

CHAPTER 3: REGULATORY AND POLICY CONTEXT

This section explains the regulatory and policy framework surrounding the development of Burbo Offshore Wind Farm. Local and National policies for renewable energy are explained in brief and the consenting process reviewed.

The Burbo Offshore Wind Farm will be constructed within 12 miles of the shoreline, defined as the Territorial Seas of the UK. The onshore construction falls within the jurisdiction of Wirral Metropolitan Borough Council (Wirral MBC), for all works above Mean Low Water (MLW).

A variety of consents are required to secure permission to construct an offshore wind farm. The following sections will outline those consents and the procedure SeaScape Energy is following.

3.1 Applications for Consents and Authorisation

The development of an offshore wind farm falls under Section 3 of the Crown Estate Act 1961 which provides the right to use Crown Estate lands. This statutory consent is provided in the form of a lease, which SeaScape Energy have entered into for a 25 year period.

The Crown Estate owns around 55% of the foreshore (between mean high and mean low water) and approximately half of the beds of estuarial areas and tidal rivers in the United Kingdom. It also owns the seabed out to the 12 mile territorial limit, including the rights to explore and exploit the natural resources of the UK Continental Shelf, excluding oil, gas and coal.

The construction of an offshore power station exceeding 1MW in capacity requires consent under Section 36 of the Electricity Act 1989 from the Secretary of State (the Department for Trade and Industry (DTI)). SeaScape Energy will apply for Section 36 consent in order to build the Burbo Offshore Wind Farm (90MW capacity). The application will cover the wind turbines and all offshore cabling.

An application under Section 5 of the Food and Environment Protection Act (FEPA) 1985 is also required. This licence covers deposits in the sea or within the seabed. This will cover the installation of the turbine foundations and scour protection material. Buried cables are exempt from this Licence under the Deposits in the Sea (Exemptions) Order 1985.

A FEPA licence may be required to cover any deposits entering the water column during installation, from drilling or pile-driving. The extraction and deposition of seabed material within the sea will require a separate FEPA licence.

Construction of works on/over the seashore or seabed below MHWS requires consent under Section 34 of the Coast Protection Act 1949, also from the DTI. Consent will be necessary for the offshore cabling as a consequence of interference with the public right of navigation by the construction process.

Onshore development of cabling, interconnection facility and substation will require a separate application under Section 57 of the Town and Country Planning Act 1990. An application will be made to the Local Planning Authority (Wirral MBC) to carry out these works.

3.2 Requirements for an Environmental Statement

Environmental impact assessment is a means of drawing together, in a systematic way, an assessment of a project's likely significant environmental effects. The main aim of the process is to ensure that the Authority giving the primary consent for a project makes its decision in the knowledge of any likely significant impacts on the environment. This Environmental Statement contains detailed information regarding the likely main environmental effects of the proposed offshore wind farm. It is intended to help to ensure that the importance of the predicted effects of the development and the scope for reducing them are properly understood by the public and the relevant determining authorities.

An Environmental Assessment is required for an offshore wind farm in accordance with Article 4 (2) of Council Directive 97/11/EC. All components of the wind farm development constitute a single development for the purposes of the EIA. This document addresses all likely significant impacts which are possible in and around the wind farm site and all ancillary structures associated with it. It also considers the cumulative effect of the proposal in combination with other wind farm developments as well as other activities and developments in the area.

3.3 Energy from Fossil Fuels and Global Climate Change

Government policy provides for the encouragement of energy generation from renewable sources, in order to reduce harmful atmospheric emissions and to meet future demand for energy with diverse and secure supplies. This section examines the environmental consequences of fossil fuel energy generation, and the commitments made both nationally and internationally to limit damage to the environment, which together underpin the need for the development of the Burbo Offshore Wind Farm.

The likelihood and consequences of Global Climate Change have been the subject of extensive research for three decades. As the work has progressed, models have improved and with them the understanding of the processes which bring about global climate change and its likely consequences.

The current consensus on Global Climate Change is summarised in the Government's review paper on The UK Climate Impacts Programme (UKCIP), "Climate Change - Assessing the impacts - identifying responses" (May 2000). It states:

"The climate of the United Kingdom is changing. Our climate has warmed by about 0.7 deg C over the last 300 years, with about 0.5 deg C of warming occurring during the twentieth century..... Global warming is also leading to rising sea levels, with a typical rise of about 1mm per year, and a maximum relative sea level rise on the east coast of England of over 2mm per year.... Evidence is mounting that such changes are due to an increase in emissions of greenhouse gases..... Climate models predict that global average temperatures will rise by a further 3 deg C by 2100 under a "business as usual" emissions scenario.... To stabilize global carbon dioxide concentrations at today's levels, emissions would need to be cut now by 60-70 %, and even then temperatures will rise by 0.7 deg C."

