

TENDRING DISTRICT COUNCIL

SCOPING OPINION

PROPOSED WIND TURBINE DEVELOPMENT

EARLS HALL FARM, ST. JOHN'S ROAD, CLACTON-ON-SEA.

1 September 2006

INTRODUCTION

Subsequent to informal discussions, Tendring District Council received a formal request from Boyer Planning, on behalf of npower renewables, for a scoping opinion in respect of proposed wind turbines at Earls Hall Farm, St. John's Road, Clacton-on-Sea. 4No. wind turbines were proposed initially, each with a potential capacity of up to 2MW, producing a total potential output of 8MW. A maximum blade tip of 115m and hub height of 80m were specified. The number of turbines proposed was increased subsequently to 5No., each with a potential capacity of up to 2.3MW, producing a total potential output of 11.5MW and with a maximum blade tip of 125m.

The request was accompanied by a scoping report which has formed the basis of the Council's consultations with both statutory and non-statutory bodies. Comments received in response to these consultations and subsequent amendment have been forwarded to the applicant and have informed the scoping opinion. Formal consultations will be carried out at the planning application stage.

The scoping opinion will inform the applicant as to the content of the Environmental Statement (ES) as part of the Environmental Impact Assessment (EIA) process. It will identify aspects of the proposal which require particular attention during the preparation of the ES, which will accompany the planning application. The Council reserves the right to request any further information which, as part of the EIA process, may be required to inform its consideration of the proposal.

KEY ISSUES

The ES will consider any potentially significant effects of the proposal at the three stages of the proposed wind turbine development - construction, operation and decommissioning - and identify any necessary mitigation and compensation measures.

The policy context for the development will be considered at international, national, regional, county and district levels:

International

Ramsar Convention

National

Energy White Paper: Our Energy Future – Creating a Low Carbon Economy

Planning Policy Statement 1: Delivering Sustainable Development

Planning Policy Statement 7: Sustainable Development in Rural Areas

Planning Policy Statement 9: Biodiversity and Geological Conservation

Planning Policy Statement 22: Renewable Energy

Planning Policy Statement 23 Planning and Pollution Control

Planning Policy Guidance Note 13: Transport

Planning Policy Guidance Note 15: Planning and the Historic Environment

Planning Policy Guidance Note 16: Archaeology and Planning

Planning Policy Guidance Note 21: Tourism

Planning Policy Guidance Note 24: Planning and Noise

Regional

Regional Planning Guidance 9: South-East England
Regional Spatial Strategy 14 (Draft): East of England

County

Essex and Southend on Sea Replacement Structure Plan (2001)

District

Tendring District Local Plan (1998)
Tendring District Replacement Local Plan Re-Deposit Draft (2005)

SCOPE OF ENVIRONMENTAL ISSUES

The proposed wind turbine development has the potential to have a wide range of significant and less significant environmental impacts. The range of issues is summarised as:

Landscape and Visual Impacts
Noise
Transportation, Highways and Access
Historic Environment
Ornithology
Ecology
Aeronautical impacts
Shadow flicker
Electro-magnetic interference
Environmental

Landscape and Visual Impacts

A detailed assessment of the landscape and visual effects of the proposal is expected to form a major part of the ES. The methodology to be used will have regard to the Landscape Institute published Guidelines for Landscape and Visual Impact Assessment 2nd Edition (2001) and the Countryside Agency published Landscape Character Assessment – Guidance for England and Scotland (2002).

The site lies close to both the district's major urban centre of Clacton-on-Sea to the east and the village of St Osyth to the west. The general topography is flat and therefore the potential exists for the wind turbines to be visible from significant distances and from several vantage points. The ES will need to identify any potential landscape impacts (both positive and negative) and any issues of effect on amenity (including landscape, residential and recreational). This assessment should also include a consideration of related issues identified under the Historic Environment heading. It will establish the extent of visual intrusion of the proposed wind turbines and associated infrastructure and resultant significance in landscape terms. Any proposed measures required in mitigation should be identified.

Photomontages are required to illustrate the likely visual impact of the proposal in both summer and winter from key public vantage points, including Heath Road to the north, St John's Road to the south, Little Clacton Road to the east and Clay Lane to the west.

A baseline study is required to provide a clear indication of the aspects of the landscape and visual resource that may be affected by the proposed development.

The direct landscape effects (e.g. new planting or loss of existing trees or hedgerows) and indirect landscape effects (e.g. changes to perception of the landscape, character of the area, or experience from another property, road or footpath) should be identified in the ES.

Visual effects include short distance views from nearby land including public footpaths and long distance views including from adjacent roads to the north, south, east and west. Viewpoints from receptors that are under 1000m from the proposed turbines should also be included in the visual appraisal.

The landscape and visual assessment should consider the sensitivity of the baseline landscape and visual resource alongside the magnitude of the potential change resulting from the proposed scheme.

The ES should explain the site selection process, including the reasons for discounting any other sites which have been subject to consideration and the reason for the choice of the wind turbine numbers, size and type, including a consideration of the alternative designs.

