
3.0 THE NEED FOR THE SCHEME

3.1 Introduction

3.1.1 The Energy White Paper (published in May 2007) recognises that the planning process is one of the most significant barriers to the deployment of renewable energy technology within the UK. In light of this, the UK Government is proposing a number of reforms to the planning system. One of the key reforms in the context of this section of the ES is that applicants will no longer have to demonstrate the overall need for renewable energy. In recognising the urgent need to bring such development forward, and the difficulties in securing planning permission for this type of development, the White Paper states (paragraph 5.3.67):

“Applicants will no longer have to demonstrate either the overall need for renewable energy or for their proposal to be sited in a particular location”

3.1.2 The Energy White Paper supports the proposed reforms to the planning system with a statement of need for renewables. This states:

“BOX 5.3.3 RENEWABLES STATEMENT OF NEED

We remain committed to the important role renewables has to play in helping the UK meet its energy policy goals. In this publication we are reiterating previous commitments we have made, not least in the 2003 Energy White Paper and Planning Policy Statement 22 on renewable energy (PPS22), on the importance of renewable generation and the supporting infrastructure. We intend this to reconfirm the UK Government policy context for planning and consent decisions on renewable generation projects.

As highlighted in the July 2006 Energy Review Report 150, the UK faces difficult challenges in meeting its energy policy goals. Renewable energy as a source of low carbon, indigenous electricity generation is central to reducing emissions and maintaining the reliability of our energy supplies at a time when our indigenous reserves of fossil fuels are declining more rapidly than expected. A regulatory environment that enables the development of appropriately sited renewable projects, and allows the UK to realise its

extensive renewable resources, is vital if we are to make real progress towards our challenging goals.

New renewable projects may not always appear to convey any particular local benefit, but they provide crucial national benefits. Individual renewable projects are part of a growing proportion of low carbon generation that provides benefits shared by all communities both through reduced emissions and more diverse supplies of energy, which helps the reliability of our supplies. This factor is a material consideration to which all participants in the planning system should give significant weight when considering renewable proposals. These wider benefits are not always immediately visible to the specific locality in which the project is sited. However, the benefits to society and the wider economy as a whole are significant and this must be reflected in the weight given to these considerations by decision makers in reaching their decisions.

If we are to maintain a rigorous planning system that does not disincentivise investment in renewable generation, it must also enable decisions to be taken in reasonable time. Decision makers should ensure that planning applications for renewable energy developments are dealt with expeditiously while addressing the relevant issues.”

- 3.1.3 It then states (paragraph 5.3.69) that the PPS on climate change, when published (i.e. the now published PPS1 supplement) will provide key policies on renewables including steering local authority decision makers not to question the national need for renewables and other low carbon technologies, or to question the need for a specific project to be sited in a particular location.

PPS1 Supplement Re: Climate Change

- 3.1.4 The government published, in December 2007, a supplement to Planning Policy Statement 1 (PPS1) in respect of “Planning and Climate Change”. As referenced under the Energy White Paper heading above, it provides key policies on renewables. The Glossary to the document explicitly identifies that renewable and / or low carbon energy supplies include those from biomass. Thus the REP must be part of the renewable and / or low carbon supply system.

3.1.5 The approach to planning set out in the supplement includes the following key policies:

13. Climate change should be a key and integrating theme of the RSS and be addressed in conjunction with the economic, social and environmental concerns that together inform the overall spatial strategy and its components. In particular, regional planning bodies should:

- *pay attention to the location of major generators of travel, the effect of differing patterns of urban growth and sustainable rural development on the movement of goods and the potential to build into new and existing development more efficient means of energy supply and increasing contributions from renewable and low-carbon energy sources;*
- *provide a framework for sub-regional and local planning to focus substantial new development on locations with good accessibility by means other than the private car and where energy can be gained from decentralised energy supply systems, or where there is clear potential for this to be realised;*
- *ensure opportunities for renewable and low-carbon sources of energy supply and supporting infrastructure, including decentralised energy supply systems, are maximised;*
- *set regional targets for renewable energy generation in line with PPS22, and ensure their ambition fully reflects opportunities in the region, are consistent with the Government's national targets and, where appropriate in the light of delivery, are periodically revised upwards;*
- *recognise the potential of, and encourage, those land uses and land management practices that help secure carbon sinks;*
- *consider and take account of the availability of water resources;*
- *consider the desirability of avoiding new development in those areas with likely increased vulnerability to the effects of climate change, particularly where it is not viable to manage likely risks through suitable measures to provide resilience; and*

