



meeting Cabinet

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## **Report of the Corporate Director of Communities**

Strategic planning observations on planning application for 12 wind turbines, with a maximum height of 145 metres, one 100 metre high meteorological mast, substation, temporary construction compound, access tracks and associated site infrastructure at Headstead Bank, Cottam, Retford, Nottinghamshire

### **Purpose of the Report**

1. To seek approval for comments set out in this report to be sent to Bassetlaw District Council in response to the request for strategic planning observations on the above planning application.

### **Introduction**

2. On 11<sup>th</sup> March 2009 a planning application was submitted to Bassetlaw District Council for a windfarm at land at Headstead Bank, Cottam.
3. Nottinghamshire County Council has been consulted for strategic planning observations on the application and this report compiles responses from Departments involved in providing comments and observations on such matters. On the basis of Cabinet's decision, comments will be sent to Bassetlaw District Council in response to this consultation.
4. The planning application is accompanied by an Environmental Statement and a Planning Appraisal. This report is based on the information submitted by the applicant in the context of national and regional policy.
5. A number of omissions in information have been identified and details of such information have been forwarded to Bassetlaw District Council in order that they can request the relevant details from the applicant. At the time of writing this report, certain elements of that information are still outstanding. These matters are highlighted in this report.

6. Although there are omissions in information, it is nevertheless important that Nottinghamshire County Council take this opportunity to provide strategic planning observations to Bassetlaw District Council in order to have an input into the decision making process. It is suggested that the comments are made subject to certain caveats regarding the outstanding information.
7. Where appropriate in this report, suggestions are made for suitable conditions to be attached to a planning permission, should Bassetlaw District Council decide to grant consent. It is important to include this information to ensure that any potential harm caused by the development can be avoided, mitigated or compensated for.

### **Description of the proposed development**

8. The application site (site plan attached) is located on land to the north and north west of the existing Cottam Power Station, to the east of the village of South Leverton and to the south of West Burton Power Station. Electricity pylons associated with the existing power stations run north to south across the site.
9. The site lies in a flat open area of arable farmland and is understood to be owned by a number of local farmers.
10. The proposed development is for a wind farm consisting of twelve wind turbines, a permanent meteorological mast, a substation, temporary construction compound, access tracks and associated site infrastructure. The layout of the site is shown on the attached plan.
11. Each turbine is proposed to be a three bladed horizontal axis turbine with a hub height of 100 metres and a rotor diameter of 90 metres, giving an overall maximum height to the tip of the blade of 145 metres. The Environmental Statement says that the exact model has not yet been selected (due to the fast-moving nature of the market) but that the applicant is confident that a wind turbine which fits the physical description described and assessed in the Environmental Statement will be used.
12. As a comparison, the Environmental Statement states that the eight cooling towers at the neighbouring Cottam Power Station are each approximately 110 metres in height and that the chimney stack is approximately 199 metres in height.
13. Each of the twelve turbines would have a rated capacity of 2.3MW, with the total rated capacity of the wind farm being 27.6MW. The Environmental Statement says that given the expected wind speeds on the site, the proposed wind farm would generate an annual average output of approximately 62,862MWh (net) of electricity which is the equivalent of meeting the needs of about 13,400 homes

(that equates to approximately 30% of the total number of homes in Bassetlaw District Council's area).

14. It is important to note that the expected annual average output has been calculated taking into account the total rated capacity of the turbines, a capacity factor (which takes into account the intermittent nature of wind, the availability of wind and any energy lost due to one turbine being in the wake of another) and the number of hours in a year. This figure is therefore a reflection of what can be expected from the wind farm and is just not the rated capacity.
15. It is also calculated that the proposed wind farm would offset between 27,000 tonnes per annum and 54,100 tonnes per annum of carbon dioxide, depending on whether it is displacing electricity produced by a coal or gas generating plant.

### **Site Selection**

16. The Environmental Statement outlines the site selection process adopted by the applicants to enable them to identify potential sites for onshore wind energy developments. Initially a desktop site identification exercise was undertaken by the applicants to determine sites where a potential wind farm could be located.
17. Each site was then assessed against a series of environmental, technical and localised considerations, together with the practical needs of a wind farm. These considerations included, but were not limited to:
  - proximity to cultural and historic designated sites;
  - proximity to nature conservation designated sites;
  - proximity to roads and public rights of way;
  - proximity to infrastructure;
  - impact on aviation;
  - a developer imposed buffer of 700m around any house not involved in the scheme.
18. Sites which were identified as inappropriate at this stage were then discounted from the process. Each of the remaining sites were then visited in order to identify local constraints and their potential suitability for wind turbines. The following issues were considered during the site visits:
  - broad assessment of landscape character;
  - visibility from nearest settlements;
  - existing land use and infrastructure;
  - broad ecology observations;
  - proximity to houses;
  - site access; and

- visible grid connection infrastructure.
19. Following the site visits, the sites were then ranked according to the constraints identified and the needs of a wind farm. The applicants used this process to enable a balance to be struck between the planning, environmental and technical considerations.

