitary Development Plan and the CCW's own wind turbine policies.

16. RSPB CYMRU

Confirm support for the principle of renewable energy where there are no environmental impacts arising from it. Advise they do not object to all windfarm applications and treat each case on its merits.

Comment that objections were raised to the 1999 application, and state that the revised proposals do not constitute any material change in the impact on wildlife, hence the RSPB **maintains its objections**.

The main concerns are:

(i) There would be disturbance to breeding populations of two Priority Species in the UK Biodiversity Plan - Black Grouse and Nightjar, at construction phase and during operation of turbines. In this context, RSPB seeks to distinguish between the disturbance effects of 'discrete' noise generations such as forestry operations, and constant noise interference such as windfarm noise. It is stated that constant noise has a 'blocking' effect on species whose lifestyles require breeding or territorial display, which applies to both Black Grouse and Nightjar.

(ii) There is no survey of Nightjars, and no research of noise disturbance on Black Grouse species which are especially sensitive to noise related disturbance. In the absence of such information the precautionary principle should apply.

(iii) A 200m separation distance from turbines to a Black Grouse lek is inadequate and will cause unacceptable disturbance to the lek. In the light of this and the developer's statements on disturbance distances, RSPB believe disturbance would manifest itself at up to 800m, and in the absence of data relating to disturbance radii for Black Grouse, a disturbance radius of 400m would enable the precautionary principle to be applied reasonably.

(iv) The development would conflict with the aims and objectives of the Welsh Black Grouse Recovery Project on the adjacent SSSI. The Project was launched in 1999 and is funded by the European Union and RSPB, and seeks to arrest the long running decline in Black Grouse, to increase numbers and raise public awareness of the situation.

17. NORTH WALES WILDLIFE TRUST

Advises the proposals affect two areas of acid grassland with some wetland interest and considerable ornithological interest, and is near to the Trust's Gors Maen Llwyd nature reserve. Object on the grounds that the proposals will disturb birds in the area, particularly Black Grouse. Noise may also affect Nightjars. Matters require addressing further:-

- (i) Ground disturbance during construction
- (ii) Habitat improvement on reducing grazing

- (iii) Impact on the lek of Black Grouse on Foel Goch
- (iv) Soil type and geology
- (v) Mitigation measures (management of land, creation/improvement of habitats/agreement with landowners)

(Original comments)

18. NORTH WALES POLICE
No formal objection to the planning application. (Original comments)
19. COUNTY ARCHAEOLOGIST
Not all sites recorded on the Sites & Monuments Record are shown on the maps provided, although none within the application site have been missed. Maintains the request for pre-determination evaluation of the impact of Borrow Pit 1 on what is registered on the Sites and Monuments Record, and Borrow Pit 4 (possible Bronze Age occupation (evaluation trenches). Considers Mitigation in the ES does not go far enough and that statements that the SMR at Tir Mostyn is simply a natural mound are too caegorical.
20. HEAD OF HIGHWAYS
Having examined the revised application in detail, notes that some of the issues raised in the course of preliminary enquiries have been addressed and recommends that any permission should include conditions ensuring adequate loading / unloading / parking and turning; adequate visibility at the access points; the provision of passing places; facilities for the cleaning of wheels; the prohibition of construction traffic accessing from the north east along the B4501, and the proper construction of all access roads. Any permission granted should be subject to a suitable agreement within which the recommendations could be contained.
21. RIGHTS OF WAY OFFICER (HEAD OF HIGHWAYS)
Draws attention to Public Footpath No. 67 which passes through the Tir Mostyn area. Asks that the public's use of the path be taken into account in the determination of the application. (Original comments)
22. HEAD OF PUBLIC PROTECTION
Offers no comments, confirming that the Section does not have the necessary expertise in matters relating to potential noise impact. (Original observations)
23. NEW DEVELOPMENT CONSULTANTS
Has no observations to make in relation to drainage on the application.
24. SCIENTIFIC SERVICES OFFICER
Advises that pre-application investigations were made by the applicant's consultants into sources of water supply in the vicinity of the site (stream and spring sources). Notes the section in the ES on Hydrology, soils and geology and confirms that the applicants would need to ensure compliance with water supply legislation. (Original comments)
25. LANDSCAPE ARCHITECT
Provides detailed evaluation of the landscape character of the area and the impact of the development. Refers to, (a) Landscape Assessment of Clwyd (1995) where the sites fall within landscape types (Moorland Plateau, Hill Forest, and Aled Hiraethog Hills); (b) The Denbighshire Landmap Study (April 2000) which is currently being completed, identifies the Llyn Brenig landscape as 'distinct', as an area of heather moorland, conifer forest, and open water on the Hiraethog Moors plateau, and assesses the visual quality as high; (c) The Register of Landscapes, Parks, and Gardens of Special Historic Interest in Wales - the sites about the West Denbigh Moors - Mynydd Hiraethog Landscape of Special Historic Interest. (Revised Consultation Document).

In reviewing the impact of the development, despite reservations at the presentation of the photomontages, the Landscape Architect considers this is well assessed in the Landscape Impact Assessment, which follows accepted guidelines. The photomontages show the turbines would have a major impact on the landscape and the Landscape Impact Assessment concludes the turbines would have a substantial or moderate visual impact and have a significant effect on viewpoints from the areas

around Llyn Brenig, Nantglyn and the area south east of Nantglyn. The Landscape Architect outlines the impact in relation to views from 4 main areas:-

- (i) Llyn Brenig – considered a very simple landscape with no visible habitation and little colour variation; very static apart from cloud and water movement; and few elements – simply water, grassland, plantation and sky; altogether with a low capacity to absorb additional features. The turbines would completely destroy the tranquillity and peace which are key features in this landscape.
- (ii) Nantglyn area – turbines would dominate the view from the village (which has a Conservation Area) and would have an adverse impact on the outlook from and setting of the village, and also from the area to the south east of Nantglyn.
- (iii) Clocaenog Forest – view of turbines would be minimal, and the visual quality of the landscape is not high because of cleared areas. Views from the A543 to the west (Sportsman’s Arms) are not considered of great significance.
- (iv) Broader landscape impact – turbines would be viewed as distinct on the distant sky line rising from Clocaenog Forest from the Clwydian Range, and would detract from the quality of the landscape of the Vale of Clwyd when seen from the higher hills in the AONB, but only seen as a small part of overall landscape.

The conclusion is that the Windfarm would be extremely prominent in the landscape and the turbines would have a massive impact, visible over a wide area of Denbighshire – reduction in numbers would do little to reduce the impact. It is considered planning policies oppose developments which would damage the landscape and there is no justification for the development in the high quality landscape of the county.

26. COUNTY ECOLOGIST

Confirms ecological comments relate to the Foel Goch site, adjacent to Marial Gwyn. Advises that the application does not directly affect the key biodiversity habitat of upland heathland at Marial Gwyn, but its location next to the heathland and the forest means there is a potential to effect important upland breeding birds - specifically 2 priority bird species in the UK Biodiversity Action Plan, to which the Government is committed. Notes that Black Grouse are especially sensitive to noise related disturbance, and considers the 200m separation distance from the lek to the nearest turbine(s) is totally inadequate, and that the development would have a significant impact on black grouse population and breeding success. With regard to Nightjar, also considers the species would be affected by noise related disturbance. Does not consider the submission addresses the issue of priority biodiversity species, and impact on black grouse survival in the area.

27. COUNTY MINERALS OFFICER

Advises that initial concerns over the absence of detail on the siting and working of the borrow pits have been addressed, and is satisfied that suitably worded conditions could be imposed to cover restoration and aftercare of the borrow pits.

28. COUNTY CONSERVATION OFFICER

In terms of the effect on views into and out of the Nantglyn Conservation Area, considers that in certain weather conditions the turbines may have a strong impact on the view out of the southern part of the village Conservation Area, and impact adversely on the landscape when viewed from this Conservation Area.

29. DENBIGHSHIRE ACCESS GROUP

Request any buildings intended for public access be designed to be disabled friendly. (Original response)

30. HAMDDEN

Do not consider the amended scheme alters any of the grounds of the original objection, i.e.

- (i) The visual intrusion of the turbines on the most visited part of Denbigh Moors / Windjen have consistently understated their visual impact and the range over which they will be visually intrusive.

- (ii) The impact on the endangered Black Grouse, who will not lek in a field full of turbines / it would be pointless continuing conservation work on Foel Goch designed to improve their breeding and feeding sites.
31. SPECTRUM PLANNING GROUP (assessors of impact on TV reception)
Outline circumstances in which wind farms may result in interference with TV reception. Refer to the possibility that the wind farm may affect the Rebroadcast link from Moel y Parc to Bala, which may require the installation of a customised receiving antenna system, and that the site is in direct line with the RCL to Cerrigydrudion. A few houses in the area may be affected and require remedial action. A legal agreement would need to be considered to meet the cost of investigating and rectifying potential problems. (Original comments)
32. INDEPENDENT TELEVISION COMMISSION
Confirms that the area of the development is one for which the BBC has a watching brief on frequency planning matters, the UK being divided between the BBC and ITC to avoid duplication of effort; hence the details have been forwarded to the BBC to respond.
33. NTL
No response received.
34. BBC
Confirm that Crown Castle International is responsible for providing the BBC's Transmission Network and ensuring the integrity of rebroadcast Links (RBL's) within BBC areas. Advise their analysis shows the proposals would still interfere with a re-broadcast link from Moel y Parc to Cerrigydrudion, hence object to a planning approval unless a legally binding commitment could be obtained from the developer under Section 106 of the Planning Act, or some similar binding agreement to which Crown Castle International is party, to meet the cost of investigating and rectifying any problems which may arise, and the provision of an alternative signal source should that prove necessary.
35. CIVIL AVIATION AUTHORITY
Advises that the site of the development is outside the normal aerodrome and site safeguarding areas and is therefore classed as an en-route case. The Aerodrome Standards Department has noted the details and has no comment on the proposals.
36. DEFENCE ESTATES
No objections to the proposed windfarm site. If permission is granted, require confirmation of points of detail necessary to inform military air crew, and ask that construction workers are advised low level military training is conducted in the vicinity. (Defence Estates are responsible for safeguarding Ministry of Defence radar, communications and low flying).
37. ORANGE
No response received.
38. CABLE AND WIRELESS COMMUNICATIONS (MERCURY)
Confirms that the works should not affect any Cable and Wireless microwave radio links, and has no objection to them.
40. ONE TO ONE
No objections.
42. VODAPHONE
Confirm they have no live sites or planned sites in this area, and see no cause for concern.
43. CELLNET
No response received.
44. LIBERTY COMMUNICATIONS
No response received.

45. IONICA
No response received.
46. DEPARTMENT OF TRADE & INDUSTRY (Radio Communications Agency)
No requirements to see the application at this stage. Technical radio site clearance will take place as part of the radio licensing procedure for any equipment erected.
47. DEPARTMENT OF TRANSPORT
No response received.
48. TRINITY HOUSE
No objections.
49. HOME OFFICE
No response received.
50. ENVIRONMENT AGENCY
Requests any approval includes conditions relating to foul drainage, mitigation measures to prevent contamination of surface water and conditions to reduce vegetation and soil erosion and to control disposal of waste.
51. CLWYDIAN RANGE AONB
Reaffirm previous objections, strongly opposing the development on grounds of the unacceptable impact on distant views from much of the AONB, including the Offa's Dyke National Trail.
52. HEALTH & SAFETY EXECUTIVE
Confirm that the application is not a type on which the HSE would wish to be consulted. (Original observations)
53. COUNTRY LANDOWNERS ASSOCIATION
Support the application for sustainable and renewable energy generation to supply electricity locally. (Original observations)
54. CLWYD MOUNTAINEERING CLUB
Request previous objections stand and add the following points:
- (i) Detrimental impact on quiet enjoyment of the countryside around Brenig, the nature reserve at Gors Maen Lwyd, the Archaeological Trail and Clocaenog Forest.
 - (ii) Impairment of views from Vale of Clwyd and Clwydian Range AONB / Offa's Dyke Path / Moel Famau Country Park.
 - (iii) Foel Goch is used for hunting and display by birds using the adjacent SSSI.
- The previous objections were on the following grounds:
- a) Impact on tranquillity of the area
 - b) Visual impact
 - c) Impact on tourism
 - d) Noise
 - e) Cumulative impact with other wind farms
 - f) Precedent
 - g) Alternatives will render land based wind farms redundant
55. FOREST ENTERPRISE
Note site boundaries and are in contact with applicants/agents to clarify questions of title to land. (Original observations)
56. COUNTRY GUARDIAN
Formally objects on grounds of policy conflicts, impact on tourist industry, and cumulative impact. Respectfully question the realistic contribution of 'clean' energy sources to energy resource, and to CO2 emissions. (Original observations).

7. RESPONSE TO PUBLICITY:

7.1 As Members will appreciate from the summary of the progression of the application in section 3, there have been two separate consultation / publicity exercises on the Tir Mostyn application, one in relation to the submission received in September 1999 and one in relation to the revised application as 'completed' in August 2000. The following sections outline the distribution and numbers of responses received in relation to both the original and the amended submission:

7.2 Original Submission

Discounting 'follow up' letters from the same individuals, some 250 letters of representation were received from private individuals, 64 in support of the application and 186 in objection.

Interest in the original proposals was extensive, the distribution of representations being as follows:

	<u>In Support</u>	<u>In Objection</u>
Community Councils of:		
Nantglyn	5	47
Llanrhaeadr Y.C.	3	13
Efenechtyd	-	-
Denbigh	-	19
Other Community Councils in Denbighshire	1	16
Conwy Community Councils	1	11
Other parts of Wales:		
Gwynedd	35	-
Flintshire	-	1
Anglesey	19	-
Wrexham	-	1
Powys	-	5
S. Glamorgan	-	2
Dyfed	-	2
England	-	61
Scotland	-	8
	<hr/>	<hr/>
	64	186

Briefly, in referring to the representations, 54 of the letters in support were the same letter signed by employees of Cambrian Engineering (Cymru) of Bangor who are involved in the manufacture of turbine parts.

The main points of objection and representation in support of the original application are the same as those summarised in the following section in relation to the amended submission.

7.3 Amended Submission

Following receipt of the final amended plans and documents in August 2000, a letter was sent to every individual / group who had written to the local planning authority on the original scheme, advising of the revisions and offering opportunity to view the plans and to forward representations. All letters requested, in view of the changes to the application, that representees write to advise what points they wished to stand and what new ones they wished to be considered.

At the time of preparing the report, a total of 148 letters of representation have been received on the amended submission, 16 expressing support for the proposals, 132 expressing objections. The distribution of representations is as follows:

	<u>In Support</u>	<u>In Objection</u>
Community Councils of:		
Nantglyn	3	27
Llanrhaeadr Y.C.	10	8
Efenechtyd	-	0
Denbigh	-	5
Other Community Councils in Denbighshire	-	9
Conwy Community Councils	2	4
Other parts of Wales:		
Gwynedd	-	2
Flintshire	1	0
Anglesey	-	
Wrexham	-	2
Powys	-	13
S. Glamorgan	-	5
Dyfed	-	2
England	-	49
Scotland	-	6
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totals	16	132

7.4 The letters received on the amended submission are from:

Mrs. Angela Kelly (Chairman), Country Guardian, Penlan, Llandeilo Graban, Builth Wells, Powys
Mrs H.M. Hayes, Moelygwelltyn Isaf, Moelfre, Oswestry
John Dodds, 43 Rectory Grove, Newcastle Upon Tyne
Mrs M. D. Crossfield M. A., Crossfield, 28 Sunny Mount, Harden, Bingley
Selby Martin, Woodmoor, 6 Rad Valley Gardens, Shrewsbury
Sheila Evans, Coach House, Llanfwrog, Ruthin
Beryl Brazier, 5 Cliff Park, Dinham, Ludlow
R. Wilson, Blaen y Ddol, Pontrhydygroes, Ystrad Meurig
Mrs Susan Carter, 3 School Hill, South Crosland, Huddersfield
Mike Wilson, Free Spirit Writers, Suite Two, Hawthorn Lodge, 23 Cambridge Street, Bridlington, East Riding of Yorkshire
G. J. L. Coltart, Napier House, 8, Colington Road, Edinburgh.
Ronald & Valerie Easton, Highlands, Townsend, Nympsfield, Glos.
R. Tanner, Willowfield, Fords Heath, Shrewsbury.
Stuart Hulse, Karibu Llandegley, Llandrindod, Powys.
Mrs. I. C. Coltart, Napier House, 8, Colington Road, Edinburgh.
Mr G O Evans, Post Office, Nantglyn, Denbigh, Denbighshire.
Dr. V C Mason, Isgoed Soar, Nantglyn, Denbigh, Denbighshire
Sir Philip Naylor-Leyland, Bt., The Estate Office, Nantclwyd Hall, Ruthin, Denbighshire, LL15 2PR
Mr Anthony W. Henfrey, East Wing, Callaly Castle, Alnwick, Northumberland, NE66 4TA
Mr J E Hammond, Highfield, Temple Grafton, Alcester, Warks, B49 6NR
J Tempest, 38 St, Hilda's Road, Harrogate, HG2 8JY
Mr Michael Imeson, Spring House, High Street, Stanton, Broadway, Worcs. WR12 7NE
Mr Gordon Willford, Sycamore, Erwood, Builth Wells, Powys
G F. Morrison, Knockquhassen Farm, Stranraer, Wigtownshire, DG9 8HX
B. S. Lancing, Firbank House, Firbank, Nr. Sedbergh, Cumbria.

