

Clerk to the Committee  
Environment and Sustainability Committee  
National Assembly for Wales  
CARDIFF  
CF99 1NA

20 September, 2011

Dear Sirs,

### **Energy Policy and Planning in Wales**

I would like to make a few points to the Committee on this subject. I am a signatory to both the Petitions (**P-03-273 & P-04-324**) which have been referred to the Committee and I attended the demonstration in Cardiff earlier this year when the Assembly Government was asked to review its TAN8 guidelines. This establishes the context of my submission, but my concerns are strategic as well as local.

#### **Background Reading**

I recommend that members of the Committee read the book “**Sustainable Energy – Without the Hot Air**” (ISBN 978-0-9544529-3-3) by Professor David Mackay who is Chief Scientific Adviser to the Department of Energy and Climate Change. In my view it should be compulsory reading for any policy maker (*and reviewer*). Particularly relevant are the chapters on Wind Power and its intermittency. I note that Arup, the consultants who were commissioned by DECC to produce a report on the prospects for renewable energy as part of the UK Government’s current review of the energy market, list this book as a major source.

#### **Policy and Commercial Wind Power**

In my view both Welsh & UK Government policies reflect a panic to maximise renewable energy generation by any means without sufficient regard to the vital end-game, which is surely to produce a *sustainable balance of energy* for our future needs with decreasing reliance on fossil and imported fuels. Because on-shore wind power is currently the most mature of the emerging renewable technologies, this has meant staggering financial incentives being offered to developers (much of it levied from existing consumers) without regard to the consequences. I suspect it is the Kyoto targets and their successors which are fuelling the panic, and there is now a serious risk that we shall waste billions of pounds on a technology which will only tick political boxes and not contribute sustainably to the long-term reliability of our energy needs.

We cannot rely on huge amounts of wind-power in the energy mix unless we can cope with the serious downside of wind intermittency. When the wind stops *and* when it blows too hard the turbines cease to turn. The grid control system needs spare generation capacity to cope with both sudden changes in the wind and longer periods of calm. The more wind-power in the mix, the bigger the problem. David Mackay suggests some sustainable but long-term solutions involving a mix of pumped storage and batteries: however, current Government policies envisage **additional standby fossil fuel power-stations** (gas-powered) to meet this variation in supply for which the supply industry itself (Centrica) is already requesting subsidies because they cannot afford to build them if they will only stand idle on tick-over waiting for the wind to drop. Only this week the UK Energy Secretary stated on television that the wholesale gas price was rocketing and that he was taking measures to reduce our dependence on this increasingly imported and therefore vulnerable fuel. How does this stack up with the plan to build 20 new gas power stations ?

So, we have subsidies to produce more wind-power **and** subsidies for the stand-by suppliers *because* we've chosen more wind !! To cap all that, in Scotland (which has already thrown its cap at on-shore wind to a greater extent than the other parts of the UK) there have been several widely publicised occasions in the last few months when wind-power operators have been paid millions of pounds by the National Grid to turn their turbines off because of excess capacity in the grid on "ideal" windy days since there was no safe way to reduce the base-load generation output further. The latest press report is attached.

### **Planning (including TAN 8 !)**

There are major risks to any policy when planning authority is split and decisions can be made piecemeal. In the context of this inquiry, small generation projects, sub-stations and local grid distribution are in County Council hands while large power stations and high voltage grid are in two places in Westminster (DECC itself + the IPC) with yet a third planning body now proposed at UK level. The Welsh Assembly Government seems to be no more than an instrument of Westminster in this context, particularly as the TAN 8 advice creates a predisposition to Counties and Westminster to approve new renewable energy generation on the basis of geography and demographics alone and without parallel attention to the related logistics of transport, construction and electricity grid nor to ring-fencing the cumulative impact of proposals coming forward over an extended time period and with the planning system in its present form.

TAN 8 aside, I would welcome full devolution from Westminster to Cardiff for planning applications exclusive to Wales but have no easy solution to suggest for the grid strengthening issues when, as in our mid-Wales situation, any extra power generated in mid-Wales is not for use in Wales nor can it be used in Wales unless it is taken to England first and therefore impinges painfully on our English border neighbours.