The possible visual impact upon the holiday caravan park at Pump Hill should be considered and assessed.

Noise

Noise will be generated by the proposed development during all three identified phases. Noise, which results from either construction or decommissioning, is considered to be within the parameters to be expected of a construction site. The impact of construction noise will be limited in duration and short term. It is not considered likely that this will give rise to any significant environmental effects and therefore it does not require formal assessment in the ES. Should problems arise, there are existing powers under the Control of Pollution Act 1974 which would enable the Council to take action if necessary.

A detailed Noise Assessment will be required to consider the effects of wind turbine noise during the operational phase. This is expected to form a major part of the ES. Existing background noise levels are required to be measured in order to determine whether a more detailed background noise study is required. All such assessments will be expected to be undertaken in accordance with the published guidance referred to in ETSU – R – 97 'The assessment and rating of noise from wind farms' (Final Report, September 1996). The dominant existing noise in the locality is road traffic noise and therefore any background noise assessment must include night-time levels, when the background noise levels are likely to be low.

The Noise Assessment should demonstrate compliance with published guidelines and illustrate the predicted impact of turbine blade rotation noise on contour maps or via graphs.

The perception of noise impact caused by the rotation of the turbine blades should be considered in terms of the numbers of residents who may be affected by the proposed development and the distance they are from the site. The ES will need to identify the type of community affected (residential, tourist and business). It should

consider how, in noise terms, the number, size and type of turbine has been selected and the comparative effects of alternative turbine types which have been considered and rejected. The ES should consider the presence of existing barriers, including woodland and buildings which will affect the perception of noise generated by the proposed development, the importance of these in noise terms and related issues of ownership and control. It should also consider the likely effects of climatic factors - wind speed, temperature, humidity and precipitation - as they affect perception of noise over the course of a calendar year, due to changes in seasonal weather patterns.

Transportation, Highways and Access

The proposed transportation arrangements and means of vehicular access to the site during the first and final stages of the development will require detailed consideration in a Transport Assessment. The Guidelines for Environmental Assessment of Road Traffic (IEMA) will form the basis for the methodology to be used. The Council anticipates that the means of access to the site will be via Earls Hall Drive off St. John's Road (classified B1027). This route forms a key transport link between the main towns of Clacton-on-Sea to the east and Colchester to the west. This road also serves a number of smaller settlements generating traffic to and from Clacton-on-Sea, including the towns of Wivenhoe and Brightlingsea and the villages of Jaywick, St Osyth, Point Clear, Great Bentley, Thorrington and Alresford.

The Council considers that Clay Lane may be less suitable for large, slow moving, vehicles, which would be required during the first and final phases of the development. It would be suitable for smaller vehicles required during the operational phase. The Transport Assessment should consider the nature and extent of all works necessary to utilise the Clay Lane and Earls Hall Drive accesses for any proposed phase of the development. This aspect of the ES will also need to consider key issues of landscape and visual impact, built heritage and ecology.

The primary access route into the District is the A120, which joins the A12 at the Ardleigh interchange north of Colchester. The A12 forms part of the Highways Agency trunk road network, linking London to Ipswich and beyond.

The ES will need to identify all aspects of the impact of works necessary to upgrade existing tracks and site access points, the formation of new tracks and the creation of hardstandings, including those which may be required to aid construction.

The Transport Assessment will need to identify and quantify the materials and equipment required in connection with the proposed development. It should identify appropriate transport routes and traffic management measures during the first and final phases of the development and seek to minimise the adverse impacts of associated traffic flows on other users of the highway and in terms of local residential amenity (noise and disturbance). Defined routes and timings should be identified along with any associated measures to improve existing infrastructure which may also be required. The main effects will be in respect of HGVs and abnormal loads. It will be necessary to identify whether any highway improvements will be required, whether these will be permanent or temporary and the procedures required for implementation and, where relevant, restoration.

The operational phase of the development is identified as low impact in transportation terms. Typically one or two service vehicles will visit the site per week for routine inspection and maintenance purposes. It is not considered likely that this

will give rise to any significant adverse effects and therefore does not require assessment in the ES.

Historic Environment

The proposed wind turbine development has the potential to impair the setting of historic sites and might compromise the visual amenity of the wider landscape, detracting from historic character, sense-of-place, tranquillity and remoteness. Impacts of the proposed development upon the settings of listed buildings will form an important part of the ES and overlap with considerations of Landscape and Visual Impacts and may include improvements to the means of access.

The setting of the Grade II listed farmhouse at Earls Hall Farm will be the most affected by the proximity of the wind turbines. The settings of Dutchess Farmhouse (Grade II) and Blue House Farmhouse (Grade II) will also need to be considered. To the south-west of the proposed site lies St Osyth's Priory which includes Grades I, II and II* listed buildings and a registered Historic Park and Garden.

Visual impact may result from the wind turbines themselves or associated infrastructure, such as overhead power lines. The visual impact of such development should be identified and taken into account, along with any necessary measures in mitigation, as part of the Landscape and Visual Impacts study. The presence of an existing powerline in the vicinity of the site is required to be taken into consideration in the ES.

