

Environment and Sustainability Committee

Inquiry into Energy Policy and Planning in Wales
EPP 10 – Snowdonia National Park

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The Clerk
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Dear Colleague

Environment and Sustainability Committee Inquiry into Energy Policy and Planning In Wales

I write in response to the above inquiry consultation process and would be pleased if you could consider the following observations in your review.

What are the implications for Wales if responsibility for consenting major onshore and offshore energy infrastructure projects remains a matter that is reserved by the UK Government?

With regard to onshore wind farms there is the potential to create uncertainty as to the acceptability of large schemes >50MW outside TAN8 Strategic Search Areas. Developers are already proposing large schemes outside SSAs (e.g. Mynydd Mynyllod) that would be contrary to Welsh Government Policy as set out in PPW and TAN8. Generally however it is perceived that strong local objections to a proposal could be ignored or undervalued by the UK government. There is also the possibility that schemes will be imposed on Wales to meet national targets without proper scrutiny and no clear accountability.

What will be the impact if consenting decisions on major infrastructure projects and associated development are not all taken in accordance with Welsh planning policy?

There is scope for inconsistency. It would be possible for two consenting bodies to arrive at different decisions on the merits of very similar wind farm proposals e.g. a scheme of 49MW, determined by a Local Planning Authority, and a one of 51MW, determined by the IPC, where the difference is one turbine. The LPA would be bound by Welsh Government Policy whilst the IPC would have to have regard to the policy and afford it such weight as it deemed fit. This would also be contrary to normal planning procedures in Wales where LPA 's, the Planning Inspectorate and the Courts take account of distinct Welsh Planning Policy. Any decision disregarding Welsh policy is legally dubious and likely to be challenged in the courts. It may also be contrary to European Legislation.

The role of the different consenting agencies, how they inter-relate and how the current system could be improved, both with and without further devolution (Infrastructure Planning Commission, Planning Inspectorate, Local Planning Authorities, National Parks, Welsh Government, Marine Management Organisation, Environment Agency).

The Welsh Government / Ministers should be able to determine major infrastructure in Wales, whilst paying due regard to the relevant National Policy Statements

The relationship between the UK Government's Energy National Policy Statements and Welsh national and local planning policies (including Planning Policy Wales, Technical Advice Note 8 and Local Development Plans) and whether or not these policies can achieve the Welsh Government's aspirations, including whether or not a formal review of TAN 8 is now required.

National Policy Statements should recognise the policies set out in Planning Policy Wales, Technical Advice Notes and adopted Local Development Plans as having primacy in the decision-making process in Wales.

It may be an appropriate time to consider a revision in TAN8 in the light of changes since 2005, e.g. the scale of the new turbines proposed (some to 185m to blade tip) and the potential visual and landscape impacts over a greater area, along with the increase in public opposition to new national grid high voltage power lines required for the transmission of the electricity produced in the SSAs. In addition it appears that offshore wind farms can make a far greater contribution to meeting targets than was anticipated when TAN8 was being drafted. Wales is a relatively small country and the cumulative impact of wind turbines will have a greater visual impact. There is a danger that designated protected landscapes such as National Parks will eventually be "ring fenced" by wind turbines destroying important views in and out of such areas and the quiet enjoyment of such areas by visitors.

The potential contribution and likelihood that different types of renewable and low carbon energy (*offshore wind, tidal, onshore wind, hydro-power, nuclear, bio-energy / waste, micro-generation, community energy projects*) will be capable of delivering the Welsh Government's aspirations for energy generation as set out in *A Low Carbon Revolution – Energy Policy Statement* and the *UK Renewable Energy Roadmap*.

A significant proportion of Wales is covered by landscape and nature conservation designations – a reflection of its high landscape and ecological quality and value. These are significant elements in attracting visitors to Wales. The potential contribution that different types of renewable and low carbon energy can make must be tempered by the need to conserve these qualities. The comments above relating to wind generation are pertinent.

The topography and climate of Snowdonia has meant that there is a long history of utilising water to produce power, from early water wheels to grind corn to complex systems of reservoirs, leats and wheels to power processing plant at slate quarries and metal mines.

The area saw the early development of hydro-electric power stations with local entrepreneurs installing small generating stations driven by Pelton wheels. Some generating stations established in the early years of the 20th Century are still operating today.

Two large pump storage schemes have been built in, or close to the Park boundary at Tanygrisiau and Dinorwig. These utilise water from high level reservoirs (located in the Park) to drive turbines at times of peak demand for electricity (or when prices are high). The water is then pumped back from a lower reservoir to the high level reservoir at off-peak times when electricity is cheaper. Because they are net consumers of electricity they are not considered to be sources of renewable energy. The generating capacity of Dinorwig is to be increased by raising the height of the dam wall at Marchllyn Mawr reservoir.

