

**DELEGATED**

**AGENDA NO**

**PLANNING COMMITTEE**

**DATE 1<sup>st</sup> July 2009**

**REPORT OF CORPORATE DIRECTOR,  
DEVELOPMENT AND  
NEIGHBOURHOOD SERVICES**

**09/0736/EIS**

**Land on South Side, Seamer Road, Hilton**

**Revised application for erection of 3 no. wind turbines together with associated crane pads, access tracks, site compound, control building, meteorological mast and access to public highway.**

**Expiry Date 27<sup>th</sup> July 2009**

### **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. The generic appearance of a turbine is 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 181 representations of support have been received and 393 of objection. Objections to the scheme relate mainly to visual impact of the turbines on the surrounding landscape and residential areas, highway safety, turbine safety, residential and public amenity, economic, environmental reasons and inefficiency of turbines. 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. Other comments 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.

Natural England considers that subject to a marginal movement of turbine no.4 that the impact on protected species can adequately be mitigated against.

Potential Noise generation has attracted significant objection, however, the councils Environmental Health Officers have assessed the noise data supplied and, subject to

conditions, are satisfied that noise would not be a significant impact for surrounding and nearby residents. A series of conditions are necessary to deal with noise and potential effects on nearby properties. While the conditions suggested are quite complex in their format, requiring a separate schedule of guidance notes, it is considered that they offer a level of protection for local residents that is properly enforceable. Having compared these conditions to their equivalents, attached to some of the earlier wind farm planning permissions nationally, the proposed noise conditions reflect the most recent wind farm appeal decisions and the recommended noise conditions which would be imposed are considered to significantly improve the level of protection to local residents. In particular, the onus for measurement of noise emissions is placed on the operator not the Council. It is considered that the conditions would ensure that any noise and disturbance from the wind farm, that had an undue impact on the living conditions of any local resident, could be dealt with. There is also protection offered by other legislation notably in terms of statutory or private nuisance.

Regard must clearly be had to the seriousness of climate change and its potential effects or the need to reduce carbon dioxide emissions through, amongst other measures, the use of renewable forms of energy. Security of supply is also an important issue.

The concerns of local residents have been fully considered and taking into account the material planning considerations the proposal is considered to be in accordance with national, regional and local planning guidance and is accordingly recommended for approval with conditions.

## **RECOMMENDATION**

**Planning application 09/0736/EIS be Approved subject to the following conditions**

### **CONDITIONS: PRE COMMENCEMENT**

#### ***SURFACE WATER DRAINAGE – Environment Agency & Highways***

*No development approved by this permission shall be commenced until a scheme for the provision of a surface water drainage system, including a means of attenuation to no more than existing discharge rates, has been approved by the Local Planning Authority. The scheme shall include details of how surface water run off shall be prevented from entering the highway and long term management responsibilities. The scheme shall be implemented before the construction of impermeable surfaces which are to drain into the approved drainage system unless otherwise agreed in writing by the Local Planning Authority.*

*Reason: To prevent the increased risk of flooding by ensuring the provision of a satisfactory means of surface water disposal.*

#### ***PHASED ARCHAEOLOGICAL WORK – Tees Archaeology***

*No development shall take place within the area indicated until the applicant, or their agents or successors in title, has completed the implementation of a phased programme of archaeological work in accordance with a written scheme of investigation submitted by the applicant and approved in writing by the local planning authority. Where important archaeological remains exist provision should be made for their preservation in situ.*

*Reason: The site is of archaeological interest.*

**TURBINE POSITIONING (Micro siting)**

*Notwithstanding details hereby approved, the wind turbines and their associated access tracks shall be sited within 50m of the positions indicated on plan ref: 5396B-07-N-075 Issue 2, Figure 2.7 of Part 3 of the Environmental Statement Addendum in accordance with a final scheme of siting to be first submitted to and approved in writing by the Local Planning Authority.*

*Reason: To provide marginal scope for micro siting whilst ensuring the development does not differ materially from the submitted proposal.*

**TURBINE COLOUR**

*Notwithstanding details hereby approved, the turbines and all their attached parts shall be of a colour to be first submitted to and agreed in writing by the Local Planning Authority.*

*Reason: In the interests of aviation safety and landscape impacts.*

**AVIATION LIGHTING – MoD**

*Prior to the erection of any wind turbines hereby approved a scheme of Aviation lighting shall be submitted to and approved in writing by the Local Planning Authority. The submitted scheme shall detail the position, type and luminance of lighting, timing for it becoming operational and a method statement for reporting any known failure of the lighting to the both the MoD and Durham Tees Valley Airport. Once installed the approved scheme shall be operated and maintained for the life of the wind farm unless otherwise agreed in writing by the Local Planning Authority.*

*Reason: In the interests of aviation safety.*

**MoD and DTVA NOTIFICATION**

*Both the Ministry of Defence and Durham Tees Valley Airport shall be notified in writing, a minimum of 4 weeks in advance of the following at the addresses below; The date construction on site commences, including timing for the erection of each turbine,*

- The date construction on site ceases,*
- The maximum height of construction equipment,*
- The latitude and longitude of each turbine.*

*Each submission of details shall be accompanied by the site address, grid co ordinates and Local planning Authority's Planning Application reference number.*

*Reason: In order to inform individuals responsible for aviation safety within the area.*

*Address: MoD  
DE Operations North Safeguarding Wind Energy  
Kingston Road  
Sutton Coldfield  
B75 7RL*

*Address DTVA  
Mr Phil Holmes  
Senior Air Traffic Engineer  
Durham Tees Valley Airport  
Darlington*

**CONSTRUCTION TRAFFIC MITIGATION – videographic survey**

*The developer shall submit to the local planning authority a videographic survey of the routes to be used for the construction of the turbines within the administrative boundary of Stockton on Tees. The videographic survey shall be submitted one month prior to the commencement of development and a joint visual inspection shall be arranged with the local highway authority prior to commencement. The applicant shall secure means by which any damage or required works to the highway shall be repaired/made good – at the applicant’s expense in accordance with the written approval of the highway authority in respect to timing for repair works to be undertaken.*

*Reason: In order to ensure the transport phase of the construction works does not unduly affect the highway network.*

**CONSTRUCTION MANAGEMENT PLAN**

*Prior to the commencement of the development hereby approved, a Construction Management Plan shall be submitted to and approved in writing by the Local Planning Authority. The Construction Management Plan shall include but not be restricted to detailing the following;*

- *Site information*
- *Programming*
- *Traffic disruption*
- *Visibility*
- *Temporary widening*
- *Running surfaces*
- *Narrow lanes*
- *Temporary Safety barriers and Safety zones*
- *Routes for emergency vehicles*
- *Routes for diverted vehicles*
- *Non motorised users*
- *Abnormal Load Movements*
- *Operational hours*
- *Vehicle recovery*
- *Incident management*
- *Temporary TROs*
- *Signing*
- *Consultation*
- *Detailed layout of Traffic Management scheme*
- *Speed control/Co-ordination with other roadworks*
- *Off highway parking for vehicles waiting to access the site.*
- *Temporary lighting*

*Throughout the construction phase, the Construction Management Plan shall be implemented in accordance with the approved details, and any changes to the plan shall only be permitted by prior written consent from the Local Planning Authority.*

*Reason: In the interests of highway safety and free flow of traffic on the Strategic Road Network in accordance with the requirements of Policy GP1 of the Stockton on Tees Local Plan.*

**ABNORMAL LOADS – DRY RUN**

*Notwithstanding details hereby approved, prior to commencement of the development, a 'dry run' for transporting the abnormal loads to the site shall be carried out. The Local Planning Authority shall be informed in writing of timing of the dry run 2 weeks prior to its operation. A written statement of the findings of the dry run shall be submitted in writing to the Local Planning Authority prior to any commencement of development on site.*

*Reason: In order to address any unforeseen impacts of transporting the Abnormal Loads to site.*

#### **WHEEL WASH FACILITY**

*Notwithstanding details hereby approved and prior to commencement on site, wheel washing facilities shall be installed at the site in accordance with a scheme which has first been submitted to and approved in writing by the Local Planning Authority. The wheel washing facilities shall remain in place and operational throughout the construction phase of the development unless otherwise agreed in writing with the Local Planning Authority.*

*Reason: In order to ensure site debris does not affect highway safety in accordance with saved Policy GP1 of the Stockton on Tees Local Plan.*

### **CONDITIONS: DURING CONSTRUCTION**

#### **CONSTRUCTION HOURS OF OPERATION**

*Notwithstanding details hereby approved, all construction operations on site including delivery of materials on site, but excluding activities associated with abnormal loads, shall be restricted to 8.00 a.m. - 6.00 p.m. on weekdays, 9.00 a.m. - 1.00 p.m. on a Saturday and no Sunday or Bank Holiday working unless otherwise agreed in writing with the Local Planning Authority.*

*Reason: In order to limit the impact of construction traffic on the amenity of the surrounding area in accordance with saved Policy GP1 of the Stockton on Tees Local Plan.*

#### **DUST SUPPRESSION FROM VEHICLES**

*All vehicles leaving the site which are transporting loads from which dust and debris may be produced shall be fully sheeted prior to leaving the site.*

*Reason: In order to prevent the emission of blown dust and debris from impacting on highway safety in accordance with the requirements of saved Policy GP1 of the Stockton on Tees Local Plan.*

#### **STORAGE OF POTENTIALLY POLLUTING GOODS**

*Any facilities for the storage of oils, fuels or chemicals shall be sited on impervious bases and surrounded by impervious bund walls. The volume of the bunded compound should be at least equivalent to the capacity of the tank plus 10%. If there is multiple tankage, the compound should be at least equivalent to the capacity of the largest tank, or the combined capacity of interconnected tanks, plus 10%. All filling points, vents, gauges and sight glasses must be located within the bund. The drainage system of the bund shall be sealed with no discharge to any watercourse, land or underground strata. Associated pipe work should be located above ground and protected from accidental damage. All filling points and tank overflow pipe outlets should be detailed to discharge downwards into the bund.*

