DELEGATED

AGENDA NO
PLANNING COMMITTEE

DATE 24th October 2008

REPORT OF CORPORATE DIRECTOR, DEVELOPMENT AND NEIGHBOURHOOD SERVICES

08/2372/EIS
Land North And South Of Hilton Seamer Road
East Of Hilton

Erection of 3 no. wind turbines together with associated crane pads, access tracks, site compound, ancillary works and meteorological mast and control building

Expiry Date: 29th October 2008

SUMMARY

This application is for the erection of 3 no. wind turbines, together with the associated development of crane pads, access tracks, site compounds, meteorological mast, control building, accesses and other ancillary development. Each turbine consists of a main support tower and three blades and is specified as having a maximum blade tip height of 125m. Whilst a specific turbine model has not been specified, it is not envisaged that this will differ from the generic appearance as detailed within the appendices. Each turbine would have a foundation and crane hard standing area. The meteorological mast is specified as having a maximum height of 80m and would be erected to monitor the performance of the wind farm. Underground electrical cabling and communications cables would connect each turbine to a control building, which would in turn connect to the National Grid.

A total of 216 representations of support have been received and 367 of objection. Objections to the scheme relate mainly to visual impact, safety, amenity, and economic and environmental reasons. The letters of support received consider that wind is a clean, free local resource which should be utilised, that the local impacts will be outweighed by the wider environmental benefits, that wind power needs to be fully supported to combat global warming and climate change and that they are an attractive addition to the scenery whilst can act as a tourist attraction. Comments further consider that there is a need to protect the needs of future generations whilst Britain needs to be able to generate energy without relying on imports from other countries and that the proposal would be beneficial to farm diversification and the local economy generating contracts for the local area

No objections have been received from consultees with responsibility for air traffic safety, Ornithology, archaeology and cultural heritage, microwave links and power lines.

The Head of Technical Services considers that there is insufficient information submitted to fully understand and assess the impact of construction vehicle movements on the surrounding highway network and on its associated features.

Natural England considers that there is insufficient information submitted to clearly demonstrate that there would be no adverse impacts on species especially protected by law.

RECOMMENDATION

That planning application reference 08/2372/EIS be refused for the following reasons: -

1. ***The Local Planning Authority is of the opinion that insufficient information has been submitted to fully understand and demonstrate whether or not the development would have an adverse impact on the surrounding highway network and on its associated features as a result of construction traffic, thereby being contrary to Policy GP1 of the adopted Stockton on Tees Local Plan.***

2. ***The Local Planning Authority is of the opinion that the proposed development site lies within close proximity to areas which may currently be used as wildlife habitats and due to their form and nature, it is considered there is insufficient information submitted in order to demonstrate whether or not the development would have an adverse affect on species especially protected by law and as such adequate mitigation could not be determined. The proposed development is therefore considered to be contrary to the requirements of ODPM Circular 06/05 Biodiversity and Geographical Conservation - Statutory Obligations and Their Impact Within the Planning System, PPS 9 Biodiversity and Geological Conservation and Policy GP1 of the adopted Stockton on Tees Local Plan which require adequate consideration of impacts on protected species to be made.***

PROPOSAL

1. The applicant has submitted the following information regarding the proposed development;

2. The proposed Seamer Wind Farm (5 turbines) straddles the boundary between Stockton Borough and Hambleton District. An application has been submitted to each of the Planning Authorities for the section of the scheme falling within each of the authorities administrative boundaries.

3. This application is for the erection of 3 no. wind turbines, together with the associated development of crane pads, access tracks, site compounds, meteorological mast, control building, accesses and other ancillary development. Each turbine consists of a main support tower and three blades and is specified as having a maximum blade tip height of 125m. Whilst a specific turbine model has not been specified, it is not envisaged that this will differ from the generic appearance as detailed within the appendices. Each turbine would have a foundation and crane hard standing area. The meteorological mast is specified as having a maximum height of 80m and would be erected to monitor the performance of the wind farm. Underground electrical cabling and communications cables would connect each turbine to a control building, which would in turn connect to the National Grid.

4. A compound area is required for the construction phase of the development and as such would only be temporary. The site would be accessed from the Seamer/Hilton Road and access roads would then be provided on site to allow vehicular access for the erection of the turbines. The applicant has indicated that the access roads have been designed in order to minimise their length and their impact on ecological features present on site, primarily hedgerows. It is further indicated that the stone for site access roads would be acquired from local quarries.

5. Information submitted indicates that the overall construction period from on site commencement to post construction reinstatement and restoration for the project on site (construction period) would be approximately 10 months and would be split into the following phases:
    - Upgrading and construction of access points onto the site from the public highway;
    - Site establishment;
    - Construction of Site Access Roads and Hard standings;
    - Site Access Roads reinstatement;
    - Installation of electrical infrastructure;
    - Construction of wind turbine foundations;
    - Construction of Switchgear and Substation building;
    - Wind turbine delivery, erection and commissioning;
    - Installation of the meteorological mast;
    - Reinstatement around wind turbines and meteorological mast;
    - Construction of the grid connection;
    - Commissioning and testing of wind turbines; and
    - Site reinstatement and restoration.

6. A 'Construction Method Statement' (CMS) would be produced prior to construction to ensure that best practice methods would be implemented at all times during construction. Once the wind turbines are operational, they would be controlled remotely although maintenance is expected to be undertaken on a year round basis. The annual servicing requirements include a maximum of 157 two-way trips made by a car or van with 28 two-way trips made by access platform or HGVs.

7. The wind farm has a design life of 25 years, following which, the elements of the wind farm above ground will be dismantled and the site reinstated although it is indicated that site access tracks could remain for use by landowners if required. The site control building and equipment would be removed and the land reinstated. All buried cabling could be left in situ or removed depending on the disturbance caused by their removal, and resale value. If it is considered commercially viable at the end of the 25 years to refurbish the site, a new planning application with an accompanying environmental statement would need to be submitted to the relevant planning authorities.

SCOPE OF THE ENVIRONMENTAL IMPACT ASSESSMENT

8. The scope of the Environmental Impact Assessment (EIA) and content of the Environmental Statement (ES) have been agreed with Stockton on Tees Borough Council and Hambleton District Council, through the scoping exercise which involved the preparation of a Scoping Report outlining the proposed content of the ES and the approach and methodologies for the EIA.

9. The EIA and subsequent ES have been carried out in accordance with the response to the scoping. Comments and requirements raised through other forms of consultation were also incorporated. This has included feedback from statutory consultees and stakeholders and specialist advice from various experienced professionals.

Environmental Effects

10. The potential environmental effects of the proposed Wind Farm have been considered throughout the EIA process, taking into account potential impacts on receptors and resources. Positive and negative impacts have been considered and the significance of any potential impacts evaluated. The significance of potential impacts has been assessed based on the degree of impact (the magnitude) and the importance, sensitivity or number of affected resources or receptors.

11. Where potential adverse effects on the environment have been predicted, mitigation measures have been identified to prevent, reduce and where possible offset these effects. The development proposal therefore includes a range of measures that have been designed to reduce or prevent significant adverse environmental effects arising. The assessment of effects has taken into account all measures that form part of the development proposal and to which Broadview (the applicant) is committed.

12. The summary of the findings of the Environmental Statement are listed within the appendices.

SITE AND SURROUNDINGS

13. The application site is located on the southeastern edge of the Borough between the villages of Hilton and Seamer. The Wind Farm crosses the Borough boundary with 3 turbines, met mast and associated infrastructure being within Stockton Borough and 2 turbines and associated infrastructure being within Hambleton District. The wind farm is shown being accessed directly off the Hilton to Seamer Road.

14. The site and its wider setting mainly consist of undulating arable farmland, which contains hedgerows and small areas of woodland. The site is split by the Hilton Seamer Road, which runs east west across the site. The planning application boundary is fixed, based on the intended locations of the turbines, met mast and access roads although there is a much wider area of land which is indicated as being within the applicants control.

CONSULTATIONS

Government Office For The North East

15. We are happy to advise on specific questions of national policy or process but it would be inappropriate to comment on this application in view of our role, as we must not prejudice the Secretary of States Role.

16. The Council will need to consider whether they wish to consult the SofS formally of the application in accordance with one or more of her Statutory Directions, if it is minded to grant planning permission, so that she may consider whether she should intervene.

17. The documents specified in the relevant Directions must accompany any formal notification and the council may need to send the SofS two copies of any EIA if the application is classes as EIA development.

One North East

18. The following comments relate to the effects that the proposals are considered to have upon the Regional Development Agency's strategic regional investment or employment policies.

19. The Regional Economic Strategy identifies Energy as one of the 'Three Pillars' for driving economic growth. Providing a clean, secure and stable energy supply is presently a key challenge and a key opportunity for the region's economy. Efficient use of low carbon energy is the key policy driver that the Agency is promoting through its plans and programmes, such as the Energy Pillar and Connectors, and the Regional Economic Strategy Action Plan, to support businesses and other users to reduce the impacts of a presently volatile energy market and grasp the economic opportunities.

20. The Agency is currently working alongside regional stakeholders and other RDA's to assist and influence the Government to shape its Energy Policy. It is hoped that the regime in support of renewable energy will continue, allowing the North East to continue demonstrating its support for renewable and low carbon technology development and deployment.

21. As well as through support for the research, encouraging the appropriate installation of technologies such as wind turbines, which utilise indigenous resources, to reduce the environmental impact of our region and increase economic benefit across business and society.

22. Subject to the applicants satisfying all the necessary environmental and visual impact issues, I confirm that One North East has no objections to the proposed development as a suitable site for wind energy development for the reasons set out above.

23. We recognise the potential conflict between turbine installations and airports whilst acknowledge the importance of air transport on regional economies. In that context, the agency supports the growth of both the region's airports and their safe and efficient operation is an important aspect to be considered in processing this application.

North East Assembly:

24. No comments: Falls below threshold which North East assembly needs to be consulted upon.

Middlesbrough Borough Council Planning Department

25. The nearest of the proposed wind turbines is 1.5km from the Middlesbrough Borough Boundary and it is not considered that the proposed turbines will have a significant impact within the Middlesbrough Area. Similarly it is noted that the proposed abnormal load route from the north utilises the Newport Bridge and A66, there are no significant concerns on highway grounds. Middlesbrough has no comment to make on the application.

Darlington Borough Council

26. As an adjacent Local Planning Authority, we have no specific comments to make in relation to this particular planning application. It is considered to be of sufficient distance from current proposals within Darlington Borough (Bishopton and Sadberge) not to give rise to issues of cumulative effect. You may wish to contact Ged Lawson - Landscape Officer - at Durham County who has an overview of wind farm developments in the region.

North York Moors National Park

27. Given the location of the site some 6-7 kilometres from the nearest part of the National Park boundary the key consideration of this Authority is the impact of the development on the setting of the North York Moors National Park.

28. Paragraphs 11,12 & 14 of Planning Policy Statement 22 entitled 'Renewable Energy' (PPS) set out that there can be no buffers around National Parks to prevent significant wind farm developments but that projects should only be granted where the objectives of designation will not be compromised and that any significant effects are outweighed by environmental, social and economic benefits.

29. In the Countryside Character Assessment carried out by The Countryside Commission in 1998 and The North York Moors National Park Landscape Character Assessment 2003 carried out by consultants White, Young and Green, the 'panoramic' views over moor land ridges, dales and surrounding lowland vales and the sea are considered to be a key characteristic of the character of this National Park. Key identified external pressures which may impact on outward facing landscapes within the Park include pressure for wind farms.

30. The Authority notes at section 9.6.3 of the Environmental Statement (ES) dealing with visual impact the ES considers there will be an adverse cumulative visual impact from the development on views in and out of escarpment and hilltop sites within this part of the National Park including Captain Cooks Monument and Roseberry Topping. This Authority concurs with that view.

31. This Authority recognises the need to accommodate suitable renewable energy developments in the Region and would ask your Planning Committee to give due consideration to the adverse impact likely to accrue from the development on the distant setting of the National Park when assessing the harm and benefits of the development.

Hilton Parish Council:

Objects on the following grounds; (summarised)

32. Supports the critique of Broadview's supporting documentation produced by several informed residents which find Broadview's submission misleading or incorrect and many assumptions being made.

33. The turbines will dominate the skyline in a rural area, which has no large buildings. They will be closer to boy hill than the pylons, which were resited because of the impact. This will impact on the enjoyment of walkers to the area and subsequently have a negative impact on tourism.

