

DOCUMENT 1 *Letter from Lead Petitioner on the “Moratorium on Wind Farms Petition” to Emyr Roberts, Chief Executive, Natural Resources Wales, copied to Petitions Committee*

29 August 2013

Reference P-04-419 Wind Farm Moratorium Petition

Dear Mr. Roberts,

Thank you for your response of the 8th. July, to our petition asking the Welsh Assembly Government to hold a moratorium on wind farm installations until matters relating to their deployment are resolved. The issues raised encompass, reliability, their place within a rural agricultural economy, the cost to Welsh energy consumers, (30% of whom are in fuel poverty), and the failure of the Welsh Assembly Government to address the lack of clarity and protection to the public; which should be the priority of any democratic Government to its population.

Paragraph 3 of your letter is both contentious and wrong on many levels. Our group's interest in the matter of onshore wind power is science led, we support Renewable Energy suitable for our topography; and the climate predicted by our Meteorological Services. We do not support the wholesale introduction of Wind Turbines to justify the political philosophy of WAG or the Westminster Government. Neither Professor D. MacKay chief scientific advisor to DECC, nor Professor Dieter Helm, in the past, advisor to Tony Blair, now currently working with DEFRA would claim onshore wind has any mitigating effect on climate change; nor should NRW, or WAG, or its Ministers, unless you can provide compelling evidence. We all accept the trend to warming and we should be selecting those generators which will both prepare our country for the effects of climate change and provide real cuts in our CO2 emissions. Wind energy is only one of the eleven sources of renewable energy identified in Directive 2009/28/EC, which implements the EU's 20% renewable energy by 2020. The well respected publication NATURE 'Climate Change' and the IPCC both agree that the way forward for countries is a mix of technologies, indeed they warn that allowing a technology to dominate policy is counterproductive to real emission reduction, (hence 2009/28/EC).

With regard to energy security, wind power is restricted by (A)What it can atmospherically glean (B) The decommissioning and installation of the present programme on a fifteen to twenty year cycle, (C) A large fossil fuel back up. (D) Continuity of subsidisation. NRW has no control over A,C, or D. Of course this gives both WAG and NRW opportunity to boast their 'green' credentials, because they are recipients of the subsidy, and not the financiers. Families and businesses in Wales provide that subsidy, 30% of Welsh families are in fuel poverty, and many businesses are struggling to re-establish employment in Wales. NRW's support for a programme to achieve the reviewed TAN 8 figures, help neither group, nor our CO2 emissions, which in common with other big wind economies, keep rising.

Your claim that wind farm development provides economic and social wellbeing of communities disregards this and other petitions. You also ignore the largest public demonstration by 2500 people in Cardiff Bay in the history of the WAG, numerous other demonstrations involving hundreds at council offices the length and breadth of Wales. It ignores people scratching together fighting funds to oppose the reviewed TAN 8 policy has endorsed by WAG and NRW.

With regard to economic contributions, the existing community benefit is little more than a charity hand out and a pittance. Our studies show that at least £22,000 per installed MW in rural areas and £28500/ MW in the valleys developments; this amount is required to compensate for loss of amenity, opportunity, property value and to fund regeneration. This is why we have asked the petitions committee to look at the possibility of a cross party examination of community benefit, to establish a means where the landlords 'windfall profit' by providing sites, and DECC make up the shortfall provided by electrical consumers subsidisation. Wind energy is divisive it sets public against farmer and 'lucky' communities against the 'unlucky' ones a couple of miles away. Further if you take a look at the petitioners addresses on this petition you will see the political divide in Wales clearly and geographically demonstrated.

The purpose of this petition is to rid us of NRW and WAG capitulation to the Developers at every turn, we are petitioning for a change to the existing system. CCW lost all credibility with us when they abandoned LANDMAP the Landscape Value data and Sensitivity results for the SSA zones. Our planning system is riddled with examples of rules in favour of the political lobby system the Wind Developers propound.

For example we are opposing Brechfa Forest East. 12 turbines out of 12 breach the Arup 2005 recommendations and LANDMAP on at least two counts, and the original TAN 8 siting rules on placement on plateau and land above 300metres. None of the developers in SSA G made any attempt to meet the 2005 requirements and limits set by Arup. This petition seeks a Moratorium until a set of rules and conditions are in place which will be respected and unchanged without proper consultation.

Adequate consultation is key to progress. During the life of this petition we have had judgement on Aarhus which demonstrates the shortcomings of the NRW and WAG approach. In your letter of the 8th July 2013 there is no mention of NRW consultation at all. Perhaps NRW and WAG will move from imposition to public consultation in light of this judgement.

The United Nations Economic Commission Europe has declared that the UK flouted Article 7 of the Aarhus Convention, which requires full and effective public participation on all environmental issues and demands that citizens are given the right to participate in the process. The UNECE committee has also recommended that the UK must in the future submit all plans and programmes similar in nature to the National Renewable Energy Action Plan to public participation, as required by Article 7.

This decision will have to cause a rethink of the Coalition's and WAG's wind-power policy, which is already under attack from campaigners who want developments stopped because, for example medical evidence showing that the noise from turbines is having a serious impact on public health as well as damaging the environment.

In this respect alone, due to ideological intransigence WAG missed an opportunity to lead Europe in noise control. The Gwyddgrug Initiative from the Wind Farm Noise Petition offered a cost nothing solution to the undoubted health issues. The new initiative is attached, it demonstrates that residents can enjoy rest and relaxation even while living too close to Wind Turbines. The developer would lose nothing, the consumer would lose nothing, and the local environmental health department would save millions in processing complaints and monitoring sites, which under the Initiative would fall to nothing. I have altered the Initiative slightly, because the only chance of an excellent idea not being binned by WAG, is to persuade OFGEM to take up the cause, and the alterations mean the Initiative can be brought into play by the National Grid without involving any outside agency.

With regard to the last paragraph of your letter, it says you only wish to make observation on those recommendations within your remit. To that end the list below shows some of the items raised by petitioners during the Moratorium on Wind Farms Petition (P-04-419). If you would be kind enough to pass any comments you may have to William Powell, Chair of the Petitions Committee.

List of unresolved NRW questions.

