

Environment and Sustainability Committee, National Assembly for Wales Inquiry into Energy Policy and Planning

Submission by Dr Richard Cowell, Cardiff University, September 2011

1.0 Introduction

Richard Cowell is a Reader in Environmental Planning at the School of City and Regional Planning, Cardiff University (cowellrj@cardiff.ac.uk). His research interests lie in the relationship between land use planning and sustainable development, with a particular focus on the interface between planning and renewable energy. This submission reviews the key targets and planning arrangements for energy infrastructure in Wales and the UK, before proceeding to assess the performance of these arrangements.

2.0 Targets for renewable energy and climate change

In the early years of the last decade, the Welsh Government's set generation targets for renewable energy of 4TWh per annum for 2010 and 7TWh for 2020.¹ These targets informed Welsh planning policy guidance for renewable energy, notably Technical Advice Note 8 (TAN8) released in 2005.² To support the 2010 target, a technology-specific target was set for 800MW of new on-shore wind power to be installed, with another 200MW from offshore wind and other renewable technologies.

Since this time, government action to address climate change has intensified. Under the Climate Change Act, the UK Government has committed itself both to an overall emissions reduction target for greenhouse gases of 80% by 2050, and a system of Carbon Budgets. In line with this, the Welsh Government has made commitments to annual reductions in the emissions of the six greenhouse gases of 3% per year, in areas of devolved competence.³ This target includes all 'direct' greenhouse gas emissions in Wales; i.e. it includes the emissions associated with electricity consumption in Wales, as allocated to end-users, but excludes those from heavy industry and power generation.⁴ An interim target of a 40% reduction by 2020 has also been set.

For renewable energy, the Welsh Government aims 'to renewably generate up to twice as much electricity annually by 2025 as we use today and by 2050, at the latest, be in a position where almost all of our local energy needs, whether for heat, electrical power or vehicle transport, can be met by low carbon electricity production'.⁵ The Welsh Government has also estimated the potential for major renewable energy technologies, of which salient features are:

- total renewable electricity output by 2025 is expected to be 48TWh and about half of this is expected to come from offshore wind and tidal range power, which assumed progress with a Severn tidal project
- the 5TWh assumed to come from on-shore wind is deemed to require 2GW of installed capacity, which is anticipated to be in place by 2015-2017

Two issues arise in linking consent procedures for energy infrastructure and the Welsh Government's greenhouse gas emissions reduction targets:

- Although renewable energy is essential to achieving a decarbonised energy system, the extent to which meeting renewable energy targets contributes to Welsh greenhouse gas emission reduction targets in the shorter term depends on how much fossil fuel generation is actually displaced. This highlights that what matters is not simply the allocation of planning powers but

how they are used, not just for renewable energy schemes but also for fossil fuel projects, and in relation to the overall level of consumption. Moreover, any displacement of fossil fuel by renewable energy would occur within the wider UK energy system, not just within Wales.

- Although consent decisions for electricity generation facilities are relevant to the renewable energy targets, they are not directly relevant to the Welsh Government's targets for greenhouse gas emissions reduction, because these exclude emissions from power generation. The link is indirect, insofar as Welsh power generation influences the carbon intensity of the overall UK electricity supply mix.

3.0 Consenting Arrangements for Energy Infrastructure

The planning arrangements for energy infrastructure can be categorised according to the scale of the infrastructure concerned, and whether it falls onshore or offshore.

Small-scale, micro-generation equipment

As with other categories of development, very small renewable energy generation equipment ('micro-generation') may be installed without the need for planning consent. This is referred to as 'permitted development', and the Welsh Government has paralleled England in extending permitted development rights for micro-renewables. Smaller electricity distribution lines are also permitted development.

Electricity generating facilities below 50MW

For facilities below 50MW, applications are determined by the local planning authority within the town and country planning system. If the local authority refuses consent and the developer appeals, or the Welsh Government decide that an application raises wider issues, then a public inquiry will be held run by the Planning Inspectorate. They issue a recommendation to Welsh Ministers who make the final decision.