Mr Richard Hayes, Moelgwelltyn Isaf, Moelfre, Oswestry, Salop. SY10 7QR
R Whittaker, 48 Gartymore, Helmsdale, Sutherland
J. D. C. Martin, The Laurels, Broad Street, New Radnor, Powys.
P.E. Sayer, Black Boy House, Stockton, Becklis, Suffolk
M Thompson, Ty Draw, Llanarmon yn Ial, Mold, Denbighshire.
L. C. Mann, 89 Millbank Road, Darlington, Co Durham.
C. Simonds, 87 Nichstream Lane, Darlington, Co Durham.
Prof. M. J. O'Carroll, Garden House, Wellbury, Northallerton.
M. J. Rogers, 31 Byron Road, Millhill, LONDON. NW7 4AH
Williams, Isgaerwen, Pentrellyncymer, Corwen.
P. A. North, 3, Green Lane, Selsey, Chichester.
J. M. Dickson, Tyn Cuddig, Moelfre, Oswestry
J. A. Henry, Garvock Church Road, Stockton, Beckles, Suffolk
F. J. & S. J. F. Griffiths, The Flat, Broadleys Farm, Groes Road, Denbigh
J. & R. M. Pickering, 18, Keppelcope Meadow, Boothstown, Worsley, Manchester
R. M. Wynne, Bryn Glas, Saron
G. R. Barber, Tal y Cefn Isaf, Llanfihangel Glyn Myfyr, Corwen
D. E. Tyrer, Cefn Maen Isaf, Saron, Denbigh
G. Yorke, Pen y Bryn, Waen, Nantglyn, Denbigh
D. B. Mills, Bron y Llan, Nantglyn, Denbigh
G Jones, Sergwyd Ucha, Peniel, Sir Ddinbych.
Dr. M. J. R. Corney, Bryn Teg, Y Waen, Nantglyn, Denbigh, Denbighshire.
G. A. & M. D. Brown, Bron Ffynnon, Waen, Nantglyn, Denbigh, Denbighshire.
Robertson, Islwyn, 2 Frongoed, Nantglyn, Denbigh, Denbighshire
R. L. Howatson, Plas Newydd, Nantglyn, Denbigh, Denbighshire.
J Brett, Sergwyd Mill Cottage, Nantglyn, Denbigh.
Martin Jones M.P., House of Commons, London, SW1A 0AA
A Dawson, Deerfold Farm, Bertley, Bruchnell, Shropshire.
Taylor, Cefn Farm, Saron, Denbigh.
J. Young, Nantgwyn, Nantglyn, Denbigh.
L.A.S. Cooper, Bryniau Gwerfyl, Pentrefoelas, Betws y Coed, Gwynedd.
G. Parker Cetrus, Soar, Nantglyn Denbigh.
P. Stubbings, Brackendale, Crossgates, Llandrindod Wells, Powys.
L. S. Parker, Ceteris, Soar, Nantglyn, Denbigh LL16 5RD
C. Knill, 33, Mytton Park, Denbigh. LL16 3HR
P. Davenport, Nantgwyn, Nantglyn, Denbighshire, LL16 5RL
C. Cornwall, Gwaen y Mywion, Nantglyn, Denbigh. LL16 5RH
Jeffrey Yates, Hafodty Goch, Saron, Denbigh
J. M. Adams, Pen Caeau Bach, Saron, Denbigh
H. & M. Roberts, Pen y Ffridd, Saron, Denbigh.
D. C. Owen, Fron Heulog, Peniel, Denbigh.
Mrs. J. M. Amesbury, Hendre, Nantglyn, Denbigh.
Dawn Fletcher, Ty'n Llan, Nantglyn, Denbigh.
David Hill, Image Matters, P.O. Box 16, Denbigh.
G., H. & R. O. Davies, Bron Haul, Prion, Denbighshire
Dr G. C. Harborne & S. J. Winter, Cefn y Maes, Nantglyn, Denbigh.
D. V. Roberts, The Paddock, Nantglyn, Denbigh.
T.A. Roberts, Cae'r Efail, Nantglyn, Denbigh
P. D. Roberts, Cae'r Efail, Nantglyn, Denbigh.
H. Martin, Hafan, Ysbyty Ifan, Betws y Coed, Conwy.
C.J.R. Mather Esq., Plasnewydd, Trefnant, Nr. Denbigh
Mr. & Mrs. B. Collins, Pear Tree Cottage, Tipps End, Welney, Wisbech, Cambs.
G. Walters, 26, Castle View Terrace, Shipton, N. Yorks
B. Dumran, Llwynhir, Parc, Bala
Mrs. Brenda J. Marfleet, Hendre Farm, Nantglyn
Michael Norton, Green Lane Cottage, Old Church Stoke, Powys
Paul Marfleet, Hendre Farm, Nantglyn
Val Hickman, 67 Mwrog Street, Ruthin
D. Clarke, 197 Whitehouse Common, Sutton Coldfield

Robin Hill, Little Stroods, Whitemans Green, Cuckfield, West Sussex
 J. R. Wren, Flat C, 22, Cardozo Road, London
 Ben L. Marfleet, 19, Park Road, Ruthin
 G. Sewell, Holme Lea, Brayton Road, Aspatria, Carlisle
 C.J.G. Harding, Garregllwyd, Nantmel, Rhayader, Powys
 Mary Robinson, 2, Graig Cottages, Pontfadog, Llangollen
 Mrs. A. Taylor, Cefn Farm, Saron, Denbigh
 John Robinson, 2, Graig Cottages, Pontfadog, Llangollen
 Rory Annesley, The Old Rectory, Bleddfa, Knighton, Powys
 Rosemary Woodward, The Cwm, Cwmbelan, Llanidloes, Powys
 P. G. Hodgson, 2, North Liddle Street, Newcastleton, Roxburghshire
 Mrs. C. E. Henry, Garvock, Church Road, Stockton, Beccles, Suffolk
 Eddie Ryle-Hodges, Brignall Mill, Barnard Castle, Co. Durham
 Neil & Carol Easton, Fairview Farm, West Down, North Devon
 Nicholas Parsons, Burrington House, Burrington, Ludlow, Shropshire
 Michael Hird, 4, Copperfields, Beaconsfield, Buckinghamshire
 C. Amesbury, Hendre, Nantglyn
 J. O. Howell C.Eng., 26, Oldway, Bishopston, Swansea
 J. H. Collins, Kilnpotts, Lindale, Grange-Over-Sands, Cumbria
 Shauna Crockett-Burrows, Positive News, No. 5, Bictron Enterprise Centre, Clun, Shropshire
 R. A. Challenor, Davies & Bowring, 6-8 Main Street, Kirkby Lonsdale, Carnforth, Lancashire
 Mrs. E. Moreton, Pandy Farm, Merthyr Tydfil
 L. Nichols, Inshallah, Churchfield, Ireleth-in-Furness, Cumbria
 Mrs. J. M. Ward, 'Beechwood', Temple Cuiting, Cheltenham, Glos.
 R. Morrison, South Paddock, Mill Lane, Legbourne, Louth
 Malcolm Ostcliffe, South Paddock, Mill Lane, Legbourne, Louth
 Clive Ferrigan, 100, Russell Avenue, Wollaton, Nottingham
 Mrs. M. A. Jones, 26, Wayside Acres, Bodelwyddan
 J. K. Reynolds, Croftwell, School Road, Lessingham, Norfolk
 Henry Thoresby, 20, Marine Road, Deal, Kent
 Robert Woodward, The Cwm, Cwmbelan, Llanidloes
 Mrs. Pamela G. Mason, Isgoed, Soar, Nantglyn
 Jill Tyrer, Cefn Maen Isaf, Saron
 E. Jones, 26, Cilgant, Eglwys Wen, Bodelwyddan
 V.M.S.H.C. & R. Cunnigham, Dolhyfryd yn Llawnt, Denbigh
 L. Lloyd, 5, Bryn Onnen, Denbigh
 G. M. Williams, 9, Cwrt Ashley, Llanelwy
 Mrs. P. M. Roberts, Deverell Cottage, Kingston Road, Lewes, Sussex
 The Owner/Occupier, 10, Maes Lliwen, Nantglyn
 Mr. M. R. Watson, Tan Llyn, Nantglyn, Denbigh
 Mrs. Catherine E. Roberts, 31, Marlborough Place, Vaughan **Street, Llandudno**
 Richard Welch, Plas Nantglyn, Nantglyn
 Betty Moore, Penrhiw, Cwmystwyth, Aberystwyth
 Alan J. Nunn, North Cornwall Marketing, 42, Longpark Way, Boscoppa, St. Austell
 Michael Tod, Porth-y-Parc, Llangattock, Powys
 Peter Gerrard Jones, Kemadarr, Rectory Lane, New Radnor, Powys
 Mrs. Helen Owen, Nant-yr-Efail, Betws-yn-Rhos, Abergele, Conwy
 Gethin Owen, Nant-yr-Efail, Betws-yn-Rhos, Abergele, Conwy
 John D. Campbell, Q.C., 11, Blacket Place, Edinburgh
 David Ll. Davies, Moor Farm, Moor Lane, Holywell
 Mr. Irfon Roberts, Priory Wall House, 3, Cockshut Road, Lewes
 Elen D. Owen, Maes Ann, Saron
 Gwynfor & Sian Evans, Pen y Caeau Mawr, Saron
 Mr. John Davies, 3, Maes yr Yrfa, Saron
 Mrs. Sheila Davies, 3, Maes yr Yrfa, Saron
 Gareth & Gwennan Hughes, Bryn Mulan, Prion
 David John Owen, Maes Ann, Saron
 R. E. Jones, Awelfynydd, Nantglyn
 Councillor Ioan M. Richard, 23, Heol-y-Mynydd, Craigcefnparc, Swansea
 The Owner/Occupier, 64B, Cathedral Road, Canton, Cardiff

Dorothy M. Williams, Rossa Fawr Farm, Prion
 Robert Rowland Williams, Bryn Golau Farm, Saron
 DART, Hendre Farm, Nantglyn *

* DART (Denbighshire Against Rural Turbines) is a local pressure group formed to oppose the windfarm. The spokesperson has written to advise that whilst the organisation is not registered, and "does not have members in the true sense of the word", it is supported by a number of local residents, businesses and groups, with a core team determining strategy and policy consisting of two members of Nantglyn Community Council, a local magistrate, past president of Friends of the Earth, a member of the Clwydian Range AONB Joint Advisory Committee, and three others. The letter estimates at least 60% of the Nantglyn Electoral roll have communicated with the organisation and expressed support for objections, including a number of local farmers and landowners. It mentions the groups in contact with DART include CPRW, the Welsh Ramblers Association, Snowdonia Society and Country Guardian; and that as a result of the web site and links to it from other web sites, regular e-mails are received from individuals in Britain and other parts of the world. The objections from DART are based on visual impact, acoustic implications and concerns on ornithology, hydrology, archaeology, public safety, local economy, and conflict with planning guidance. The substance of the comments are included in the summary of objections which follows:

7.5 The basic points raised in support and in objection to the amended application are:

(A) In SUPPORT of the application of	Approximate Number Representations
In terms of the PRINCIPLE of clean / renewable energy sources:	
- Windfarms are an excellent way of using an abundant, cheap, clean and safe natural renewable resource	6
- Windfarms are a realistic way of reducing CO ₂ emissions and global warming	2
- Denbighshire does not make any contribution to the national grid by way of wind, atomic or gas power generation and has high ground capable of wind generated power	1
In terms of LOCAL IMPACT	
- The turbines will not be visible to people living in nearby villages	2
- This is a remote, sparsely populated area and the development would only affect a few people	2
- Noise would only affect the property of landowners involved in the scheme, and they should accept it	1
- Noise would not adversely affect the locality	1
- Fears over impact on wildlife, tourism and property values are exaggerated	5
- The site can be restored to its former condition at the end of the windfarm's life	1

- The development would support the local economy through:
 - a) Helping local farms to diversify and secure their survival 7
 - b) Construction jobs would boost the rural economy 1
 - c) Reduced electricity bills 1

In general terms

- The County Council should not surrender to a NIMBYist attitude 1

(B) In OBJECTION to the application of **Approximate Number Representations**

In terms of the PRINCIPLE of clean / renewable energy and wind Turbine developments

- The actual contribution of energy to the National Grid from windfarms is limited and does not justify the damage to the countryside 40
- Windfarms do not realistically result in CO₂ savings or impact on global warming 11
- A conventional power station would generate the annual output of a 25 turbine windfarm in a matter of hours / there is surplus capacity at conventional stations 3
- The efficiency of turbines is low and they only operate intermittently 9
- Windfarms are not economically viable, are meeting fashionable political objectives, and are only popular as long as government subsidies under the NFFO programme are available 12
- Windfarm developers and local farmers are only seeking profits and should not be encouraged to do so at the expense of the locality 3
- There is more sense in developing alternative means of generating energy, (solar, tidal, hydro and biome schemes) and encouraging energy conservation through support for better house insulation 12
- Offshore windfarms are preferable as landscape / noise and other issues are of more limited consequence 4
- Alternative locations should be sought where people do not hear or see turbines in their immediate living environment 1
- There are already enough wind turbines in Wales / 46% of the UK's turbines but 5% of its population 4
- Small scale community based schemes are preferable to large scale development 1

In terms of LOCAL IMPACT

1 LANDSCAPE AND VISUAL IMPACT

- The development would destroy the natural beauty of a high quality unspoiled landscape 86
- It would affect people's enjoyment of an attractive upland area 16

- The windfarm would be visible from, and devalue views from, the Clwydian Range AONB, Offa's Dyke Trail, Moel Famau Country Park 16
- It would have a detrimental impact on the Snowdonia National Park 1
- Movement of turbines draws attention to such developments 1
- The amended scheme involves larger rotor diameter blades which would be more prominent when moving 14
- There would be an overwhelming physical impact on nearby property 2
- The overhead line to Denbigh would impact on many people 1
- Other windfarms prove the damage which can be caused to the landscape 2
- It only takes one careless action to destroy what has remained unsullied for centuries 1
- There would be a severe cumulative impact from the Tir Mostyn site and the one at Pentrefoelas 16
- The categorisation of the Clwydian Range AONB as of "medium sensitivity" in the assessment is inappropriate 1

2. AMENITY IMPACT

NOISE

- The noise impact of the turbines would be unacceptable / no guarantees can be given that there will be no noise pollution, as evaluation is an inexact science 23
- There is no 'agreed' methodology for assessing noise impact, predictions can be unreliable and seem to take no account of terrain, varying wind conditions and atmospheric pressure, and there is no satisfactory evaluation of the long term effect of noise 1
- The thud of rotor blades may cause distress to residents 1
- Any noise would be intrusive and impact on the quality of life and enjoyment of the countryside 1
- The Acoustic Assessment suggests noise levels may be unacceptable to the local population / use of the term "unlikely" to lead to sleep disturbance is of no help if there are problems once turbines are operating 1

SHADOW FLICKER

- Shadow flicker may occur in the locality and impact adversely on residential property 5

ELECTROMAGNETIC INTERFERENCE

- All implications of electromagnetic fields need to be investigated / not simply the narrow area of concern immediately around the turbines 1
- Any adverse impact on TV reception would be unacceptable 2

HEALTH AND SAFETY

- Turbines would pose a risk to low flying military aircraft 5

-	Aircraft warning lights would be required and would lead to light pollution	1
3.	NATURE CONSERVATION (ECOLOGY / ORNITHOLOGY)	
-	The proposals would have an adverse impact on wildlife and ecology	25
-	The Foel Goch site is adjacent to the Mynydd Hiraethog SSSI and could impact adversely on its conservation interests, in particular breeding bird assemblages. Denbigh Moor is designated as a National Nature Reserve by the CCW on the basis of the need to protect the lekking area of the Black Grouse	19
-	Construction works and turbine noise would constitute a threat to a number of other bird species	5
-	The qualifications of the consultant preparing Addendum 2 on Black Grouse are not stated	1
4.	HIGHWAYS	
-	There may be problems during the construction period on narrow roads in Cerrigydrudion, and at pinch points elsewhere	1
-	There should be no interference with any footpaths in the vicinity of the site	1
5.	IMPACT ON THE RURAL ECONOMY	
-	A windfarm would be likely to discourage visits to the area by tourists, including the Brenig Centre; local fishermen, water sports enthusiasts, archaeological trail walkers, and others who should be able to enjoy their recreation without visual and noise disturbance / loss of tourist revenue would have serious consequences on the local economy (e.g. B & B's, shops)	41
-	There are questionable benefits to the local economy, with few jobs beyond the construction phase / most turbines are manufactured abroad	3
6.	ARCHAEOLOGY	
-	The development would destroy the peaceful / natural atmosphere of the Llyn Brenig / Hen Ddinbych archaeological trail	5
7.	HYDROLOGY	
-	There appears to be no systematic analysis of the potential impact on spring water supplies to local properties	5
-	There should be no interference with the supply and quality of water supplies in the locality	2
8.	OTHER GENERAL POINTS	
-	Amendments to the submission are immaterial and original objections still stand	51

-	The grant of permission would set a precedent for approval of other schemes which have received NFFO contract	8
-	Offers of “benefit” payments to Community Councils by developers should not influence planning decisions	1
-	Effective reinstatement of the land is questionable given that habitats and hydrological changes may be irreversible	3
-	Property values would be blighted	10
-	The site should be viewed on a clear day and from as many viewpoints as possible	1
-	Other permissions highlight the dangers of supporting windfarms – visual disasters, noise nuisance, abuses of conditions	1
-	Developers offer to revise applications are a ploy to persuade local authorities to grant permission	1
-	There is inadequate / insufficient / questionable information in the submission:	
*	The scale of the turbines is not properly represented in the photomontages	1
*	The use of a 35mm camera with a 50mm lens favourably reduces the impact of turbines / the field of view is too wide in comparison with the human eye	1
*	The use of a grey overcast sky as background on the photomontages offers the least intrusive of possibilities – photographs showing different weather conditions would be less misleading	3
*	The Moel Fammau viewpoint montage is of no value as it is taken on a misty day with poor visibility, when the horizon and application site are hidden	3
*	There is inconsistency between the zone of Visual Impact map and the photomontage from Nantglyn in terms of numbers of turbines visible	2
*	Some of the photomontages are taken with trees and objects as significant foreground features	1
*	The Acoustic Assessment is more comprehensive than the original ES, but the choice of monitoring points includes a number of properties owned by landowners involved in the application, or which have been uninhabited for years	2
*	The Acoustic Assessment does little to reassure the non-technical person what the noise impact will be	2
*	Readings should have been taken in villages	1
*	The ornithological assessment conflicts with the RSPB’s views / the author’s qualifications are not stated / the conclusions on the risks to Black Grouse are baffling	1
*	Proposals for the overhead line connection to Denbigh should form part of the application so its impact can be assessed	1

9. PLANNING POLICY ISSUES

- There is no guidance on windfarm developments from the National Assembly and no permission should be given in the absence of clear up to date policy guidance 1
- In the absence of national guidance, the application should be “called in” for determination by the National Assembly / the issues are similar to those applying to the Conwy application and the two sites are intervisible 1
- There is conflict with the following Development Plan policies:
Glyndwr Local Plan – L4, L12, L16
Clwyd County Structure Plan : First Alteration – H5, H9, G9, G10, G11
2nd Alteration - CONS5, CONS9, CONS24
CONS25, CONS28
Denbighshire Unitary Development Plan – ENV1, ENV2, ENV3, ENV4,
CONS9, MEW10 32

7.6 MEMBERS' COMMENTS

No comments have been received from County Council members for inclusion in this report on the application.

8. PLANNING POLICIES AND GUIDANCE:

8.1 There is a volume of general guidance on the principles of developing renewable sources of energy. The UK Government has responded to International pressures to tackle the perceived problems of climate change and global warming, highlighted at the United Nations Conference on Environment and Development (the Earth Summit) in Rio de Janeiro in 1992 and the Climate Change Conference in Kyoto, Japan in 1997, resulting in the legally binding Kyoto protocol, setting international targets for reducing greenhouse grasses. The Government’s policy is to encourage the development of renewable sources of energy wherever they have the prospect of being both economically and environmentally acceptable, and this is reflected in the development of the Non Fossil Fuel Obligation (NFFO) system, and through more local advice in Planning Guidance (Wales) 1999 and Technical Advice Note (Wales) 8 – Renewable Energy, 1996. The NFFO and planning policy is reflective of the Government’s commitment to the development of renewable energy sources outlined in Energy Papers, House of Lords reports and general statements of principle since the late 1980’s.

8.2 At the more local level, there is limited planning policy guidance on windfarm developments in the current Development Plan documents, the Clwyd County Structure Plan, First Alteration (1991) and the Glyndwr District Local Plan (1994). Whilst the Second Alteration to the Structure Plan was not progressed beyond its deposit and proposed changes stages in 1995 and 1996, it did include a policy on wind power. The Denbighshire Unitary Plan (UDP) has specific policies on renewable energy and wind power and a Supplementary Planning Guidance topic paper has been prepared on Wind Energy. The UDP was placed on deposit in May 1999, its proposed changes were published in the spring of 2000 and the Local Plan Enquiry is ongoing in October and November 2000. The relative status of these development plan documents is covered in Section 9.5 of this report.

8.3 The following section provides an outline of the NFFO process, National Planning Guidance, and the policies in the current development plan documents of relevance to the Tir Mostyn application.

8.4 Central Government approach -

- The Non Fossil Fuel Obligation (NFFO) process

The Non Fossil Fuel Obligation process was introduced following the privatisation of the electricity supply industry in 1989. The Government made provision through the Electricity Act 1989 to support the Nuclear Generating Industry which stayed in public ownership by requiring each of the 12 Regional Electricity Companies to ‘purchase’ over a fixed period, a specified minimum amount of electricity generated from non-fossil sources at least in part to help meet emissions targets. The Act enabled the Secretary of State for Trade and Industry to make Orders relating to energy produced from a number of ‘renewable’ energy sources, which include wind, solar, hydro, tidal and bio fuels. This is referred to as the Non Fossil Fuel Obligation (NFFO), and falls under Section 32 of the Electricity Act 1989. It provides a framework for the commercial

exploitation of renewable energy and has led to a number of proposals by private companies specialising in the development of different sources of 'clean' energy.

There have been five Orders made under the NFFO, since 1990, referred to as Renewable Orders, aimed at specific targets of renewable energy generation (1500mw by the year 2000 and 10% of the UK's energy needs by the year 2010). Details of the NFFO's for generators of electricity from renewable energy sources are included in the Government's publication Renewable Energy Bulletin No. 5.

The Tir Mostyn proposals represent one of eight NFFO contracts secured by Windjen Power Ltd., together with DJ Construction, this project forming one of the 195 NFFO 4 contracts released in 1996/1997. The fifth order of NFFO were announced in 1998 and included the release of 281 contracts for projects, including 69 wind projects.

