



## **Planning and regulating mechanisms for renewable energy technologies: a literature review**

**Judith Parks**  
**Sustainable Cities Research Institute, Northumbria University**

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## 1 INTRODUCTION

This working paper arises from Northumbria University's literature review (work package 1.1) within the TSEC (Towards a Sustainable Energy Economy) project, "Beyond NIMBYism: a multidisciplinary investigation of public engagement with renewable energy technologies". The paper is one of four working papers produced by project partners. The other papers are reviews of "participatory-deliberative engagement", "NIMBYism" and "public perceptions of energy".

Beddoe and Chamberlin (2003: 5) define planning as 'the process by which Government resolves disputes about land uses'. This working paper examines land-use planning and policy development relating to energy technologies in the UK. It begins by outlining the land use planning system in the UK, including opportunities for public consultation, and taking account of recent changes. It then summarises energy policy in the UK, again taking account of recent changes, beginning by outlining Government energy targets, and then exploring how the Government seeks to promote renewable energy in particular. The next section explores national policy instruments relevant to renewable energy planning, first covering strategic instruments (Strategic Environmental Assessment (SEA)/ Sustainability Appraisal and the Statement of Community Involvement (SCI)) and then instruments which apply to specific projects (the Environmental Impact Assessment (EIA)).

The following section details the planning process for energy developments, beginning with an overview, and then giving a breakdown of the planning procedure first for electricity infrastructure (overhead power lines and power stations), and then for the six renewable energy technologies focussed upon (onshore wind, offshore wind, marine, biomass, solar/ photovoltaics (PV), and hydro at both the small and large scale). It takes account of differing procedures across the devolved administrations, exploring how planning decisions are made, detailing the consents required and the different stages of development in each case. It explores relevant statutory consultation procedures that have been set within the framework of established national and strategic planning guidance, and identifies any official or recognized points and mechanisms of engaging the public during the planning process.

The final section summarises the key points about the potential for community involvement in the planning of renewable energy developments.

## **2 THE UK LAND USE PLANNING SYSTEM**

### **2.1 Overview**

There are two aspects of planning legislation: planning control is concerned with how to resolve the conflicts on the ground when applications are submitted, while development planning is 'the strategic framework within which decisions are made, represented by regional, sub-regional and local development plans and policies' (Brooklyndhurst, 2003).

Planning in the UK is devolved to the Scottish, Welsh and Northern Ireland administrations. Policies exist for each UK nation to provide guidance for Local Authorities (LAs) and other relevant bodies on planning policy and the operation of the planning system. In England, planning is usually the responsibility of district councils where the two-tier planning system operates, or of unitary authorities under the single-tier system, as in major cities. In Scotland and Wales, planning permission is dealt with by single-tier authorities, and in Northern Ireland the Assembly takes direct control of planning decisions through six regional offices (Sustainable Development Commission, 2005: 45).

### **2.2 The Planning System in England**

When a developer submits a planning application to the LA in England, the decision on whether or not to grant planning permission is taken by the Planning Committee of the Local Planning Authority (LPA), or is delegated to officers. Proposals for larger scale developments require consent from the Secretary of State for Trade and Industry, referred to henceforth as Department of Trade and Industry (DTI) consent. Applications for projects of particular importance can be designated by the Secretary of State as a major infrastructure project, and subjected to an inquiry process (Office of the Deputy Prime Minister (ODPM), 2004f: 15).

The Planning and Compulsory Purchase Act 2004 introduced a new planning system in England operating at regional and local level, thus changing the Town and Country Planning system and strengthening the regional element (Brooklyndhurst, 2003). It requires LPAs to produce new forms of Development Plans called Local Development Frameworks (LDFs) and Regional Spatial Strategies (RSSs), which regional planning bodies are currently working towards. These inform the public, statutory authorities, developers and other interested bodies of the policy framework and land use proposals that will be used to guide development decisions within their local area, and aim to provide an objective basis for considering planning applications. LDFs are a set of Local Planning Documents, including an SCI (see below), Development Plan Documents (DPDs), Supplementary Planning Documents, Sustainability Appraisal (see below), Annual Monitoring Report and Local Development Scheme, made up of Local Development Documents (LDDs). They set out the LA's policies for meeting the economic, environmental and social aims for the future of their area. RSSs are regional planning documents for development in the region, interpreting national aspirations and targets on the promotion of renewable energy technologies for example.

Under the new planning system, Planning Policy Statements (PPSs) are prepared by the Government following public consultation. These documents also explain the relationship between planning policies and other policies which have an important bearing on issues of development and land use.

Public consultation has been a statutory part of the planning process since the beginning of nation-wide planning in 1947, when the planning system involved the public in preparing Development Plans (Dartmoor National Park Authority, 2006). Article 8 of the Town and Country Planning (General Development Procedure) Order (1995) sets out the statutory consultation requirements for planning applications, requiring LAs to publicise applications either by a suite notice or by formal notification to neighbours. The Town and Country Planning (Local Development) (England) Regulations 2004 set minimum requirements for community involvement with which LPAs must comply. The ODPM explains (2004f):

An extensive legislative framework already governs community involvement in planning. There are statutory requirements for making information available about plans and planning applications; allowing people to make representations on plans and planning applications; and governing independent examinations and inquiries.

The ODPM sets out the opportunities for community involvement in planning at the national, regional and local levels, as well as at the level of individual planning applications, as follows (ODPM, 2004f: 18, Annex A):

- 'National planning policy:
  - Wider stakeholder involvement in the preparation of draft policy statements and guidance;
  - Government White papers on policy proposals issued for public consultation;
  - PPSs and other guidance documents issued in draft for public consultation;
  - Draft regulations issued for public consultation.
- Regional Spatial Strategies [RSSs]:
  - Focus group on project plan for RSS revision;
  - Focus groups of stakeholders, consultation seminars and other opportunities to be involved in emerging issues and options for draft RSS revision;
  - Formal opportunities to make representations on changes to the RSS revisions proposed by the Secretary of State.
- Local Development Documents [LDDs]:
  - SCI sets out the LPA's policy on involving the community in the preparation of its LDDs;
  - Early dialogue on LDDs, in line with the SCI;
  - Before draft proposals are finalized, the authority will formally publish its preferred options for consultation and must consider representations;
  - Draft DPDs are published and submitted for public examination. Representations can be made, to be considered at the examination;
  - Those making representations seeking changes to a DPD will have a right to appear in person at the examination;
  - Inspector's report will be made available for public inspection;

- Annual monitoring report published by LA.
- Planning applications:
  - The SCI will set out the LPA's proposals for consulting the community on planning applications;
  - Third parties can make representations on planning applications;
  - Objectors can speak at planning committee meetings at the discretion of the LPA;
  - Reasons for decisions are published;
  - Third parties can make representations on appeals and at inquiries into called in applications;
  - Additional consultation with regional and national bodies where appropriate for Major Infrastructure Projects'.

Under the new planning system, LPAs can issue a standard planning application form to improve the quality of planning applications and the information needed to support them. This will better allow developers to work with communities on development proposals before applying to the LA for planning permission. The Government will also be consulting on possible changes to the statutory requirements for publicising planning applications (ODPM 2004f: 14). PPS1 (Department of Communities and Local Government (DCLG), 2005: 3) sets out the following principles for community involvement in planning:

- Community involvement that is appropriate to the level of planning;
- Front loading of involvement
- The methods used to encourage involvement and participation should be relevant to their experience;
- Clearly articulated opportunities for continuing development;
- Transparency and accessibility;
- Planning for involvement.

In December 2005, the UK Government commissioned an independent review of land-use planning in England, known as the Barker Review, 'to consider how, in the context of globalisation, and building on the reforms already put in place in England, planning policy and procedures can better deliver economic growth and prosperity alongside other sustainable development goals' (Barker, 2006: 3). This links in with the recent Stern Review (Stern, 2006), which advocated early action to reduce the future economic costs of climate change. The particular aspects examined by the Barker Review include 'streamlining the planning system to increase certainty, reduce complexity and cut costs for the private and public sectors while ensuring that systems support effective community involvement', 'enhancing the speed and quality of local authority decision-making', and 'improving the appeals system, to reduce substantially the lengthy delays currently experienced' (Barker, 2006: 5). The review advocates a 'plan-led system', and proposes a number of specific measures to address some of the barriers faced by projects under the current system, for example:

- To address the delays that can be experienced by projects that have to go to public inquiry, it recommends that the Government draws up Statements of Strategic Objectives for major infrastructure, including energy, 'following full public consultation with all interested parties, including affected local communities where the Statements

have a spatial element'. This would 'increase certainty and reduce the time spent in inquiry on debating whether or not there is a national need for a project' (Barker, 2006: 10). The Statements would be factored into RSSs. Along with this, the Review proposes the establishment of an independent Planning Commission to make decisions on major infrastructure applications. 'Proceedings would be based on a streamlined public inquiry model, using timetabling to ensure timely decision-making' (Barker, 2006: 86).

