

## Wrexham Power Limited ♦ Proposed Wrexham CCGT power station

# Policy overview

## 1. INTRODUCTION

- 1.1. As a part of its application to the Planning Inspectorate for a Development Consent Order for the proposed power station, Wrexham Power Limited (WPL) will submit a policy appraisal for the proposals.
- 1.2. This section identifies the principal policy sources to which reference will be made. It includes energy policy in the form of National Policy Statements, and planning policy at the national and local level. The section also explains how relevant policy and guidance is being taken into account in WPL's project development programme.

## 2. NATIONAL POLICY STATEMENTS

- 2.1. National Policy Statements (NPSs) are the primary policy documents used by the Planning Inspectorate when considering applications for nationally significant infrastructure projects (NSIPs). The NPSs for energy were subject to extensive public consultation and scrutiny in Parliament prior to being '*designated*' in July 2011.

### Overarching National Policy Statement for Energy (EN-1)

- 2.2. This NPS provides an overview of government policy relating to all energy projects. The NPS is supplemented by other policy statements relating to specific technologies.
- 2.3. Whilst a significant priority for the Government is to meet targets to cut greenhouse gas emissions by at least 80% by 2050, compared to 1990 levels, EN-1 acknowledges that this cannot be achieved overnight and that, to ensure security in the country's electricity supply network fossil fuel energy generation will remain an important part of the UK's electricity mix, stating that '*some fossil fuels will still be needed during the transition to a low carbon economy*'.
- 2.4. According to EN-1 para. 3.6:

*'fossil fuel power stations play a vital role in providing reliable electricity supplies: that can be operated flexibly in response to changes in supply and demand, and provide diversity in our energy mix. They will continue to play an important role in our energy mix as the UK makes the transition to a lower carbon economy, and government policy is that they must be constructed, and*

*operate, in line with increasingly demanding climate change goals'* (para 3.6.).

- 2.5. Para 3.6.2 acknowledges that *'gas will continue to play an important role in the energy sector – providing vital flexibility to support an increasing amount of low carbon generation and to maintain security of supply'*.
- 2.6. EN-1 has regard to the fact that natural gas is a fossil fuel, the use of which gives rise to the emission of greenhouse gases – principally carbon dioxide. EN-1 requires that all commercial scale combustion power stations (at or over 300 megawatts capacity) are designed to be 'carbon capture ready' (CCR). Space must be reserved at the power station site for the potential retrofitting of a carbon capture plant to remove the CO<sub>2</sub> emissions. The development of carbon capture technology is advancing, with the government recently launching a competition to stimulate a £1 billion investment in the development of carbon capture technology in the UK.
- 2.7. Other aspects of EN-1 of relevance include an acknowledgement of the need to upgrade the National Grid to accommodate the new pattern of electricity generation (Section 3.7), and favourable consideration for combined heat and power (CHP), in which waste heat is supplied to other users.
- 2.8. Part 5 of EN-1 considers the *'generic impacts'* of major energy projects and how these should be considered in new development projects. These include the following, each of which will be assessed by WPL:
  - biodiversity and geological conservation;
  - civil and military aviation and defence interests;
  - coastal change;
  - flood risk;
  - historic environment;
  - land use including open space, green infrastructure and green belt;
  - socio-economic;
  - traffic and transport;
  - waste management.

### **National Policy Statement for Fossil Fuel Electricity Generation Infrastructure (EN-2)**

- 2.9. EN-2 adds further detail to the policy requirements of EN-1 with specific regard to fossil fuel energy generation technology such as CCGT power stations. Within this policy statement the policy to be used in considering the

environmental effects of fossil fuel power stations is set out. These criteria are additional to the generic impacts set out in NPS EN-1, and relate to the following specific effects:

- air emissions;
- landscape and visual;
- noise and vibration;
- water quality and resources.