Of interest to the NFFO process, in January 2000, the Government issued its conclusions in response to a public consultation on a document 'New and Renewable Energy : Prospects for the 21st Century'. These were to reaffirm the commitment to generating 10% of electricity from renewable sources, but to change the mechanism for achieving it, from the NFFO process to one termed a Renewable Obligation, to be imposed on electricity suppliers. The relevant legislative framework is contained in the Utilities Bill 2000, and it is understood that the relevant Orders to implement the Renewable Obligation will be in place by the end of the year 2000.

The basis of the Renewable Obligation process is that there will be a legal requirement on licensed suppliers of electricity to supply a specified proportion of their electricity to customers from renewable sources of energy. The Government intends the Obligations to set a maximum price at which suppliers will have to purchase electricity from renewable sources, in order to protect customers from excessive costs. In the opinion of the planning appraisal submitted with the application, it is likely that this new framework will be primarily competitive and place at a disadvantage those renewable technologies requiring substantial financial support, including offshore wind; and that land based wind energies may be one of the few renewable energy technologies sufficiently advanced to compete in this framework.

8.5 **National planning policy and Guidance**

- Planning Guidance (Wales) – Planning Policy First Revision April 1999.

There is general support for the principles of Sustainable Development (Para 3.2.1) including the objectives of the "prudent use of natural resources", and the "effective protection of the environment". The paragraph states the National Assembly for Wales has a duty to set out how it proposes in the exercise of its functions, to promote sustainable development. Section 13 relates specifically to energy, and outlines the government's policy "to stimulate the exploitation and development of renewable energy sources where they have prospects of being economically attractive and environmentally acceptable" (Para 13.1).

The advice continues in Para 13.2, requiring local authorities to consider the impact of renewable energy projects on the local environment (and infrastructure), and their contribution to reducing emissions of greenhouse gasses and other pollutants.

- Planning Guidance (Wales) – Technical Advice Note (Wales) 8 – Renewable Energy. November 1996

TAN 8 provides extensive guidance on the issue of Renewable Energy and sets out in Annex A a series of land use planning considerations relevant to Wind Energy proposals (59 paragraphs). The general advice in TAN 8 points to the advantages of using renewable energy, in substituting for finite energy sources and limiting greenhouse gas emissions (Para 3).

Annex A provides explanatory detail on what is involved in the development of windfarms, from the basic characteristics of turbines, locational principles, planning implications (including noise evaluation, landscape and ecological, assessment) and advice on consultative bodies.

Noise evaluation

Paragraphs A28 – A38 deal with noise evaluation. A28 refers to a detailed document produced by the Energy Technology Support Unit (ETSU) for the Department of Trade and Industry, which provides

detailed information on wind turbine noise (“The Assessment and Rating of Noise from Windfarms”). Reference is made in A29 to the use of British Standard BS4142 (1990), which has been advocated as a standard which comes nearest to dealing with issues encountered in wind turbine developments, but A30 concludes that the use of BS4142 may be inappropriate to assess wind turbine noise for several reasons. These include the fact that BS4142 is a standard for assessing noise from industrial premises or fixed installations in mixed residential and industrial areas (not rural areas where windfarms are usually proposed); the Scope of BS4142 specifically precludes situations where background noise levels are below 30 dB(A) (which is likely to be the case at most windfarm sites); and BS4142 recommends against taking noise measurements in extreme weather conditions like high wind speeds, as the measurements may be unrepresentative. A31 urges caution in the use of BS4142 as a means of determining potential noise nuisance where these factors give rise to concern, and suggests the effect of turbines should be determined by reference to the character and sensitivity of the area. A33 states that experience has shown there is unlikely to be a significant noise problem for any residential property situated further than 350 – 400 metres from the nearest turbine and that lesser separation distances may be acceptable depending on the turbines used and the specific conditions at a site.

Electromagnetic interference

A39 refers to Electro magnetic production and interference and states that provided careful attention is paid to siting, wind turbines should not have adverse effects on communication systems using electromagnetic waves as the transmission medium (TV, radio, or microwave links). A49 accepts that a structure of any size can interfere with electromagnetic transmissions, but that wind turbines present no new problems. A41 notes that a windfarm may interfere with television reception, but that where this occurs, it is of a predictable nature and can generally be alleviated by the installation of a local repeater station or cable connection.

Landscape

A44 notes that local authorities must always weigh the desirability of exploiting a clean renewable energy source against the visual impact on the landscape of wind turbines. A45 recognises it is impossible to make a completely objective assessment of the landscape qualities of an area and the impact of development on the landscape. It outlines the need for adequate evaluation of the likely visual impact of a development from different locations through photomontages. A46 refers to the use of maps showing likely Zones of Visual Influence and computer graphics on larger schemes. A47 details the principal factors influencing the visual impact of turbines (landform and characteristics, number and size of machines, design and colour, layout of machines, the existing skyline of the area), and A48 concludes that the acceptability of turbines will be determined to a considerable extent by the form and pattern of the landscape within and adjoining a particular site. A49 outlines the need to take into account the potential cumulative impact of windfarm developments.

Ecology

A56 refers to the need to examine rigorously applications in areas designated of ecological importance, and A55 notes that the Countryside Council for Wales are able to advise on the likely impact.

- Planning Guidance (Wales) – Technical Advice Note (Wales) 5 – Nature Conservation & Planning. November 1996

TAN 5 contains detailed advice on the significance of proposals affecting land classified as a Special Protection Area (SPA) designated as Special Areas of Conservation (SAC’s) or Sites of Special Scientific Interest (SSSI’s). It states that development proposals in or likely to affect an SSSI must be subject to special scrutiny and that the Countryside Council for Wales must be consulted (Para 21).

TAN 5 draws attention to protected species under the Wildlife and Countryside Act 1981 (Part 1) and the legal significance of this protection (Paras. 30-32).

There are no SPA’s, or SAC’s in the vicinity of the Tir Mostyn site. The Mynydd Hiraethog SSSI is located immediately to the west of the Foel Goch section of the site.

- Planning Guidance (Wales) – Technical Advice Note (Wales) 11 – Noise. October 1997

TAN 11 contains advice on matters which may be material to decisions on individual planning applications involving development which will either generate noise or be exposed to existing noise sources.

The basic advice is that local planning authorities must ensure that noise generating development does not cause an unacceptable degree of disturbance (Para 8). Authorities are expected to consider whether noise generating uses would be compatible with existing activities and development should not normally be permitted in areas where unacceptably high levels of noise are expected and where such noise will continue through the night (Para 10). Due account is expected to be taken of existing background noise levels, as in rural areas this may be low and noise generating activity may be especially disruptive (Para 13).

TAN 11 does not give detailed guidance on assessing noise from wind turbines and refers to the advice in TAN 8 – Renewable Energy, Annex A, Paras. A28-A38.

- Planning Guidance (Wales) – Technical Advice Note (Wales) 17 – Environmental Assessment. July 1998

TAN 17 outlines the requirement for Environmental Assessments with specified types of planning application, and details the procedures involved in the Environmental Assessment process.

- Welsh Office Circular 60/96 – Planning and the Historic Environment : Archaeology

The general approach of Circular 60/96 is that care should be taken to ensure archaeological remains are not needlessly or thoughtlessly destroyed, and that in the course of dealing with planning applications where remains are present, areas of potential conflict between development and preservation are reduced through a positive approach by both parties. (Para 3). The Circular recognises proposals and preservation of archaeological remains can only be assessed on a case by case basis, and that in each instance, development plan policies and other material considerations (including the intrinsic importance of remains) have to be weighed against the need for the development. (Para 16).

In paragraphs 22 and 24, the Circular outlines the local planning authority's power to impose planning conditions requiring an archaeological watching brief during the construction period, as it recognises that remains may not be discovered until works have commenced.

8.6 Development Plan Policies and Guidance

Glyndwr District Local Plan

The local plan contains no specific policies on renewable energy, but there are a number of policies relevant to detailed aspects of the application.

A.1 – Normal Planning Consideration

The policy requires proposals for development to have proper regard to 'normal planning considerations'. Of relevance to the windfarm application are:-

- Criterion I - the scale of development, siting, layout, design, external appearance and use of materials should be appropriate to the surroundings;
- Criterion II - the effects on the amenity of adjoining properties or the general environment of the area, including nature conservation interests;
- Criterion IV - the need for a safe and convenient access.

L.1 – Protection of the Landscape

Whilst this policy states that Conservation of the landscape will be a primary consideration within the Outstanding Landscape Area in the local plan, this relates only to the Clwydian Range and the Berwyn Mountains not the area including the application site.

L.4 – Areas of Historic Landscape Value

The Glyndwr plan identifies four areas of Historic landscape value, one including land between Llyn Brenig and the application site (but not actually including any part of the site), designated because of the concentration of archaeological features such as Bronze Age Funery and Ritual Monuments which form part of the landscape. The policy contains a strong presumption against development which would have a detrimental effect on the character of the landscape, Historic Buildings, or structures within it.

L.12 – Sites of Special Scientific Interest and Nature Conservation

L.12 contains a strong presumption against any development on or in the vicinity of sites of Special Scientific Interest, and sites of Nature Conservation importance, where such development will affect the scientific or nature conservation interest of the site. The Mynydd Hiraethog SSSI, referred to in paras. 4.2 and on map 3 is located immediately to the west of the Foel Goch site.

L.16 – Development in the Special Landscape Area (SLA)

This policy places emphasis on the requirement that the conservation and enhancement of the landscape in the Special Landscape Area will be a primary consideration, and that any development which detracts from the character and appearance of the landscape will be resisted. It states that development in the countryside shall be kept to a minimum and any which is permitted will be required to conform to high standards.

The explanation to L.16 notes that the Special Landscape Area is of 'county significance', i.e. the landscape is of high quality warranting special protection and makes a major contribution to the rural character of the County. With the exception of the coastal towns, the majority of Denbighshire, including the application site, is within the Special Landscape Area.

Clwyd County Council Structure Plan : First Alteration

The First Alteration to the Clwyd County Structure Plan contains no specific policies on renewable energy, but there are a number of policies relevant to detailed aspects of the application.

F.20 – Borrow pits

The policy obliges proposals for the extraction of minerals from borrow pits to be considered against the criteria set out in structure plan policies F1-8, which require due evaluation of environmental effects. The basis of the policy is that such applications will normally be permitted where it can be established that there would be overriding environmental or other benefit.

G.9 – Scheduled Ancient Monuments

Planning permission for development will normally be refused on scheduled ancient monuments, other than where scheduled monument consent has been granted by the Secretary of State and there are no overriding archaeological reasons for preservation, the amenity value of the site is preserved and adequate provision has been made for the protection of archaeological features.

G.10 – Development on unscheduled archaeological sites

G.10 states that planning permission may be refused for development on unscheduled archaeological sites considered to be of sufficient regional, local or academic interest to merit protection from disturbance. Where development is considered permissible the policy suggests consent be withheld until satisfactory agreements have been made for the provision of adequate archaeological investigation before/during development, which may be secured through attachment of conditions.

G.11 – Development in close proximity to a scheduled or unscheduled ancient monument

The policy states that development will only be allowed if it does not have an adverse impact on the setting and character of a scheduled or unscheduled ancient monument. Specific reference is made to the protection of Offa's Dyke and Wat's Dyke.

H.5 – Special Landscape Area

Policy H5 states that within the Special Landscape Area, priority will be given to the conservation and enhancement of the landscape, and that development in the countryside will be kept to a minimum. Development permitted in accordance with other policies of the Structure Plan will be required to conform to higher standards than may be acceptable elsewhere, other than in an AONB, to ensure the impact in the landscape, both from nearby and distant viewpoints is minimised.

The additional explanation to H5 notes that the Special Landscape Area is of 'County Significance', i.e. the landscape is of high quality, meriting special protection, and makes a major contribution to the character of the county.

H.9 – Nature Conservation

This policy seeks to protect Sites of Special Scientific Interest and other Sites of Nature Conservation Importance, and contains a strong presumption against any form of development either within or in the vicinity of a site which would have an adverse effect on the nature conservation interest of the site.

H.11 – Control of Pollution

H.11 requires that proposals for development should not have an unacceptable effect on public health, the natural environment or on general amenity by emissions to water, land or the atmosphere, or by noise or vibration.

H.12 – Quality of water

H.12 contains a presumption against any form of development causing discharge of effluent in a manner which would unacceptably impair the quality of coastal or inland water.

Clwyd County Structure Plan : Second Alteration (Proposed changes and Revised Written Statement

The proposed modifications to the Structure Plan included a number of detailed 'site specific' policies relating to the impact of development on a locality and a main policy relating to wind power developments (CONS 28).

CONS 9 – Sites of Special Scientific Interest

This repeats the substance of H.9 of the Structure Plan First Alteration, in seeking to protect SSSI's from development likely to harm their conservation or scientific value.

CONS 11

This seeks to ensure the conservation of natural landscape features and presumes against proposals which would result in significant loss of trees, damage ancient woodland or other important natural features.

CONS 14

Repeats the substance of H.11 in ensuring development does not have an unacceptable effect on public health, amenity and the nature environment as a result of emissions to water, land or the atmosphere, or by noise or vibration.

CONS 24, 25, 26 – Archaeological considerations

These three policies seek to protect sites of Archaeological importance by presuming against development in close proximity to a scheduled or unscheduled site which would have an adverse effect on its setting or character, and require a full archaeological evaluation of a site by a developer prior to determination of an application.

CONS 28 – Wind power applications

CONS 28 states that proposals designed to generate energy from wind power will normally be granted planning permission provided that such proposals meet with the following criteria:-

“ Proposals for developments designed to generate energy from wind power will normally be granted planning permission providing that:

- A. The impact of development upon agriculture or other existing land uses is minimised with particular regard to access and construction activities;*
- B. The scale of development is sensitive to the landscape and natural environment particularly in terms of visual impact;*
- C. The development satisfies the requirements of Structure Plan policies regarding archaeology, built conservation and other heritage interests;*
- D. The development does not detract from the character and appearance of the landscape within the AONB;*
- E. The development does not harm, to a serious extent, the appearance of the Local Landscape Areas;*
- F. Nature conservation interests are not prejudiced within sites designated for their ecological value;*

- G. *The development is shown not to threaten public safety or have an unacceptably adverse effect on amenity by virtue of noise disturbance, shadow flicker effect or radio-magnetic/microwave interference “.*

Denbighshire Unitary Development Plan

The Unitary Development Plan contains two main sections, Part 1 including a General Development Strategy and Part 2 a series of detailed policies against which applications should be considered. Both Parts contain policies of relevance to the windfarm application, Part 1 a general statement in STRAT 2 Energy, and STAT 7 ENVIRONMENT, Part 2 a specific policy on wind power in MEW 10, and a series of other detailed policies against which an application falls to be tested.

POLICY STRAT 2 – ENERGY

This strategic policy is relevant to the application insofar as in respect of the generation and conservation of energy, it suggests development of clean and renewable energy sources will be permitted so far as they are compatible with the Plan's policies (section (I)).

POLICY STRAT 7 – ENVIRONMENT

Strat 7. Environment seeks to safeguard the special character of Denbighshire, including its built heritage, countryside, coastline and environment by protecting and enhancing the nature conservation, biodiversity and landscape quality of the County, including the aquatic environment, both in urban and rural areas (section (iii)); and by preventing development leading to unacceptable environmental pollution or disturbance (section(iv)).

GEN 7 – Development Control requirements

GEN 7 lists a series of standard Development Control ‘tests’ against which proposals need to conform where they are in accordance with the UDP’s other policies. Of relevance to the windfarm application are the need for development to:-

- respect the site and surroundings in terms of layout, intensity of use of land (i);
- not unacceptably affect the form and character of surrounding landscape, the local natural and historic environment (ii);
- not unacceptably affect prominent public views into, out of, or across any main centre, main village, or area of open countryside (iii);
- incorporate where possible, existing landscape or other features, take account of site contours and changes in levels, and avoids prominent skylines (iv);
- not unacceptably affect the amenity of local residents, other land and property users or characteristics of the locality by virtue of increased activity, disturbance, noise, dust, fumes (v);
- provide safe and convenient access and parking (vi);
- not have an unacceptable effect on the local highway network (viii);
- satisfy physical or natural environmental considerations relating to drainage (x).

GEN 10 – Planning Obligations

This policy supports the use of Planning Obligations where relevant in conjunction with planning conditions where permissions are being considered, to ensure development is in accord with the objectives and development strategy of the UDP, to provide community benefit and to reflect public interest.

GEN 11 – Environmental Assessment/Statement

GEN 11 outlines the requirement for suitable Environmental Statements to accompany applications falling within Schedules 1 and 2 of the 1999 Environmental Assessment Regulations.

ENV 1 – Protection of the Natural Environment

The policy seeks to protect the landscape and biodiversity of the natural environment throughout the County, and requires that development must be designed to maintain and enhance the landscape character of the countryside and biodiversity of the natural environment.

ENV 4 – International/National Sites of Conservation Value

ENV 4 states that development which would unacceptably affect the integrity of a site of European Nature Conservation Value or unacceptably harm the conservation value of Sites of Special Scientific Interest, will not be permitted unless the reasons for development significantly outweigh the respective values of these sites.

ENV 6 – Species Protection

ENV 6 states that development which would unacceptably harm species given special protection by law will not be permitted unless appropriate steps can be taken to secure their protection. The explanation to the policy outlines the need to maintain protected species and their habitats, and refers to the special protection afforded to wild flora and fauna in Part 1 of the Wildlife and Countryside Act, which includes birds in Schedule 1.

CON 12 – Areas of Archaeological Importance

The policy requires, in line with Planning Guidance (Wales) and Circular 60/96, that where relevant a suitable report on archaeological evaluation of sites of known or potential archaeological significance is submitted prior to the determination of proposals. It outlines the requirement for conditions or Obligations obliging excavation and recording in advance of construction work, where remains are affected but preservation in situ is not merited.

CON 13 – Historic Landscape, Parks and Gardens

CON 13 states that development which would unacceptably harm the character of an historic landscape, park or garden, or its essential setting will not be permitted.

ENP 1 – Pollution

This policy requires that development will not be permitted where it would unacceptably harm the environment and/or the amenity of nearby properties in terms of pollution of groundwater, vibration, noise, light or other pollution.

TRA 6 – Impact of new development on traffic flows

The policy presumes in favour of development subject to other UDP policies provided there is no unacceptable impact on the safe and free flow of traffic, and the capacity/traffic conditions on the surrounding road network are satisfactory. Where necessary, a traffic impact assessment may be required along with assessment of mitigation measures.

MEW 8 – Renewable energy

MEW 8 supports the principle of development which captures energy from naturally sustainable sources, as far as is compatible with other UDP policies. It states that in particular, development will only be permitted where there is no unacceptable effect to the environmental quality of the locality. The explanation to the policy refers to guidance in Planning Guidance (Wales) advocating the exploitation and development of renewable energy sources where they have prospects of being economically attractive and environmentally acceptable, and affirms the Council's commitment to considering the contribution the UDP area is able to make in meeting need on a local, regional and national basis.