- It suggests (2006: 12) that politicians 'should seek to delegate more planning decisions to their officers – 90 per cent of cases are currently delegated, but only 3 per cent of cases are for major developments. This suggests that in some cases members determine cases where it is less important to deploy their democratic mandate – which is used to best effect in setting out the vision for the area through the local development plan'.
- It recommends (Barker, 2006: 6) 'streamlining policy and processes through reducing policy guidance, unifying consent regimes and reforming plan-making at the local level so that future development plan documents can be delivered in 18-24 months rather than three years or more'.

### **2.3 The Planning System in Wales**

Planning decisions in Wales are taken by the LPA or the DTI, on the same basis as in England. 'Planning Policy Wales' (PPW) (Welsh Assembly Government, 2002) sets out the Welsh Assembly Government's land-use planning policies, and is supplemented by a series of Technical Advice Notes (TANs). These, together with circulars, comprise national planning policy which should be taken into account by LPAs in Wales in the preparation of Unitary Development Plans (UDPs). They are used to help determine individual planning applications, as well as called-in planning applications and appeals by the National Assembly for Wales and Planning Inspectors (Welsh Assembly Government, 2002).

### **2.4 The Planning System in Scotland**

In Scotland, the planning system is governed by the Town and Country Planning (Scotland) Act 1997. There is a series of National Planning Policy Guidance documents and Planning Advice Notes, equivalent to England's PPSs.

The Scottish planning system is currently the subject of review and amendment proposed by the Planning etc. (Scotland) Bill 2006. The Bill introduced a new planning system that is quicker and more efficient, with a new emphasis on community involvement. The new system aims to speed up decisions, and to better reflect local views. It updates the Town and Country Planning (Scotland) Act 1997 and other primary legislation affecting planning. The Bill proposes specific measures, including the ability to establish the need for a particular development that is of National Strategic Importance by identifying it as a National Development under the National Planning

Framework,<sup>1</sup> and a hierarchy for development proposals requiring different application procedures for national, major and local developments. The intention is to make the planning system more fit-for-purpose, ensuring that responses to each application type are proportionate.

The new planning system in Scotland is underpinned by the statutory Development Plan system, which sets out the planning policies for any given area against which planning applications will be assessed. Scottish ministers intend to remove the requirement to have structure plans covering the whole of Scotland, replacing this with a framework of Local Development Plans across the country, supplemented by four city region plans. Scottish Ministers will retain powers to grant consent for large electricity projects under the Electricity Act (DTI, 2006b) (see below).

However, the Planning etc. (Scotland) Bill differs from planning legislation in the rest of the UK in that it does not make high level development plans subject to public inquiry. According to the Royal Society for the Protection of Birds (RSPB) Scotland, this may mean that the most controversial developments, such as large-scale wind farm projects, can no longer be challenged by local communities: 'In the absence of this scrutiny, Scotland could become a dumping ground for the most controversial developments in Britain'. RSPB Scotland also expresses disappointment that the Bill makes no statutory provision to require public consultation for the National Planning Framework (RSPB Scotland, 2005):

The Bill will give Ministers powers to produce a National Planning Framework (NPF) that will grant planning permission, in principle, to the most controversial and complicated development projects in Scotland. This includes a provision to designate these as 'National Developments', meaning that they will not only be approved 'in principle' with a requirement that they are accepted by local development plans that sit underneath the NPF, but will also create a 'fast-track' system to ensure planning consents will be granted quickly. Under the new legislation these developments can no longer be challenged by local communities, or even local authorities ... (RSPB Scotland, 2006).

## **2.5 The Planning System in Northern Ireland**

In Northern Ireland, the Department of the Environment (DoENI) is responsible for planning control under the Planning Northern Ireland Order 1991. The Planning Service, an agency within the DoENI, administers planning functions. The DoENI and the Department of Regional Development are currently in the process of developing a full set of PPSs, including one for renewable energy, the contents of which LAs must take into account in preparing their Development Plans (DCLG website). These set out the policies of the DoENI on particular aspects of land-use planning and apply to all of

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<sup>1</sup> In 2004 the Scottish Executive launched the National Planning Framework, to help guide the spatial development of Scotland to 2025, providing a context for Development Plans and planning decisions. The Scottish Executive intends to review the framework in four years. The contents have been subjected to a Strategic Environmental Assessment (SEA) (see below).

Northern Ireland. They are gradually replacing the Planning Strategy for Rural Northern Ireland<sup>2</sup>. In determining whether or not to grant planning permission, the Planning Service refers to the following planning policy documents: the Regional Development Strategy, PPSs, the *Planning Strategy for Rural Northern Ireland*, and Development Plans, as well as Supplementary Planning Guidance such as Development Control Advice Notes and Design Guides (DoENI website).

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<sup>2</sup> The Planning Strategy for Rural Northern Ireland covers all of the towns, villages and countryside of Northern Ireland outside Belfast and Derry. The Strategy establishes the objectives and the policies for land use and development appropriate to the particular circumstances of Northern Ireland and which need to be considered on a scale wider than the individual District Council Area. It provides a basis for coordinating decisions in both the public and the private sectors and sets out regional policies for the control of development, to ensure a consistent approach to rural planning matters (DoENI website).

## 3 NATIONAL POLICY INSTRUMENTS FOR PLANNING

### 3.1 Strategic Instruments

#### **3.1.1 Sustainability Appraisal and Strategic Environmental Assessment**

Sustainability Appraisal is a form of assessment of development documents, mainly for LDFs and RSSs, used in the UK since the late 1990s. The Planning and Compulsory Purchase Act 2004 introduced mandatory Sustainability Appraisals of local and regional plans. Their purpose is to promote sustainable development through the integration of social, environmental and economic considerations into the preparation of revisions to RSSs, and for new or revised Development Plan Documents and Supplementary Planning Documents (DCLG website).

The Strategic Environmental Assessment (SEA) is the type of environmental assessment of policies, plans and programmes required under the European Community (EC) Directive on SEA<sup>3</sup> (EU Directive 2001/42/EC). The Directive does not prescribe who is to carry out the SEA, but this is usually the task of the Responsible Authority. The SEA Directive does not disapply the Environmental Impact Assessment (EIA) Directive, but can help with the preparation of an EIA. In practice, an SEA is typically concerned with broad proposals and alternatives, while the EIA is project-specific and requires more detailed information on the effects of a particular proposal (ODPM, 2005b). The SEA is carried out at a strategic level to identify, predict and report on environmental impacts, and to identify and consider feasible alternative options. At present, an SEA is not required for proposed windfarm developments onshore, but is required for offshore windfarm Site Licensing Rounds.

The SEA Directive brings a new emphasis to consulting the public and authorities with environmental responsibilities as part of the assessment process. It specifies that consultation bodies and the public<sup>4</sup> must be consulted on the draft plan and the Environmental Report which is written up from the SEA (ODPM, 2005b). The consultation bodies must also be consulted on screening determinations on whether SEA is needed. Each LPA must consider whether or not the SEA Directive applies to their Community Strategies.<sup>5</sup> The ODPM (2003: 33) states:

The Government would expect all Community Strategies to address environmental issues, and therefore to have the potential to have significant environmental effects. However, whether the Directive applies will depend primarily on the degree to which the Community Strategy can be considered in

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<sup>3</sup> The EC Directive on SEA was transposed to EU member states in July 2004.

<sup>4</sup> Under the Directive, the public to be consulted includes 'the public affected or likely to be affected by, or having an interest in [a plan or programme] including relevant non-governmental organisations' (ODPM, 2005b).

<sup>5</sup> Under the LGA 2000, LAs must prepare a Community Strategy, the aim of which is to improve the social, environmental and economic wellbeing of their areas, and to coordinate the actions of local public, private, voluntary and community sectors. It is a statement of the needs and aspirations of local communities. Responsibility for producing the Community Strategy has been passed to the LSP which includes Council representatives.

itself to set the framework for future development consents, either directly or via relevant policies in the development plan.

While the requirement to carry out a Sustainability Appraisal and an SEA are distinct, both can be satisfied through a single appraisal process. The Government has produced guidance (ODPM, 2005b) to ensure that Sustainability Appraisals meet the requirements of the SEA Directive, and to assist authorities in carrying them out (DCLG website). Each Development Plan Document and Supplementary Planning Document<sup>6</sup> will be subject to SEA/ Sustainability Appraisal as it is developed.

SEA is a devolved matter. The Environmental Assessment (Scotland) Bill (SEA Bill), passed in the Scottish Parliament in November 2005, extends the scope of SEA beyond the requirements of the EU Directive, to cover all public sector strategies, plans and programmes (Sustainable Development Commission, 2005: 49).

### **3.1.2 Statement of Community Involvement (SCI)**

One of the LDDs which local and regional planning bodies are required to prepare is the SCI, aimed at anyone who produces planning documents, including Supplementary Planning Documents produced by services other than planning, and at bodies considering planning applications. The SCI should set out the LPA's vision and strategy for community involvement and how this links with other community involvement initiatives such as the Community Strategy. It should describe the LPA's policy on involving the community in preparing and revising RSSs and LDDs, and consulting on planning applications. It should let people know how and when they can get involved, who will be involved and how they represent the wider community and stakeholders, identifying the community groups that need to be involved and the techniques required to effectively involve them both informally and formally. It should detail how the approaches to consultation may vary in relation to different topics, different types of LDDs, or at different stages in the process of preparing documents.