*Reason: To prevent pollution of the water environment.*

### **PROTECTED SPECIES**

*No development shall take place unless in accordance with the mitigation detailed within the following documents unless otherwise agreed in writing with the Local Planning Authority;*

- *Seamer Wind Farm Environmental Statement dated 8 August 2008 and relevant Appendices, (author Broadview);*
- *Environmental Statement Addendum March 2009 and relevant Appendices, (author Broadview); and*
- *Additional Ecology Information enclosed within TNEI's letter dated 19 May 2009.*

*Works shall include but not restricted to adherence to timing and spatial restrictions; provision of mitigation and habitat enhancements in advance, micro siting of turbines, undertaking confirming surveys, adherence to precautionary working methods and adherence to lighting restrictions.*

*Reason: To conserve protected species and their habitat in accordance with Policies GP1 and EN4 of the Stockton on Tees Local Plan and the guidance contained within ODPM Circular 06/2005.*

### **CONDITIONS: POST CONSTRUCTION**

#### **DECOMMISSIONING – 25 YEARS**

*The turbines may remain on site for a period not exceeding 25 years from the date that electricity from the development is first exported into the electricity grid. Within 12 months of the expiration of the 25 year period, all elements of the development shall be removed and the site shall be restored in accordance with a scheme of remediation and reinstatement to be first submitted to and approved in writing by the Local Planning Authority, unless otherwise agreed in writing with the Local Planning Authority.*

*Reason: In order to ensure the wind turbines and associated infrastructure and ancillary development are removed in a timely manner at the end of their operational life.*

#### **TURBINE REMOVAL AFTER 12 MONTHS INOPERATION**

*If any wind turbine ceases to be operational for a continuous period of 12 months it shall, unless otherwise agreed in writing with the Local Planning Authority, be dismantled and removed from the site within a period of 9 months from the end of the 12 month period and the immediate location of the turbine shall be restored in accordance with a scheme of remediation and reinstatement to be first submitted to and approved in writing by the Local Planning Authority, unless otherwise agreed in writing with the Local Planning Authority.*

*Reason: To ensure turbines are removed at the end of their operational life.*

#### **TELEVISION INTERFERENCE**

*Prior to the commencement of development, a baseline television reception study in the area shall be undertaken by a qualified television engineer and submitted in*

writing to the Local Planning Authority with a scheme of works to mitigate the effects of the development on domestic television signals in the area. Any claim by a person for domestic television picture loss or interference at their household within 12 months of the final commissioning of the wind farm, shall be investigated by a qualified engineer at the expense of the wind farm operator and the results shall be submitted in writing to the Local Planning Authority. Should any impairment to the television reception be determined as attributable to the wind farm operation on the basis of the baseline study, such impairment shall be mitigated within 3 months from the decision in accordance with the approved scheme of mitigation.

Reason: In the interests of protecting local amenity in accordance with saved Policy GP1 of the Stockton on Tees Local Plan.

### NOISE CONDITION

The rating level of noise emissions from the combined effects of the wind turbine generators when measured and calculated in accordance with “The Assessment and Rating of Noise from Wind Farms, ETSU-R-97” published by ETSU for the Department of Trade and Industry shall not exceed the values set out below. Where there is more than one property at a location the noise limits apply to all properties at that location

During night-time hours of 2300-0700 [maximum Noise level La90,10minsdB]:-

Location	Standardised 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	Standardised Wind speed m/s (at 10m height)									
	3	4	5	6	7	8	9	10	11	12
Coldpool	39.3	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	36.0	37.0	38.2	39.7	41.5	43.5	45.6	47.8	50.1	52.5

In the event of a complaint being received in writing by the local planning authority alleging noise nuisance at a residential property or properties due to the wind turbines, the wind farm operator shall, at its expense, employ an independent consultant approved by the local planning authority to measure and assess the level of noise emission from the wind farm at the location of the complaints property (or, in the event that access is not possible, at the nearest publicly accessible location

acceptable to the local planning authority) following the procedures described in the above guidance. Where the complaint related to a location that is not specified in the tables listed above, the relevant noise limits shall be those for the nearest property listed in the tables above. The results of the independent consultant's assessment shall be provided to the local planning authority within two months of the date of notification of complaint unless otherwise extended in writing with the local planning authority. The operator of the development shall be under no obligation to follow the procedure set out in this condition where the complaint relates to a dwelling house more than three kilometres from the nearest wind turbine generator.

*Reason: In order to safeguard the amenity of nearby properties.*

#### **WIND SPEED DATA**

*The wind farm operator shall commence to log wind speed and wind direction data from the date the wind farm becomes operational, by a method to be first agreed in writing with the Local Planning Authority and thereafter monitor such data continuously throughout the period of operation of the wind farm (unless otherwise agreed in writing with the Local Planning Authority). This data shall be retained for a period of not less than 12 months and shall include the arithmetic mean wind speed in metres per second (ms-1) and the arithmetic mean wind direction in degrees from north for each 10 minute period synchronised with Greenwich Mean Time.*

*At the written request of the Local Planning Authority the recorded data relating to a standardised height of 10 m above ground level and relating to any periods during which noise monitoring took place or any periods when there was a specific noise complaint shall be made available. Wind speeds at the standardised height of 10 m shall be derived either by direct measurement of 10 m height wind speeds or derived by calculation from measurements of wind speed at other heights or derived by calculation from the power output of the turbines by a method to be agreed by the Local Planning Authority prior to commencement of the development.*

*Reason: In order to safeguard the amenity of nearby properties.*

#### **TURBINE INOPERATION DATA**

*At the written request of the Local Planning Authority the wind farm operator shall provide, within 28 days from the date of request, a list of ten-minute periods during which any one or more of the turbines was not in normal operation. This information will only be required for periods during which noise monitoring was undertaken in accordance with conditions attached to this permission. 'Normal operation' is defined in the guidance notes referred to above.*

*Reason: In order to safeguard the amenity of nearby properties.*

Other conditions are to be recommended in respect to the following, the wording of which will be provided to committee in an update report.

- *Site compound siting and layout*
- *Control building design and siting*
- *Landscape scheme details*
- *Timing of works for breeding birds*
- *Temporary works – removal*
- *Provision of National Grid – Monitoring equipment*



- *Internal access road surface materials*
- *Turbine specification, design and size,*
- *Turbine icing detection equipment*
- *Mitigation schemes*
- *Grid Connection*

## **BACKGROUND**

1. Planning permission was sought for the development of the wind farm under 2 separate applications, application ref: 08/2372EIS (to Stockton Borough Council) and an application to Hambleton District Council, taking into account the wind farm being located partly within each authority. The applications were submitted to each authority for the extent of development within that authority's administrative boundary.
2. The application submitted to Stockton Borough Council was placed before the Planning Committee with a recommendation to refuse as officers considered that there was inadequate information submitted to fully consider the impacts of the development on Protected Species, the surrounding highway network and its associated features (as a result of construction traffic). The application was refused by Planning Committee for the following reasons:

***The Local Planning Authority is of the opinion that insufficient information has been submitted to demonstrate that the adverse effects on the surrounding highway network, its associated features and the village of Hilton can be acceptably mitigated, thereby being contrary to Policy GP1 of the adopted Stockton on Tees Local Plan.***

***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.***

3. The 2008 application determined by Hambleton District Council's Planning Committee was refused contrary to Officer recommendation to approve. The reason for refusal was as follows:

***The proposed wind farm would result in unacceptable harm to the character of the local landscape and to the amenity of local residents, contrary to Planning Policy Statement 22, Policy ENV10 of the Regional Spatial Strategy for Yorkshire and The Humber and Policies CP1, CP16,***

**CP18, DP1, DP30 and DP34 of the Hambleton Local Development Framework.**

4. An application for the erection of a 60m temporary guyed wind monitoring mast for a period of 24 months (07/3519/FUL) was refused by the Planning Committee for the following reasons:

***In the opinion of the Local Planning Authority the proposed mast by virtue of its size and location would be contrary to the saved policies GP1 (i) (ii) (viii) of the adopted Stockton on Tees Local Plan as it would adversely affect the quality and sensitivity of the existing landscape and would cause unacceptable harm to the amenity of neighbouring residents***

The application was subsequently approved on appeal.

5. Since the refusal of application 08/2372/EIS and prior to the submission of this application currently being considered, the applicant has had several meetings and discussions with the Local Authority's Officers and a number of Statutory Consultees which have been aimed at providing further information and seek to address the reasons for refusal.

## **PROPOSAL**

6. This application seeks permission for effectively the same proposal as the previous application (08/2372/EIS) although it has been supported with both the original Environmental Assessment and an Environmental Statement Addendum (to address previously outstanding matters).
7. The proposed Seamer Wind Farm (5 turbines) straddles the boundary between Stockton Borough and Hambleton District. A revised application has been submitted to each of the Planning Authorities for the section of the scheme falling within each of the authorities' administrative boundaries.
8. The application to Stockton Borough Council is for the erection of 3 no. wind turbines, together with the associated development of crane pads, access tracks, site compound, 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. 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.
9. The proposal has been amended from the 08/2372/EIS submission in the following ways:
  - Length of access tracks slightly increased due to the relocation of the southern site entrance leading to turbine 4 and the met. mast.
  - Minor change to allow the two site entrances off the Hilton to Seamer Road to provide stagger from one another (and movement of access track associated)
  - Junction Layout details have been amended

- Location of the proposed crane hard standing area associated with turbine 4 has rotated slightly
  - Proposed to use a geo – textile material on the tracks at the site entrance areas
  - Confirmation that the temporary compound would be 50m x 60m.
10. The applicant has advised the following within the Environmental Statement and associated Addendum, the latter of which provides detailed information in respect to traffic and access issues, landscape and visual impacts and nature conservation:
- a 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 access roads have been designed in order to minimise their length and their impact on ecological features present on site, primarily hedgerows. The stone for site access roads would be acquired from local quarries.
- b 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.
- c 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.
- d 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

11. The scope of the Environmental Impact Assessment (EIA) and content of the Environmental Statement (ES) were agreed with Stockton on Tees Borough Council and Hambleton District Council, through a 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.
12. 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***

13. 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.
14. 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.