34. Should a turbine collapse onto the nearby power lines or across the road, or the blade break off then this could cause a severe accident. The fire authority will not have equipment to reach the top of a turbine whilst the turbines could attract lightening strikes.

35. Shadow flicker could be serious on passing motorists and ice flying from the blades could also occur.

36. The turbines lie in the safety zone of Durham Tees Valley Airport, which is trying to increase passenger and cargo flights, whilst takes traffic from other airports, thus increasing risks over Stockton.

37. The nearest property will only be 800m from the nearest turbine and it has been put forward that turbines should not be built within 1 mile of where people live. Living in close proximity will cause noise pollution shadow flicker can cause photosensitive epilepsy.

38. The turbines could affect birds; particularly migratory ones which come to the region and this would have an adverse impact on tourism. In addition, the site is home to bats and great crested newts and the developers have taken little account of the effects on these. Visitors to Seamer Carrs are likely to be discouraged by the presence of wind turbines.

39. The construction phase will cause traffic and highway disruption through Hilton having a negative impact on the village and the condition of the roads. It is understood that such loads would have police escorts and will travel at night causing disruption and noise issues.

40. Offshore wind farms are more environmentally friendly and more viable. Within a five mile radius there will be an impact on the landscape and effecting future tourism.

Yarm Town Council

41. Fully support the objections made by the Seamer and Hilton Wind farm Action Group in line with the Policy of the Council in regard to wind farms.

Ingleby Barwick Town Council

42 The Town Council supports SHWAG in their objections to the proposal as this development is sited totally in the wrong place. The limited amount of renewable energy which would be generated would not compensate for the impact it would have on the nearby villages and this proposal is therefore in the Town Council's opinion not justifiable.

43. The proposed 125m high wind turbines would have a significant detrimental affect on this rural area which is already blighted by unsightly pylons.

44. The wind turbines would be sighted very close to nearby residences, the villages of Hilton and Seamer, as well as the Hilton to Seamer road and overhead power lines. This raises concerns in respect of the safety implications, as there are many recorded instances of turbine collapse and blades being shed.

45. The proposed wind turbines would be a distraction to motorists thereby increasing the risk of road traffic accidents.

46. Noise pollution is another concern as turbine noise can be both annoying and irritating as well as the possible cause of a number of health problems.

47. The development will have a detrimental effect on the immediate environment and cause harm to the local wildlife.

48. Traffic nuisance during the 10 months construction period will create major disruption to road users and will increase the safety risk for cyclists. Transportation of the turbines to the site will cause huge disruption given their size. It is understood that such loads are likely to require police escort and will travel at night causing not just traffic problems but noise issues.

49. The Town Council hopes that you will give due consideration to their objection when considering this application.

Kirklevington And Castle Leavington Parish Council

50. Unanimously support Hilton Parish Councils objections to the proposals.

Seamer Parish Council: Objects on the following (summarised)

51. The proposal will harm the character of the landscape, the proposal is in close proximity to residents harming the residential amenity, will result in safety issues owing to close proximity to the road and power lines, the proposal will harm wildlife, result in noise disturbance and cause health issues for residents, during construction the development will cause traffic disruption, reduce value of homes and negatively impact upon the perception of Seamer whilst providing little electricity.

Stokesley Parish Council

52. Strong objections to the wind farm which is in totally the wrong location, ruining the landscape and being too near to the road.

Councillor C Seymour, Stokesley Ward: Objects on the following (summarised)

53. It will spoil a high quality landscape, which were recognised by the planning inspector at the pylon enquiry (1991-2002) as high quality. The turbines will be higher than the pylons and will dominate the landscape. Wind power is not an efficient technology and does not warrant despoiling the landscape. The shadow flicker effect will distract motorists. The turbines will be noisy and will be constructed too close to residential properties.

R.W Redman, Middleton Parish Councillor: Objects on the following (summarised)

54. The turbines are located too close to the national park and will destroy the environment. The turbines should be located offshore. The proposal will result in a loss of view for the residents of Middleton. Concerns are also raised that the development will set a precedent.

Dari Taylor MP: (Summarised)

55. Totally opposed to the proposal as the area already has pylons and overhead lines within it. This would be built on a beautiful rural area outside 2 delightful villages adding to the unsightly pylons. My opposition is seriously added to the fact that the applicant is behaving in an opportunistic and profit motivated manner. I believe they have chosen this site because they can tap into the electricity supply chain provided by the existing overhead lines thereby reducing their costs and increasing profits. I have asked them to consider the industrial coastal area for their wind farm who advised there was insufficient wind there which is a laughable statement. I have no problem with Governments policy of promoting renewable energy, however do not accept that wind farms should be located such that they should ruin the most beautiful countryside. I received a ministerial letter which made this point.

Northumbrian Water Drainage

56. No objection

Northumbrian Water Telecommunications

57. The proposed development does not interfere with any of the companies scanning radio or microwave links.

Northern Gas Networks

58. No Objection

NEDL

59. Standard connection comments made.

Chief Fire Officer

60. Cleveland Fire Authority offers no representations to this application.

Civil Aviation Authority: (Summarised)

61. Advised that it is essential that the Durham Tees Valley Airport Operator, NATS and the MoD be consulted and given the opportunity to comment, that there might be a requirement to install aviation lighting to some or all of the turbines, that the rotor blades and upper 2/3rds of the mast may require to be painted white, that details will have to be supplied to the Defence Geographic Centre to allow their plotting on aeronautical maps.

62. Following advice being given to the CAA Authority that DTVA have no objections, the CAA consider comments to be sufficient and we should rely on the response from Teesside airport.

National Air Traffic Services: (Summarised)

63. Advised that there technical and operational safeguarding teams have examined the proposal against impacts on navigational aids, air to ground voice communication and radar, and although the proposal is likely to impact their electronic infrastructure they have no safeguarding objection to the proposal.

Durham And Tees Valley Airport: (Summarised)

64. No objection to the wind farm and will continue to work closely with Broadview Energy Developments if the wind turbines are constructed.

Ministry Of Defence: (Summarised)

65. The MOD has no objection to the proposed wind farm, which although within the line of sight for the Air Traffic Control Radar at Leeming Bar, the anticipated effect has been assessed as manageable, subject to conditions being imposed which require the following:

- Information will need to be provided to the MOD if permission is granted relating to precise grid co-ords, start date of construction and final tip height.
- Turbines are fitted with a 200 candella omni directional red light at the highest practicable point.

Newcastle Airport

66. Newcastle International Airport Ltd has no objection to the above proposal

Council For The Protection Of Rural England (Durham) : Summarised

67. Fully support the objection from SHWAG as they are the ones who are most effected and as such their comments should be of the utmost importance. It is considered that para 22 of the ES is misleading which comments on the range of savings by displacement of gas to coal approved by the ASA. The BWEA is taking steps to agree national standards for the wind industries carbon offset figure which have not yet been published.

68. In considering load factors compiled for 10 north east wind farms it is indicated that wind turbines are not working at the predicted load factors.

69. Concerns regarding the balance between benefits and disadvantages of the application.

Ramblers Association

70. No Objection as no part of the Footpath Hilton 07 is within the topple distance of the turbines and subject to a condition being imposed to safeguard the Teesdale Way and cycle track.

Natural England (summarised)

71. Natural England objects to the proposal on the grounds that the application contains insufficient survey information to demonstrate whether or not he development would have an adverse effect upon legally protected species.

72. Natural England considers that additional information about the likely impact upon bats is required with specific reference to more detail required regarding trees present within the site which have the potential to support bat roosts. Furthermore the mitigation does not appear to address all potential impacts upon bats and their roosts as there is no analysis of potential bat strikes and little attention has been given to the possible impact of the new access upon boundary hedges. Specifically the design of the proposal should ensure a 50 metre separation distance from hedgerows regardless of the quality of the hedge, as it may be suitable for bat commuting, foraging and habitats.

73. With regard to Great Crested newts the survey does not meet the recommended standard set out within English nature's Guidelines owing to this the size of the population may have been underestimated and as a result the mitigation may not be of an acceptable level. Furthermore it appears that the turbines will be located within 500 metres of a pond in which Great Crested Newts have been identified as such it is considered that it is possible that newts will move on to the development site. Additionally there has been no assessment of potential impacts on the habitat of Great Crested Newts

74. Any works on hedgerows should be limited to outside of the bird breeding season or when the absence of nesting birds can be determined before works commence.

75. Further surveys are required to determine whether white clawed crayfish are present within the site and what impacts the development may have upon their habitat

76. With regard to protected sites, Natural England has no objections as it is not considered that the proposal is likely to have a significant effect on the internationally important features of the north Yorkshire Moors Special Protection Area (SPA)

77. Natural England does recognise the intention of the developer to compensate for the loss of hedgerows, to reinstate those of poor quality and diversify edges of woodland by planting scrub. As such Natural England recommend that the planting should be native hedges and shrubs which are appropriate to the landscape. Natural England also recommend an agreement with the developer to ensure suitable land is made available and managed to compensate for loss of habitat.

78. Natural England recommend that the site should be reinstated to agricultural land following decommission

RSPB

79. The RSPB's response to Hambleton District Council's request for an EIA scoping opinion identified the potential for the proposed wind farm to have adverse impacts on the North York Moors Special Protection Area (SPA), the Teesmouth & Cleveland

Coast SPA (and their composite SSSIs). Consequently, we have carefully assessed the Environmental Statement with this in mind.

80. Our view is that the surveys carried out are of an appropriate nature, timing and duration to assess the movement of birds through the wind farm area. These surveys have revealed a limited number of migratory waterfowl flight paths through the proposal site. Furthermore, only low numbers of species that could be associated with the SPAs/SSSIs mentioned above have been recorded using the proposal site. Therefore, the Environmental Statement's conclusion that the proposal will not impact the integrity of the two SPAs is in all likelihood an accurate one.

81. As a charity with limited resources, the RSPB is unable to engage with planning applications that are unlikely to impact on designated wildlife sites or nationally-important bird populations. Furthermore, we support the principle of developing renewable energy developments in areas where adverse impacts on these sites can be avoided. Consequently, we do not feel that there are grounds for the RSPB to make representations on the Seamer wind farm proposal.

<u>The Environment Agency (summarised)</u>

82. No objection to the development as proposed subject to conditions being included on any granted planning permission relating to Surface Water Drainage, Storage of Materials, site toilets.

<u>National Grid</u>

Several comments have been received from the National Grid which are listed in chronological order.

83. 01 October. The application was sent to National Grid some weeks ago and initial comments were provided by a member of our asset protection team. At the time it was felt that the risk was moderate, however, further investigation has been undertaken since that original comment into the effects of wind farms on overhead lines and the outcome is the latest information which I sent to you by email at the beginning of this week. As far as I am concerned this supersedes comments submitted by our asset protection team.

84. 02 October. Following our recent telephone conversation I attach for your information a copy of 43 – 8, I believe it is incorrectly referenced in government planning advice as 44-8. The issue for National Grid is that 43-8 specification details clearances required to overhead lines for electrical safety but takes no account of the impact of wind turbines on overhead lines.

85. 03 October. Overhead Transmission lines are susceptible to wind induced vibration. If additional vibration or movement is introduced that is beyond the original design capability, the route will encounter increased wear or damage leading to extra maintenance requirements, unplanned outages, shorter asset lives or ultimately conductor failure.

86. Concerns have been raised from utilities in a number of countries that land based wind farms can induce damaging vibration or low frequency oscillations on overhead lines. The wake structure behind large wind turbines is complex and its effect on OHL's has not previously been fully considered. A number of papers have been published which support this concern and following an internal review, a

recommended separation distance of 5 rotor diameters has been chosen to reduce the risk to National Grid assets.

87. National Grid is monitoring a program of ongoing research work within the UK Electricity Supply Industry to investigate this phenomenon. The results of this work are expected to be published in the first half of next year. Upon publication, National Grid expects to update current policy accordingly.

88. 09 Oct. In the light of our discussions in recent weeks concerning the scheme, National Grid has decided to withdraw its objection to the applications and to engage in dialogue with the developer to address our concerns.

Argiva (Spectrum Planning Group)

89. We have considered whether this development is likely to have an adverse affect on our operations and have concluded that we have no objection to this proposal. Both the BBC Research Department and OFCOM are interested in the effects of wind farm interference on domestic reception for BBC, ITV, Channel 4 and 5. The BBC have launched a web based tool so that wind farm developers can carry out assessments of interference to domestic reception for themselves. Any wind farm enquiries to the BBC or Ofcom now result in the enquirer being directed to this web based tool.

