

**Public Inquiry
into the cumulative impact of five
proposals for wind turbine generating
stations and the 132kV Llandinam
connection, known as
Conjoined Wind Farm Inquiry (Powys)**

**Proof of Evidence
on Planning Balance**

**of Peter Minto BA, MA, AM, D.Phil, MRTPI
on behalf of Natural Resources Wales (NRW)**

Browne Jacobson

Browne Jacobson
44 Castle Gate
Nottingham NG1 7BJ
Ref: 0259880475

1.0 Introduction

- 1.1. This statement will deal with the need for and impacts of the developments proposed, with respect firstly to the Overarching National Policy Statement on Energy EN-1 [CD/COM/001] policies on energy supply and security, and then to targets for renewable energy set by Europe, the United Kingdom, and Wales.
- 1.2. It was the main thrust of Natural Resources Wales' (NRW) opening planning statement [CON-003-PLA-SOC-2], in concert with the Wales Government policy, that there would be a shift in the planning balance if the TAN 8 targets are exceeded, because the targets reflect the environmental capacity of the area. In particular the Welsh Government has stated that *“Provided development is limited to the maximum capacities above, we do not believe that there is a need for the large, visually intrusive, high voltage grid network infrastructure and associated sub station of the kind proposed within Mid Wales.”* [CD/COM/020].
- 1.3. In response to a written assembly question on 11 June 2012, the First Minister, Carwyn Jones said *“we expect all decision makers in Wales, including the national infrastructure directorate which has replaced the infrastructure planning commission, to recognise our spatially specific policy outlined in TAN 8 and to respect the fact that the strategic search areas have a **finite environmental capacity** and output should not exceed the maximum levels as assessed in 2005. “* (My emphasis) [CD/CON/003/PB/001]
- 1.4. It was also argued by NRW in our opening planning statement on Planning and Energy Policy, para 35. that *“The planning balance for offshore wind-farms, with greater output, less intermittency, and less environmental impact when compared to onshore, is good reason to suppose that they will provide the bulk of renewable wind energy required by UK and Welsh targets.”*
- 1.5. Since our opening planning statement there have been significant changes in the policy background which affect the issue of planning balance, and which it would be wrong to ignore. The UK government's attitude to onshore wind and gas extraction from shale has changed radically, as detailed below.

2.0 Energy Security: EN-1

- 2.1. There are references throughout EN-1 to security of supply and the need to make a transition to a low carbon economy without compromising that security. This issue forms a significant component of the overall desire to facilitate the development of energy infrastructure including that needed for renewable energy. At Para 2.2.25 the two main challenges for security of supply are outlined as the reliance on imports, where costs are rising and supply is politicized, and the need for timely investment in power stations, electricity networks and gas infrastructure.
- 2.2. This is summarised at Para 3.1.1 *“The UK needs all the types of energy infrastructure covered by this NPS in order to achieve energy security at the same time as dramatically reducing greenhouse gas emissions.”*
- 2.3. The UK will need to find 22GW of generating capacity to replace outdated power stations, of which 12 GW is driven by the Large Combustion Plant Directive (LCPD) [CD/CON/003/PB/002] which regulates emissions of sulphur and nitrogen oxides (EN-1 Para 38).