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- *bring forward adaptation options for existing development in likely vulnerable areas.*

19. In developing their core strategy and supporting local development documents, planning authorities should provide a framework that promotes and encourages renewable and low carbon energy generation. Policies should be designed to promote and not restrict renewable and low-carbon energy and supporting infrastructure.

20. In particular, planning authorities should:

- *not require applicants for energy development to demonstrate either the overall need for renewable energy and its distribution, nor question the energy justification for why a proposal for such development must be sited in a particular location;*
- *ensure any local approach to protecting landscape and townscape is consistent with PPS22 and does not preclude the supply of any type of renewable energy other than in the most exceptional circumstances;*
- *alongside any criteria-based policy developed in line with PPS22, consider identifying suitable areas for renewable and low-carbon energy sources, and supporting infrastructure, where this would help secure the development of such sources, but in doing so take care to avoid stifling innovation including by rejecting proposals solely because they are outside areas identified for energy generation; and*
- *expect a proportion of the energy supply of new development to be secured from decentralised and renewable or low-carbon energy sources.*

40. An applicant for planning permission to develop a proposal that will contribute to the delivery of the Key Planning Objectives set out in this PPS should expect expeditious and sympathetic handling of the planning application.

3.1.6 The significance of the Climate Change Supplement can not be overstated in respect of proposals like the Sleaford REP. In paragraphs 13, 19, 20 and 40 it

reconfigures the emphasis in the planning system, such that the approach to proposals like the REP, should be one of facilitation and encouragement., with planning authorities not requiring applicants for to demonstrate either the overall need for renewable energy and its distribution, nor question the energy justification for why a proposal for such development must be sited in a particular location.

- 3.1.7 In light of the above, there is unequivocal policy support for the assertion that it is not necessary to demonstrate need as part of this planning application. Notwithstanding this, for completeness (and in order to highlight a material planning consideration to which considerable weight should be attached), Eco2 has elected to provide an overview of the need for the Sleaford REP development. Accordingly, this section summarises the need for the development from a national, regional and local policy / strategy perspective.

3.2 Need from a Policy / Strategy Perspective

- 3.2.1 Need is, in many instances, closely related to planning policy and strategy, the detailed appraisal of which is contained within Section 5.0 of this ES. By necessity, the appraisal of need will overlap with the full planning assessment and has been informed by it. Consequently, rather than repeating many of the issues which are addressed in detail in Section 5.0, this sub-section only provides a summary of the key issues. However, it does provide a greater focus upon the relevant national, regional and sub-regional targets for renewable energy provision.

- 3.2.2 The need for the Sleaford REP from a policy / strategy perspective can be summarised as follows.

National Policy / Strategy (Energy White Paper May 2007, The UK Biomass Strategy May 2007 and the UK Renewable Energy Strategy Consultation Draft June 2008)

- 3.2.3 The principal issues in terms of the national need for renewable energy facilities are set out within the 'renewables statement of need', which is contained within the introduction to this section. However, there are a number of other points contained within the Energy White Paper, UK Biomass Strategy

and Draft UK Renewable Energy Strategy that further demonstrate the need for the Sleaford REP development, these are summarised below.