The Council must consult the community and stakeholders during the preparation of the SCI and other Development Plan Documents, and then publish the final versions of the documents which are submitted to the Secretary of State for an independent assessment. The ODPM (2004d) explains:

The SCI provides an opportunity for authorities to set out minimum standards, the statutory requirements for publicizing such applications as well as the ground rules for community participation. This could involve identifying the circumstances when authorities will use neighbour notification letters, explaining how such letters will be circulated, how the community can find out more information regarding applications, how comments should be subsequently made and the timetable for doing so. SCIs should encourage developers to undertake pre-application discussions and early community consultation although they cannot prescribe that this is done.

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<sup>6</sup> These reports form part of the Local Development Framework.

## **3.2 Project-Specific Instruments**

### **3.2.1 Environmental Impact Assessment (EIA)**

The EC Directive on EIA is based on three principles. First, the developer of any project likely to have significant effects on the environment must compile detailed information about the likely environmental effects. Second, the Environmental Statement (ES), written up from the EIA, must be made available to the public along with the planning application. And third, the public must be informed of the planning decision and the main reasons for it.

In England and Wales, the EIA Directive is implemented by the Electricity Works (EIA) (E and W) Regulations 2000. These regulations apply to planning applications under Section 36 of the Electricity Act 1989 for consent to construct, extend or operate a generating station, and applications under Section 37 of the Act for consent to install or keep installed an overhead power line. Developments which fall outside the Act for which DTI consent is not required may still be deemed by the LPA to require an EIA under the Town and Country Planning (EIA) (E and W) Regulations 1999, known as the EIA Regulations. In Scotland, the equivalent regulations are the Planning EIA Regulations (the EIA (Scotland) Regulations 1999), and in Northern Ireland, the Planning (EIA) Regulations (Northern Ireland) 1999.

Schedules 1 and 2 of the Electricity Works Regulations define those developments for which an EIA is required. Schedule 1 lists those categories of development for which EIA is mandatory, while Schedule 2 lists those that are to be judged by the DTI on a case by case basis, where the LPA adopts a screening opinion that an EIA is required. Developers may formally request a screening opinion from the LPA, or the DoENI in Northern Ireland, before submitting a planning application. This opinion will inform the developer whether or not the LPA considers that a proposed development necessitates an EIA. If the developer does not request a pre-screening screening opinion, the LPA will issue one when it receives the application. If the developer disagrees with the LPA's screening opinion, a screening direction can be requested from the DTI, the Scottish Executive, or the DoENI (DTI renewable energy website).

Schedule 3 of the Regulations describes the criteria to be used to determine whether or not a development is an EIA development. Overhead lines with a voltage of 220kV or more and a length of more than 15km which require consent under section 37 of the Electricity Act 1989 are included in Schedule 1 of the Electricity Works (EIA) (England and Wales) Regulations 2000, making EIA compulsory. National Grid will always undertake an EIA of all new high voltage overhead line routes of more than 15km in length. Onshore renewable energy proposals fall within Schedule 2, making them subject to an EIA if they are considered likely to have significant effects on the environment. For wind power projects over 5MW, the developer is legally required to conduct an independent EIA. LPAs are required to screen applications for the need for EIA for wind power projects less than 5MW where the development involves the installation of more than two turbines, if any turbine height exceeds 15 metres, or if the turbine is to be erected in an Area of Outstanding Natural Beauty (AONB), an Area of Special Scientific Interest (ASSI) or an area which has a European designation. For

smaller developments that do not require a full EIA, the LPA may require some or all of the issues to be addressed, forming Additional Environmental Information or an Environmental Report, to accompany a planning application. All offshore projects are expected to be subject to an EIA.

Where an EIA is required, the developer can request a scoping opinion from the LPA or DTI on the information to be supplied within the ES (DTI renewable energy website). During scoping, the developer consults the LPA and statutory consultees, other appropriate expert bodies and the public on the content of the EIA, including relevant alternatives.

Statutory consultees include first of all the LA, where it is not making the decision, as well as bodies such as Natural England, the Environment Agency (in England and Wales) or the Scottish Environmental Protection Agency (SEPA), and English Heritage. The Environment Agency, for instance, may ask for environmental information even if the LPA does not. However, the Barker Review (2006: 121) states:

... but there are still questions about the threshold at which these bodies become involved. Housing developments of only ten units, for example, can trigger the requirement to consult a range of statutory bodies. There might also be potential to narrow the non-statutory consultation lists or reduce the number of statutory consultees.

Developers must publish the results of the EIA in an ES. This is a publicly available document used in the consents process, which many developers publish on their websites. The ES must be accompanied by a non-technical summary, which should be written in an accessible way and available free from the developer. The Royal Town Planning Institute (2001) states that public engagement should preferably begin before the EIA stage, but at least should begin as soon as the EIA process begins. When the ES is received along with the planning application, the LPA must consult statutory consultees, other expert bodies and the public on the impact predictions and the mitigation measures proposed in the ES. These, together with representations from non-statutory consultees such as local conservation groups and the public, will inform the decision process. Advice from consultees should be in writing and all comments, including those from the public, should be made available to the developer and held on the publicly available application file (Royal Town Planning Institute, 2001).

The website of Entec UK, an environmental consultancy, demonstrates as follows how the EIA might typically fit within the planning process for a development:

- 'Feasibility and optioneering: Demonstrate the need for the development; Where appropriate, consider alternative sites and/ or technologies
- Screening: Initiate discussions with consultees; Provide screening report if appropriate, identifying likely significant effects; Request screening opinion
- Scoping the EIA: Define the scope of the EIA – survey and assessment methodologies for likely significant effects; Prepare scoping report; Continue consultation; Continue discussion on avoidance/ mitigation/ enhancement with design team

- EIA detailed assessment and preparation of ES: Collect data; Predict effects; Identify in detail avoidance/ mitigation/ enhancement measures; Determine significance; Report EIA findings
- Internal review of ES
- Determination: Review by planning or other regulatory body following submission of ES; Attend public inquiry where required
- Project implementation'.

## 4 UK ENERGY POLICY

### 4.1 Government Energy Targets

Unlike planning, energy policy has not been devolved to the Scottish, Welsh and Northern Irish administrations, but is a reserved policy area. However, the Scottish Executive has responsibility under the Scotland Act 1998 for the promotion of renewable energy generation, the consenting of electricity generation and transmission development, and energy efficiency in Scotland (Scottish Executive, 2006). Policy on Combined Heat and Power (CHP) is reserved to the UK Government (DEFRA website).

One of the UK Government's long-term goals for energy is 'to put the UK on a path to cut our carbon dioxide emissions by some 60% by about 2050, with real progress by 2020' (DTI, 2006b). The Government has published a range of policy documents setting out how this and the other energy targets are to be reached. In May 2002, the DTI and the Department of the Environment, Food and Rural Affairs (DEFRA) launched a major stakeholder and public consultation into an Energy White Paper,<sup>7</sup> to which more than 6,500 individuals and groups contributed (DTI/ DEFRA, 2003: 20). The Energy White Paper set out Government policy on renewable energy technologies and identified the following obstacles to the development of renewable energy in the UK: a low approval rate at the local level for onshore wind farms, Ministry of Defence objections, and a lack of development plan and strategic policies (Beddoe and Chamberlin, 2003: 3-4). It acknowledged planning as a significant barrier to the development of renewable energy technology, suggested streamlining and simplifying planning as a solution (DTI/ DEFRA, 2003). The new planning system in England was introduced the following year, and the Barker Review was commissioned by the Government in 2005.

However, since the publication of the Energy White Paper in 2003, the Government's position on how to meet its carbon reduction targets has changed, particularly as regards the potential contribution of nuclear power. The Energy Review (DTI, 2006b) was published in July 2006, and sets out the Government's revised position on energy, stating: 'We have a responsibility to ensure that our planning system deals with investment proposals in an efficient and timely way. Proper scrutiny and challenge will remain essential, but it is time to overhaul the present planning system'. It sets out the steps that the Government will take to improve the planning process for all energy infrastructure, including renewable energy technologies.

The Energy Review identifies several problems with the current planning system for energy infrastructure. First, the lack of a clear Government policy highlighting the strategic national need of a particular type of development means that public inquiries into proposed developments can become embroiled in debates about national issues rather than focusing on local issues relating to the siting of the particular development. In response to this problem, the Barker Review (2006: 7) states that 'planners should not be attempting to determine if there is sufficient 'need' for a given application – rather

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<sup>7</sup> Consultation documents of all government policy documents are made available for comment.

the applicant, who is bearing the risk, should be responsible for assessing that likely demand is sufficient to make the development viable’.