## **SITE AND SURROUNDINGS**

15. The application site is located on the south eastern 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.
16. 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 applicant's control.
17. A power line runs southwest to northeast across the site with 2 turbines being located to the north of the power line and 3 to the south.

## **CONSULTATIONS**

### **One North East (summarised)**

18. Subject to the applicants satisfying all the necessary environmental, highway and visual impacts and airport operation issues, One North East has no objections to the proposed development as a suitable site for wind energy development. It is understood that if the LPA are minded to approve the application, the matter may be referred to the Secretary of State for consideration.

### **Association of North East Councils**

19. The planning application falls below the threshold which the North East Planning Body (NEPB) wishes to be consulted upon, in accordance with the NEPB's conformity procedures. Therefore, the NEPB will not be submitting a formal response to assess the conformity of the development proposal with regional planning policy.

### **Redcar & Cleveland Borough Council**

20. No objections.

### **Middlesbrough Borough Council Planning Department (summarised)**

21. The nearest turbine is approx. 1.5km from the Middlesbrough Borough Boundary and it is not considered that the visual impact will be significant. Similarly, whilst 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**

22. Confirm that DBC has no comments to make on the proposed development.

### **North York Moors National Park**

23. No comments have been received from the NYMNP in respect to this latest application. Their previous comments in respect to application ref:08/2372/EIS in respect to the same scheme were;
24. 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.
25. 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.

26. 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.
27. 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.
28. 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 (summarised)

29. Hilton Parish Council would wish to lodge objections to the scheme based on the following considerations:
30. Landscape - the proposed wind turbines would dominate the skyline as they are 2.5 times the height of existing pylons. This is a rural area with no high rise buildings so the impact would be enormous. They are also closer to Boy Hill than the pylons which were re-sited because of the impact. Many walkers come to the area and their enjoyment of the views to the Cleveland would be ruined thus having a negative effect on tourism to the area.
31. Safety Implications - the turbines are very close to high voltage power lines 150 - 525 metres and very close to the road 137 - 550 metres. The power line is the 400kv National Grid line. Should a turbine collapse the effects could be very serious indeed; causing either a major traffic accident or a major power outage/fire. Similar effects could occur in the event of a blade being shed and blades could travel up to 900 metres given the position of the blade when failure occurs. There are many instances of turbine collapse and blades being shed recorded. In the event of a total failure of a turbine debris could be scattered over several hundred metres threatening not only the power lines and road but also houses. In the event of a fire what would the fire brigade be able to do? Would they have equipment capable of reaching the top of a turbine? The road travels west to east and the effect of flicker on traffic could be very serious. These very tall turbines are likely to attract lightning strikes which could cause blades to delaminate and fly apart. Where would the debris land? During cold winters the problems of ice flying from the blades could also be a major safety issue.
32. Aviation and Radar - the wind farm would lie within the safety zone of Durham Tees Valley airport and it is known that wind turbines can affect radar systems. Durham Tees Valley airport is trying to increase the number of passenger flights it handles as well as increasing the number of cargo flights

thus increasing risks over Stockton itself. In addition Durham Tees Valley has a very long runway and can take large aircraft, such as Jumbo jets, if there are problems at other airports. It often takes traffic when Leeds Bradford or Newcastle airports are closed by fog and by implication at times when weather conditions are not ideal and radar systems need to be at their most effective.

33. Noise and Health - the nearest property within Hilton will only be 800 metres from a wind turbine and it has been put forward that turbines should not be built within 1 mile of where people live. Living close to wind turbines can cause a number of health problems and most properties within Hilton will be subject to this noise pollution. In addition the shadow flicker from the turbines can cause health issues including photo-sensitive epilepsy. Even if illness does not result the strobe effect will cause considerable disruption.
34. Environmental - The RSPB has said "this development has the potential for severe adverse effects on resident and migratory birds". The RSPB is currently constructing a state of the art visitor centre at Saltholme on Teesside to attract tourists and keen birdwatchers and this development could have a devastating effect on visiting birds. Yet another negative effect on tourism. The site where the turbines are proposed also houses protected species such as bats and Great Crested Newts and the developers appear to have taken little account of the effect of the construction and operation of wind turbines on such species.
35. Seamer Carrs is a habitat of major importance and once again a large number of visitors are likely to be discouraged by the presence of wind turbines.
36. Traffic Nuisance - during the construction of the wind turbine site there will be a huge increase of heavy goods vehicles almost all of which (according to the developers) will have to pass through Hilton having a huge negative effect on the village. The village has gateways to reduce the speed of traffic travelling through it and these will have to be removed and then reinstated. In addition the heavy goods traffic would have a bad effect on the road surface itself causing it to deteriorate at a much quicker rate than would otherwise be the case causing yet more disruption for local residents and extra costs to be met by Stockton council. This road is already showing signs of some deterioration and would probably have to be completely rebuilt following such an increase in traffic. There will also be a large increase in traffic noise. The turbine blades themselves are likely to be of the order of 40 metres long and to get these through the village would cause a great deal of disruption not to mention the probable need to remove garden hedges and walls which is unlikely to please any resident concerned. It should also be noted that many trees in the area have tree preservation orders and Hilton Parish Council has always tried to preserve the environment of the village. In addition we understand such loads are likely to require police escorts and will travel at night again causing huge disruption and noise issues.
37. The members of the Parish Council and villagers made comments such as: Off shore wind farms are more environmentally friendly and more viable. I disagree with this scheme on the grounds of noise, safety (for users of the main road) and the impact of shadow flicker. Within a five mile radius there will be an impact on the landscape effecting future tourism potential. There are unlikely to be local jobs created and there are already three power

stations in the area. Why are the public footing the bill for a scheme nobody wants - taxpayers are being asked for billions of pounds in subsidies because without grants the developers cannot afford to build wind farms.

Health issues have not been taken into account. The development will create a major safety hazard for vehicles using the road through the site. It will destroy one of the few views of the Cleveland Hills from Teesside. The development will spoil our rural environment. It will bring problems to the area from noise, road safety issues and effects on health. Such developments should be on brown field sites or industrial sites.

38. Thus Hilton Parish Council objects to the development on behalf of Hilton residents.

#### Yarm Town Council

39. Yarm Town Council Members fully support the Seamer & Hilton Wind farm Action Groups objections to this proposed development in line with the policy of the Council in regard to wind farms.

#### Ingleby Barwick Town Council (summarised)

40. Ingleby Barwick Town Council would refer to their previous comments submitted in respect of planning application no. 08/2372/EIS have considered all of the information in respect of planning application no. 09/0736/EIS and also considered the objections raised by Seamer and Hilton Wind farm Action Group (SHWAG).
41. The Town Council supports SHWAG in their objections to the proposal as this development is sited totally in the wrong place.
42. The limited amount of renewable energy (10-15MW) would not compensate for the impact it would have on the nearby villages and this proposal is therefore not justifiable.
43. The proposed 125m high wind turbines would have a significant detrimental effect on this rural area which is already blighted by unsightly pylons.
44. The wind turbines would be sighted very close to nearby residences, the Hilton to Seamer road and overhead power lines raising concerns in respect of 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 a concern as turbine noise can be annoying and irritating as well as the possible cause of a number of health problems. Concern in respect of the effects of shadow flicker which would blight residents lives.
47. The development would have a detrimental effect on the immediate environment and cause harm to the local wildlife.
48. Traffic nuisance during the 10 months construction period would create major disruption to road users and increase the safety risk for cyclists



49. Delivery of the turbines would generate abnormal loads over a 4 month period, with a police escort during non peak traffic flow periods. It was suggested this would be occur at night causing traffic problems, road safety concerns and noise issues and impacts on trees and hedges and costs involved are also an issue.

Kirklevington and Castle Levington Parish Council (summarised)

50. We unanimously supported Hilton Parish Council and SHWAG in their objections to the previous proposals 08/2372/EIS (Stockton) & 08/2451/FUL (Hambleton), as below, also support Hilton Parish Council and SHWAG in their objections to the new proposals as application 09/0736/EIS does not overcome the objections originally presented by the Seamer & Hilton Windfarm Action Group, (SHWAG).

Seamer Parish Council (summarised)

51. Object as it would harm the character and appeal of the area on the fringe of the North York Moors National Park, it is too close to nearest residents, the road and power lines, it would cause harm to wildlife and damage the immediate environment, It would provide little electricity and only when the wind is strong enough, it would cause several months of disruption during the construction phase, it would reduce the value of home and alter the perception of Seamer as an attractive village.

Stokesley Parish Council (summarised)

52. Object as the development will harm the character of the area on the fringe of the NYM National Park, severely degrading the village of Seamer and the rural landscape. It will be too close to residential properties who will suffer the effects of shadow flicker and noise. There will be impacts of safety risks from its proximity to the power lines contrary to National Grids guidelines whilst NYCC Highways have recommended a risk assessment be carried out. It will cause harm to local wildlife and biodiversity. Little electricity will be provided to the national grid having little impact on CO2 emissions. It will cause almost a year of traffic disruption during construction phase, reduce the values of homes. Hambleton has received two applications for wind turbines at Bullamoor and Appleton Wiske and both the MOD and DTVA have objected to these. The cumulative effect of these would present worse problems for aviation as well as for the visual impact.

Councillor Sherris

53. As per the objections for the original application refused by both authorities; In support of the residents in Hilton and Seamer and for those residents soon to face the challenge of a similar application in the Appleton Wiske, Hornby, Wellbury and Deighton areas.

