

## **Environment and Sustainability Committee**

Inquiry into Energy Policy and Planning in Wales

EPP 137 – Dŵr Cymru

Welsh Water

Lord Dafydd Elis-Thomas AC/AM,  
Chair,  
Environment and Sustainability Committee,  
National Assembly for Wales,  
Cardiff Bay,  
CARDIFF.  
CF99 1NA

Date: 20 September 2011

Dear Lord Elis-Thomas,

### **INQUIRY INTO ENERGY POLICY AND PLANNING IN WALES**

Thank you for your letter of 2 August inviting Dŵr Cymru Welsh Water to submit evidence to the above inquiry being undertaken by the National Assembly for Wales' Environment and Sustainability Committee.

Dŵr Cymru Welsh Water has some three million customers in Wales and adjoining parts of England. We provide an essential public service to our customers by supplying their drinking water and then carrying away and dealing with wastewater. We are owned by Glas Cymru a not-for-profit company with no shareholders and we are run solely for the benefit of our customers.

Dŵr Cymru is a major energy user - we are in the top ten energy consumers in Wales. The treatment processes that we have to employ to bring drinking water and waste water up to the required standards can be very energy intensive. The geography of our supply area exacerbates the problem as we have to pump water, often over long distances, to and from our customers.

Last year we spent £34 million on gas and electricity. The rising cost of energy from our suppliers continues to add significant upward pressure to our operating costs and, therefore, water bills. This is particularly unwelcome as we attach a high priority to trying to keep our water charges affordable, especially for our customers on low incomes.

More widely, Dŵr Cymru is very aware of the threat that climate change poses to the Welsh environment on which our business relies. We fully support the Welsh Government's aspiration to cut carbon emissions. We are committed to reducing substantially our own carbon footprint to contribute to the wider effort within Wales - in our Strategic Direction Statement, "*Our Sustainable Future*" (published in November 2007), we undertook to reduce our total carbon footprint by 25% by 2015, with a view to halving it by 2035.

Against that background, Dŵr Cymru is looking for ways to reduce our energy use and become more energy efficient. We are also keen to develop new renewable energy sources and so are investing in

projects to generate wind energy, hydroelectricity, bio-energy and solar power. We believe that this approach will shield our customers from escalating energy prices; give us greater control over our energy supply; reduce our carbon footprint; and help us to deliver our broader commitment to sustainability.

You ask about the different consenting agencies and how they interrelate. Your request for evidence itself illustrates the numbers of agencies that can have an involvement in consenting proposed renewable energy projects. This is in addition to bodies with an advisory input such as the Countryside Council for Wales. In our view, the Welsh Government has an important role in providing strategic advice to these agencies in Wales, to encourage a joined up approach between the various organisations with an interest.

Most of our energy projects tend to be fairly small scale in terms of planning definitions, so fall within the purview of the Welsh authorities. To date, we have not formulated any projects over the 50 megawatt threshold that triggers referral of onshore generation schemes to the Infrastructure Planning Commission, so we cannot comment on that process.

It is, of course, essential that all new proposals receive proper scrutiny by the regulators to assess their local impact and wider environmental effects. Dŵr Cymru is very happy to work with the relevant agencies in Wales. However, one of our main frustrations is the length of time it can take to obtain the requisite consents, particularly given the general scientific consensus that urgent action is needed if society is to mitigate the worst potential impacts of climate change.

By way of illustration, some (but not all) local planning authorities require the provision of full Environmental Impact Assessments in support of our applications for planning consent. Their scoping opinions often stipulate that Statements should include 12 months' new data on some local ecology: this automatically delays schemes by at least a year. We accept that there are occasions when this sort of information may need to be gathered, but we also believe that there are projects where a more flexible approach could be adopted whilst not significantly increasing the environmental risk. For example, local planning authorities might consider allowing us to survey for shorter time periods if similar surveys are available for nearby sites (e.g. migratory bird surveys).

For hydroelectric schemes we also have to obtain various consents from the Environment Agency which (depending on the scheme) may include abstraction licences or environmental permits. The Agency may also request an Environmental Impact Assessment. Dŵr Cymru welcomes the recent commitment by the Agency to improve co-ordination of its consenting processes and we also note the ongoing consultation on its Hydropower Good Practice Guidelines.

Particularly for small scale projects, the time and effort required to fulfil consenting requirements can seriously jeopardise schemes' financial viability. For example, a relatively small wind scheme for a single turbine may still require a period of over two years and expenditure of over £100,000 to get as far as a planning submission. We believe that it is inappropriate that the regulatory requirements and associated costs of obtaining the approvals for small scale schemes - which, by implication, are unlikely to have a significant environmental impact - are essentially the same as the requirements and associated costs arising from much larger projects that, on the face of it, may pose a much greater environmental threat. Compare, for example, a single 500kW turbine (with scheme costs of £1-£2 million) and a medium wind farm of 8 x 2.5MW turbines (scheme costs £30-40 million) - the

consultation and planning requirements are very similar in both extent and cost. Another example could be a 30kW versus a 300kW or even a 3000kW hydroelectric plant - the Environment Agency and planning requirements (and thus the associated costs) are likely to be similar for each scheme.