The second problem identified in the Energy Review is a lack of time limits for the statutory process (both the inquiry, where one is held, and the final decision-making process). This makes it difficult for developers to plan construction and procurement of key components, leading to further delays even after consent has been secured. The Barker Review proposes a programme of work to tackle the planning barriers for developers of energy infrastructure, focussing on three key components of an effective planning system. The first involves a proper strategic context set by Government for major energy infrastructure developments of national importance. The second involves new and more efficient procedures for the consenting regimes to enable streamlined inquiries to focus on the relevant issues. The Barker Review (2006: 6) recommends ‘ensuring that Secretary of State decisions focus on important, strategic issues, with a reduction by around 50 per cent in the volume of Secretary of State call-ins’. The third involves a review of the directions that lead to applications being called in, ‘providing a higher threshold before Government Offices need to be informed’ (Barker, 2006).

The third problem identified in the Energy Review is delayed action by decision makers, causing delays at the end of the consenting process (DTI, 2006b). The Barker Review (2006: 6) recommends ‘promoting a positive planning culture within the plan-led system so that when the plan is indeterminate, applications should be approved unless there is good reason to believe that the environmental, social and economic costs will exceed the respective benefits’. Toynbee (2007) says of the proposed policy changes:

The government has now promised new planning guidance and laws that will require local planning authorities to look favourably on wind farms without each one going through the pantomime of ascertaining whether there really is a need for renewable energy ... New planning rules will weaken local residents’ right to raise aesthetic objections to wind-farm applications, so long as they are not in national parks.

Another commitment set out in the Energy Review is for the DCLG to consult on changes to the General Permitted Development Order, in the hope of ensuring that, so far as possible, all microgeneration is exempted from the need for a planning application (DTI, 2006b) (see below). This follows the publication of the Microgeneration Strategy (DTI, 2006a). The Scottish Executive is working in a number of devolved policy areas, including energy efficiency, fuel poverty, renewable policy and building regulations, to support microgeneration. The Planning Service in Northern Ireland is currently considering what permitted development rights might be given for microgeneration with a view to public consultation.

## **4.2 Renewable Energy**

The UK Government supports the promotion and development of renewable energy by providing funding through a system of capital grants, and through the Renewables Obligation (RO) scheme. The RO and the associated Renewables (Scotland) Obligation

came into force in April 2002 as part of the Utilities Act (2000) (British Wind Energy Association (BWEA) website a), replacing the Non-Fossil Fuel Obligation (NFFO). The Utilities Act 2000 gives the Scottish Ministers executively devolved powers to set a separate RO for Scotland, and to exclude particular technologies.

The RO encourages electricity suppliers to supply 10% of electricity from renewables by 2010 (Toke, 2005), with the cost to consumers limited by a price cap (BWEA website a). Eligible renewable generators receive Renewables Obligation Certificates (ROCs) for each Mega Watt hour (MWh)<sup>8</sup> of electricity generated from renewable sources. The certificates can then be sold to suppliers, in order to fulfil their obligation. Suppliers can either present enough certificates to cover the required percentage of their output, or pay a 'buyout' price of £30 per MWh for any shortfall. All proceeds from buyout payments are recycled to suppliers in proportion to the number of ROCs they present (BWEA website a).<sup>9</sup>

Under the old NFFO system, the contract awarded to the developer often specified fixed conditions about the site or other details of renewable energy developments, to which the developer was tied. NFFO contracts were awarded for the cheapest bids to produce certain types of renewable energy. Because the NFFO procedure was competitive, the bidding process had to be secretive to avoid competitors claiming sites that were being publicly negotiated by another developer and proposing a similar development at a lower price. Thus bidders had to specify the location of their proposed development, and winning bids were tied to that site. However, the RO avoids this competitive dimension (BWEA website a).

The Government also seeks to support renewable energy through the new planning system. Current planning policy for renewable energy is set out in PPS22 (England) (ODPM, 2004a) and its Welsh and Scottish equivalents (see below).

Local political decision-making and public involvement in individual planning applications for renewable energy projects occurs 'within relatively loose local, regional and national policy frameworks' (DTI, 2005: 96), in which politicians make individual planning determinations. These frameworks vary between localities, regions and nations/devolved administrations, and they 'tend not to be used to "clear the way" for wind power as they are in other countries' (DTI, 2005: 96). If a more strategic planning approach was implemented in the UK, whereby political influence was removed from individual decisions, then 'once the factors which make a good project are agreed, projects meeting those criteria should be approved' (DTI, 2005: 89). This 'would mean faster consent timescales for individual projects, and more predictable planning outcomes, which in turn lead to more predictable orders for local manufacturing industry' (DTI, 2005: 88).

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<sup>8</sup> The explanation of a Mega Watt hour given in the Energy White Paper (DTI, 2003) is: 'A 1 MW power-generating unit running for 1 hour produces 1 MWh of electrical energy'.

<sup>9</sup> Running alongside the RO is the Climate Change Levy. Introduced in 2001, this is a tax on energy use by both business and public sectors. The levy package as a whole is expected to save at least 5 million tonnes of carbon a year by 2010 (BWEA website b).

In the UK, where a renewable energy development is approved in an area, there are no formal, direct economic benefits to the relevant LA (DTI, 2005: 87). The main feature of community benefits in the UK is a voluntary contribution to some sort of community fund (DTI, 2005: 90). Section 106 of the Town and Country Planning Act 1990 (S106) allows an LPA to enter into a legally binding agreement (planning obligation) with a land developer over a related issue. A possible example of a S106 Agreement is that the developer will transfer ownership of an area of woodland to an LPA with a suitable fee to cover its maintenance. S106 Agreements can act as a main instrument for placing restrictions on the developers, often requiring them to minimise the impact on the local community and to carry out tasks which will provide community benefits.<sup>10</sup> In other European countries, local community benefit is explicit in the planning process. There, where renewable energy projects are approved, formal benefits are awarded to the affected community through a combination of jobs, local taxes and opportunities for local ownership (Ward, 2006), with voluntary contributions to community funds an unfamiliar concept. Regeneration South West<sup>11</sup> (2004: 29) explains that in the UK:

Many developers are willing to offer local benefits, although there is no requirement and often little incentive for them to do so. Current planning legislation prevents this type of developer contribution, where it is not regarded as 'necessary', being sought by local planning authorities. The provision of local benefits cannot therefore be a precondition for approval of a planning application, as acceptable development should never be refused because an applicant is unwilling or unable to offer benefits. This may however change for large scale developments under the new planning system. If this is the case, it must be ensured that developers are not made to make additional contributions twice. However as current law stands, there are no powers of enforcement if a developer is unwilling to make such a contribution.

Although there is some evidence to suggest that community benefits have little impact on public acceptance of renewable energy developments (DTI, 2005: 90), there is now a recognized need in the UK for a more standardized practice of developers providing benefits to local communities affected by renewable energy developments.<sup>12</sup> The Barker Review (2006: 15) states:

There are also further options for incentivising communities. In particular, developers could use community good-will payments – on a strictly voluntary basis – to pay households a fixed sum to help gain their acceptance for a project they would otherwise object to. These projects would still, of course, require planning permission. The case for operating a land bid scheme, where the local authority offers farmers and landowners the option of selling their land on a closed-bid basis to the authority who could then buy some of it, rezone it for development, and then sell, could also be explored.

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<sup>10</sup> DETR circular 01/97 *Planning Obligations* offers advice regarding the use of such agreements.

<sup>11</sup> Regeneration South West (RegenSW) is the renewable energy agency for the South West region of England, set up by the South West Regional Development Agency as a strategic agency for renewable energy in the South West region.

<sup>12</sup> The DTI has commissioned a toolkit for community benefit from wind energy developments (DTI, forthcoming). This will provide guidance for wind developers, planners and community groups on the nature and scale of benefits available.

### 4.3 Planning Legislation for Renewable Energy

PPS22 sets out current planning policy for renewable energy in England (ODPM, 2004a). It covers all renewable energy technologies except CHP and those located offshore. Offshore wind and wave technologies fall outside the scope of the planning system, while their connection to the grid falls within it (Brooklyndhurst, 2003). PPS22 encourages LAs and developers to 'front-load' engagement,<sup>13</sup> and to ensure that communities are suitably involved in the process, starting at the pre-planning stage. It covers land-use planning policy issues at regional and local level, ensuring that renewable energy is one of the topics addressed in RSSs and LDDs. It sets out policies to be taken into account by regional planning bodies in the preparation of RSSs and by LPAs in the preparation of LDDs, and provides national policy guidance for local decision-makers on renewable energy developments. It sets out Government policy and advice on planning issues, and the national policy considerations that should be applied to the treatment of renewable energy in Development Plans in England and to planning applications for renewable energy developments (Town and Country Planning Association, 2006). The Companion Guide to PPS22 (ODPM, 2004b) advises LPAs on community involvement processes, stating that developers of renewable energy projects should engage in active consultation with local communities at the pre-application stage.

The equivalent policy guidance in Wales is Technical Advice Note (TAN) 8 (Welsh Assembly Government, 2005). TAN8 identifies seven strategic search areas in Wales: 'This approach addresses the issue of location of onshore wind facilities at a strategic all-Wales level. Local planning authorities are best placed to assess detailed locational requirements within and outside SSAs in the light of local circumstances ... The local implications of TAN 8 including the SSAs, should be incorporated into Local Development Plans (LDP) in line with the requirements of the LDP process, including sustainability appraisal, and Strategic Environmental Assessment (SEA)'.

