

CLIMATE CHANGE AND THE LAW

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RENEWABLE ENERGY PROPOSALS: HURDLES TO DELIVERY IN THE FUTURE

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The Problem

1. No matter how effective Emission Trading Schemes (“ETSs”) are; how successful national governments are at restraining growth in use of energy; and how many subsidised schemes for energy efficiency are introduced, most scientists agree that there is a **daunting gap** between the amount of energy the human population will continue to demand and the ability of the earth to cope with the emissions from the required level of generation.
2. Added to that, the UK government has to grapple with the following key points¹:
 - a. the geopolitical implications in terms of **security of supply** in excessive reliance on imported fossil fuels (from e.g. the Middle East and Russia); and
 - b. the **energy gap** – as existing facilities come to the end of their life² and as e.g. gas production from the north sea declines.
3. So we are in a situation where: (1) climate change considerations; (2) security of supply considerations; and (3) the looming energy gap; all point to the need to meet our energy requirements other than through excessive reliance on use of fossil fuels. But how?

The Answer: Nuclear?

4. **Nuclear** energy seems to many to be at least a partial solution. But it is no panacea – even its most vocal proponents do not contend that it will meet a significantly rising share of UK energy requirements in the foreseeable future. With much existing capacity coming to the end of its life in the not too distant future, and with the consenting procedure destined to remain mired in controversy and litigation for years to come (with every stage being subject to minute legal scrutiny by critics: see e.g. *R(Greenpeace) v Secretary of State for Trade and Industry/BERR*) there is no realistic prospect of nuclear energy making a sufficiently large contribution towards meeting underlying energy policy objectives in the foreseeable future such as to be a complete answer.

The Answer: Renewables?

5. In that context **renewable energy (“RE”)** developments seem an obvious solution: so the logic goes if one can mass-produce affordable renewable energy, then humans can continue to have

¹ These were and are a key driver of UK energy policy over and above climate change considerations.

² Predictions vary but somewhere around 20% of generating capacity will be closed between now and 2020 at a time when electricity consumption continues to rise.

high energy consumption life-styles without “costing the earth”. Further with wide spread and localised generation and with many different renewable technologies available, RE addresses security of supply issues. A win-win situation which any politician would be attracted to.

Technological Advances

6. For the first time in history, renewable energy is now seen as being technologically sufficiently sophisticated to make a significant contribution to energy needs. Recent technological advances mean that what was only 10 years ago regarded as blue sky thinking is becoming mainstream. There is no doubt that this technological advance is dramatically changing – year by year and even month by month – the terms of the RE debate.
7. Whether it be solar panels whose price is coming down almost as quickly as their efficiency is increasing; or new tidal stream and tidal range technologies which are able to generate electricity in ways only dreamed of 10 years ago or substantially taller wind turbines whose manufacturers say they can generate efficiently at sites which were previously regarded as insufficiently windy to justify the investment, it is plain that renewable energy developments are entering the mainstream.
8. Interestingly, although many RE related companies suffered significant falls in share price along with everyone else last year, private sector R&D into RE is reported to be running at unprecedented levels.
9. It can be confidently expected that there will be major technological advances in the years to come. These advances will pose major challenges to the planning and legal system which will have to work hard to keep up.

Economic circumstances

10. Perhaps counter intuitively the current economic circumstances are seen by many (including our own PM and the President of the USA³) as providing an opportunity for delivering the investment necessary to generate a step change in RE developments.
11. We will, so the argument goes, fight our way out of the economic crisis by massive investment in a step change in delivery of renewable developments: stimulating the economy, creating jobs and repositioning manufacturing capacity to meet the demands of a low carbon economy.
12. You can save the banks; and save the world too!
13. So politically, environmentally, economically and technologically, permitting and encouraging renewable energy developments may seem to be an obvious policy response to current environmental and economic circumstances.

³ In the case of the USA, for example, investing huge sums of public money in a renewed “national grid” which will enable much renewable energy generation which is presently curtailed by problems with connection to the grid.

The Government's Ambitions

14. It is plain that that is how the government sees it.
15. In June 2008 at the Low Carbon Economy Summit the PM talked of £100bn of investment in RE over 12 years; provision of 4000 additional onshore and 3000 additional offshore wind turbines and massive tidal and wave power schemes. Apparently he has claimed that the UK should be the "Saudi Arabia of wind power". More recent policy statements in the light of the economic crisis are interesting in the significant *economic* emphasis being placed on RE projects.
16. But that policy response has to be applied and delivered within a very complex set of environmental protection laws which seek to ensure that harm (even by developments which bring climate change benefits) is properly analysed and assessed at all stages of the consenting process and that alternative means of delivering the benefits are considered. There are no current proposals to water down these environmental protection policies in the light of the dash for renewables. RE projects will have to negotiate the myriad of legal hurdles if they are to be delivered.
17. There is no doubt that delivery of RE developments will be a very major planning issue for years to come.