Cllr Harrington

54. Further to our discussions this morning, please could you withdraw my original email which I sent you on 25th May. Ahead of you presenting this application to Committee, I will ensure that you receive fresh comments.

Councillor C Seymour, Stokesley Ward (summarised)

55. It will spoil the landscape and views of the Cleveland hills. Planning Inspector previously required pylons to be moved off the escarpment (pylon inquiry 1991 - 2002) and turbines will be substantially taller than pylons. Turbines are inefficient and does therefore not justify spoiling the landscape. Concerns over accuracy of data supplied  
 Busy road and will adversely affect road safety  
 The flicker effect will distract motorists  
 Turbines are noisy and the turbines are set too close to properties  
 The turbines are set too close to the overhead power lines  
 If the blades broke or caught fire they would create an unacceptable risk, particularly to road users.  
 Traffic nuisance will be caused to local villages during the construction phase which is quite unacceptable on the current rural road network.  
 The turbines and their construction would be detrimental to the diverse wildlife in the area.  
 Support the principle of wind power but it must be in inappropriate locations. However, these would be a permanent scar on the landscape in a quiet rural location, with many better locations. Fully support SHWAG's objections.

Dari Taylor MP (summarised)

56. Apart from the objections raised in respect to the turbines spoiling the countryside, constant noise and potential danger I am of the belief that the Highways Agency has serious objections. These reflect that the minimum standards in terms of separation distances between the turbines, the main road and that number of small houses in the vicinity are not accommodated in the plan. It seems to me that the HSE would have serious concerns with regards to the proposal. As such I am objecting to the proposal.
57. The LPA have been sent a copy of a letter from Dari Taylor to National Grid which expresses her disappointment that the National Grid reached an agreement with the applicant to monitor the effects of the Wind Turbines on National Grid equipment as she was under the impression that the National Grid would be objecting to the application to ensure safe and secure transportation of electricity supply is not compromised, suggesting that there must be other operational sites which could be used for monitoring purposes. Dari Taylor has urged the National Grid to reconsider there position.

G Bloom - Member of European Parliament for York's and North Lincs (summarised)

58. Industrial wind turbines have minimal impact on carbon emissions. Certain reports from Denmark and Germany indicate that their CO2 emissions have not reduced and additional coal fired power stations have been built to ensure reliable delivery. Recent academic research shows that turbines may actually increase greenhouse gas emissions due to the need for back up equipment.
59. Turbines are not a viable economic alternative. Denmark has the highest energy charges in Europe. America heavily subsidises wind power which costs far more than other energy sources.
60. There is a growing body of scientific evidence to suggest turbines can cause sleep disturbances leading to depression, chronic stress and other problems. Studies have shown that turbines can cause disturbance to people more than 2km away.
61. Flicker from turbines can be as a minimum disruptive and annoying and poses a risk of photo sensitive seizures. The refusal of government to order

full independent environmental assessments, including assessments of health effects of any wind turbine project undermines the credibility of claims that there will be no such negative effects.

62. Suggestion that turbines will affect local house prices, especially in this scenic location. If turbines are to be accepted on sites then we should seek internationally endorsed set off distances. The French Academy of Medicine recommends 1.5km, or alternatively locate them in sparsely populated areas.

#### Northumbrian Water Drainage

63. Northumbrian Water has no objections to the proposed development.

#### Northern Gas Networks

64. No adverse comments made

#### NEDL

65. Standard connection comments made.

#### Chief Fire Officer

66. With regards to Application No. 09/0736/EIS, Cleveland Fire Brigade offers no representations to this application.

#### Civil Aviation Authority (summarised)

67. Like any wind farm development, there is the potential to impact upon aviation operations and activities which in this case would be Durham Tees Valley Airport and DTVA should be consulted accordingly. Additionally, there may be a need to install aviation obstruction lighting and for the turbines to be painted white.
68. Proliferation of wind turbines might result in difficulties for aviation and similarly sited turbines may get different responses as to their suitability.
69. Should the application be approved, the developers will need to provide details to the Defence Geographic Centre so that they can be adequately charted.

#### National Air Traffic Services

70. Although the proposed development is likely to impact our electronic infrastructure, NATS has no safeguarding objection to the proposal.

#### Durham and Tees Valley Airport

71. No comments have been received from Durham Tees Valley Airport although they raised no objection in respect to the previous application advising that they would continue to work closely with Broadview Energy Developments if the wind turbines were constructed.

#### Ministry Of Defence (summarised)

72. No objection. Although this scheme is in line of sight to the Air traffic Control radar at RAF Leeming, the anticipated effect has been assessed as manageable. Based on expert advice need for the southern most turbines to be fitted with aviation lighting in the interests of Air Safety. A condition is requested to inform Defence Estates of certain details if planning permission is granted.

#### Council for the Protection of Rural England (Durham): Summarised

73. CPRE's concerns remain from the previous submission in view of the limited nature of the changes made and believe the proposal is in the wrong location. The CPRE continue to support the local objection group (SHWAG). Whilst the CPRE support the governments targets on renewable energy production, the CPRE urge government not to destroy the environment its trying to save by rushing measures through that will be harmful to communities, wildlife and the landscape. We need to ensure the delivery of the UK Renewable Energy Strategy is carried out to secure climate change benefits of renewable alongside minimising negative impacts on the natural environment.
74. The CPRE are worried about government legislation which suggests a balance needs to be struck between the UK's objectives for nature conservation and renewable energy. Concern is further raised about goodwill payments made by wind farm developers which are tantamount to bribery and have no means of being legally enforced.
75. The local landscape has a sense of tranquillity, timelessness and is moderately attractive, being a quiet agricultural area exhibiting little signs of change. The scheme will affect this.
76. The information submitted and considered should not be exaggerated in terms of potential benefits, should not ignore potential dis-benefits and no misleading information. The CPRE reference comments of BWEA that indicates there is a big number of complaints in respect to the wind industry, particularly in respect to wind speed, carbon off sets and noise levels. It is advised newsletters for another wind farm grossly underestimated the turbines impact on the landscape. A photograph was submitted showing the height of the Walkway turbines together with the newsletter sent round by the applicant for that scheme.
77. The CPRE considers the walkway wind farm near Sedgefield which is now operation to not have addressed objections in respect to wind speed and noise whilst the developers had the noise condition altered and the turbines are now operational and making a noise. The CPRE have cited a letter sent to Sedgefield Borough Council where a resident (920m from wind farm) complained about a distinctive noise being audible through the night and that this can vary in intensity depending on speed and noise levels.
78. Comments made in respect to the impacts of turbines on radar. Reference is made to a proposed offshore wind farm where the MoD had to object based on an over-riding aviation related obstruction issue that could not be overcome and to a statement from Gordon Brown asking the industries to test impacts and solutions to these matters. Further reference is made which indicates there is no universal solution to mitigating the effects of wind turbines on radar.
79. CPRE have quoted speakers from the house of lords where questions related to whether the National Grid is concerned about the connection of wind turbines to the grid and question whether there would be a requirement for additional conventional capacity to cover the time when the turbines are not turning, with comments that wind is therefore not the most effective source in terms of securing energy supply.
80. The CPRE ask the LPA to consider wind farms in the UK where turbines have been subject to lightening strike, have caught fire, have had blades

spinning off and instances where turbines have not been operating for months and years.

81. The CPRE have submitted information which indicates that many of the north east wind farms are operating well below the 30% anticipated load factors, in some instances 17%, 10% and 8% and indicating some wind farms have had turbines which have not operated for several years such as Blyth harbour.
82. The site is too close to housing and roads and will significantly affect the amenity of people living in the locality. It will affect tranquillity and be a prominent feature on the landscape. The turbines have the potential to have a far greater impact than the photomontages suggest whilst believe aviation has not been satisfactorily addressed.

#### Natural England (summarised)

83. Natural England understands that this application is being considered together with an adjacent application for two wind turbines and associated infrastructure lodged with Hambleton District Council. Like the Environmental Statement provided with the planning application, Natural England's comments relate to all five turbines and ancillary infrastructure, with separate representation made to Hambleton District Council by our Yorkshire and Humber Government Team. Natural England refers you to our letter dated 8 October 2008, which should be read alongside the advice set out below. We draw your attention to sections entitled Protected Sites, Site Enhancements and Protection of Best and Most Versatile Agricultural Land in particular, which contain important advice which remains relevant to the current planning application and has not been repeated here. For convenience I have repeated our comments in response to the original Environmental Statement below (as set out in our letter dated 8 October 2008), where they are still relevant to this revised planning application.
84. **Landscape and Visual Impact Assessment**  
Natural England believes that the landscape assessment in the Environmental Statement has correctly analysed and described the landscape character of the area and incorporated a good number of representative local viewpoints which can be used to assess the potential effects of the development on the surrounding countryside. Generally speaking, Natural England concurs with the assessment of possible impacts on the landscape which has been made. However we do have a number of concerns about the assessment which both Local Authorities should give due consideration to when considering this application.
85. **Visual amenity**  
Natural England maintains reservations about the misleading assessment of the impacts on visual amenity, in particular from highly sensitive key locations within the North York Moors National Park, including the escarpment edge, Roseberry Topping and the Cleveland Way. These are correctly identified as highly sensitive receptors, and it is the impacts on these receptors that are therefore significant, and to reduce the assessment of these effects because the receptors represent "a limited percentage of views from the designation as a whole" is not appropriate. Rather than "feel removed from the lowland areas in the view" the presence of a wind farm is likely to bring the intrusion of industrial development closer, thus having an adverse impact on the experience of the North York Moors landscape.