## **Planning Policy Context**

### **National Policy**

20. Planning Policy Statement: Planning and Climate Change Supplement to Planning Policy Statement 1 (2007) states that *“The Government believes that climate change is the greatest long-term challenge facing the world today. Addressing climate change is therefore the Government’s principal concern for sustainable development”* (paragraph 3).
21. Following the publication of this Supplement to Planning Policy Statement 1 (PPS1), the UK Renewable Energy Strategy was consulted upon during summer 2008. It sought views on how to drive up the use of renewable energy in the UK, as part of an overall strategy to tackle climate change. The final Strategy is due for publication summer 2009.
22. The Government is therefore clearly committed to renewable energy as one of the means of addressing climate change. This commitment was set out in the Energy White Paper 2003 and reinforced in the Energy White Paper 2007. The aim was to put the UK on the path to cutting its carbon dioxide emissions by 60% by 2050, with real progress by 2020. The target has since been upgraded by the Climate Change Act (2008) in which the Government has taken on board the findings of the Stern Report (2007) and the Committee for Climate Change’s first report entitled “Building a Low Carbon Economy” (2008). The Act sets out legally binding targets for the UK to reduce carbon dioxide emissions by at least 80% by 2050 and 26% by 2020. The development of renewable energy is a key component of this.
23. The Government’s report on the 2006 Energy Review proposed a range of measures, including strengthening of the Renewables Obligation (the key mechanism for the expansion of electricity from renewables by requiring electricity suppliers to source a growing percentage of the electricity they sell from renewable sources each year, strengthened in April 2009) that, taken together, are intended to increase the percentage of UK electricity coming from renewable sources by 2020.
24. Planning Policy Statement 22: Renewable Energy (PPS22) outlines the key principles to which regional planning bodies and local planning

authorities should adhere in their approach to planning for renewable energy (paragraph 1). A number of these principles concern how the renewable energy should be dealt with in the plan making process both at regional and local authority level.

25. There are two principles of note in PPS22 that have a direct influence in this instance. Firstly, principle 1 iv) states that *“the wider environmental and economic benefits of all proposals for renewable energy projects, whatever their scale, are material considerations that should be given significant weight in determining whether proposals should be granted planning permission”*. Thus significant weight should be attributed to the benefits of the proposal in the decision making process. Secondly, principle 1 viii) states that *“development proposals should demonstrate any environmental, economic and social benefits as well as how any environmental and social impacts have been minimised through careful consideration of location, scale, design and other measures”* ensuring that the negative impacts caused by development are considered and where possible kept to a minimum.

#### East Midlands Regional Plan

26. On 12<sup>th</sup> March 2009 the East Midlands Regional Plan (RSS) was published and the Nottinghamshire and Nottingham Joint Structure Plan ceased to be part of the statutory development plan for Nottinghamshire.
27. For the purposes of determining planning applications within the district of Bassetlaw, the RSS is therefore the development plan and decisions must be made in accordance with it, unless material considerations indicate otherwise.
28. The RSS has a number of policies which are of particular relevance to this application, including:
- Policy 26 Protecting and Enhancing the Region’s Natural and Cultural Heritage
  - Policy 27 Regional Priorities for the Historic Environment
  - Policy 29 Priorities for Enhancing the Region’s Biodiversity
  - Policy 31 Priorities for the Management and Enhancement of the Region’s Landscape
  - Policy 40 Regional Priorities for Low Carbon Energy Generation.
29. The RSS clearly supports the development of renewable energy resources in principle, subject to certain factors being satisfactorily being considered. Policy 40 outlines a number of considerations to be taken into account in the formulation of policies by Local Planning Authorities for onshore wind energy in development plans and local development frameworks. These considerations include impact on the landscape, natural, cultural and built environment; the size and

number of turbines; the cumulative impact of wind generation projects; the contribution towards the regional renewables target; and the contribution of wind projects to national and international objectives on climate change.

30. Appendix 5 of the RSS sets out the regional renewable energy targets. The onshore wind target for the region to 2010 is a total capacity of 122 megawatts (MW), rising to 175 MW by 2020. It should be noted that these are indicative and expressed as a minimum. Indeed, paragraph 3.3.84 states this and goes on to say *“To achieve the targets...there will need to be a complete change in attitude in current planning practice. Local planning authorities need to accept that far more energy generation schemes using innovative renewable technologies need to be accepted if renewable energy targets are to be achieved. Furthermore it should not be inferred that once targets have been met, efforts should not continue to deliver additional renewable schemes.”*
31. Paragraph 3.3.82 of the RSS states that *“Parts of the East Midlands, notably the Trent Valley, have clear locational advantages for major energy installations through easy access to the grid...”*
32. Renewable energy projects will help to meet UK and international commitments for greenhouse gas reduction and assist in assuring diversity of energy supply.