Major energy generating facilities and grid lines

Larger power stations (50MW or above) have long been subject to special planning procedures, which have applied equally to England and Wales. Since electricity privatisation, proposals have needed to secure 'Section 36' consent under the Electricity Act 1989; consent is issued by the relevant Minister under a process managed by a special unit in Whitehall. Local planning authorities are important consultees – if they object to an application it automatically triggers a public inquiry. Comparable procedures apply to major grid lines, under Section 37 of the 1989 Act.

The desire of successive governments to 'streamline' the decision-making process for major infrastructure has seen the inception of new consenting arrangements. Under the 2008 Planning Act, responsibility for determining consents for onshore generating facilities of 50MW or above and large grid lines now fall to an independent body, the Infrastructure Planning Commission (IPC). The IPC will hold an examination for each application, but work to a strict timetable. Its decisions must be made in accordance with National Policy Statements, issued by central government, which aim to clarify the need for certain categories of infrastructure. The Welsh Government is a statutory consultee to this process.⁶

Although the May 2010 Coalition government plans to abolish the IPC, the broad structure of the new process remains intact. Although examinations will be held by a Major Infrastructure Unit (MIU) within the Planning Inspectorate, the process will still be 'streamlined', and National Policy Statements will guide deliberations. However, final decisions will revert to being made by Ministers and National Policy Statements will be ratified by Parliament.

The Scottish Government has executive control over the consents process for major energy infrastructure. Applications to build and operate power stations and to install overhead power lines are made to the Scottish Ministers for consent: in operational terms, the consents process is handled by the Energy Consents Unit.

Offshore renewable energy

The arrangements for off-shore energy developments in England and Wales are more complicated. For schemes below 100MW, the lead organisation for consents is to be the Marine Management Organisation created by the Marine Coastal Access Act 2009. For schemes above 100MW, applications fall to the IPC with the Marine Management Organisation as an important consultee. Broadly speaking, these arrangements apply in Wales too, subject to the caveats that (i) the onshore works pertaining to major offshore renewable energy facilities (like transformers) will be consented by local planning authorities in Wales, rather than the IPC (as in England), and (ii) applicants seeking to develop off-shore wind farms in the in-shore waters around the Welsh coast can either apply to the Welsh Government, under the 1992 Transport and Works Act, or to the IPC.

In Scotland, from April 2011, a new agency Marine Scotland has been given responsibility for issuing all of the licenses and consents for offshore renewables.

Steps to devolve the responsibility for consenting major energy infrastructure to Wales thus need to consider not only the relationship with the IPC (and then MIU), but also the Marine Management Organisation. That said, most offshore wind projects are likely to exceed 100MW and therefore fall outside its purview.

4.0 Planning Policy for Energy Infrastructure

To assess whether a particular allocation of powers is more likely to deliver a given goal (such as for renewable energy), one must also look also at the policies against which decisions are to be made.

An important feature of the National Policy Statement for energy is that it seeks to clarify the need for each type of energy generation and grid infrastructure, with the expectation that issues of need will not normally be reopened in individual project inquiries. Moreover, the NPS does not permit the IPC (or successor bodies) to assess whether individual energy generation projects will assist in meeting the Carbon Budgets: 'it is for industry to propose the specific types of developments that they assess to be viable'⁷, within the strategic framework set by government (such as the European Union Emissions Trading Scheme). The UK government has resisted setting targets or limits for individual types of energy generation.

The implication is that if the consenting powers for major electricity generating infrastructure was devolved to the Welsh Government, and it adopted the same line as the current NPS, it would be difficult to use the consents mechanism to steer investment towards greenhouse gas emissions reduction targets.

For applications in Wales below 50MW, the main policy context is given by local development plans and national planning policy guidance. This includes Planning Policy Wales and the system of technical advice notes (such as TAN8). From the 2005 revision of TAN8, the main thrust of Welsh planning policy has been:

- to stress the importance of expanding renewable energy, to meet Welsh targets;
- to set out the factors to be taken into account when determining proposals for renewable energy projects;

- for on-shore wind, to institute a presumption in favour of the development of large-scale wind projects (of 25MW or above) within seven demarcated ‘Strategic Search Areas’, while allowing a more restrictive approach to be taken to onshore wind schemes above 5MW outside them.