86. **Landscape sensitivity**  
The proposals are considered appropriate in terms of the LUC North Yorkshire Sustainable Energy Planning Guidance (p.129) because it is "a small to medium sized wind farm" and therefore appropriate to this particular lowland site. However, the report fails to explain that this area has a landscape sensitivity rating of medium with the guidance stating that "key characteristics of the landscape are relatively robust, though would potentially be adversely affected by this type of renewable energy development". Your local authority should be aware of the sensitivity of this landscape and take this into account in your decision.
87. **Off site grid connection**  
The proposed development falls within the Lowland Plain and Rolling Lowland Farming landscape character areas that are an amalgamation of three published landscape character assessments for the region (9.3.9.1). Whilst overhead transmission lines/pylons are stated as being features in parts of the Lowland Plan character area (Table 9.4, July 2008 ES), we believe it is not possible to conclude the above character areas have the capacity to absorb new wood pole lines without an appropriate assessment.
88. We are therefore disappointed that the applicants have not provided comprehensive details of the grid connection required for this development. It is our view that the revised Environmental Statement is flawed because the off-site grid connection operation has not been assessed, alongside the wind farm, for landscape impact. It is important that this is done in order to fully understand the landscape impact of this development.
89. **Cumulative effects**  
Since the consideration of the previous planning application for a wind farm at this site, a further wind farm at Bullamoor has been proposed. We welcome the cumulative impact assessment within the revised Environmental Statement and agree that the proposals at Seamer would serve to 'span the gap' between the wind farms to the north and the Bullamoor proposal. We agree with the conclusion that, in combination with Bullamoor wind farm, the development would cause significant adverse visual effects on parts of the North York Moors National Park.
90. **Biodiversity**  
Natural England notes that no change to the location of turbine 4 has been made, despite the advice set out in paragraph 1.2 of Appendix 2 of our letter dated 8 October 2008 (please see our letter dated 8 October 2008 for details). Paragraph 11.7.3 of the Environmental Statement Addendum states the intention of the applicant to achieve the required minimum distance between the turbine and the hedgerow by micro siting the turbine post planning permission.
91. The reasons why the location of turbine 4 has not been changed to reflect our advice prior to the resubmission of the planning application, are unclear to Natural England. This would have enabled any required knock-on alterations to other elements of the planning application to be understood, as well as any necessary changes to the Environmental Statement to be made. In this context, we consider that your council should consider whether micro siting this turbine as described post planning permission will be an appropriate course of action in this instance and should this be acceptable to the Local Planning Authority then Natural England consider the proposal is unlikely to

have an adverse effect in respect of species especially protected by law, subject to appropriate conditions being imposed in respect species mitigation works.

#### RSPB

92. Our comments regarding the previous application apply again here - we do not believe there will be adverse effects on designated wildlife sites or important bird populations.
93. The previous comments made by the RSPB in respect to application 08/2372/EIS are as follows;
94. 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.
95. 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.
96. 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.

#### Tees Valley Wildlife Trust

97. No response has been received from the TVWT in respect to this latest application. Their previous comments for application 08/2372/EIS advised that they were of the opinion that the wind farm proposal would not have a significant adverse effect on the Brewsdale SNCI / Nature Reserve.

#### The Environment Agency (summarised)

98. Have no objection to the development as proposed, subject to conditions being imposed in respect to surface water drainage and storage of oils, fuels and chemicals,

#### National Grid - Initial Comments (summarised)

99. National Grid has serious concerns with regards to the proposed wind farm scheme for the following reasons;
100. National Grid is a leading international energy infrastructure business. In the UK National Grid's business includes electricity and gas transmission networks and gas distribution networks as described below.

101. Electricity Transmission  
National Grid has a statutory duty to develop and maintain an efficient, co-ordinated and economical transmission system of electricity and to facilitate competition in the supply and generation of electricity.
102. National Grid operates the national electricity transmission network across Great Britain and owns and maintains the network in England and Wales, providing electricity supplies from generating stations to local distribution companies. We do not distribute electricity to individual premises ourselves, but our role in the wholesale market is key to ensuring a reliable and quality supply to all.
103. National Grid and Local Development Plan Documents  
The Energy White Paper makes clear that UK energy systems will undergo a significant change over the next 20 years. To meet the goals of the white paper it will be necessary to revise and update much of the UK's energy infrastructure during this period. There will be a requirement for;
- An expansion of national infrastructure (e.g. overhead power lines, underground cables, extending substations, new gas pipelines and associated installations).
  - New forms of infrastructure (e.g. smaller scale distributed generation, gas storage sites).
- Our electricity infrastructure is sited across the country and many stakeholders and communities have an interest in our activities. We believe our long-term success is based on having a constructive and sustainable relationship with our stakeholders. Our overhead lines were originally routed in consultation with local planning authorities and designed to avoid major development areas but since installation much development may have taken place near our routes. Our aim in this is to ensure that the safe and secure transportation of electricity is not compromised.
104. Specific Comments  
Planning Policy Statement PPS22 Companion Guide at paragraph 55 advises that turbines should be located at a distance from overhead lines in accordance with the Electricity Council Standard 43-8 "Overhead Line Clearance". Although this document provides advice on the level of clearances required with overhead lines for electrical safety it takes no account of the impact of turbulence created by wind turbines on overhead lines.
105. As a consequence National Grid published a policy in September 2008 entitled "Overhead Line Separation from Wind Turbines. This policy provided advice on separation distances from wind turbines and was to be applied for overhead line circuits operating at all voltages on the National Grid transmission system. The reason for the introduction of a policy was to take account of the fact that large wind turbines produce significant turbulence in their wake while conductors on overhead lines are susceptible to damage from vibration initiated by wind. The policy set out measures to reduce the likelihood of premature wear on conductors and fittings which if uncontrolled may lead to a significant reduction in asset life, increased maintenance, unplanned outages or ultimately conductor failure. The policy introduced a requirement which sought to ensure that all new wind turbines were constructed at a distance of more than five times their rotor diameter away from any overhead line.



106. National Grid commented on the original application submitted by Broadview and raised concerns with regard to the relationship of the proposed wind turbines to the overhead lines and objected on the grounds that the turbines were too close to the overhead lines and would compromise the long term future of the assets. In a series of emails with your authority National Grid made reference to the emerging policy, however, proper research and development had not been undertaken to establish whether five times separation was actually an appropriate distance. On this basis, National Grid considered it necessary to withdraw its objections to the original planning application.
107. The research has now been completed and National Grid has been in discussions with the British Wind Energy Association to consider the formal introduction of the Overhead Line Separation from Wind Turbines policy. At the time of writing, the current policy requires a minimum separation distance of five times the rotor diameter; however, discussions are taking place to consider reducing this to three times the rotor diameter.
108. The proposed application will affect the 2TX line Lackenby - Thornton and towers 2TX 038 - 2TX042.

#### National Grid – Latest comments (summarised)

109. National Grid met with Broadview Energy this morning to discuss the concerns outlined in my letter to you dated 13 May 2009; as a consequence National Grid has decided not to formally object to the proposals. In terms of the proposed wind farm, in the event that planning permission is granted National Grid and Broadview have reached agreement in principle to use Seamer wind farm as a test case to study the effects of turbulence created by wind turbines on National Grid's overhead lines.
110. In conclusion, I confirm that National Grid is formally withdrawing the letter dated 13 May 2009.
111. For such a small amount of generation the proposed wind farm will be connected through the Distribution Network Operator (DNO) not directly into the National Grid. Grid Network capacity is not an issue for these proposed turbines.

#### Health and Safety Executive (summarised)

112. As you will appreciate, I cannot comment on individual wind farm applications such as the Seamer/Hilton proposal. I can however respond to the general points raised in your e-mail.
113. The Health and Safety Executive's (HSE's) role in relation to wind farms is to enforce health and safety legislation and relates to duties on employers to ensure that the risks to worker and public safety from their work activities are, so far as is reasonably practicable, safe and without risk to health. Health and safety law does not come into effect until there is a work place i.e. once the construction activities commence. A risk assessment of the operation of a wind turbine cannot therefore be required (under the Management of Health and Safety at Work Regulations 1999) at the planning application stage of a development.

114. Once work has commenced HSE's interest would be in the employer's legal responsibility to ensure the safety of workers from hazards associated with the construction, commissioning, operation, maintenance and eventual decommissioning of the site. The protection of the public from hazards arising from work activities (e.g. the operation of wind turbines) is also covered within this remit.
115. As wind turbines are frequently located on land open to the public consideration needs to be given to hazards such as whole or partial blade failure and falling ice. When a developer seeks planning permission for a wind farm we would expect these potential risks to public safety to be assessed within the planning framework process. For England this is of course Planning Policy Statement 22 (PPS22) Renewable Energy together with its Companion Guide. The planning process therefore has an important role to play in helping identify and address health and safety issues prior to development and before health and safety at work legislation applies. As with any health and safety issue, it is sensible to consider risks early in the design phase, when controls and mitigation measures can more easily be introduced.
116. In terms of the planning process itself HSE's role is very limited. In England HSE is only consulted in relation to planning applications for developments that are within the consultation distances around major hazard sites and pipelines.

Argiva (Spectrum Planning Group) summarised

117. Based on the information that you provided, our analysis shows the proposed development is unlikely to affect any of our UHF Re-Broadcast feeds and hence we would not wish to object. We recommend that you contact Ofcom and the BBC with respect to all microwave links and terrestrial television transmission.

OFCOM

118. Ofcom have found that within the assessed fixed link frequency bands there are no fixed link ends within or fixed links paths that cross a 1000m radius coordination area for the turbine locations. Contact links were given for CSS Spectrum management and the Joint Radio Company who deal with scanning telemetry systems.

BBC (Web Tool)

119. (This assessment has been carried out based on the 3 turbines within Stockton Borough). You would be likely to affect 0 homes for whom there is no alternative off-air service. In addition, you may affect up to 14717 homes for whom there may be an alternative off-air service. The transmitters likely to be affected are PONTOP PIKE, BILSDALE CH5, BILSDALE, BURNHOPE CH5
120. This information is provided for the guidance of Wind Farm developers. The results of this query are a rough estimate of populations that may suffer interference from wind farms built at the locations specified. The information is not intended to be a substitute for an on-site survey where the potential for disruption to television services may more accurately be assessed.