One area we would like to make particular mention of is solar photo-voltaic schemes. This has not been an area we have invested in up to now but we intend to do so during this and next year. The UK Government's recent changes to Feed in Tariffs encourage many smaller scale schemes rather than fewer larger ones. With such a scenario it is vital that overheads, such as planning, that apply to every scheme are kept to the minimum necessary.

We welcome the new Environment Minister's recent acknowledgement in the press that hold-ups in the planning process can frustrate developers of renewable energy schemes. Dŵr Cymru would like the Welsh Government to consider introducing procedures to simplify or streamline approval for smaller projects as they are much less likely to have a significant impact on the local environment.

As part of its inquiry your Committee is going to examine Technical Advice Note 8 (TAN 8). From our perspective, it provides a very useful framework, setting out how the Welsh Government's energy priorities should translate into local planning policy. It gives transparency for all parties, including developers considering whether to invest in renewable energy generation.

TAN 8 does not – nor should it – obviate the need for developers to obtain exactly the same permissions that would be required at any location in Wales. However, it does enable developers to screen out, at an initial stage, sensitive locations in Wales where some types of project are very unlikely to be acceptable. TAN 8 thus ensures that developers only investigate the potential of schemes at locations where such projects may be feasible from a planning perspective.

Much of the recent controversy surrounding TAN 8 implies that it steers all wind turbine projects towards the open countryside. This is misleading. TAN 8 also encourages developers to consider brownfield sites: Dŵr Cymru has, for example, recently announced proposals to locate a wind turbine at each of our waste water treatment works at Nash (near Newport) and Swansea. These will both be submitted for planning approval later this year and, if they get the go-ahead, will supply around half of the power used at each site (the equivalent of the energy usage of 1,000 houses in the case of Nash and 600 houses in the case of Swansea will be generated).

You ask about the potential of renewable energy to help deliver the Welsh Government's aspirations for energy generation and greenhouse gas reduction. We believe that onshore renewable energy generation has a very important role to play in delivering Wales' future energy needs whilst reducing its reliance on fossil fuels. We support the Welsh Government's aspiration (confirmed in its energy policy statement) to "move to resilient low carbon energy production via indigenous (and thus secure) renewables". As noted above, Dŵr Cymru is investing in various renewable energy projects to generate wind energy, hydroelectricity, bio-energy and solar power – these will give our company far greater security over our energy supplies and the surplus will contribute to meeting Wales' overall energy needs.

To illustrate the potential contribution that onshore renewable energy can make to meeting Wales' requirements, Dŵr Cymru has invested about £75 million on three 'state of the art' advanced digestion plants at Cardiff, Hereford and Port Talbot. These plants use the sludge left over after the

treatment of sewage from more than 1 million people and turn it into enough electricity to power a town the size of Caernarfon. These schemes will not only save Dŵr Cymru (and thus our customers) around £8 million every year, they will also reduce our carbon emissions by some 40,000 tonnes.

In addition to the investment mentioned above, during our current investment programme (which covers 2010 to 2015) Dŵr Cymru plans to invest a further £25 million on renewable energy and energy efficiency schemes including hydropower, wind power and solar photo voltaic generation.

Hydropower offers opportunities for long term sustainable energy production: although the pay back of such schemes may be slower than some technologies, they have a longer operating life. Dŵr Cymru has five small hydro schemes in operation already and currently has a further 20 or so projects at various stages of feasibility, design and delivery. For example, at Penycefn near Dolgellau a new water treatment plant has been constructed that includes a hydro turbine to generate electricity from the power of the water as it enters the works. Like most of Dŵr Cymru's renewable generation projects, the power generated at Penycefn will be used on site to reduce our carbon footprint and minimise operating costs.

You ask about the contribution of some of the newer energy generation technologies. Dŵr Cymru is generally supportive of alternative energy technologies. However, in the light of reports from elsewhere (notably the USA), Dŵr Cymru has concerns about the potential environmental impacts of energy production from shale gas drilling, through the so-called 'fracking' process. In particular, we are concerned that the processes used to extract methane in this way could pose a real risk, either directly or indirectly, to the underground aquifers from which we abstract water for some of our drinking water supplies. Dŵr Cymru would therefore like to be notified where such schemes are proposed in our supply area. For example, we believe that water undertakers such as Dŵr Cymru should be statutory consultees in respect of planning applications for these schemes as this would enable us to assess whether there might be an impact on the quality of the water from which we source our public drinking water supplies and advise local planning authorities accordingly.

You also mention the transportation impacts. This is a particular concern raised in relation to the construction of wind turbines. We sympathise with those who fear that moving wind turbines onto relevant sites will cause major, long term disruption to local traffic. Our aim is to cause as little disruption as possible to the local community. The sorts of wind energy schemes in which Dŵr Cymru is currently involved tend to involve only short term disruption - say seven or eight abnormal loads being transported to the chosen site. That is not to downplay the disruption that can be caused by, for example, widening roads to accept abnormally wide vehicles. But this short term disruption needs to be weighed against the longer term (25 year) benefit of renewal energy that these turbines can deliver.

Dŵr Cymru would be willing to appear before the Committee if it would assist the inquiry.