The Strategic Search Areas have – unsurprisingly – attracted wind farm applications of more than 50MW in capacity. For such applications, responsibility for implementing Welsh planning policy falls to the IPC (then MIU), although it should be noted that a number of large wind farm applications were lodged before the 2008 Planning Act procedures, and these are being addressed under Section 36. Consequently, the relationship between National Policy Statements and Welsh planning policy becomes important. Although the NPS explains that ‘(t)he IPC should have regard to’ Welsh policy, and expects ‘applicants to have taken them into account when working up their proposals’, it also says ‘(w)hether an application conforms to the guidance or the targets will not, in itself, be a reason for approving or rejecting the application’.⁸

This could be interpreted in a number of ways. It might be read as no more than a reflection of the discretionary character of British planning policy, in which each application is to be treated on its merits. Equally, one might observe that the firm spatial policies in TAN8 have not been reflected with equal firmness in the National Policy Statement. Although the National Policy Statement has received the ratification of Parliament, it is unclear whether there is any statutory reason why it could not have been worded to support more firmly the policies of TAN8.

5.0 Evaluation – how has the planning regime for major energy projects performed?

Clearly, the multi-tier arrangements for making decisions on major energy infrastructure attenuate the decision-making authority of the Welsh Government, but the substantive implications for development outcomes – and thereby renewable energy aspirations - are unclear. No consents have yet been issued by the IPC, and the arrangements for offshore developments are not yet fully in place. Consequently, there is little hard evidence by which to deduce the weight being given to Welsh planning policy, or whether the IPC’s decisions differ from what the Welsh Government might have done. Section 36 consents have been issued for a series of gas-fired power stations (as at Baglan and Pembroke) and biomass power stations (as at Port Talbot), but DECC’s decision letters do not record whether this is what the Welsh Government would have wished.

In the absence of evidence, this submission offers broader considerations against which the interface between planning, consenting processes and energy policy might be judged. The main point is that assessing ‘the performance’ of planning is by no means simple, since the planning system seeks to achieve different objectives simultaneously – the delivery and reconciliation of a range of economic, social and environmental objectives, while providing for public engagement and democratic legitimacy. Concomitantly, those concerned that the Welsh Government does not possess the full array of consenting powers may have different concerns in mind, which may prove hard to reconcile.

5.1 Delivery

New on-shore wind energy development from 2005 to 2010 fell short of the Welsh Government’s 800MW target. Before judging TAN8 a failure, it must be noted that there is now about 1950MW of onshore capacity under active consideration within the Strategic Search Areas:⁹ a level sufficient to help the Welsh Government meet its 2GW aspiration. It could be concluded that TAN8 has helped to construct a stable and attractive context for large-scale wind energy investment in Wales.

Nevertheless, it is often argued that TAN8 – and planning processes generally – have delayed the delivery of renewable energy investment. Such claims require qualification. Firstly, although TAN8 did disrupt the flow of on-shore wind applications coming forward, new applicants have also had to

negotiate Forestry Commission Wales's preferred bidder strategy for applications within Strategic Search Areas that also fall within the national forest estate; larger power station applications have also needed to address the shifting consents regime for major infrastructure projects, including the IPC's new requirements for pre-application consultation. Electricity Market Reform may also create hesitancy among developers.

Secondly, and more fundamentally, whether decision-making speed should be the pre-eminent basis for judging the effectiveness of planning is questionable, especially where larger projects with significant systemic impacts are concerned. Arguably, planning processes ought not be concerned solely with consenting the maximum level of development as quickly as possible, but with helping society both identify and deliver the *best* low carbon energy system possible.¹⁰ This entails some consideration of the other goals that ought to be met, alongside those of low carbon energy, which is not always swift. TAN8 should thus not be judged solely against the delivery of renewable energy, but also the delivery of valued landscapes, free of major industrial intrusions. For some, the concern might be that the IPC will fail to give adequate weight to the spatial policies of TAN8.

