

# **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)**

## **Statement of Case**

## **on Planning Issues**

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1. I am Peter Anthony Minto, a planning consultant with Browne Jacobson. I have worked in planning since 1972, and have qualified for membership of the Town Planning Institute. I worked first for the Department of the Environment, then in two North Wales councils, and then for ten years as a private consultant. I rejoined the public sector with CCW in 1991, and was their senior casework officer until 2010. I have since returned to consultancy, and am currently working for Browne Jacobson on NRW cases.

## Statement Of Case

2. Natural Resources Wales' (NRW) predecessor body, the Countryside Council for Wales (CCW), has submitted preliminary statements of case, which contain details of our case with respect to the specific issues arising from each development, in relation to landscape, peat, and protected wildlife. It is unnecessary to repeat that content.
3. In April 2013 NRW brought together the work of the Countryside Council for Wales, Environment Agency Wales and Forestry Commission Wales, as well as some functions of Welsh Government. Our purpose is to ensure that the natural resources of Wales are sustainably maintained, used and enhanced, now and in the future. NRW's functions are set out in the Natural Resources Body for Wales (Functions) Order 2012 and include the requirement to exercise its functions so as to
  - Promote nature conservation and enhancement of natural beauty and amenity, and
  - Promote the provision and improvement of opportunities for access to and enjoyment of the countryside and open spaces; open air recreation; and the study, understanding and enjoyment of the natural environment.Our advice and comments to the Inspectors and the PI are therefore provided in the context of the above remit.
4. This statement will cover NRW's overall position in relation to UK and Welsh Government policy and the development of SSAs B and C, and the issue of connection to the national grid. In NRW's view there is no necessary conflict between NPS EN-1 and NPS-EN-03, and Welsh Government policy.

### UK Planning Policy

5. NRW wholly endorses Government concerns over climate change, and recognises the need to reduce the UK and Wales carbon footprint. NRW supports the position expressed in the National Policy Statements for Energy (NPS). EN-1 para 3.1.1, that "*the Government is committed to increasing dramatically the amount of renewable generation capacity.... In the short to medium term, much of this new capacity is likely to be onshore and offshore wind....*"
6. NRW also endorses the recognition in NPS that energy provision should seek to avoid or minimise the impact on the environment, and should not compromise international and national statutory obligations for designated areas, species and habitats. Section 104(7) of the Planning Act 2008 requires the Secretary of State to assess whether '*the adverse impact of the proposed development would outweigh its benefits*'.

### Renewable Energy Targets

7. At the same time as the National Policy Statements, the UK and devolved administrations issued the Renewable Energy Roadmap, which sets out actions by which overall UK target for renewables can be met. Para 1.2 states "*Our goal is to ensure that 15% of our energy demand is met from renewable sources by 2020 in the most cost effective way.*" The document "*sets out our shared approach to unlocking our renewable energy potential....It complements and strengthens parallel activity by the Devolved Administrations in Wales, Scotland and Northern Ireland, each of which has set its targets and ambitions, which taken together make a major contribution to renewable deployment.*" (Intro)

8. Welsh Government policy on renewable energy relies heavily on targets. In NRW's view the Renewable Energy Roadmap demonstrates that there is no conflict between the UK and Welsh approach. Para 1.2 states that *“Ambition is equally strong across all areas of the UK, where the Devolved Administrations have set themselves challenging domestic targets for both the level of renewable electricity and heat consumption by 2020.”*

### **Renewable Energy Roadmap Update 2012**

9. A crucial part of the Energy Roadmap is that it contained an annual commitment *“to publishing annual updates of the Roadmap to provide information on progress and changes in renewable energy over each year and our journey towards the 2020 target.”*
10. In para 2.10 of the Update it states that *“Since last year we have had an increase of 1.3GW in operational capacity (between January 2011 and end of June 2012) and the onshore wind pipeline holds an additional 6.1GW of projects awaiting or under construction as well as 7GW awaiting planning approval. The current pipeline is likely to have the potential to provide the appropriate quantity of deployment to fulfil our ambition outlined last year.”*
11. The projections do not assume a 100% approval rate, and are based on historic consent rates. These are found in the Renewable Energy Roadmap 2011, where Para 3.21 states that *“UK consent rates for onshore wind projects vary from around 60% in Scotland and Wales, to 80% in Northern Ireland and 54% in England.”*