MEW 10 – Wind power

MEW 10 is of direct relevance to the Tir Mostyn application and states as follows:-

- “ WIND TURBINES OR WINDFARMS, INCLUDING ANY ANCILLARY ASSOCIATED DEVELOPMENTS, WILL BE PERMITTED PROVIDED THAT:
- i) ALL DETAILS OF ASSOCIATED ANCILLARY DEVELOPMENT ARE SUBMITTED WITH THE PLANNING APPLICATION AS AN INTEGRAL PART OF THE SCHEME;
 - ii) THERE IS NO UNACCEPTABLE EFFECT TO AREAS OF CONSERVATION VALUE OR TO FEATURES OR ARCHAEOLOGICAL, HISTORIC OR ARCHITECTURAL IMPORTANCE;
 - iii) THE PROPOSAL DOES NOT DETRACT FROM THE CHARACTER AND APPEARANCE OF THE LANDSCAPE, PARTICULARLY THE AONB OR AOB, NOR SERIOUSLY AFFECT VIEWS INTO OR OUT OF THE AONB, AOB OR NATIONAL PARK;
 - iv) THE PROPOSAL DOES NOT LEAD TO UNACCEPTABLE NOISE LEVELS TO RESIDENTIAL AMENITY IN THE SURROUNDING AREA;

- v) THERE IS NO UNACCEPTABLE RISK OR NUISANCE TO THE PUBLIC ARISING FROM WIND TURBINES, SUCH AS SAFETY, SHADOW FLICKER, OR RADIO INTERFERENCE;
- vi) THE EXISTING ROAD NETWORK IS ADEQUATE TO SERVE THE DEVELOPMENT, OR IS MADE ADEQUATE, AND SUITABLE ACCESS IS PROVIDED TO THE NETWORK;
- vii) THE PROPOSAL WOULD NOT LEAD TO AN UNACCEPTABLE CUMULATIVE VISUAL IMPACT IN AN AREA WHERE ZONES OF VISIBILITY OVERLAP. PARTICULAR ATTENTION WILL BE PAID TO THE POTENTIAL EFFECTS OF A PROLIFERATION OF SUCH DEVELOPMENTS IN ANY ONE AREA;
- viii) THE PROPOSAL DOES NOT HARM THE SETTING OF LISTED BUILDINGS, CONSERVATION AREAS AND THE CHARACTER OF HISTORIC LANDSCAPES;
- ix) THE PROPOSAL DOES NOT SERIOUSLY HARM THE ENJOYMENT OF THE LANDSCAPE FOR RECREATIONAL AND TOURISM PURPOSES;
- x) THERE IS NO UNACCEPTABLE EFFECT ON GROUND WATERS OR PRIVATE WATER SUPPLIES.
- xi) THERE IS NO UNACCEPTABLE EFFECT ON NATURE CONSERVATION INTERESTS “.

The explanation to MEW 10 outlines the requirement for an Environmental Statement and information on the visual impact and the need to ensure that the cumulative impact should be minimised. It also refers to further guidance in Supplementary Planning Guidance, which is included in the separate document prepared in conjunction with the UDP, SPG 21 : Wind Energy.

For clarification, members are advised that objections have been lodged to all the policies in the Unitary Development Plan which are referred to in this report.

Current Circular guidance on the status of emerging plans suggests significant weight can only be attached to unopposed policies, hence due caution needs to be exercised in reliance on the ‘opposed’ policies in reaching a conclusion on the windfarm application. As in every instance, it is incumbent on the local planning authority to look at an application individually to assess the relative weight to be attached to the Deposit version of the Unitary Development Plan, set against the adopted Development plans and national planning guidance.

Supplementary Planning Guidance 21 : Wind Energy

This SPG was produced in conjunction with the UDP to provide more detailed 'practice' guidance on the application of Policy MEW 10. The SPGs were the subject of public consultation but have not been advanced to take account of representations and do not form part of the UDP.

SPG 21 outlines the government’s basic approach to the development of renewable sources of energy and is written in the context of guidance in TAN 8 Wales, Renewable Energy, in providing additional guidance on MEW 10. It provides detailed guidance on:-

- a) Siting of turbines.
- b) Design of turbines.
- c) Noise and associated problems.
- d) Removal of structures.
- e) Guidance for applicants/planning application details and information.

The SPG summarises the thrust of policy as follows:-

“ The Council is committed to considering the contribution the plan area is able to make in meeting need on a local, regional and national basis. However, this should be balanced against other important considerations such as tourism, landscape and nature conservation. Using the UDP Policy, this SPG and other material planning considerations, the Council will therefore weigh the desirability of exploiting

a clean, renewable energy resource against the local and national need to conserve the environment and landscape for its own sake. The Local Planning Authority needs to be convinced that any damage to the environment of the County is outweighed by an over-riding need for renewable energy generation”.

9. MAIN PLANNING CONSIDERATIONS:

9.1 There are several material planning considerations to be weighed up in determining this application. The considerations range from national planning policy to matters of detail. This section attempts to deal with all of the material planning considerations in a way which will enable members to comprehend the evidence and to apply proper weight. This section will therefore:

- (i) outline each issue
- (ii) set out the planning policies/guidance in each case
- (iii) outline the applicant's case
- (iv) summarise the responses from consultations
- (v) summarise responses from private individuals
- (vi) evaluate and conclude on each issue

9.2 In the final section I will summarise, draw final conclusions and set out my recommendation. The whole process requires us, in making our decision, to have regard to the development plan and all other material planning considerations and, in accordance with Section 54A of the Town and Country Planning Act 1990, to make our decision in accordance with the development plan unless other material planning considerations indicate otherwise. In dealing with this application, significant weight must be given to Government Policy. In the final analysis the decision will rest on whether the benefits arising from the development outweigh any harm which may be caused.

9.3 The Clwyd Structure Plan First Alteration and the Glyndwr District Local Plan represent the development plan for the purposes of Section 54A. The Clwyd Structure Plan Second Alteration and the Denbighshire Unitary Development Plan have reached deposit stage and should be given significant weight. However, where policies in the deposit UDP have been objected to, they should be given less weight because they may be subject to change.

9.4 Many of the considerations are technical. Many objectors have raised issues such as electromagnetic interference and shadow flicker. In my opinion, many of these issues are capable of being resolved by using planning conditions or legal agreements. The proper test is to ask whether planning constraints or obstacles can be mitigated or resolved by using planning conditions or legal agreements.

9.5 Several objectors have referred to issues of precedent and some question the merits of Government policy. For the record I consider that:

- (a) the evaluation of the comparative merits of different forms of energy generation is not necessary or appropriate in relation to an individual planning application
- (b) the economic assessment of wind farm projects is a matter for the Secretary of State for Trade and Industry as part of the NFFO contract bid process
- (c) fear of precedent is not in itself sufficient to justify the refusal of planning permission
- (d) as a matter of law it is open to the local planning authority to conclude that an accepted need can and should be met elsewhere without reference to specific alternative sites. However, the existence of other sites suitable for wind energy need not preclude or delay development at the application site if it were deemed acceptable.
- (e) there is a general principle in planning that there is no right to maintain unchanged a private view over other land
- (f) even where the electricity contribution is a relatively small one, it is nevertheless a matter which needs to be placed in the balance. The contribution is a tangible benefit, which should be taken into account in any balancing exercise.

- (g) the diversification of the rural economy is a material planning consideration but it is not the function of the planning system to enable proper management of agricultural land by the granting of planning permission for development, which might not otherwise be permitted.
- (h) protection of private property value can not be accorded much weight as the planning system is based on the exercise of control in the public interest through protection of the amenity and the right of individuals to enjoy their property and surroundings.
- (i) the issue of overconcentration of windfarms in Wales is not one which can be addressed by the local planning authority.

9.6 Finally, we have carried out extensive consultation with interested parties and with the local community and individuals. Wind farm proposals often raise strong emotive opinions. This application is no exception. There are strong views both for and against the development. The important point from our perspective is that we try and deal with this application as objectively as possible, critically appraising the evidence both for and against the development. In order to take a more informed and balanced assessment officers have viewed the site and locality at different times of the day and under different weather and light conditions. They have also used the photomontages and wire diagrams to inform their judgement. Members have also inspected the site, a single wind turbine in Cerrigydrudion, and a wind farm in Carno on the 19 October, 2000 to help gain an appreciation of the issues and the details.

9.7 The material planning considerations in this instance are considered to be:-

1. Principles of developing 'clean' renewable energy sources.
2. Landscape/visual impact
3. Amenity impact
 - noise
 - shadow flicker
 - electromagnetic interference
 - health and safety
4. Nature conservation
 - ecology and ornithology
5. Highways / access
6. Impact on the rural economy / tourism
7. Archaeology
8. Hydrology
9. Borrow pits

9.8 **PRINCIPLES OF DEVELOPING RENEWABLE ENERGY SOURCES**

9.8.1 **Policies and Guidance**

1. The planning policies and guidance relevant to the principles of developing renewable energy sources are:

GLYNDWR DISTRICT LOCAL PLAN

A4 - general indication of awareness of need to ensure the Council's actions are consistent with the conservation and sustainable use of resources.

CLWYD COUNTY STRUCTURE PLAN : SECOND ALTERATION

CONS 28 - encourages renewable energy proposals provided they are compatible with other plan policies.

DENBIGHSHIRE UNITARY DEVELOPMENT PLAN

STRAT 2 Energy - encourages the development of clean and renewable energy sources so far as they are compatible with the plan's policies.

PLANNING GUIDANCE (WALES) PLANNING POLICY - FIRST REVISION APRIL 1999

Para. 3 - broad objectives in relation to Sustainable Development, including effective protection of the environment and the prudent use of natural resources.

Para. 13.1 - government policy is to stimulate the exploitation and development of renewable energy sources wherever they have prospects of being economically attractive and environmentally acceptable.

Para. 13.2 - requires local authorities to consider the impact of renewable energy projects on the local environment, and their contribution to reducing emissions of greenhouse gasses and other pollutants.

TECHNICAL ADVICE NOTE (WALES) 8 – Renewable Energy (1996)

Contains general comment on the advantages of using renewable energy, including the substitution of valuable energy sources of finite supply, and the limiting of emissions of greenhouse gasses.

9.8.2 Outline of Submission

1. The Environmental Statement refers at length to the basis of National Renewable Energy Policy, National Planning Guidance, and Development Plan policies which deal with the general principles of renewable energy sources.

2. The submission suggests Central Government's approach is discernible through the adoption of Local Agenda 21, following the Rio Earth Summit in 1992 and that National Government is committed to sustainable development, and looks to local authorities to implement its policies. This is evident through a series of statements in Papers, from Advisory Groups and documents encouraging the generation of energy from renewable sources as part of a policy to stabilise and reduce the emission of gasses which result in global warming. Enhanced programmes including the Non Fossil Fuel Obligation have detailed specific targets of renewable electricity generating capacity. Most recently, a target of 10% of UK electricity from renewable energy sources and 20% reduction in greenhouse gasses by 2010 has been set out in the Government's Consultation Document 'New and Renewable Energy Prospects for the 21st Century'.

3. The 'flesh on the bones' is provided through Planning Policy Guidance Notes in England and the equivalent Planning Guidance Wales and Technical Advice Note Wales documents.

9.8.3 Consultation Responses

1. None deal specifically with general principles, but there is support for developing alternative energy sources from Denbigh Town Council, RSPB Cymru and the County Landowners Association.

9.8.4 Private Individual Responses

1. A number of private individuals express support for the principle of clean / renewable energy sources. 6 letters state that windfarms are an excellent way of using an abundant, cheap, clean and safe natural renewable resource, and 2 add that they are a realistic way of reducing CO₂ emissions and global warming.

9.8.5 Evaluation and Conclusions

1. The overall approach of the Government to the development of renewable energy sources is well documented in the Planning Policy and Guidance section of this report and in the brief summary of the submission in Sections 2 and 8. More specific guidance is given in the Welsh Planning Guidance and Technical Advice Notes which, in combination with Government energy policy, are important material considerations in the determination of the planning application.

2. Advice in TAN 8 is that Development plans should give only the broadest locational guidance about potential wind farm sites. In its present form, the Denbighshire UDP does not provide locational guidance but lists in MEW 10 relevant considerations for each application. No search areas or indications of the amount of renewable energy contributions for individual local authorities in North Wales have been identified in the North Wales Regional Planning Guidance.

9.9 LANDSCAPE AND VISUAL IMPACT

9.9.1 Policies and Guidance

1. The planning policies and guidance relevant to the consideration of the visual impact of the windfarm development are:

GLYNDWR DISTRICT LOCAL PLAN

A1(i) - the scale of development, siting, layout, design, external appearance and use of materials should be appropriate to the surroundings.

L1 - conservation of the landscape will be a primary consideration within the Outstanding Landscape Area (includes the Clwydian Range AONB and the Berwyn Mountains, not the application site).

L4 - presumes against any development which would have a detrimental effect on the character of the landscape in areas of Historical Landscape Value (land between the site and Llyn Brenig is shown as an Historical Landscape area because of the concentration of archaeological features, but not the application site).

L16 - emphasises that conservation and enhancement of the Special Landscape Area will be a primary consideration and that any development which detracts from the character and appearance of the area will be resisted. Where permitted, development must conform to high standards. (The majority of Denbighshire is within the Special Landscape Area).

CLWYD COUNTY STRUCTURE PLAN : FIRST ALTERATION

H5 - priority will be given within the Special Landscape Area to the conservation and enhancement of the landscape, and development will be kept to a minimum. Development permitted in accordance with other policies of the plan will be expected to conform to higher standards than acceptable elsewhere other than in the AONB to ensure the impact in the landscape from nearby and distant viewpoints is minimised.

CLWYD COUNTY STRUCTURE PLAN : SECOND ALTERATION

CONS 11 - seeks to ensure the conservation of natural landscape features.

CONS 28B - the scale of development should be sensitive to the landscape and natural environment, particularly in terms of visual impact.

CONS 28D - the development should not detract from the character and appearance of the landscape within the AONB.

CONS 28E - the development should not harm to a serious extent, the appearance of the Local Landscape Areas.

(The site is not within an AONB and no Local Landscape Areas were designated in conjunction with the Second Alteration of the Structure Plan)

DENBIGHSHIRE UNITARY DEVELOPMENT PLAN

STRAT 7 ENVIRONMENT - seeks to safeguard the special character of Denbighshire, including its countryside and environment, by protecting and enhancing the landscape quality of the County.

GEN 7(i) - development needs to respect the site and it's surroundings in terms of layout and intensity of use of land.

GEN 7 (ii) - development should not unacceptably affect the form and character of surrounding landscape.

GEN 7 (iii) - development should not unacceptably affect prominent public views into, out of, or across, any main centre, main village, or area of open countryside.

GEN 7 (iv) - development should incorporate, where possible, existing landscape or other **features**, take account of site contours and changes in level, and avoid prominent skylines.

MEW 10 (iii) - the proposal should not detract from the character and appearance of the landscape, particularly the AONB or AOB, and will not seriously affect views into or out of the AONB or AOB or National Park.

(The site is not within the Clwydian Range AONB, the Area of Outstanding Beauty (Berwyn Range), or the Snowdonia National Park)

SPG 21 - guidance in connection with MEW10 - seeks to minimise visual and amenity impact.

TAN 8 (Wales) - paras A44 – 54 detail the main considerations applying to assessment of the impact of windfarms on the landscape. The desirability of exploiting renewable energy sources has to be weighed against the visual impact of turbines on the landscape (A44). There is no completely objective method of assessment of landscape quality or the impact of development (A45). Photomontages and Zones of Visual Influence may assist an appraisal, as well as Cumulative Impact Assessments where relevant (A45, 46 and 49). Advice is given in A47 on what influences the visual impact of wind turbines. A51 – 53 deal with considerations of what materials / colours may be suitable for turbines and ancillary buildings. A54 concerns siting and advises that the most desirable layout in any given case will be a compromise between the quality of wind resource, the characteristics of the landform, and existing features of the landscape.

9.9.2 **Outline of Submission**

1. The evaluation of the potential impact of the windfarm on the landscape and visual amenity is contained in:
 - a) The Environmental Assessment prepared by Border Wind, received in September 1999.
 - b) A Cumulative Impact Assessment prepared by Environs Aspinwall received in June 2000.
 - c) Addendum 3 Volume 2 – Figures and Montages, to support the Cumulative Impact Assessment, received in June 2000.
 - d) Planning Appraisal, prepared by Dulas Limited and Albro Planning and Environment, received in July 2000.
2. The Landscape and Visual Assessment in the **Environmental Assessment** sets out to predict the extent of landscape and visual effects, and to assess the significance of the likely effects on the intrinsic quality of the landscape. It uses the following methodology:
 - 1) **A description, classification and evaluation of landscape quality** - This section attempts to establish the intrinsic landscape quality of the site and surrounding areas, to form a 'baseline' condition against which predicted changes by the development can be evaluated. It concludes that the intrinsic landscape quality of the proposed development is of "low importance", as there is no landscape designation over the area (the SSSI is to the west), the vast majority of the area has been intensively modified by commercial forestry activity, and intensive farming has, in parts, destroyed the original condition of the site.
 - 2) **A description of project effects** – This section identifies, describes and assesses the effects of the development during construction and operational phases on the landscape, as well as visual effects. It suggests there will be a short term impact from site works and associated removal of surface vegetation, but that reinstatement would take place; but the main impact would clearly be the turbines.
 - 3) **A landscape and visual description** – This is an evaluation of the impact of the turbines from 8 viewpoints to address the potential close up views of the windfarm.

- 4) **An assessment of landscape and visual effects** – This begins with an assessment of the theoretical visibility of the windfarm from points in the locality, through a Zone of Visual Influence Map, which indicates areas within a radius of 15km of the site, where some part of turbines would be visible (including the tips of blades). Photomontages are also included from 6 viewpoints, with turbines superimposed through use of a 'digital terrain model' which produces a wireline diagram outlining visibility from the viewpoint to the site based on topography (taking no account of tree cover). The Assessment proceeds by categorising the visual impact from the viewpoints in terms of sensitivity, magnitude and significance and within each category into high, medium and low impact.

The **conclusions** of the Landscape and Visual Assessment is that:

- a) The windfarm will cause some change to existing conditions during the construction and operation of the site.
- b) Site access tracks and ancillary structures will not be significant features.
- c) Visibility of the development will be most prominent within a 5km radius of the site. Close views in some locations may be significant but are localised and limited in nature.
- d) Beyond the 5km distance the ZVI indicates patches of visibility to the north and south, and the higher ground of the Clwydian Range at 14km, where turbines would be visible under certain weather conditions and would not be dominant within the landscape.
- e) The panoramic large scale of the landscape and the strong influence man has had on the landscape in the area 'presents an area with the ability to accommodate the proposed wind turbines'.
- f) A wind farm in this locality is considered an acceptable feature in landscape and visual terms.

Finally, in relation to the visual effect, the Environmental Assessment makes reference to public perception of windfarms. It mentions a number of independent public opinion surveys carried out in the locality of windfarms and contends that the majority of people living close to windfarms consider them acceptable features within the landscape.

3. The **Cumulative Impact Assessment (CIA)** was prepared following consideration of the initial submission and a request to the applicants to provide a full evaluation of the potential cumulative effect of windfarm developments at Tir Mostyn, and at the one proposed at Pentrefoelas in Conwy. The Assessment addresses the potential cumulative effects on the character and quality of the landscape and on the visual amenity of local residents and tourist routes in the area. It is accompanied by plans showing a 17km radius Zone of Visual Influence of both major windfarms (independently, and together), viewpoint photographs and photomontages produced from wireframe perspectives

The methodology in the CIA broadly follows that in the Environmental Assessment, and takes into account ETSU guidelines on cumulative Impact Assessment produced in June 2000, and information in development plan documents. It seeks to conclude on the magnitude and significance of the effects of the windfarm(s) in terms of the ability of the landscape to accommodate the proposed changes.

The **main conclusions** of the Cumulative Impact Assessment are:

- a) The Tir Mostyn windfarm, considered in the context of the Pentrefoelas windfarm will change the landscape and visual baseline conditions.
- b) Whilst the two windfarms are in close proximity, the topography and Clocaenog Forest ensure that the windfarms do not appear visually associated in short to intermediate length views, and would appear self contained within the respective landscape character areas. The Hafotty Ucha scheme is also in the main visually independent from Tir Mostyn and Pentrefoelas.

- c) The general impression when travelling through the landscape on the main road network will be of sequential visibility, i.e. seeing each windfarm separately.
- d) Whilst simultaneous visibility would be obtained from elevated areas of the Clwydian Range / Berwyns over 17km away, at such distance, windfarms are only discernible in good weather conditions and in the context of Clocaenog Forest.
- e) The landscape in terms of scale, topography and character has the capacity to absorb and accommodate the Tir Mostyn windfarm. It is not considered there would be any significant cumulative effect on the landscape or visual amenity in relation to the turbine at Hafotty Ucha and the proposed wind farm at Pentrefoelas.