### **Landscape and visual impact**

33. The existing landscape is largely flat and open with a large scale, geometric field pattern. There are nucleated villages and individual properties which are largely red brick with pantile roofs.
34. Land use is predominantly arable, with some smaller scale pastoral farming on the fringes of villages. Large steep sided ditches are common along tracks and field boundaries. Hedgerows are often gappy or missing, particularly along roadsides. Tree cover is low.
35. As stated above, West Burton Power Station lies to the north and Cottam Power Station lies to the south east of the site. Pylons run north to south across the site. A freight railway line also runs north west to south east to the south of the site.
36. There is a network of straight minor roads linking settlements and a number of public rights of way within the site boundary, including unsurfaced byways/farm tracks.

### **Impact of the Construction Phase on the physical Landscape**

37. The main impact on the physical landscape within the site boundary would be during the construction phase when foundations and cable

trenches are excavated, the turbines and mast will be erected, substation constructed and access tracks upgraded/constructed.

38. It is not clear whether some sections of hedgerow at junctions along the route may need to be removed to allow HGV deliveries.
39. The applicant intends to plant approximately 470m of new hedgerows along the new field boundary created by the new site track from Broad Lane to Turbine 8, with the hedgerow then continuing up to the small copse east of Turbine 9.
40. The applicant concludes that there would be a slight beneficial impact on the landscape fabric as a result of the construction phase. This assessment is not concurred with and instead it is concluded that the impact of the development during construction would be slight/moderate adverse. There will be considerable disruption during the construction phase but disturbed land will be reinstated following installation of cables etc.
41. During the operational phase, it is considered that the impact on the physical landscape would be slight – provided that any removed hedgerows are re-established. Arable land would be lost to provide areas of hardstanding. The applicant considers that there would not be any further impacts on the landscape fabric during operation.
42. On decommissioning, the applicant considers that there would be a slightly beneficial effect on the landscape fabric. It is intended to remove all structures above ground and restore to agricultural use. It is considered that if the new access tracks are removed and the land restored to agricultural use and the upgraded tracks are restored to their original width (in keeping with the rural location) this would be acceptable and the assessment agreed with.

#### Landscape Character

43. The site lies within the Terrace Farmlands sub-division of the Trent Washlands character area, as designated in the Nottinghamshire County Council Landscape Guidelines (1997). These Guidelines are currently being updated and the element covering the district of Bassetlaw is expected to be published in June 2009. The landscape strategy in both documents is to conserve and strengthen the traditional agricultural character and continuity of the landscape.
44. In the revised Guidelines key recommendations for the policy zone in which the proposed site is located are as follows:
- conserve the traditional pattern of hedges, fields and pasture around Cottam, Rampton and Church Laneham;
  - seek opportunities to recreate historic field boundaries where these have been lost;

- conserve the traditional character of nucleated villages with red brick houses and pantile roofs;
- seek opportunities to restore arable land to permanent pasture/wet grassland;
- reinforce hedgerows where these are gappy and in poor condition particularly along road sides;
- reinforce and strengthen the continuity of ecological diversity of stream and ditch corridors; and
- conserve mature hedge lines along tracks, and promote measures for increasing existing tree cover.

45. Field survey work to assess the landscape condition and landscape sensitivity of the Mid Nottinghamshire Farmlands and the Trent Washlands Landscape Character Areas shows that the Policy Zones immediately adjacent to the proposed site have a 'Conserve' or 'Conserve and Reinforce' Landscape policy. This means that these areas are in the highest categories of landscape in the Mid Nottinghamshire Farmlands and Trent Washlands and therefore views of the turbines will have a substantial visual impact on them.

#### Impact of the Development on the Landscape Character

46. The applicant states that the introduction of the 12 wind turbines and mast, which are not characteristic of the current landscape, would result in a significant change in the character of the site landscape. The applicant also concludes that the most significant change in landscape character is likely to occur during the operational phase.

47. As acknowledged by the applicant, it would be difficult to site a wind farm of any scale in the UK without significantly affecting the character of at least the site and immediate surroundings. The key issue is how far this change in landscape character would extend and whether this change is acceptable.

48. The applicant states that the upgrading of site tracks (total approximately 4.17km) would not have a significant effect on the landscape character of the Trent Washlands. However the tracks will be wider to accommodate the construction traffic and large hardstanding areas are to be created next to the turbines which would be clearly visible from the adjacent tracks and roads.