Reflecting increasing public and governmental concern, these issues are being addressed at all levels, from international treaties cascading down to EU policy, national policy, regional and local planning policy.

3.4 International Context

The United Nations "Earth Summit", held in Rio de Janeiro in 1992, first established the need to control greenhouse gases and other emissions, in the light of rising levels of global warming and pollution referred to above.

At Kyoto in December 1997 the 174 parties to the convention considered what should be the next step. In an historic agreement a new Protocol was drawn up. This aims to reduce developed country emissions of a basket of the six principal man-made greenhouse gases overall to 5.2% below the 1990 levels over the period 2008-2012. In contrast to 1992, this target is legally binding.

The Kyoto Protocol has had a number of significant policy consequences for most developed countries. In particular it has led to the widespread adoption of measures to encourage the generation of electricity from renewable resources. The result has been the rapid development of renewables, and in particular wind energy, throughout Europe and North America in particular.

3.5 European Context

The Protocol permits countries to undertake commitments jointly and the Member States of the European Community agreed to undertake an 8% reduction, and to increase the contribution made to energy supplies from renewable sources from 4% to 8% by the year 2005. In June 1998 European Environment Ministers agreed how this target would be shared out between Member States. The UK agreed to take on a reduction target of 12.5%.

The White Paper on Renewable Energy Sources published in 1998 by the Commission and endorsed by both the Council of Ministers and the European Parliament then called for a target of 12% of gross domestic energy consumption to be met by renewables by 2010.

In August 2001 EU policy took a significant step forward with the publication of a Directive of the Parliament and the Council of Ministers on the promotion of electricity produced from renewable resources. In its preamble, this states:

“The Community recognizes the need to promote renewable energy sources as a priority measure given that their exploitation contributes to environmental protection and sustainable development and make it possible to meet Kyoto targets more quickly.”

The Directive sets the UK target at 10% of gross electricity consumption by 2010 (see below). It also requires the Commission to assess progress towards these national targets and if necessary submit proposals for mandatory targets should progress not be sufficient.

Meanwhile the development of wind energy throughout the world has accelerated dramatically, with 5000 MW installed in 2001 (a 40% increase), and with the world total now exceeding 23,000 MW.

3.6 National Energy Policy Framework

The UK Government is fully aware of the dangers from climate change which the country, and the world, is facing. In March 2000, the draft UK Climate Change Programme was distributed:

“Climate change is one of the most serious environmental threats facing the world today.”

In a report from the DTI in 1999, John Battle summed up in his opening statement:

“By their nature fossil fuels will inevitably run out. New and renewable energies will therefore become one of the world’s main energy sources in the new millennium.”

Only through the recognition of this problem on a national and international level can changes be made. The current Labour Government, through Tony Blair, is committed to ensuring that renewable energy features heavily in all energy reviews.

3.6.1 Renewable Energy Policy in the UK

Government Renewable Energy Policy was first defined in Energy Paper Number 55, "Renewable Energy in the UK: The Way Forward" (June 1988):

"The Government intends to stimulate the development and application of renewable sources of energy wherever they have prospects of being economically competitive and environmentally acceptable".

This was first quantified in the White Paper "This Common Inheritance" September 1990. It stated:

"... the Government will work towards a figure of renewable electricity generating capacity of 1000 MW in 2000".

In November 1992 the Renewable Energy Advisory Group (REAG) made a strong recommendation to increase the targets for renewable energy by underwriting a floor level of 1500 MW Declared Net Capacity (DNC)¹ by the year 2000. This was to be achieved through the Non Fossil Fuel Obligation, established under the Electricity Act of 1989, which provided for premium prices to be paid by the regional electricity companies for the supply of contracted amounts of electricity from renewable sources. A parallel arrangement for Scotland, The Scottish Renewables Obligation was also established.

The Government accepted this recommendation and Energy Paper Number 62 (March 1994) confirmed that Government policy was to work towards 1500 MW declared net capacity of new electricity generating capacity from renewable sources for the UK by 2000. Five rounds of competitive bidding for NFFO contracts then ensued.