2.10. WPL will assess the effects of the proposed Wrexham Energy Centre on these environmental sensitivities.

### **National Policy Statement for Electricity Networks Infrastructure (EN-5)**

2.11. In a similar manner to EN-2, EN-5 sets out the policy criteria for the assessment of proposals for new electricity infrastructure. In addition to the environmental effects listed above, EN-5 requires that the potential effects of electromagnetic fields from new electricity networks are considered.

## **3. NATIONAL PLANNING POLICY AND GUIDANCE**

3.1. The Welsh Government has published various planning policy documents of potential relevance in the current context. These include Planning Policy Wales and various technical advice notes.

### **Planning Policy Wales – 4th edition, February 2011**

3.2. Planning Policy Wales (PPW) sets out the Welsh Government's land use planning policies. Chapter 12 of PPW concerns the provision of infrastructure and services. In respect of energy, the focus of the chapter is on smaller projects (i.e. under 50 MW capacity), for which permission is sought through conventional planning applications submitted to local planning authorities, as opposed to NSIPs consented under Planning Act 2008 procedures. Much of the guidance thus relates to the delivery of renewable energy projects. However, opening paragraph 12.1.1 emphasises the importance of infrastructure provision to Wales generally.

*12.1.1 Adequate and efficient infrastructure, including services such as education and health facilities along with water supply, sewers, waste management, electricity and gas (the utilities) and telecommunications, is crucial for the economic, social and environmental sustainability of all parts of Wales. It underpins economic competitiveness and opportunities for households and businesses to achieve more socially and environmentally desirable ways of living and working. At the same time, infrastructure which is poorly designed or badly located can exacerbate problems*

*rather than solving them.*

- 3.3. PPW para. 7.2.1 is relevant in the current context because the site under consideration by WPL is allocated for employment use.

*7.2.1 In **designating land for employment needs**, local planning authorities should address such issues as the phasing of development and the availability of infrastructure against an agreed identified 'requirement'. Some local planning authorities have allocations of land for employment and other uses which cannot realistically be taken up in the quantities envisaged over the lifetime of the development plan. Local planning authorities should therefore review all their non-housing allocations when preparing or reviewing their development plans and consider whether some of this land might be better used for housing or mixed use developments or no longer be designated for development. Within this review, opportunities for decentralised and renewable and low carbon energy sources should be explored, so as to maximise the benefit of co-location of users with varying energy and heat demand.*

- 3.4. Whereas WPL's proposals do not constitute a decentralised renewable energy project, CCGT power stations make efficient use of gas resources, particularly where there are opportunities to supply surplus heat to adjacent industrial occupiers. A location on the Wrexham Industrial Estate provides such an opportunity.

#### **Technical Advice Note 5: Nature conservation and planning, 2009**

- 3.5. TAN 5 provides advice about how the land use planning system should contribute to protecting and enhancing biodiversity and geological conservation. It provides advice for local planning authorities on:

- the principles of positive planning for nature conservation;
- nature conservation in development management procedures;
- development affecting protected internationally and nationally designated sites and habitats;
- development affecting protected and priority habitats and species.

- 3.6. WPL will apply relevant principles from TAN 5 in its consideration of nature conservation and biodiversity. In consultation with Wrexham CBC and the Countryside Council for Wales (CCW), it will:

- adopt the recommended five-point approach to decision-making - information, avoidance, mitigation, compensation and new benefits;
- ensure that the ecological sections of its Development Consent Order submission to the Planning Inspectorate contains adequate information, established through early negotiation, the use of checklists, ecological surveys and appropriate consultation;

- secure necessary measures to protect, enhance, mitigate and compensate through planning conditions and obligations;
- identify ways to build nature conservation into the design of power station development.

#### **Technical Advice Note 11: Noise, 1997**

- 3.7. TAN 11 provides guidance on the potential noise effects of development and their regulation through the planning process. It aims to ensure that noise generating developments do not cause an unacceptable degree of disturbance. Measures which may be employed to mitigate noise are categorised in TAN 11 as *'engineering; layout; and administrative'*. WPL will have regard to this approach in its assessment of the noise effects of its proposals.