BBC (Web Tool)

90. Following the inputting of grid references and turbine data the BBC Web tool advised the following for each turbine:

Turbine No.	No. of homes likely to be affected for whom there is no alternative service	No. of homes which may be affected for whom there may be an alternative off air service
1	0	13169
2	0	10412
3	0	11903
4	0	10151
5	0	9821

91. This information is a rough guide and is not a substitute for an on site survey where potential impacts can be more accurately assessed.

Tees Archaeology

92. I have read the chapter concerning archaeology and cultural heritage and agree with the recommendations in paragraph 13.4.2 that a conditioned programme of archaeological works take place prior to construction should the application be granted, which should be controlled by condition.

Environmental Health Unit

93. I have no objection in principle to the development, however, I do have concerns regarding the following environmental issues and would recommend the conditions as detailed be imposed on the development should it be approved.

- Noise disturbance from wind turbines

(a) At the reasonable request of, and following a complaint to, the Local Planning Authority, the operator of the development shall measure and assess

at its expense the level of noise emissions from the wind turbine generators following the procedures described in "The Assessment and Rating of Noise from Wind Farms, ETSU-R-97" published by ETSU for the Department of Trade and Industry.

The level of noise emissions from the combined effects of the wind turbine generators on the Wind Farm when measured in accordance with section A of the guidance notes shall not exceed at any dwelling lawfully existing at the time of this consent:

During night-time hours of 2300-0700:-

Location	*Wind speed (m/s at 10m height)*									
	3	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
Cold pool	*43.0*	*43.0*	*43.0*	*43.0*	*43.0*	*44.8*	*46.9*	*49.0*	*51.1*	*53.3*
Low fields	*45.0*	*45.0*	*45.0*	*45.0*	*45.0*	*45.0*	*45.0*	*47.2*	*49.7*	*52.3*
Boy Hill	*43.0*	*43.0*	*43.0*	*43.0*	*44.1*	*46.2*	*48.5*	*51.0*	*53.6*	*56.4*
Middleton Lodge	*43.0*	*43.0*	*43.0*	*43.0*	*43.0*	*44.7*	*46.6*	*48.6*	*50.7*	*52.9*
Greenfield	*43.0*	*43.0*	*43.0*	*43.0*	*43.0*	*43.0*	*43.0*	*43.1*	*44.7*	*46.4*
Wall Lane	*43.0*	*43.0*	*43.0*	*43.0*	*43.0*	*43.0*	*44.8*	*47.2*	*49.7*	*52.3*

At all other times:-

Location	*Wind speed (m/s at 10m height)*									
	3	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
Coldpool	*40.0*	*39.8*	*40.7*	*42.0*	*43.6*	*45.4*	*47.4*	*49.4*	*51.4*	*52.3*
Lowfields	*45.0*	*45.0*	*45.0*	*45.0*	*45.0*	*45.0*	*45.6*	*47.8*	*50.1*	*52.5*
Boy Hill	*40.8*	*40.9*	*41.7*	*43.3*	*45.4*	*47.8*	*50.5*	*53.3*	*56.0*	*58.5*
Middleton Lodge	*40.4*	*40.2*	*40.7*	*41.7*	*43.3*	*45.2*	*47.3*	*49.6*	*52.0*	*54.3*
Greenfield	*40.1*	*40.0*	*40.4*	*41.0*	*41.9*	*43.0*	*44.2*	*45.5*	*46.8*	*48.2*
Wall Lane	*40.0*	*37.0*	*38.2*	*39.7*	*41.5*	*43.5*	*45.6*	*47.8*	*50.1*	*52.5*

(b) Tonal noise shall be measured by the operator of the development at its expense at the reasonable request of, and following a complaint to, the Local Planning Authority in
accordance with the procedure described in section B of the guidance notes. If, at any dwelling lawfully existing at the time of this consent, the tonal noise from the
combined effect of the wind turbine generators exceeds the threshold of audibility:-
(i) by more than 2.0dB but less than 6.5dB a penalty of ((5/6.5) x Audibility)dB shall be added to the noise level derived for that property in accordance with section A of the guidance notes.
(ii) By more than 6.5dB a penalty of 5dB shall be added to the noise level derived for that
property in accordance with section A of the guidance notes.

(c) The wind farm operator shall log wind speed and wind direction data at a grid reference to be approved by the Local Planning Authority to enable compliance with (a) and (b) above to be monitored. This wind data shall include the wind speed in metres per second (ms-1) and the wind direction in degrees from north for each 10 minute period. At the reasonable request of the Local Planning Authority the recorded data relating to 10m height above ground level shall be made available to them.

94. Where wind speed is measured at a height other than 10m, the wind speed data shall be converted to 10m height, accounting for wind shear by a method whose details shall also be provided to the Local Planning Authority.

Highways (Public Rights of Way)

95. Public Footpath no. 7 is approx. 250m from the proposed turbine no. 2. A number of other footpaths are recorded within the definitive map within the areas of Hilton and Seamer.

Urban Design (Highways and Landscape)

General Summary

96. The Head of Technical Services objects to the planning application for the Seamer Wind Farm as the information provided does not allow full consideration of development impact to be assessed. In particular, concerns have been raised as to the final routes of the abnormal load and HGV routes. Without the routes being finalised the impact on traffic on the highway and amenity of residents in Hilton cannot be fully assessed. As a result of their inconclusive assessment of impact conditions to control the final development cannot be drafted. The proposal would also result in direct landscape impacts which are considered to be avoidable.

97. Details of the objection and requirements for further studies are detailed below:

Environment Policy

98. Environmental Policy has no objections to this proposal but would recommend that a condition requiring micro-siting of turbines within the application site boundary as detailed on Drg No 5396B-07-N-059 is applied. This would allow any variation to that layout to be reviewed in terms of environmental impact.

99. It is understood that the final choice of turbine will be influenced by the outcome of the analysis of the meteorological data collected on site from the installation of the met mast which has only recently received planning consent.

This data is essential for the design and final layout of the turbines including blades and is likely to be a requirement of the turbine manufacturer's warranty. The fixed site layout of the turbines as noted above may, therefore, not be possible as this will be influenced by the wind speed and direction data gathered by the met mast. Given this fact we reiterate that should the layout vary significantly from that set out within the application there may be a need to review the relevance of aspects of the environmental impact assessment.

100. The gathering of this data will also allow an assessment of the likelihood of ice formation on the turbine blades. As icing of the blades could occur in this location where fragments of ice might be released from the blades a condition requiring that all turbines are fitted with vibration sensors. These would detect any imbalance

which might be caused by icing of the blades, in which case operation of machines with iced blades could be inhibited. It is noted that the Governments guidance in respect to the safety of turbines states that blade failure is most unlikely given their composite structure. Details of blade design would be determined following the outcome of the analysis of meteorological data collected on site. Furthermore it is noted that the fall over distance is in line with our policy regarding toppling.

Highways Comments

101. A Transport Assessment (TA) has been submitted as part of an Environmental Statement (ES) for the erection of 3No. wind turbines and associated works on land north and south of Hilton Seamer Road, East of Hilton. We object to this application as detailed below:

General

102. During pre-planning discussions for this development, the applicant outlined the abnormal load route via Hilton, but stated that the HGV route was to be via Middlesbrough and North Yorkshire. This pre-application agreement was not adhered to due to highway objections from North Yorkshire County Council, and the HGV route has subsequently changed to the same route as abnormal load route, without further consultation with Stockton Borough Council (SBC). We, therefore, object to the presumption that this is acceptable due to the potential for adverse impact to be encountered by residents of the Borough particularly those living in Hilton due to the effects of the disruption due to construction including:

- Noise;
- Vibration;
- Pollution;
- Severance.

103. Since it has been demonstrated in the ES that access to the site from a southerly direction is suitable for HGV's further investigation work needs to be undertaken on the suitability of this and other alternative routes. This should include Route E, where very little consideration has been given and would appear to be a suitable HGV route for many of the identified quarries as much of the route is along A-class highway.

104. Given that the impact cannot be fully ascertained due the uncertainty of routeing of the HGVs and their potential impact as noted above we would object to the application as the applicant has failed to demonstrate these impacts and potential mitigation measures to enable full consideration of the development to be assessed.

Strategic Road Network

105. Confirmation that the Highways Agency (HA) has been consulted and agree to the route/movement of abnormal loads on their network. We are particularly concerned that the trunk road system may not capable of travelling around the recently completed improvements at the A19(T) Portrack Interchange.

106. No swept path analysis has been submitted for Portrack Interchange and A1032 Newport Bridge Approach Road in order to see if the largest vehicle can manoeuvre through this section of highway. It is noted that Newport Bridge is the usual abnormal load route, however clarification is necessary that Newport Bridge can accommodate this size and weight of vehicle. Details should therefore be submitted for consideration by the Council's Structural Engineers. Should the abnormal load

not be able to travel along the strategic road network it brings into doubt the conclusions of the TA.

107. Confirmation that Cleveland Police, and other Police areas have been consulted and agreement reached that they will assist in the movement of abnormal loads as specified within the ES. This would be included in the Traffic Management Plan that should be conditioned.

108. Section 4.7 of the ES refers to a 'dry run' being undertaken using the largest transportation vehicle. This should be done prior to the determination of the planning application in order to ascertain if the identified abnormal load route is achievable. Without the 'dry run' it is assumed that the route, its impact and potential mitigation are not fully demonstrated. We would require this 'dry run' to be undertaken as stated or the ES amended to advise that it is not required and that the impacts are in fact fully assessed.

Street Furniture

109. Any street furniture (warning signs, street lighting) removed from position in order to allow access for the abnormal load must be reinstated immediately in order that road safety is not compromised for other road users. The ES is not proposing this therefore the mitigation measures proposed is not acceptable. In particular where it is necessary to remove street lighting columns then a condition regarding temporary lighting should be imposed on the applicant. Further discussion is also necessary on the 'fixed' traffic calming features on both approaches to Hilton Village and the potential impact the movement of the abnormal loads may have on these features. It is imperative that a physical speed reduction feature remains in place throughout the period of abnormal load movement. In addition the ES suggests sign removal on the bend at Hilton Village and relocation of the signs on the opposite side of the carriageway. It does not detail what signs these are and proposed location, and whether it can be permitted in Highway legislation to relocate these signs, therefore I am concerned that the relocation of these signs may have an adverse impact on road safety and further discussion on this is necessary. Due to the lack of clarity on the abnormal load route or its full impact on street furniture no conditions can be proposed at this stage. As a minimum a Traffic Management Plan must be provided to consider in detail all aspects of the abnormal load route. This Plan would require the applicant to enter into a S278 agreement for SBC to undertake all removal, replacement and location of street furniture, reinstatement and to provide temporary street lighting etc. The list is not exhaustive and full details of the requirements of the S278 would be detailed on agreement of route and impacts.

110. It is also noted that the route would have predictable impacts of highway trees. These impacts have not been fully assessed by the ES. Further details of impact are given in the Landscape and Visual Section of this memorandum.

111. Option 1 is the preferred choice outlined in the TA for the movement of abnormal loads through the A174 Parkway Ext. / A1045 Thornaby Road junction despite this option involving the removal of a number of signs. The alternative option does not involve the removal of any street furniture and is therefore the preferred choice of SBC. Further discussion on this choice is advised and will require detailing in the Traffic Management Plan.

Severance

112. There is little reference made in relation to the severance residents of Hilton Village would experience due to the significant number of additional vehicles, utilising this route throughout the period of construction. Further analysis of this is necessary,

including potential mitigation measures to reduce the potential effects. In addition no discussion regarding 'fear and intimidation' for residents is considered, therefore additional work is necessary and possible mitigation measures need to be considered.

Noise Pollution and Vibration

113. It appears that there is no consideration to noise, pollution and vibration effects of the HGV's through Hilton within the ES. Confirmation is therefore necessary that this has been considered appropriately and mitigation considered.