Implications and Delivery

18. What does the dash for RE developments mean in practice? In this talk I aim to highlight some of the issues which I see arising in the future as a result of the step change in ambitions for delivery of renewables.⁴
19. By way of overview only, as the most obvious and most easy to develop options for RE developments are taken up, it is inevitable that RE proposals will be pushed towards less obvious and more controversial locations and options. That will mean that:
 - a. In future RSS reviews, consideration of strategic spatial decision making for RE developments is likely to be hotly contested as will be the content and conclusions of the SEA which informs the RSS;
 - b. nationally protected areas of natural beauty and/or nature conservation importance will be likely to be affected (even if only indirectly) thus engaging the whole myriad of policy and legal protections afforded to them;
 - c. as more marginal sites (in terms of benefits) come forward, the planning balance in favour may shift. "Conspicuous adverse effects" may arise, in which case developers may in future have to justify their developments by assessment of alternative sites and alternative solutions – something of course currently strenuously resisted; and
 - d. of course, we still have the scope for dispute and challenges on access to information and compliance with the detailed EIA requirements.

⁴ For an analysis of recent case law see John Litton's seminar paper for the Renewable Energy Seminar High Court Challenges – in October 2008 available on the LM website.

20. Whilst much of this controversy will play out in the political sphere, there is no doubt the Courts will find themselves dragged into the issues on a regular basis.

The Context

21. As we have seen the law at both national and EU level is moving towards legally binding targets over varying time frames for renewable energy. For 20% of UK energy requirements to be “renewable” by 2020 implies at least that 33% of electricity generation will have to be renewable.

22. This is a huge figure, especially for:

- a. a densely populated country;
- b. with limited hydro-electric generating potential; and
- c. very substantial proportions of its undeveloped land mass covered by nature conservation and natural beauty protection designations.

23. Even Denmark which has a mature wind industry, masses of available land, favourable wind conditions and a small and sparse population, achieves only 20% of RE generation.

24. Or looked at another way, to achieve 20% would require:

- a. at least a 10 fold increase in all existing RE capacity; or
- b. between 3 and 5⁵ times the capacity which would be generated by the Severn tidal schemes - “the Severn Project” (a highly controversial project costing billions, taking years in the evolution of the proposals, the planning approvals process and even longer in the building and in a unique location with possibly the best tidal range resource in the world).

25. So the task is great.

26. So too are the obstacles.

The Non-Legal/Planning Obstacles

27. Technological hurdles remain very substantial:

- a. In respect of offshore windfarm developments, the best, most easily developed and most profitable have been (or are in the process of being) developed. More remote locations with less favourable geological conditions and more site constraints will be much harder to develop;
- b. Harnessing wave power is still in its infancy in terms of it moving off the drawing board and becoming a major, efficient and affordable energy source. So far only small-scale devices are currently in operation although much more substantial developments are now in the pipeline⁶;

⁵ Depending on which scheme is ultimately chosen and whose figures one accepts.

⁶ EON are reported to have recently ordered the first large capacity wave generator in the UK

- c. The Severn Project (tidal range) proposals are currently being evaluated. Five different technological solutions are being compared (and a sixth which has less environmental impact and which nature conservation bodies are promoting is also being worked on). Whilst a decision is expected in the short to medium term, converting a decision on the appropriate technology into an actual operating scheme is, no doubt, a complex exercise; nothing on this scale has been tried anywhere ever before;
 - d. Solar power is making vast strides forward in Saudi Arabia and many Gulf states as a result of some significant technological advances. It is also attracting considerable investment in the USA. However, its potential to make a major contribution to UK needs (given the climate and the relative scarcity of suitable land) is questionable; and
 - e. Micro-generation has had teething problems: see e.g. the reported B&Q withdrawal of its micro-generation turbine apparently on the basis that in many situations it generated less electricity than consumed in its manufacture.
28. Economically too, whilst there are many companies reaping substantial rewards from the rush for RE, many projects are facing funding difficulties:
- a. many independent forecasters anticipate that the Severn Project requiring massive public investment. Whether that can be delivered in future public spending rounds remains to be seen; and
 - b. Off-shore wind turbines investors have had a far from universally successful experience with notable withdrawals from the industry having occurred.
29. This issue can, however, be overstated. Whilst the statistics available are not altogether consistent the overall picture appears to be of very substantial overall increase in investment both here and overseas. In 2008, investment in wind power meant that it became the single largest source of new electricity in the US and EU. Massive further investment in the US is currently planned⁷.
30. Politically, whilst there is a consensus in favour of “green technology” (now spreading to the USA), the devil, as ever, is in the detail. The general consensus rapidly falls apart when the generalised ambition gives way to specific proposals on the ground. The success of the Eco-towns campaign in terms of reducing the scale of the UK Government’s ambition – although not directly on point – is a vivid illustration of how what may seem a laudable objective gets seriously bogged down when concrete proposals to give effect to that laudable objective emerge.
31. Further, even those with an active interest and strong support for sustainable energy and RE generally find themselves driven to object to specific proposals. Take NE or the EA – keenly interested in climate change and aware of the bigger picture – finding it very difficult to avoid objecting to specific proposals, such as wind farm developments near SPAs or tidal projects affecting fisheries.

⁷ Most recent announcements are for a target of an additional 80GW of capacity by 2020 in the US

32. Despite these constraints, everyone is proceeding on the basis there will be major additional On and Off-shore wind capacity to 2020, some (potentially major) wave and/or tidal flow generation in that time frame, and potentially a massive tidal range project in the Severn.
33. Delivering that mix is a major national project which has major planning implications.
34. It is the Severn Parrage and On-shore wind capacity where the most significant planning and legal issues in the future are likely to arise.
35. In what follows I look at the issues which may arise in respect of each of these as a proxy for wider legal issues which could be relevant to a whole host of proposals.