In Scotland, the corresponding policy guidance is National Planning Policy Guidance 6: Renewable Energy Developments (Scottish Executive, 2000), which sets out the Scottish Executive's national planning policies for renewable energy projects in Scotland, currently under review. Planning Advice Note 45: Renewable Energy Technologies (Scottish Executive, 2002) provides advice on good practice on renewable energy technologies in Scotland. Toke (2005) points to 'a general perception that the planning problems have been worse for wind power in England and Wales compared to Scotland'. However, constraints to Scotland's renewable energy targets include lack of electricity transmission infrastructure in Scotland, grid constraint, and the low rate of Scottish RO contracted projects becoming operational.

The DoENI is currently developing a PPS for renewable energy in Northern Ireland. Under the Planning Strategy for Rural Northern Ireland, Regional Planning Policy PSU12 was the only specific guidance on renewable energy, aiming 'to assess proposals for renewable energy sources against the need to protect and conserve the

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<sup>13</sup>'Front-loading' is the early involvement of communities in plan-making and the early taking of key decisions (ODPMb, paragraph 4.24).

environment'. It does not give any guidance on specific renewable energy technologies other than wind. Interestingly, it specifies that where appropriate, planning assessments will consider the cumulative effects of successive developments within a particular area (Planning Service Northern Ireland).

## 5 THE PLANNING PROCESS FOR ENERGY PROJECTS

### 5.1 Overview

Under the current UK planning system, developers of energy projects must seek planning permission either from the LPA<sup>14</sup> or from the DTI under certain consents regimes, depending on the scale of the proposed development.<sup>15</sup> The process of seeking planning permission from LPAs is overseen by the DCLG. Usually the consents that must be secured from the DTI will be deemed to grant planning permission at the same time. Whether a project is required to seek planning permission from the LPA or consents from the DTI, the process will be multi-faceted, involving local government, an assessment of the proposal against the LA's existing development plans, and public participation. Some projects will also involve an EIA. There is also the potential for a public inquiry (DTI, 2006b).

Under Section 36 of the Electricity Act 1989, developers are required to gain consent from the DTI or Scottish Executive for the construction, extension or operation of onshore generating stations over 50MW capacity, offshore power stations over 1MW capacity, and hydro plant over 1MW. Section 36 contains comprehensive procedures in which the views of the LPA, local people, statutory bodies and other interested parties can be brought into the decision-making process. All applications are routed to the LPA. A public inquiry may be called before the Secretary of State makes a decision. The Electricity (Applications for Consent) Regulations 1990 (SI 1990 No. 455) and the associated Electricity Works (Environmental Assessment) (Scotland) Regulations 2000 (SSI 2000, No 320) also apply in such cases. The authorisation procedures also include provisions for a public inquiry in circumstances where relevant objections are lodged.

Under Section 37 of the Electricity Act 1989, developers are required to gain consent from the DTI or Scottish Executive to install or keep installed overhead lines over 20kV capacity (DTI, 2006b). In Northern Ireland, all planning applications for renewable energy developments with an installed capacity below 50MW are dealt with by the DoE. Under Article 39 of the Electricity (Northern Ireland) Order 1992, all energy projects over 50MW, and all offshore proposals, must also obtain consent from the Department of Enterprise, Trade and Investment (DETI) (Sustainable Development Commission, 2005: 111). In both cases the LA is a statutory consultee.

The authorisation of offshore renewable energy facilities are not covered by the Town and Country Planning (Scotland) Act 1997. This is currently the subject of a Scottish Executive consultation paper which suggests that the authorisation of such proposals should come within the scope of Section 36 of the Electricity Act 1989 and the associated Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2000 (Scottish Executive, 2000).

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<sup>14</sup> Requirements for planning permission vary according to the LA, and whether it is an urban or rural area.

<sup>15</sup> The Country Guardian website warns that the level at which a planning decision is taken, that is whether it is taken at local council level or at national (DTI) level, is likely to affect how local communities perceive their ability to become involved.

Toynbee (2007) points to the current delays in decisions for applications which have to go to the DTI or Scottish Executive:

Labour may feel smug on reading the British Wind Energy Association's findings that show Labour councils are more likely to approve wind farms. But it turns out that the greatest blockage in the system is inside its own Department of Trade and Industry. Section 36 applications for the biggest wind farms go direct to the DTI. Here, 465MW of wind farms have been held up, some for as long as four years. The Labour-Lib Dem Scottish Executive is even worse – 4,148MW of wind power is currently stuck in limbo. However, the DTI and Scottish Executive say it's not their fault – they have to consult local councils, which trigger long public inquiries as a blocker.

In England, Wales and Scotland, developers of all other electricity infrastructure such as small power stations or substations are required to gain planning permission from the LA under the Town and Country Planning Act (1990) or under the Town and Country Planning (Scotland) Act 1997. Appeals and call-ins are overseen by the Secretary of State for Communities and Local Government. In the case of substations, planning permission must be jointly determined by the LA and the DTI (DTI, 2006b).

In the case of small-scale, particularly domestic renewable energy developments (microgeneration), some technologies do not require planning permission at all. The Town and Country Planning (General Permitted Development) Order 1995 sets out the criteria under which householders in England and Wales, in certain circumstances, can alter the exterior of their house without needing to seek planning permission, such as for satellite dishes (permitted development). Northern Ireland and Scotland have separate legislation covering permitted development. The Energy Review (DTI, 2006b) and the Microgeneration Strategy (DTI, 2006a) have committed to giving permitted development status to most domestic and small commercial renewable energy installations. The Barker Review (2006: 12) proposes the introduction of a system based on the New Zealand model of side-agreements, 'where if potential applicants can come to an agreement with all affected third-parties there should be no requirement for full planning permission' (Barker, 2006: 12).

Offshore renewable energy developments are subject to a different consenting process. Applications for offshore projects under 1 MW are determined by the LPA, while for offshore wind and water driven generating stations with a generating capacity above 1MW in territorial waters, or above 50MW in the Renewable Energy Zone, consent is required from the DTI in England and Wales and from the Scottish Executive in Scotland. This consent covers the windfarm, cables and other offshore infrastructure construction. Offshore projects are outside the jurisdiction of LPAs, whose responsibility for determining planning applications does not extend outside the low water mark (DTI renewable energy website; DTI, 2006b). The UK Government will legislate to establish a Renewable Energy Zone to provide a regulatory framework for projects beyond territorial waters, and strengthen the regulatory regime for within territorial waters. The Scottish Executive is working with the DTI to create an appropriate consents regime for waters outside the 12 mile limit. In Northern Ireland, the offshore consents process is managed

by the Department of Enterprise, Trade and Investment under Article 39 of the Electricity (Northern Ireland) Order 1992 (DTI website).

If a planning application is rejected, the developer may take their case to the relevant appeal body, which has the power to overrule the original decision. A developer is also entitled to go to appeal following non-determination after the statutory period (Sustainable Development Commission, 2005: 45). At any point, the DTI or the Scottish Executive can 'call in' the planning application to be decided nationally, which would automatically require a local public inquiry. A decision is made by the planning committee or DTI/ Scottish Executive. If the decision is yes, the project proceeds to the implementation stage. If the decision is no, projects under 50 MW can go to planning appeal, while projects over 50 MW are rejected outright. If it goes to appeal, this will be heard by the relevant national body. The Planning Inspectorate (England and Wales) can decide to either hear the case through written or informal evidence, or request a local public inquiry.<sup>16</sup> In Northern Ireland, appeals against refused applications are heard by the Planning Appeals Committee (DTI website). The Barker Review (2006: 14) proposes the introduction of a Planning Mediation Service, 'to address the 64 per cent rise in appeals from 1997-98 to 2004-05'.

## **5.2 The Planning Process for General Electricity Infrastructure**

### **5.2.1 Overview**

Under the Electricity Act 1989, the National Grid is the sole holder of a transmission licence in England and Wales. National Grid is a statutory undertaker under the Town and Country Planning (General Permitted Development) Order 1995. This Order grants planning permission for certain defined classes of development. National Grid therefore has certain rights to carry out development under the Order without the need for planning permission from the LPA. This permitted development relates primarily to development in existing substations, on operational land and to underground cables. New substations or major extensions to existing substations may require planning permission from the LPA.

### **5.2.2 Overhead power lines**

In order to construct a new overhead power line above 20kV capacity, the developer is required to obtain consent from the Secretary of State for Energy or the Scottish Executive under Section 37 of the Electricity Act 1989, unless the new line is across land owned and occupied by the developer. With applications for generating stations over 132KV capacity, the developer should apply to the relevant LPA at the same time as submitting the application to the Secretary of State for Energy. 'Such an application must be advertised and an opportunity given to persons other than the relevant planning authority to send objections to it direct to the Secretary of State for Energy'. For overhead lines less than 132KV, 'there is no requirement for advertisement and thus no

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<sup>16</sup> Developers can apply to the High Court for a judicial review of a decision under Section 31 of the Supreme Court Act 1981. The Country Guardian points to 'the current system whereby developers may appeal against a planning decision which goes against them, but local communities cannot also appeal.'

mechanism for objections to be made to the Secretary of State' (Department of the Environment, 1990).