49. The applicant intends to plant 470m of new hedgerow. It is recommended that gapping up hedgerows in the area which have been allowed to deteriorate and restoring hedgerows along roadsides takes place, which would be in line with the Nottinghamshire Landscape Guidelines key recommendations. The hedgerows would not screen the wind turbines but would help to mitigate the development and would be mature by the time the wind farm is decommissioned.



50. There is also potential for tree planting as a mitigation measure, to strengthen the character and continuity of the Terrace Farmlands. Woodland planting should be small scale and limited in extent allowing open views along the river corridor and a sense of visual continuity with adjacent character areas. Woodland planting should be concentrated around rural settlements, individual farmsteads and rural dwellings. Hedgerow trees are the main element of tree cover in this landscape and tree planting in hedgerows is also recommended.
51. There is also potential to improve the ecological diversity of stream and ditch corridors. Much of the diversity has been lost in this area with the creation of straight steep sided ditches on farmland. Uniform steep-sided channel edges have been created with little space for emergent vegetation and little opportunity for colonisation by riverside trees and shrubs. Opportunities should be sought to diversify these ditches, for example cutting notches into the base of the bank to allow colonisation by emergent plants.
52. At the decommissioning stage, the view of the applicant is agreed with that relative to the existing landscape character the removal of the structures would not have a significant impact. All structures, including new tracks and hardstanding should be removed on decommissioning.
53. The wind farm would also have a significant impact on the character of adjacent character areas, although not to such a great extent.

#### Visual Impact of the Development

54. The main visual elements during the 25 year operational phase will be the 12 wind turbines, the site tracks, substation building and the mast.
55. There are other vertical structures in the vicinity of the site boundary – West Burton Power Station lies to the north and Cottam Power Station lies 1.2km to the south east of the site – chimneys and cooling stacks are prominent features in the landscape.
56. Pylons which run north to south across the site are also prominent vertical features.
57. The Environmental Statement includes a visual impact assessment of the proposed wind farm, with viewpoints assessed from various locations in the vicinity and from locations within a 20 km radius.
58. The applicant acknowledges that there will be significant visual impacts from many locations but does not state whether these will be significant beneficial or significant adverse effects on visual

amenity as the visual impact of wind turbines is subjective and public opinion is mixed.

59. From viewpoints within the 5km radius, the applicant concludes that that the overall significance of the visual impact is largely major or major/moderate due to the high sensitivity of residents and the substantial magnitude of change.
60. Although there are several viewpoints within the 5km radius, there are residential properties and public rights of way where the turbines would be more visible and it is recommended that photomontages are produced from some of these locations to illustrate the magnitude of change. Paragraph 10.276 and 10.277 lists the individual properties where the turbines would be visible from in close proximity and states that this would result in a significant change in the view for these residents. It is estimated that views from residential properties within 1km of the site would have generally have a major adverse impact.
61. Users of the local public rights of way, particularly those within the site and in the immediate vicinity would experience a substantial adverse effect on their visual amenity due to the proximity. Users of the Trent Valley way long distance path and the National Byway cycle path within the vicinity of the site would also experience a substantial adverse visual impact.
62. Outside the 5km zone, the applicant concludes that the overall significance of visual impact is largely moderate to moderate/minor to minor.
63. Overall the analysis of the visual impact in the Environmental Statement is agreed with.

#### Cumulative Impact

64. The applicant considers that cumulative impact does not need to be considered as there are no other wind farms in the vicinity. However, it could be argued that with the presence of power stations and pylons, the location of a wind farm is adding to the energy generation use of the countryside in this area.

#### Landscape and visual impact conclusions

65. As stated earlier, locating a wind farm in any landscape would have a major impact on both the landscape character and on visual amenity.
66. The landscape in this area is very flat and open with long distance views. There are already large scale physical elements in the area – cooling towers and chimneys of Cottam and West Burton Power

Stations, together with pylons. The introduction of large scale moving structures will have a moderate/substantial adverse impact on the landscape character of the area. It could be argued that together with the existing large vertical structures, the wind farm will add to the cumulative impact of energy generating features in the countryside.

67. The proposed wind farm would have a substantial adverse visual impact on many residential properties and rights of way, both within the immediate vicinity and within the wider countryside.

68. The applicant should provide the following information:-

- Plan showing location and length of hedgerows to be removed during the construction phase (including at any junctions where large HGVs would require hedgerow removal).
- Plan showing mitigation planting both within the site boundary and the adjacent areas, including tree planting (hedgerow trees, or small scale woodland planting), new hedgerow planting along roadsides and field boundaries where these have disappeared or gapped up where they have been allowed to deteriorate. Planting should be in line with the recommendations of the Nottinghamshire County Council Landscape Guidelines for the Trent Washlands.
- Proposals for improving the ecological diversity of stream and ditch corridors in the vicinity of the development.
- Photomontages of the turbines from properties and public rights of way within the site boundary and from properties within the 5km zone where the turbines would be more visible – for example Turn-a-Beck to the south west, Littleborough Cottage to the north.
- Consideration should also be given to reducing the size of the turbines to reduce the visual impact.