The proposed development will also have physical effects which may impact upon archaeological remains as the wind turbines require deep and wide foundations. Related and ancillary buildings and works all have the potential to reveal or damage any archaeological remains in the vicinity. A comprehensive desk-top study is required to be followed by a walk-over survey. This may reveal archaeological interest which requires evaluative field work. The ES must include details of the evaluation of any known archaeological interest, measures to record and protect any affected items and features of archaeological interest and identify any measures required in mitigation.

Ornithology

The site of the proposed development is close to a coastal area recognised as being of international importance for birds, particularly overwintering, and the ES will assess the likely impact of the proposal on birds in all respects.

The ES should:

- define a study area, which shall include an appropriate buffer;
- assess statutorily protected nature conservation sites in the wider vicinity of the proposal;
- survey any breeding birds on the site;
- survey any wintering or passage birds using the site;
- assess the significance of the species recorded;
- include a Phase 1/NVC habitat survey;
- include a hydrological survey;
- assess ornithological effects in terms of direct and indirect habitat loss and collision risk;
- assess other ecological effects which may impact upon birdlife;

include proposals to mitigate impacts; and
include proposals for monitoring effects.

The study area should be assessed for the presence of birds throughout the year, using the site itself for feeding roosting or breeding or flying through or nearby. A buffer zone of at least 500m depth, extending from the boundary of the wind turbine site, should be identified in the ES.

Proposals for the monitoring of effects and any need for a habitat management plan should be identified in the ES.

Ecology

The ES should identify the likely ecological effects of the proposal during each phase of the development. The effects of the proposal during the construction and decommissioning stages should be assessed with particular regard to its impact upon habitats. The micro-siting of the wind turbines will be influenced by the assessment and the least damaging location for the wind turbines in relation to adjacent ancient woodland should be explored via sensitivity testing

The effects of the proposal during the operational phase will be mostly in respect of species on the move, in particular birds and bats. The possible impact upon birds, bats, badgers and other protected species should be considered and addressed.

The impact of the proposal upon both statutory and non-statutory designated sites should be considered, including the two closest non-statutory Wildlife Sites (Hartley Wood and High Grove) and the nearby designated Site of Special Scientific Interest (Riddles Wood). Areas of national and international importance are identified at the statutory designated sites at the Colne Estuary (to the south-west) and further away, Hamford Water (to the north-east).

Siting the proposed wind turbines upon agricultural land is likely to reduce direct damage to wildlife interests. However, other possible impacts and effects should also be identified, including upon hedgerows and ditches adjacent to the arable fields.

Aeronautical impacts

After initial examination and assessment of the proposal, NATS has stated that, although the proposed development is likely to have an impact, no safeguarding objection is raised. A line of sight assessment from Debden (in Uttlesford District) has shown that the turbines would be visible from points between hub height and blade tip. However, NATS has assessed the effect on Debden Secondary Surveillance Radar to be negligible.

Further consideration of any specific military impacts will be subject to assessment by the Ministry of Defence (MoD). A holding objection will be submitted by the MoD if the proposal is within line of sight of any air defence radars, unless evidence is provided that it would have no impact upon such radars.

Any possible impacts upon local light aircraft use should be considered in regard to Clacton Airfield.

Reference should also be made to the Department of Trade and Industry document, Wind Energy and Aviation Interests – Interim Guidelines.

Any need for aviation obstruction lighting to some or all of the proposed wind turbines should be considered in relation to Landscape and Visual Impacts and other considerations as relevant.

Shadow Flicker

The possibility of shadow flicker should be considered in terms of impact on the Historic Environment and wider environment, including residential properties.

Consideration is required to be given to the paint finish of the rotor blades as the use of gloss paint could result in undesirable reflected light from rotating rotor blades.

Electro-magnetic interference

The ES should consider the potential impact of electro-magnetic interference upon television reception at receptor dwellings. Any necessary measures to rectify problems should be identified.

Any electrical interference caused by signals generated within the proposed wind turbines is considered negligible due to the construction standards required and this aspect is scoped out of the study.

Environmental

A closed landfill site is situated to the south of Earls Hall Farm. This site opened in 1956 and closed in 1965. It is known to have accepted domestic waste during its lifetime. The ES should identify the former landfill site and care should be exercised if any works are proposed to be carried out within its vicinity.

The area around Earls Hall Farm is classified as a minor aquifer and the ES should consider the potential impact of works upon any local water abstraction. This should also include changes to the hydrological regime which may be caused by the foundations required for the development.

A geotechnical investigation should be carried out to identify the suitability of the ground conditions to accommodate the proposed wind turbines. Should any piling be required to support the wind turbines, the ES should consider potential impacts to the minor aquifer, particularly the disturbance of groundwater supplies to any nearby local water abstraction. The impact of any piling as a possible pollution pathway, particularly with regard to the possible mobilisation of pollutants within the closed landfill site, should be investigated.

There will be a need to manage surface water runoff from proposed hardstanding areas, using a surface water drainage scheme.