#### **Technical Advice Note 12: Design, 2009**

- 3.8. TAN 12 provides advice on the achievement of high quality design in the built environment. WPL is committed to following this guidance in the evolution of its design for a power station. The company's design process includes the consideration of layout options informed by a detailed assessment of site characteristics, including landscape and ecological surveys.
- 3.9. The layout, architectural design and landscape treatment of the development, will be allowed to evolve in response to feedback from consultees, to ensure that a sensitively designed scheme is promoted in accordance with TAN 12 guidance.

### **4. LOCAL PLANNING POLICY**

- 4.1. At the local level, planning policy is set out in the Wrexham Unitary Development Plan 2005.

#### **Wrexham Unitary Development Plan, 2005**

- 4.2. The Unitary Development Plan (UDP) was adopted by Wrexham County Borough Council on the 14 February 2005, and will remain as the statutory development plan for the area until replaced by a Local Development Plan.
- 4.3. Part 1 of the UDP sets out the strategic policies applicable to the whole plan area. Policy PS1 directs new development to land within existing settlement and employment areas, whilst policy PS2 aims to ensure that new development does not detrimentally affect the countryside, landscape/townscape character, or the quality of the natural environment. Strategic policy PS3 sets out the

Council's preference for new development to be on brownfield sites, stating that, where greenfield sites are to be developed, sites of ecological, landscape or amenity value and good quality agricultural land should be avoided.

4.4. WPL is seeking to apply these strategic principles in the current context, the preferred location for the power station being a partly brownfield site on the edge of an existing industrial estate, and not subject to any protective environmental designations. Similarly, WPL will apply the planning and design principles set out in UDP policy GDP1 identifies criteria that all new development should meet, including the need to:

- ensure that built development, in its scale, design and layout and in its use of materials and landscape treatment, accords with the character of the site and makes a positive contribution to the appearance of the nearby locality;
- ensure the safety and amenity of the public and safeguard the environment from the adverse effects of pollution of water, land or air, hazards from industry and quarrying, and associated noise, odour or vibration arising from development;
- safeguard sites and areas of nature conservation and wildlife interest, and to provide new habitats where there is an unavoidable loss of existing habitats and areas of wildlife interest;
- ensure that development does not result in, or is subject to, flooding, soil erosion, landslides or contamination, either on or off the site;
- secure the development of sustainable communities, through the promotion of the economic, social and environmental well-being of the area.

4.5. UDP policy E3 allocates the land that is the focus of WPL's interest as follows:

*Land is allocated at Owens Corning Fibreglass, Wrexham Industrial Estate for a major single user employment project that requires a site of over 30 hectares for an employment development that cannot be accommodated on allocated employment land or employment land with planning permission. Any development proposed will need to incorporate extensive high quality landscaping in order to mitigate the visual impact of the development on the appearance of the neighbouring countryside and local landscape.*

4.6. The site was allocated for a large user in the UDP, in part to attract a car manufacturer that was understood to be searching for a site at the time. However, this opportunity did not come to fruition. Planning permission for a 500,000 sq ft building for industrial or distribution use was granted on appeal in 2010, but this has not been implemented.

4.7. Explanatory paragraph adds that:

*The allocated site at Owens Corning Fibreglass adjoins Wrexham Industrial Estate and landscaping details should form part of the overall design of buildings and layout of the site. Landscaping proposals should be sympathetic to the local landscape in terms of types of planting required, and opportunities should be sought to create new habitats for wildlife, reflecting Policies EC5 and EC6 of the UDP.*