- 2.4. In the intervening period since the opening session, there has been a major development with respect to energy security, namely the government's new found enthusiasm and encouragement for the extraction of shale gas, commonly known as fracking. In a recent speech, the Secretary of State for Energy and Climate Change, said "*Gas, as the cleanest fossil fuel, is part of the answer to climate change, as a bridge in our transition to a green future, especially in our move away from coal.*"¹ [CD/CON/003/PB/003].
- 2.5. On average, power plants that run on natural gas emit half as much carbon dioxide, less than a third of the nitrogen oxides, one percent of the sulphur oxides, and much lower levels of mercury than plants that burn coal. Compared to oil, carbon dioxide emissions are 30 percent lower.² [CD/CON/003/PB/005].
- 2.6. As EN-1 explains in Para 3.6.3, gas produces half the carbon produced by coal, and EN-2 explains at 2.5.3 that "*Fossil fuel generating stations are likely to emit nitrogen oxides (NOx) and sulphur oxides (SOx), although SOx emissions from gas-fired generating stations may be negligible.*"
- 2.7. The dramatic reduction in SOx and NOx emissions is of particular importance for short term energy security, since EN-1 estimates that 12 GW of the 22GW of supply that needs to be closed by 2020 is because of European directives. Replacing coal burning power stations with gas would also save 5400 tonnes of CO₂ per year. As the Committee on Climate Change have repeatedly warned, continued unabated coal burning beyond the early 2020s would certainly ensure we have no chance of decarbonising in line with the national carbon budgets set out in the Climate Change Act 2008.³ [CD/CON/003/PB/006].
- 2.8. The Intergovernmental Panel on Climate Change (IPCC) has also indicated that natural gas can act as a bridge technology to low-carbon energy generation.(Summary for Policy Makers 14 March 2014)
"*GHG emissions from energy supply can be reduced significantly by replacing current world average coal fired power plants with modern, highly efficient natural gas combined cycle power plants or combined heat and power plants, provided that natural gas is available and the fugitive emissions associated with extraction and supply are low or mitigated (robust evidence, high agreement). In mitigation scenarios reaching about 450 ppm CO₂eq concentrations by 2100, natural gas power generation without CCS acts as a bridge technology, with deployment increasing before peaking and falling to below current levels by 2050 and declining further in the second half of the century (robust evidence, high agreement). [7.5.1, 7.8, 7.9, 7.11, 7.12]" (Page 24)⁴ [CD/CON/003/PB/007].*

3.0 Renewable energy needs. European, UK and Welsh policy.

- 3.1. As useful as a switch to gas may be in reducing our carbon footprint and other dangerous atmospheric pollution, as well as in satisfying the imperative in EN-1 and government policy generally to achieve energy security, it does not help meet the targets for renewable energy.

¹ <https://www.gov.uk/government/speeches/the-myths-and-realities-of-shale-gas-exploration> 9 September 2013. Edward Davey, Secretary of State, for Energy and Climate Change

²EEA Technical report No 9/2013 Reducing air pollution from electricity-generating large combustion plants in the European Union: An assessment of potential emission reductions of NOX, SO2 and dust.

³ <https://www.gov.uk/government/collections/energy-and-emissions-projections>

⁴ http://report.mitigation2014.org/spm/ipcc_wg3_ar5_summary-for-policymakers_approved.pdf

- 3.2. In 2009 the EU Directive on the Promotion of the Use of Energy from Renewable Sources [CD/COM/021] set binding targets for all EU Member States, such that the EU will reach a 20% share of energy from renewable sources by 2020 and a 10% share of renewable energy specifically in the transport sector. For the UK the national share means a 15% contribution from renewable energy.
- 3.3. EN-1 para 3.4.1 says with reference to the role of Renewable Electricity Generation “*The UK has committed to sourcing 15% of its total energy (across the sectors of transport, electricity and heat) from renewable sources by 2020 and new projects need to continue to come forward urgently to ensure that we meet this target. Projections suggest that by 2020 about 30% or more of our electricity generation – both centralised and small-scale – could come from renewable sources, compared to 6.7% in 2009. The Committee on Climate Change in Phase 1 of its advice to Government in September 2010 agreed that the UK 2020 target was appropriate, and should not be increased.*”
- 3.4. It is a principle of EN-1 that “*The Government does not consider it appropriate for planning policy to set targets for or limits on different technologies.*” UK policy has no sectoral targets and therefore the capacity of marine wind energy to meet the need expressed in EN-1 and UK government policy generally is relevant to this inquiry. The Welsh Government’s Energy Policy Statement (2010) [CD/COM/009] identifies the sustainable renewable energy potential for a variety of different technologies. According to Jane Davidson's introduction [CD/CON/003/PB/009] “*Developments since the Route Map was published, especially in respect of offshore wind, indicate that we could now revise to a figure greater than this. The Energy Statement shows that Wales has the potential to produce more than twice as much renewable energy as we consume as a nation by 2025 - with about 40 percent of this from marine, a third from wind and the rest mainly from sustainable biomass power or smaller local heat and electricity generation projects using wind, solar, hydro or indigenous biomass.*”⁵
- 3.5. As emphasised in our initial evidence on Planning and Energy Policy, and as stated in Para 3.4.3 of EN-1 on Offshore Wind– “*offshore wind is expected to provide the largest single contribution towards the 2020 renewable energy generation targets;*”
- 3.6. CCW as NRW's predecessor never made the argument that offshore wind should be weighed in the planning balance when considering the benefits and impacts of onshore wind. However it is relevant to EN-1, which makes no distinction between them. Equally important is the fact that the potential for offshore wind power is now reality and the prospect for rapid implementation of marine projects forms a major part of the Welsh Government strategy. Figure 12.1 of the now superseded Planning Policy Wales (PPW) Edition 5 [CD/COM/008] shows the government predicted 2GW from onshore wind by 2015/17, while 6GW should come from marine by 2015/16.
- 3.7. Although NRW considers that the potential for offshore wind should now have significant weight in the planning balance, there is in Wales a specific target, not only for wind energy, but for onshore wind energy, embodied in TAN 8 and subsequent upward revisions of the target.
- 3.8. These targets have increased from the original 1120MW in TAN 8 to 2000MW, and proposals exceed that target total. The Welsh Government has already expressed to the inquiry the view that the targets amounting to 2000MW should be treated as maxima, as representing the