4. The **Planning Appraisal** document summarises the conclusions of the Assessment which form part of the application. It accepts that the windfarm will cause some change in the existing landscape but notes a total of 23 points from the Assessments, which lead to the **conclusion** in the context of the development plan and emerging local plan, that:-

- (1) The proposal does not significantly affect views out of the AONB, AOB or National Park.
- (2) The proposal does not harm the appearance of Local Landscape Areas.
- (3) The proposal is sensitive to the landscape and does not significantly detract from the character or appearance of the Special Landscape Area.
- (4) Therefore the enjoyment of tourists and those using the area for recreational purposes will not be seriously harmed.
- (5) The proposal is of a high standard of design and the ancillary structures reflect vernacular architecture.
- (6) The potential cumulative effects with the proposed wind farm at Pentrefoelas and the existing wind turbine at Hafotty Ucha are not considered to be significant.

The Appraisal considers the application complies with the development plan and emerging local plan policies in terms of effect on the landscape and visual amenity.

9.9.3 **Consultation Responses**

1. Objections to the potential visual impact / effect on the landscape of the windfarm have been expressed by Nantglyn Community Council, Denbigh Town Council, the Ramblers Association, the National Trust, the Countryside Council for Wales, the County Conservation Officer, the County Landscape Architect, Hamdden, the Clwydian Range AONB Joint Advisory Committee, Clwyd Mountaineering Club, Country Guardian, and the CPRW.

The basis of objections are the serious impact on the landscape character and visual amenity, from local views to more extensive views from the AONB and Snowdonia National Park; and fears over the cumulative impact with other windfarms. Many objectors point to clear conflict with current planning policies.

2. Snowdonia National Park Authority raise no objections as they consider the proposal would not be seriously detrimental to enjoyment of the National Park because of the distance from the Park boundary and the distance of the site from areas of popular access within the Park.

3. Ruthin and District Association state the contribution to electricity production from the windfarm has to be balanced with the effect on the physical environment.

9.9.4 **Private Individual Responses**

1. Some 86 private individuals have written to express objections on landscape / visual amenity grounds. The basic view is that the development would destroy the natural beauty of a high quality,

unspoiled landscape. 16 state the development would affect people's enjoyment of an attractive upland area, that there would be severe cumulative impact with other windfarms in the area, and the same number consider it would devalue views from the AONB, Offa's Dyke trail and Moel Famau Country Park. One person considers the development would have a detrimental impact on Snowdonia National Park. 14 letters express the view that the larger diameter blades would draw more attention to the turbines, when moving. Others believe there would be an overwhelming physical impact on nearby property; that the overhead line to Denbigh should form part of the submission, but would itself have an impact on many people; and that other windfarms simply prove the damage caused to the landscape by this form of development.

2. In support of the application, two private individuals consider the turbines will not be visible to people living in nearby villages, and that this is a remote sparsely populated area where the development would only affect a few people.

9.9.5 **Evaluation and Conclusions**

1. Visual impact and the effect on the landscape are invariably the most contentious issues arising in relation to windfarm proposals, as they involve subjective judgement. There is no commonly agreed 'standard' or a simple series of tests devised in the course of considering other windfarm proposals which can be applied by the local planning authority to determine whether the physical impact of the Tir Mostyn proposals can be objectively concluded as 'acceptable' or 'unacceptable'. This is perhaps inevitable as individual opinions on visual impact and landscape impact tend towards the respective extremes – from those who view the landscape as a naturally changing and evolving feature as a result of man related activities such as farming and forestry, capable of accepting such development; to those who consider it resource to be treasured and protected in its natural state from developments which threaten to harm its intrinsic qualities and enjoyment by man and beast for a host of reasons.

2. The difficulties in assessing the question of landscape and visual impact are apparent from Inspectorate decisions in favour and against other windfarm applications which have been reviewed in preparing this report. Whilst clearly it is not appropriate to directly apply arguments put forward elsewhere to the Tir Mostyn case, there are interesting general threads of reasoning in some of the reports which relate to landscape and visual impact, and which outline points both for and against proposals. For clarification in looking at this issue, reference is made to guidelines which describe **landscape impacts** as the changing in fabric, character and quality of landscape, and **visual impact** as a 'subset' of landscape impact, relating to changes in available views of the landscape and the effects of those changes on people.

3. Appeal decisions in England and Wales since 1991 raise a number of general points, including:

- Points in support of wind turbine development:

- * Turbines can be regarded as more attractive than other developments cluttering the countryside (overhead lines, pylons etc) with no associated 'industrial' developments.
- * Turbines will be seen from many viewpoints only against the sky, and the choice of light grey colouring would fade them against a pale grey sky.
- * Viewed from distance, windfarms are seen as part of a wide landscape panorama which can easily absorb such development
- * Turbine layout is not necessarily regimented, avoids straight lines and geometric arrangements.
- * Turbine sites can be effectively reinstated on decommissioning of turbines.
- * No one has the right to have their views unaltered in perpetuity.
- * Windfarms become an accepted part of the landscape in time.

- * It is possible to develop windfarms in open country, even close to designated areas, without harm to the countryside.
- Points in opposition to wind turbine developments:
 - * Turbines should be regarded as effectively 'permanent' structures and assessed accordingly even though their anticipated lifespan is 25 years.
 - * Turbines have a domineering attribute accentuated by their modern appearance and moving parts.
 - * The sheer size of turbines can clearly contrast with the simplicity of the local landscape in which they would intrude.
 - * Turbines would industrialise the local landscape.
 - * Harm can be caused through a loss of intrinsic naturalness.
 - * The movement of blades causes visual disruption and makes turbines difficult to ignore from close by.
 - * Turbines are not comparable in scale to any other structures or natural features.
 - Points which reflect generally accepted common ground:
 - * Evaluation of impact is based on a combination between magnitude of impact on the one hand and the sensitivity of the landscape to change on the other.
 - * The extent of visibility of turbines is inevitably determined by the topography of an area, hence by definition there will be areas where development will not be visible, and others where it will be highly visible.
 - * Impact will vary according to weather, the direction of sunlight and the backdrop against which turbines are seen.
 - * It is increasingly difficult to identify individual turbines and blade movement with the naked eye beyond 10km.
 - * The main visual impact is likely to be up to 5km from a site.
 - * Glinting of blades should not be a problem with use of suitable finishes, and would decrease with weathering.
 - * Shadow flicker can be addressed, when identified, by control mechanisms on turbines which cut out blade movement at critical times.

4. In looking first at the contents of the submission, there is within the Environmental Assessment and Cumulative Impact Assessment highly detailed methods of landscape assessment, which attempt to establish the key issues of the quality of the existing landscape, its ability to accommodate change, and the likely impact of the windfarm. Consultation responses from the CCW and the County Landscape Architect do not challenge the basic methodology of the Landscape Assessment, as this is based on established guidance, including that in the Landscape Institute's Guidelines for Landscape and Visual Assessment (1995), referred to in TAN (Wales) 8. It is accepted that the submission addresses the basic factors influencing visual impact, which are:

1. The landform and its characteristics.

2. The number and size of machines.
3. The design and colour of turbines.
4. The layout.
5. Existing skyline.

5. Whilst I would consider the basic evaluation technique is sound, I share the reservations expressed by consultees and private individuals at the presentation, and hence the value, of many of the photomontages in the submission which are intended to illustrate the potential visibility of turbines. These show turbines faintly against a bleached sky, some with a cluttered foreground, and in the instance of the Moel Fammau viewpoint the site and background of Snowdonia is not visible as the photograph was taken on a day with mist / poor visibility. It is also considered unfortunate that the overhead line route from the site to Denbigh, which would involve some 8km of poles and wires is not included as part of the application, so its impact can not be properly assessed.

6. Irrespective of these reservations, the crux of the issue in terms of landscape impact is the **interpretation** placed on the quality of the landscape, the significance of the changes which would result, and the ability of the landscape to accept these changes. The main requirement is to make a reasoned assessment of impact, wherever it is identified and what harm it may cause.

7. In this case, careful evaluation has been made of the submission and the conclusions of the CCW, County Landscape Architect and a number of other consultees. There is little dispute apparent over several points and these need to be highlighted. These include the appraisal of the general landscape character of the area, with the distinct variations from the remote and wild open moorland of Mynydd Hiraethog, the simple enclosed landscape of water, grassland, forest and sky around Llyn Brenig, the forest blanket at Clocaenog, and a more pastoral landscape on the lower land to the north and east. All parties accept that the development will change the landscape to some degree, and that the site is within a Special Landscape Area (Clwyd County Structure Plan : First Alteration) that it lies to the east of an Historic Landscape Area (Glyndwr District Local Plan, but is not within an AONB, National Park, or Area of Outstanding Beauty (Denbighshire UDP). The technique adopted elsewhere to assess impact involves breaking down assessment into the effect from distant viewpoints (above 15km), from 'medium' range viewpoints (5 – 15km), and from close range (up to 5km), and this appears to be appropriate in this instance, allowing also for regard to the potential cumulative impact of the Tir Mostyn and Pentrefoelas windfarms.

8. In terms of the existing landscape quality, the view is taken that whilst the area's only designation is currently as part of the Special Landscape Area, the combination of Heather moorland, conifer forest and open water on the Hiraethog Moors plateau justify the Denbighshire Landmap Study conclusions that the visual quality of that area, is 'high'. There are particular qualities of merit in the transition areas between the moorland, forest and the pastoral area to the north and west which make this a landscape sensitive to change. The absence of other formal 'designations' for the area does not diminish its visual importance for visitors and residents.

Impact from distant viewpoints

9. The Zone of Visual Influence map indicates the 25 turbines at Tir Mostyn would be visible from a wide area from high ground in the Berwyn and Llantysilio mountains in the south and east, along the whole of the Clwydian Range (including the villages of Graigfechan, Llanbedr D.C., Gellifor, Llangynhafal, Llandyrnog, Bodfari, Tremeirchion, Rhualt, parts of St. Asaph) and through to Rhuddlan, and parts of Prestatyn and Rhyl to the south. Views would be more limited to the high ground south of Pentrefoelas and Cerrigydrudion and to the west, around Eglwysbach, The nearest part of the Snowdonia National Park is approximately 13km to the south west near Pentrefoelas, most of the National Park being in excess of 20km away.

10. At distances in excess of 15km, as a result of the landform, the Tir Mostyn windfarm would appear as a 'mid-horizon' feature from the main views from the Clwydian Range (to the east) and from Snowdonia (to the west). At these distances, even taking into account the size of the

turbines, these would appear as relatively small, static features of interest in the landscape, as blade movement would be a worst marginally detectable to the naked eye. The view is taken with due respect to the strong objections voiced, that the windfarm would only be seen at this distance in fine weather, and then in the context of a wide panoramic landscape which from this distance has the capacity to absorb development without unacceptably impacting on the enjoyment of the countryside when viewed from the AONB or National Park. For the same reason the view is taken that from the more limited locations from which the Tir Mostyn and Pentrefoelas windfarms would both be visible, there would be no significant cumulative impact.

Impact from middle distance views

11. The ZVI map shows the 25 turbines at Tir Mostyn would be visible only intermittently in locations between 5km and 15km distance. These locations include pockets of higher ground around Betws G.G. and Melin y Wig to the south, limited viewpoints west of Ruthin (but not the town itself), Denbigh Castle and land to the east and north of the town, higher land in the Henllan, Groes, Llanefydd and Llansannan area, and upland moorland at Mynydd Hiraethog. There would be intermittent views along the A525 north of Denbigh, along the A543 Denbigh – Pentrefoelas Road, the A544 at Llansannan, the B5015 near Clawddnewydd and the B4501 from Cerrigydrudion. There would be no views of the windfarm along the A5.

12. At distances between 5km and 15km it is considered the views of the windfarm would be scattered, but nonetheless potentially significant where the turbines are visible. Overall, however it is suggested that at such distances the impact of turbines would be reduced through the presence of intervening landscape features and the scale and variety of the landscape, and that the impact on the landscape, and visual amenity would not be so detrimental to justify opposing the scheme. As there would be few middle distance viewpoints where the Tir Mostyn and Foel Goch windfarms could be seen together (these are mainly to the west on Mynydd Hiraethog) it is suggested objections on cumulative visibility would be difficult to sustain.

Impact from within 5km of the windfarm

13. The ZVI map confirms the main impact of the Tir Mostyn windfarm would be in the area within 5km (3 miles) of the site. With the obvious exception of those locations behind hills in steep valleys and behind plantations of trees. Most, if not all, the turbines would be visible within this distance of the site. Nantglyn village is 3km to the north of the Tir Mostyn section of the site and Pentre Llyn Cymer some 4km to the south west of Foel Goch. Otherwise, the area comprises a scattering of farms and rural dwellings and the complex at Brenig, including the visitor centre. There would be views of the turbines from many sections of the B4501 from Cerrigydrudion north to the Sportsman's Arms on the A543 along the B4501 from near Llyn Bran past the site, towards Denbigh, and along the minor roads leading south west from Nantglyn to the B4501 north of Gors Maen Llwyd.

14. The localised impact of a wind turbine development on the landscape and visual amenity is likely to be significant. Assessing the degree of impact, however, is a particularly difficult task as there are no comparable structures in terms of size and number in the Denbighshire area, and no structures on the site which can act as a meaningful reference to assess scale etc. Plan 4 gives a guide to the relative heights of pylons and other local structures, but this illustration has to be used with caution as most of structures are 'one off's', and pylons and other posts are rarely if ever grouped together in the same physical manner as turbines and a windfarm. Cumulative impact with the Pentrefoelas windfarm is not an issue for viewpoints within 5km of the Tir Mostyn site, as the two developments could not realistically be viewed together in the same field of vision in this area.

15. The area to the immediate south and east of the site is dominated by Clocaenog Forest, and the turbines would be visible only from a small number of locations there. It is not considered that the impact on the landscape or on visual amenity is likely to be significant in this area.

16. The windfarm is likely to have a major impact on the landscape and visual amenity of the area around Llyn Brenig. From some locations, the 'split' site (Tir Mostyn – Foel Goch) will convey the impression of two separate windfarms, increasing the severity of the physical impact of the development. The area around Llyn Brenig possesses a range of landscape characteristics / qualities, being referred to variously as remote, bleak, unspoiled, uncluttered, conveying a feeling of

tranquillity, desolation, and 'naturalness'. Most of the turbines would be visible against the sky from the Brenig area, giving no background against which to frame or moderate their impact, and the movement of the blades is likely to distract attention and cause visual surprise / disturbance, adding further to the impact. It seems reasonable to suggest that the quiet, open and placid landscape is a main reason why the Brenig area is a focus for visitors and recreational users, and that any development detracting from the feelings of wilderness and sense of isolation would have a high and potentially harmful impact on them.

17. There would be a somewhat different, but also significant impact on the area to the north and west of the B4501, nearest the Tir Mostyn end of the site. This area contains a number of private properties, public roads and footpaths, from which there would be immediate direct views of the Tir Mostyn turbines from base to top of blades, and of the tops of the remaining turbines. The Tir Mostyn part of the site comprises a broad grassed, ridge / crest, rising south from the deep valley of the Afon Ystrad, and it has no significant natural or man made structures to catch the eye. This site for 8 turbines appears very prominent in the local landscape when viewed from the north west at a distance of up to 3km, and would occupy a large proportion of the horizon whilst the access tracks and substation would have little impact. The combination of turbine towers, blade diameters and movement would, in my view, have a strident and overwhelmingly dominant and intrusive impact on both the landscape and on the amenities of the locality generally, including residents of private properties and users of public highways and footpaths in this area. Residential properties in particular would become less enjoyable places to live for their occupiers, and even accepting the possibility that residents may come to accept the presence of windfarms, the impact seems likely to be so substantial at close range, that it is hard to believe people could get used to such a development.

18. Overall the view is taken that the development clearly conflicts with planning policies seeking to protect visual amenity and the landscape of a Special Landscape Area insofar as the 75m high structures would have a severe and adverse impact on the Llyn Brenig area, and the area to the north / north west of the site. It is suggested there are specific conflicts with Glyndwr Local Plan policies A1, L4, L16, Clwyd Structure Plan : First Alteration, H5; and GEN 7 and MEW 10 of the emerging Denbighshire Unitary Development Plan. The landscape and visual impact is considered to be a material 'harm' to be weighed in the balance of considerations on the application.

9.10 AMENITY IMPACT NOISE

9.10.1 Policies and Guidance

1. The planning policies and guidance specifically relevant to the noise implications of the development are:

GLYNDWR DISTRICT LOCAL PLAN

A1(iii) - requires appraisal of the impact on the amenity of adjoining property and the general environment of the area.

CLWYD COUNTY STRUCTURE PLAN : FIRST ALTERATION

H11 - requires proposals for development should not have an unacceptable effect on public health, the natural environment, or on general amenity by noise.

CLWYD COUNTY STRUCTURE PLAN : SECOND ALTERATION

CONS 14 - repeats H11

CONS 28G - development should not have an unacceptably adverse effect on amenity by virtue of noise disturbance.

DENBIGHSHIRE UNITARY DEVELOPMENT PLAN

STRAT 7 ENVIRONMENT (iv) - seeks to safeguard the special character of the County by preventing development leading to unacceptable environmental disturbance.

GEN 7 (v) - proposals should not unacceptably affect the amenity of local residents, other land and property users by virtue of increased noise.

EMP 1 - development should not be permitted where it would unacceptably harm the environment in terms of noise.

MEW 10 (iv) - proposals should not lead to unacceptable noise levels to residential amenity in the surrounding area.

SPG 21 - guidance in connection with MEW10 - seeks to minimise amenity impact.

PLANNING GUIDANCE (WALES) PLANNING POLICY FIRST REVISION APRIL 1999 - notes that noise can affect health and amenity and can be a material consideration requiring detailed assessment.

TAN (Wales) 8 - Renewable Energy November 1996

Paras. A28 – 38 deal with evaluation of noise in relation to Wind Energy proposals. They outline the limitations of reliance on BS4142 as a standard for assessing noise from wind turbines, and refer to detailed advice provided by the Energy Technology Support Unit (ETSU) for the Department of Trade and Industry. Para. A33 states that experience shows there is unlikely to be a significant noise problem for any residential property situated further than 350 – 400 metres from the nearest turbine.

TAN (Wales) 11 – Noise October 1997

Provides general advice requiring local planning authorities to ensure noise generating development does not cause unacceptable disturbance, particularly at night, but gives no detailed guidance on assessing noise from turbines. Refers to guidance in TAN 8.

9.10.2 Outline of Submission

1. The original submission received in September 1999 contained an Acoustic Assessment section in the Environmental Assessment. This has been superseded in its entirety by Addendum 4 – Acoustic Assessment, received in June 2000.

2. The Acoustic Assessment in Addendum 4 by Hayes Makenzie details the methodology adopted to assess the potential impact of the windfarm at Tir Mostyn / Foel Goch, on the surrounding area and any nearby dwellings. Existing noise levels have been taken at selected dwellings neighbouring the development, identified as the potentially most sensitive through prediction of noise levels emitted by the site. Predicted levels have been calculated using a wind turbine sound power level (SWL) of 102dB(A) at a wind speed of 8m / second, at 10 metres above ground level. The assessment potential of noise impact has been carried out on this basis and in consideration of the type of noise produced by turbines, and published guidelines concerning the acceptability of noise levels from various sources.

3. The site locations selected for measurement of existing noise around the site were:

- 1) Garreg Llwyd
- 2) Hafotty Las

4. The detailed conclusions of the significance of noise levels in accordance with the DTI Noise Working Group's Recommendations and BS 4142 : 1997, and a Sleep Disturbance Assessment are provided from the following properties:

- | | |
|-------------------|-------------------|
| 1) Garreg Lwyd | 9) Pennant Uchaf |
| 2) Hafotty Las | 10) Pennant Isaf |
| 3) Ty'n y Ffynnon | 11) Hafod Caradoc |
| 4) Hafod Ty Du | 12) Ty Newydd |
| 5) Brynbach | 13) Cader Chapel |
| 6) Pen y Graig | 14) Maes Cadarn |
| 7) Glan Ceirw | 15) Hafod Wen |
| 8) Isgair Wen | |

The assessments for properties numbered 3) – 15) were made on the basis of background noise measurements based on WNW wind measurements at Garreg Lwyd, to define the prevailing background levels.