1. **2002/49/EC** This EU initiative ratified in 2002 has still not been enacted with respect to rural areas. We request a timetable for sound mapping methodology, and a programme for public Consultation.
2. **Chief Executive NRW** Claims wind power as a source of energy security. To maintain that security, based on the present TAN 8 programme, what replacement rate of turbines are NRW planning on over the next 100 years?
3. Have **NRW** any limit on wind turbine installations outside TAN8 areas?
4. Presuming **NRW** have a limit what is the total faceplate capacity of that limit?
5. What would the turbine replacement rate be for maintaining the faceplate capacity, (in 4 above), over a 100 year period.
6. What percentage of wind energy produced in Wales is for the home energy market?

7. **Disposal of Non Recyclable Parts** . Over the 100 year period, maintaining our energy security (in 2 above) a large amount of non recyclable materials will emanate from the scrap turbines, the main foreseeable problem will be disposal of the composite materials in the manufacture of turbine blades. Maintaining TAN 8 ambitions alone will generate around 1,000 tonnes of scrap blades annually. (A) Will the turbine blades be repatriated? (B) If the scrappage is to take place ‘in Wales’, what are the methods of cutting up and disposal?
8. **DECC** assert the need for a back up energy source to allow wind energy to be considered as a base load electricity provider. (A) What form of energy will provide the backup for the wind energy produced in Wales? (B) Where will the backup energy sources be sited. (C) How many jobs will be created in providing wind energy backup for the TAN 8 ambitions.
9. **Site Safety** many of the TAN 8 sites encompass rights of way in the forestry **NRW** have a duty of care to walkers and cyclists using these rights of way. Other **EU** member states impose safety restrictions on the general public approaching turbine, and ancillary equipment on wind farm sites. While **NRW** cannot abdicate its duty of care, according to the Minister for Housing and Regeneration, he prefers that the developer sets the rules. (A) Are **NRW** content to abdicate the responsibility? (B) How will **NRW** set any standard, considering that different developers are involved?
10. **Operational Safety** GALAR presented documentation to the Petitions Committee regarding our fears for the contamination of our agricultural lands, in the event of fire. Turbine fires, while infrequent, do happen, (as the insurance executive, quoted in our evidence confirmed). Because of the nature of the construction of wind turbines, they contain many contaminants which would harm, and if discovered in high enough concentrations preclude agricultural operations. While the developer covers the replacement of equipment in his insurance, there is no evidence that there is any cover for windblown contamination. As it would be impossible to allocate liability, between turbine and forest as to the causality do: (A) **NRW** and the developer have joint responsibility for contamination emanating from a development? (B) Neither **NRW**, nor the Developer accept liability for contamination emanating from a development? (C) If **NRW** and the developer jointly accept responsibility, what amount of compensation and specialist decontamination would be offered?
11. **Further to 10** above. While turbine fires may be rare, forest fire, whether accidental, or malicious, are common. Do **NRW** intend to legislate to control storage of turbine blades on site? Will any standards set for blade storage be applicable during commissioning and decommissioning of the turbines? What specialist equipment should County fire brigades hold to combat forest fires, involving Wind Farm developments?
12. Do **NRW** support the Minister for Housing and Regeneration assertion that there is an acceptable ‘kill’ level for bats and birds? Is this ‘kill’ level based on research undertaken by the WAG? Does the ‘kill’ level take into account the recently announced 60% reduction in flora and fauna in Wales? Are there any guidelines for local residents to preclude bird residence, (removal of nesting boxes etc); or to assess the problems which may be caused by modern turbines, (for example the tip speed of a modern turbine is 340Km/Hr or 208mph. While the swept area increases from 1963 sq. mts. on a traditional turbine to 6362 sq.mts. on a modern one).

We would be obliged if you can offer guidance on the above issues.

Yours Sincerely

James M Shepherd Foster

Lead Petitioner Moratorium on Wind Farms Petition (P-04-419)

Document 2 *Letter from Lead Petitioner on the “Moratorium on Wind Farms Petition”
to William Powell AM Chair of the Petitions Committee; and the Members of the
Petitions Committee.*

Dear William,

When I last wrote to the committee I was hopeful that we may be able to have a forum with interested stakeholders and **Natural Resources Wales** to discuss our very real concerns, and have expert input on the issues raised. In the reply from **Emyr Roberts**, there is obviously little hope of that; and indeed the previous replies from the ministers were equally unhelpful

However, as a matter of politeness, I attach my reply to **Emyr Roberts’s** letter of the 8th July 2013, (with my comments), and a list of the matters raised by the petition which we believe are within the remit of **Natural Resources Wales**; and a breakdown of our response to the **Minister for Housing and Regeneration** and **The Minister for Environment and Sustainable Development**.

The Petition

This petition was born from the frustration we felt at the evasion and lack of clarity in all matters relating to wind farms emanating from the offices of **WAG**, and intransigence in policy relating to renewable energy. This has been amply demonstrated in the ministers, and **Emyr Roberts** replies to this petition. The **WAG** either by accident, or design, have created a situation where the people of Wales come a very poor second to foreign investment exploiting our natural resources, despoiling our biodiversity and environment: and ultimately paid for by Welsh families, 30% of whom, I would remind you, are in fuel poverty.

Energy Security from Wind Energy.

Both the **Minister for Housing and Regeneration** and **The Minister for Environment and Sustainable Development** and **Emyr Roberts** all make reference to Renewable Energy in responses to this petition. This petition relates only to Wind Farms and Wind Energy. There is a case to be made that wind energy is the cuckoo in the nest of Renewable Energies, and because of the crippling subsidies paid to this industry, all others suffer by comparison. This petition is not about making that case. The Petitioners want clarity on wind policy, and how that policy will be carried forwards; and a reasonable degree of safety measures, so that the Wind Turbine has the least possible impact on Rural Areas. **Emyr Roberts** claims the **WAG** wind policy will provide future energy security, and I have asked him to consider a future of 100 years, or the life expectancy of a child born today. Whether he responds to that, from an appeal by petitioners is hard to say.

So that the petitions committee can have some idea as to our concerns, we have put forward our predictions for the future impact of the current wind energy policy being pursued by **WAG**.

The table below demonstrates how the **WAG** ambition for 2655MW (from the *The Welsh Assembly Government Energy Policy Statement* (2010) which is the basis of the present target), of wind generation plays out over that 100 year projection according to **GALAR**, the parameters used in the calculations are listed below the table. We have also included the **Arup TAN 8** ambitions of 2005, and **Garrad Hassan Report** figures as comparisons to show the exponential rise which future generations will have to bear.