⁵ <http://wales.gov.uk/about/cabinet/cabinetstatements/2010/100315energy/?lang=en>

environmental capacity of the SSAs, in particular because of the step change in grid infrastructure that would be needed if all the present wind energy proposals were built [CON-001-002].

- 3.9. The view that projected renewables output could exceed the UK's renewable energy commitments, and that more is not needed has been taken further in a recent statement by the UK Energy Minister, Michael Fallon, who said "*We remain committed to cutting our carbon emissions. And renewable energy, including onshore wind, has a key role in our future energy supply. But we now have enough billpayer-funded onshore wind in the pipeline to meet our renewable energy commitments and there's no requirement for any more.*" (Interview on the Today Programme, BBC Radio 4. 24th April 2014) [CD/CON/003/PB/008]
- 3.10. This policy position was reinforced by the Prime Minister in Prime Minister's Questions 30th April 2014 [CD/CON/003/PB/004] when he said "*What is changed is that we have seen a massive increase in onshore wind generation in our country. We will achieve, through what is in the planning system and under construction, the provision of approaching 10% of our electricity demand through onshore wind. The question is then whether it is right to continue to overrule local planners and local people and whether it continues to be right to put taxpayers' money in after we have built out that onshore wind provision. I do not believe that it is, and the Conservative manifesto will make that very clear for local communities. Other parties will have to make their own choices.*"⁶

4.0 Landscape impacts: Carnedd Wen, Llanbrynmair, Llandinam 132 kV line.

- 4.1. NRW accepts and endorses the Welsh Government position that exceeding the onshore wind targets for the Mid Wales SSAs will produce unacceptably adverse cumulative impacts, producing a need for unacceptably obtrusive grid connections. This would be a step change that radically alters the balance between need and impacts.
- 4.2. NRW also considers that overall renewable energy targets can be met without increasing the proportion that comes from onshore wind, and that, in accordance with the Welsh Government and EN-1 projections, most renewable energy will be produced by offshore wind-farms. It is therefore not necessary to consent all of the proposals now in the pipeline in order to meet targets, and in the context of the strategic approach taken by the Welsh Government it is not appropriate to deal with them on a first come, first served basis.
- 4.3. Of the five windfarm proposals currently being considered NRW considers the least acceptable are Carnedd Wen and Llanbrynmair. TAN 8 does not assume that all areas within an SSA are suitable for windfarm development. The purpose of Annex D, TAN 8 is to "*achieve a finer grain of development allocation within the SSA, taking into account landscape, visual and cumulative impacts.*"
- 4.4. We have provided evidence on the landscape issues related to the above windfarms in Session 2, and evidence on the 132 kV line in Session 3, I will not rehearse that evidence here. We did not provide evidence to Session 4 since, in the absence of a comprehensive assessment of cumulative impacts by the applicants, NRW did not have the resources to produce our own. However, Powys County Council (PCC) say in Para 6.5 of their landscape evidence to Session 4 "*The overall in-combination landscape and visual cumulative effects of the scenario including Llanbrynmair and Carnedd Wen (subject to the Council's objection to the*

⁶ <http://www.publications.parliament.uk/pa/cm201314/cmhansrd/cm140430/debtext/140430-0001.htm#14043035000005>

Llanbrynmair access and the Carnedd Wen five turbines) and the parallel twin 132kV OHL grid connections to Legacy would give rise to a significant landscape effect, although this would be limited to the scenic value of one VSAA but one outstanding value,(sic) and some significant visual effects, including on users of a national trail, from viewpoints within the National Park and several settlements.” [OBJ-002-LAND-POE-RUSSELL-S4].