Joint Radio Company (JRC). (Responsible for scanning telemetry systems)

121. The JRC has no objection to the turbines at the following locations:-  
T1 448222 511497  
T2 447846 511236  
T3 448383 511091  
T4 447971 510909  
T5 448369 510670  
Hub Height 80m Rotor Radius 45m  
Our earlier objection was based on a site centre grid reference together with an operational radius of 1km. I confirm that my earlier correspondence to the agent contained a typographical error in respect of rotor dimensions. Please accept my apologies for this. All assessments were made using a rotor radius of 45m and the correspondence should have reflected this.

#### Tees Archaeology (summarised)

122. I would be grateful if you could take my previous comments in relation to 8/2372/EIS into account when considering this application, these being;
123. 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. Condition recommended.

#### Highways Agency (summarised)

124. Taking into account the A19 Tees Viaduct being unsuitable, the abnormal loads are proposed to leave the A19 at the A1032, rejoin at the A66 and then leave again at the A174. The Autotrack assessments have been reviewed and the mitigation measures and route are acceptable.
125. The applicant would however, still be required to liaise with the Highways Agencies Abnormal Loads Officer post planning to agree the route and Faber Maunsell would also need to assess the point of joining the A19 which has not yet been considered. For example, at present it is anticipated that the abnormal loads would arrive at the northern shore at Teesport. If this were the case then the A19/A689 junction would then need to be assessed to ensure it is fit for purpose.
126. With regards to other construction traffic,(HGV's), having reviewed the construction period and predicted delays of vehicular movements, am satisfied that these would not have a significant impact on the strategic road network. However, would support the implementation of measures to encourage construction workers to travel more sustainably to site. The Highways Agency therefore has no objections to this proposal subject to conditions being imposed relating to; Construction management plan being agreed prior to commencement.

#### Environmental Health Unit

127. No objection in principle although have concerns regarding the following environmental issues and would recommend conditions be imposed on the development should it be approved in respect to Noise disturbance from wind turbines, Construction and Traffic Noise and dust from construction Vehicles including wheel washing and dust suppression.

#### Urban Design: General Summary

128. The Head of Technical Services has no objections to this application subject to the imposition of conditions on any consent. These conditions are noted below and include a Grampian condition for a 'dry run' to be undertaken, a Traffic Management Plan, Highway condition surveys, highway risk assessment on the turbine position and landscape condition to preserve and enhance existing trees and hedgerow.

#### Urban Design - Environment Policy

129. Environmental Policy has no objections to this proposal but would recommend that the condition specifying location and layout as per drawing number Drg No 5396B-07-N-075 is applied and that any variation to that layout be conditional upon a review of the effects that such changes would have on validity of the environmental impact assessment.
130. We understand that the final choice of turbine will be influenced by the outcome of the analysis of 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.
131. The gathering of this data will also allow an assessment of the likelihood blade shear and of ice formation on the turbine blades. Such information would influence the need to incorporate measures into the design to avoid ice forming on the blades or to ensure that the turbine is switched off in weather conditions where the likelihood of ice formation is high.

#### Urban Design - Highways

132. The Environmental Statement and associated addendum, figures, visualisations, tables, drawings and appendices have been considered and comments are as follows:
133. The proposals have been assessed with consideration to PPS22 (Renewable energy), Design Manual for Roads and Bridges and the Institute of Environmental Assessment's, guidelines for the environmental assessment of Road Traffic (1993). The latter focuses on the following key areas
- Potential effects on local roads and users of the road; and
  - Potential effects on local land users and environmental resources that front those roads

### **Construction Phase**

#### ***Route Identification***

134. Route Identification and assessment was undertaken using the following information:
- Quarry locations and suitable HGV routes.
  - Turbine component delivery routes (abnormal loads)

The proposed abnormal load route on the local highway network is as follows:

135. From A19 the loads will travel along A174 parkway extension turning left onto Thornaby Road, then turn right to join the A1044, Low Lane. This will be followed to Hilton Lane (Fox Covert) where the vehicles will turn left towards Hilton then through the village where it becomes Seamer Road and to the site. This includes crossing A19 at Redhill Bridge on Hilton Lane where it is confirmed that the bridge can support the abnormal loads by the Highways Agency. The type of vehicles used to transport abnormal loads means that vehicle lengths can be reduced for the 'return' journey when there is no load being carried.
136. Abnormal loads have been assessed using height and weight restrictions along the total length of the route. Swept path analysis has been undertaken to assess the routes to ensure the required vehicles can be accommodated at junctions and pinch points and over-run areas have been identified. Specific analysis at A1044 junction with Hilton Lane and the 'S' bend in Hilton Village has been undertaken by a company that has experience in the delivery of wind turbine components. The assessment takes account of the benefits of independently steered rear axle movements and confirms that the vehicle carrying the largest 45.2m blade can be accommodated. These drawings are based on ordnance survey data and topographical surveys. It is therefore necessary that a Grampian condition is included for a 'dry run' to be undertaken by the developer to ensure that the vehicle can negotiate the route as the swept path analyses demonstrate. This 'dry run' will further assist in demonstrating the street furniture that is required to be temporarily removed as the vehicles pass. Where necessary, signs to be removed and be replaced with 'demountable' signs so that they can be removed then immediately returned to position once the load has passed, to ensure highway safety is maintained. This will be controlled via a Traffic Management Plan.
137. It should be noted that movements will be agreed in advance of any abnormal loads with appropriate liaison with the Police being undertaken. The 'dry run' would highlight areas of concern above the worst case scenario auto tracking that they have already undertaken. As topographical surveys have not been carried out for all sections of the abnormal load route then it is not possible to categorically say that the abnormal load vehicles can access the site, although, in the unlikely event that the 'dry run' result in unforeseen circumstances then either additional mitigation would need to be submitted to the LPA and considered or a reduced load length/component part could be specified by the developer.
138. The proposed HGV route on the highway network is as follows:  
From A19 the loads will travel east on A174 and turn left at the A1044 slip road, signposted to Hemlington, the load will then turn right along A1044, Low Lane then turn left at Hilton Lane then through the village where it becomes Seamer Road and to the site.
139. An initial assessment of alternative routes to the site have been considered and evaluated by the Developer with the preferred route being through Hilton, as the location of suitable quarries have been identified with those closest to the site being of preference, particularly for ready mix concrete, although all supplied would go through a tender process. The Developer has indicated

that potential suppliers have confirmed they will access the site from the northwest via Hilton and hence this is the most direct route. Some of the alternatives are acceptable to provide stone and concrete for the site, although not preferred, the developer has demonstrated on drawing numbers 08223646-P-61 and 08223646-P-62 that both the northern and southern accesses to the site can accommodate HGV traffic from either direction, should HGV's travel from the direction of Seamer, although abnormal loads are only accessed from the direction of Hilton.

140. It is noted that construction traffic will be controlled by appropriate traffic management and will be subject to usual road works requirements that are controlled by the Highway Authority. Wheel washing facilities will also be included on site to remove mud and debris prior to entering the highway. An outline Traffic Management Plan (TMP) has been included with the Environmental Statement addendum that outlines how the impact of the construction phase will be managed on the local highway network. It is recommended that a full TMP will be conditioned should Planning Consent be granted and it is necessary for the Developer to liaise closely with the Highway Authority in order for the plan to be developed. It is noted that the TMP will deal with the construction and operational phases only with decommissioning being dealt with at the appropriate time.
141. The following list indicates the key potential issues to be considered for the full TMP:
142. Abnormal loads and HGV's:
- Detailed impact of abnormal loads & HGV's on Strategic Road Network (SRN)
  - Detailed impact of abnormal loads & HGV's on Local Road Network (LRN)
  - Access/Egress from site during construction
  - Access/Egress from site during construction site operation and maintenance
  - Construction of site access

**Base Traffic Flows**

143. A traffic survey undertaken in January 2006 on Seamer Road, west of Roger Lane, Hilton, has been used to demonstrate the baseline traffic conditions for the development. This was the most recent traffic survey information available for the site when the Environmental Statement was prepared and the methodology is acceptable as appropriate growth factors were used to increase the traffic to the design year of 2010. The survey indicates that there are 1021 vehicles travelling in an eastbound direction (towards Seamer) and 928 vehicles travelling in a westbound direction (towards Hilton); this has been factored appropriately to 1103 and 998 vehicles respectively.
144. Following the applicant's figures being questioned by objectors, traffic surveys have been carried out by the Highway Authority's experienced surveyors that indicate the following traffic flows:
- October 2008 eastbound 1178 westbound 1071
  - May 2009 eastbound 1287 westbound 1139

145. All surveys were undertaken at the same location west of Roger Lane thereby omitting any turning traffic to or from Roger lane so that the appropriate impact on the village of Hilton itself is established.
146. The following is a table indicating the full breakdown of vehicles in both directions from the survey undertaken on 20 May 2009:

Hour beginning	Pedal Cycles	Motor Cycles	Cars & Taxis	Light Goods	H	Bus	Van	Rigid 2 Axle	Rigid 3 Axle	Rigid 4 Axle	Artic 3 Axle	Artic 4 Axle	Artic 5 Axle	Artic 6 Axle	All vehicles	Weather
07.00	0	1	149	1	0	1	20	0	0	0	0	0	0	0	172	FINE
08.00	1	1	247	9	1	1	25	1	3	1	0	0	1	0	291	"
09.00	1	0	147	5	0	1	16	3	0	0	0	0	1	0	174	"
10.00	7	2	106	3	0	1	17	1	0	0	0	0	1	1	139	"
11.00	2	3	127	5	1	1	24	2	5	0	0	0	0	1	171	"
12.00	4	1	132	2	1	1	28	0	2	1	0	0	0	0	172	"
13.00	4	1	136	2	2	1	20	2	1	3	0	0	0	0	172	"
14.00	7	1	137	5	0	1	19	2	0	1	0	0	0	0	173	"
15.00	5	4	148	6	2	3	29	2	0	0	0	0	0	1	200	"
16.00	3	5	212	8	2	2	31	2	0	1	2	2	0	0	270	"
17.00	1	0	269	1	0	2	15	1	0	0	0	0	0	0	289	MIXED
18.00	8	1	179	1	0	2	10	0	0	0	0	0	1	1	203	FINE
<b>TOTALS</b>	43	20	1989	48	9	17	254	16	11	7	2	2	4	4	2426	

147. An additional survey undertaken by SHWAG indicates the following:
- Total number of vehicles (both directions) 3188
  - Including HGVs 120
  - Cyclists 138
  - Walkers 22
148. The location of this survey is not specified, although it is likely to be to the east of Roger Lane as that is part of National Cycle Route 65 and may explain the increase in the number of cyclists using the route compared to the 20 May 2009 survey.