5. The final section of the Acoustic Assessment states:

- a) For all operating conditions of the windfarm, noise levels at dwellings neighbouring the site meet the Lower Absolute Quiet Daytime Limit proposed in the DTI NWG Recommendations and will be limited to +5dB(A) above the prevailing background noise when above 35dB_{L_{A90}} with the exception of Hafotty Las. The 0.3dB _{L_{A90}} exceedance at Hafotty Las is considered insignificant. Dwellings more remote from the proposal will experience lower levels of turbine noise.
- b) Internal noise levels due to the operation of the windfarm are expected not to exceed 32 dB _{L_{Aeq}} during high wind speed conditions at any neighbouring dwelling with windows open for ventilation. Lower levels will occur with windows closed.
- c) Predicted noise levels are based on a quoted estimated sound power level that can be emitted by the proposed wind turbine, not actual noise measurements from an installed machine, and do not allow for 'penalties' for any tonal noise emissions from the wind turbines. In the absence of independent test report for the Vestas V52 850kw machine, the predicted noise levels for the site are the company's best prediction. It is suggested that once confirmed noise data has been received, predictions are repeated to determine actual noise levels from turbine operation, including any penalties for toned noise if that is evident.

9.10.3 **Consultation Responses**

1. Two consultees express concerns over the potential noise implications of a windfarm development (Nantglyn Community Council, Clwyd Mountaineering Club)

9.10.4 **Private Individual Responses**

1. 23 private individuals raise basic objection to the proposals on grounds of noise impact. The comments range from general concern that **any** noise would be intrusive and impact on the quality of life and enjoyment of the countryside, and there would be distress to residents from the thud of blades, to specific comment on the fact there is no agreed methodology for assessing noise impact, predictions can be unreliable and take no account of terrain, varying wind and atmospheric conditions, and no guarantee can be given that there will be no noise pollution as prediction is an inexact science. It is stated that the Acoustic Assessment suggests noise levels may be unacceptable to the local population, and that use of the term "unlikely" to lead to sleep disturbance is of no help if there are problems once turbines are operating.
2. In support of the application, one private individual has commented that noise would not adversely affect the locality, and another individual letter suggests that as noise would only affect the property of landowners involved in the scheme, they should accept it.

9.10.5 **Evaluation and Conclusions**

1. In order to evaluate the Acoustic Assessment prepared by Hayes McKenzie, an appraisal has been commissioned from Martec Environmental Consultants for the local planning authority. The brief was to evaluate the methodology adopted and to assess the veracity of the conclusions. The conclusions of the Martec appraisal are:
 - 1) Using the ETSU document, the monitoring undertaken does not appear to be adequate, for the following reasons:
 - i. Background noise surveys should have been carried out at Hafod Ty Du and at Brynbach.
 - ii. It is not possible to confirm that the range of wind directions conform with the ETSU document's requirements.
 - iii. The range of wind speeds during the Hafotty Las measurements do not appear to conform with the ETSU document's requirements.

- 2) Details of the calculations should be provided, including at least one sample calculation for the most affected property. Equally, details of the turbines sound power levels and tonality will need to be assured before reliance can be placed upon the predictions.
- 3) Whilst accepting it is correct to assess the noise impact based upon the quietest wind direction for a particular property (because this was done at Hafotty Las), the procedure was not followed at Garreg Lwyd. When this procedure is followed, the predicted noise levels exceed recommended limits in the ETSU document and “complaints are likely” if a BS.4142 assessment is performed.
- 4) The conclusion of the Hayes McKenzie Assessment is that the noise impact of the proposed Tir Mostyn / Foel Goch Wind Farm will be acceptable based on ETSU-R-97. However, in order for such conclusions to be valid, the methodology of the document has to be followed, which does not appear to be the case.

2. The Martec conclusions have been passed to the applicant's agents and a detailed response to Windjen from Hayes McKenzie has been forwarded to the local planning authority. The basis of the response is set out in the following paragraphs:

1(i) Background noise measurements were not taken at Hafod Ty Du as this is owned by a party with an interest in the project, in relation to which the acceptable noise levels set out in ETSU recommendations of $45\text{dB}_{\text{LA90}}$ would not be achieved by the operation of the windfarm and wind speeds in excess of 12 m/second (i.e. noise levels would not exceed the level referred to).

Background noise surveys would be unnecessary at Bryn Bach as ETSU recommendations outline a simplified approach in locations where predicted wind speeds are below $35\text{dB}_{\text{LA90}}$ for a wind speed of 10 m/s. The predicted incident noise level at Bryn Bach is no more than 32 m/s at this wind speed. Meeting the ETSU condition alone is considered to offer sufficient protection of amenity.

1(ii) A table of wind direction as a percentage time during surveys at Gareg Lwyd and Hafoty Las is provided to verify conclusions on prevailing winds.

1(iii) Whilst it is accepted that the maximum measured wind speeds during survey at Hafotty Las was 11.04 m/s, it is not considered necessary to have the complete range of wind speeds, as assessment of potential noise impact there indicates at wind speeds of 10 m/s turbine noise will be well below prevailing background noise level during the Quiet Daytime Period. Also, night-time predicted noise levels do not exceed $43\text{dB}_{\text{LA90}}$, the absolute noise limit proposed for night time operation during quiet background periods

Prediction methodology is outlined in the Acoustic Assessment and is a relatively simple model with an allowance for barrier attenuation, based on findings in an ETSU report on Windfarm Noise Propagation produced in 2000.

An independent Test Report of the Vestas V52 Turbine is also attached, for its 104 and 102 dB options. These indicate the published noise levels for the wind turbine can be achieved, and that no tones are discernible from the narrowband spectrums for the two operating conditions of the turbine.

Hayes McKenzie are unaware of any difference in the method of assessment between Garreg Lwyd and Hafoty Las.

3. Martec have been made aware of the Hayes McKenzie response, and have confirmed that whilst this clarifies most of the areas of concern, it is difficult to conclude on certain points of detail in the absence of further information. It is, however, accepted that these matters could reasonably be covered by planning conditions if a permission was being considered, obliging relevant background noise, wind speed and direction survey work, and the submission of simple calculations and specific details on sound power and tonality.

4. Overall the view is taken that the evaluation of the Acoustic Assessment points to minor deficiencies in the methodology, but no fundamental flaws or clear evidence to demonstrate harm would result, i.e. unacceptable levels of noise likely to lead to complaints, making dwellings in the locality less

pleasant places in which to live. It is suggested that where evidence is considered to be lacking, suitable planning conditions or legal obligations could be devised to ensure relevant details are provided and safeguards imposed to ensure the development meets current guidance on noise.

5. Whilst acknowledging local concerns over the limitations of methodology of assessing noise impact, I believe the Tir Mostyn application has been the subject of thorough review and that the conclusions are reasonable in the context of the most relevant, up to date guidance available to developers and local authorities.

9.11 **SHADOW FLICKER**

9.11.1 **Policies and Guidance**

There are limited policies / guidance relevant to the issue of 'shadow flicker'. Shadow flicker is an effect arising from combinations of geographical position and time of day when the sun may pass behind the rotor of a turbine and cast a shadow over nearby property; when rotor blades rotate, the shadow flicks on and off. The policies and advice are:

CLWYD COUNTY COUNCIL STRUCTURE PLAN : SECOND ALTERTION

CONS 28G – development of wind power should not have an unacceptably adverse effect on amenity by virtue of shadow flicker.

DENBIGHSHIRE UNITARY DEVELOPMENT PLAN

MEW 10 (v) - there should be no unacceptable risk or nuisance to the public arising from wind turbines, such as shadow flicker.

TAN 8 - Para A27 - obliges applicants to provide calculations to quantify the effect of shadow flicker.

9.11.2 **Outline of Submission**

1. The Environmental Statement comments in detail on the occurrence of shadow flicker and notes the advice in PPG22 and TAN 8 that this effect only occurs inside buildings where the flicker appears through a narrow window opening. It notes that where shadow flicker occurs, its effect is most noted from dwellings at distances within 10 rotor diameters of a turbine in directions from south west, through north, to south east (i.e. locations in the shadow of a turbine). The amended documents state the closest distance between a dwelling and a wind turbine in the Tir Mostyn application is over 600m, well over the 10 rotor diameter range of 520 metres.

9.11.3 **Consultation Response**

1. There are no consultation responses which comment on the issue of shadow flicker.

9.11.4. **Private Individual Responses**

1. Five individual letters of objection express concerns that shadow flicker may occur in the locality and impact adversely on residential property.

9.11.5 **Evaluation and Conclusion**

1. On the basis of the distance from the nearest turbine to private residential property, it appears the incidence of shadow flicker is unlikely in this case. To protect against the possibility of shadow flicker, it would be possible in any event to impose a monitoring condition, and through the inclusion of a condition obliging the use of a suitable mechanism on the relevant turbine(s) cutting out blade movement during the critical period of each day when the angle of the sun could cause flicker through a turbine.

9.12. **ELECTROMAGNETIC INTERFERENCE**

9.12.1 **Policies and Guidance**

1. The planning policies and guidance of relevance to electromagnetic interference are:

GLYNDWR DISTRICT LOCAL PLAN

A1 - due consideration is required of the impact of development on the amenities of properties and the general environment of the area.

CLWYD COUNTY STRUCTURE PLAN : SECOND ALTERATION

CONS 14 - development should not have an unacceptable effect on public health or amenity.

CONS 28G - development should not have an unacceptably adverse effect on amenity by virtue of radio-magnetic / microwave interference.

DENBIGHSHIRE UNITARY DEVELOPMENT PLAN

MEW 10 (v) - there should be no unacceptable risk or nuisance to the public, such as radio interference.

TAN 8 Annex A39 – 41 - refers to Electromagnetic interference and where this may interfere with television reception, steps may be required to alleviate by installing or modifying a local repeater station or a cable connector.

9.12.2 **Outline of Submission**

1. The Environmental Statement outlines two forms of Electromagnetic interference which can be caused by wind turbines:

- a) Physical Interference, which is the scattering of signals, causing 'ghosting' on television screens
- b) Electrical interference, which are principally signals generated within the wind turbine, impacting on telecommunications equipment.

The Statement notes that wind turbines have been installed world-wide with few recorded instances of Electromagnetic Interference, and where problems have occurred, these have been with TV interference and have been remedied by developers. It is stated that the use of smooth tubular steel towers and glass fibre blades minimise electromagnetic interference.

2. The submission acknowledges there may be a potential effect on the Rebroadcast Link (RBL) between Moel y Parc and Cerrigydrudion, and that local residents may experience some interference with TV reception. Its conclusion is that these technical problems can be easily remedied, and the developer is prepared to enter into a legally binding agreement to ensure that any interference with the RBL link or loss of quality of TV reception resulting from the construction of the turbines is rectified, at the developers' expense.

9.12.3 **Consultation Responses**

1. The consultation response received from Crown Castle International, acting on behalf of the BBC, confirms the concerns over the impact on the Rebroadcast Link between Moel y Parc and the Cerrigydrudion relay site. The response records the same objection as Conwy Borough Council to the grant of permission unless a legally binding commitment can be obtained from the developer, to which Crown Castle International is party, to meet the cost of investigating any problems which may arise and the provision of alternative signal source(s) should it prove necessary.
2. No objections have been received from the other telecommunications operators consulted in accordance with TAN 8.

9.12.4 **Private Individual Responses**

1. There are objections from private individuals to the proposals on grounds of Electromagnetic Interference, including general concerns over the effect of electromagnetic fields, and specific concerns over the impact on TV reception.

9.12.5 **Evaluation and Conclusions**

1. The question of Electromagnetic Interference has been addressed in detail in relation to previous windfarm applications, and in the course of appeals arising from them. There is no clear evidence to support general health fears arising from electromagnetic fields. It has been accepted that potential interference with a Rebroadcast Link and TV reception can be countered by suitably worded planning conditions and / or Section 106 Obligations or other legally binding undertakings involving operators, obliging developers to undertake appropriate surveys of existing conditions and to meet the costs of any remedial action necessary to ensure no detriment to users. The Tir Mostyn application raises no issues which could merit a different approach by the local planning authority.

9.13 **HEALTH AND SAFETY**

9.13.1 **Policies and Guidance**

1. The planning policies and guidance relevant to issues of health and safety are:

GLYNDWR DISTRICT LOCAL PLAN

A1 - general protection of amenities of the private individual

CLWYD COUNTY STRUCTURE PLAN : SECOND ALTERATION

H11 - requires that development should not have an unacceptable effect on public health

DENBIGHSHIRE UNITARY DEVELOPMENT PLAN

MEW 10 (v) - there should be no unacceptable noise or nuisance to the public arising from wind turbines, such as safety.

9.13.2 **Outline of Submission**

1. Points raised in relation to Electromagnetic interference and to proximity of turbines to public roads and footpaths are dealt with separately in Section 9.12.

The Environmental Statement and support documents refer to certification procedures for wind turbine construction, the existence of constant monitoring by internal computers, failsafe mechanisms closing down turbines in strong winds and strict maintenance procedures. It is stated there have been no recorded accidents in the world of death or injury to members of the public by wind turbines. The submission concludes that the proposals meet the minimum separation distance standards suggested in TAN 8 from turbines to public roads or footpaths.

9.13.3 **Consultation Responses**

1. The Head of Public Protection has made no specific comments on issues of health and safety. The Head of Highways has made no comments on the development in respect of the distance of turbines to public roads or footpaths other than the Rights of Way Officer's request that the public's use of footpath 67 be taken into consideration. The Health and Safety Executive have confirmed that the application is not a type on which they wish to be consulted.

2. The Ministry of Defence and Civil Aviation Authority raise no objections to the proposals. The MOD state that if permission is granted, confirmation of points of detail are necessary to inform military aircrew, and that construction workers would need to be advised that low level ministry training is conducted in the vicinity. The CAA advise that the site is outside the normal aerodrome and site safeguarding areas.

9.13.4 **Private Individual Responses**

1. A number of private individuals have expressed concerns over the potential risks to low flying military aircraft from the turbines.

9.13.5 **Evaluation and Conclusions**

1. Concerns over public health and safety from a windfarm development embrace a wide range of issues, including ones covered in other sections of this report. Those not referred to specifically elsewhere are the potential dangers arising from low flying military aircraft colliding with turbines and the physical danger to the public from blade failure, particularly in extreme weather. Respectfully, on both counts there are no realistic grounds to substantiate the concerns. Neither of the relevant aviation authorities have expressed objections. There are stringent construction, monitoring and safety safeguards in relation to rotor blades, and as the nearest properties to the site are in excess of 600 metres, the likelihood of structural damage and threat to personal safety appear remote.

9.14 **NATURE CONSERVATION - ECOLOGY AND ORNITHOLOGY**

9.14.1 **Policies and Guidance**

1. The planning policies and guidance relevant to ecological and ornithological considerations are:

GLYNDWR DISTRICT LOCAL PLAN

A1(ii) - requires appraisal of the effects on the general environment of an area, including nature conservation interests.

L12 - presumes against any development on, or in the vicinity of sites of Special Scientific Interest and Nature Conservation importance where development will affect the scientific or nature conservation interest of the site.

CLWYD COUNTY STRUCTURE PLAN : FIRST ALTERATION

H9 - presumes strongly against any form of development either within or in the vicinity of a site which would have an adverse effect on the nature conservation interest of the site.

CLWYD COUNTY STRUCTURE PLAN : SECOND ALTERATION

CONS 9 - repeats H9.

CONS 28F - wind power developments should not prejudice nature conservation interests within sites designated for their ecological value.

DENBIGHSHIRE UNITARY DEVELOPMENT PLAN

STRAT7 ENVIRONMENT - seeks to safeguard the special character of the County including the countryside and environment by protecting and enhancing nature conservation.

GEN 7(ii) - development should not unacceptably affect the form and character of the local natural environment.

ENV 1 - requires development to maintain and enhance the biodiversity of the natural environment.

ENV 4 - development unacceptably affecting the integrity of sites of European Nature Conservation Value or unacceptably harming the conservation value of Sites of Special Scientific Interest will not be permitted unless the reasons for the development significantly outweigh the respective value of these sites.

ENV 6 - development which would unacceptably harm species given special protection by law will not be permitted unless appropriate steps can be taken to secure their protection.

MEW 8 - supports the principle of developing renewable energy sources, subject to there being no unacceptable effect to the environmental quality of the locality.

MEW 10 (xi) - wind farms will be permitted provided there is no unacceptable effect on nature conservation interests.

PLANNING GUIDANCE (WALES) PLANNING POLICY FIRST REVISION APRIL 1999

Contains general support in para. 3 for sustainable development and in Paras. 13.1 and 13.2 for the development of renewable energy sources where they are environmentally acceptable.

TAN 8 (Wales) - Paras A55 and A56 require rigorous examination of applications for wind farms in areas designated of ecological importance and refers to the CCW's role in advising on likely impact. Considers that evidence suggests the effects of windfarms on animals and bird life including habitat are minimal.

TAN 5 (Wales) - Para. 21 – development proposals in, or likely to affect an SSSI must be subject to special scrutiny and require consultation with the CCW. Paras. 30 – 32 draw attention to protected species under the Wildlife and Countryside Act 1981

9.14.2 Outline of Submission

1. The application contains considerable detail on ecological issues, including an Ecological Assessment, and an Ornithological Assessment in the original Environmental Assessment; the Ornithological Assessment being supplemented by Addendum 2 – The Potential Effects on Black Grouse and Suggestions for Mitigation Measures (a report by Dr. Steve Percival). The application has been amended to delete 4 turbines at Foel Goch to take account of the potential impact on the lekking area of Black Grouse in that area.
2. The **Ecological Assessment** includes an appraisal of the plant communities present within the site, an assessment of the possible impact of the development and suggested mitigation measures. It identifies in relation to:
 - 1) The northernmost Tir Mostyn site – mainly grazed sheep pasture with improved grassland cut for silage.
 - 2) The central site at Tir Mostyn – grazed sheep pasture with small patches of mire on the north east side. Poor grassland species but the lightly grazed wetland shows greater species diversity.
 - 3) The Foel Goch site – species poor improved grassland, grazed with some fields left for silage. A poorly drained area in the centre of the site supports rush pasture and mire communities.
3. The Ecological evaluation notes that there are no statutory or non statutory designations on the site(s) under British or EC legislation, but that the Mynydd Hiraethog SSSI lies immediately to the west of the Foel Goch site. It states the SSSI is one of only four areas of sub-montaine heath remaining in the old County of Clwyd area and supports a diverse heathland and more flora including some notable species found only in Wales. The evaluation states that the habitats within the SSSI in all probability indicate what the application site would have supported prior to agricultural improvement and drainage, as the site supports no vegetation type of national, regional or local rarity, with very limited species diversity evident. The **conclusion** is that careful placement of turbines and the road network could avoid disturbance to the areas of unimproved wet grassland, that the effects of removal of material from borrow pits would be of limited consequence, and that mitigation measures including decreasing grazing pressure on the site would allow regeneration and an increase in species diversity, of long term benefit to invertebrate and bird populations.
4. The **Ornithological Assessment** in the Environmental Assessment includes the results of a survey of the site between April and June 1988, considered to be the most important period of the year for upland breeding birds. The assessment and conclusions are made with reference to other studies of birds undertaken in the area. The assessment notes:
 - 1) The adjacent forest holds good numbers of birds of prey and small passerines but the application site had a small breeding population of a few species (pied wagtail, meadow pipet, skylark).
 - 2) The site has more significance as a feeding station for a large and more diverse range of species which breed within the forestry edge and have territories which overlap the application site. Most noticeable is a Goshawk. 15 species are listed.
 - 3) Two nocturnal species were observed, Nightjars and tawny owls.

5. The **conclusions** of the Ornithological Assessment are that there are three principal impacts of windfarm developments:

- disturbance
- habitat loss
- collision

The greatest impact is acknowledged as being during the construction period which can have the potential for reducing site use by birds. The study states that research on other windfarm sites show no significant difference in species numbers or numbers of breeding pairs before and after construction, but accepts that species vulnerability is limited to information available to date, and that vulnerability may be site specific to local populations. Research on collision rates show these are not significant to affect bird populations. The conclusions are that the site has little ornithological importance for two reasons:

- the land is improved grassland, heavily grazed by livestock
- there is very little ground cover and no hedgerows / scrub (ground cover being important for foraging, feeding and safety)

and that the wind farm would cause no significant effects in its construction or operational phase.