## **Natural Environment**

### **Habitats**

69. Habitats present at the site include; arable land with associated field margins, improved grassland, wet ditches and defunct/species-poor hedgerow. The predominant habitat present at the site is intensive arable farmland.

70. The site does not lie within any statutorily designated sites, and there are no such sites in the vicinity which are likely to be affected by the development. Two Sites of Importance for Nature Conservation lie within the proposed development area; Cow Pasture Lane Drain (2/479) – “Drains with notable aquatic and bankside vegetation”, and Broad Lane Grassland, North Leverton (5/2191) – “A neutral grassland”. The latter has not been identified in

the Environmental Statement, presumably due to its fairly recent designation.

71. The impacts of the proposed development are:

- Three moderately species rich sections of hedgerow (each section 8 metres in length) are to be removed due to the construction works; and
- Cow Pasture Lane Drains SINC lies next to Cow Pasture Lane, which is to be used for transporting materials during the construction period. There could be potential adverse impacts upon this ditch through contamination with construction materials or direct damage.

### Birds

72. Viewpoint wintering bird and breeding bird surveys were carried out by the applicant between November 2006 and October 2008. Over 30 bird species were recorded within the site area at this time including a number of UK red listed species such as Reed Bunting, Skylark, Starling, Yellowhammer which were identified as having a low potential collision risk with the turbines. Some birds occurred at the site at low frequencies, making collision impacts extremely unlikely. The most significant survey findings were for the following species:

#### *Golden Plover*

A large flock of wintering Golden Plovers were recorded using the northern field within the site. More than 1500 plovers were recorded on one occasion in winter 2007/2008, which indicates a population of county importance. Modelling of the collision risk estimated a collision risk of 35.06 bird collisions per year (with 95% avoidance), which equates to a monthly average of 2.92 bird collisions.

#### *Lapwing*

An estimated flock of around 200 lapwings were recorded during the winter 2007/2008 surveys in the same area as the Golden Plovers mentioned above. Four pairs of Lapwing were recorded nesting within the site boundary. Modelling of the collision risk estimates a collision risk of 56.87 birds per year (with 95% avoidance), which equates to a monthly average of 4.73 bird collisions.

Lapwing plots with an area of at least 2 ha are to be created to mitigate the potential adverse impact on nesting lapwings. The location is provisionally to be at least 300 metres away from the turbine locations, off-site to the east of the application area. It is recommended that the location of these area(s) be decided and submitted prior to the determination of this application for approval.

The impact of the proposed wind farm on the above two species has been assessed as minor negative with probable certainty at parish level.

#### *Barn Owl*

Barn Owls are known to nest on the site, with a nesting box close to the centre. It is estimated that if left in situ, the Barn Owl box will be 250 metres away from a wind turbine. Without mitigation, the nesting box will be subject to disturbance during and after its construction.

#### Bats

73. A number of survey visits were made to the site between August 2007 and September 2008. Common and Soprano Pipistrelle, Noctule and *Myotis* bats were recorded at the site, with common pipistrelle the most frequently recorded species, being present in moderate abundance. The other species were recorded in much smaller numbers.
74. Surveys found the site is used by bats foraging and commuting, mainly using the linear hedgerows features towards the centre of the site. No 'conspicuous' sites with high roosting potential for bats were identified during the survey work, but from viewing aerial photography on Nottinghamshire County Council's GIS layer, there appear to be a number of mature trees in the fields in this area (between Southbank Lane and Broad Lane) which could offer potential bat roosting habitat.
75. The Environmental Statement comments that turbines have been sympathetically sited away from woodlands and hedgerows with two exceptions to minimize bat exposure. Unfortunately, the two exceptions are located in the area with greatest bat activity. Concern should be raised that these two wind turbines are situated close to the main areas of bat activity identified during the survey, mainly around the hedgerows either side of Broad Lane and particularly along the Southbank Lane track. It is suggested that turbines 4 and 5 (see plate A.9 in the non-technical summary) be relocated. Moving the turbines further away from a bat commuting and foraging route will do more to minimise the risk of bat fatality as a result of close contact with the turbines, and will reduce disturbance to these flight lines. Whilst it is appreciated that the wind turbines need to be a specified distance apart from one another to maximise their usefulness, from looking at plate A.9, turbine 4 could be moved further north of Southbank Lane, and turbine 5 slightly further south, or relocated entirely.

#### Badgers

76. The application site has been surveyed for badgers. No setts were found within 50 metres of any proposed construction works and

therefore no adverse impacts are anticipated. It is however recommended that a condition be attached, such that the site is resurveyed for badgers prior to the commencement of works. The applicant's attention should also be drawn to section 12.189 of the Environmental Statement regarding the precautionary mitigation measures to be followed during construction.