Failure to Implement the Aarhus Convention, 2009/28/EC and 2002/49/EC

WAG has obligations to meet UK Government Energy targets as required by **DECC** although the **Minister for Housing and Regeneration** implies he also has **EU** commitments. We would be interested to learn how the negotiations with **DECC** required **Wales** to deliver far more wind farms per hectare, and far more wind power per capita than England, how we went from 1200MW under the original **TAN 8**, to 2655MW demanded by **DECC** in 2010. In addition, why **WAG** failed to secure control of all wind energy produced in **Wales**.

Last month the UK government were found guilty of a breach of article 7 of the **Aarhus Convention**, due to lack of adequate consultation. The EU directive ratified in 2009, (2009/28/EC), on which the UK commitment to renewable energy rests, also makes it incumbent on the member states to undertake public consultation, and consideration of the best sort of **Renewable Energy** available to a particular site. I live in **SSA G** where to date three wind farms are proposed, I have attended the consultation put on by the developers on all three sites at none of them has any alternative been offered or discussed. Claims for capacities have been made which have later in the process been withdrawn, incomplete EIA statements, the list is endless.

2002/49/EC was ratified in 2002, yet isn’t even mentioned in **TAN 8** (three years later), and still is not activated to this day. Yet it is key to the protection acoustic pollution in rural areas.

This cherry picking of directives and parts of directives; to circumvent the rationale behind those directives, is a national disgrace. Our commitments to **EU** and **The United Nations Economic Commission Europe** should be at the forefront of planning, and is the duty of the **WAG and CC's** to implement, not pass it to Developers who have only a profit motivation in any undertaking. Other normal routes of Government scrutiny do not operate in bringing these matters before the public. Organisations such as the **BBC** and the **IWA** are either complicit, or complacent, I know not which, but those people who have been denied a fair consultation are dismissed as Nimbies, and **WAG and DECC** ambitions go unchallenged. Local media are usually excellent in reflecting a balanced view, but it is local to the affected area. This is also a key reason for this petition, the petitioners are denied a fair hearing.

A Way Forward for Our Petition

Because **Wales** has yet to feature has a perpetrator of directive deceit does not mean it is innocent, far from it. Protest groups tend to have far more technical and practical knowledge, we tend to be weak on the political technicalities; this is a changing factor, we are slowly learning that the **EU** directives we have long thought were the enemy, are in actual fact our ally. Both the **EU** directives, and the **Aarhus Convention** have consultation at the heart of their legislation, and it is this full consultation which has been denied the people of **Wales**..

I have attached a sheet on the areas I believe have not been fully complied with, dating back to January 2003 when the rules on consultation became incumbent on the member states, and the adoption of the Aarhus convention into European Law in 1999.

I believe the **Petitions Committee** can help clear the bureaucratic intransigence that bedevils onshore wind power in Wales. At the moment **DEFRA** and **DECC** are having a symposium on energy, and this would be a time when our **AM's** should be doing the same. **WAG** has set an agenda for wind power capacity in **Wales**, the need for that programme, in both scope and effect needs to be fully explained and justified. The cost to **Welsh** people now, and the costs been handed on to their children needs full and open debate. **WAG** has to make a case based on fair and democratic consultation with the public through their **AM's**, **DECC** has to explain why this disproportionate demand on our environmental resources are necessary to electricity security.

I would ask the **Petitions Committee** to recommend to the **Assembly** that such a debate takes place to end the divisions within our country, and that we can go forward with **Renewable Energy Provisions** which reflect our ability to provide them in a sustainable way.

Yours Sincerely

James Shepherd Foster. Lead Petitioner: Moratorium on Wind Farms Petition.

Attached documents:

- 1) Our reply to Emyr Roberts
- 2) Our breakdown on the Ministers responses
- 3) Sheet on 2009/28/EC 2003/4/EC
- 4) Copy of updated Gwyddgrug Initiative to accompany reply to Emyr Roberts
- 5) Our Prediction of present and Future Impacts on the People of Wales follows on next page

[See Predictions table Overleaf](#)

Predictions Table Based on Criteria Listed Below Table

Calculations for:	Load Factor WAGI*	Number of Turbines to deliver WAGI	Number of Turbines Corrected to TF*	Turbine Lifespan	Average Turbines used per year over 100 years	Capability of Fossil Fuel Back up
2010 WAG Target of 2655MW	30%	1207	1376	17.9 years	77	
	20%	1605	1830	19.7 years	93	1730MW
Garrad Hassan 1666MW	30%	1110	1243	20.4 years	61	No imperative to 30% load factor
	20%	1477 (1110)	1653 (1243)	21.8years	76	900 MW
TAN 8 Targets as per Arup 1200MW	30%	1000	1090	24.8 years	44	No imperative to 30% load factor
	20%	1330	1450 (1090)	26.4 years	55	620 MW

Figures in red indicate actual predictive requirement to achieve targets set by the three Calculations

(Figures) in brackets only indicate number of turbines required to give a 30% load factor. There was no imperative for this in either Garrad Hassan or the original TAN 8 document.

Calculations for: The three sets of figures refer to targets set by Ministerial Statement in 2010 and the Garrad Hassan review, which increased the TAN 8 original targets, (see table below).

***Load Factor WAGI:** The Ministerial Review in 2010 also gave a 30% load factor to onshore turbines. Previously only a indicative faceplate capacity, dependant on turbine size and design was employed. Once a Load factor is applied it indicates an actual electrical output. We call this the **Welsh Assembly Government Imperative (WAGI)**. Of course wind harvest affects this number, in fact 2010 itself had a very poor harvest in the low 20's. However, if you have a target electrical output you are committed to meeting, then you can only increase the number of turbines. We have based the worst case scenario on a load factor of 20%.

Number of Turbines to deliver WAGI: The number of turbines are based on an average 2.2MW turbine. Of course larger turbines have been mooted in some areas, but in practise the face plate capacity is sometimes dropped after initial indications of higher values. For example **Brechfa East** promised 3.7MW at the planning stage, but now are reducing these to 2.2 to 2.5MW in the application. This will require 6 to 8 more turbines on SSA G to meet the **WAGI**.

***Number of Turbines Corrected to TF** TF or turbine factor is a % figure to compensate for turbine commissioning and decommissioning, downtime and the fact that all turbines lose some performance towards the end of their life. These extra turbines will compensate in producing the **WAGI**.

Turbine Lifespan : The wind industry claim 20 to 25 years. The Renewable Energy Foundation have recently produced figures suggesting this is much less. Climate exposure, faceplate size and operational hours are critical to both estimates. For example, if OFGEM decide that the wind industry should provide a reduced rate during off peak times, (like fossil fuel energy), switching turbines off to meet this will significantly improve the lifespan. The physical size of the turbines give much larger stress moments on high face plate capacities.