6. In response to concerns from specialist consultees over the adequacy of the Ornithological Assessment, an **Addendum** was forwarded in June 2000 dealing with **The Potential effect on Black Grouse** and suggestions for mitigation measures. This report acknowledges the concerns of the RSPB and the CCW over the potential impact on the local population of Black Grouse, noting the national importance of the species and the efforts in the SSSI to manage an area as part of the national Black Grouse recovery programme. It notes the presence of a single lek (display ground) close to the western site boundary at Foel Goch and that the turbine layout has been amended to a separation distance of 200 metres from this location.

7. Addendum 2 reviews the three potential impacts of a windfarm identified in the ornithological assessment, listed in para 2.4 above. The **conclusions** in relation to the main impacts are:

- **Disturbance.** From experience at other wind farms, it is not considered likely that the noise of turbines would disturb birds from their lek site in particular. Studies suggest short term displacement may occur with some species, but birds seem to habituate to the presence of turbines. It accepts no specific studies have been carried out on black grouse, but the red grouse, a close relative is clearly unaffected, and the most likely outcome for black grouse would be the same. However, given the sensitivity of the lek in particular it is considered advisable to maximise the distance from this to the turbines.
- **Habitat loss** - This is considered to be an effect of minor magnitude, as there is minimal land loss to turbines and access tracks.
- **Collision** - Taking into account the low density of bird species, the wide spacing of turbines and the slow speed of rotation, it is considered there would be negligible risk of bird collisions. Fencing and overhead lines can pose a risk but these are not planned at Foel Goch, where the main concerns lie over Black Grouse.

8. The **habitat enhancement measures** suggested are, that in consultation with the RSPB: improved management of the moorland, restoration of moorland along the forest edge and within the site, felling of patches of conifer on forest edges, planting of birch along forest edges, and a financial contribution to the black grouse recovery programme.

9.14.3 **Consultation Responses**

1. Strong objections have been raised by consultees on the potential impact of the windfarm on the Ornithological interests in the area, including the Mynydd Hiraethog SSSI. (Ramblers Association, Hamdden, Clwyd Mountaineering Club, North Wales Wildlife Trust, Countryside Council for Wales, Royal

Society for the Protection of Birds Cymru). The specific points of note in the RSPB and CCW's objections to the revised application are:

- To dispute comments in the Environmental Statement and Addendum 2 that the site is of little ornithological value, in view of the breeding populations of two Priority Species in the UK biodiversity Action Plan (Black Grouse and Nightjar)
- There is no justification for the 200 metre turbine distance from a Black Grouse lek and this would lead to unacceptable disturbance to the lek. The RSPB uses a 1.5km 'exclusion zone' for forestry and other noise generating activity in its Black Grouse Recovery Project Zone.
- The development would conflict with the aims and objectives of the Welsh Black Grouse Recovery Project on the adjacent SSSI.
- Any management plan should be put forward before planning permission is obtained.
- In the absence of any survey on impact on Black Grouse or Nightjars from noise disturbance, the 'precautionary principle' should apply (i.e. planning permission should not be granted).

9.14.4 **Private Individual Responses**

1. 25 private individuals have outlined objection to the proposals on grounds of potential impact on ecology / wildlife. 19 refer specifically to the adjacent Mynydd Hiraethog SSSI and the potentially adverse impact on its conservation interests, particularly upland breeding bird assemblages. Mention is made of the designation of Denbigh Moor as a National Nature Reserve by the CCW on the basis of the need to protect the lekking area of the Black Grouse. 5 letters consider construction works and turbine noise would constitute a threat to a number of other bird species.
2. 5 private individuals express the view that fears over impact on wildlife are exaggerated.

9.14.5 **Evaluation and Conclusions**

1. The issues arising in this section of the report on nature conservation fall conveniently into the two headings outlined, in terms of ecological and ornithological effect.
2. There appear to be no specific concerns over the impact of the windfarm development on the **ecology** of the area around the application site. The site lies outside the Mynydd Hiraethog SSSI and is not subject to any nature conservation designations. The type of development proposed would not seem likely to impact on vegetation or soil types in the SSSI, there being no anticipated hydrological implications on land to the west of Foel Goch. As there are no vegetation types of national, regional or local rarity on the site itself, it would seem the proposals actually offer a positive opportunity to secure improvements to species diversity as mitigation agreements can be sought to decrease grazing pressures, allowing natural regeneration of vegetation.
3. The main issue identified is the **impact on upland bird species** in the vicinity of the application site. There are strong and specific objections from the RSPB and CCW who maintain there is inadequate consideration of the potential effects on Black Grouse and Nightjar, and that a number of turbines at Foel Goch are too close to the display area of the Black Grouse. Emphasis is drawn to the status of these birds as Priority Species in the UK's Biodiversity Action Plan.
4. Clarification has been sought from the RSPB and CCW of detailed aspects of objections. Neither objection is lodged simply in opposition to the principle of a windfarm development, as both organisations are supportive of developing sustainable / clean energy. Both stress their comments are specific to the facts of the case at Tir Mostyn / Foel Goch, and that there is clear evidence to support a refusal of permission.
5. Even with the Addendum report on Black Grouse and the amended layout at Foel Goch, both RSPB and CCW maintain strong objection to the scheme. They confirm there is clear evidence that the development would give rise to harm to Nationally protected species and that this is of particular relevance as Black Grouse numbers are in decline and the numbers in this area are of national significance. They

remain of the view that noise disturbance to Black Grouse during the construction and operational phase, including turbines within 200m of the lek would directly threaten the species. In turn, this would give rise to conflict with the publicly funded Welsh Black Grouse Recovery programme, which is under way on the adjacent Mynydd Hiraethog SSSI. The RSPB believe disturbance would manifest itself at 800m from the lek, and in the absence of data relating to this problem, believe a disturbance radius of 400m would be justified. This radius would encompass 3 of turbines proposed in the amended scheme. The RSPB request application of the 'precautionary principle' in this instance, which suggests where there is a risk, but it can not be measured, it would be inappropriate to allow a development to proceed.

6. The ornithological issues have been investigated in some detail. The two key 'statutory' and 'non statutory' consultees maintain their objections on quite specific grounds, and these constitute valid planning policy objections. The threat to species protected by the Wildlife and Countryside Act and identified as Priority Species in the UK Biodiversity Action Plan, is a potentially adverse effect on the nature conservation interests of an SSSI, which is in specific conflict with policy L10 of the Glyndwr Plan and H9 of the Clwyd Structure Plan : First Alteration, and other policies of the emerging UDP. There appear to be no satisfactory mitigation measures or practical planning conditions which could overcome the concerns over disturbance during the construction and operational phases, and the RSPB have confirmed that translocation of Black Grouse is not feasible as this would result in a 'sub-optimal' parading ground, to the long term detriment of the species. Also of relevance is the potential impact on the publicly funded National Black Grouse Recovery project on the adjacent SSSI, which would be rendered meaningless by development threatening the very species for which it seeks to secure a future.

9.15 HIGHWAYS

9.15.1 Policies and Guidance

1. The planning policies and guidance relevant to the highway implications are:

GLYNDWR DISTRICT LOCAL PLAN

A1 (iv) - the need for a safe and convenient access

DENBIGHSHIRE UNITARY DEVELOPMENT PLAN

GEN 7 (vi) - the need for a safe and convenient access and parking

TRA 6 - presumes in favour of development provided there is no unacceptable impact on the safe and free flow of traffic, and the capacity / traffic conditions on the surrounding network are satisfactory.

MEW 10(vi) - the existing road network should be adequate to serve the development or be made adequate, and suitable access is provided to the network.

TAN 8 – Annex A, 25 and A26 - Highway authorities should be consulted / a cautious approach is required to siting turbines near roads as drivers may be distracted by unfamiliar objects.

9.15.2 Outline of Submission

1. The Environmental Assessment details the likely Construction programme for the windfarm, the proposed access routes for construction vehicles, and the submission shows the proposed improvement / construction of access tracks to serve each turbine. It accepts that there would be an element of disturbance during the anticipated 32 week construction period, including an increase in the number of vehicles using access routes.

2. Two routes are proposed for construction and delivery traffic, including turbine components and cranes:

a) from the A5 at Cerrigydrudion, north along the B4501 to Pont y Brenig, and east to Garreg Lwyd (for wind turbine components, reinforcing steel and erection cranes)

b) from the A543 (Pentrefoelas – Denbigh road), south along the B4501 at Llyn Bran and east to Garreg Lwyd (for delivery of ready mixed concrete).

3. The main site entrance would be constructed near Garreg Lwyd, providing the access through the Tir Mostyn site, to the unclassified road running through Clocaenog Forest, to serve the two other parts of the site. Improvements are proposed along parts of the B4501 within 2km of the site, and along the unclassified road within Clocaenog Forest. The developers have offered to agree the timing and extent of works necessary, and to the imposition of suitable conditions and / or a legal obligation
4. Estimates of vehicular movements are provided. It is stated the maximum movements in any one day would be in the order of 16, which would be when concrete is being poured for turbine foundations. The only 'abnormal' loads would involve movement of the main erection crane and the longer component parts of turbines. All axle weights would have to be within legal highway limits, and where necessary the contractors would need to liaise with the police and local highway authority in connection with the use of rear wheel steering trailers.

Post construction phase traffic is indicated as negligible, limited to a weekly visit by a light van.

5. With regard to the proximity of turbines to roads and public footpath 67, which runs along the north west boundary of the 'central' part of the site, and along the south east boundary of the northernmost Tir Mostyn site, the submission states a minimum separation distance of 50 metres has been achieved. It suggests this is acceptable in accordance with TAN 8 which advises a set back of at least the height of the turbine to achieve maximum safety (the hub height of the turbine being 49 metres). The submission believes TAN 8 takes precedence over SPG21 which suggests a 100 metre distance from a turbine to a public road, and 25 metres from a turbine to a public right of way.

9.15.3 Consultation Responses

1. The consultation response from the Head of Highways raises no objections to the proposals. It requests the imposition of conditions and / or the formation of a legal agreement to control arrangements for construction vehicle access, wheel cleaning facilities, the construction of all access tracks and on site parking / turning / unloading. The Rights of Way Officer asks for due consideration of the public's use of footpath 67.

9.15.4 Private Individual Responses

1. There are only limited objections from private individuals on access grounds. The points raised relate to problems during the construction period at pinch points along the road to Cerrigydrudion and the need to avoid interference with footpaths in the vicinity of the site.

9.15.5 Evaluation and Conclusions

1. Overall there is little concern expressed over the highway implications of developing the windfarm. The main focus is the construction phase when a degree of inconvenience is likely from the movement of large vehicles, but this is for a limited period of time. The highway network appears, within reason, adequate to accommodate the volume and type of traffic anticipated. The developers accept there may be a need to undertake improvements to sections of road near the site and are prepared to accept conditions / legal obligations obliging agreement to and implementation of these improvements along with controls over construction traffic movement to ensure there is no use of minor roads around Cerrigydrudion, Saron and Nantglyn by construction vehicles. Normal planning conditions can cover the construction and timing of access works within the application sites. There would be no direct interference with public rights of way although the enjoyment of users of footpath 67 which runs alongside parts of the Tir Mostyn sites may be affected by the close proximity of some of the turbines. Controls would be necessary to ensure adequate safety distances between turbines and the footpath in the event of blade failure, but this could be achieved by way of suitable planning conditions. The potential distraction to drivers from turbines appears limited, other than along the A and B roads in the immediate vicinity of the sites.

9.16 THE RURAL ECONOMY AND TOURISM

9.16.1 Policies and Guidance

1. There are few planning policies which specifically apply to proposals impacting on the rural economy and tourism, although many contain wording in line with the general principles of the Development Plan and Planning Guidance (Wales) documents, to support the development of the economy whilst protecting the quality of the environment and the interests of residents.

CLWYD COUNTY COUNCIL STRUCTURE PLAN : SECOND ALTERATION

CONS 28 (A) - the impact of development on agriculture or other land uses should be minimised.

DENBIGHSHIRE UNITARY DEVELOPMENT PLAN

MEW 10(ix) - the proposal should not harm the enjoyment of the landscape for recreational and tourist Purposes.

9.16.2 Outline of Submission

1. The Environmental Assessment touches briefly on the economic benefits of the windfarm proposal. It points primarily to the support the contract would provide for D.J. Construction, a locally based company directly employing 400 posts – the majority held by long term locally employed people who contribute directly to the economy and prosperity of the area. It is stated D.J. Construction use local sub-contractors, material suppliers, and professional bodies wherever possible, and that there would be permanent employment opportunity for the operation and maintenance of the turbines over the 20 – 25 year lifetime.

9.16.3 Consultation Responses

1. A number of consultees comment on the potentially negative impact on tourism in the area from a windfarm, on grounds that the visual impact could diminish the public's ability for the quiet enjoyment of the countryside (Ramblers Association, Hamdden, Clwydian Range AONB Joint Advisory Committee, Clwyd Mountaineering Club). FRCA note the poor quality of the agricultural land, and consider any land lost would have no impact in terms of national agricultural interest.

9.16.4 Private Individual Responses

1. Over forty private individuals object to the development of the windfarm, as it is considered it would discourage visits to the Llyn Brenig area by fishermen, water sports enthusiasts, archaeological trail walkers and others who wish to enjoy recreation without visual or noise disturbance. The objectors contend this would result in loss of tourist revenue and would impact on the local economy through loss of trade for shops and B & B's. Claims that the development would benefit the local economy are questioned as there would be few jobs beyond the construction phase, and many turbine parts are manufactured abroad.

2. In support of the application, 5 individual letters suggest the development would make a positive contribution to the local economy. These letters refer to construction jobs and support for companies supplying parts for the turbines, and the benefits for local farmers in their effort to diversify to survive.

9.16.5 Evaluation and Conclusions

1. It is not possible to reach a simple conclusion on whether the potential effects of the windfarm development on the rural economy and tourism, would ultimately be 'good' or 'bad'. The impact on what is a fragile local agricultural economy is likely to be minimal outside the actual enterprises who own the land and would benefit financially from the development, but this is a relevant consideration. There would be a significant short term investment in the locality / North Wales, and benefits to those local firms involved in providing site facilities, building materials and equipment, and there would be employment for local people for a period of about 9 months whilst construction works are ongoing. Beyond the construction period, employment would be restricted to a small number of local maintenance engineers (equivalent to one full time employee). It is understood that the payment of business rates on the site would be sizeable, but as the County Council would simply act as a billing and collection agency,

and monies are paid into a national pool, redistributed by the Welsh Assembly on a pro rata basis to all local authorities, it is not possible to assess the potential 'local' benefit from the windfarm.

2. The potential impact on tourism in the area is impossible to predict. Against the proposal is the possibility that the visual / noise impact would serve to discourage visitors or recreational users of the area, who choose to travel there for its wildness and sense of isolation, and who may be sensitive to the impact of turbines. In favour is the argument that others may find windfarms a source of interest and make a special visit they may not otherwise make, and that there are special visitor facilities established to cater for individuals or parties who are drawn to windfarms as an attraction in their own right. Either way there is no clear evidence to show the proposals would result in a significant loss of tourist numbers in the area.

9.17 **ARCHAEOLOGY**

9.17.1 **Policies and Guidance**

1. The planning policies and guidance relevant to the archaeological implications are:

GLYNDWR DISTRICT LOCAL PLAN

L4 - presumes against any development which may affect an Historic Landscape Area (the land between the site and Llyn Brenig is an HLA because of its archaeological features)

CLWYD COUNTY STRUCTURE PLAN : FIRST ALTERATION

G9, 10 AND 11 - permission should normally be refused where development affects Ancient Monuments and unscheduled monuments of regional local or academic interest; other development lose to a scheduled or unscheduled monument will only be allowed where it does not have an adverse impact on the setting and character of the monument.

CLWYD COUNTY STRUCTURE PLAN : SECOND ALTERATION

CONS 24, 25 AND 26 - repeat G9, 10 and 11 above.

CONS 28 (c) - requires wind power developments to satisfy other Structure Plan Policies regarding archaeology.

DENBIGHSHIRE UNITARY DEVELOPMENT PLAN

CON 12 - requires a suitable report on archaeological evaluation of sites of known or potential significance prior to the determination of proposed and conditions / obligations obliging excavation and recording in advance of construction work where remains are affected but preservation is not merited.

MEW 10 - wind farms will be permitted provided there is no unacceptable effects to areas of archaeological importance.

WELSH OFFICE CIRCULAR 60/96

Outlines general considerations encouraging resolution of conflict between development and preservation, the weighing of policies, material considerations including the importance of remains, against the need for development.

9.17.2 **Outline of Submission**

1. The Environment Assessment details the outcome of a desk top assessment appraisal of aerial photographs and a walk and survey of the Tir Mostyn – Foel Goch sites, which sought to identify known archaeological information, including the presence and significance of archaeological deposits, in the area including and around the application sites.

2. Within the area studied for the Environmental Assessment, there are two Scheduled Ancient Monuments shown on the Clwyd Powys Archaeological Trust Sites and Monuments Record (SMR), but both are **outside** the application site : a Bronze Age barrow (DEO88), 300m west of the Tir Mostyn site, and earthworks which may be a medieval farmstead (DE086), 1.2 km west of the Foel Goch site. Otherwise the SMR shows a total of 14 entries in the area studied, nine of which are Bronze Age ritual or

ceremonial sites (barrows or cairns) with a main focus of Bronze Age activity, a barrow cemetery on the west slope of Foel Goch on the shore of Llyn Brenig.

3. Within the application site, the Environmental Statement notes one entry on the SMR indicating the possible presence of archaeological deposits in the form of a mound within the Tir Mostyn site near to the unclassified road running south west towards Clocaenog Forest. The Statement considers this entry to be erroneous as it is a natural mound, a point it is stated is recognised in the SMR. Stone clearance cairns considered of 20th century origin are evident on the 'centre' Tir Mostyn site, and the Foel Goch site, but are considered of minor local significance.

4. The conclusion of the Assessment is that there are no significant archaeological sites or monuments within any of the sections of the application site. In the wider study area there is evidence of upland Bronze Age and medieval occupation, the former represented by funerary and ceremonial movements, but there are no Bronze Age habitation sites documented in the vicinity. Agricultural improvement including ploughing and stone removal on the application site, and commercial forestry operations is considered likely to have destroyed evidence of habitation. It is suggested there may be sub-surface features such as post holes or ditches surviving on Tir Mostyn to indicate the former presence of post-medieval field boundaries, of minor local significance. The afforestation at Clocaenog and creation of Llyn Brenig are considered to have significantly altered the character of the immediate landscape, compromising the visual setting of monuments present. It is recommended that an archaeological watching brief be maintained during topsoil stripping for access roads, to allow recording of any features of minor local significance and that no unrecorded significant features are adversely affected. This may be of particular relevance to Borrow Pit 1 which is located over the mound which is an SMR entry on the Tir Mostyn site.

5. Since the preparation of the Environmental Assessment, the applicants' agents have stated they consider post-determination excavation trenches would be adequate to allow appraisal of the significance of remains and have stated the SMR entry at Tir Mostyn is a natural mound mistakenly identified as an antiquity.

9.17.3 Consultation Responses

1. The County Archaeologist has confirmed that not all sites on the SMR are shown in the Environmental Assessment, but none within the application site have been missed. A request has been made for pre-determination work and evaluation of the archaeology present, as it is not considered possible to put forward a mitigation strategy should important remains be discovered. As it stands, the archaeologist considers it difficult to assess the adequacy of mitigation measures proposed. It is also considered that the statements over the SMR at Tir Mostyn being simply a natural mound are too categorical.

9.17.4 Private Individual Responses

1. There are no individual representations relating to the archaeological implications of the development. One letter expresses concern at the impact of the windfarm on the enjoyment of the nearby Archaeological Trail.

9.17.5 Evaluation and Conclusions

1. There are a number of archaeological remains in the vicinity of the application site, but it is not considered that the development would impact unacceptably on the setting of the Scheduled Ancient Monuments outside the site boundary. The concerns of the County Archaeologist over the investigation of the mound on the Tir Mostyn site can be reasonably addressed by the inclusion of a condition / obligation requiring the carrying out of excavations and evaluation before development commences, and the resolution of mitigation measures if necessary as a result of the evaluation. A watching brief would also be necessary during construction works to record features of any significance uncovered.