**Traffic movement & Traffic flows**

149. An indicative programme of traffic movement has been outlined that is acceptable as a basis for the development, it will be necessary for the developers to liaise closely with the Highway Authority on the progress of work.
150. A detailed breakdown of traffic flows associated with development is given based on the assumed requirements for each process of the construction period. The worst case scenario for construction traffic is when concrete bases are poured for turbine foundations as this needs to be carried out in a single process. It is estimated that month 3 of the construction phase is the worst case with an expected maximum of 84 HGVs per day travelling to the site. As it is expected that the concrete pour is an ongoing process these vehicles will be arriving throughout the day in a steady flow and not as a group.

151. The worst case impact shows an increase of 14% of traffic and the maximum number of trips on the highway will be 121 in a westbound direction during the evening peak period. The maximum number of additional HGV's proposed during the construction period is 8 per hour on average in month 3. Although recent traffic surveys have shown an increase in vehicles using Seamer Road the increase in traffic due to construction of the turbines will not create vehicle capacity issues on Seamer Road and due to base traffic flows currently being higher the percentage impact of the development traffic actually decreases from the 14% indicated in the Environmental Statement.
152. It will be necessary for the Highway to be fully inspected by the Highway Authority prior to the commencement of any development so that a full report can be recorded on the condition of the highway. Once construction is complete a further inspection should be carried out to determine what reinstatement work is required to the local highway network. The developer should be responsible for any reinstatement works.
153. It is acknowledged that the short term traffic disturbance will have an adverse effect on Hilton village due to an increase in development traffic; however the implementation of a Traffic Management Plan should ensure that highway safety risks are kept to a minimum.

#### **Mitigation Proposals**

154. Various mitigation proposals are described in the Environmental Statement. During the construction phase they are:
- Wheel washing facilities
  - Escorted abnormal loads and timing during quiet periods
  - Specified routes to the site
  - Abnormal load escorts and specified timing
  - Temporary road safety features and then original features put back
  - Controlled roadwork's
  - Dust sheeting over vehicles
  - Notification of development and loading schedule to be provided for local residents
  - Road defects that may impact on noise to be repaired prior to construction
  - Vehicle maintenance and checks to be regularly carried out.
155. No Public Rights of Way are affected by the development, it is noted that the compound area is to be fenced off and that CDM Regulations will be followed during the construction period.
156. Other effects considered
- Driver delay: Incurred by non-development traffic, it is only expected to be an issue on roads at or near capacity, which is not the case here. This is an acceptable assumption;
  - Accidents and Safety; Taking into account all of the issues outlined in the report, it would be expected that road safety risk associated with this development particularly during the construction period are minimised. There have been 4 injury accidents in the last 3 years resulting in 2 serious and 2 slight injuries;
  - Hazardous Loads; No hazardous loads are predicted for this development;
  - Air quality; an air quality assessment has been undertaken. This has no highway implications;



- Noise assessment; A noise assessment has been undertaken. This has no highway implications;
  - Community Severance; this study has been undertaken to establish the impact of the proposed development on journeys by pedestrians, cyclists and equestrians in Hilton Village.
157. The study was carried out using DMRB guidance and analysed the following:
- Village structure;
  - Existing facilities & Public amenities;
  - Existing base point for traffic speeds;
  - Composition and quantities;
  - Establish base point for pedestrians, equestrian & cyclists;
  - Consider existing community severance.
158. New severance caused by traffic movements can be categorised using three scales (slight, moderate and severe) as follows:
- Slight: In general, the current journey pattern is likely to be maintained, but there will probably be some hindrance to movement.
- Moderate: Some residents, particularly children and elderly people are likely to be dissuaded from making trips. Other trips will be made longer or less attractive.
- Severe: People are likely to be deterred from making trips to an extent sufficient to induce a re-organisation of their habits.
159. The study concluded that based on current traffic levels, layout of footways and pedestrian crossing points there is currently no observed severance in Hilton. As the proposed increase in traffic levels is only temporary during the construction period, this will be a minimal rise above the current severance level and it will not raise the severance level above 'slight'. Therefore no mitigation is proposed for this temporary increase.

## **Operational Phase**

### ***Site access assessment***

160. Wet weather speed surveys have been undertaken to DMRB and are acceptable. These surveys give 85% tile speeds of 46.29 MPH, there is a good description of conditions that makes the results robust and indicates that visibility splays of 130m are required.
161. Visibility splays for the site accesses have been assessed as acceptable as indicated on drawing 08223646-P-60. The proposed hedgerow replanting is acceptable to accommodate the visibility splay. There is no topographical survey undertaken that would demonstrate the stopping sight distances for east and west bound traffic, however I am satisfied that there are no significant undulations that would prevent vehicles from stopping on this section of highway if necessary in accordance with DMRB. The access arrangements are of a suitable distance and designed in accordance with DMRB major/minor junctions.
162. Details of trips associated with the various levels of servicing for the turbines once operational is described that shows there will be minimal impact on traffic levels along Seamer Road as follows:



168. The ES addendum states that the speed surveys were taken at the site access which is the appropriate location in order to determine appropriate visibility from the site. The original speed surveys were recorded bi-directionally and are acceptable due to the highway topography. The survey was carried out to the appropriate guidance and recorded vehicle speeds of vehicles travelling under free flowing conditions. The Highway Authority would normally send one Surveyor to undertake a speed survey on a lightly trafficked rural road. An appropriate method of surveying was undertaken for the period of time specified; this is a normal procedure for this work. The survey will deliberately miss peak hour traffic as it is likely that more vehicles would be present and therefore lower speeds are expected, in quieter periods higher speeds are often recorded, that is what is of importance to the Highway Authority to ensure that an appropriate visibility splay is introduced.

### **Traffic Flow Data**

The concerns have been addressed within the report.

### **Proposed Access Route**

#### ***Abnormal Load Preferred Route***

169. The abnormal load route is the nominated route for abnormal loads travelling within the Borough of Stockton-on-Tees, there is no need for additional structural surveys as the Authority's Structural Engineer is aware of the loads.

#### ***Site Access Assessment***

170. Drawings P-61 and P-62 are acceptable; they indicate the swept path analysis of abnormal loads and HGV's wishing to access sites, north and south of Seamer Road.
171. The drawings indicate that HGV's can access the site if they are travelling from Seamer. The developer has indicated that the preferred route for HGV traffic will be via Hilton as the quarries and concrete plants lie to the north west of the site and this would be the shortest route. There is however still potential for HGV's to access the site from the direction of Seamer and the developer is indicating that this is possible. HGV's can legitimately use highway and it may be appropriate for some to travel from Seamer to the site, although the majority will come from Hilton.

#### ***Abnormal Load Vehicle Access: Auto Track Drawing and Site Access Assessment***

172. The report undertaken by the Highway Consultant Faber Maunsell describes the vehicle used to undertake the auto tracking on drawing numbers 08223646-P-1 to 13. The dimensions of this vehicle are indicated on drawing number 08223646-P-14.

#### ***Auto Track Assessment by R Collett & Sons***

173. A specialist vehicle operator was commissioned to undertake the pinch point locations at A1044 Low Lane/Hilton lane junction and the S bend through Hilton village the drawings are included within the report, drawing numbers 185497-50A1 and 185497-45A1 show these locations, and indicate that the largest abnormal load vehicle can access these pinch points as demonstrated on the drawings. They have however been carried out using Ordnance Survey based information and not topographical surveys and the 'dry run' previously described should demonstrate the vehicle that will be necessary to bring in the appropriate sized turbine components.

### **Horizontal Swept Path Assessment for Route 1**

174. The 'dry run' is a Grampian condition as previously described.

### **Construction Traffic Calculations**

175. It is expected that the highway should normally be able to withstand volume and weight of traffic. The Highway Authority is carrying out a survey prior to commencement of development to ascertain the condition of the highway and a subsequent survey will be undertaken when the development is complete. Any defects will therefore be dealt with as necessary.

### **Glare from the sun**

176. In this vicinity none of the recorded injury accidents in the last three years have glare from the sun identified as a causation factor.

### **Highways Agency advice on siting turbines**

177. Highways Agency guidance is noted, however, it is relevant to trunk roads that are heavily trafficked and the siting of turbines will be subject to further investigation.

### **Summary of Urban Design Highways**

178. In summary no objection are raised to the proposal subject to the conditions outlined above. These include a Grampian condition for a 'dry run' to be undertaken, a Traffic Management Plan to the satisfaction of the Highway Authority to be implemented, condition surveys of the highway prior to commencement and following completion of the construction phase of the development to be undertaken and risk assessment on the turbine position to be submitted.