Average Turbines per year for a Hundred years: This assumes turbines are replaced when performance falls. If the developer replaces a complete wind farm when a few turbines start to lose performance, this figure will be higher.

Capability of Fossil Fuel Back Up: If wind is to be considered as a base load supply, then it requires a dedicated back up. Either coal or gas. Coal can be more flexible, but the CO2 emissions are more than for the less flexible gas. There is an allowance in that assumes wind will never reach zero, or if it does there would be enough flexibility in other base loads to accommodate this.

See Garrad Hassan table on next page

Table 1. Energy Yields (GH estimates) Strategic Search Area	Rated Capacity Output (MW) Draft TAN 8	Rated Capacity Output A (MW) Garrad Hassan Report
A	200	212
B	200	430
C	100	98
D	100	212
E	100	152
F	350	430
G	150	132
Total	1200	1666

Please note that Garrad Hassan worked on a 700metre separation distance, which is why some areas were reviewed downwards.

The New Gwyddgrug Initiative

Short Form

J.M. Shepherd Foster

7/17/2013

The new Gwyddgrug Initiative is similar in most respects to the Initiative put forward as part of the Wind Turbine Noise Petition submitted to, and rejected by the Welsh Assembly Government. Please read this document with Gwyddgrug Initiative Figures A&B

In a similar manner to its predecessor the Initiative is aimed to give respite from noise to people living near turbines; to operate in a cost neutral manner to the consumer, and to be cost neutral to the developer. The full list of beneficiaries are listed below.

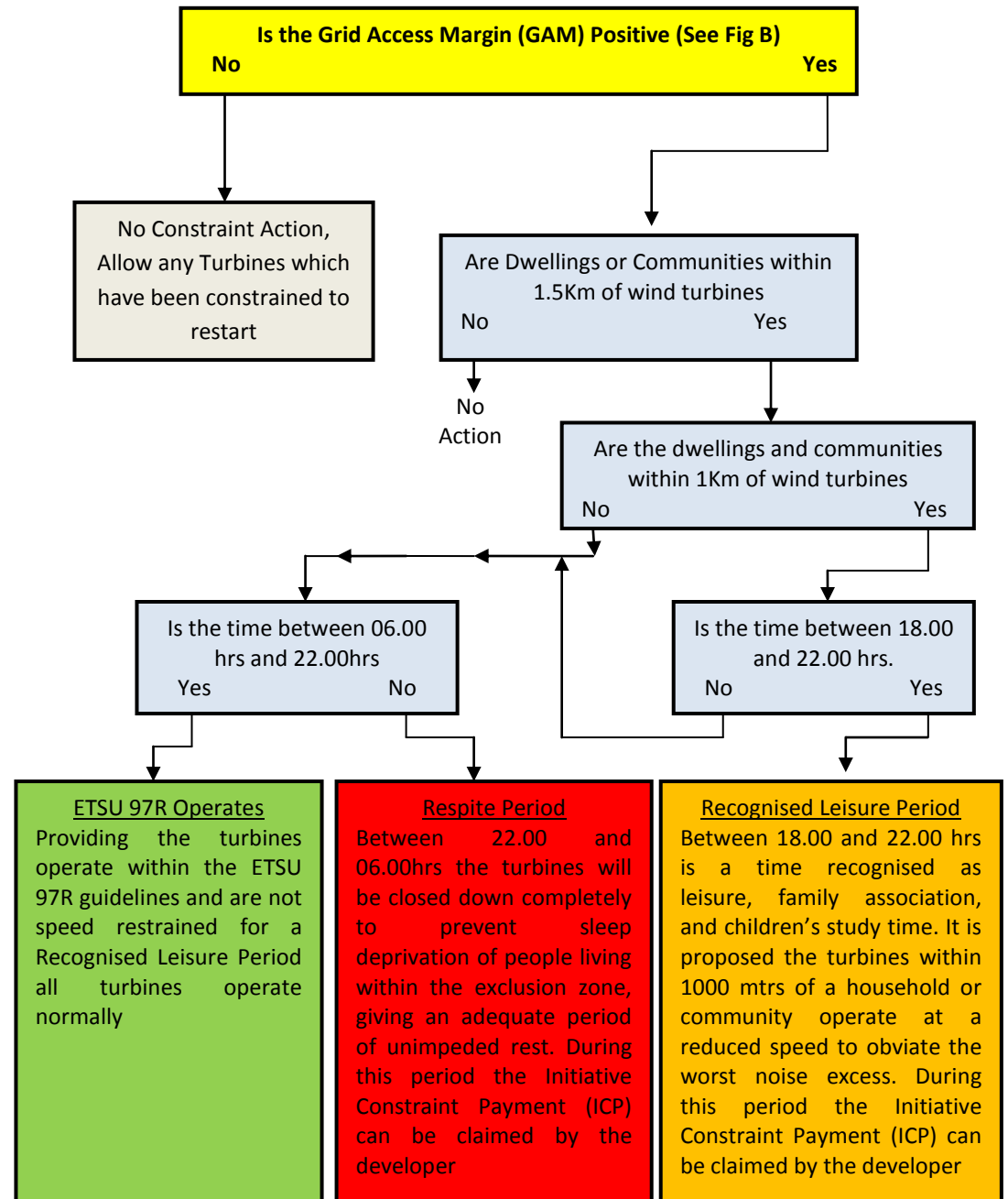
Under normal operation there is plenty of energy available in off peak times and the Grid operates with a safety margin of oversupply. If this margin is too great for the grid to handle then the supply side, (Nuclear, Fossil fuel and off peak renewable), are paid to constrain supply. Conversely, if the supply falls below demand the supply side is paid to increase supply. The GAM is the area consumers pay for, but don't use, it is a margin which ensures the lights don't go out due to under supply and monitored to ensure the grid is undamaged by oversupply.

When Turbines are constrained, under the initiative, they are able to claim restraint, (Initiative Constraint Payment IPC) to the value of the energy they would have produced unrestrained. Therefore, in GAM positive territory, if the constraint payment is equal to the energy the consumer would have paid for anyway, then both the consumer and the developer have a cost neutral system, and the grid will be a little more efficient for the removal of the energy. If GAM is negative the people of Gwyddgrug accepted that the grids needs should be addressed first.