#### Reptiles and Amphibians

77. No specific reptile surveys have been carried out at the site. The site is predominantly intensive agricultural fields which offers little suitable habitat for reptiles; no adverse impacts upon reptiles are anticipated.

78. There are no ponds present within the study area. No adverse impacts upon Great Crested Newts or other amphibians are anticipated as a result of the development.

#### Water Vole

79. The site was surveyed for Water Voles in August 2007. Water voles were recorded as present along a number of ditches which cut through the site.

80. It is unclear whether any crossings over watercourses will be created as a result of the development, but it is stated that there could be a risk of damage to the banks or within 5 metres of the banks of some of the drainage ditches present on site. Prior to the determination of this application, areas (i.e. where ditches are to be directly affected by construction works, or where works are to occur within 5 metres of a watercourse) which could potentially adversely impact upon this species should be resurveyed. Appropriate mitigation measures should be submitted if it is found that there is likely to be an adverse impact. This approach is in accordance with the Government Circular (06/05) accompanying Planning Policy Statement 9: 'Biological and Geological conservation – statutory obligations and their impact within the planning system', paragraphs 98 and 99:

*"The presence of a protected species is a material consideration when a planning authority is considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitat."*

*"It is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision. The need to ensure ecological surveys are carried out should therefore only be left to*

*coverage under planning conditions in exceptional circumstances, with the result that the surveys are carried out after planning permission has been granted.”*

#### Other Species

81. An individual plant was recorded in a field margin towards the northern part of the site. Prickly poppy is listed as a ‘vulnerable’ red data book species. No construction works are to occur near or within this area; no adverse impacts upon this species are anticipated.

#### Proposed Mitigation

82. In addition to the further survey work required in relation to water voles and Lapwing prior to the determination of this application, the following mitigation measures are proposed in order to address the issues and impacts highlighted above:

- barrier fencing should be placed along the road verge of Cow Pasture Lane to prevent accidental damage or contamination to the Cow Pasture Lane SINC which is welcomed. It is recommended that the necessary protection measures be attached as a condition to any planning permission;
- on the basis of the results of the additional water vole surveys, a condition should be imposed requiring any appropriate mitigation measures;
- the Barn Owl box is to be moved outside of the breeding season to another location. The siting of the existing box and the additional proposed Barn Owl box should be carried out in consultation with the ‘Wildlife Conservation Partnership’ mentioned in the Environmental Statement who monitor the boxes;
- it is recommended that a condition be attached, such that any vegetation clearance occurs outside of the nesting bird season (March – August inclusive);
- Bird repellent spikes will be placed on the nacelle of each turbine to try and reduce the risk of birds colliding with the turbines. It is recommended that this be attached as a condition to any planning permission;
- it is recommended that a condition be attached, such that areas identified as being potentially suitable reptile habitat should be hand searched prior to the commencement of works to prevent accidental killing or injury;
- approximately 470 metres of new hedgerow will be planted along a newly created access track north of Broad Lane. It is recommended that a condition be attached, such that a suitable hedgerow species mix is submitted;
- no mitigation has been offered for Golden Plovers, but post-construction monitoring for both Golden Plovers and Lapwings is proposed to determine whether use of the site is resulting in high mortality. The common bird census is also to be repeated for at

least one year after construction. It is recommended that the above measures be attached as a condition to any planning permission, and the results of such monitoring be submitted;

- Bat corpse monitoring should be undertaken for at least one year post-construction and the results of such monitoring submitted for review. It is recommended that this be attached as a condition to any planning permission.

### **Biodiversity Enhancements**

83. A detailed management plan for the wet ditches on the site is to be drawn up with the aim of creating more suitable habitat for water voles and increasing species diversity. It is recommended that a condition be attached, such that a plan is submitted to Nottinghamshire County Council for approval.

84. Broad Lane Grassland SINC lies within the boundaries of the development area. It is suggested that if this site is not currently being managed, then the applicant should make efforts to bring the site into favourable management as part of any mitigation proposed for the site. Suitable management for the grassland would be a hay cut taken in late summer, followed by aftermath grazing over the autumn period. The applicant should make contact with the Nottinghamshire Biological and Geological Records Centre for further details and the location of the SINC etc.

85. Approximately 470 metres of new hedgerow is to be planted which is welcomed.

### **Natural Environment Conclusions**

86. Overall, provided that the recommended survey work, mitigation and proposed enhancements are secured and that the conditions outlined above are attached to any planning permission, the proposal would not conflict with the RSS's nature conservation policy.

