Environment and Sustainability Committee

Inquiry into Energy Policy and Planning in Wales EPP 123 – Brett Kibble

RESPONSE TO THE ENVIRONMENT AND SUSTAINABILITY COMMITTEE ON ENERGY AND PLANNING IN WALES

POLICY CONTEXT

The Welsh energy policy and the relationship with the U.K. government energy policy is critical to the success or otherwise of the policy. First of all the legitimacy of a Welsh Energy Policy must be identified as it is not at present a policy area that the WG has devolved to it. It is important to identify the proper role that the WG should be pursuing within its powers and ensure it is not using land use planning policy to implement an energy policy through the back door. Such a method undermines both legitimate land use planning and energy policies and leads to irresolvable squabbling between the WG and Westminster. This is NOT putting the WG in a good light with anybody.

The WG should work **with** Westminster to develop a truly realistic energy production and consumption policy that is fully integrated with UK policies. This should lead to a much more realistic set of energy production targets that would not destabilise the National Grid of which Wales has to be part. The present WG aim of producing 200% of its energy consumption from renewables is obviously unrealistic and is leading to the massive distortion against full socio-economic issues in Wales. The alienation of the Welsh population can only increase as the cost to the consumer, including those in fuel poverty, continues to increase dramatically through the ROC payments and the WG is seen to be milking the subsidies through its Forestry Commission Wind Farm Plan (60% of the SSA land is owned by the FC).

A realistic energy policy would lead to buy in from the Welsh nation and the UK government as long as meaningful and responsive consultation is carried out . The land use policies to support that could then be worked up and again properly consulted. Again this should lead to buy in compared to the reverse process that was carried out with TAN 8. This must now be one of the most recognised and vilified 'technical type' documents ever produced. To have a windfarm consultancy firm devise a renewable energy strategy hidden in a land use planning 'technical document' is bound to lead to a one sided outcome. The vilification of that by the population is not surprising especially when the incredible damage it will cause to all socio-economic and amenity issues become clear as it did in Mid Wales this year. The paltry amount of energy produced by the on shore windfarm schemes only then increases the injustice felt by the population. I give below the main features of the present system which lead to the distrust and negative effects felt by all and would be pleased to give verbal and/or further written evidence to the committee if desired.

The following is all based upon reports commissioned by WAG and County Councils throughout the TAN 8 process and is, as much as is possible, based upon fact rather than opinion.

ENERGY POLICY AND TARGETS

The WG energy policy and targets are predicated upon 'Wales having an abundant source of wind'. Although subjectively that may seem to be the case the actual wind maps of the UK show that Wales is not special at all, and has

lower wind speeds than most of Scotland and Ireland and no better than East Anglia. The result of this is that taking the proper (see below) figures from the Garrad Hassan report the total capacity of all the SSAs should be well below 700 MW. To obtain the actual average output from this capacity over a year this capacity has to be multiplied by a Load Factor which because of the poor wind performance in Wales has a rolling average figure of about 23%. Thus if we take 600MW and multiply it by 23% we get an average output of 138MW. This amount of power output in generating terms is miniscule and is equivalent to 7.6% of the output of the new gas fired power station being built in Pembrokeshire and about 2.5 % of the WG renewable energy target. It appears impossible to justify the devastation that the TAN 8 on- shore wind policies will visit on Wales for such a miniscule benefit.

ASSUMPTIONS OF DAMAGE TO WALES BUILT INTO TAN 8

I fear that the population of Wales, their representatives in both AMs and local councillors and major decision makers have very little idea of the damage to Wales' incredible scenery (let alone the social issues) that is assumed in the TAN 8 and the associated PPW 12 documents. Only by studying the various Arup and Garrad Hassan reports, available on the WG and council websites, does the almost incredible destruction become obvious. I will try and give an oversight here using quotes from these documents. I have further papers based on those documents if the Committee would wish to view.