The other hydro schemes however are renewable in that they utilise the power of falling water (from reservoirs or rivers). The electricity produced is therefore eligible under the old Non-Fossil Fuel Obligation (NFFO) or newer Renewables Obligation for a premium price in the electricity market. These schemes stimulated the upgrading of older generating stations in the Park (and close to its boundaries) along with the development of new small-scale run-of-river and micro-hydro stations.

The 20 or so hydro power stations which use water from Snowdonia have a combined total installed capacity in excess of 82MW. This is sufficient for some 36,500 households (there are approximately 11,211 households in the National Park).

The National Park and its immediate surrounds are therefore net exporters of electricity to the National Grid.

A recent study by the Environment agency, *“Opportunity and environmental sensitivity mapping for hydropower in England and Wales”* concluded that there was potential for further hydropower schemes in Gwynedd and Conwy (many of these would be within the National Park boundary). It was estimated that there was potential for the generation of 47MW hydropower in Gwynedd, however 98% of the sites were classified as “highly sensitive”, similarly Conwy had potential for 38MW generation but 96% of the sites were constrained.

Despite these constraints there will may be some limited potential for further run-of river and micro-hydro schemes on Snowdonia's rivers; however each must be assessed on its own merits with safeguards built-in order to protect the ecological value of the particular watercourse. Rather than making specific allocations or areas of search this is best addressed by criteria based policies.

Other Renewables

Other renewable energy technologies are not as common in the National Park.

Biomass

The *'Gwynedd Renewable Energy Study'* published in 1994 identifies the use of biomass as the only other technology which is likely to have potential on an economic basis within Gwynedd. This was confirmed by MANWEB, in its report *'Prospects for Renewable Energy'*, which indicates that the 67,000 ha of commercial forests in North Wales could supply a biomass plant with forest waste capable of producing some 7 MW of electricity. The report recommends that the optimum location for a biomass power station would be outside the National Park

Although permission has been granted for a small biomass district heating plant (no electricity generation) in Abergynolwyn, funding for the scheme has not been forthcoming though.

Landfill Gas

Electricity can be generated by the combustion of the gas (mainly methane, a potent greenhouse gas) produced by the decomposition of organic wastes in landfill sites.

An investigation of the potential for such a plant within the National Park has been undertaken at the Ffridd Rasus landfill site which is also owned and operated by Gwynedd Council. A gas engine at Gwynedd Council's Cilgwyn landfill site (outside the Park) produces 1MW.

There are a number of closed landfill sites in the National Park which served the towns and villages of the area. They were fairly small in size and the waste was often burnt before being covered. Given these factors it is highly unlikely that these old tips have any potential as locations for generating electricity from landfill gas

Tidal / Wave / Offshore Wind Energy

The SNPA's planning jurisdiction ends at the Mean High Water Mark except in the estuaries. It would not therefore have a direct planning involvement for offshore developments unless shore based facilities were also required. The potential for renewable energy from the sea is enormous with opportunities to exploit the power of tides, waves and wind. A number of technologies have been developed to try and exploit these almost unlimited resources. They include tidal barrages and lagoons; tidal flow and wave machines.

The potential for the development of tidal barrages is considered to be low. The relatively large estuaries of the Dwyryd, Mawddach and Dyfi are shallow and dry out at

low tide. In addition to being highly valued in landscape terms they are also covered by international nature conservation designations. Tidal lagoon technology is as yet unproven on a large scale although some interest has been shown in developing tidal lagoons off the north Wales coast in the vicinity of Rhyl and in Swansea Bay.

Trials of submerged tidal generators have been carried out off the coastline of Pembrokeshire where the islands and reefs produce powerful tidal streams. However the coastal topography of Snowdonia is quite unlike that of Pembrokeshire and as a result the tidal streams are weak.

Offshore wind farms have been constructed off the north Wales coast although none have been built or proposed off the coast of Snowdonia. Because of the partly enclosed nature of Tremadog Bay, with the Llyn peninsula figuring strongly in views from the National Park, it is considered that offshore wind farms could impact significantly on the seascape and views from Snowdonia across to Llyn and vice versa.

Photovoltaics and Solar Water Heaters

One property in Snowdonia has been renovated and a roof comprising photovoltaic (pv) tiles has been installed. However pv technology remains expensive and until economies of scale lead to lower manufacturing costs, uptake of this particular technology will be limited.

Solar water heaters have been allowed on roofs where they do not harm visual amenity. Although these do not generate electricity they can reduce demand for electricity.

Finally, I hope that you find the above to be a constructive and helpful response to your consultation. Please do not hesitate to contact me should you require further advice.

Yours faithfully,

Aneurin Phillips
Chief Executive