The National Grid owns the land occupied by its substations, but only exceptionally does it own the land which is crossed by its electricity lines. It is thus required to seek 'necessary wayleave'. Current legislation covering applications for wayleave is covered in Schedule 4 of the Electricity Act 1989 and the Electricity (Compulsory Wayleaves) (Hearings Procedure) Rules 1967. Electricity companies need permission to install electric lines and associated equipment (poles, pylons, staywires and transformers for example) 'on, over or under private land and to have access to that land for the purposes of inspecting, maintaining, repairing, adjusting, altering, replacing or removing the line or equipment'. This permission is granted by the DTI or the Scottish Executive, and is done by way of a contractual agreement known as a wayleave, granting the developer the right to install an electric line and to keep it installed. Usually, a wayleave, together with access to the land, is secured voluntarily. However, if a voluntary agreement cannot be reached, the electricity company has access to compulsory procedures, as it has a public service role. For a new line, the electricity company has the option of either seeking a Compulsory Purchase Order under Schedule 3 to the 1989 Act, or of seeking a necessary wayleave. In the latter case, the company must give the owner or occupier at least 21 days notice requiring him to grant the wayleave. If the wayleave is not granted after twenty-one days, the developer applies to the Secretary of State. The Department then checks the application, usually within two months, to ensure that the Secretary of State has jurisdiction to proceed, and requests further information as necessary. If the Secretary of State has jurisdiction, the matter proceeds and a hearing is requested, for which the Secretary of State appoints an Inspector. The hearing is not a public inquiry, thus only the electricity company and the owner(s) and occupier(s) (or their representatives) are entitled to appear and make their case. Within three months of the hearing, the Inspector makes his recommendations. The Secretary of State then considers these and notifies the parties of his decision, usually within two months. If he decides to grant a necessary wayleave, this is usually subject to a condition that it can only be terminated after fifteen years, and these are binding on successive owners or occupiers (DTI, 2002a, para 6.10).

The Electricity Act 1989 contains a formal procedure for consultation with LPAs within whose areas the new line is proposed. If the LPA objects to an application for Section 37 consent, a public inquiry must be held unless the Secretary of State for Energy grants consent subject to conditions or modifications. The National Grid has agreed with the Secretary of State for Energy that it will provide an ES with every application for consent to install an overhead line over 275KV along a new route. Overhead lines under 132KV or under one km long are deemed unlikely to require an ES. The Secretary of State for Energy will nonetheless consider each case on its own merits, particularly where the overhead line would pass across sensitive land.

### **5.2.3 Power stations**

In order to construct a new power station over 50MW, an electricity company must seek DTI consent under Section 36 of the Electricity Act 1989. As with overhead lines, with applications for generating stations over 132KV capacity, the developer should apply to

the relevant LPA at the same time as submitting the application to the Secretary of State for Energy. The Secretary of State for Energy may also direct that hazardous substances consent is deemed to be granted where this is required for a generating station. Although such an application would be separate from any associated transmission works, discussions between the electricity company and the National Grid normally take place at an early stage. National Grid would encourage prospective generators to consult it in advance of the consents process so that the transmission and consent implications of the project can be fully considered. Although separate applications must be made for the generating station and the grid upgrade, Government believes that both applications should be considered under the same inquiry, where practicable (DTI, 2006b).

The Government is currently seeking to change the procedure for gaining consents for works on existing distribution lines to improve their resilience, for example by replacing bare wire conductors with insulated conductors. Government has therefore reviewed the overhead lines regime and believes a better balance can be struck between changes for which the full consents process is required and changes where a more flexible approach can be adopted (DTI, 2006b).

### **5.3 The Planning Process for Renewable Energy Developments**

#### **5.3.1 Onshore wind power**

Planning permission is required for all onshore wind turbines, from either the LPA or the DTI depending on the scale (see above). The first stage of development for onshore wind farms is the pre-application assessment. This begins with site selection, which may be informed by LPA policy on renewable energy. The developer looks at potential sites to assess their suitability, taking account of technical, commercial and environmental constraints. Desk-based research is carried out to see whether sites meet essential criteria. Some developers may hold informal discussions (initial consultation) with the LPA and statutory consultees to identify potential issues to be addressed. The local community may also be approached to assess the likely local reaction. Whether there is a reasonable prospect of obtaining planning permission is becoming a much more dominant factor in the initial site selection process than for example wind speed. Next, the developer conducts a more detailed feasibility study. Site visits will be required and the developer will need to agree the scope of the EIA with the LPA. 'Consultation with the local community should also take place at this stage if it has not already' (Sustainable Development Commission, 2005: 110). The developer then decides the exact design and layout of the turbines. The detailed assessment is likely to include an EIA (if required), detailed community consultation, consultation with the appropriate statutory and non-statutory consultees, and detailed economic assessment. Finance for the project will be secured at this stage.

The second stage of development is planning consent. Statutory consultation is carried out, during which the planning application is placed on the planning register and made available for public inspection. With applications to the LPA, the public can make representations once the application is put before the Planning Committee. In DTI

cases, the public have a specified period to register objections with the Secretary of State. Objections registered in time count as 'qualifying objectors' and objectors are automatically entitled to appear at any public inquiry. In coming to a decision, LPA officials first check that proposed wind farm developments are in line with national, regional and local planning policies, then consider the ES from the developers, then consider the responses to the public consultation, and finally make a recommendation to the Planning Committee which must make the final decision. This is also the opportunity for local stakeholders to register support or opposition to the scheme with the planning case officer and possibly with Members and the local MP. A decision must be given in eight weeks, or sixteen weeks for applications accompanied by an ES.

The final stage is implementation. This involves the negotiation of local benefits, the construction, commissioning, operation and maintenance of the development, and eventually the decommissioning and land reinstatement or repowering of the development. At the end of their working lives (usually 20 years), wind turbines will be removed and the materials recycled. The site may then be repowered (with potentially significant increases in output) or fully decommissioned. However, in some cases the original planning consent may stipulate that the site must be decommissioned, in which case the developer would have to apply for planning permission to repower the site. Developers have responsibility for the operation of their wind farm throughout its lifetime and the public should be notified of any changes of operation. Maintenance activities will need to take place regularly for individual turbines and associated infrastructure, and the developer should provide site visits and ongoing information (Sustainable Development Commission, 2005: 110-112).

The Sustainable Development Commission (2005: 92) explains the normal procedure for public engagement during the planning process for onshore wind farms:

Public consultation usually occurs during the planning and development of the wind farm as part of the ES and then once a formal application has been made to the relevant planning authority. This would constitute good practice on behalf of the developer. Legally, the public must be consulted following the submission of a planning application to the LA for a proposed wind farm development. This is the only stage at which there is a legal obligation for the public to be consulted. The developer could normally place an advertisement in a local paper to advertise the scheme and invite comments. The planning authority of the local council may also advertise the application in the local press or on the council's planning website. Some people may have been contacted prior to this stage if they are neighbours of the scheme or if the EIA process indicated that they may be negatively affected by the scheme.

The South West of England was the first region to incorporate a regional renewable electricity target into its planning guidance.<sup>5</sup> The region has a regional renewables office,

Regen South West,<sup>17</sup> and has a high number of energy organisations, both in the private and voluntary sectors (Brooklyndhurst, 2003).

The South West Public Engagement Protocol and Guidance for Wind Energy (RegenSW, 2004) is, until now (see DTI, forthcoming), the only guidance of its kind in the UK. It is a set of commitments to be endorsed by each LPA and every wind developer operating in the South West region. It requires LAs to talk to wind developers before the application stage. Thus LAs are reluctant to sign it in case they look biased in favour of wind, and wind developers are also reluctant to sign it. However, developers believe it will encourage LA involvement in public engagement rather than leaving it to the developers. It lists a series of key tasks at the various stages of the process (pre-planning, planning and post-planning), clarifying what is expected of whom at what stage. It also clarifies responsibility in terms of setting a policy framework for engaging with Councillors (Environment Council, 2005: 10). It outlines the issues to be considered during the preparation of the engagement plan and who they are addressed to. RegenSW explains:

The Wind Protocol has been designed to ensure that local communities near any proposed wind energy developments can be clear about how the developer will keep them involved with development plans, how they can ensure their concerns are addressed and on which issues the developer is willing to negotiate both within and outside the formal planning process ... Signing up to the Protocol does not imply support for wind energy, but it allows local planning authorities and wind developers to clearly state their commitment to developing a robust process of engagement that is inclusive, transparent, accessible and accountable, and for the benefit of all involved. It also increases the chance that schemes that are given planning approval will work for local communities by providing guidance on how to negotiate profit sharing and local employment benefits from new schemes ... Wind energy developers and local planning authorities throughout South West England have been invited to sign up in support of the approach outlined by the protocol.

The Protocol, endorsed by the BWEA and the RTPI, is now being developed nationally by the DTI.