### **Impact of Energy Policy and related Planning Regime on Mid-Wales**

- Wind farms of all sizes are being proposed across the north of Powys. They are obviously being planned for construction on remote bare hilltops, most on the western side. The sites often involve clear-felling of forestry as well as substituting hardcore and concrete for peat, thereby increasing the risk of faster run-off of rainwater and therefore worsening the flooding risk along the Severn Valley. Access for construction and maintenance (both for the many abnormal loads and construction materials) would involve massive disruption to traffic over a prolonged period affecting tourism, retail, domestic and emergency services. You have access to specialist reports on this part of the logistics. The latest wind-farm consultation (Dyfnant Forest) proposes taller turbines(185m) than any currently planned on-shore in the UK. Because of this, in addition to the transport implications, no current guidelines exist to support any of the relevant environmental planning statements (e.g. landscape & noise).
- The electricity grid in Mid-Wales is adequate for future consumption in the area but cannot take more generated power without strategic strengthening of the grid. The effect of this strengthening would not be limited to Wales : power needs to be relayed into England before it can be used in the National Grid. There is the prospect of a huge sub-station and 400kv, 40 mile connection to England supplemented by a connecting web of feeder pylons.
- The A458 corridor is the last major east-west route through Powys where no turbines are currently visible. This landscape is threatened with the blight of industrialisation by both wind-farms and pylon lines. Two of the biggest proposals (Carnedd Wen and Dyfnant Forest) are on the edge of the Snowdonia National Park. Tourism is already affected –downturn in renewals in some of the caravan sites—, and this vital part of the fragile rural economy is set to suffer more if the proposals go ahead.
- Apart from for a handful of local landowners **there is no benefit to the local communities at all** : no jobs, no cheaper electricity, no stability of energy supplies, no compensation. All the majority of us have is the prospect of blight, disruption, fall in property values, loss of tourist income & jobs and further rural decay. We face this knowing that the planning regimes in place are fragmented, loaded against us and therefore offer no real protection, particularly because there is no mechanism to take a cumulative view and call a halt.

### **Alternative Strategies**

Central government needs to concentrate more on the end-game and fast-track the creation/renewal of sustainable base-load power generation. Pragmatically this must mainly mean the rapid replacement of our aging nuclear plants and a major increase in their future generating capacity. Wind-power has a role but only in parallel with a sustainable power-storage strategy (back to David Mackay's book).

Obviously, all other renewable technologies have a role with clean coal (temporarily), waste incineration, biomass and tidal energy being in the lead. At local level, and with Mid-Wales particularly in mind, the stampede to commercial onshore wind power should be quickly capped to remove the necessity of strengthening the grid in the manner currently under consideration. Climate change levies should be diverted from that flawed route to a more pro-active policy of encouraging energy saving measures on the one hand and supporting **sustainable** community, private and business micro-generation renewable energy projects on the other. This will both provide a worthwhile contribution to the overall energy policy without major environmental & economic blight and it will strengthen communities rather than split them apart (which the current policies and plans are doing). It will also provide employment opportunities in the building and electrical trades as well as underpinning UK manufacturing.

As an aside, I have made a contribution this year by extending my double-glazing and installing a photovoltaic panel array on the roof. I am benefiting (in a long-term financial pay-back scenario) from the Feed in Tariff but have not benefited from any up-front grants or loans. To make this policy work, there will need to be an innovative and flexible approach to funding. I am a firm believer in attractive loans with repayment linked to the payback from the energy investment.

### **Summary**

We are desperate for a moratorium on development and a fundamental review of renewable energy policy and implications for this area. Unless this cumulative and fully inclusive review takes place there is a real risk that the next wind-farm approval (whether in Llandrindod Wells or London) will set in train an irreversible and catastrophic sequence of events and developments. Powys County Council and our MP., Glyn Davies, have petitioned for this moratorium and review : I urge the Welsh Assembly Government to concur. Power to your arm !!

Yours faithfully,



**David A. Smyth**