Legal and Planning Hurdles

The Severn Project – a case in point

36. It is no secret that the Government places significant store by the potential for a Severn barrage in some shape or form being delivered in the period to 2020.
37. To that end, a short listing exercise of options has been carried out and the announcement made in January 2009 resulted in five options being taken forward for further assessment.
38. The environmental impact of any of the options will be very substantial. To name but one, the full barrage option will hold back the tide twice a day for several hours each time thus, even on the promoter's case, severely diminishing the Severn mudflats and inter-tidal feeding areas for many protected species. Those mudflats are of international importance for migratory species.
39. It is thus plain that HMG will be under considerable legal and political pressure to ensure that environmental considerations are at the forefront of its decision making.
40. Whilst generally supportive of RE projects in the right place, organisations such as NE and RSPB are actively seeking to ensure that impacts are minimised and alternative, less damaging solutions investigated. To that end, a number of alternative less damaging schemes have been promoted including one by nature conservation bodies which, they claim, has the prospect of delivering a similar amount of generating capacity at less cost whilst creating significantly less environmental harm.

SEA

41. The plan for a major RE project in the Severn is almost certainly a plan or programme for the purposes of the Strategic Environmental Assessment Directive ("the SEAD") and the UK is proceeding on that basis.

42. The Severn Project is thus an appropriate example to assess how SEA will play out for major RE programmes.

43. The SEAD is an important step forward in European environmental law. As the Director General of the Environmental Directive of the Commission stated in the foreword to the EU Guidance, environmental impact assessment for individual applications under Directive 85/337/EEC (as amended) takes place:

“at a stage when options for significant change are often limited. Decisions on the site of a project or on the choice of alternatives may already have been taken in the context of plans for a whole sector or geographical area. The [SEAD] plugs this gap by requiring the environmental effects of a broad range of plans and programmes to be assessed, so that they can be taken into account while plans are actually being developed, and in due course, adopted. It goes to the heart of much public-sector decision making. ... Proposals will have to be more systematically assessed against environmental criteria to determine their likely effects, and those of viable alternatives....”

44. The whole purpose is to ensure that environmental considerations are taken into account in evolution⁸ of the plan or programme - so that the ultimate choice is properly justified having regard to alternative means of delivering the same objective.

45. To this end, the Government has shortlisted 5 options for further consideration. It has left the door open to other options emerging through the process.

46. The current stage of the process – assessing those options and choosing between them – is **the crucial stage**. Well before any application for consent and even well before a final scheme has been worked up, the Government will make the “in principle” decision as to which option it will support/promote/fund.

47. This highlights a key point. Major strategic decisions are necessarily made at a relatively early stage of the “consenting” process. Very often, organisations and individuals seek to get involved in environmental decision making too late, after the key strategic decision making and policy making has occurred and at a stage when the options have already been limited.

48. By way of a further example. The RSS process normally now gives rise to identification of areas of search for wind turbine developments. Once areas are identified through the statutory processes and subject to SEA, the high level policy framework in favour of wind turbines in that general location will have been set and thus the scope for objecting to individual proposals on the basis that wind turbines are not appropriate in the general locality will be significantly more constrained than it would have been at the RSS stage⁹.

⁸ The process for SEA is an iterative one and the SEA does not all have to be contained in one document. However, it is plain that the SEA is meant to develop in tandem with the proposals contained in the plan: see e.g. recitals 4, 5 and 6 of the SEAD and para 5.3 of the EU Guidance. It is axiomatic that plans should develop in the light of the SEA in the environmental report, and not vice versa

⁹ Although of course, more local and site specific issues remain relevant.

49. The plan or programme making stage is, I think, the crucial stage.
50. For those promoting major/strategic RE developments, the policy formulation stage (either through the RSS and LDF in the case of wind turbines or through programme specific policy formulation in the case of the Severn Project) is crucial. If at that stage, an iterative process is gone through in which the choices made are properly justified, the scope for later problems and challenges will be substantially reduced.
51. Reg 12 of the Environmental Assessment of Plans and Programmes Regulations 2004 – which implement the SEAD –sets out the required contents of the environmental report as part of the SEA process. It shall “identify, describe and evaluate the likely significant effects on the environment of:
- a. Implementing the plan or programme; and
 - b. Reasonable alternatives¹⁰ taking into account the objectives and the geographical scope of the plan or programme.¹¹”
52. If that is done appropriately at the SEA stage, then it will be easier to satisfy the requirement of the EIA regulations and the Habitats Directive at the later stage of an application being pursued.
53. Whilst under current case law the Courts will not question the content or correctness of the information in the environmental report at the SEA stage: see by way of example Weatherup J

¹⁰Alternatives:

(1) The EU Guidance considers the requirements re: alternatives at paras 5.11 – 5.14. Para 5.11 states:

“The obligation to identify, describe and evaluate reasonable alternatives must be read in the context of the objective of the Directive which is to ensure that the effects of implementing plans and programmes are taken into account during their preparation and before their adoption.”