The Prime Minister, at the 1997 Kyoto Conference in Japan, explained that the UK planned to reduce carbon dioxide (CO₂) emissions to 80% of 1990 levels. This follows the signing of the United Nations Framework Convention aiming at keeping CO₂ emissions at 1990 levels. Similar

¹ Declared Net Capacity (DNC) is an indicative measure of the capacity factor of renewable energy plant in comparison with conventional plant, recognising that an energy source such as wind is intermittent in nature. For wind, 1 MW installed = 0.43 MW (DNC) where installed capacity is the maximum output of the plant.

conventions have been undertaken to reduce other harmful emissions, such as sulphur dioxide (SO₂) and nitrous oxides (NO_x), contributors to acid rain pollution.

3.6.2 Supplier Obligation And The Climate Change Levy

The present government has committed itself to a target of at least 10% of electricity supplies to come from renewable sources by 2010.

The advent in 2000 of a revised UK electricity market (the New Electricity Trading Arrangements) rendered further use of the NFFO mechanism impossible for structural reasons. The Government therefore embarked on extensive consultation on a successor mechanism and in August 2001 announced the final form of the new Renewables Obligation.

The Renewables Obligation is an obligation on all UK electricity supply companies to source a certain percentage of electricity from renewable sources each year, or face a financial penalty (known as "buying out"). Starting at 3% of their total energy turnover in 2001/3, the required percentage will rise to 10.4% in 2010/11 and remain at least at that level until 2026/7.

To achieve these obligations, and taking account of the predicted growth in UK electricity demand, the production of electricity from renewable sources will need to increase from 9.4 Terawatt hours (TWh) in 2001/3 to 33.6 TWh in 2010/11. Onshore and offshore wind are expected to account for about half of this increase, and this requires more than 500 MW of wind generation capacity to be installed each year for the next eight years.

The Government recognises the magnitude of the task it has set itself. In June 2001 Brian Wilson, Minister for Energy, said:

"The Government is committed to bringing green energy from the margins into the mainstream. The Government is doing everything it can to help industry meet our target of supplying 10% of electricity from renewable resources by 2010".

In 2002, at the opening of the Bein an Tuirc wind farm, he said:

"Wind power has a vital contribution to make towards our renewable energy targets. The Government will encourage developments both onshore and offshore, and create the right conditions for both larger scale power projects like this one and also smaller scale ones to move ahead.

"Renewables is not just about energy and the environment but also about manufacturing and jobs. There are very significant opportunities for UK industry and if they respond

well to this, it will result in new generating equipment and services being supplied by UK firms."

3.6.3 The Energy Review

The latest Government thinking on renewables is embodied in The Energy Review, published by the Performance and Innovation Unit (PIU) of the Cabinet Office in February 2002.

The PIU, in examining the options for a low carbon energy system, concluded that new renewables *"represent a huge potential UK resource, offer large synergies (and very limited conflicts) with other policy objectives, and are flexible"*.

They went on to recommend that "the government should set a firm target of 20% of electricity to be supplied from renewables by 2020", a doubling of the present target of 10% by 2010.

Summarising the report in New Review (No 52, May 2002), one of the authors, Catherine Mitchell wrote:

"The importance of the Energy Review for renewables is that it creates an argument for the reasons why renewables have to be central to UK energy policy. Moreover, it provides a realistic assessment of the potential of renewables to be a major source of energy supply. The Review clearly shows that from the perspective of both technical potential and cost, renewables is the preferred option as the least-cost low-carbon set of technologies to take the UK to a low-carbon economy in 2050.

It also very clearly shows that unless the barriers to renewables deployment currently in place are not removed, the UK is very unlikely to meet the 10% target for 2010, never mind a 20% target for 2020 called for by the Review.

In that sense, the important point from the Review for renewables is the call to increase the rate of deployment over the next few years by a determined assault on the barriers to their commissioning."

The recommendations of the Review, including the proposed new renewables target, are currently the subject of a consultation exercise.

"Energy Policy: Key Issues for Consultation" was published in May 2002 with a deadline for comments of mid-September 2002. It is the intention of the Government to publish a White Paper by the end of the year.

3.7 Planning Policy

The planning policy context under which proposals for the establishment of renewable sources are to be considered is set at the national level (in England) by Planning Policy Guidance Note 22 entitled “Renewable Energy”.