In the original initiative the Recognised Leisure Period was monitored and controlled by listening stations. The new initiative says if GAM is positive then Turbines within 1Km. of dwellings will be speed restricted to 3RPM below design speed. This will take all site work and costs out of the system and the Initiative will be cost neutral as well, in that it is only a executive decision to enact all parts.

Beneficiaries

- 1} **Dwellings and communities** within 1.5 Km of Wind Turbines.
- 2} **Wind Farm Developers**; because Turbines are lifetime related to operating hours, restriction of operation while being recompensed, means life extension of the Turbine at zero cost, and the opportunity to earn generation costs over a much longer period. This bonus can be up to 50% of generation and renewal costs. The initiative does not seek to claw back any of this bonus, because we wish it to be able to be applied retrospectively to existing wind farms. With developments not yet built it would be up to DECC to provide an equitable settlement.
- 3} **Local Council Environmental Health Departments**. Most complaints relate to times outside office hours. With the Initiative only ETSU 97R operates, and only in the twelve hours between 06.00 and 18.00 Hrs. Monitoring, if required will fit within rural Environmental Health Officers normal operations.
- 4} **Housing Market**. Noise will be less of a negative issue on house prices.
- 5} **Nocturnal Birds and Mammals**
- 6} **Reduces** likelihood of oversupply constraint payments.
- 7} **Green Groups** a more efficient_grid is a prime green objective



Gwyddgrug Initiative Figure A

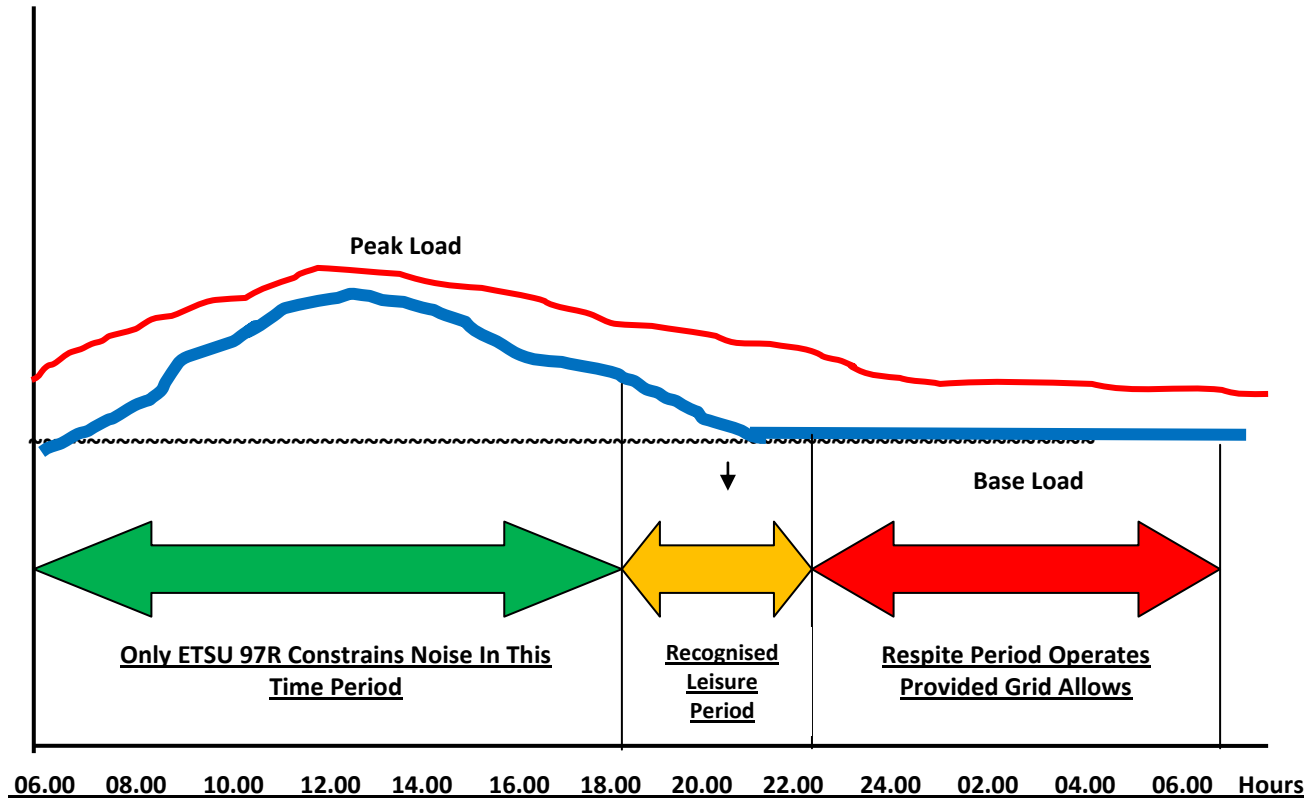


Fig. A Representation of 24 Hour Grid Cycle As Applied to the Gwyddgrug Initiative

— Thick blue line represents the actual grid demand line on which the National Grid controls the supply side,(supply side are generators i.e fossil fuel, nuclear, wind).

— Red line represents “full grid” or supply side restraint limit. This is very flexible, and in practise a comfortable position is 20% over peak. It is also the reason off peak electricity is supplied heavily discounted, (i.e to avoid constraint payments to supply side, and utilise overproduction).

↔ Symbols show World Health Organisation (WHO) and European Noise Directive (END) time period definitions.

Gwyddgrug Initiative Fig B

Red line represents “full grid” or supply side restraint limit. At this point grid has to request supply side to reduce output