(2) In para 5.12 it goes on:

“...The essential thing is that the likely significant effects of the plan or programme and the alternatives are identified, described and evaluated in a comparable way. The requirements in Article 5(2) concerning the scope and level of detail for the information in the report apply to the assessment of alternatives as well. It is essential that the authority or Parliament responsible for the adoption of the plan or programme as well as the authorities and the public consulted, are presented with an accurate picture of what reasonable alternatives there are and why they are not considered to be the best option.”

(3) Para 5.13 states, inter alia:

“...The first consideration in deciding on possible reasonable alternatives should be to take into account the objectives and the geographical scope of the plan or programme.... An alternative can thus be a different way of fulfilling the objectives of the plan or programme. For land use plans, or town and country planning plans, obvious alternatives are different uses of areas designated for specific activities or purposes, and alternative areas for such activities.”

¹¹ Reg 12(2)

in *Seaport Investment Limited* [2007] NIQB 62 at para 26¹², inadequacy of analysis at the SEA stage may leave gaps which cannot be properly filled at later stages¹³.

54. How this plays out remains to be seen there being no examples yet where gaps in the SEA analysis have led to problems later on, but: (1) for promoters the clear message must to seek to start without preconceptions as to the correct answer and let the analysis of options guide the result; and (2) for those concerned about major strategic RE developments the clear message must be to seek to put forward alternative/less damaging options which achieve the same or similar underlying objectives at as early a stage of the plan making process as possible and not to wait until an application is submitted.

The Habitats Directive

55. Almost by definition, many (if not most major) RE projects will be in remote/rural areas. To date, experience has shown that many are near to designated areas for habitat and bird protection – SPAs (both onshore and offshore) and SACs.
56. Being the preferred option after a plan making process including SEA does not avoid the need for compliance with the Habitats Directive¹⁴; the Birds Directive and their implementing legislation in the UK principally the Conservation (Natural Habitats & c.) Regulations 1994 (“the 1994 Regs”)¹⁵.
57. Art 6(3) of the Habitats Directive sets out a framework for the consideration of the impacts of any “plan or project” before the competent authority (the local authority, central government or any other arm of the state) gives consent. That requires a well known (but often misunderstood or misapplied) staged approach to be adopted. These requirements are transposed into national law in regs 48 – 53 of the 1994 Regulations. Difficult questions arise at each stage. As experience has shown it is essential to address each stage separately and in turn because otherwise the wrong legal questions can get asked at the wrong stage of the process and a conclusion reached which is not defensible.

¹² ***“The responsible authority must be accorded a substantial discretionary area of judgment in relation to compliance with the required information for environmental reports. The Court will not examine the fine detail of the contents but seek to establish whether there has been substantial compliance with the information required by schedule 2. It is proposed to consider whether specified matters have been addressed rather than considering the quality of the address. Thus the Court will look not to the fine detail but instead to whether particular matters have actually been addressed.....”***

¹³ There are currently references to Europe in respect of this case.

¹⁴ Directive 92/43/EEC as amended on the Conservation of Natural Habitats and of Wild Fauna and Flora

¹⁵ Key Sources: Council Directive 92/43/EEC – Conservation of Natural Habitats; Conservation (Natural Habitats) Regulations 1994; Managing Natura 2000 Sites - The Provisions of Article 6 – EC website: ECJ Website – http://curia.eu.int/en/content/juris/index_form.htm. It is often claimed that MN2000 is no more than Guidance and cannot dictate the interpretation of the Directive. It is, however, clear from the cases, including *Waddensee* and *Humber Sea Terminals* that the ECJ uses MN2000 as a significant aid to construction. If in doubt, refer to it – and there is a good chance that the answer you find there will ultimately be adopted by the ECJ.

58. The stages are broadly as follows¹⁶:

- a. Can it be demonstrated that the proposals will not have a significant effect on the European site;
- b. If not, an Appropriate Assessment (“AA”) is required of the implications of the proposals on the Site;
- c. In the light of the AA, a permission may be granted if the decision maker is sure that the proposal will not have an adverse effect on the integrity of the European Site (“the Integrity Test”);
- d. If a proposal fails the integrity test it may only be permitted if there are no alternatives to it and there are imperative reasons of overriding public interest to justify granting;
- e. In such circumstances, compensatory measures to compensate for the harm caused must be delivered.

59. Three important points are particularly relevant to major RE projects (especially those which are based on new technology and whose implications¹⁷ are not yet fully understood or tested)¹⁷.

60. First, a proposal does not have to be in or on the SPA/SAC to trigger the need for AA¹⁸ - a common and surprisingly recurring misconception;

61. Second, the assessment has to be approached on a precautionary basis¹⁹. This means - see *Waddensea C-127/02 [2004] ECR I-7405*²⁰ - that the decision maker has to be certain - no

¹⁶ This summary is no substitute for the detailed provisions and the case law under each part.

¹⁷ For a full analysis of case law on the approach to the Integrity Test see my seminar paper - “Habitats and Birds Directive Case Law” on the LM website.

¹⁸ The classic case where a development off site may fall within the regulations is where a windfarm is proposed other than on an SPA but the birds from the SPA fly through the site of the proposed windfarm on their way to and from the SPA. Dependent on the relationship between the site and the SPA and the flight paths of the birds, it will often (even at some distance) be necessary to apply the Regulations.