First of all the brief to Arup which can be gleaned from their Final Report of 2004 regarding drawing up the draft SSAs led them to say 'Adopting an 'environmental capacity' approach to planning of onshore wind in Wales, whereby no material environmental assets were to be compromised, would be unlikely to lead to the delivery of the national targets for renewable energy production'. This is strengthened by the actual WAG requirement in the brief for drawing up the draft SSAs – 'This study will exclude non-statutory environmental constraints/factors such as landscape capacity and sensitivity, historic landscapes, National Trails, and consideration of landscape quality and character using LANDMAP in the initial identification of SSAs. These will be tested in due course via consultation on the outputs of the work'.

Although Arup did do some landscape work, as can be seen from the end of their report, this was **not** used to inform the draft SSA areas but only to see if they could rank which SSAs should be developed first. They came to the conclusion that each SSA was seriously affected but in different ways (see their table 6.1) and therefore there was no priority and every SSA was needed quickly to satisfy the target.

It does appear a positively negligent policy to particularly exclude such important issues when drawing up a major strategy on land use and 'hope' that they will appear in their correct form from the consultation responses.

However, that is what happened and the draft TAN 8 and MIPPS were issued for consultation to likely interested parties and I presume placed on the WAG website. No displays or consultation 'roadshows' were put on as far as I know (although these were recommended by Arup). This is quite unbelievable considering the scale of the land use strategy being drawn up and the effect upon so many lives. On asking 2000 concerned people at a meeting in Welshpool as to whether they had known of this consultation only three people answered yes and

they had been informed as part of an interested party notification. Thus *the* consultation was not fit for purpose.

WAG did do an 'analysis' of the responses and that is available on their site but quite difficult to find. WAG also engaged Arup again to draw up a way of dealing with the

responses and their method is spelt out in their Final Report of 2005 which is available on the WG site.

Both documents say that landscape and environmental issues were of great importance to consultees but you will see from reading both reports virtually no change was made to the MIPPs, TAN 8 and the strategic search areas. Arup did however have to change the areas to take account of rather a lot of settlements they had missed and remove any buffer zones by National Parks.

Arup report 'The issues (landscape and cumulative effect) cannot be addressed satisfactorily at the all-Wales level with current data availability, resources and assessment tools.' They therefore devised the Annex D (or refinement process) to be carried out by local councils which were lucky to be allocated SSAs in order for them to look at all the landscape and environmental issues. Their report details how each 'problem' raised by consultees is steered into the refinement process.

Thus the local authority Refinement Report is absolutely crucial if any landscape and environmental safeguards are to be implemented to balance the capacity targets

REFINEMENT EXERCISES (ANNEX D PROCESS)

After the issue of TAN 8 all the local authorities employed Arup (with White as sub consultant) to undertake their refinement exercises. Most of these are freely available on the web and all of them have the following quote from Arup who designed the SSAs. 'Practically much of the land within and in the immediate surrounds of the SSAs *lacks the features which would render it suitable for hosting large scale onshore windfarms*'. This emphasises again how important these exercises were if we were not to have windfarms proposed in highly unsuitable areas.

The refinement exercises were massive undertakings but although they were predominantly about landscape and environmental issues there was according to Arup *no dialogue* with CCW. This appears to be a serious omission.

In order for the due process as envisaged by TAN 8 to be carried out these refinement exercises then had to be adopted as some sort of interim planning guidance (an IDCG, IPG or SPG) otherwise there would be no suitable policy against which windfarm applications could be judged at local level. The danger of this was spelt out by Arup.

The attempts at trying to implement these interim documents has been nothing short of disastrous. Investigation has shown the following results:

- Some authorities didn't appear to understand the importance of these documents and just filed them in case they needed them for future guidance.
- Some authorities put them in place in a draft form but then later withdrew them when the Wern Ddu appeal judgement rubbished the Denbighshire

- interim guidance. This meant they reverted to the very sparse basic TAN 8 document and original SSAs.
- Powys C.C in particular tried hard to implement an IDCG after doing two exercises but at public consultation were severely challenged by CCW because they had not carried out a Strategic Environmental Assessment (SEA). According to a communication from Powys this was difficult as the higher level document i.e. TAN 8 had not had an SEA and therefore no further work was valid on the IDCG. It has therefore been implemented as the draft with I presume no alterations due to the public consultation. It is likely that this would not stand up very well at appeal!