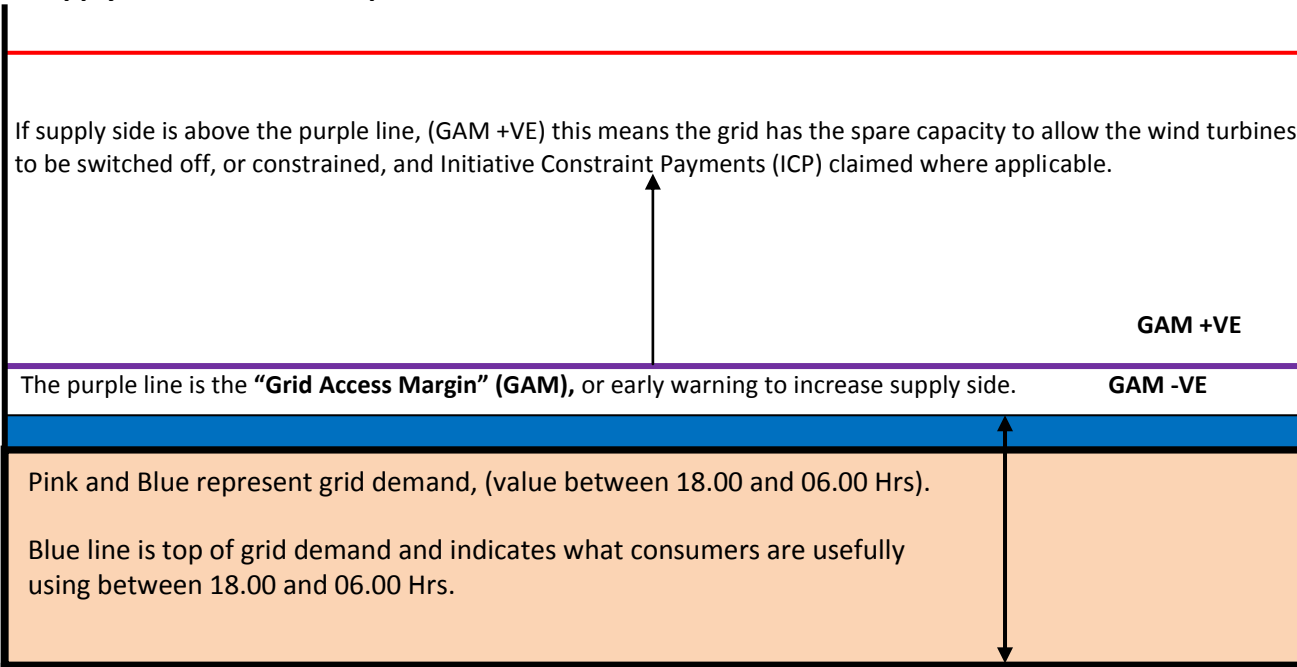


Fig B Shows a snapshot of grid demand during restraint periods and how GAM will allow noise restraint when positive, but override restraint when GAM is negative.

DOCUMENT 4

Wind Farm Moratorium Petition. References to EU legislation we have been denied through 'cherry picking'

We believe that the references below point to the fact that we have not had a full and adequate consultation in SSA G, on the Wind Farms known as Brechfa West, Brechfa East, and Bryn Llywelyn. Bryn Llywelyn is in appeal, Brechfa West has been approved, but we feel the old IPC failed to provide adequate consultation and the approval should be set aside. Brechfa East is yet to go before CCC planning, but is imminent.

I don't know enough about the other SSA's to comment on the quality of consultation, and whether it conformed to the Aarhus convention, but the local AM's, if informed of the requirements incumbent on the IPC WAG and affected CC's would comment better than I.

Indeed the legality of TAN 8 itself would seem to be on very shaky ground. The SSA's were ring fenced for wind turbine developments, and Arup advised WAG on the areas selected, but there was no consultation on what promise to be the seven biggest wind farms in Europe. That is no Wales wide Consultation and explanation of public participation, nor was there local consultation. The first reference is based on 2009/28/EC and the second reference is from 2003/4/EC, which predates TAN 8 by 2 years, and relates to the signing of the Aarhus convention in 1998. A full seven years before TAN 8. TAN 8 itself makes no reference to the directives, neither in 2005, nor at subsequent reviews. The third reference is to 2002/49/EC and points out the EC's demand for public consultation on matters relating to the European Noise Directive, which we have asked Emyr Roberts to give us an implementation programme.

2009/28/EC

(90) The implementation of this Directive should reflect, where relevant, the provisions of the Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, in particular as implemented through Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information(1)

OJ L 41, 14.2.2003, p. 26..

2003/4/EC

(5) On 25 June 1998 the European Community signed the UN/ECE Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters ('the Aarhus Convention'). Provisions of Community law must be consistent with that Convention with a view to its conclusion by the European Community.

Public Consultation European Noise Directive

Article 3 Definitions 2002/49/EC

(v) 'the public' shall mean one or more natural or legal persons and, in accordance with national legislation or practice, their associations, organisations or groups.

Document 5 *Galar ecology volunteer*
group

Questions Arising from Ministers Responses to Wind Farm Moratorium
Petition P 04 419

Minister for Environment and Sustainable Development 21 Nov. 2012 Ref P 04 419

Minister for Housing and Regeneration 15th May 2013 Ref P 04 419

We would like to thank the Ministers for their response and ask them to look at the questions arising from their replies:

Question 1

Minister E S and D wrote:

Local planning authorities consider onshore proposals up to 50MW under Town and Country Planning legislation. Applications over 50MW are not devolved and are processed by the National Infrastructure Directorate, within the Planning Inspectorate, and decisions on such schemes in Wales are taken by UK Ministers.

The current energy ambition of the WAG is 2655MW installed plate capacity, What part of that lies with the NID, and who is responsible in ensuring consultation with the public on renewable energy, as defined by EU directive 2009/28/EC 2003/4/EC and the Aarhus Convention signed on the 28th.June 1998 between the UN and ECE? On projects below 50MW who is responsible for consultation with the public. WAG or the CC's?

Question 2

Minister for E S &D wrote:

The Welsh Government accepts that the introduction of new, often very large, structures into the open countryside needs careful consideration to minimise the impact on the environment and local communities. However, the need for wind turbines is established through a global environmental imperative and is a key part of meeting the Welsh Government's renewable energy production aspiration and UK and European targets on renewable energy.

Following the Ministerial Statement of 2010, why were the LANDMAP protection in the SSA's abandoned by WAG? Why were the capacities set by Arup and Garrad Hassan in 2005 abandoned? Why was the WAG aspiration on Wind Power raised from 1666MW to 2655MW? What public consultation, as required by EU directive, was undertaken in that increase of 160%? Does Wales have a separate European target than the rest of the UK, and if not where can we see the records of the negotiation for the 160% increase, with the UK government by WAG?

Question 3

Minister for E S & D wrote:

The public, and other relevant stakeholders, have the opportunity to be involved in the preparation of Local Development Plans and as such can have a say in the future development and use of land in their area. The views of the local community should also be taken into account in the decision-making process. It is however for the local planning authority, taking into account any relevant views on planning matters, to determine the planning application on its planning merits.

In practise do not LDP's have to be approved by WAG and central planning? What appeals procedure is in place, when WAG are disinclined to accept LDP's? In your sentence "**The views of the local community should also be taken into account in the decision making process**", does this include the public's rights under the EU and Aarhus convention, and is the Minister certain that these WAG obligations are fully enacted with respect to all wind installations below 50MW in Wales?