¹⁹ The precautionary principle is to be applied in making decisions under the Habitats Directive: see *National Farmers’ Union [1998] ECR I-2211* para 63. The principle is not defined in the Treaty but in 2000 the Commission adopted a Communication on the precautionary principle where it stated:

“whether or not to invoke the precautionary principle is a decision exercised where scientific information is insufficient, inconclusive, or uncertain and where there are indications that the possible effects on the environment, or human, animal or plant health may be potentially dangerous and inconsistent with the chosen level of protection.”

Kramer on EC Environmental Law Fifth Ed Sweet and Maxwell, London 2003 notes that:

“increasingly [the precautionary principle] is understood to justify measures even in cases where scientific uncertainty exists as to the cause and extent of the environmental impairment.”

²⁰ “61. In view of the foregoing, the answer to the fourth question must be that, under Article 6(3) of the Habitats Directive, an appropriate assessment of the implications for the site concerned of the plan or project implies that, prior to its approval, all aspects of the plan or project which can....affect the site’s conservation objectives must be identified in the light of the best scientific knowledge in the field. The competent national authorities, taking account of the appropriate assessment of the implications of mechanical cockle fishing for the site concerned in the light of the site’s conservation objectives, are to authorise such activity only if they

reasonable scientific doubt – that there will not be an adverse effect on the integrity. This is a very high test. There are obvious difficulties in meeting that test for new and untried/tested technology especially given that the burden is clearly imposed on the promoter to convince the competent authority of the absence of any reasonable scientific doubt based on best available science.

62. Third, where the integrity test is failed, “alternatives” comes back into the frame as do “imperative reasons” and compensation. It is worth considering these in an RE context by reference to the Severn Project.
63. It seems to me that there are a number of stages to compliance with the Habitats Directive all of which need to be met given an adverse effect on integrity of the SPA is (it is commonly assumed) inevitable in the case of any Severn Project option being adopted:
 - a. The first stage is for the UK to justify looking to exploit tidal range whether generally or in the Severn specifically. In the light of the pressing need for RE, that may be a relatively short exercise and will no doubt be addressed in government policy to be contained in the Renewable Energy NPS;
 - b. The next stage is to consider the options – against environmental considerations. That is the process currently being undertaken in the “Option Selection” exercise. If options are wrongly left out of consideration in that SEA, they may be brought back in by objectors at a later stage;
 - c. Having justified the choice of option (by reference to the Habitat Directive test and case law), the next question is whether its delivery is IROPI. A significantly more damaging option may not be IROPI if a less damaging option could deliver much of the benefit without the level of harm; and
 - d. Crucially, is the harm properly and fully compensated?
64. In the case of the Severn, the compensatory measures are yet to be finally identified but will presumably require compensatory mudflat and habitats to be artificially created to replace that lost. That will no doubt be a massive and complex exercise. The adequacy of compensation was one of the key reasons why the *Dibden* Container terminal proposals in an SPA were rejected.

On-Shore Wind turbines

65. Wind farms are controversial and polarise opinion in a way that most development do not. It is easy to see why that polarisation occurs – what may seem a benevolent and beneficial form of development from a distance (or when studying energy needs from Whitehall) may seem an

have made certain that it will not adversely affect the integrity of that site. That is the case where no reasonable scientific doubt remains as to the absence of such effects.”

unwarranted intrusion into beautiful and remote countryside; or a neighbour nuisance if in close proximity to your home.

66. The Government's push for a massive increase in on shore wind turbines over the next 12 years²¹ comes at a time when many of the most obvious sites (the best sites in terms of wind resource and the more remote from residential users) have already been subject to applications and, in many cases, permissions. More marginal sites and more controversial sites will now be promoted over a huge geographical area.
67. That this will be an ongoing and increasing headache for the Government is beyond question. The number of refusals by local authorities, the number of public inquiries required; the length of those inquiries; the number of people attending; the number of cogent issues raised; and the number of challenges to permissions are all testament to this area being and continuing to be very controversial and difficult in the years to come.
68. Formulating a policy ambition in Whitehall is one thing; translating it into development on the ground is quite another.
69. Whilst the following issues are not new, the way they play out will change as development applications are made in increasingly marginal or sensitive locations:
 - a. RSS policy formulation and RSS – see above;
 - b. Noise – as turbine size increases and as separation distances from residences are squeezed, noise issues are being raised in different ways, based on experience and new science;
 - c. Extent of the benefits – whilst government policy tells us that the benefits from even small scale renewable energy facilities are to be accorded significant weight, how does this work when the wind resource is more marginal and the economics of delivery are driven by (indirect) subsidy rather than by the generating capacity of the site;
 - d. Extent of the landscape harm – as we move into increasingly sensitive areas, how does the generalised policy ambition fit with the reality of the impact on the ground?
70. Further, the requirements of the EIA regulations have been a legal minefield in this area and will, no doubt, continue to be so.
71. Access to information - historically this has been a very significant issue and the cause of much litigation. My perception is that it is becoming less so as developers increasingly appear to recognise that a combination of the law on access to environmental information and natural justice concerns makes refusal to provide underlying data difficult to sustain.