Maintenance Tracks

114. There appears to fairly extensive maintenance required for each individual wind turbine, therefore confirmation of permanent access arrangements is needed. Such arrangements to include existing uses of the farm access for agricultural use and any easements associated with the adjacent Transmission Power Lines. In addition it is stated that occasional HGV / platform vehicle access is required therefore evidence that the aforementioned vehicles can access the agreed sites is necessary, in addition to available visibility splays for this road. Notwithstanding the submitted details and this Highway response the location of the access route would not be acceptable in Landscape and Visual Terms as the requirement for visibility splays is likely to result in a loss of hedgerows that currently run along the Hilton to Seamer Road or their replacement on a line that is out of character with the existing landscape.

115. An access track to the North of the Hilton to Seamer road would be acceptable in Landscape and Visual terms if hedgerows were not to be removed.

116. As a result of Landscape and Visual concerns associated with the proposed access tracks maintenance to the turbines West of Hilton to Seamer road should be gained via the existing farm access from minor road (1st right out of Hilton) towards Middleton on Leven. Access to the eastern turbines should be gained from Stainton Road via land adjacent to Low Fields Farm. The land over which these track will cross is in the control of the applicant (blue Line boundary). A Grampian condition would be required to control the new access points. The access off Stainton Road would also require consent from Hambleton Council as the entrance to the highway network lies within their administrative boundary.

117. It is noted that HGV trips are dependent on where the internal access tracks are to be constructed as some of the trips are associated with this construction, if the access tracks require more construction then more HGV trips bringing concrete and stone etc. will be required. This cannot be finalised at this stage as the turbine locations are not agreed.

Other Issues

- Section 6.8 of the ES – Clarification of paragraph 1 is required particularly in terms of vehicular increase (1.8 – 2.0) due to the development, as it is unclear how this figure is derived.

- Working hours' for the duration of the works is not stipulated. Suggested hours would be Mon – Fri 8am – 6pm, Saturday 9am – 1pm. However, confirmation will be necessary.

- On agreement of access tracks for both construction and future maintenance reduced visibility splays for vehicles prior to construction requires confirmation as they should be 4.5m x 215m. If a speed survey is undertaken and speeds are lower than the posted limit then a reduced splay can be considered. In addition, clarification as to how many and what type of vehicles will be using the access prior to construction are required.

- Further discussion is required regarding the traffic management to be used at the access during the construction period. (i.e.: hours the TM is utilised etc). Should the application be approved then this should be conditioned as part of the Traffic Management Plan.

- Whist there appears to be conflicting information in the ES, for the purposes of this assessment we have taken the positions of the proposed to be fixed in accordance with ES Drg No 5396B-07-N-059.

- It is likely that the final design will be a maximum of 125m high and an appropriate margin of safety from the highway will be necessary.

- Government guidance on shadow flicker PPS 22 advises that in terms of highways safety that drivers are faced with a number of varied and competing distractions during any normal journey, including advertising hoardings, which are deliberately designed to attract attention. At all times drivers are required to take reasonable care to ensure their own and others' safety. Wind turbines should therefore not be treated any differently from other distractions a driver must face and should not be considered particularly hazardous. There are now a large number of wind farms adjoining or close to road networks and there has been no history of accidents at any of them.

- It should be noted that Public Footpath No.7 – Hilton, is approx. 250m from the proposed indicative location of turbine No.2, as shown on drawing Ref.53296B-04-N-037. It should also be noted that a number of other footpaths are recorded on the Definitive Map within the areas of Hilton and Seamer. These footpaths are located beyond the toppling distance and are therefore not affected by this application.

118. We therefore object to this application as there is insufficient information submitted in order to demonstrate that this development can be accommodated without adversely affecting the highway. Without the full impact being predicted it would be unreasonable and unenforceable for SBC to provide conditions for any potential approval of this application.

Landscape & Visual Comments

General

119. The Landscape and Visual Impact Assessment L&VA) chapter of the Environmental Statement (ES) has identified the impact on the landscape of the Seamer Wind Farm proposal, which is located between the villages of Seamer and Hilton. This proposal comprises 5 turbines, with a maximum tip height of 125m (typically 80m hub height and up to 45m blade length). The proposal site is located such that 3 turbines and the part of their infrastructure lie within the administrative boundary of Stockton Borough Council, while the other 2 wind turbines and remaining part of the

associated infrastructure lie within the administrative area of Hambleton District Council.

120. As landscape impact is not affected by administrative boundaries shown on maps, Stockton Borough Council has coordinated the assessment of L&VA with Hambleton District Council to ensure that a consistent approach to the assessment is achieved. Many of the potential views of the turbines would occur from a wider area (beyond our administrative boundary). As a result a L&VA study area which encompassed an area within a 20km radius of the proposed wind farm was agreed as part of the scoping study.

121. Arup was commissioned by Stockton Borough Council to undertake a review of the adequacy of the L&VA, Arup having considerable experience for work in the field of wind farm developments and being responsible for the recently published East Durham Limestone and Tees Valley Wind Resource Area Study.

Summary of Landscape and Visual Impact at Date of Opening

122. The L&VA concludes that significant adverse impacts would occur on the local landscape character of the site and on the visual amenity of receptors at the following locations: 13 dwellings or groups within 2.5km on the nearest turbine; the western side of Seamer village and locations where Hilton village is viewed in its rural setting and small local roads." The assessment does not identify the actual number of properties from the 13 listed which are located within the administrative area of Stockton Borough Council which would experience significant adverse impact. The turbines would also be visible at a distance from travellers using the A19 (T).

123. Whilst the L&V impacts would be potentially significant and adverse they would only be of a local magnitude for both the local settlements of Hilton and Seamer. There are also no landscape designations which cover the site or its immediate surroundings which may determine the final location of the wind farm. We consider that the range of receptors in the L&VA covered, their sensitivity and levels of impact are a fair assessment and would, therefore, not lead to an objection to development of the wind farm in landscape and visual terms.

124. It is noted that these impacts are based on the locations as identified on Drg No 5396B-07-N-059. These locations would allow for possible resiting of the individual turbines therefore a condition would be required to allow further assessment of any potential environmental impacts associated with final location.

125. Cumulative visual impacts were considered in the L&VA for all wind farms (constructed, permitted and those awaiting determination) within 32km of the development site. It is concluded that no significant cumulative visual impacts would occur with the construction of the proposed Seamer wind farm. Whilst we would concur with this statement it should be noted that the permitted Butterwick wind farm, near Wynyard (which will be located to the north of the constructed Walkway wind farm also near Wynyard in the administrative Borough of Sedgefield) has not been considered within the cumulative assessment. Within the LVIA the incorrect numbers of turbines for the High Volts and Trimdon Grange wind farms are stated but Figure 9.28 records the correct number. These minor discrepancies should not affect the conclusion that their will be no significant cumulative impact.

126. The degree of cumulative impact of these wind farms when viewed from higher ground of the Hambleton Hills and within the North Yorkshire National Park are considered to be insignificant due to the benefit of distance approximately 10km (the nearest part of the National Park lying 6-7km from the proposed wind farm location) and angle of view i.e. looking down onto the turbines set within the generally flat topography of the wider landscape character of the Tees Lowlands (Countryside

Commissions Landscape Character designation of this part of Northern England comprising the relatively flat topography of, Teesside, North Yorkshire and Country Durham). Our assessment of cumulative impact is based on studies undertaken s part of the East Durham Limestone and Tees Valley Wind resource areas which concluded the following Perceptual distances for Wind Farms

0-2km Turbines Likely to be a prominent feature in the landscape;
2-5km Turbines Relatively prominent in the landscape;
5-15km Turbines only prominent in clear visibility - seen as part of a wider landscape;
15-30km Turbines Only seen in very clear visibility - a minor element in the landscape.

127. The Civil Aviation Authority (CAA) will require that the turbines to be painted white and Defence Estate Operations will require that red lights are fitted to the tops of the towers. The lighter colouring of the blades (refer to mitigation section of this memorandum) and in particular the requirement to fit red lights on the towers would result in adverse visual impact continuing to occur during the hours of darkness.

128. Based on our assessment of the ES we would recommend that a condition be attached to any consent that requires the locations of the turbines to be It is fixed in accordance with ES Drg No. 5396B-07-N-059.

Access Tracks

129. An access track to the North of the Hilton Seamer road would be acceptable in Landscape and Visual terms providing the existing hedgerows are not removed for the creation of increased sightlines. However, given that increased sightlines are likely to be required the submitted location of the access route would not be acceptable in L&V terms as the revised line of hedgerow would be out of character with the existing landscape. The existing hedgerows growing in close proximity to the road follow the gentle undulation and sweep of the road and surrounding topography.

130. It is recommended to prevent removal of hedgerows that the proposed maintenance access tracks to the turbines west of the Hilton to Seamer road should, be gained via the existing farm access from the minor road (1st right out of Hilton) towards Middleton on Leven. Access to the eastern turbines should be gained from Stainton Road via land adjacent to Low Fields Farm. The land over which these tracks would cross is in the control of the applicant (blue Line boundary). A Grampian Condition would be required to control the new access points. The access off Stainton Road would also require content from Hambleton Council as the entrance to the highway network lies within their administrative boundary and under the control of North Yorkshire County Council.

131. It is recommended that the construction of the final maintenance access tracks should be non -surfaced if practicable or reinforced soil used to reduce their appearance in the open and undulating arable farmland. These tracks should run where possible along the rear of existing/proposed hedgerows to prevent the tracks becoming incongruous features in the landscape. Material choice for the tracks to be conditioned as part of any consent.

132. The LVIA has addressed the landscape aspects required by the scoping opinion issued by Stockton Borough Council apart from undertaking a detailed assessment

of the off-site electrical grid connection, although this is subject to a separate consenting regime and would be covered within that.

Mitigation

133. Suggested measures to reduce the visual impact of the proposed development include painting the turbines with *"matt grey surface finish"*. Whilst the grey colour would be an appropriate colour with the background of northern skies the turbines would in this location have to be painted white to conform with CAAs recommendations. This change in colour whilst slightly increasing visual impact would be acceptable. The colour of the turbines should be conditioned together with a ban on advertising on any part of the structure or blades.

134. The proposed location of the turbines so they are viewed as a cohesive group with no outliers from the most sensitive viewpoints is considered to be good practice. Whilst it is unlikely that there would be any views of overlapping (*"clashing"*) blades this would be reassessed as part of the discharge of condition for the micro siting of the tower positions.

135. As noted within the L&VA, that due to the height of turbines, screening of wind energy development is rarely effective as a mitigation measure. The mitigation measures proposed within the LVA are considered to be appropriate for this location. These measures are the replacement of hedgerows to screen the lower part of the turbines from views afforded from occupants of vehicles travelling along the Hilton Seamer road. The undulating and sweeping nature of the road reducing the extent of direct views afforded of the turbines when views from vehicles travelling in either direction along this road.

136. Whilst these hedgerows would be planted on land in the control of the applicant, the land lies within the administrative boundary of Hambleton Council. As such a Grampian Condition would be required to ensure these works are undertaken.

137. The mitigation measures outlined within the LVIA chapter do not provide any mitigation measures for the control building or any substation, as such a Grampian Condition would be required to ensure these works are undertaken in a manner that is acceptable to SBC.

Summary of Landscape and Visual Impact Due to Construction

138. Whilst the impact on the wider landscape and views afforded from dwelling houses, roads and public rights of way have been considered the route and access study for both HGV and abnormal load access has been conducted for the proposed development (Appendix 7) no detailed assessment of direct landscape impact has been carried out for the preferred access route.

139. Assessment of the swept path analysis of the abnormal load vehicle's movements concludes that hedgerows would require removal to create the necessary access routes. Whilst removal (and later full reinstatement) would generally be acceptable in landscape and visual grounds (dates for removal to avoid bird nesting season) the ES contains conflicting information on impacts to trees. It would appear from the Autotrack diagram (Drg no. 185497-50A1) produced for the 'S' Bend in Hilton that this diagram is in conflict with the statement by R. Collett & Sons as the significant tree pruning works to a height of 5m may be required on the 3 highway trees in ownership of SBC on the second bend in Hilton. The degree of pruning is likely in

our opinion to create un-shapely and unbalanced trees. Full mitigation of this impact would be required without which the works to trees would not be acceptable.

140. Most trees in Hilton, (species include mature Sycamore, Pine, Birch and Horse Chestnut) are protected by Tree Preservation Orders due to their very significant amenity value. However, trees in the highway whilst worth of protection due to their amenity value and positive features in the rural landscape have not been given this additional protection status as SBC the control the land and manage them in an appropriate manner.