The part sentence "**taking into account any relevant views on planning matters**" seems to have some hidden meaning, which we are unable to determine. Do not the public have a right to examine all the planning imperatives, emanating from the local planning office and central planning through WAG?

All developments under consideration by local planning are 50MW or less, which is 0.02% of WAG's stated ambition, most of those applications amount to 0.00002 of WAG's stated ambition. Cannot it be left completely to the discretion of local planners and planning rules on these piffling amounts?

If a publicly elected CC turns down a 50MW or less application on it not being either Environmentally or Sustainably within the interests of the community those CC's represent, isn't it your job to endorse that decision and oppose any reapplication? Should not any reapplication be subject to Aarhus and EC 2003/4/EC being reapplied so the council and WAG are fully aware of the public's position?

WAG is a fully committed member of the EU, you must therefore be less than pleased that it appears to the petitioners that WAG is deliberately ignoring some sections of EU directives to drive forward a political programme of supplying more than Wales's fair share of the UK's European commitment. Can you assure us this is not the case? The directives recognised in this petition all relate to your ministry, can we expect early progress in their recognition and application in all parts of Wales?

Minister for Housing and Regeneration 15th May 2013 Ref P 04 419

The minister for H & R wrote:

Health and Safety in Construction and Design of Wind Turbines

Incidents involving turbines are rare. The risks posed by wind turbines can and should be managed by their operators so that neither the workers involved in building or running them, nor members of the public, are harmed or put at risk of harm.

Separation distances, between turbines and other land uses (such as buildings, roads and railways), are considered within the planning and consenting process in order to ensure safety. The distance between wind turbines and buildings required, on the basis of expected noise levels and visual impact, will often be greater than that necessary to meet safety requirements.

Where appropriate, the Health and Safety Executive or the relevant local planning authority, depending on the particular circumstances, would be responsible for investigating incidents involving wind turbines.

We would agree incidents involving turbines are rare, as are ships striking icebergs, but when they occur the lessons gained should feed into the safety procedure. We have no problem with the industry setting a code of conduct in respect of construction, operation, public access and decommissioning; providing that code of

conduct is a written document being approved and endorsed by the Minister and the Health and Safety Executive, and available to the public. Is such a document in existence? Does it cover small turbines, some of which are mounted on school property, and comprise the large majority of turbine incidents?

Because many windfarms impact with public rights of way it is important to establish access after the turbines have been installed, yet there is no common consensus as to the closeness of access. Obviously the general public cannot be expected to provide hardhats and ear defenders, common to construction workers, but why isn't a common policy in place, as it is in other EU countries?

In respect of fire, we are only concerned in agricultural land contamination. Agriculture is the prime industry and employer in rural areas. In the cases of fire we have studied, it is apparent that the developer is insured for damage to their property, but it is less clear that surrounding land, contaminated by pollutants from such fires have any automatic recourse to compensation by the developer. The standard fire fighting procedure is to allow the turbine to 'burn out', with all the potential to pollute surrounding areas. Our similar concerns for the very flammable turbine blades which may be stored on the site, polluting our farm land. As clean up can cost several million pounds, who would pay?

Question 2

The Minister wrote:

Landscape and visual impacts are considered within the planning and consenting process. Wind turbines should be sited and designed so that adverse effects on landscape and visual amenity are minimised and the special qualities of designated areas are protected. Wind farm applications will usually require an Environmental Impact Assessment (EIA). EIA is a means of drawing together an assessment of a project's likely significant environmental effects, including its impact on the landscape.

TAN 8: Planning for Renewable Energy seeks to minimise the affect across Wales of large scale renewable energy developments by identifying 7 Strategic Search Areas (SSAs). The SSAs are considered most suitable in terms of environment, technical issues and grid network. This approach seeks to safeguard our most important environmental priorities and minimise the associated grid lines required to meet our obligations under European and UK law.

Why, when later in your letter, you are of the opinion that wind turbines do not affect tourism, WAG continues turbine concentration in the seven SSA's, when for example the Brecon Beacons are far better placed, both in wind resource, and grid lines feeding Cardiff and Newport and England?

Why was there no Public Consultation when the seven SSA's were recognised, with people local to those areas? The Aarhus Convention, ratified in 1998, before the WAG came into being, EU/2003/4/EC ratified two years before TAN 8 all point to a consultation procedure which WAG ignored?

Why was there no public consultation when the Ministerial announcement in 2010 meant abandoning LANDMAP and other protections advised by Arup and Garrad Hassan in 2005?

The seven SSA's seek to disadvantage one area of the country, against another, and adopting a policy which means Wales has adopted wind energy targets far in excess of the rest of the UK either judged per capita, or per hectare the WAG must be very confident that England will continue to subsidise the industry. What grounds have you for this confidence?

Question 3

The Minister wrote:

Ecology and biodiversity impacts of wind farms are considered as part of the planning and consenting process. Planning Policy Wales (edition 5, November 2012) supported by TAN 5: Nature Conservation and Planning provides advice on protecting and enhancing biodiversity and geological conservation. Policy guidance is given for local planning authorities in considering any development proposal on how to consider environmental impact, so as to avoid, wherever possible, adverse effects on the environment. In addition, TAN 8 addresses the potential impact of wind turbines moving blades upon birds and bats. This issue is a common concern but, in most cases, will not lead to significant numbers of bird and bat deaths or injuries.

Wind farm applications will usually require an EIA; which assesses the effect of developments on the environment. In addition, developers should follow the industry's Best Practice Guidelines and work closely with organisations, such as Natural Resources Wales and the RSPB, to ensure that wind farm design and layout does not interfere with sensitive species or wildlife designated sites.

In 2011 the Welsh Government published "Practice Guidance: Planning Implications of Renewable and Low Carbon Energy" as a tool to support Local Planning Authorities in dealing with applications for renewable and low carbon energy development, including wind farms. This provides advice on what mitigation measures can be incorporated into the design of wind turbines and wind farms to mitigate potential impacts on local ecology.

Is there any plans to review your policy in view of the announcement that Wales has lost over 60% of its biodiversity, and many plants, mammals and birds are under threat, and that neither you're present policy, nor that of the RSPB looks to mitigate against climate change?

I have read in detail the EIA's in respect of SSA G and find them nothing more than a self justification for whichever wind farm they are seeking planning on. If these are powerful and well thought documents, why are they not endorsed by WAG?