Energy White Paper

- the Government has set a target to see renewables grow as a proportion of our electricity supplies to 10% by 2010, with an aspiration for this level to double by 2020. The White Paper indicates that in 2006 electricity supplied from renewable sources stood at around 4% of the UK's total. It is clear therefore that if the Governments targets are to be achieved significant levels of renewable energy provision will have to come forward, and with some urgency. Given that the Sleaford REP will take approximately 30 months to construct and commission, it will not be able to contribute to the 2010 targets (a fact that does no more than underline the urgency of the problem faced in trying to meet renewable energy projects). The proposed facility would nevertheless contribute towards the aspiration that 20% of electricity supplies will come from renewables by 2020.
- the Government indicates that increasing the amount of electricity generated by renewables would make a significant contribution towards their long-term aim of reducing CO₂ emissions by 60% by 2050. As renewable energy technologies produce very little carbon dioxide and other greenhouse gases, they play an important part in tackling climate change. The Sleaford REP is expected to contribute to the achievement of this objective as it would save approximately 250,000 tonnes of CO₂ compared with the same level of electricity generation from coal.
- achieving the 20% renewables target would reduce the UK's current dependence on imported fossil fuels.
- The White Paper also proposes changes to the Renewables Obligation (RO). The existing RO regime requires power suppliers to derive from renewables a specified proportion of the electricity they supply to their customers. This started at 3% in 2003, rising gradually to 10.4% by 2010, and 15.4% by 2015. Eligible renewable generators receive Renewables Obligation Certificates (ROCs) for each megawatt hour MWh of renewable electricity they generate. These are sold to electricity suppliers, allowing them to demonstrate how much renewable generation they have sourced. Suppliers can either present sufficient

certificates to cover the required percentage of their output, or they can pay a 'buyout' price for any shortfall. The buy-out price is the fixed penalty that an energy supplier pays for each MWh that it falls short of its obligation. The buy-out price is linked to the Retail Price Index (RPI) and for 2007/08 the price is £34.30 per MWh. The suppliers pay this money into an account administered by Ofgem (the Buy-out Fund) and each year the accumulated Fund is shared among those suppliers who have presented RO Certificates (ROCs). The combination of the buy-out price and the extent to which suppliers have fallen short of their obligations determines the nominal value of a ROC and the total support available for each MWh of renewable electricity under the RO. When the Obligation as a percentage of total electricity supplied is greater than the share of actual renewable generation, the value of a ROC will be by definition greater than the buy-out price. One of the most significant changes promoted within the White Paper is to 'band' the obligation to differentiate levels of support for certain types of renewable technologies. The introduction of banding means that technologies could be awarded more or less than one ROC for each MWh of electricity they produce, depending upon the stage of the technology development and associated costs. The aims of this are to bring forward a variety of renewable technologies, increase their deployment and improve the overall effectiveness of the RO. Dedicated regular biomass (which is proposed at Sleaford) falls within the third band and as such, would be awarded 1.5 ROCs per MWh under the new regime.

The UK Biomass Strategy

- the Government's strategy for biomass is to "realise a major expansion in the supply and use of biomass in the UK".
- the Biomass Strategy acknowledges the importance of energy generated from biomass in tackling climate change and notes that biomass will have a central role to play in meeting the Government's target aspiration of 20% renewable energy by 2020, both through co-firing and the use of dedicated biomass energy facilities (such as that proposed at Sleaford);
- the strategy sets out a number of principles aimed at securing a sustainable increase in UK biomass production, one of which is to

“encourage local planning authorities to put in place policies to promote and encourage the development of renewable resources (which includes energy from biomass) through the planning system..”;

- Appendix A of the Strategy contains a table which specifically considers the potential supply of biomass in the UK. It indicates that there are some 3 million tonnes per annum of cereal straw (the fuel which is to be used by the Sleaford REP) available within the UK for energy generation, it indicates that this could generate the equivalent energy of 1.1 million tonnes of oil and has the potential to generate approximately 3,500 – 4,000 gigawatt hours of electricity (GWhe). The supporting text to the table contained within Appendix A is also of significance: this indicates that the 3 million tonnes of surplus straw is available in the eastern counties of England (including Lincolnshire) without disrupting its existing use for livestock or as a fertiliser.