### **5.3.2 Offshore wind power**

The Crown Estate owns the seabed out to the limits of territorial waters. For offshore windfarm development on its marine estate, the Crown Estate must grant a lease over a particular site. Similar considerations will apply in the Renewable Energy Zone, although here the Crown Estate will issue a licence to develop a wind farm rather than a lease, as it does not own the seabed beyond the territorial limit. The Crown Estate's permission is necessary to place structures on or pass cables over the seabed and its foreshore.

Areas of seabed have been made available for offshore wind farm projects through two rounds of development. The Crown Estate announced the first round in December 2000,

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<sup>17</sup> RegenSW is a small independent, not-for-profit, publicly-funded company set up with the help of the South West Regional Development Agency. As it receives core funding, RegenSW can provide free advice to LAs and businesses on renewable energy.

inviting applications from developers for options on suitable sites (BWEA, 2002).<sup>18</sup> Following Round 1, twenty offshore wind farms have been commissioned (DTI, 2002). These full term leases are for twenty-two years with a further three years for decommissioning.

In July 2003, the Crown Estate announced a competitive tender for a second round of larger sites. For the largest Round 2 projects the full term lease is for 50 years.<sup>19</sup> The Agreements for Lease over Round 2 sites grant developers a development option for seven years during which time the successful bidders have to obtain the relevant statutory consents. Once the necessary statutory consents are in place, developers will be able to convert their agreements for lease into full leases. The Crown Estate announced details of the sites and the developers chosen to build them.<sup>20</sup> The developers are now developing detailed proposals together with supporting ESs as a basis for their applications for consent to construct (Marine Consents and Environment Unit (MCEU) website). However, this process does not identify the exact location for offshore wind developments. The BWEA (2002: 6-7) explains:

There has been no overall strategic process to agree where offshore wind sites should be located, or how many there should be in any one area. It has been left to developers to find sites they believe will be economically viable, and environmentally and socially acceptable.

While small-scale offshore wind projects are covered by planning legislation, for larger schemes, potential developers must obtain statutory consents from a number of Government departments responsible for the offshore wind development process. Developers usually ask for deemed planning permission at the same time as obtaining these consents. For any associated onshore works required for connecting the power to the grid, such as an electrical sub-station, the developer can apply to the Secretary of State for 'deemed planning permission' under Section 90 of the Town and Country Planning Act 1990, as part of the Section 36 application for onshore work. Alternatively, the developer can apply for planning permission directly to the relevant LPA under Section 57 of the Town and Country Planning Act 1990 (DTI website). The Government will make its decision by reviewing information provided as part of the EIA, drawing advice from technical specialists, and reviewing responses from the consultation process.

The number of consents required varies from case to case, as some consents are site-dependent for both the offshore and onshore work. The DTI's Offshore Renewables

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<sup>18</sup> 'In the 12 months following its creation in April 2001, subsequent to the Crown Estate's announcement of the release of 18 potential seabed sites for development, the website for the UK offshore wind energy industry ([www.offshorewindfarms.co.uk](http://www.offshorewindfarms.co.uk)) received a total of almost 40,000 visits, averaging between 2,500 to 3,500 each month' (BWEA, 2002: 20).

<sup>19</sup> Offshore turbines have a warranted life-span of 20 years, as for onshore. However, the lease awarded for an offshore site will last 50 years, so typically the developer would replace the first set of turbines with new ones during the wind farm's life time. At the end of the lease period, they would decommission the wind farm or reapply for planning permission to replace the project (Npower Renewables).

<sup>20</sup> In Round 2, the three areas of shallow waters proposed by the Crown Estate and the DTI as appropriate for development were the Thames Estuary, Greater Wash and North West.

Consents Unit (ORCU) serves as a focal point for offshore wind farm consent applications under Section 36. It co-ordinates the progress of applications through Government (DEFRA and the MCEU), acting as a point of direct liaison with regard to consultation arrangements, clarifying issues in relation to Section 36 consents, and providing status updates. Although it is strongly recommended that developers lodge their consent applications with the ORCU, there is no obligation to do so and a developer may choose to send applications for the various consents directly to the relevant consenting authorities.

Additional consent is required under Section 5 (marine eco-systems protection) of the Food and Environment Protection Act 1985 for any activities that result in the deposition of any material in the marine environment below the Mean High Water Springs. Additional consent may also be required under Section 34 (navigation safety provisions for cables) of the Coast Protection Act 1949<sup>21</sup> for construction on or under the seashore below the level of Mean High Water Springs (DTI website), and the Transport and Works Act 1992.<sup>22</sup> The Telecommunications Act 1984 (for cable operations) and other legislation such as local Harbour Acts also exercise statutory control for marine works. The Energy Act 2004, which deals with safety zones and decommissioning, introduced a new scheme to enable a safety zone(s) to be established around offshore renewable energy installations, probably around each turbine in the case of wind farms, and to extinguish public rights of navigation.

The BWEA (2002) sets out guidance for the wider voluntary consultation process for offshore wind farms, which 'should as far as possible mesh in with the formal consultation processes for statutory consents, but should be wider, so that it includes local and non-statutory, as well as statutory, stakeholders' (BWEA, 2002: 10):

The Fisheries Liaison Offshore Wind group, facilitated by the DTI, consists of members of key fisheries organisations and representatives of the offshore wind industry. It has been set up as a result of cooperation between the fishing industry, the BWEA and Government (DTI), to be the focal point for all nationwide fishing and fisheries matters pertaining to the offshore wind industry (BWEA, 2004). The BWEA (2004) has produced guidelines for developers of offshore wind and the fishing community. They are based on best practice developed through the experience of the UK's fishing community, and the offshore oil and gas and cable industries. They provide guidelines for any company involved in offshore wind development when dealing with fishing and fisheries. It recommends that contact between the wind project and the local fishing industry is established from the earliest possible time in the planning phase, preferably prior to a bidding round and/ or to announcing the position of the wind farm or of the associated cable routes. Hopefully local fishermen can distribute most of the information from the

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<sup>21</sup> Section 34 of the Coast Protection Act provides for third parties to participate in or make representations on policy, siting, assessment of proposals, or decision-making for offshore developments. However, the provisions are perceived by some to be limited and in need of strengthening' (BWEA, 2002: 7).

<sup>22</sup> The TWA and Section 36 require that close liaison is maintained with the relevant government departments and fishing organisations in respect of any wind farm construction activity or associated cable laying.

developers amongst the fishing community more efficiently than the developers would, but the developer will still need to ensure that the information is posted at local harbour master offices, and should also seek to identify fishermen who are not members of any organisation. It recommends that developers appoint a Fishing Liaison Officer within the company as early as possible and also seek to appoint a Fishing Liaison Representative. The Fishing Liaison Representative should be appointed by elected members of the fishing community.

### **5.3.3 Marine**

The DTI (2002) proposed competitions for site leases in defined areas of sea which would be subjected to prior SEA. While it focused primarily on wind, it anticipated that, in the case of wave and tidal energy, competitive rounds would be preceded by a phase in which there were requests from developers for sites for demonstration projects and stated that these would be considered on their merits. The marine renewables industry is now at the pre-commercial stage of finding sites for demonstration devices to validate the technologies used. When sufficient developers are proposing commercial generation projects, the Crown Estate will hold a competition for the award of site leases (DTI, 2005b: 5), as with offshore Rounds 1 and 2. The demonstration phase will help with the establishment of a stakeholder engagement framework to facilitate subsequent implementation of the commercial phase, and evolution and refinement of the consents process and adaptation as appropriate to new technologies and their impacts (DTI, 2005b: 6).

DTI guidance (2005b) sets out the application of existing lease and consenting procedures for all small-scale marine renewable energy generation demonstration devices in English and Welsh territorial waters and the whole UK Renewable Energy Zone, except that beyond Scottish territorial waters. It does not cover procedures for larger commercial scale wave and tidal stream projects which will only go ahead on the basis of a full SEA and a Crown Estate site lease competitive round, which is not expected for several years. This guidance does not cover public engagement.

There is as yet no guidance on how the consenting arrangements will be applied to tidal energy developments. The DTI identifies a need for guidance on this for developers and stakeholders. However, no new legislation or regulation will be involved (DTI, 2005b: 3). The DTI states that 'consents applications will be subject to a minimum 28 days public consultation in the normal way and assessed in terms of the EIA' (DTI, 2005b: 4).

### **5.3.4 Biomass**

The House of Lords Science and Technology Committee Fourth Report (2001) stated that there are several biomass plants in the UK, 'but it is unlikely that there will be more in view of the unhelpful and confused regulatory environment and the lack of financial encouragement'. However, the DTI states that it is likely that proposals for biomass generation will increase in number as the technology matures and feedstock production increases (DTI website). However, there is as yet little formal guidance or policy relating to biomass, other than in PPS22.

Small-scale biomass plants do not require planning permission unless the installation requires the fitting of a new flue and the development is proposed in a Conservation Area. Heat only plants, and electricity plants or CHP with an electrical output under 50MW, require planning permission from the LPA under the Town and Country Planning Act 1990. Biomass plants over 50MW capacity must obtain planning consent from the Secretary of State for Energy under Section 36 of the Electricity Act 1989 (ODPM, 2004b).