²¹ See PM's Announcement in June 2008 at the Low Carbon Economy Summit

Noise

72. I do not intend to rehearse here the full legal issues arising on noise from windfarms²². A decision on a case in *Shipdham* in Norfolk at which many of these core issues were discussed with noise experts on both sides is awaited.
73. The government considers that it has a tried and tested formula to deliver an acceptable noise environment when turbines are located relatively close to homes – contained in ETSU; PPS22 and the companion guide and BERR standard conditions. Further, so the logic goes, technological advances are making the turbines quieter such that the scope for adverse noise impacts is reduced and separation distances can be correspondingly quite limited without significant adverse impacts.
74. It is plain that in its policy the Government advises that noise should not be an issue with appropriate separation distances, appropriate locational decisions and appropriate conditions: see PPS22 and ETSU 1997.
75. Further, there has been a conscious and deliberate policy decision that in very quiet rural areas, wind farm operators should not be required to limit their noise emissions by reference to prevailing background levels because that is regarded as an unreasonable fetter on the delivery of RE proposals. Thus, the premise of the policy is that windfarms can be accommodated in most locations without unacceptable noise impacts.
76. ETSU (1997) and its confirmation in PPS22 (2004) were based on the science, the knowledge, the turbines and the separation distances prevalent at that time. What happens if an objector or a Council seeking to resist wind turbine development does not accept the scientific or factual premise upon which government policy is based or seeks to rely on scientific knowledge or experience not available at that time?
77. It is axiomatic that in the planning field the government is entitled to formulate policy and guidance and that Inspectors are not to question the merits of that guidance. No matter how much one may disagree with aspects of PPS22 and ETSU 97, it is government policy that in assessing noise from turbines the methodology in ETSU should be followed²³.
78. It is plain that Developers rely on this general point to attempt to limit the ambit of debate both at application stage and at inquiry. The refrain - “it is not for you, sir/madam, to assess the merits of government policy” is one heard very regularly in this field. That point is legally correct: *Bushell v. Secretary of State for the Environment* [1981] AC 75.

²² For a detailed analysis of the approach to Noise from Windfarms, assessment and challenge including access to underlying data please see my seminar notes – Windfarms and Noise – on the LM website: October 2008.

²³ Criticisms of ETSU along the lines that it is out of date or it was “written by people actively involved in the wind industry” and not representatives of local residents have, for this basic reason not been successful. The Government has decided that it is the appropriate basic tool for assessing noise and inspectors will be hard pressed to second guess that.

79. But, and it is a very big “but” in this field, general policy and guidance cannot prevent consideration of:
- a. the specific facts of an individual case;
 - b. scientific information which suggests that the general methodology may need to be adjusted on the facts of an individual case; or
 - c. actual experience elsewhere on the ground which shows that the government approved methodology does not always accurately predict the impacts.
80. Thus, whilst it is undoubtedly true that it is not for parties to an inquiry to question the merits of government policy, their evidence on the matters in the previous paragraph is plainly capable of constituting “other material considerations” which the decision maker has to take into account and, in an appropriate case, reach a conclusion on.
81. Attempting to limit the ambit of debate on such matters is thus legally dubious. It may result in the decision maker failing to grapple with principal controversial issues or it may lead to challenges on the basis that the decision maker has been wrongly persuaded not to take into account material considerations.
82. Further, even if third parties are raising points which the experts advise are misconceived, tactically there is a big question mark as to whether it is sensible for developers to attempt to “close down” the debate on those issues. Experience in recent years has shown how objectors can and do use all avenues open to them to force a full open debate of the merits of a particular proposal – with significant consequences in terms of delay to decision making and costs.
83. Thus, the starting point is plainly government policy; but objectors should not feel constrained by policy to not raise points within the headings in the above paragraph and developers should seek to answer the substance of those points rather than fall back on the mantra - “it is government policy”.
84. A case in point is amplitudal modulation – the phenomenon where aerodynamic noise displays a greater degree of fluctuation than usual such as to give rise to greater disturbance and annoyance than would otherwise be the case. In other words at the same noise levels the impact on residential amenity is greater. The cause of AM is subject to significant debate and it is clear that there is no consensus as to when it may arise or how its occurrence may be predicted – although some experts have identified indicators which may point to the likelihood of it being an issue on the facts of a particular application.
85. ETSU discounted AM because it was thought to be a factor which was negligible – only 3 dBA at the turbines themselves and much less at residences.

86. Subsequent work commissioned by the Government suggested that AM could, in some circumstances, be significantly higher than that assumed in ETSU²⁴.

87. Further research was recommended and in 2007 the Salford report was published. It noted that *complaints associated with AM were relatively limited and concluded:*

“The incidence of AM and the number of people affected is probably too small at present to make a compelling case for further research funding in preference to other types of noise which may affect many more people”

88. The government decided not to undertake further research and in a press release said that ETSU guidance should continue to be used (“the Statement”). Some have used (and continue to use) this statement to argue that AM was not a factor to be considered at public inquiries and, even, that AM does not exist.

89. This Statement was challenged by REF (the Renewable Energy Forum) [CO/9686/2007] on the basis that the SoS was ignoring the result of the Hayes study and seeking by a policy statement to exclude from consideration on an individual application the possible impacts of AM. In other words the complaint was that the SoS was seeking by a policy statement to shut down debate on AM at public inquiries – and to dictate that AM as a phenomenon did not exist or was not significant.