The images produced to indicate the visual impact of a development bear little resemblance to the finished development; technically far better representations are possible. Why don't WAG endorse these representations, after all local planners use them as their only indication of the visual impact of a development?

We have studied "Practice Guidance: Planning Implications of Renewable and Low Carbon Energy".

We would ask the following:

Why does wind energy stand alone as the only Renewable with a target?

Many statements in the guide are so positive to wind energy, it could have been written by Renewables UK themselves. Why was it felt necessary to include them?

Examples *For a typical upland site in the UK, a turbine is likely to be operational for around 70-85% of the time.* This implies a load factor only slightly less than a nuclear power station, and is one of the requests of this petition that cut in speeds are increased to stop turbine wear and protect animal life, as applies in many US states. The 30% load factor the guide claims Welsh Turbines achieve is also higher than the annual load factor available in Wales. In fact the majority of Welsh onshore turbines are described as underperforming.

2 *Power is a function of the wind speed raised to the power of three, so if the wind speed doubles then the power will increase by a factor of eight.* How true, but as the wind speed halves the opposite is true, would this were understood. Even children who have been instructed in turbine technology think that if the design speed of a turbine is 20RPM then 10RPM gives you half the output.

Why is there no mention of a back up energy source, which allows Wind to be regarded as a base load supply, by DECC and every major EU economy?

The Minister wrote on noise, we have concluded that any fair and considered judgement on noise is better pursued with DEFRA and OFGEM.

The Minister wrote:

National Planning Policy, and EIA Regulations, identify that any proposal for a wind farm development needs to consider potential impacts upon both hydrology and hydrogeology, and, where necessary, provide appropriate mitigation.

The Welsh Government's "Practice Guidance: Planning Implications of Renewable and Low Carbon Energy" provides advice on what mitigation measures can be incorporated into the design to minimise flood risk and surface water runoff.

Changes to planning policy are based upon clear and substantiated evidence, and my officials keep a watching overview for the need to revise planning policy. In terms of the preferred advice set out by Galar it is not clear what evidence underpins their figures.

National Planning Policy, in relation to protection of groundwater and flood risk, is robust and it is not proposed to endorse the recommendations put forward by Galar.

Comment:

In a country with so many domestic properties at risk of flooding we find this a very complacent attitude. The Meteorological Office tell us four out of the five wettest years since records began in 1910 have occurred since 2000. They also predict that climate warming will increase the potential for water vapour in the atmosphere, (the most potent greenhouse gas), and hence the likelihood of further record years. While "*Practice Guidance: Planning Implications of Renewable and Low Carbon Energy*". appear to dispute this in their assessment; on balance I think the Meteorological Office are more likely to be correct. Therefore, if we do not use the chance of mitigating against flood risk, while the heavy machinery is in place during wind farm developments; and if the developers are excused the responsibilities of making a real difference and complying with Technical Advice Notes to improve the situation on our mountains, then I think this is an abdication of responsibility of WAG.

Question 4

The minister wrote:

TAN 8 provides an appropriate framework for the strategic planning of all forms of renewable energy in Wales. The Welsh Government has no intention, at the present time, to undertake a wholesale review of TAN 8.

In addition, it is for local planning authorities to set out local criteria, against which smaller scale renewable energy proposals outside of Strategic Search Areas will be evaluated, in their development plans. We have prepared a Toolkit 'Planning for Renewable and Low Carbon Energy – A Toolkit for Planners' to assist local planning authorities produce renewable energy assessments in support of their local development plans. The Toolkit offers a possible methodology which enables local authorities to develop a robust evidence base to assess the potential renewable and low carbon energy generation. The information can underpin renewable energy and low carbon energy policies in local planning authority's local development plan.

Why did WAG review TAN 8 twice, and by demanding Wales provide by far the biggest wind energy programme per capita and per land space available in the entire EU, set county against county in Wales?

The WAG has been under the control of the same political party since devolution, what happened in 2010 which caused them to abandon the work of Arup and Garrad Hassan, for a target which was already higher than the rest of the UK? What public demand was there for this?

Do you accept WAG has responsibilities in endorsing and enacting Aarhus and the other EU legislation on consultancy with the public?

We noticed in your guide "*Practise Guidance: Planning Implications of Renewable and Low Carbon Energy*". that public consultation only appears once in the whole guide, and that's regarding TAN22. Why are planners not encouraged to consult the public, who have a statutory right under EU directives?

Question 5

The Minister wrote:

Community Benefit

We are currently working with the onshore wind industry to increase levels of Welsh investment and we will set expectations for economic and community benefit. We have agreed the broad principles under which onshore wind community benefits should be operated within Wales and an analysis of current community support arrangements is taking place. The Welsh Government and wind developers are currently participating in workshops to develop more detailed arrangements.

The Petition specifically asked that Community Benefit be examined by a cross party committee as increases have to be met by the Welsh public, through their electricity bills. We specifically asked that wind farm landlords and DECC should supply the substantial increases needed to offset the losses to people living in and around the TAN 8 SSA's. As the Minister represents WAG, and the onshore wind industry represents their shareholders, both recipients of the subsidies provided by the Welsh public, we feel they will not be inclined to improve the benefit in any meaningful amounts. Why can't this matter be examined by AM's who represent those paying the benefit? How do wind farm benefits compare with other community benefits from other energy sources?

Question 6

The Minister wrote:

Tourism

A diverse range of factors influence the tourism industry. There is no concrete evidence to suggest that wind farms damage tourism. Although inconclusive, previous research carried out into the impact of wind farms on tourism in Wales has indicated that, for the majority of visitors, the existence of wind farms in the countryside does not have a major impact. Studies carried out elsewhere indicate that the impact of wind farms on tourism is minimal and, if they are properly designed and sensitively laid out, there is no reason to believe that renewable energy targets and tourism are incompatible.

Tourism is our second largest industry; if wind farms have no effect on tourists, why can't wind farms be shared out more equitably around the land available?

In Spanish studies it has been found the biggest factor affecting tourism was the amount of holidays affected by the construction industry. As the WAG ambition for wind energy will require servicing, and wind turbines are short lived consumables, there is unlikely to be a year in the next hundred years when seventy to a hundred turbine installations are not taking place, and due to our climate we haven't

the option of moving construction from the holiday season. Have WAG any studies which look at the effects of holidays affected by construction and heavy vehicular traffic?

In inland Spain and Greece many people feel their tourist share is affected by wind turbines. This is mainly because many people resent the massive subsidies enjoyed by the wind companies in times of economic hardship, how will we overcome the negative feelings of tourists?