In addition to planning permission, a biomass plant may require any of the following authorisations: building regulations, such as building control for domestic combustion equipment under 50KW, an abstraction licence from the Environment Agency for the abstraction and discharge of the cooling water if used, and pollution control systems, which regulate the technical details of the waste management activity, requiring an operating permit to be obtained prior to starting activities (ODPM, 2004b).

A planning application for a biomass plant should include indicative details of grid connection works, including transmission lines and transformers, even if consent is required under Section 37 of the Electricity Act 1989 ((ODPM 2004b). If the LPA feels that significant effects are likely, they will issue a screening opinion requiring an EIA (ODPM 2004b). Thermal biomass power stations with a heat output greater than 300MW would fall under Schedule 1 of the EIA Regulations, making EIA mandatory; however, no such installations are likely to be built in the UK in the near future (DTI website). The remit of consideration for planners is around the power plant and associated impacts/ energy conversion plant itself, rather than the fuel supply. Many of the environmental issues associated with the fuel supply may be covered by an EIA undertaken by other bodies connected with the scheme (ODPM, 2004b).

Small biomass plants may be easily incorporated into existing agricultural buildings. They may not therefore require specific planning permission if they are ancillary to the main use of the site. However, heat and power generation plants do require planning permission (Scottish Executive, 2000).

### **5.3.5 Solar/ PV**

The installation of solar panels and photovoltaic (PV) cells often fits the criteria of the Town and Country Planning (General Permitted Development) Order 1995, as they are clean and silent in operation. Planning permission is not normally required if the panels do not project significantly (150mm) beyond the roof slope, provided they are not of an unusual design, do not involve a listed building, and are not in a designated area. In such cases, an EIA is usually not necessary, and no other authorisations are required. Different conditions apply if the panels are to be erected elsewhere than on the roof: if the LPA considers that the works would enlarge the roof of a house or alter its shape, it may require a planning application to be made. Listed Building Consent is required for solar water heating panels, PV panels or a new flue. However, exceptions may apply for systems on listed buildings, age of the property or in Areas of Outstanding Natural Beauty.

For PV installations under 5kW, permission needs to be obtained under the scope of the Engineering Recommendations G83/1 (Recommendations for the Connection of Small Scale Embedded Generators), in Parallel with Public Distribution Networks. Larger systems may be required to meet E.RG59 (Recommendations for the connection of embedded generating plant to the regional electricity companies' distribution systems) (ODPM, 2004a). These are mandatory requirements, largely to ensure that distributed grid-connected generation systems like PV will not cause safety risks to engineers working on the network, and that the electricity fed into the network complies with mains power quality requirements. These permissions are required for all grid-connected generators, but no additional authorizations are required for stand-alone systems not connected to the distribution network.

Passive solar design (PSD) does not require any other consent beyond planning control. It is, however, also relevant to the application of the Building Regulations. PSD should be dealt with principally by way of LDD policy and guidelines.

The Town and Country Planning (EIA) (England and Wales) Regulations 1999 do not include solar energy systems specifically in Schedule 1 or 2. However, large, industrial scale developments (producing over 0.5MW of electricity) are listed in Schedule 2 and would thus require a screening opinion, but these are rare in the UK. For stand-alone systems not connected to the distribution network, no additional authorisations are required. For systems that are connected to the electricity network, prior consent of the local Distribution Network Operator<sup>23</sup> must be obtained for all domestic renewable energy systems. Where planning permission is required, conditions may be applied, such as that the scheme is to be built to a design approved by the LA, and the design of solar modules is to be agreed by the LA. To install a PV system with the intention of connecting it to the mains electricity supply network, it is important to ensure that the correct electrical authorisations and prior consent are obtained and approved from the local electricity supply grid (ODPM, 2004b).

### **5.3.6 Hydroelectricity**

Planning permission is required for all hydro plants, apart from for example for the refurbishment of an existing scheme, where there is no 'change of use' (British Hydropower Association, 2006). Some schemes may require a Building Regulation Approval. Hydro developments are largely non-controversial, but can cause problems with fishing and water abstraction in low flow rivers. Potential impacts include fish migration, fish being damaged in turbines, flood risk, impact on flora and fauna and water quality issues (DTI, 2006a). Future hydro development in the UK is only likely to involve small-scale, relatively unobtrusive developments, as all the opportunities for large-scale development have already been taken up.

All water courses in England and Wales are controlled by the Environment Agency, which grants licences to remove water from them. There are three licences that can

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<sup>23</sup> There are fourteen Distribution Network Operators in the UK to cover all regions, but the liberalised nature of the UK electricity market makes it challenging to find out your local DNO.

apply to a hydropower scheme. The first and most common is the abstraction licence, where water is being diverted 'away from the main line of flow of the river'. The British Hydropower Association (2006) explains: 'In practice, this means that the only type of scheme which can avoid an abstraction licence would be a barrage-type project where turbines are installed on an existing weir and the water remains between the existing banks of the river'. Abstraction licences are granted for a twelve-year period, after which time they must be renewed. Other licences required less often are the impoundment licence, and drainage consent for work being carried out in a 'main channel':

The Environment Agency may also require a Section 158 Agreement to be drawn up, which defines certain further details on the way the scheme must be operated in order not to conflict with the Agency's river management duties, e.g. rights of access, the control of river levels, flood waters, maintenance of the weir and river structures, etc. (British Hydropower Association, 2006).

Proposals for hydropower schemes that will generate less than 500KW are not required to produce an EIA, but must be supported by an Environmental Report summarising the details and impacts of the scheme (British Hydropower Association, 2006). Proposals for projects generating over 500KW may be required to produce an EIA under Schedule 2 of the EIA Regulations.

In Scotland, a proposal to construct or operate a hydropower station with a capacity over 1 MW must be submitted to the Scottish Ministers for consent under Section 36. Before applying, an applicant must consult the Fisheries Committee, which advises on possible damage to fisheries or fish stocks (Scottish Executive, 2000).

## 6 CONCLUSIONS

This review has described the statutory planning procedures in relation to the development of energy projects in England, Wales, Scotland and Northern Ireland, including the formal procedures in place for the public to become involved. This has included the opportunities for the public to influence local and regional Development Plans, as well as specific applications for developments of energy projects. It has reviewed a range of Government and other guidance documents, as well as official policy. There are a number of points to note about the potential for the public to become involved in the planning of renewable energy developments.

The SCI, which describes each LPA's policy on involving the community in preparing and revising Development Plans and consulting on planning applications, allows the public to know how and when they can get involved in planning decisions, who will be involved, and how they represent the wider community and stakeholders. Thus the potential for public involvement will vary depending on the authority.

While PPS22 (ODPM, 2004a) specifically encourages the 'front-loading' of engagement, the BWEA (2002) explains how 'front-loading' is in some cases taken further by developers than what is recommended in official policy:

New developments on land that require planning permission have to go through a statutory consultation process, giving people an opportunity to ask questions or raise objections. Even though such developments are set within a framework of established national and strategic planning guidance, many developers recognize the additional benefits of encouraging much earlier and wider public participation than is required in the statutory planning process.

Whether a developer is required to seek consent from the LA or from the DTI, the public may become involved in the planning process from the pre-application stage. Even during the site selection process for onshore wind farms, the developer may approach the local community to assess the likely local reaction (Sustainable Development Commission, 2005: 110). The detailed assessment, where the developer decides the exact design and layout of the turbines, may include detailed community consultation (Sustainable Development Commission, 2005), but the only stage at which there is a legal obligation for the public to be consulted is following the submission of the planning application to the LA (Sustainable Development Commission, 2005: 110-112), or during the preparation of the EIA where one is required.

While policy guidance outlines the types of environmental concerns that may constitute public objection to proposed developments, it does not stipulate exactly what should be the content of public consultations and how much weighting should be given to each concern, such as the cumulative effect of multiple windfarms in a given area.

## 7 LIST OF ABBREVIATIONS

BWEA	British Wind Energy Association
CHP	Combined heat and power
DCLG	Department of Communities and Local Government
DEFRA	Department of the Environment, Food and Rural Affairs
DETI	Department of Enterprise, Trade and Industry (Northern Ireland)
DoENI	Department of the Environment Northern Ireland
DPD	Development Plan Document
DTI	Department of Trade and Industry
EC	European Community
EIA	Environmental Impact Assessment
ES	Environmental Statement
EU	European Union
LA	Local Authority
LDD	Local Development Document
LDF	Local Development Framework
LPA	Local Planning Authority
MCEU	Marine Consents and Environment Unit
MW	Mega watt
MWh	Mega watt hour
NFFO	Non-fossil fuel obligation
NIMBY	Not in my back yard
ODPM	Office of the Deputy Prime Minister
ORCU	Offshore Renewables Consents Unit
PPS	Planning Policy Statement
PV	Photovoltaics
RO	Renewables Obligation
ROC	Renewables Obligation Certificate
RSPB	Royal Society for the Protection of Birds
RSS	Regional Spatial Strategy
SEA	Strategic Environmental Assessment
SCI	Statement of Community Involvement
S106	Section 106
TAN	Technical Advice Note
TSEC	Towards a Sustainable Energy Economy
UDP	Unitary Development Plan
UK	United Kingdom

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