It is worth pointing out that at the Wern Ddu appeal where the inspector was very critical of the way the refinement exercise was carried out and possibly of its methodology as well, the council's case against the development was put by the personnel from Arup and White who had devised the Annex D process for WAG and then carried them out for every County Council. Therefore WAG have devised a process through their consultants that has then been imposed upon the County Councils and who using their best endeavours by employing those consultants to implement it cannot succeed due to challenges by WAG's own CCW and Appeal Inspectors. You couldn't dream it up if you tried! Of course it is the landscape and ecology of Wales and the amenity of its residents that will suffer grievously.

To get an idea of the destruction, even if only the refined areas in the SSAs were used (they are 50% or less of the SSA areas), I will give some relevant quotes from the Arup White refinement exercises.

On using land for windfarms classified as **exceptiona**l by the CCW Landmap process: 'They are essential to the delivery of a meaningful sized SSA boundary and this is a consequence of the national TAN 8 process'. This is despite such land being of national or international importance and equivalent or better than a National Park.

In the Brechfa Forest SSA all the area is of high landscape classification. As well, we have the quote: 'Zones G 5,6&7 have an outstanding Value under Habitats Landmap aspect but this in itself is not considered sufficient to render these zones unacceptable (i.e. for development) in landscape and visual terms'.

On SSAs close to urban areas: '0.5 million people live within or close to SSAs E&F. In identifying the refined SSA boundaries it is accepted that significant change in the landscape will impact on many communities'.

60% of the total SSA area is Forestry Commission land but Arup say: 'The Forestry Commission has a duty to have regard to the national interests in maintaining and expanding the forestry resource of Wales and extensive deforestation could be in breach of its legal duties'.

On a particularly valued viewpoint: 'Plunlumon is a significant mountain setting. Views from the summit have been explicitly considered as part of the study (including a site visit). However the decision has been taken not to introduce the mountain into the visual analysis as a specific receptor. This would be inconsistent with the approach taken in other similar studies and would distort the quantitative analysis'. Plunlumon will be surrounded by proposed windfarms.

And in a similar theme in the Brechfa Forest: 'The views from Mynydd Llanllini to the Brecon Beacons are regarded as important and indeed mentioned in the visual and sensory aspect assessment. Wind turbines in zone 10 & 11 would significantly interfere with those views. Nevertheless 10 & 11 make a significant contribution to the SSA in terms of development potential.' Needless to say they stayed in the refined area!

On National Parks: 'The Snowdonia National Park is adjacent to the Area B but both the N.P and the SSA are at broadly the same elevation and inter-visibility between the two is relatively limited'.

On AONBs: The Shropshire Hills AONB lies to the east of SSA c and has views directly across to it. Nevertheless it is the less visited part of the AONB. It therefore was not of much consequence in deciding the refined area.

On SSA margins: 'The SSA boundary as published in TAN 8 has been buffered by 5km in all directions to allow for a review of its margins (in accordance with the guidance in TAN 8 Annex D)'. This means as you can see from their maps that the SSA areas are in effect *doubled* in size. 16% of windfarm applications are already in these buffered areas *The three SSAs in Mid Wales in effect join up!*

It is important to remember that all the above quotes apply to the least sensitive areas as identified in the refinement exercises. Now that the refinement exercises have been made almost useless the whole of the SSA areas (and the 5km buffer zones) are now 'fair game' to the developers and there will be very large areas of much higher sensitivity included.