4.8. WPL's approach to landscape design and habitat creation will accord with these principles.

## 5. OTHER POLICY AND GUIDANCE

### **People, Places, Futures: The Wales Spatial Plan – 2008 Update, July 2008**

- 5.1. The Wales Spatial Plan (WSP) is not part of the development plan, although it is a statutory document to which Local Planning Authorities must have regard to when preparing local development plans.
- 5.2. Chapter 16 of the WSP presents a strategy for future development in north-east Wales, including the Wrexham area, which is acknowledged to be a significant focus of economic activity. The plan defines a 'hub', encompassing Wrexham, Mold, Broughton, Connah's Quay, Deeside and Chester, as a focus for future investment in employment, housing, retail, leisure and services. The Plan also places emphasis on developing sustainable communities and prioritising the development of brownfield sites in preference to greenfield land.
- 5.3. The dependence of the north-east Wales economy on the manufacturing sector is highlighted in the WSP, as is the vulnerability of this sector to changes in the global economy. WSP para. 16.12 notes that '*some communities in Wrexham and Flintshire are experiencing relatively high levels of economic in-migration which presents opportunities and challenges in terms of service provision but has helped to sustain the economy by filling jobs in a very tight labour market*'. The recent economic recession has diminished this trend, although the regional economic importance of Wrexham and the relative buoyancy of its manufacturing sector remain intact.
- 5.4. According to para. 16.26, '*it is important to maintain the quality of the offer at established key employment sites in the North East Wales Area including major industrial estates in Wrexham and Deeside*'. WPL intends that its power station proposals will support this objective, through the provision of enhanced electricity grid connections to the Wrexham Industrial Estate, and the opportunity to provide heat to neighbouring industrial occupiers.
- 5.5. A socio-economic assessment will be undertaken to quantify the value of a combined cycle gas fired power station at Wrexham Industrial Estate to the local and Welsh economy.

## Energy Wales: a Low-Carbon Transition, 2012

- 5.6. This document was published by the Welsh Government in March 2012 with the intention of defining the strategic direction of future energy investment in Wales.
- 5.7. In a section entitled '*Where we are now*', it is noted that Wales was responsible for 9% of generation in the UK between 2004 and 2010. Total electricity generation in Wales has fallen 10% over this period, driven largely by a fall in generation from coal and nuclear plants. Gas currently accounts for 50% of the electricity generated in Wales. Wales's electricity and gas grids and its energy skills base are recognised as important assets (page 9). The future role of gas generation is outlined on page 10:

*Gas will be a key transitional fuel because greenhouse gas emissions from gas are significantly less than coal subject to the method of extraction. Gas is a flexible, responsive and reliable source of energy which can play a key role in the transition to a genuinely low carbon energy system.*

*Whilst the rise of gas is essential in a low carbon transition, it cannot be a long term basis for the energy economy of Wales without carbon capture and storage. Carbon capture and storage therefore, if successfully commercialised and supported by the appropriate regulatory framework, will be a vital component of our medium to long term energy future . . .*

*In the short term, gas, nuclear and bio-energy will provide the energy to compensate for the intermittency in supply from renewable resources. In the medium to long term, the development of energy storage technologies and a next-generation 'smart grid' will provide further scope for managing the intermittency and balancing supply and demand more effectively.*

- 5.8. WPL's proposals are consistent with this approach, even before the local benefits of the project are taken into to account. On page 13 the potential of Wales's energy infrastructure to attract new investment is also acknowledged.

*Wales has major infrastructure assets. Our electricity transmission network – the grid – traverses well-established corridors to the north and south of Wales. Our deep sea ports provide access to the energy in our seas. Our gas infrastructure – notably the two LNG terminals at Milford Haven – is an important source of stability during the transition to a low carbon economy. These are all major assets. They make Wales an attractive location for investment and development in energy.*



## 6. CONCLUSION

6.1. From this overview of relevant energy and planning policy it is evident that Wrexham Power Limited's proposals have the potential to meet a range of strategic policy objectives, including:

- enhanced security of energy supply, nationally and, through grid reinforcement and the potential to supply surplus heat, for occupiers of the Wrexham Industrial Estate;
- the appropriate use of gas resources in the transition to a low carbon economy, with provision for future carbon capture and storage, should this be required;
- economic regeneration in north-east Wales;
- the effective use of brownfield land.

6.2. At the same time, the policy review has highlighted the need for development to respond to local environmental sensitivities, including landscape, ecology, heritage, air and water quality and the protection of residential amenity, through careful siting and high quality design. These requirements are reflected in WPL's project approach, and will be informed and verified by a phased process of stakeholder consultation.