### **Welsh Government Planning Policy and TAN8**

12. NRW fully supports the Welsh Government's energy policy and its reliance on spatial and strategic approaches to planning as the best way to achieve renewable wind energy targets and minimise environmental harm. The strategic approach to the location of windfarms is embodied in the strategic search areas set out in Planning Policy Wales (version 5, November 2012) and TAN 8 Planning for Renewable Energy July 2005.
13. The Secretary of State will have regard to Welsh Government renewable energy policy in relation to the need for renewable wind energy, and the Welsh Government approach to meeting that need. NRW considers the Secretary of State should also have regard to recent Welsh Government policy statements that the Welsh Government targets should be used as maximum as well as minimum targets, and that to exceed the Welsh Government target may have serious impacts on the landscape which is one of Wales' primary economic as well as cultural and environmental assets. In the *“Written Statement By The Welsh Government”* dated June 2011, the First Minister stated *“The indicative capacities set out in TAN8 in 2005 reflected a considered view of the potential impact of grid and transport connections. However, in a number of the SSAs, developer interest has now greatly exceeded those indicative figures. The Welsh Government believes this level of development is unacceptable in view of its wider impacts on the local area.”*  
<http://wales.gov.uk/about/cabinet/cabinetstatements/2011/110617plan/?lang=en>
14. The Welsh Government's view that the SSA targets should be treated as the maximum limit as well as a minimum is not, however, an attempt to set limits on a specific technology. This is something which is not considered to be appropriate in EN-1 Para 3.1.2 where it states *“It is for industry to propose new energy infrastructure projects within the strategic framework set by Government. The Government does not consider it appropriate for planning policy to set targets for or limits for different technologies.”*

15. Rather it is because it is the Welsh Government's considered view that 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.”*
16. There is now widespread public concern that the grid infrastructure required by distributed energy production will in itself produce a severe and transformative impact on the Welsh Countryside, and NRW considers that serious additional and cumulative impacts may arise as a result of provision of the additional grid connections. In mid Wales the number of turbines determines the scale and numbers of grid connections required. Manweb are currently anticipating the possible connection of **1,424 MW**. (Connection of On-Shore Wind Farms in Mid Wales (via Shropshire) - July 2012 Update of Strategic Options Report, para 3.6) with an estimated carrying capacity for a 400kV line of **1100MVA**. We have been advised in meetings with Manweb that 1MVA is roughly equivalent to 1MW
17. The Welsh Government is not alone in its concern that going beyond current targets may create additional problems that need careful consideration. In a discussion of renewable energy in the House of Commons on 31 October 2012, David Cameron said *“There has been no change towards renewable energy. Let me explain exactly. We have a big pipeline of onshore and offshore wind projects that are coming through. We are committed to those, but all parties will have to have a debate in the House and outside about what happens once those targets are met.”*  
31 Oct 2012 : Column 229  
<http://www.publications.parliament.uk/pa/cm201213/cmhansrd/cm121031/debtext/121031-0001.htm#12103160000027>

### **Progress and Potential in Welsh Renewable Energy Targets**

18. In the initial phase of wind turbine development, there were concerns that the criteria based policy seemed to be creating a pepper pot distribution of windfarms, with consequent widespread adverse effects. By the same token, the wind industry found that many proposals were turned down on the grounds of cumulative impact.
19. NRW's predecessor body, CCW, therefore made proposals for a strategic approach which culminated in the TAN 8 process, in which all stakeholders cooperated in producing spatial analysis that would guide windfarms to areas with the best combination of high wind output and low environmental impact. TAN 8 was published in 2005, and defined 7 search areas each with targets for installed capacity. The total for the SSAs was **1120 MW**, which represented a reduction from the maximum of **1666 MW** defined by Garrard Hassan. The purpose was that the reduced figure *“will allow local discretion in identifying the best sites.”* That discretion was to be achieved through the Refinement Exercise, proposed in Annex D of TAN 8.
20. The Welsh Government has subsequently revised the target upwards, and current targets are set out in the document entitled "[A Low Carbon Revolution](#)" of March 2010. The target for onshore wind power is expressed as *“to have 4.5 kWh/d/p of installed onshore wind generation capacity by 2015/2017”*. This translates into an installed capacity of **2000MW**, of which **1700MW** are to be found in the SSAs and **300MW** to be found in *“a combination of developments under 25MW, brownfield sites as well as community and local schemes and a contribution from micro-generation.”* Letter from John Griffiths July 2011 **CON 01 01**.