There is one dimension of delivery where simply relocating consenting powers from one arena of government to another will not straightforwardly resolve the problem – coordinating grid connection with new energy generation capacity investment. This is not a new problem.¹¹ The procedures operated by the IPC replicate British planning conventions in dealing with separate applications separately (because power stations and grid connections are applied for by separate, private companies), with grid connections being subservient to power station applications (since grid operators have an obligation to connect).

In theory, TAN8 could have given the Welsh Government an advantage over other parts of the UK, by providing a firm spatial expression of likely concentrations of on-shore wind investment before individual applications come forward, allowing early discussions about grid capacity reinforcement. Conflicts that have emerged around transmission line projects in mid-Wales suggest that it has proved difficult to translate the 'advance warning' of TAN8 into a planning process which overcomes the fragmented nature of the consenting regime.

5.2 Engagement and democratic legitimacy

It is often contended that the problem with planning lies in local implementation, especially the susceptibility of local planning committees to cave in to organised and vocal local opposition, leading to refusals of projects which, on policy grounds, should have been consented. Indeed, the recent planning reforms in England and Wales – the system of National Policy Statements and the IPC – might be read as attempts to delimit the impact of 'local objections', and thereby expedite consent. It is unclear that they have achieved this, and the reasons why might hold lessons for any decision-making system for major energy projects introduced by the Welsh Assembly government. Simply reallocating decision-making powers from one level to another may be insufficient as a mechanism for expediting renewable energy development, insofar as it may do little in itself to tackle the reasons why major energy projects are controversial.

One reason is quite simply the scale of transformation - in our energy systems, in our modes of travel and lifestyle, and in our wider environments - required by the decarbonisation of electricity generation, and the unavoidably uneven distribution of costs and benefits. One should not be surprised that this is generating significant societal conflict. It is equally unsurprising that much of the societal response to these transformations gets concentrated on the planning system, given that it is one principle democratic arenas for deliberating the direction of development. For many people – despite the best efforts to encourage wide consultation around planning policies – it is only when specific projects come forward that their interest is ignited.

Another reason concerns the perception that decision-making processes are unfair – an important dimension of public opposition to major energy development. Devolving consent decisions for major energy projects from London to Cardiff may help in this regard but not perhaps if the Welsh Government just replicates a centralised, fast-track decision-making procedure. The 2008 Planning Act consenting process has attracted opposition for the way in which it restricts public engagement, and it is not yet clear whether the recent emphasis on ‘front loading’ public involvement (i.e. consulting widely before proposals are submitted) leads to greater public contentment. Indeed, it may simply expose earlier in the planning process the reality – which many of the members of the public find difficult – that key policy decisions justifying particular forms of energy investment have already been taken. It is not easy, in practice, to confine the new, ‘streamlined’ consenting processes to minor issues of siting and design.

All of this suggests that the Welsh government would do well to consider carefully how the public might be engaged in policy formulation, rather than simply development applications. This is a fundamentally difficult issue, but a few lessons are worth noting. The fact that consultation drafts of the 2005 version of TAN8 received 1700 separate responses – a remarkable number for a planning policy document – could be taken as positive endorsement of how translating future energy supply into some kind of visual form stimulates engagement. There is also evidence that collaboration between tiers of government in the identification of wind energy development zones can lead to policies which enjoy greater local commitment, as in Germany between Länder and municipality level, although it entails risks for achieving targets. Simply passing responsibility for identifying wind power development areas to local municipalities, without adequate incentive to give weight to renewable energy targets, risks too few areas being identified, as happened in Sweden.¹²