UK Renewable Energy Strategy Consultation Draft

- Chapter 7 (Bioenergy) summary states:

“According to our analysis, the least cost delivery of our 2020 renewable energy goals might require approximately 30% of the UK’s renewable energy to come from bioenergy (energy produced from the direct or indirect combustion of biomass material such as energy crops, wood and waste, and biogas) across the heat and electricity sectors. This is in addition to the bioenergy needed for transport, discussed in the previous chapter. This chapter seeks views on a number of potential measures for maximising our biomass resources for heat and electricity, including:

- *ensuring the sustainability and the fuel-quality of biomass supply, both domestic and imported;*
- *continuing support for energy crops with research into new energy crop options; and support for local supply chain development via the Bio-Energy Infrastructure Scheme and the Bio-Energy Capital Grants Scheme;*
- *as far as is practical, discouraging the landfilling of biomass, thereby maximising its availability as a renewable fuel;*

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- *considering the scope for Local Authorities to collect and separate organic food waste as far as is practical to provide an additional biomass fuel;*
 - *encouraging Waste Incineration Directive-compliant combustion infrastructure and support for anaerobic digestion as a means of generating energy from waste;*
 - *a biomass communications programme to raise awareness about the benefits of bioenergy including energy from waste.”*
 - Table 7.1 of the document estimates that the long-term potential of bioenergy sources in the UK includes up to 14.5TWh of primary energy per year from straw.

3.2.4 It is clear from the above (and the ‘renewables statement of need’ contained within the introduction), that there is a significant need for additional renewable energy facilities nationally. It is also apparent that energy generated from biomass will be central to the achievement of the Government’s renewable energy targets.

Regional Policy (The East Midlands Energy Strategy (July 2006), East Midlands Regional Spatial Strategy [RSS] and Draft RSS)

The East Midlands Energy Strategy (July 2006)

3.2.5 The East Midlands Energy Strategy: The East Midlands Energy Challenge was published in July 2006 and provides the framework for decisions on the generation, supply and use of energy across the region and makes connections between energy and other key policy areas, in particular spatial planning, waste and transport, but also food and farming and housing. The policies and actions for energy detailed within the Strategy are structured around the energy hierarchy, adopted by the LGA in 1998, with priorities are set in the following order:

- “Reducing the need for energy;
- Using energy more efficiently;

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- Using energy from renewable sources;
 - Making clean and efficient use of fossil fuels.”

3.2.6 The section of the Strategy that is of most relevance to this appraisal is that relating to the use of energy from renewable sources. This makes a number of statements which support the Sleaford REP development, including:

- Policy ENG10 seeks “to ensure that an increasing amount of electricity is generated from renewable sources”. The basis of this policy is the Government’s renewable energy targets (i.e. 10% renewable energy supply by 2010 and an aspiration for 20% renewable energy by 2020);
- the Strategy recognises that (at the time of its publication) renewable energy only contributes 1.4% to the region’s energy generation capacity and that the East Midlands would need to see a significant increase in renewable energy;
- the supporting text to policy 10 recognises that “biomass is a major resource in the Region and, as market conditions improve, is likely to be increasingly developed”;
- Policy ENG 11 seeks “to promote and support a growing market in renewable energy generation”;

3.2.7 It is evident from the above that the East Midlands Energy Strategy recognises there is a significant need to increase the amount of renewable energy that is generated within the region if national targets are to be achieved. The Sleaford REP development would contribute to the achievement of the relevant policies and targets set out within the Strategy.

East Midlands RSS and the Draft RSS for the East Midlands

3.2.8 Appendix 6 of the extant RSS for the East Midlands (March 2005) contains a table which provides, for each sub-region, a “...target for electricity generation from renewables in the East Midlands for 2010”. For the Lincolnshire sub-region the target is 72.8 megawatt electrical (MWe) capacity, of which approximately 21MWe is to be provided through a variety of biomass technologies. The overall target for the East Midlands is 671.6MWe by 2010, of which 66.1MWe is to be provided through a variety of biomass related technologies. It is likely that the East Midlands will fail to meet these targets.

New targets are proposed in the emerging RSS for the East Midlands which look beyond the 2010 horizon.