Regional Planning Guidance for the North West exists in the form of RPG13. At local level, strategic policy is set out in the Merseyside Structure Plan. All these documents have been, or are, currently subject to review. Wirral and Sefton MBC’s have set out their policies in current Unitary Development Plans (Draft).

Section 54A of the Town and Country Planning Act 1990 (as amended) places a duty on local planning authorities to make decisions in accord with planning policies forming part of an approved development plan unless material considerations indicate otherwise. The weight to be ascribed to other planning policy guidance may vary according to the status of that advice.

Section 54A of the Town and Country Planning Act 1990 (as amended) is not relevant to the offshore installations, and is only applicable to the onshore component of the Burbo Offshore project. However, certain elements of the development plan and planning policy guidance has some relevance to the offshore elements of the proposed development.

In addition to the principal elements of planning policy other advice contained in Planning Policy Guidance Notes may be of relevance. These include:

- PPG1 General Policy and Principles
- PPG7 Countryside
- PPG8 Telecommunications
- PPG9 Nature Conservation
- PPG15 Planning and the Historical Environment
- PPG16 Archaeology and Planning
- PPG21 Tourism
- PPG24 Planning and Noise

3.7.1 National Planning Guidance

The principal source of planning policy guidance relating to renewable energy schemes in general in England is PPG 22 issued in 1993. This document of planning policy is supportive of renewable energy schemes in the context of current European and National commitments to reduce greenhouse gases. An annex to the PPG provides detailed guidance about the technology of harnessing wind energy at onshore locations to help in forming policies within development plans and in the context of development control.

Planning Policy Guidance Note 1 (PPG1), "*General Policy and Principles*" emphasises the Government's commitment to the concept of sustainable development. PPG1 links the role of the planning system in regulating the use of land in the public interest to the achievement of sustainable development, "...by helping to provide for necessary development in locations which do not compromise the ability of future generations to meet their needs."

3.7.2 Regional Planning Guidance

The Government published Regional Planning Guidance for the North West in the form of RPG13 in 1996. It contained specific reference to the matter of renewable energy development and suggests that facilities should be encouraged wherever they have the prospects of being economically viable and environmentally acceptable. This includes wind farm development, which is recognised as having great potential in several parts of the Region.

The RPG is subject to review, with the final version expected early 2003.

3.7.3 From Power to Prosperity

In parallel with the creation of the Renewables Obligation, the Government has recognised the important role the planning system has to play in delivering these demanding targets. A series of statements led in October 1999 to specific proposals for the development of regional targets for renewable energy. In response to the Twelfth Report of the Lords Select Committee on European Communities "Electricity from Renewables", the Government said:

"In order to facilitate the setting of regional targets we have asked the Government Offices for the Regions to set in motion the process of preparation of regional assessments and targets for renewable energy provision... Government Offices will be encouraging local planning authorities to make positive proposals in their plans for renewable energy provision in their areas".

In February 2000, the then Department of the Environment, Transport and the Regions published its "Guidance on Preparing Regional Sustainable Development Frameworks". This further elaborated the approach and set out plans for regional targets which the Government wished to see in place by the end of 2000. It led to the commissioning of a series of studies and consultation exercises in each region, leading to reports recommending targets. These are intended to feed into Regional Planning Guidance and then cascade down through to Structure and Local Plans in due course.

In the Northwest Region this study took the form of a report published in March 2001 by Sustainability Northwest entitled "*From Power to Prosperity, - Northwest of England's renewable energy study.*" This study

identified renewable energy technology as an important driver for the local economy and set challenging targets for the deployment of capacity. Specifically, the study set a target of four offshore wind farms by 2010.

Sustainability Northwest has since set up a new company, Renewables Northwest to champion renewable energy technology and fast-track its deployment in England's northwest. Renewables Northwest will work with the North West Development Agency, the Regional Assembly, the Government Office and others to set out a strategy for developing green energy schemes and improving the planning system to enable more rapid progress from drawing board to commissioning.

When the formation of the company was announced in February 2002, Mike Shields, Chief Executive of the Northwest Development Agency said:

"The announcement today enables England's Northwest to take a lead in the field of renewable energy technology and we are extremely proud to be a part of it with United Utilities. It is crucial that we all ensure that businesses large and small grasp the opportunities presented by this new initiative-not just in order to reap the obvious environmental benefits but also to ensure that the Region maintains our competitive edge in this field."