### **Cultural Environment**

87. Previous archaeological evaluation of this site has shown that several areas within the proposed development site were, in the Romano-British period, areas of agriculture and possible dispersed settlement. It is highly likely that similar activity existed prior to the Roman period as well as continuing afterwards into the medieval period. Given the relatively high amounts of known archaeology within the area of the development it is possible that significant archaeological deposits remain undetected. If any such archaeological deposits survive, it is likely that the proposed development will damage or destroy them.



88. A medium to high potential exists for additional archaeological remains to exist within the proposed plot. Due to the archaeological interest of this area, as well as the nature and extent of the proposed development it is recommended that if planning permission is to be granted this should be conditional upon two things. Firstly, that prior to commencement of development, the applicants submit for approval details of a scheme for an archaeological watching brief of the site; and secondly, upon the subsequent implementation of that scheme.

89. This scheme should be drawn up and implemented by a professional archaeologist or archaeological organisation. It is recommended that Nottinghamshire County Council is consulted on this.

#### Conservation Areas

90. There are no Conservation Areas in the vicinity of the development. East Drayton lies approximately 5.2km to the south west – the applicant concludes that there would be no significant indirect visual effects on the character, appearance or setting of the Conservation Area. This conclusion is concurred with.

#### Cultural Environment conclusions

91. Overall, providing appropriate conditions are attached if planning permission is granted to ensure that any archaeological interest is identified and appropriate action taken, as detailed above, the proposed development does not conflict with policy 27 of the RSS.

#### **Contribution of project towards regional renewables target**

92. As outlined above, the indicative regional target for onshore wind (as set out in Appendix 5 of the RSS) is 122 MW to 2010, increasing to 175 MW by 2020.

93. The Environmental Statement is based on a particular type of turbine (Nordex N90) and states that 12 of these would have a total rated capacity of 27.6 MW and that given the expected wind speeds on site that this would equate to an annual average of approximately 62,862 MWh (net) of electricity, meeting the equivalent average annual electricity needs of up to 13,400 homes. This corresponds to approximately 30% of the total number of homes in the Bassetlaw District area.

94. In this respect the 27.6 MW capacity of the proposed turbines would make a significant contribution towards the regional targets set out in Appendix 5 of the RSS and therefore play an important role in working towards national and regional renewable energy targets.

## **Highways**

95. No objections are raised to the principle of the proposed development, however, there is a lot of outstanding information regarding the construction phase, largely relating to the transportation of equipment to the site, which has been requested from the applicant but not received at the time of writing this report.

## **Rights of Way**

96. There are a number of public rights of way within the application boundary, including BOATs - Byway Open to all Traffic – including on foot, horseback, bicycle or motorised vehicle. A short length of bridleway (Rimes Lane), also open to horseriders, links Southbank Lane with Broad Lane approximately 350m to the west of turbine 4. A RUPP (Road Used as a Public Path) runs along Humber Meadow Lane, approximately 50m west of turbine 1.
97. Several of the wind turbines are located close to or adjacent to these public rights of way. It is suggested that the developer provides further information in relation to these matters as wind turbines can be disturbing to horses and therefore dangerous to riders and the public.

## **Shadow Flicker**

98. The Environmental Statement analyses and discusses the potential for properties to be affected by shadow flicker caused by rotating blades at certain times of the day on sunny days. In accordance with the guidance in the companion guide to PPS22 an assessment of the impact on properties within 900 metres (that is ten times the diameter of the blade which is deemed by the companion guide to PPS22 to be limit at which flicker effects can occur) has been undertaken.
99. The Environmental Statement concludes that there may be the potential (subject to the right atmospheric conditions) shadow effect impacts on certain properties on a number of days in the year. As such, mitigation is proposed which would involve the wind farm control system using information from sensors on the turbines, together with readings of wind directions, to switch off the turbines during the times of potential effect whenever the conditions for shadow flicker exist.
100. Whilst this is a non-strategic, detailed matter for your Council to consider in determining the application, this approach may be imposed as a condition if planning permission is to be granted.

## **Noise**

101. Policy 40 of the RSS states that noise intrusion is a consideration when assessing the impact of wind turbines on the built environment. The Environmental Statement states that an operational noise impact assessment has been carried out in accordance with DTI guidelines and PPS22. It concludes that under all conditions the nearest residential locations meet the night-time noise limit and the upper day-time noise limit. At one property, (Marlyn House), the lower day-time noise limit has been found to be exceeded by 1dB. The Environmental Statement proposes that if this is found to be significant, the nearest wind turbines will be operated in a noise reduced mode.
102. Overall, it is concluded that, subject to the imposition of suitable conditions, noise arising from the proposal would be unlikely to cause a significant adverse effect on nearby residents.
103. Nottinghamshire County Council has not undertaken a background noise survey, and does not have access to the technical data required to corroborate these findings. However, compliance with these predicted noise limits, together with the mitigation measures proposed to protect Marlyn House, are recommended as conditions if planning permission is granted.