## **Review of available figures on the Potential Capacity inside and outside of the SSAs**

21. The following sections are a summary of available data on wind farm potential capacity in Wales. Other data would be available from BWEA and PCC.
22. There was initially some concern that the TAN 8 targets would not be met, particularly in the light of the ongoing Refinement Exercises. However technology has greatly increased the potential output from wind turbines since the publication of TAN 8 in 2005. NRW maintains its own database on wind farm scoping, applications, permissions, and operational sites. This is the most up to date data to which NRW has access. This data demonstrates that given the amount of renewable wind energy currently proposed for the SSAs there is little doubt that the target can be reached. This applies to the totals across all SSAs and to the capacity of SSAs B and C. (To be specific, SSA B has a target of **430MW** with permissions (**43.2MW**) and proposals (**537.5MW**), totalling **580.7MW**, while SSA C has a target of **98MW** with proposals running at **293.7MW** (without the proposed Llandinam repowering.) (NRW's Detailed figures in support are attached as Appendix 1, Summary figures as Appendix 2)
23. Not all of the smaller proposals outside the SSA are sent to NRW for comment, and the figures for development may be an underestimate. Micro-generation is particularly popular due to favourable FIT rates. It seems clear from NRW data therefore that the Welsh Government target of 2000MW can easily be reached.
24. There are of course other data on wind farm potential. In July 2010 the Welsh Government published **Research on Strategic Search Area Reassessment and Validation** by the consultants Arup. This concluded that "Proposals for some **2306MW** are currently under consideration in and around the SSAs, almost all since the publication of TAN 8 in July 2005. This is significantly in excess of the 2010 target of **800MW**. Of these projects, a total of **1944MW** of wind farm developments (consenting through to pre-application ad hoc) are located within an SSA; and a further **362MW** of wind farm developments (consenting through to pre-application ad hoc) are located within 5km of an SSA..Of the forthcoming developments (within the SSAs and 5km around the SSAs), a total of **204MW** have been consented, a total of **868MW** of wind farm applications have been lodged but are yet to receive a decision, and a total of **811MW** have chosen to submit their application through the IPC." For SSA B the figures were **685.95MW** potential capacity including **78.95MW** installed. For SSA C the potential is **203.8.MW** (Executive Summary)
25. Arup also looked at other land not in the planning process but within, or within 5km of the SSAs , and concluded that "*based on knowledge of current project developments, there appears to be only the potential for around 300MW of additional development in and around (i.e. up to 5km) the SSAs.*" (Executive Summary) This is based on assumptions about the ratio of consents to refusals which NRW do not share. In Section 5 Arup state that it is possible to "*determine a 'practical' scenario for the outstanding capacities identified during the above study.*" The figures they use are questionable however. They suggest a reduction of 50% due to "*unmappable constraints*" and a further 25% for planning application refusals. However none of the constraints listed are technical and they are all precisely the kind of constraints that justify first stage and appealed planning refusals. This clearly represents double counting, and the effect of the compound reduction is to reduce potential to 37.5% of the possible total. In the view of NRW this is a gross underestimate that is not borne out historically, even prior to the introduction of SSAs. We prefer the Renewable Energy Roadmap estimate of 60% consents referred to in para 11 above. This

would produce an additional **480MW** from the SSA.

26. Technical Advice Note (TAN) 8 Review of Wind Farm Developer Interest, with data from February 2012 shows in planning and consented as **536MW** and **63.4MW** operational in SSA B and **399.5MW** and **31.8MW** in SSA C, totalling **599MW** in SSA B and **431.3MW** in SSA C.
27. According to "Connection of On-Shore Wind Farms in Mid Wales (via Shropshire) - July 2012 Update of Strategic Options Report" para 3.6, "*The total contracted onshore wind generation projects described above is 826 MW. It is recognised that information in the public domain suggests that there are other generators that may seek connection in the Mid Wales region. Publications in 2011 on the Powys County Council and Welsh Government websites identify total onshore wind generation levels in Mid Wales within the region of 1,325 MW and 1,424 MW respectively.*" The re-powered Llandinam project would represent an additional **90MW**. (para 3.7)