141. Notwithstanding the submitted details and our Highway response the location of the access route would not be acceptable in Landscape and Visual Terms. A swept path analysis to avoid the true canopy extend (which will require accurate surveying on site) would, therefore, be required as part of any confirmation of preferred route. The agreement of preferred route should be conditioned as part of any consent. In addition, details of survey requirements and protection of trees shall be conditioned as part of any planning consent.

PUBLICITY

142. A total of 15 site notices were erected at strategic points around the periphery of the site adjacent to highways and within key villages, a press notice has been placed in a local newspaper as well as letters of consultation sent to residents of Hilton, Seamer and the surrounding area within the vicinity of the proposed development. In addition, prior to submitting the application, the applicant undertook a consultation exercises in the form of a public exhibition.

143. This exercise has resulted in significant response, a detailed summary of the addresses of those who have submitted a representation can be viewed in the appendices, of which 216 representations offer support for the proposal and 367 object. Significant objections have also been received from the Seamer & Hilton Wind Farm Action Group.

Those who object cite reasons, which are summarised below:

Visual Impact

- There would be significant visual impact on the surrounding landscape and scenery resulting in a detrimental impact upon views from the north Yorkshire moors National Park, Captain cooks monument and surrounding residential properties.
- There is limited natural beauty within the Tees Valley, the proposal would result in a loss of openness of the countryside
- Turbines are dominant industrial features which are out of scale with the surrounding area and out of character with the rural nature of the surrounding countryside- turbines should be sited on brownfield land within industrial areas such as Wilton or Billingham
- There will be a cumulative impact owing to other wind turbines which are visible from the site along with others around the Cleveland Hills and existing pylons.
- The proposal will require widening of roads which will result in a loss of hedgerows, verges and trees which characterize the area.
- The permanency of the design of the proposed development
- The white colour requested by the airport contradicts the grey colour suggested by the applicant to minimise the visual impact

Safety issues

- Close proximity to country road, along with shadow flicker causing a distraction to road users including drivers, cyclists, walkers and horse riders
- noise and design spooking cattle and horses resulting in an adverse affect upon horse rider safety
- Close proximity to overhead power lines and pylons
- Blade failure causing fires and resulting in debris
- Lightning and storm damage
- Ice collection and ice throw
- Impact upon Durham Tees Valley Airport radar safety with specific reference to light aircraft
- Impact upon RAF training flights
- Road network not sufficient to accommodate vehicles required resulting in traffic calming measures having to be removed therefore having an adverse affect upon highway safety
- Emergency services may not be able to deal with a turbine fire

Amenity of neighbouring residents

- Loss of views from properties
- Noise disturbance from blades and mechanical workings
- Noise disturbance at night time from construction vehicles
- Low frequency noise causing vibro acoustic disease, pulse irregularity and anxiety
- Shadow flicker resulting in effect of health of residents
- Light pollution from aircraft mitigation

Economic Impact

- Loss of agricultural land
- No benefits for local people in terms of job creation
- Wind farm development are piecemeal offerings by the government to appear to have a green policy
- Wind farms contradict government policy to further develop nuclear power
- The developer will receive a substantial amount of money from subsidies provided by the government
- The electricity would be sent to the south of the country as Teesside already generates a sufficient amount of electricity
- Money could be better used to insulate homes and promoting saving energy
- Detrimental impact upon tourism in the area

Environmental Impact

- The development would be harmful to wildlife species including birds on the RSPB red and amber list and protected species such as bats and Great Crested Newts
- The proposal would also have an impact upon badgers, foxes, deer and hedgehogs in terms of loss of habitat
- Impact upon bird including owls, woodpeckers, curlews, lapwings, goldfinches, herons and wild geese in terms of bird strike, loss of habitat and impact upon migratory routes.
- Impact upon waterfowl at Seamer Carr, a waterlogged area.
- Concrete bases resulting in poor drainage and causing flooding
- Generate additional traffic from construction and maintenance which will result in congestion and additional pollution
- Disruption to flora and fauna

Residual matters

- Data submitted by the applicant is incorrect and unreliable, specifically noise levels and traffic survey results
- Devaluation of property and detrimental impact upon saleability of properties
- Community does not want to the proposal
- Should pursue offshore wind development
- No substantial evidence that wind turbines are efficient or successful or will supply enough to meet targets
- No evidence that the site is viable in terms of wind strength
- Need a co-ordinated policy for the Teesside area with regard to renewables
- Set a precedent for wind farm development

The letters of support typically cite the following reasons:

- The impacts locally will be outweighed by the wider environmental benefits
- Wind power needs to be fully supported to combat global warming and climate change
- Wind turbines are an attractive addition to the scenery
- Could potentially turn the wind farm into a tourist attraction
- Need to protect the needs of future generations
- Wind energy is clean and free
- Britain needs to be able to generate energy without relying on imports from other countries
- Wind is a local resource which should be utilised
- The proposal would be beneficial to the local economy generating contracts for the local area

PLANNING POLICY CONSIDERATIONS

National Planning Policy

144. The relevant national planning policy statements are outlined below:
    - Planning Policy Statement 1: Delivering sustainable development and companion guide Planning and Climate Change
    - 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 Guidance 24: Planning and Noise

144. The Government's national planning policy advice, regarding renewable energy, is contained within Planning Policy Statement 22: Renewable Energy (PPS22) and its companion guide, published in 2004. It supports the development of onshore wind farms in order to facilitate the delivery of the Government's commitment to climate change and the development of renewable energy sources. This includes the commitment to generating 10% of national electricity from renewable sources by the year 2010 and the aspiration to double that figure to 20% by 2020. PPS22 advocates a plan led approach to such developments, whether through site-specific designations or the formulation of criteria based policies to guide planning applications. This guidance states that renewable energy development should be capable of being accommodated throughout England, in locations where the technology is viable and environmental, economic and social impacts can be satisfactorily addressed. Whilst PPS22 recognises the need to consider the need to

address material planning considerations, it states that significant weight should be given to wider environmental and economic benefits.

145. Within PPS22 there is an acceptance that turbine siting will always be a compromise between maximising energy capture and minimising visual impact. However the impact of turbines upon the landscape will vary according to the size and number of turbines and the type of landscape involved. With the Government's guidance it states that these impacts can be temporary if conditions are attached to planning permissions to require the future decommissioning of turbines. Planning Policy Statement 1 (PPS1) and its companion guide, Planning and Climate Change, supports this approach and provides guidance regarding how planning should contribute to reducing emissions and stabilising climate change.

Regional Spatial Strategy

146. The relevant policies within the Regional Spatial Strategy (RSS) are outlined below:
- Policy 39 - Renewable Energy Generation
- Policy 40 - Planning For Renewables
- Policy 41 - Onshore Wind Energy Development

Policy 39 - Renewable energy generation
Strategies, plans and programmes should:
a) Facilitate the generation of at least 10% of the region's consumption of electricity from renewable sources within the region by 2010 (454 MW minimum installed capacity);
b) Aspire to further increase renewable electricity generation to achieve 20% of regional consumption by 2020;
c) Require new developments, particularly major retail, commercial and residential, to have embedded within them a minimum of 10% energy supply from renewable sources; and
d) Facilitate the achievement of the following minimum sub regional targets to 2010:
- Northumberland 212MW
- Durham 82MW
- Tyne & Wear 22MW
- Tees Valley 138MW (Which includes authorities Darlington, Middlesbrough, Stockton on Tees, Hartlepool, Redcar and Cleveland)

Policy 40 - Planning for renewables
Strategies, plans and programmes should support and encourage renewable energy proposals and identify renewable resource areas. In assessing proposals for renewable energy development the following criteria should be considered:
a) wider environmental, economic and social benefits;
b) anticipated effects resulting from development construction and operation such as air quality, atmospheric emissions, noise, odour, water pollution and the disposal of waste;
c) acceptability of the location and the scale of the proposal and its visual impact in relation to the character and sensitivity of the surrounding landscape;
d) effect on the region's World Heritage Sites and other national and internationally designated sites, areas or their settings;
e) effect of development on nature conservation features, biodiversity and geodiversity, including sites, habitats and species;
f) maintenance of the openness of the region's Green Belt;
g) accessibility by road and public transport;

h) effect on agriculture and other land based industries;
i) visual impact of new grid connection lines;
j) cumulative impact of the development in relation to other similar developments; and
k) proximity to the renewable fuel source such as wood-fuel biomass processing plants within or close to the region's major woodlands and forests.

Policy 41 - Onshore Wind Development
Strategies, plans and programmes should provide a positive policy framework to facilitate onshore wind development within the following broad areas of least constraint for wind energy developments:
a) Kielder Forest has the potential to become a Strategic Renewables Resource Area,
including large scale wind energy development;
b) the following areas have potential for medium scale development:

- South and West Berwick upon Tweed
- North/ South Charlton
- Knowesgate
- Harwood Forest
- Northern Coalfield south of Druridge Bay
- Kiln Pit Hill
- North Durham Upland Coalfield
- South Durham Upland Coalfield
- Tees Plain
- Teesside/ Tees Estuary

Small wind farms in urban areas and on the urban rural fringe should also be supported, particularly within the following areas:

* Sunderland;
* South Tyneside; and
* Tees Valley.

The broad locations of these areas should be identified within Local Development Frameworks. Other areas will be judged subject to assessments of local impact.

147. The Regional Spatial Strategy (RSS) includes a plan which identifies the broad areas of least constraint for onshore and off shore wind resource areas, which is intended as a guide to appropriate turbine locations. These generally fall along the east coast, having a medium resource area being identified between Hartlepool and Stockton. However, The RSS states that this does not remove the need to consider the potential for onshore wind developments in other parts of the region. Proposals for onshore wind development both within and outside these broad areas should be assessed against the criteria contained within the RSS.

Tees Valley Structure Plan

148. The Tees Valley Structure Plan has no saved Policies which relate to the development of Wind Farms.

Local Planning Policy

149. Where an adopted or approved development plan contains relevant policies, Section 38(6) of the Planning and Compulsory Purchase Act 2004 requires that an application for planning permissions shall be determined in accordance with the

Development Plan(s) for the area, unless material considerations indicate otherwise. In this case the relevant Development Plan is: - the Stockton on Tees Local Plan (STLP).

150. There is limited planning policy, within the adopted Stockton on Tees Local plan relating specifically to this form of development, although, there is a general presumption in favour of the use and operation of renewable energy sources at both Local and National Planning Policy level. Policy EN42 relating to the development of single wind turbines is a saved policy, but is not directly relevant to the proposal to hand. The following planning policies are considered to be relevant to the consideration of this application: -

Policy GP1 – General Principles
Proposals for development will be assessed in relation to the policies of the Cleveland Structure Plan and the following criteria as appropriate:
(i) The external appearance of the development and its relationship with the surrounding area;
(ii) The effect on the amenities of the occupiers of nearby properties;
(iii) The provision of satisfactory access and parking arrangements;
(iv) The contribution of existing trees and landscape features;
(v) The need for a high standard of landscaping;
(vi) The desire to reduce opportunities for crime;
(vii) The intention to make development as accessible as possible to everyone;
(viii) The quality, character and sensitivity of existing landscapes and buildings;
(ix) The effect upon wildlife habitats;
(x) The effect upon the public rights of way network

Policy EN4 - Sites of Nature Conservation Importance
Development which is likely to have to have an adverse effect upon sites of nature conservation importance will only be permitted if:-
(i.) There is no alternative available site or practicable approach and;
(ii.) Any impact on the sites nature conservation value is kept to a minimum

where development is permitted the council will consider the use of conditions and /or planning obligations to provide appropriate compensatory measures.

Policy EN11 - Cleveland Community Forest
The planting of trees of locally appropriate species will be encouraged within the area indicated on the proposals map as community forest. In considering applications for planning permission in the community forest area the local planning authority will give weight to the degree which the applicant has demonstrated that full account has been taken of existing trees on site, together with an appraisal of the possibilities of creating new woodland or undertaking additional tree planting. In the light of the appraisal he Local Planning Authority will require a landscaping scheme to be agreed which makes a contribution to the community forest.

Policy EN13 – Limits to Development
Development outside the limits to development may be permitted where;
(i.) It is necessary for a farming or forestry operation; or
(ii.) It falls within policies EN20 (reuse of buildings) or TOUR 4 (Hotel conversions); or
In all remaining cases and provided that it does not harm the character or appearance of the countryside; where:

(iii) It contributes to the diversification of the rural economy; or
(iv.) It is for sport or recreation; or
(v.) It is a small scale facility for tourism.