9.18 HYDROLOGY

9.18.1 Policies and Guidance

1. The planning policies and guidance of relevance to the hydrological implications of an applications are:

GLYNDWR DISTRICT LOCAL PLAN

A1 (iii) - requires regard to the impact on the amenity of adjoining properties or the general environment of the area.

CLWYD COUNTY STRUCTURE PLAN : FIRST ALTERATION

F20 - seeks to ensure excavation for borrow pits does not have environmental impact

H11 - seeks to ensure proposals do not have an unacceptable effect on the environment, including the pollution of water

H12 - presumes against development which may cause discharge of effluent in a manner which would unacceptably impair the quality of water.

CLWYD COUNTY STRUCTURE PLAN : SECOND ALTERATION

CONS 14 - as H12 above

CONS 28A - as H12 above

DENBIGHSHIRE UNITARY DEVELOPMENT PLAN

GEN 7(x) - development has to satisfy physical or natural environmental considerations relating to drainage

ENP1 - presumes against development which would harm the amenity of nearby property in terms of pollution of ground water.

MEW10(x) - wind turbine development should have no unacceptable effect on ground water or private water supplies.

9.18.2 Outline of Submission

1. The Environmental Statement outlines the hydrological and hydrologically related impacts of a windfarm development including the works associated with the turbines, ancillary installations and access roads. The interests are identified as water supply, fisheries and nature conservation.
2. The study states there is no significant aquifer underlying the Tir Mostyn and Foel Goch sites and that there will be no impact on groundwater; no main river will be affected but there are tributaries which may be. What risks exist to the surface water environment are stated as short term during the construction period (from stored fuel, run off / erosion from stored subsoil, construction of turbine bases and access tracks), and longer term changes to soil hydrology and disruption of land drainage through blocking watercourses.
3. The conclusions of the Environmental Statement are that any effect of the development would be limited to surface water in the Clwyd catchment, and there would be no effect on the Dee catchment, on groundwater, or on the Mynydd Hiraethog SSSI to the west. It acknowledges there is private water extraction from a tributary of the Afon Concwest, and that construction works may affect the turbidity of this water source (turbidity is where suspended matter clouds water), but contends suitable mitigation contingency measures can be put in place by way of a planning condition to protect the interests of any affected property.

9.18.3 Consultation Responses

1. No objections are raised by the Environment Agency Wales to the proposals in respect of potential impact on groundwater supplying local properties. Their request is that mitigation measures be included to prevent contamination of surface water. The Scientific Services Officer in the Public Protection Section has raised no objections but notes the need for compliance with relevant water supply legislation.

9.18.4 **Private Individual Responses**

1. Concerns are expressed by private individuals at the absence of any systematic analysis of the potential impact on spring water supplies to local properties, and contend there should be no interference with supply and quality of water supply.

9.18.5 **Evaluation and Conclusion**

1. In acknowledging concerns over the potential impact on spring water supplies and the tributary of the Afon Concwest, in the event that the development was to proceed there appears to be a straightforward means of protecting the interests of any affected parties through planning conditions controlling site works during the construction phase and through suitable mitigation measures to oblige the developers to remedy any turbidity which may arise from works on the site.

9.19 **BORROW PITS**

9.19.1 **Policies and Guidance**

1. The planning policies and guidance of relevance to the excavation of borrow pits are:

CLWYD COUNTY STRUCTURE PLAN : FIRST ALTERATION

F20 - obliges policies for minerals extraction from borrow pits to be considered against criteria in policies F1 – 8. These require close evaluation of environmental effects, methods of operation, and restoration / aftercare.

9.19.2 **Outline of Submission**

1. The Environmental Statement explains the proposals to utilise dark grey Silurian shale excavated from on-site borrow pits to surface the access tracks to the turbines, and to widen existing verges where necessary. It refers to a total of 14,500 m³ of stone required to surface the tracks, and states the use of material from the site would negate approximately 1500 return trips from external quarries. It explains that reinstatement works at the end of extraction would permit the areas to be reseeded and stabilised, in line with recommendations from an ecologist / agronomist.

9.19.3 **Consultation Responses**

1. The County Minerals Officer has no objections to the amended proposals subject to suitably worded conditions to cover restoration and aftercare of the borrow pits.

9.19.4 **Private Individual Responses**

1. There are no specific responses from private individuals relating to the excavation of borrow pits in connection with the development.

9.19.5 **Evaluation and Conclusions**

1. The principle of excavating material for use on access tracks is within planning policy, the acceptability being dependent on the detailing. In this instance the County Minerals Officer is satisfied at the proposals outlined, and has requested the imposition of conditions relating to details of restoration and aftercare. In the event of permission being granted, standard conditions can be included to cover the methods of operation as well as restoration and aftercare.

10. MAIN CONCLUSIONS

10.1 The decision on this planning application depends on a balancing exercise. Balancing national policy and the benefits of exploiting renewable energy generation with the local impact of the development in terms of landscape, wildlife, etc. In my opinion the benefits in terms of renewable energy generation and emission savings, important as they may be, are not a decisive factor. The development will cause harm and the decision rests on whether this harm is sufficiently compelling to override the perceived benefits of renewable energy generation.

10.2 On consideration of all of the evidence and my site inspections, I consider that there are four principal issues in this case. They are:

- (i) the acceptability of the proposal having regard to the Government's policy on renewable energy and local policies in the development plan
- (ii) the impact which the proposal would have on the character and appearance of the landscape, and visual amenity.
- (iii) the effects of the proposal on nature conservation interests
- (iv) the effects of the proposal on the living conditions of nearby residents, particularly in terms of possible noise disturbance.

(i) GOVERNMENT POLICY AND NATIONAL AND LOCAL PLANNING GUIDANCE

10.3 The Government's energy policy is to stimulate the exploitation and development of renewable energy sources wherever they have prospects of being economically attractive and environmentally acceptable. The primary mechanism for implementing renewable energy policy is the Non Fossil Fuel Obligation (NFFO), which through the Electricity Act 1989, enables the Secretary of State for Trade and Industry to require each regional electricity company to secure the availability of a specified amount of electricity generated from non-fossil sources, including wind energy. The proposal has been awarded a NFFO contract to supply power. The scheme would generate around 21,250 megawatts the equivalent to 57 million kW hours each year. This would be sufficient to meet the average domestic needs of between 15,000 and 16,000 dwellings, equivalent to around 37% of dwellings in Denbighshire.

10.4 Merely because a scheme would produce only a small fraction of total national electricity needs does not mean that it would not be worthwhile. On a County level, the contribution is significant. Generally over time each unit of electricity produced by wind energy displaces a unit of electricity which otherwise would be produced by other means. In my view there would be a high probability that this would be from fossil fuel burning power stations, which are held responsible for contributing to global climate change. Therefore, in my view, this proposal would represent a contribution to the present Government's goal of producing 10% of the UK's electricity from renewable sources and reducing carbon dioxide emissions from the UK by 20% by 2010. The evaluation of the comparative merits of different forms of energy generation is not practicable or necessary.

10.5 National Planning Policy is set out in Planning Guidance (Wales) Planning Policy First Revision. Further supplementary advice is contained in Technical Advice Note (Wales) 8 Renewable Energy.

10.6 There are no specific renewable energy or wind farm policies in the operative development plan (Clwyd Structure Plan : First Alteration and Glyndwr District Local Plan). The Clwyd Structure Plan Second Alteration (deposit version) and the emerging Unitary Development Plan contains policies on wind farm proposals. The UDP has reached an advanced stage and should accordingly be given significant weight. The relevant policy MEW 10, however, is subject to objection, and may be changed. Accordingly, it, and other policies subject to objection, should be given less weight. It seems to me that the following policies are particularly relevant to the determination of this application:

Glyndwr District Local Plan	A1, L12, L16
Clwyd Structure Plan First Alteration	H5, H9
Clwyd Structure Plan Second Alteration	CONS9, CONS11, CONS28
Denbighshire Unitary Development Plan	STRAT2, STRAT7, GEN7 ENV1, ENV4, ENV6 MEW8, MEW10

10.7 The policies in the emerging development plan support the principle of renewable energy provided that there are no unacceptable effects on the quality of the environment. Other policies in the development plan and emerging UDP seek to protect residential amenity, the appearance and character of the landscape, the nature conservation value of designated sites, and the protection of species and biodiversity.

(ii) LANDSCAPE AND VISUAL IMPACT

10.8 In my opinion, any final evaluation of landscape and visual impact is, to a large extent, a matter of subjective judgement informed by professional judgement and experience. The impact is twofold: impact on the visual appearance and impact on the character of the landscape. The degree of impact is influenced by the number, size, design, colour and layout of the wind turbines; the landform and skyline of the area; the movement of the blades; prevailing light and weather conditions.

10.9 The turbines by comparison with most rural buildings and structures will be massive, having a height to the tip of the blade (when upright) of 75 metres (245 feet) the equivalent of a 25 storey building. The turbines would be amongst the largest erected in the UK to date.

10.10 There would be considerable impact on views at a distance of up to 5km. The turbines would be noticeable over large parts of the Vale of Clwyd and the Clwydian Hills to the east.

10.11 The visual impact will vary accordingly to the weather, light conditions and the backdrop against which the turbines are seen.

10.12 The Countryside Council for Wales and the Council's Landscape Architect have lodged strong objections to the proposal. The Environmental Assessment carried out by the applicant states that there will be an impact at distances up to 5km and less impact on views from the AONB (Clwydian Hills)

10.13 The landscape in this part of the County although not designated nationally is recognised in the adopted development plan as being of special landscape value. The provisional LANDMAP study identifies the landscape in this area as being of a high quality. Although forestry plantations and current felling operations have altered the landscape, the landscape is not marred by mineral extractions, large industrial buildings, significant pylons, posts, masts or other man-made objects. The landscape of the upland area of Mynydd Hiraethog on the southern edges is characterised by open moorland, forestry plantations and Llyn Brenig. On the northern side the landscape is more pastoral with field enclosures and plantations on open, broad crests and valley sides.

10.14 Views of Llyn Brenig over towards Foel Goch from the Brenig Visitor Centre are particularly pleasant on the eye. Attractive views are to be had from minor roads over the Afon Ystrad towards Tir Mostyn and from the B4501 beyond to the Vale of Clwyd and the Clwydian Hills in the distance.

10.15 In my opinion the turbines, due to their sheer size, siting and movement of the blades, would contrast with the relative simplicity of the local landscape into which they would conspicuously and adversely intrude. The sites would cover an area of some 188 hectares and extend north-south over a distance of 4km. The turbines would have a significant impact over the short to medium distance. The northern group would dominate the open crest overlooking Nantglyn. From the minor road on the other side of the valley the vertical emphasis of turbines would be accentuated, viewed as they would be from their base to the top of the blade. They would appear as huge, tall structures, not in any way comparable in scale to any other structure around, like walls or trees. The movement of the blades would make them difficult to ignore and for some properties they would dominate the horizon.

10.16 From the B4501 near Pont y Brenig and Pant y Maen the wind farm would appear as two separate wind farms separated by distance (1km) and a forestry plantation. In my view, this would create the impression of incipient development in the open countryside.

10.17 Many of the turbines would stand out silhouetted against the sky from several public vantage points and this would dramatically accentuate their domination of the landscape. The windfarm does not occupy a moorland plateau where it would be possible with careful siting to obscure views from most public vantage points. The southern cluster of 10 turbines would occupy a position to the east of a distinct and exposed high level summit. The turbines would protrude above the skyline and would, with the movement of the blades, draw attention and dominate the views over Llyn Brenig. Their brooding presence would, in effect, industrialise the unspoilt vista from the visitor centre, resulting in the loss of intrinsic natural harmony and remoteness.

10.18 There would be no adverse visual impact on the Snowdonia National Park, and Clocaenog Forest to the south and east. From the Clwydian Hills Area of Outstanding Natural Beauty the wind farm would be seen at a distance of some 17km. In my opinion, at this distance, the wind farm itself (not necessarily individual turbines) would be visible and noticeable. However, at this distance their relationship with the Snowdonia Mountain Range beyond to the west would only be seen in fine weather, and the wind farm would be viewed as part of a much wider panorama. On balance I do not believe that the proposal would unduly adversely affect the enjoyment of the AONB, or affect its setting.

10.19 For some people the turbines would be an object of curiosity, but for others they would adversely impact on the enjoyment of the outdoors in this part of the County. Whether the development would cause an increase or a decrease in the use of these immediate areas for recreational activities is not proven.

(iii) IMPACT ON WILDLIFE

10.20 The Government's policy is to protect the nature conservation interests of statutorily designed sites and to sustain or enhance the biodiversity in the wider landscape. The advice in Planning Guidance (Wales) Planning Policy recognises that nature conservation can be a significant material consideration in determining planning applications, especially in or near SSSIs and that the presence of a protected species is a material consideration when a local planning authority is considering a development proposal which, if carried out, would be likely to result in harm to the species or its habitat.

10.21 The advice that the authority has received from the Countryside Council for Wales and from the RSPB is that the construction phase of the development and the operation of the wind farm due to noise would disturb two nationally protected bird species – the Black Grouse and the Nightjar.

10.22 In Wales, the 1997 Black Grouse survey suggested numbers had dwindled by nearly 50% since the first survey in 1986. Black Grouse have now become restricted to core populations in mid and north Wales. Left unchecked, RSPB believe that the decline in black grouse population will lead to extinction in 10-15 years.

10.23 In 1999 the RSPB embarked upon a £550,000 Black Grouse recovery programme with substantial financial assistance from the European Union, National Assembly for Wales, Countryside Council for Wales, Forestry Enterprise and private landowners. This project is actively working in the Clocaenog Forest including an area close to the southern cluster of turbines near Foel Goch.

10.24 Black Grouse utter a low bubbling call as part of their display at leks to attract females. A lek is located near to Foel Goch in close proximity to several wind turbines. Black Grouse are sensitive to human activity. Leks are selected by the black grouse for their optimum breeding potential and their locations are enduring.

10.25 There is compelling knowledge and experience to conclude that turbines, particularly those within 400 metres of the lek, would adversely affect the breeding habitat of the Black Grouse. The declining numbers of these birds, the possibility of them becoming extinct, and the relative importance of their concentration in the Clocaenog Forest means that any risk to their future and thus reduction in biodiversity must carry significant weight. In my opinion the risk arising from a known harmful effect is too high. This is a compelling reason for opposing most of the turbines in the southern group in the vicinity of Foel Goch.

10.26 The area also contains nationally important numbers of breeding populations of the rare Nightjar. The potential impact on Nightjar, which feed in the air (not on the ground), is less clear-cut. However, it is reasonable to assume that they are likely to be affected by the proposal. In my view the impact on the Nightjar in an area which contains approximately 3.5% of national (Wales) population adds weight to the harmful effect this development would have on the Black Grouse.

(iv) IMPACT ON RESIDENTIAL AMENITIES

10.27 Impacts from wind farms can take several forms including noise, shadow flicker, electromagnetic interference, health and safety, etc. Reference to other appeal decision letters clearly indicate that many of the impacts, where they exist, can be resolved or mitigated by using planning conditions or legal agreements.

10.28 The nearest dwelling to a wind turbine is 600metres. The potential impact, notwithstanding the topography of the site is remote. There is no hard evidence to demonstrate that there would be harmful effects on residential amenities.

10.29 Like many other wind farm proposals, noise has featured strongly in objections. The proper test in looking at noise is to decide whether the evidence clearly points to the probability that the wind turbines would generate noise levels / tonal levels sufficient to make dwellings in the locality a less pleasant place in which to live.

10.30 Martec Environmental Consultants have critically and independently assessed the noise impact. The view is taken that whilst there are deficiencies in the way the applicant's noise consultant has approached the assessment of noise impact, there is no clear evidence to demonstrate that the wind farm would create unacceptable levels of noise leading to complaints.

10.31 If the Council were minded to approve the application it should be on the basis that further background noise measurements are taken and full compliance is achieved with the methodology used to assess noise impact. There is no evidence to suggest that such details could not be provided and subsequently safeguarded by planning conditions or legal agreement to ensure that the development meets current guidance on noise.

CONCLUSION

10.32 In conclusion, I suggest the determination of the Tir Mostyn application rests on consideration of the desirability of exploiting a clean, renewable resource, weighed against the landscape and visual impact of the wind turbines and the impact of the construction and operation of the wind farm on protected bird species. In this case, I do not consider that the needs of the community and nation for renewable energy overrides the significant harm which would be caused to the landscape character and visual appearance of the area, and the adverse and serious consequences for the survival of protected bird species. These immediate and compelling planning objections are compounded by the fact that the wind farm would be visible over a wide area of the Vale of Clwyd and Clwydian Hills to the east, and by the cumulative effect of ancillary equipment including the long distance overhead connection to the electricity supply grid; objections which do not justify refusal in themselves but which do add some weight to the principal reasons why I consider this application ought to be refused. I recommend accordingly.

RECOMMENDATION

That permission be REFUSED for the following reasons:

1. The windfarm development is considered likely to result in significant harm to an unspoiled landscape of high quality, included in the Special Landscape Area in the Clwyd County Structure Plan : First Alteration, due to the number, size, and location of turbines in relation to the topography of the land, which in combination with the movement of the blades would have an enduring, dominant and unacceptably intrusive visual impact on the area, in particular in the Llyn Brenig area and from areas immediately to the north and north west of the site; contrary to policies L16 of the Glyndwr District Local Plan; H.5 of the Clwyd County Structure Plan : First Alteration; CONS 28B of the Clwyd County Structure Plan : Second Alteration; and STRAT 7 ENVIRONMENT, GEN 7 (i), (ii), (iii), (iv), NEW 10 (iii) of the Denbighshire Unitary Development Plan.
2. It is the opinion of the local planning authority that the noise associated with the construction and operation of the Foel Goch section of the windfarm, including the movement of turbine blades, would lead to an unacceptable threat to nationally important numbers of breeding populations of two Priority Species in the UK Biodiversity Action Plan, Black Grouse and Nightjar, undermining the objectives of the publicly funded Welsh Black Grouse Recovery programme, and adversely impacting on the nature of the conservation interests of the adjacent Mynydd Hiraethog Site of Special Scientific Interest, contrary to policies A1(ii) and L.12 of the Glyndwr District Local Plan; H.9 of the Clwyd County Structure Plan : First Alteration; CONS 9 and CONS 28F of the County Structure Plan : Second Alteration; STRAT 7 ENVIRONMENT, GEN 7(ii), ENV 1, ENV 4, ENV 6, MEW 8, and NEW 10(xi) of the Denbighshire Unitary Development Plan; and advice in TAN 8 (Wales) and TAN 5 (Wales) relating to the impact of development on areas of ecological interests and Sites of Special Scientific Interest.

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ADRODDIAD GAN Y PENNAETH GWASANAETHAU CYNLLUNIO

DYDDIAD YMWELIADAU SAFLE

1. PWRPAS YR ADRODDIAD

1.1 Cyngori Aelodau am ddyddiad tebygol unrhyw Ymweliad Safle y gofynnir amdano gan y Pwyllgor Cynllunio.

2. DYDDIAD YR YMWELIAD SAFLE

2.1 Mewn ymgynghoriad â Adran Gyfreithiol & Gweinyddol penderfynwyd mai **dydd Mercher 8 Tachwedd 2000** sydd fwyaf addas. Trefnwyd y dyddiad yn amodol.

2.2 Dywedir felly y cynhelir unrhyw ymweliad safle a drefnir heddiw ar **ddydd Mercher 8 Tachwedd 2000** (amser i'w gadarnhau).

3. AELODAETH Y PANEL YMWELIAD SAFLE

3.1 Bydd hyn yn dibynnu ar Gydbwysedd Gwleidyddol.

4. ARGYMHELLIAD

4.1 Bod Aelodau yn cytuno cynnal ymweliad safle fore dydd **Mercher 8 Tachwedd, 2000**.

AGENDA EITEM 5

PWYLLGOR CYNLLUNIO
1 TACHWEDD 2000
CEIWIADAU A BENDERFYNWYD GAN Y PENNAETH GWASANAETHAU
CYNLLUNIO DAN RYMOEDD DIRPRWYEDIG 16 MEDI 2000 HYD 13 HYDREF 2000

EITEM DDIM AR GAEL AR FFURF ELECTRONIG