## **Conclusions**

104. The overarching planning policy context in relation to wind farm developments, as outlined in paragraphs 20 to 32 above, is supportive of the principle of wind farms in Nottinghamshire and the wide benefits of deploying renewable energy technologies in tackling climate change, subject to a number of considerations. In relation to this application, the main areas of consideration relate to the positive contribution of the proposal in working towards national and regional renewable energy targets and the potential impacts of the proposal on the landscape and natural and historic environment.
105. The proposed development would significantly contribute towards the regional targets for renewable energy from onshore wind, as set out in Appendix 5 of the RSS. As stated in paragraph 30 above, the RSS makes it clear that these targets should be treated as a minimum and that local planning authorities need to accept far more energy generation schemes if these targets are to be achieved. This proposal presents an opportunity to do this and to show a commitment to achieving renewable energy targets regionally and nationally.
106. In relation to the landscape and visual impact of the proposed development, the overall impact on the physical landscape within the site boundary during the operational phase of the proposal is considered to be slight.

107. However, it is considered that there would be a moderate / substantial adverse impact on the landscape character of the area and a substantial adverse visual impact on many residential properties and rights of way in the immediate vicinity and the wider countryside. There are however, no national landscape designations in this area which would be adversely affected by the proposed development.
108. It must be acknowledged, however, that the siting of any wind farm in any rural location will have a significant impact on the surrounding landscape by the very nature of the introduction of such a development. Given the size of the proposed development and therefore the assessment that it will have a moderate to substantial impact on the surrounding landscape, it is concluded that there is a conflict with policy 31 of the RSS.
109. In the Environmental Statement, the applicant argues that there is no need to consider cumulative impacts in this case because there are no other wind farms in the area. However, the cumulative impact of the proposed development in light of the surrounding power stations should be considered.
110. As stated above, the proposed development is located between two existing power stations and there are electricity pylons which run across the application site. The introduction of the turbines adds to the built development within this area of countryside. Whilst this will undoubtedly have a visual impact on the area, it is an opportunity to utilise the existing grid infrastructure and promote the use of renewable energy technology, set against a backdrop of power stations. It illustrates how the county of Nottinghamshire is working towards tackling climate change and meeting national and regional targets for renewable energy.
111. With regard to the natural environment, provided that the additional surveys in relation to water voles and Lapwing are undertaken and that any necessary mitigation measures are secured, together with the proposed conditions outlined above, the proposed development is considered to be in line with policies 26 and 29 of the RSS.
112. In relation to cultural heritage, providing that appropriate survey work is undertaken and that appropriate action is secured as a result of the findings of this survey work, the proposed development is considered to be in line with policies 26 and 27 of the RSS.
113. There are no objections to the principle of the proposed development from a highways perspective, subject to the outstanding matters being adequately addressed.

114. In conclusion, whilst it is acknowledged that the proposed development will have a significant impact on the surrounding landscape, the contribution that it can make towards meeting the regional targets for renewable energy, utilising existing infrastructure in the locality, is considered to outweigh these concerns, particularly in the context of the proposals being in line with other RSS policies. In this respect, it is concluded that on balance the proposal is in line with policy 40 of the RSS.

115. It is therefore recommended that, subject to raising the caveats expressed in this report, together with the caveats relating to satisfactory preliminary survey work, additional information and the imposition of a number of conditions, Nottinghamshire County Council should not raise a strategic planning objection to the proposed wind farm development.

### **Statutory and Policy Implications**

116. This report has been compiled after consideration of implications in respect of finance, equal opportunities, personnel, Crime and Disorder and those using the service. Where such implications are material, they have been described in the text of the report.

### **Human Rights Act Implications**

117. The Human Rights Act implications arising from this report have been assessed in accordance with the Council's adopted protocol. At this strategic level, no human rights issues are raised. However, these matters will be considered by Bassetlaw District Council when specific planning and transport matters are considered by them as part of their discussions on specific development proposals.

### **Recommendation**

118. It is recommended that Cabinet does not object to the proposed development, subject to:

- a) raising the concerns expressed in this report;
- b) caveats relating to the satisfactory conclusions of additional survey work and outstanding information; and
- d) conditions to be attached to any planning permission relating to the landscape, natural environment, cultural environment and noise matters detailed in this report.

**TIM MALYNN**  
**CORPORATE DIRECTOR (COMMUNITIES)**

### **Legal Services Comments**

The County Council's observations are made as strategic planning observations only. (SHB 09-06-09)

**Comments of the Service Director - Finance**

The report deals with planning matters only and as such there are no direct financial implications.

**Background Papers Available for Inspection**

Planning application documents, including Environmental Statement, Non-Technical Summary and Planning Statement.

**County Electoral Divisions Affected**

All.