MATERIAL PLANNING CONSIDERATIONS

151. The consideration of wind turbine proposals is a balance between Government Policy and commitment to the development of renewable energy resources, with a general aim of reducing carbon dioxide emissions in line with international agreements, and the protection of the environment and residential amenity of any neighbouring occupiers. In assessing the application, careful consideration has been given to the responses from specialist consultees, interested parties and local residents. Taking into account the criteria listed in Regional Spatial Strategy Policy 40 relating to renewable energy, it is considered that the key issues when assessing this case are:

- Principle of development assessed against National and Regional Policy
- Impact on Highway Safety and accessibility
- Landscape and Visual Impact including new grid connections and cumulative impacts of similar schemes
- Impact on Residential amenity
- Impact on surrounding area
- Noise Impacts
- Impact on Nature Conservation
- Impacts on Archaeology and Cultural Heritage
- Health & Safety and Other Issues

These and other relevant matters are considered as follows;

Principle of Development

152. Local Plan Policy in relation to this proposal is relatively limited and generic and as such it is necessary to consider the National and Regional Policies, which have effectively superseded the Local Policies. National Policy Guidance contained within PPS 22 supports the development of onshore wind farms in order to facilitate the delivery of the Government's commitments to climate change and the development of renewable energy sources. Both National and Regional Policies include the commitment to generating 10% of national / regional electricity from renewable sources by the year 2010 and the aspiration to double that figure to 20% by 2020.

153. Regional Spatial Strategy Policy 39 - *Renewable energy generation* gives a minimum sub regional targets for 2010 of the following areas providing the following amount of electricity produced by renewable sources:
- Northumberland 212MW
- Durham 82MW
- Tyne & Wear 22MW
- Tees Valley 138MW (which includes Darlington, Middlesbrough, Stockton, Hartlepool, Redcar and Cleveland)

154. The Regional Spatial Strategy identifies the broad areas of least constraint for onshore and off shore wind resource areas, which is intended as a guide to appropriate turbine locations which generally fall along the east coast, having a medium resource area being identified between Hartlepool and Stockton. However,

The RSS states that this does not remove the need to consider the potential for onshore wind developments in other parts of the region which should be assessed against the criteria contained within RSS.

155. RSS Policy 41 which relates to Onshore Wind Development indicates key areas where strategies, plans and programmes should provide a positive policy framework to facilitate onshore wind development. The areas listed include the Tees Plain and Teesside/ Tees Estuary having the potential for medium scale development whilst advises small wind farms in urban areas and on the urban rural fringe should also be supported, particularly within the Tees Valley, indicating that the broad locations of these areas should be identified within Local Development Frameworks and that other areas will be judged subject to assessments of local impact.

156. Objections have been received in respect to the provision of Offshore Wind Farms being more appropriate; wind farms contradicting government policy to further develop nuclear power, the local community not wanting the development and developers receiving subsidies from government. However, the proposal is considered to conform with the broad principles of the national and regional policies in relation to renewable energy and would assist in the Borough and the wider Tees Valley area meeting its targets for renewable energy generation. A number of objections have also been received in respect to their being no economic benefit for local people in terms of job creation, that electricity will be sent to the south and Teesside already generates enough electricity and that the money could be better used to insulate homes within the area and promoting energy saving. Whilst these comments are noted, to date, although there are renewable energy schemes within the Borough, or approved but not yet installed, these have a negligible contribution to the overall 2010 requirements and as such there is a government requirement for the Tees Valley Area to meet the target figures as detailed within the Regional Spatial Strategy. The future users of the energy generated from the scheme is not considered to be an issue which should affect the determination of this application.

Traffic, Transport and Highway Safety

157. The Head of Technical Services has assessed the application and has raised a number of concerns largely in relation to the impact of the proposal on the highway network during the construction phase. The Head of Technical Services considers that the applicant has failed to demonstrate the impacts and potential mitigation to enable the development to be fully assessed. In particular-

- Insufficient details to establish the final routes of the abnormal load and HGV routes;
- In the absence of such details this results in an inconclusive assessment of impact on amenity of Hilton residents in respect of noise, vibration, pollution and severance.
- Lack of clarity on the abnormal load route or its full impact on street furniture (signage, street lighting, trees etc).
- Potential number of HGV trips associated with construction (as a result of revised access points being required)

158. A number of objections have been raised in connection with the amount of construction traffic proposed through the village of Hilton and on the highway network within the area generally. Construction traffic is an expected part of any development site and the Local Planning Authority have the ability to control the number of vehicle movements to and from the site in a specified period and, where

necessary, the route of the traffic. The Head of Technical Services considers that there is insufficient information submitted in order to demonstrate whether or not the development has an adverse impact on the highway network, visual and residential amenity and as such any impact could not be adequately mitigated.

159. The Head of Technical Services has also commented on maintenance tracks indicating preferred access points gained via an existing farm access and secondary road which is considered could be dealt with by way of a condition.

160. Concern has been raised over working hours during the construction phase which could be controlled by condition in order to prevent undue impact on residential amenity.

161. Comments have been received from the Head of Technical Services in relation to safety margins from the highway, blade shearing, ice formation on blades, shadow flicker and proximity to public footpaths have been considered elsewhere within the report.

162. Several objections have been raised in respect to the impact of the turbines on the surrounding highway network. PPS 22 advises that although a wind turbine erected in accordance with best engineering practice should be a stable structure, it may be advisable to achieve a set-back from roads and railways of at least fall over distance, so as to achieve maximum safety. In addition, PPS 22 advises that; *concern is often expressed over the effects of wind turbines on car drivers, who may be distracted by the turbines and the movement of the blades. Drivers are faced with a number of varied and competing distractions during any normal journey, including advertising hoardings, which are deliberately designed to attract attention. At all times drivers are required to take reasonable care to ensure their own and others' safety. Wind turbines should therefore not be treated any differently from other distractions a driver must face and should not be considered particularly hazardous. There are now a large number of wind farms adjoining or close to road networks and there has been no history of accidents at any of them.*

163. In view of the guidance of PPS 22 and the position of the proposed turbines, it is considered that the turbines would not unduly compromise the safety of the users of the adjacent highway under normal circumstances.

Landscape and Visual Impact

164. The Head of Technical Services has considered the accompanying Landscape and Visual Impact Assessment and concluded that the landscape and visual impacts would be potentially significant and adverse, however, they would only be of a local magnitude for the local settlements of Hilton and Seamer. There are also no landscape designations which cover the site or its immediate surroundings which may determine the final location of the wind farm. We consider that the range of receptors in the L&VA covered, their sensitivity and levels of impact are a fair assessment and would, therefore, not lead to an objection to development of the wind farm in landscape and visual terms.

165. Cumulative visual impacts were considered in the L&VA for all wind farms (constructed, permitted and those awaiting determination) within 32km of the development site. The degree of cumulative impact of these wind farms when viewed from higher ground of the Hambleton Hills and within the North Yorkshire National Park are considered to be insignificant due to the benefit of distance

approximately 10km (the nearest part of the National Park lying 6-7km from the proposed wind farm location) and angle of view i.e. looking down onto the turbines set within the generally flat topography of the wider landscape character of the Tees Lowlands (Countryside Commissions Landscape Character designation of this part of Northern England comprising the relatively flat topography of, Teesside, North Yorkshire and Country Durham). Our assessment of cumulative impact is based on studies undertaken s part of the East Durham Limestone and Tees Valley Wind resource areas which concluded the following Perceptual distances for Wind Farms

0-2km Turbines Likely to be a prominent feature in the landscape;
2-5km Turbines Relatively prominent in the landscape;
5-15km Turbines only prominent in clear visibility -- seen as part of a wider landscape;
15-30km Turbines Only seen in very clear visibility -- a minor element in the landscape.

166. Reference has been made with regards to the colour of the turbines and lighting, which is required for aviation purposes, and the control of advertisements. The Head of Technical Services has advised that the necessary white colour of the turbines and blades, although being more intrusive than the proposed grey colour, would be acceptable. It is considered that these issues can be controlled by condition.

167. The landscape and visual impact of the access track has been examined and it is considered that the location and material choice can be controlled by the use of an appropriate condition, as can its degree of permanence.

168. The Head of Technical Services considers that, the proposed turbines would be viewed as a cohesive group with no outliers, thereby avoiding views of overlapping (*"clashing"*) blades from the most sensitive viewpoints, which is considered to be good practice.

169. Screening of wind energy development is rarely effective as a mitigation measure due to their height. The mitigation measures proposed within the LVA are considered to be appropriate for this location. These measures are the replacement of hedgerows to screen the lower part of the turbines from views afforded from occupants of vehicles travelling along the Hilton Seamer road. The undulating and sweeping nature of the road reducing the extent of direct views afforded of the turbines when views from vehicles travelling in either direction along this road.

170. Whilst these hedgerows would be planted on land in the control of the applicant, the land lies within the administrative boundary of Hambleton Council. These works could be the subject of a condition.

171. The mitigation measures outlined within the LVIA chapter do not provide any mitigation measures for the control building or any substation, however, these works could be subject to a condition to ensure these works are undertaken in a manner that is acceptable to SBC.

Traffic Noise

172. The applicant has indicated the majority of vehicles movement during the life of the wind farm will take place within the construction phase which is scheduled to last ten months from site entry, using a range of vehicles including;

- Low loaders
- Articulated trailer lorries
- Turbine component delivery vehicles
- Dump trucks
- Cranes

173. The majority of these vehicles are standard road vehicles such as vans and Heavy Goods Vehicles (HGVs), however the delivery of the turbines requires vehicles that are significantly longer and wider. These abnormal load vehicles will carry out 10-15 movements per month for a four month period. It is expected that the same number of abnormal load trips will be required through the decommissioning period. Details of the predicted monthly movements during the 10 month construction phase are outlined in the table below;

Activity	**Month**										
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**Total**
Mobilisation to Site and Site	331										331
Access Track Construction and Crane Pads		383	383		247	246					1259
Public Highway Works		26		25	24						101
Turbine and Anemometer			106	106		71	70				353
Connection Building	26				10	10					20
Electrical Installation					5	5	5	5			20
Turbine Transformers					6	6	4	6			22
Demobilisation and Site									25	25	50
Monthly HGV Total	**357**	**409**	**489**	**131**	**292**	**338**	**79**	**11**	**25**	**25**	**2156**
Monthly Light Vehicle	**220**	**550**	**550**	**550**	**660**	**660**	**660**	**220**	**220**	**110**	**4400**
Turbine Deliveries					**15**	**15**	**10**	**10**			**50**
Monthly Abnormal Load	**0**	**0**	**0**	**0**	**15**	**15**	**10**	**10**	**0**	**0**	**50**
Average Daily HGV	**18**	**20**	**20**	**2**	**15**	**14**	**1**	**1**	**1**	**1**	
Total Vehicle Movements	**28**	**45**	**(Max**	**(Max**	**46**	**(Max**	**(Max 96)**	**12**	**11**	**6**	

The Table below shows the maximum Annual Servicing Vehicle Traffic (as taken from ES)

Vehicle Type	Two-way trips (No.)
Car or Van	157
Access Platform/HGV	28

174. The environmental statement which accompanies the application indicates that when this data is compared to base traffic data from a survey carried out by Stockton Borough Council in January 2006 there will be a maximum hourly increase on the Seamer Hilton Road of up to 14% during the main construction period. Given the existing low hourly traffic figures on this road, the overall increase, in cars per minute, increases from 1.8 to 2.0. However the applicant has indicated mitigation proposals to off-set the impacts. The proposed mitigation measures would be included as part of an agreed traffic management plan which could be dealt with by planning condition.

Turbine Noise

175. The relevant guidance document to assess wind farm noise in the UK is the ETSU-R-97 'The Assessment and Rating of Noise from Wind Farms (1996)' which provides a framework for the measurement of noise from wind farms and for reaching suitable limits for suitable protection from such for neighbours. An assessment of the existing background and anticipated noise levels upon operation of the wind farm, have been submitted with the application which has included assessment from the closest residential properties.

176. Applications for Wind Farms do not usually specify a precise model of turbine during the application process in order to retain flexibility in this regard. Instead, they specify a maximum height and maximum noise levels predicted. In instances where the scheme and its predicted noise levels are deemed to be acceptable, it is appropriate for the Local Planning Authority, where recommending approval, to condition the maximum noise levels allowable from the turbines and for monitoring surveys to be undertaken where necessary.