### **Other sources of renewable energy.**

28. It has habitually been argued at previous public inquiries for onshore wind projects that onshore wind is the only practical and financially viable source of renewable energy that can meet the Welsh Government and UK targets. It is now clear however that offshore wind will become the primary source of wind energy from Wales.
29. Wales already has two operating offshore windfarms at North Hoyle (**60MW**) and Rhyl Flats (**90MW**) and the much larger windfarm at Gwynt y Môr (**576MW**) is due for completion in 2014.
30. The total **762MW** and should produce **2.4TWh** of electricity a year. Round 3 of offshore wind development includes the Irish Sea Zone which, in proportion to the zone which is in Welsh waters, will bring about **3,715MW** ashore to Wales, or **12.4TWh** of electricity a year. All figures assume a 38% load factor.
31. The Atlantic Array will have a capacity of **1,500MW** and about a third of the area they are planning to develop will be in Welsh waters. This **500MW** will produce about **1.7TWh** of electricity a year at 38%.load factor. This means that Wales will, by about 2020, be producing approximately **16.7TWh** of electricity a year from offshore wind.
32. There are practical and cost constraints on the amount of intermittent energy that the national grid can absorb, with most estimates at around 30%. Some forms of renewable wind energy, however, are less intermittent than others, which imposes less strain on the national grid, reduces the costs of backup generation, and enables them to make a greater nett contribution to renewable energy. The Welsh Assembly assumes that onshore wind turbines have a capacity factor of 30% , producing approximately 2.6GWh per MW of installed capacity per annum. The offshore wind figure is closer to 40%, producing around 3.5GWh per MW of installed capacity per annum. (Para 4.2 Welsh Assembly Government Facilitating Planning for Renewable Energy in Wales: Meeting the Target Final Report - Research Contracts 105/2002 and 269/2003)<http://wales.gov.uk/topics/planning/planningresearch/publishedresearch/meetingtarget/?lang=en>
33. According to the information provided by DECC the Welsh assumption is reasonably accurate, with a load factor of 34.6% offshore and 27.3% onshore.

[https://restats.decc.gov.uk/cms/assets/Uploads/Regional-Statistics\\_2011/Regional-spreadsheets-2011-27Sep2012.xls](https://restats.decc.gov.uk/cms/assets/Uploads/Regional-Statistics_2011/Regional-spreadsheets-2011-27Sep2012.xls)

34. The table at appendix 3 from the Renewable Energy Foundation provides detailed figures for both onshore and offshore wind-farms.

<http://www.ref.org.uk/roc-generators/search.php?mode=client&rid=&GeneratorName=&CtryCode=WA&kwaction=equals&InstalledkW=&TechGroup=&TechCode=&dateaction=equals&AccreditationDate=&Location=&CHP=&turbineaction=equals&NumTurbines=&TurbineModel=&HubHeight=&BladeDiam=&Developer=&Operator=&SiteOwner=&Postcode=&save=Search>

It can be seen that the existing Llandinam windfarm had a load factor of 11-12% in the last year of reporting, while the single turbine at the Centre for Alternative Technology achieved 3%. The tables show a 10 year average of 25.4% for onshore but there are no comparable long term figures for offshore.

35. 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.