- 3.2.9 The emerging RSS for the East Midlands (Secretary of States Proposed Changes July 2005) specifically discusses (paragraph 3.3.74 extract) the future requirements for renewable energy generation within the East Midlands Region, it states:

“At present renewable energy sources make a minor contribution to the Region’s capacity (approximately 2%) and the East Midlands lags behind the other English Regions. The regional Targets and Scenarios for Renewable Energy Report indicates that a 20% renewable energy mix by 2020 can only be achieved by adopting energy efficiency improvements and challenging micro generation targets as well as a mix of large scale grid connected renewable energy. Revised indicative targets are summarised in Appendix 5.....”

- 3.2.10 Appendix 5 of the emerging RSS contains a table showing renewable energy targets for the East Midlands Region for 2010 and 2020; it also includes indicative targets for 2025. One of the main revisions to the targets from those presented in the extant RSS is that they no longer include figures for offshore wind, which results in lower overall targets and targets are no longer split sub-regionally. It is anticipated that the renewable energy target will be some 337MWe in 2010, 3,610MWe in 2020 and 3,683MWe by 2025. The corresponding targets for biomass technologies are 66.1MWe in 2010, 168MWe in 2020 and 187MWe in 2025.

- 3.2.11 The Sleaford REP would be capable of producing (at full capacity) 40MWe continuous output, exporting some 300,000MWh per annum of green energy to the electrical supply network. As a consequence, it would make a very significant contribution to the achievement of the 2020 and 2025 targets set out within the emerging RSS and in particular those relating to biomass.

- 3.2.12 The emerging RSS also contains specific guidance on the renewable technologies that are appropriate within each sub-area. For the Eastern sub-area (which includes the County of Lincolnshire) the guidance states that,

“there are significant opportunities for biomass of all types, including large scale biomass power plants, using crops or animal waste....”.

Sub-Regional (Lincolnshire Structure Plan and North Kesteven Local Plan)

3.2.13 Other than the county targets set out within the RSS, Lincolnshire County Council and North Kesteven Council do not appear to have set any specific targets in respect of renewable energy provision. However, support for renewable energy development is inherent in both the Lincolnshire Structure Plan and the North Kesteven Local Plan. Policy NE9 of the Structure Plan (Renewable Energy) indicates that: “Local Plans / LDD’s should promote and encourage a range of renewable energy sources....”. Planning for renewable energy provision is also one of the Structure Plan’s key sustainability objectives. The reasoned justification to policy C16 of the Local Plan states: “development that will lead to increased exploration of renewable sources is to be welcomed in principle”.

3.3 Conclusions on Need

3.3.1 There is an unequivocal policy case which shows that it is not necessary to demonstrate need as part of this planning application (primarily as a result of statements made in the new Energy White Paper and more significantly PPS1 Supplement).

3.3.2 Notwithstanding the statement above, the applicant has elected to identify the need for the Sleaford REP in the context of a number of strategic policy documents. The assessment has established that there is a demonstrable need for the development as:

- the Energy White Paper includes targets which aim to see renewables grow as a proportion of electricity supply to 10% in 2010, rising to 20% in 2020. The provision of electricity supply by renewables in 2006 was 4%. Consequently, a significant number of new facilities will need to come forward if the targets are to be achieved;
- the UK Biomass Strategy promotes the use of biomass as an energy source and notes that biomass will have a central role to play in meeting

the Government's aspiration of 20% renewable energy by 2020. It also acknowledges the importance of energy generated from biomass in tackling climate change;

- from a national, regional, sub-regional and local perspective, all extant and emerging policy and strategy documentation support renewable energy developments;
- there is a significant capacity shortfall on a regional basis (the emerging RSS states that only 2% of the region's energy is supplied by renewables). Consequently, there is a need for a range of new renewable energy facilities such as the Sleaford REP;
- the 2020 target for renewable energy generated from biomass related technologies in the East Midlands emerging RSS is 168MWe. The Sleaford REP facility would produce 40MWe at maximum capacity and as such would make a significant contribute towards meeting that target.