177. The submitted noise assessment, indicated as being based on a worst case scenario (a receiver height of 2m above ground level, hard ground, no screening effects and an air absorption based on a temperature of 10deg C and 70% relative humidity) shows that the predicted wind farm noise emission levels meet the ETSU-R-97 derived noise limits under all weather conditions and at all locations for both quiet day time and night time periods.

178. Having considered the submitted information, the Councils Environmental Health Unit have raised no objection in principle to the development, however, as the exact model of the turbines is unknown, it would be necessary for adequate conditions be imposed on the development, should it be approved, in order to adequately control the noise emissions from the wind farm. Such conditions should require the developer to measure and assess the level of noise emissions from the wind turbine generators and allow the Authority to limit the maximum cumulative noise impact of the wind farm.

179. A number of objections have been raised in respect to noise pollution as a result of the proposed turbines as well as the noise assessment being based on a 2MW turbine and not a 3MW turbine as proposed by the scheme. Whilst these comments are noted, the predicted noise levels are considered to be acceptable and were the application to be approved, the wind farm would be restricted by planning condition

to these accepted noise levels and it would therefore be for the applicant to install and operate turbines within these restrictions.

Low Frequency Noise

180. Planning Policy Statement 22 states:
'There is no evidence that ground transmitted low frequency noise from wind turbines is at a sufficient level to be harmful to human health. A comprehensive study of vibration measurements in the vicinity of a modern wind farm was undertaken in the UK in 1997 by ETSU for the DTI (ETSU W/13/00392/REP). Measurements were made on site and up to 1km away in a wide range of wind speeds and direction. The study found that:
- *Vibration levels 100m from the nearest turbine were a factor of 10 less than those recommended for human exposure in critical buildings (i.e. laboratories for precision measurement).*
- *Tones above 3.0 Hz were found to attenuate rapidly with distance – the higher frequencies attenuating at a progressively increasing rate.*

181. In view of this guidance and there being no sensitive properties within 100m of any turbine, although objection has been raised in respect to Low Frequency Noise emission it is considered that the proposed wind farm would not unduly compromise residential amenity, health or similar as a result of low frequency noise emission.

Nature and Conservation

182. The application has been submitted with protected species surveys and proposed mitigation measures as well as character assessments and considerations of impacts on landscapes and surrounding designated areas.

183. The proposal has been considered by Natural England with regard to Ecological issues and some landscape related issues and also considered by the Councils Urban Design Team in consultation with an independent consultant in respect to landscape impact matters.

184. The applicants submitted information indicates that there are bats, great crested newts and Brown Hare within the locality of the site and that the site offers potential habitat for White Clawed Crayfish. In considering the findings of the ecological surveys and the proposed mitigation, Natural England has objected to the proposed scheme on the grounds that the application contains insufficient survey information to demonstrate whether or not the development would have an adverse effect upon legally protected species, specifically, Bats, Great Crested Newts and White Clawed Crayfish. .

185. Natural England consider that, as there are trees present within the site that have the potential to support bat roosts and key survey work does not appear to have been carried out, additional information has been requested. It is further considered that proposed mitigation does not address all potential impacts on bats and their roosts. In addition, Natural England state that the design of the proposal should be amended to ensure that the turbines are located a greater distance than 50 metres from all potential bat commuting, foraging and roosting habitats.

186. Natural England consider the survey for great Crested Newts does not meet the recommended standards and as such the size of the population may have been

underestimated, and the mitigation may therefore be insufficient. It is therefore advised that additional work should be carried out to ascertain the population size to enable accurate impact assessment and appropriate mitigation.

187. The Environmental statement makes reference to the fact that the site is a suitable habitat for white clawed crayfish and Natural England advise that specific surveys are required to take to place, in accordance with PPS9 and paragraphs 98 and 99 of Government Circular 06/2005, to determine whether or not they are present and are likely to be effected by the proposal, which requires information to be submitted prior to determination of the application. In the absence of sufficient information relating to the schemes impact on Protected Species being submitted, it is considered that an adequate assessment of the impacts of the scheme cannot be made and as such adequate or appropriate mitigation can also not be agreed. Circular 06/2005 as indicates that;

> *'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'.*

188. As such, the proposed scheme would be contrary to the guidance of Circular 06/2005, PPS 9 and Policy GP1 of the Stockton on Tees Local Plan.

189. The site is located approximately 550m to the east of a Site of Nature Conservation Interest (SNCI) designated under Policy EN4 of the Stockton on Tees Local Plan. The impact on Protected Species and Ornithology are considered elsewhere within this report. Notwithstanding that the development has a limited footprint and that the land between the turbines and the SNCI remains agricultural land, there is still some doubt that the development would not unduly compromise this designated area.

Ornithology

190. The Environmental Statement has considered the impacts of the scheme on birds, indicating that there are no areas within the site, which are specifically protected for Ornithological importance. A number of site surveys have been undertaken to ascertain flight patterns, breeding bird potential and frequency of presence. Natural England accept the table of significance submitted within the EA and have concluded impacts on nesting birds can be mitigated by appropriate timing of works to hedgerows etc.

191. The RSPB have raised no objection to the scheme, being of the view that the surveys carried out are of an appropriate nature, timing and duration to assess the movement of birds through the wind farm area and that these surveys have revealed a limited number of migratory waterfowl flight paths through the proposal site. The RSPB further comment that only low numbers of species that could be associated with the North York Moors Special Protection Area (SPA), the Teesmouth & Cleveland Coast SPA (and their composite SSSIs) have been recorded using the proposal site. Therefore, the Environmental Statement's conclusion that the proposal will not impact the integrity of the two SPAs is in all likelihood an accurate one.

192. In view of the comments received by both Natural England and the RSPB, it is considered that the wind farm would not have significant undue impacts on bird populations subject to adequate conditions being imposed were the application to be approved.

Protected sites

193. Owing to the distance away from the boundary with the North York Moors Special Protection Area, Natural England has no objection to the proposal, in respect of protected nature conservation sites, as it is considered that it would not be likely to have a significant effect on the internationally importance features of the North York Moors Special Protection Area or any of the features of the North York Moors Site of Special Scientific Interest (SSSI).

Archaeology & Cultural Heritage

194. The Environmental statement which accompanies the application states that there is some potential for remains of all periods to be present. If features are present, given the regional importance, preservation by record is considered to constitute appropriate mitigation. Tees Archaeology is satisfied that the proposed mitigation is acceptable in this location and has advised that they have no objection subject to the imposition of an adequate condition. An appropriate condition has been recommended accordingly.

195. The proposed development, although large and viewable from distance, is not considered to have significantly detrimental impact on any listed buildings, historic parks or gardens or other such designated sites as the turbines are not considered to impact on the immediate setting of such, thereby allowing them to retain their form and presence within their locations.

Air Traffic Safety (Aviation and Radar)

196. Wind turbines and wind farms can affect military and civil air traffic movement and safety as either a physical obstruction to low flying aircraft or through effects on aeronautical radar systems. Physical obstructions may necessitate mitigation either by the wind farm developer or by the aviation sector if deemed necessary where as impacts on radar manifest themselves as 'radar clutter' on radar returns, which when from multiple turbines can appear as fast moving objects, mimicking the returns from aircraft themselves. Where such effects are acceptable or can be mitigated against sufficiently to allow a development to be consented the Civil Aviation Authority or Ministry of Defence can often require detailed installation information to be submitted

197. The Civil Aviation Authority had advised that it is essential that the Durham Tees Valley Airport Operator, NATS and the MoD be consulted and given the opportunity to comment, that there might be a requirement to install aviation lighting to some or all of the turbines, that the rotor blades and upper 2/3rds of the mast may require to be painted white, that details will have to be supplied to the Defence Geographic Centre to allow their plotting on aeronautical maps.

198. The site falls within the line of sight for Durham Tees Valley Airport and the Ministry of Defence's air traffic control radar at Leeming Bar. The anticipated effects have been assessed as manageable and no objections have been raised by Durham Tees

Valley Airport or the Ministry of Defence. However, the MoD have requested that if permission is granted that certain information be supplied to them prior to installation and that the turbines are fitted with directional red lights at the highest practicable point. Conditions are recommended to address both these issues.

199. In view of the requirement for lighting of the turbines by the MoD, in accordance with the guidance received from the Civil Aviation Authority it is also considered necessary to ensure the turbines are painted white. Any approval could be conditioned accordingly.

200. National Air Traffic Services have advised that their technical and operational safeguarding teams have examined the proposal against impacts on navigational aids, air to ground voice communication and radar, and although the proposal is likely to impact their electronic infrastructure they have no safeguarding objection to the proposal.

201. Newcastle Airport has advised that they have no objection to the above proposal, which lies, beyond their 30km consultation zone.

202. In view of these responses, although a number objections have been received with respect to impacts of the development on safety of air traffic and on the impacts on RAF training flights it is considered that the above, based on consultee responses has adequately assessed these impacts.

Wind Turbine Icing

203. A number of objections have been raised with respect to the potential for ice forming on the turbine blades and this ice becoming detached once the turbines start rotating and building speed.

204. Planning Policy Statement 22 states:
'The build up of ice on turbine blades is unlikely to present problems on the majority of sites in England. For ice to build up on wind turbines particular weather conditions are required, that in England occur for less than one day per year. (Wind Energy Production in Cold Climates (WECO) (ETSUW/11/00452/00/REP). In those areas where icing of the blades does occur, fragments of ice might be released from the blades when the machine is started. Most wind turbines are fitted with vibration sensors which can detect any imbalance which might be caused by icing of the blades, in which case operation of machines with iced blades could be inhibited'.

205. In view of Government guidance, it is considered that icing of blades would not be a significant risk to health or safety subject to the imposition of a condition requiring sensors, which would detect ice, build up on the blades, being an integral part of the turbines.

206. Neighbour comment has been submitted relating to potential ice throw from turbines, which are static and as such would not be prevented from such a mechanism as mentioned above. Whilst these comments are noted, there is no government guidance which has been obtained which indicates that ice throw from a static turbine would be an issue. As such, working to the latest government guidance in this respect and without there being clear evidence submitted to support this, it is considered that the scheme is suitably located in respect to public rights of way in order to prevent undue safety risks in this regard.

Shadow Flicker

207. Objection has been raised in respect to shadow flicker, which it is advised within governments PPS 22 companion guide, that,

A single window in a single building is likely to be affected for a few minutes at certain times of the day during short periods of the year. The likelihood of this occurring and the duration of such an effect depends upon:

- *the direction of the residence relative to the turbine(s);*
- *the distance from the turbine(s);*
- *the turbine hub-height and rotor diameter;*
- *the time of year;*
- *the proportion of daylight hours in which the turbines operate;*
- *the frequency of bright sunshine and cloudless skies (particularly at low elevations above the horizon); and,*
- *the prevailing wind direction.*

Only properties within 130 degrees either side of north, relative to the turbines can be affected at these latitudes in the UK – turbines do not cast long shadows on their southern side.

The further the observer is from the turbine the less pronounced the effect will be. There are several reasons for this:

- *there are fewer times when the sun is low enough to cast a long shadow;*
- *when the sun is low it is more likely to be obscured by either cloud on the horizon or intervening buildings and vegetation; and,*
- *the centre of the rotor's shadow passes more quickly over the land reducing the duration of the effect.*

208. PPS 22 further advise that shadow flicker can be mitigated by siting wind turbines at sufficient distance from residences likely to be affected. Flicker effects have been proven to occur only within ten rotor diameters of a turbine. Therefore if the turbine has 90m diameter blades as being proposed, the potential shadow flicker effect could be felt up to 900m from a turbine. The nearest property in Hilton is shown to be 900m away whilst the nearest property in Seamer is shown as being 1000m away. There are approximately 10 dwellings within 900m of the turbines, some of which lie to the south which it is advised cannot be affected by shadow flicker. As such, in view of their location and the array of factors which impact on shadow flicker, this is not considered to be a significant issue.

TV Interference

209. Wind farms and individual turbines can interfere with radio communications links and broadcast transmissions. Despite careful siting of turbines to reduce this risk, impacts can remain uncertain until turbines become operational. There are normally several options for addressing such interference including realigning the television ariel and retuning televisions or through the provision of digital television to households.

210. The applicant has advised that no radio-communication links have been identified as crossing or being in close proximity to the site whilst there has been no objections raised from such communication providers.