## Grid Connections

36. It is now clear that the grid infrastructure necessitated by distributed energy production is a major concern for the general public and the Welsh Government. In deference to the Inspector's belief that "*it would not assist the Inquiry to examine future grid connections in detail, other than the Llandinam connection*", NRW will not be providing a witness or any detailed evidence on the grid other than the Llandinam connection. However it is NRW's view that the provision of connections to the grid from a wind farm is an intrinsic part of the project, and ought to be considered as such for the purposes of environmental assessment.
37. Since our initial skeleton statement of case, which relied on "Planning for Renewable Energy; A Companion Guide to PPS22" para 99, and EU guidance on whether works are integral, and "The EU Note - Interpretation of Directive 85-337-EEC(4)" on whether they are intrinsic, the Inspector has concluded in response to legal submissions "*that the applications before the Inquiry can be considered individually and separately from the necessary new grid infrastructure. The direct, indirect, secondary or cumulative effects of each individual project would be assessed on the basis of the environmental information that the developer can reasonably be required to compile. There would therefore be no conflict with either the EIA Directive or the EIA Regulations.*"
38. Irrespective of whether they are "integral" or "intrinsic", or neither, the grid connections constitute direct, indirect, secondary or cumulative effects for the purpose of EIA regulations. This is an issue discussed in paragraphs 4.9.2 and 4.9.3 of the Overarching National Policy Statement for Energy (NPS EN-1), which requires sufficient information to be provided to comply with the EIA Directive, including indirect, secondary and cumulative effects which will encompass information on grid connections.
39. Therefore, as advisers to the government on matters of landscape and nature conservation, not matters of law, the main concern for NRW is whether, in treating windfarms and grid connections separately, it is possible in practise to assess properly the cumulative impacts of the proposals.

40. In NRW's view, more information on the impacts could and should have been provided on the basis of the approximate routes that are known to the applicants, even though the precise route may not be known. NRW will offer evidence on any deficiencies in information arising from the absence of a full Environmental Impact Assessment, particularly with respect to cumulative impacts and the issue of alternatives.
41. In the case of the Llandinam connection it is NRW's view, on which our expert witnesses will provide supporting evidence, that the applicants do not provide enough information and justification to support the extra connection. They do not explore the alternative of connecting to the proposed SPEN 132kV line from SSA C, and therefore do not provide enough information to allow a proper assessment by decision makers of whether the additional impacts of a dedicated line are justified. Since the National Policy Statement for Electricity Networks Infrastructure (EN-5) para 2.8.3 states "*Sometimes positive landscape and visual benefits can arise through the reconfiguration or rationalisation of existing electricity network infrastructure.*", it seems appropriate that rationalisation should also be carefully considered at the design, assessment, and approval stage.
42. The applicant has failed to show that they have met the duty in Schedule 9 1(1)(b) of the Electricity Act which states that a license holder "*shall do what he reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites, buildings or objects.*"
43. NRW supports the suggestion made by RES that it would be open to the Secretary of State to issue a 'minded to approve' letter.

### **Impact on the Snowdonia National Park**

44. NRW have a particular responsibility towards conserving and enhancing the National Parks and in planning policy terms NRW considers that considerable weight should be given to their value and importance. NRW is however confident that the SNPA will be able to cover the issue without detailed support and repetition on our part. In addition our landscape witness will provide detailed evidence on the policy issues that underpin his assessment, including, for example, their sensitivity and special qualities.
45. Of the five sites NRW have only objected to Carnedd Wen on the grounds of impacts on the National Park.

### **Llandinam**

46. With respect to the issue of whether Llandinam is within SSA C, NRW has always understood that it is adjacent to but outside the SSA. However our primary concern is with the environmental impacts produced by the proposal, rather than its precise location.

### **Brief Summary of Case**

47. Though there is an urgent need for renewable energy, NRW considers that there is sufficient potential onshore wind energy to play its appropriate part in the renewable energy mix, and for Wales to play its full part in meeting national and Welsh targets.
48. The available data on potential power output from the SSAs, including that provided in the Renewable Energy Roadmap, 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.

49. NRW continues to believe that the strategic, spatial and target based approach adopted in Wales through TAN8 remains the best way to meet the need for renewable onshore wind energy and does not conflict with national target. There is no incompatibility between that approach and targets and the overall UK approach and targets.
50. It is the Prime Minister's view that when renewable energy targets are reached, there must be a debate "*in the House and outside*" about what happens next. It is the Welsh Government view that the targets set out in TAN8 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.
51. While the Welsh Government have precise targets for the contribution of wind energy to the renewables mix, 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.
52. It is therefore open to the Secretary of State to once more allow "*local discretion in identifying the best sites.*", 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.
53. There is little to choose between the 5 proposals in planning policy terms. The assessment of a proper planning balance will therefore be primarily a matter of weighing the impacts of each proposal, as understanding the value of any possible mitigation. NRW will provide specialist evidence on impacts, and continues to work with the developers on mitigation. In making that assessment however, it is NRW's view that considerable weight should attach to the sensitivity and value of the National Park, as well as to its statutory designation.