So the position regarding landscape looks pretty dire for any SSA and the surrounding area. As nearly all windturbines being considered are of approximately 130 metres total height (except of course for the absolute monsters of 180 metres being proposed for the Dyfnant Forest next to the Snowdonia N.P) the effect upon the surrounding area will be significant for at least 10 miles. In a national Wales context the effect will also be dire: On considering a map of Wales with the SSAs and present windfarms marked on it you will find that on a line from Pontypridd to Swansea and then from Swansea to the North Wales coast at Rhyl there will only be 15 miles separating each conglomeration. I reckon that there will be *no view from upland Wales (except in the far west of Pembrokeshire) that will not have a considerable number of windturbines...* Is this what we should be doing to a country that has tourism as its major industry? And all for so little energy.

OTHER ISSUES DISMISSED BY THE TAN 8 PROCESS 1. Peat

As we now know the loss of CO2 from peat when it is destroyed or dried by altering the drainage around it is very significant. Although TAN 8 says that the SSA areas are not peat rich, applications for windfarms in them has shown otherwise (e.g. Mynydd y Gwair). Peat concentration was not researched by Arup and was dismissed with the following: 'No extensive areas of peat bog occur in the SSAs or indeed in other parts of Wales to the same extent as in Ireland and thus this is not seen as an issue warranting further consideration at the strategic level'.

2. Transport and it's effect on communities

The transport issue of windfarm components and building materials has been shown by the Capita Symonds report to be unbelievably disrupting to Mid Wales. In fact they said it would constitute the largest infrastructure project ever undertaken in Wales and this didn't even include the proposed 20 acre transformer station and well over 100 miles of overhead line. Can we seriously be considering completely ruining the entire Mid Wales economy with at least 8 years of complete gridlock and the largest construction site ever seen in Wales for ½ the ridiculous energy figures I gave above.` Of course no tourists will ever come again as not only will there be no landscape left but over 70% of Montgomeryshire's architectural and historic settlements (as described in Pevsner) will be viewed with a backcloth of windturbines, pylon lines or transformer stations.

3. Common Land and Access Land

Arup dismiss Common Land with the words 'developers have been successful elsewhere in Wales in siting windturbines on Common Land'. As for Access Land, which generations have fought to obtain, Arup actually used such land as a proxy for openness and therefore reduced ownership numbers which would make it more suitable for windfarms!

4. National Trails and Cycle Routes

Glyndwr's National Trail in Mid Wales: wind turbines and/or pylons will be visible for most of the 130 mile route and for at least 30 miles with current proposals one will be walking alongside windturbines. The Sustrans High Level cycle route from Pontypridd to Neath will be virtually encompassed by turbines for its whole length if the proposals listed on the WG website go ahead. These are only examples of the devastation.

5. Flooding

No work appears to have been at all on the obviously serious effect that filling our uplands with concrete and hardcore rather than peat and soils is going to have on water run off. Each turbine needs an Olympic swimming pool size concrete foundation. A little publicised fact is that each turbine also needs a crane pad consisting of hardcore (or possibly concrete) that is 5 times that size. In fact the 180m high ones being proposed at Dyfnant will each require two such pads! We ignore this at our peril.

6. Noise

The nearest Arup got to a scientific rationale regarding the separation of dwellings from windturbines was to decide by 'a rule of thumb' that 500 metres was about right. To plan a major land use policy that will seriously effect many peoples lives in such a cavalier way beggars belief.

7. Electrical connection infrastructure

On reading the Arup reports one can see that SSAs were predicated on there either being suitable infrastructure in place or there were already plans to enhance the local area network. As regards the Mid Wales SSAs MANWEB had an investment for the local area network that they were putting before the regulator and that is why the three SSAs were proposed. *That investment was not agreed to by the Regulator* (according to SPEN who bought MANWEB) and therefore the Mid Wales SSAs should have been withdrawn..