90. However, the SoS did not defend the position on the basis that: - “I have decided that AM is not significant enough to be considered. That is my policy and public inquiries cannot go behind it”.

91. On the contrary she resisted permission being granted for JR on the basis that the Salford report and her response to it did not prevent discussion of AM - “Nowhere in the 2007 statement does the government suggest that AM is not an issue in the UK; nor does it suggest that AM will not and cannot be an issue in the case for future applications for wind farms close to residences in low background noise areas.” (para 24 of SoS’s Acknowledgement of Service); and “Nothing in the statement should be construed as preventing any material from being considered in the context of a [windfarm] application” (para 35). The judge (Mitting J) in refusing permission on the papers – said – “It will always be open to any objector to an application for permission to develop a site as a windfarm, to contend that the Statement is technically inadequate or erroneous.” On the basis of that assurance, the claim was not pursued²⁵.

92. That dispute and its resolution confirms the basic position which I have set out above, namely that: (1) policy is for the government to set and for inspectors to follow; but (2) it cannot prevent consideration of arguments based on the matters set out above.

²⁴ Hayes McKenzie study 2006

²⁵ Permission was refused on the papers and not renewed.

93. This I think has significant ramifications for considering wind turbine applications.
94. First, on the specifics in cases where AM and other noise related issues (such as low frequency noise) is claimed to exist, those issues must be grappled with. Reliance on the “it is government policy” mantra will not be sufficient.
95. Second, more generally, where objectors raise a prime facie case that issues may arise on the facts notwithstanding ostensible compliance with government policy (say for example that the location of the turbines is inappropriate and that separation distances are not sufficient because of site specific circumstances), the substance of the point needs to be considered. It will not be good enough to proceed on the basis that generalised guidance as to appropriate separation distances (based after all on different smaller earlier turbines) set out in PPS22 and ETSU dictate the answer on the facts of a particular case.
96. Third, where such issues are raised, the need for these matters to be debated and resolved, in my view strongly supports having a public inquiry. TSoI is faced with a number of challenges on windfarms decided through written representations. Where significant environmental impacts are raised, the appropriate forum for grappling with them properly is normally a public inquiry. Saving the costs of a public inquiry can be a false economy.
97. Fourth, if these matters can be raised, it follows that site specific data which allows that debate to be properly informed should be disclosed upon request.

EIA and Provision of Data

98. Challenges to windfarm decisions are brought primarily on environmental or related grounds and are best avoided by getting the ES right in the first place. The better the ES, the more likely an inspector will be convinced by the scheme, the less likely a challenge, and the easier it will be to resist the challenge.
99. Provision of data is a running sore between those promoting windfarm development and those resisting it. The developers have all the data and objectors have no means to replicate it themselves because it is obtained from very expensive equipment erected on the site at significant expense by the developers. Those of us who act on both sides of the debate and for HMG, think there needs to be a greater willingness by developers to disclose certain information²⁶. In *R (Hulme) v. Secretary of State* [2008] EWHC 637, the issue turned on the failure to disclose background noise measurements. The SoS conceded the challenge in the Court of Appeal.
100. In respect of noise data specifically, it seems to me that the issue is particularly important.

²⁶ For a full exposition of the arguments on this issue see John Litton’s Seminar paper on Renewable Energy High Court Challenges on the LM website.

101. Where the development is EIA, a noise chapter of the ES will almost inevitably be required. A report setting out what has been done to establish the prevailing and predicted noise environment in an ETSU compliant way will be required.
102. Those reports often summarise masses of background data. They provide scattergraphs (but not the underlying data) and set out “average” noise levels or wind speeds often averaging over thousands or even tens of thousands of 10 minute intervals.
103. That approach is readily understandable because it avoids excessive detail and allows one to understand the broad picture.
104. However, it does not allow objectors and decision makers to delve into the detail and on key elements in the assessment of noise the “devil is in the detail”.
105. Developers have, in some circumstances, been reluctant to provide the background noise dataset and/or the windspeed data set for varying reasons. Objectors say they need that data for various reasons under the Noise rubric:
 - a. To ensure that the background noise measurements have not included periods when extraneous noise sources were present;
 - b. To ensure that there are not underlying “surprising” results which may indicate for example that the equipment was not calibrated correctly or was not working consistently;
 - c. To allow comparison with their own data;
 - d. To check the basic maths – you would be amazed how often results in detailed technical work are shown to be wrong simply because somebody has made an arithmetic mistake or has put a formula into the wrong cell in a spreadsheet;
 - e. To show the fluctuation around the averages and to show a “true worst case”;
 - f. To show what lies behind the headline averages – in terms of frequency of events which are worse/better than the average and how significantly they are worse/better than the average;
 - g. To demonstrate how often a condition will be breached and therefore how often they will be subject to unacceptable noise impacts and/or how often the turbines will have to be cut off – which of course goes to the drafting of conditions and the impacts of those conditions in terms of environmental benefits.
106. The correct approach for objectors in such circumstances is to ask the Council or the SoS to make a regulation 19 request for further information on noise levels and/or windspeeds on the basis that absent the provision of the detail:
 - a. They will be denied the opportunity to test the correctness or relevance of the averages; and
 - b. They will be unable to address that about which they are concerned - namely the variation around the averages.