211. The BBC have been consulted via their web tool which advises that there are no dwellings which would be affected by the wind farm for which their would not be an alternative option to gain a signal. This is however only a tool for an approximate

assessment and as such, were the application to be approved, it is recommended that a suitable condition be imposed which requires any signal interference problems to be rectified by the developer should any occur.

Impact upon Tourism

212. Objection has been raised in respect to the potential for the wind farm to impact on tourism within the area, mainly as a result of the visual impact of the turbines on the character of the surrounding countryside and the North Yorkshire Moors National Park.

213. Whilst there is a network of footpaths around the site where clear views would be achieved of the wind farm and which would be significantly dominated by the turbines, it is considered that the turbines would not unduly affect the use of these footpaths. The Ramblers Association and the Highways Officer of the Borough Council have raised no objection to the turbines or their impacts on the surrounding rights of way network.

214. The North Yorks Moors National Park Authority concurs with the view of the Environmental Statement that there will be an adverse cumulative visual impact from the development on views in and out of escarpment and hilltop sites within this part of the National Park including Captain Cooks Monument and Roseberry Topping. The North Yorks Moors National Park advise that they also recognises the need to accommodate suitable renewable energy developments in the Region and have requested that the Planning Committee give due consideration to the adverse impact likely to accrue from the development on the distant setting of the National Park when assessing the harm and benefits of the development.

215. There are no known significant tourist attractions within the immediate vicinity of the proposed wind farm. Tourist attractions further afield such as the North Yorkshire Moors National Park and the Captain Cook monument are considered to be of a sufficient distance away to prevent any significant undue impact on tourism, taking into account the backdrop of Teesside when viewing the site from these area.

Impact on Overhead Power Lines

216. During the scoping for the proposed wind farm and its impacts, and during the early stages of this application the National Grids standing advice in relation to proximity of wind farms to overhead lines was as follows;

'If your proposals include the installation of wind turbines then clearance between the maximum blade tip height and the overhead line should never be less than 20m in the unlikely event of the turbine falling towards the overhead line.'

217. The location of turbines as indicated within this application meets this safeguarding criteria which is designed to prevent interference with the National Grid Apparatus should a wind turbine topple.

218. National Grid did object to the scheme part way into the application process, however, have withdrawn their objection, advising that they are engaging in dialogue with the developer.

219. In view of there being no objection raised from the National Grid and the siting of turbines meeting with their topple distance criteria, although there have been a number of objector comments in respect to the impact of the turbines on overhead lines, the proposed development is considered to be acceptable in this regard.

Grid Connection

220. The Environmental Statement has listed several options for making a connection to the National grid from the turbines, although it is advised that connection directly into the 400kV line which crosses the site is not possible due to loading issues as are connections to 11kV lines. As such, the grid connection study has focussed on connection into the 33kV system. The applicant advises that 4 options have been assessed against network capacity and fault levels although a specific connection has not been selected as a preferred option. Within the ES, options include the following;

- 4 km connection into the Rudby substation,
- 3km connection into the Bowesfield – Rudby overhead line,
- 3km connection into a new sub station on the Bowesfield to Rudby line,
- 1km circuit to a new substation on the Bowesfield to Stokesley Circuit,

221. All options highlight the benefits of underground routing of the grid connection cables. The applicant has advised that under grounding grid connection cables can occur on the site which is in the control of the applicant, however, the applicants landscape consultant considers that over ground cables, fixed to wooden poles, is a relatively common feature of the wider landscape and does not specifically consider that under grounding of cables is necessary on this site.

222. The routing of the grid connection would ultimately require a separate agreement with NEDL which would determine the precise nature and scale of the connection. Furthermore, these works may fall within the scope of 'Permitted Development' for which planning permission would not be required. In order to ensure a satisfactory impact is achieved a condition could be imposed relating to connection apparatus on land within the applicants control.

Property Prices

223. Whilst the influence of the development upon property prices within the area has been the basis for many objections to the proposal this is not a material planning consideration when assessing a planning application.

Viability of the Site

224. A number of objections have been received in respect to the viability of the site, that they are efficient or that they will supply enough energy to meet targets taking into account wind yield and other factors. Milton Keynes Council was recently challenged on their decision to grant permission for a wind farm consisting of 7 turbines. The challenge failed after the high court held that the viability of the scheme was a matter for the developer and not the Local Authority. In view of this decision, it is considered that the economic viability of the proposal is not a material planning consideration.

Trust Fund

225. Separate to the planning application, it is relatively common practice for wind farm developers to set up and manage 'Community Trust Funds' where monies are paid into the fund by the owner of the wind farm which are then used in association with development works which benefit the communities local to the site of the wind farm. The community funds are not normally a requirement of the planning system as the planning process is already required to consider the impacts of any development and ensure adequate mitigation is made via imposition of conditions or legal agreements. Therefore, the community funds are undertaken by the wind farm operators above any requirements of the planning system.

226. Broadview Energy Ltd's Interim Statement of Community Involvement as referenced within Section 3, Appendix 5.3, Volume 4, of the Environmental Statement details the applicant's intentions towards the provision of a community fund. The Environmental Statement advises the following;

Broadview proposes to contribute approximately £2000 per MW per annum to a community benefit fund. It will work with the community, school and local groups to decide the best use of this fund. This could be used to improve energy efficiency and implement micro renewable generation schemes. A copy of the community fund details is appended to this report for information purposes only.

227. The overall site (including the turbines located within Hambleton District) is expected to produce 15MW of electricity per year, which indicates an approximate trust fund value of £30,000 per year totalling £750,000 over its lifetime of 25 years. However, in view of this not being a requirement of the planning process in this instance, the level of any trust fund is not considered to be a material planning consideration.

Decommissioning

228. In order to ensure the turbines are not left as a landscape feature when their effective life has ceased it is considered necessary to condition the requirement for their decommissioning and removal (including ancillary works) and for the reinstatement and restoration of the site following the expiration of their anticipated life span which is indicated as being 25 years. This would be controlled by an appropriate condition.

229. It is further considered appropriate to require the decommissioning of the site in instances where the site becomes inoperable on a long term basis as the significant impact of the turbines would no longer be justified on the character and appearance of the landscape and its surroundings and on the amenity of local residents. This would again be controlled by an appropriate condition.

Turbine Location

230. It should be noted that the application site boundary effectively shows a zone for the siting of the turbines, which has allowed a broad assessment of their impact to be considered. Given that there may be a requirement for a degree of flexibility for the final siting (micro siting) within the zones, for example, taking into account ground conditions, however movements within these parameters is not considered to give rise to any fundamental issues which have not already been addressed within this

report. Furthermore, the development if approved and installed would need to accord with the Environmental Statement as submitted.

Other Matters

Impact on Horse riding

231. Objection has been raised in respect to the movement of the wind turbines and its associated noise startling horses, which use the bridleways and road networks within the surrounding locality. The latest guidance from the British Horse Society in relation to wind farms indicates that;

'as a starting point when assessing a site and its potential layout, a separation distance of 4 times the overall height should be the target for National Trails and Ride UK routes, as these are likely to be used by equestrians unfamiliar with turbines, and a distance of 3 times overall height from all other routes, including roads, with the 200m recommended in the Technical Guidance to PPS 22 being seen as the minimum, where it is shown in a particular case that this would be acceptable. The negotiation process recommended in PPS 22 should indicate whether, in the particular circumstances of each site, these guidelines can be relaxed or need strengthening to minimise or eliminate the potential difficulties.'

232. However, the companion guide to PPS 22 advises;
The British Horse Society, following internal consultations, has suggested a 200 `metre exclusion zones around bridle paths to avoid wind turbines frightening horses. Whilst this could be deemed desirable, it is not a statutory requirement, and some negotiation should be undertaken if it is difficult to achieve this.

233. The nearest bridleway to the site within Stockton Borough lies immediately to the south of Hilton approximately 1290m from the nearest turbine, thereby exceeding the upper guideline of the British Horse Societies Distance criteria. The turbines also exceed these spacing guidelines form the majority of the surrounding highway network, although are located within 140m of the main Hilton to Seamer Road. In view of this road having a 60mph speed limit and thereby accommodating fast moving vehicles, and part of the proposed mitigation being to plant new hedgerows along the road side which will in part screen the turbines, it is considered that there would not be any significant undue impact on horse riding along the local highway network.

Turbine Safety

234. A number of objections have been received in respect to the safety of the turbines. The companion guide to governments PPS 22 advises that;
'Experience indicates that properly designed and maintained wind turbines are a safe technology. The very few accidents that have occurred involving injury to humans have been caused by failure to observe manufacturers' and operators' instructions for the operation of the machines. There has been no example of injury to a member of the public. The only source of possible danger to human or animal life from a wind turbine would be the loss of a piece of the blade or, in most exceptional circumstances, of the whole blade. Many blades are composite structures with no bolts or other separate components. Blade failure is therefore most unlikely. Even for blades with separate control surfaces on or comprising the tips of the blade, separation is most unlikely. The minimum desirable distance between wind turbines

and occupied buildings calculated on the basis of expected noise levels and visual impact will often be greater than that necessary to meet safety requirements. Fall over distance (i.e. the height of the turbine to the tip of the blade) plus 10% is often used as a safe separation distance.

235. Cleveland fire brigade has raised no objection to the proposed development and as such concerns over the safety of the turbines, taking into account the turbines being located in excess of topple distance away from all publicly accessible areas, it is considered that there are no issues of safety raised by the proposed turbines.

Loss of agricultural land

236. Objection has been made in respect to the loss of agricultural land, which although will occur, the loss will be limited as agricultural operations will be able to continue to occur right up to the base of the turbine foundations without affecting the turbine operation, as advised within the governments companion guide to PPS 22. This is therefore considered to be a negligible loss.

Surface Water

237. The Environment Agency and Northumbrian Water have raised no objections to the scheme in respect to surface water run off or the scheme affecting drainage within the area. The concrete bases associated with the turbines are relatively small within the wider landscape whilst access tracks and crane hard standings are indicated as being of permeable construction. As such, although objection has been raised in respect to the potential flooding and poor drainage being caused by the development, it is considered that the scheme would not significantly affect such. However, were the application to be approved it is considered necessary to attach a condition which would control any surface water run off entering the highway.

Toilet facilities and foul drainage

238. The Environment Agency has requested information be submitted and considered in respect to the proposed toilet facilities to be provided at the site, prior to determination of the application. The applicant has submitted information which indicates portaloo type toilet facilities would be provided on site during the construction phase of the development, which would be removed off site once complete. These details have been forwarded to the Environment Agency who are considering the information. The Environment Agency previously advised that some scheme would be achievable and acceptable on the site and were the application to be approved it is considered a toilet provision and foul drainage scheme could be dealt with by condition.

Setting a precedent for Wind Farm Development.

239. A number of objections have been received based on this proposal, if approved, setting a precedent for other wind turbines, however, all applications are considered on their own merit and any subsequent proposals for wind turbines either at this site or other sites, would need to be considered at the time of submission, against all relevant policy and guidance.

CONCLUSION

240. It is considered that there has been insufficient information submitted in respect to construction traffic arrangements and in respect to the impact of the scheme on protected species and as such, the precise impacts and potential mitigation of impacts cannot be fully considered. As such the proposed development is considered to be contrary to the guidance of the requirements of ODPM Circular 06/05 Biodiversity and Geological Conservation, PPS 9 Biodiversity and Geological Conservation and Policy GP1 of the Stockton on Tees Local Plan which require adequate consideration of impacts to be made prior to determination of the application.

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Financial Implications – As report

Environmental Implications – As report

Legal Implications – As report

Community Safety Implications – As report

Human Rights Implications –
The provisions of the European Convention of Human Rights 1950 have been taken into account in the preparation of this report

Background Papers –
Planning Application Reference No. 08/2372/EIS and accompanying documents.

Planning Policy Statement 1: Delivering Sustainable Development and Companion Guide: Planning and Climate Change
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 Guidance 24: Planning and Noise

Adopted Stockton on Tees Local Plan (June 1997)
Adopted Tees Valley Structure Plan (February 2004)
Regional Spatial Strategy

WARD AND WARD COUNCILLORS

Ward	**Ingleby Barwick East**
Ward Councillor	**Councillor K C Faulks**
Ward Councillor	**Councillor D C Harrington**
Ward Councillor	**Councillor A M Larkin**