8. Social Issues

In the Arup report of 2004 they say: 'In the Project Brief: Social issues were not felt necessary to be included in the identification of relevant criteria'. And so it seems to have remained. I cannot find any document that deals with or refers to any social issues being considered by WAG or its consultants with respect to this major land use planning policy that impinges upon so many lives. In fact the human being seems to have been completely ignored which I suppose is not surprising if one employs a windfarm consultancy to draw up such a strategic issue totally divorced from all the rest of a legitimate government's policies. A full socio-economic analysis of such a massive undertaking is surely a prerequisite of good government. That must of course include a test against its' other policies.

9. Reason for SSAs

We are told by WG that the reason for employing the SSA approach is to limit the spread of windfarms. According to the Arup 2004 report that was not the real reason for deciding on that approach but a downstream consequence of the decision. I quote from the report: 'After much internal discussion , WAG decided that this research should consider a concentration approach , to maximise the economies of scale of larger developments to help facilitate the provision of new electrical infrastructure'.

In fact TAN 8 doesn't stop windfarms outside SSAs at all because there is:

- 1. the 'licence' to treat the 5km buffer zone around each SSA as if it was inside the SSA. This doubles the size of each SSA.
- 2. the following incredible statement in 2.14 of TAN 8: 'There will also be opportunity to re-power and/or extend existing windfarms which may be located outside SSAs and these should be encouraged provided that the environmental and landscape impacts are acceptable.' The fact that it says encourage, and the environmental and landscape effects will nearly always be o.k. next to an existing windfarm means it will be very difficult to refuse any applications at appeal. The fact that Wales already has about 20 windfarms outside SSAs gives some scope! And of course the sentence can be repeated just after one has finished each extension!
- 3. PPW12.8 says that local planning authorities should facilitate local scale renewable energy in development plans. This can mean windfarms up to 25MW as I read it and therefore about 12-18 turbines each.
- PPW 12.8 also states that policies for strategic renewable energy development in areas outside SSAs if appropriate should be included in local development plans. In effect more SSAs.
- a willingness by Inspectors to happily pass windfarms outside SSAs as they argue that the windturbines in the nearest SSA will make it all look joined up! If you do not believe me see the Inspectors report on Mynydd y Betws.

WHAT IS THE OUTCOME OF ALL THIS

As we are aware, despite the First Minister promising to limit the windfarm capacity to the indicative TAN 8 figure of 800 MW, the WG has seen fit to increase the target to 1666MW. This is based on the Garrad Hassan report of 31/5/2005 entitled 'Energy Assessment of TAN 8 Wind Energy Strategic Search Areas'.

This report bears close scrutiny as it will be found that the 1666MW target bears no resemblance to reality. Garrad Hassan clearly point out that if NATS requirements and the effect by forestry upon the capacity are taken into account

the likely capacity will be nearer 700MW. *If planning considerations are then factored in they say the target can only be substantially less than 700 MW.* Hence the optimistic figure of 600MW that I used above to obtain the average output of 138MW.

Because of the intermittency of wind power, the power generation industry has also to consider what is called 'dispatchable power' i.e. the amount of capacity that can be relied upon when called upon. For wind power this is of course very low and well below 10% of capacity. For the whole of Wales we are therefore talking of less than 60MW.

Even as a Chartered Engineer and committed environmentalist who firmly believes in tackling global warming I cannot believe we can possibly be contemplating so much destruction to Wales and peoples' lives for such an incredibly small power output.

THE FUTURE

I wish to thank the Environment and Sustainability Committee for the opportunity to put forward this communication that I hope has been based as much as possible upon the facts of the reports that have been produced for WAG.

There is a great opportunity with your review to ensure, as required by the European Directive on Renewable Energy, 'that steps to increase use of electricity from renewable sources must be in proportion to the objective to be achieved'.

A proper energy policy, that is in reasonable balance with the WG's other policies, can only be found by undertaking full socio-economic, cost-benefit and strategic environmental assessments. Until they are carried out we must call for a moratorium on windfarm development before the destruction described above is allowed to cause us all to have profound regret.

Thank You.

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