3.7.4 Local Planning Guidance

Although the wind farm falls outside formal local planning jurisdiction, the onshore components of the development will not. The local planning authority is Wirral MBC. The onshore elements consist of the following:

- Offshore cabling above MLW
- Onshore cabling
- Interconnection facility
- Electrical substation

All of these elements will require planning permission before they can be constructed.

The cable will cross the North Wirral Foreshore Site of Special Scientific Interest and will be determined in accordance with policy NC3 of the Wirral Unitary Development Plan 2000. This states that developments will be:

"subject to special scrutiny and will not be permitted unless it can be demonstrated that the reasons for the development clearly outweigh the nature conservation or earth science value of the site and the national policy to safeguard the national network of such sites."

It goes on to note that where such development proposals are to be approved, the Local Authority will need to be satisfied that:

- *The development proposals are sited and designed in such a way as to conserve the integrity of the site*
- *Adequate provision has been made to minimise the potential for damage or injury to any part of the site during construction and after the development proposed is occupied*
- *Adequate measures have been taken in order to safeguard compliance with these requirements and where appropriate to provide for the reinstatement of damaged areas*

The proposed cable landing crosses the sea defences and passes through an area of the Undeveloped Coastal Zone, designated a Countryside Recreation Site and also falling within the Wallasey Golf Course and Leasowe Gun Site site of biological importance. It will be dealt with in accordance with Policy NC5 of the Wirral Unitary Development Plan 2000. This policy does not seek to prohibit development, but notes that:

“Development affecting such habitats will only be permitted where the Local Planning Authority is satisfied that the continued ecological viability of the habitat or wildlife interest of the site can be adequately safeguarded by means of appropriate conditions and/or legal agreements.”

Developments within the Undeveloped Coastal Zone are subject to Policy CO2 (which strictly speaking only applies to small-scale facilities for tourism and water based recreation). This policy states that such facilities will be permitted subject to clearly requiring a coastal location, not being obtrusive and not adversely affecting the local environment nor reducing the effectiveness of the coastal protection structures.

One further policy is applicable – Policy CO7 – Criteria for Development in the Inter-Tidal Zone. This policy requires that:

- *A proposal requires a location on or near the foreshore or in coastal waters*
- *The proposal should not interfere with the navigation or in the Dee Estuary or Mersey Estuary or along the North Wirral Foreshore, nor prejudice the operation of commercial fisheries*
- *Impacts on sedimentary movement within the same sedimentary cell have been examined and minimised*
- *The proposal does not reduce the effectiveness or impede the maintenance of sea defences or coastal protection structures and does not increase the risk of flooding or coastal erosion elsewhere*
- *The proposals will not adversely affect coastal and marine nature conservation or earth science, archaeology, landscape character or visual quality*
- *Public access is preserved or enhanced unless the would be impractical*

- *Any associated on-shore facilities satisfy the requirements of Policy CO1 and CO2.*

Both the Wirral and Sefton Unitary Development Plans refer specifically to the development of renewable energy.

Within an overall objective *“To increase the provision of renewable energy infrastructure to reduce reliance on fossil fuel”*, policy EMW2 of the First Deposit Draft of the Sefton Unitary Development Plan (July 2002) says that:

“proposals for renewable energy infrastructure will be judged against national and Sefton-wide benefits that the proposal may bring and the availability of other sites that will allow the particular renewable energy source to be harnessed.”

By way of explanation, the plan states:

“Renewable energy schemes should only be developed where they will be of most benefit and cause least harm, although some impact will be unavoidable.”

The plan recognises that:

“The North West coast, including Liverpool Bay, is likely to be a location for major offshore renewable energy projects. Wind turbines are already an established feature in Sefton within the Port and there are proposals for a wind farm offshore at Burbo Bank, Blundellsands.”

Policy REN1 of the Wirral Unitary Development Plan (February 2000) is less comprehensive. Nevertheless, it recognises the need for renewable energy and notes:

“Clearly, the opportunity to develop such sources depends on a number of factors, including the physical conditions necessary and the environmental effects that a technology will have.”

3.8 Conclusion

Burbo Offshore Wind Farm fits within the scope of National and Local frameworks for the promotion and development of sustainable electricity generation. There are a variety of consents required by the wind farm before construction can begin, ensuring Burbo Offshore will comply with relevant policy and stakeholder guidelines. The following sections of this ES demonstrate the suitability of Burbo Offshore in helping Government achieve its target of 10% renewable energy by 2010.