- 4.5. NRW notes this assessment but unlike PCC considers that the scale of these impacts would produce unacceptable impacts, in part because of the highest status of protection in relation to landscape and scenic beauty afforded to National Parks by the Government and NRW. This is in accordance with government advice that areas with national designations should remain largely free from wind farm impacts, including those that are located outside of National Parks. Government and NRW also recognise the importance of National Trails to recreational facilities, and consider that adverse impacts upon them should be avoided or mitigated.
- 4.6. In reaching conclusions over planning balance, it is NRW's view that considerable weight should be attached to the sensitivity and value of the National Park, as well as to its statutory designation and purposes, and to Glyndŵr's Way National Trail.

5.0 Ecological Issues

- 5.1. Some of the issues that weighed in the planning balance against the various proposals have been resolved since the Inquiry started, as the Statements of Common Ground (SOCGs) show. This applies to peat and breeding birds, subject to implementation of Habitat Management Plans, protection and management strategies and various conditions.
- 5.2. For European Protected Species, there are still outstanding issues between us and the Llanbrynmair and Llandinam 132kV projects, dormice in the case of Llanbrynmair, and both bats and dormice for Llandinam 132kV. It is NRW's view that it cannot be demonstrated there would be no likely detriment to the maintenance of the favourable conservation status of European Protected Species as a result of these projects. This is contrary to UK and Welsh planning policy as set out in EN-1, PPW and TAN 5 and NRW considers that the SoS will need to take this into consideration when coming to a decision on the projects.
- 5.3. With regards to issues relating to European sites and the implementation of the Habitats and Species Regulations 2010, NRW will submit a clarification note for the Inspector on any outstanding issues in respect of each of the applications before the Inquiry. Subject to the requirement for the implementation of conditions and mitigation measures for the Berwyn, River Wye and Pen Llyn y Sarnau Special Areas of Conservation (SACS), we do not consider the proposals will adversely affect the integrity of the forementioned sites, and that the impacts on the European sites are not likely to weigh in the planning balance.

6.0 Conclusions

- 6.1. While the UK government policy still recognises the need for renewable energy, Ministers have expressed the view that the reduction in emissions possible by substitution of UK gas resources will help meet European emission targets in the short term, and the Welsh Government and UK Ministers have expressed the view that it is unnecessary to exceed the current targets for renewables by means of increasing onshore wind provision. NRW considers that there is more than sufficient onshore wind energy in the pipeline to play its appropriate part in the renewable energy mix, and for Wales to play its full part in meeting national and Welsh targets.

- 6.2. The available data on potential power output from the Strategic Search Areas (SSAs), including that provided in the Renewable Energy Roadmap [CD/COM/013 and CD/COM/015], demonstrates that the Welsh and UK approach remain compatible, and it is evident that it is not necessary to approve all submitted proposals to reach the targets, as estimates of potential show. Renewable Energy Roadmap projections are based on the assumption of a 40% rejection rate, as discussed in NRW's opening Planning Statement.
- 6.3. NRW continues to believe that the strategic, spatial and target based approach adopted in Wales through TAN 8 remains the best way to meet the need for renewable onshore wind energy and does not conflict with UK national targets. There is no incompatibility between that approach and targets and the overall UK approach and targets.
- 6.4. It is the Welsh Government's view that the targets set out in TAN 8 and subsequent statements must be met, but that exceeding those targets set out by Welsh Policy will cause disproportionate environmental impacts, and exceed the environmental capacity of Mid Wales to accommodate wind turbines and their associated infrastructure.
- 6.5. While the Welsh Government has precise targets for the contribution of wind energy to the renewables mix, which will be reached, there are no national sectoral targets. With regard to the National Policy Statements therefore, there is good reason to take into account the huge potential from marine development, particularly in view of the constraints on intermittent energy generation associated with onshore wind.
- 6.6. It is therefore open to the Secretary of State to once more allow "*local discretion in identifying the best sites.*", (Para 2.5 TAN 8) to conclude that the need for a particular project can be met elsewhere, and to refuse whichever of those applications within SSAs B and C which are considered to produce unacceptably adverse impacts when weighed against the need for renewable energy and government targets. There is no imperative to allow proposals on a first come, first served basis.