While there will be criticism of the veracity of some of the concerns raised by sectors of the public, it is equally true that even carefully prepared strategic spatial guidance cannot be omniscient, and that there will inevitably be issues and impacts that only become apparent at the application stage. It is perfectly consistent with the implementation of TAN8 that certain specific applications may come forward within the Strategic Search Areas yet not be found environmentally acceptable. Arguably, because central government planning policy cannot easily be omniscient in its identification of environmental and social consequences, and because the ‘need’ for certain categories of energy technology tend to shift, there is a case for seeing planning not simply as a means of facilitating the unquestioning delivery of investment, but an important arena for testing policy. Indeed, a further criticism of the kind of centralised consenting regime set up by the 2008 Act is the assumption that the overarching need for categories of infrastructure can be wholly resolved, *a priori*, of individual planning projects, and that nothing useful is learned from the contestation of ideas that takes place within planning processes.

5.3 Costs and benefits

One further factor shaping public opposition is the sense that local communities receive relatively little benefit from major renewable energy projects and grid infrastructure. While the Welsh Government is supporting community-owned renewable energy development through initiatives like Ynni'r Fro, the bulk of capacity development is likely to come from major, international corporations, for which other mechanisms would be required to channel benefits to the affected areas. The proposal of the Coalition government to direct a greater share of business rates to local communities may help incentivise acceptance (as happened to some extent with similar strategies in France).¹³ Although the mode of renewable energy development, including the balance between different forms of ownership, is a reflection of the financial support system rather than the planning system, attention could be given to whether planning policy does as much as it could to accommodate renewable energy projects with substantial community input.

6.0 Conclusions

There may be reasons of principle, based on self-determination, why Wales should be given responsibility for consenting major onshore and offshore energy infrastructure projects. How far this will assist in meeting the Welsh Government's aspirations for renewable energy and targets for greenhouse gas emissions reductions is complicated by a number of factors:

- the dislocation between renewable energy targets and greenhouse gas emission reduction targets;
- the policy criteria against which new energy projects will be judged;
- the problems of coordinating grid capacity investment with energy generation

Simply reallocating decision-making powers will not automatically resolve these problems, or the root causes of opposition to major renewable energy facilities. But it provides an opportunity to think about how planning can be used, creatively, to foster a low carbon energy future, and this may entail seeing it as more than a regulatory hoop. This should also be an opportunity for considering carefully the merits of creating a Welsh version of the kind of fast-track decision-making process currently operated by DECC (under Section 36) and the IPC.

¹ Welsh Assembly Government (2003) *Welsh Assembly Government Energy Statement*, February.

² Welsh Assembly Government (2005) Technical Advice Note 8: Planning for Renewable Energy. July, WAG: Cardiff.

³ Welsh Assembly Government (2010) *Climate Change Strategy for Wales*, October.

⁴ Welsh Assembly Government (2010) *Climate Change Strategy for Wales*, October, p.34

⁵ Welsh Assembly Government (2010) *A Low Carbon Revolution*, p.6.

⁶ Infrastructure Planning Commission (IPC) and the Welsh Assembly Government (The Assembly Government), *Memorandum of Understanding*.

⁷ Department of Energy and Climate Change (2011) *Overarching National Policy Statement for Energy* (EN-1), July, para 3.3.6.

⁸ Department of Energy and Climate Change (2011) *National Policy Statement for Renewable Energy Infrastructure* (EN-3), Para 2.2.1.

⁹ Review for the Welsh Assembly Government by Arup (2010)

¹⁰ Breukers S and Wolsink M (2007b) 'Wind power implementation in changing institutional landscapes: an international comparison', *Energy Policy* 35, 2737-2750.

¹¹ Sheate, W R (1995) 'Electricity generation and transmission: a case study of problematic EIA implementation in the UK', *Environmental Policy and Practice* 5(1), 17-25.

¹² Bergek A (2010) 'Levelling the playing field? The influence of national wind power planning instruments on conflicts of interest in a Swedish county', *Energy Policy* 38, 2357-2369.

¹³ Nadež A (2007) "'Planning", "siting" and the local acceptance of wind power: some lessons from the French case', *Energy Policy* 35, 2715-2726.