107. It seems to me that there remains substantial scope for challenge of refusals to make such directions on an appropriate case and/or to ultimate grants where no such direction has been made:

- a. The purpose of the EIA directive is to allow inclusive decision making – see Carnwath LJ in *R(Jones) v. Mansfield BC* [2004] Env LR 391 at para 57 – 59. That can hardly be achieved if one party has control of the core information and he alone decides what of that information he allows to be tested.
- b. An objector can hardly be expected to obtain their own windspeed measurements or detailed noise measurements (and to require them to do so would inevitably result in a breach of *Aarhus* - prohibitive expense in accessing environmental justice).
- c. Absent a direction, the objector is thus put into the inevitable and unavoidable position that he is unable to test a key part of the applicant's case and the applicant is given an unfair advantage of being able to select what information to present;
- d. That is contrary to the purposes of the Directive and inimical to proper and fair decision making;
- e. There is no countervailing good reason why the data should not be supplied.

108. I do not doubt that such challenges would face considerable legal hurdles – could the data have made a difference? Does the alleged unfairness fall into any accepted category of natural justice? A decision maker has a wide leeway to decide what further information they require. However, recent experience has shown that objectors are willing and able to take up these issues in the Courts. Requests for information should, I think, only be declined for very good reason.

109. And very good reason does not mean:

- a. They won't understand the data – that will be evident if they misuse it - it is not an excuse for non-disclosure;
- b. It will prolong the inquiry – only if they make good points based on it and in any event that is I think legally irrelevant;
- c. It will confuse the issue – that is for the decision maker to decide - not for the applicant;
- d. It is commercially confidential – I cannot see how background noise measurements can possibly be commercially confidential (see *Hulme*) and whilst there may be a commercial cost to obtaining windspeeds and that data may have some commercial value for an immediately adjoining site, this is no different from much other information which customarily has to be provided in ESs.

Noise Conditions and nuisance

110. Conditions can only be imposed when they are reasonable, necessary, precise and enforceable. The drafting of enforceable noise conditions for wind turbines is fraught with difficulty.

111. Model BERR conditions (see BERR website on renewables) are now customarily imposed - *Onshore Wind Energy Planning Conditions Guidance Notes October 2007* - www.berr.gov.uk/files/file35240.pdf.
112. On their face, the standard conditions seem fine – but very significant difficulties arise when one comes to consider how, in practice, the conditions are to be policed/enforced. The model condition imposes measurement and reporting requirements by reference to the ETSU noise limits but there is no mechanism contained in the conditions to ensure that the turbines close down as soon as there is an exceedance. There is no requirement for continual monitoring and interventions. The position is thus that on a complaint, the LA may require monitoring in accordance with ETSU (but as I have shown above there is always room for considerable debate as to what ETSU requires and how it will be complied with) and may thereafter be able to identify infringements. But even if the Council were to take enforcement action, how would a notice be worded and how would that be enforced. Further the condition is incapable of taking into account differing atmospheric conditions and is tied to a height of 10m/s without any consideration of the impact of wind shear factor adjustments.
113. Plainly the condition is not a perfect solution. Whether it avoids nuisance situations being created and whether it stands up to judicial scrutiny remains to be seen. It is doubtful that we have heard the last of challenges on noise issues and noise conditions in the wind turbine context.
114. Further, planning permission does not authorise a nuisance. Whilst there has not, as far as I am aware, yet been a successful nuisance claim brought arising from wind turbine noise, it is clear that some claim to be exposed to unacceptable levels of impact. Whether this becomes a more widespread issue will depend on the extent to which separation distances are squeezed and the extent to which workable conditions are imposed.
115. Home owners are not generally entitled to compensation for adverse impacts caused by operation of wind turbines. Land is not compulsorily acquired and the impacts of the turbines do not trigger any right to compensation under the statutory compensation code. If the government is going to achieve its objective re: On-shore wind power then this is a matter which it may have to revisit. If the public interest in delivering wind power capacity is sufficient to expose individual homeowners to significant harm (then just as with any other public project or airport expansion) the logic for government to provide a mechanism for compensating that harm seems, to me at least, strong.

Balancing benefits and harm

116. The present position is as follows:
- a. The Government says in PPS22 that the benefits of RE should be given significant weight in all planning policy decision making and that RE projects should be capable of being appropriately accommodated in most locations in the UK; and
 - b. Given that point and the need, there is no need for developers to consider alternative locations for e.g. On shore wind turbine developments.

117. Inspectors have so far followed that approach – attaching significant weight to the benefits and weighing any harm against those benefits. In many cases they have declined to consider objectors’ alternative proposals and to date this approach has been upheld.

118. However, as wind turbine proposals are promoted in more marginal, sensitive locations – where the energy resource may be less and the landscape and visual harm may be greater, and against a backdrop of government policy that there is a “need” for substantial On-shore turbine development, I can envisage developers having to demonstrate that there are not alternative sites which can better meet the need.

119. The argument would go as follows:

- a. The development gives rise to “conspicuous adverse effects”;
- b. Looking at the site in isolation, the RE benefits on the facts - limited wind resource etc.. – do not outweigh that harm; but
- c. The developer still says permission should be granted because of the national need.

120. In such circumstances, the developers will have to demonstrate that the need cannot be met more appropriately in an alternative location.

David Forsdick

6th March 2009