## Urban Design - Landscape & Visual Comments

### **General**

179. The Hilton - Seamer Wind Farm proposal comprises 5 turbines, with a maximum tip height of 125m (typically 80m hub height and up to 45m blade length) located between the villages of Hilton and Seamer. The proposal site is located such that 3 turbines and their associated infrastructure lie within the administrative boundary of Stockton Borough Council, while the other 2 wind turbines and remaining associated infrastructure lie within the administrative area of Hambleton District Council.
180. The Wind Farm proposal was originally submitted in 2008 (ref: 08/2372/EIS) and was refused permission. No changes to the proposed turbine layout or locations have been made in the new application; however the site access points from the Seamer Road and the location of the sub station have been revised.
181. The potential landscape and visual impacts that would arise as a result of the Wind Farm proposal are identified in Landscape and Visual Impact Assessment (LVIA) chapter of the Environmental Statement (ES), submitted as part of the original application and the LVIA chapter of the ES Addendum.
182. The assessment contained within the LVIA chapter of the ES has not changed from the assessment submitted with application ref: 08/2372/EIS. The LVIA chapter of the ES Addendum (referred to as the LVIA Addendum chapter or LVIA Addendum from this point forward) provides: an assessment

of the changes made to the original Application (namely the revised site entrance locations and sub station position); clarification of issues raised during the consultation period for the original application (ref: 08/2372/EIS); and, details of corrections to the LVIA.

### **Summary of Landscape and Visual Impact at Date of Opening**

183. The assessment of the landscape and visual impact at date of opening contained within the LVIA chapter of the ES remains the same, concluding 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 isolated dwellings or groups within 2.5km on the nearest turbine (including 6 properties within 1km radius of the nearest turbine would be likely to experience significant impacts); the western side of Seamer village and locations where Hilton village is viewed in its rural setting and small local roads.
184. The LVIA chapter of the ES Addendum provides additional assessments in response to the changes to the proposal (from the original application) and supplementary information supplied.
185. The application proposes the use of pale grey turbines. However, in response to the comments regarding the Civil Aviation Authority's (CAA) requirement for turbine colour made in the original committee report the LVIA Addendum provides a commentary considering the potential visual impact should the turbines be painted white. The comments made in the original committee report (ref: 08/2372/EIS), regarding this matter and the Defence Estate Operations requirement to fit red lights on the turbines, are still relevant.
186. The LVIA Addendum provides a supplementary assessment of Local Resident's Visual Amenity. This assessment identifies which dwellings located within the villages of Hilton, Seamer, Newby and Middleton-on-Leven, and which isolated dwellings within 3km of the centre of the wind turbine group would be likely to experience significant adverse effects on their outlook during the operational period of the proposed wind farm. The potential views to the proposal from dwellings were identified and graded according to whether views were possible, the direction of view and whether the view was from ground floor or upper storey windows.
187. The assessment considers that dwellings within 1.5km would experience significant adverse effects if views were graded as "clear views from main ground floor windows" or "oblique or semi-screened views from main ground floor windows or clear views from upper windows"; and that dwellings within 3km would experience significant adverse effects if views were graded as "clear views from main ground floor windows". The assessment notes that it was beyond the scope of the study to again access to individual dwellings or gardens and that the nearest public access point was used for visual assessment purposes. It is acknowledged that the assessment can therefore only be used as a guide. The resident's visual amenity assessment identifies that eight out of approximately 93 dwellings within Seamer, two out of approximately 63 dwellings in Newby, four out of approximately 170 dwellings in Hilton and no dwellings out of approximately 19 in Middleton-on-Leven would experience significant adverse effects. It is also noted that 11 out of the 43 scattered isolated dwellings would experience significant adverse effects.

Views from seven out of these 43 scattered isolated dwellings were not assessed.

188. The original LVIA chapter omitted the assessment of cumulative effects with the Butterwick Moor wind farm. A cumulative assessment including a Zone of Theoretical Visibility plan (ZTV) has been provided within the LVIA Addendum chapter. The assessment concludes that the proposals would not contribute significantly to cumulative effects and that there would not be cumulative landscape effects.
189. Since the original application was made (ref: 08/2372/EIS) a four turbine wind farm has been proposed at Bullamoor, located approximately 17km south west of the proposed Hilton -Seamer wind farm. The Bullamoor proposal is located within Hambleton District Council and is currently awaiting determination. (Possibly November 2009). A cumulative assessment including a Zone of Theoretical Visibility plan (ZTV) has been provided within the Hilton -Seamer wind farm LVIA Addendum chapter. The assessment concludes that the Hilton -Seamer wind farm proposal would not result in the occurrence of cumulative landscape effects. However, it is acknowledged that there could be a visual link between the 2 sites from views afforded from elevated ground that lies above the Bullamoor site. From certain vantage points which include land within the North Yorkshire National Park, the Hilton -Seamer wind farm would be visible. However, it is considered that with the benefit of distances in excess of 20km that this visual link is insufficient to constitute a cumulative impact. Whilst the turbine's at Hilton - Seamer would be visible from a greater distance these elevated viewpoints would be looking down on to the turbines which would be set against a back drop of countryside rather than sky and therefore viewed as part of a wide landscape that currently containing many other larger structures, for example industrial development at Billingham, Thornaby Lackenby and Wilton.

#### **Access Tracks**

190. The wind turbines would be accessed via three separate junctions, as the original application (ref: 08/2372/EIS). However, the location of the two proposed access tracks from Seamer Road within Stockton on Tees has been revised from the original application.
191. The LVIA Addendum states that the "construction of the two principle accesses with their visibility splays would involve the loss of approximately 110m of hedgerow and the reinstatement of 130m of native species hedgerow located a few meters back from the existing hedge line or following the curved lines of entrances."
192. The existing hedgerows, where still present grow in close proximity to the road, following the gentle undulation and sweep of the road and surrounding topography. Whilst new opening would be created the new access track arrangements allow replacement hedgerows which are acceptable for both the temporary access and longer term decommissioning. i.e. hedges won't have to be removed when the Wind Farm is dismantled. There is scope for additional hedgerow planting along the blue line boundary of the application. It is recommended that this additional hedgerow planting is secured by way of a condition.
193. In accordance with the recommendations made in the committee report for the original application the LVIA Addendum outlines that Tarmac bell mouths

would be required at the junctions with the main road and that the proposed access tracks may be surfaced with a geotextile grid or equivalent. Material choice for the tracks to be conditioned as part of any consent.

### **Mitigation**

194. No additional mitigation measures have been proposed within the LVIA Addendum. The comments made by Urban Design remain as for application ref: 08/2372/EIS.

### **Summary of Landscape and Visual Impact Due to Construction**

195. The impact on the wider landscape and views afforded from dwelling houses, roads and public rights of way during the construction period were considered within the original ES, and a route and access study for both HGV and abnormal load access was conducted for the proposed development (Appendix 7 of the original ES). However, no detailed assessment of direct landscape impact was carried out for the preferred access route in the original LVIA.
196. An Arboricultural Survey of the trees along the main road within Hilton undertaken by JCA Ltd. has been included in Appendix 7: Traffic and Transport of the ES Addendum. The survey focuses on Council owned highway trees and specimens growing within private garden along a 250m stretch of road passing through Hilton. The species, overall height, crown height, stem diameter and (true) crown spread were measured for each tree. An assessment of the age class, physiological and structural condition and an estimate of life expectancy of each tree were made. The survey identifies a retention category value for the trees in accordance with BS 5873:2005 Trees in Relation to Construction.
197. An assessment of the impact on the trees in Hilton as a result of Abnormal Loaded Vehicles (ALVs) transporting turbine components through the village was undertaken. This assessment was based on a worst case scenario using proposed route that the ALV would take through the village, the dimensions for the ALV delivering the longest wind turbine component (rotor blades, 46m in length) and the vertical clearance required for the tallest component (5m).
198. The assessment of the tree works required to facilitate the ALVs identifies that eight trees within the village would require their crowns lifting, three trees or groups of trees may require minor pruning (however this may be avoided by temporarily tying the foliage back), and one tree may will require major pruning of a branch which overhangs the road to allow unobstructed passage of the ALVs. The assessment notes that in the short term the removal of the branch would affect the individual aesthetic appearance of the tree and would require observation and maintenance for the remainder of its life; however it further notes that the tree is planted as part of a group of three trees therefore the loss of visual amenity would be limited. An alternative option of removing the tree which requires major pruning works and replanting a new tree has also been suggested within the tree report; however this option has not been taken forward into or considered within the LVIA Addendum chapter.
199. SBC's Arboricultural Officer has visited site and reviewed the tree survey submitted as part of the application and notes:  
*"I would recommend if the scheme is otherwise approved, the tree is removed and replaced in preference to the limb in question being removed - the size of the limb is approximately equal to the size of the more upright*

*stem and it is likely the ensuing wound on the stem would be a future entry point for decay which may in turn reduce the retention span of the tree and compromise its structural integrity - the tree may also adapt and produce new sound wood around the defect however the tree may also lose its natural form and symmetry by the removal of a significant portion of the canopy on one side. I would recommend its removal and replacement with a large structural species such as Lime (Tilia cordata) or possibly another ornamental maple of suitable upright growth habit bearing in mind its presence adjacent to the highway."*

## **PUBLICITY**

200. 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.
201. 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. There have been 181 representations offer support for the proposal and 393 objections. Significant objections have also been received from the Seamer & Hilton Wind Farm Action Group. In addition to these the applicant has sent in letters of support which are primarily on a pro forma that they have received at their office. Objections are summarised below:
202. 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 , Corus site, derelict wasteland on the coast or unused Industrial Estate at Teesdock.
  - 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
203. 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
- New regulation from the Electricity Authority states that turbines must be at least 3 times their height away from any high voltage power lines.
- 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
- Proposed fish farm will add to the traffic chaos
- Emergency services may not be able to deal with a turbine fire

204. 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
- Acadamie Nationale de Medecine in France's review on Health problems created by wind turbines such as headaches and tiredness recommended turbines to be installed no less than 1.5km from homes.
- Light pollution from aircraft mitigation
- Close proximity to residential properties
- Scotland, USA and Europe planning guidance advises that turbines should be 2km from homes.

205. 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
- Government Figures show that wind farms are less than 30% efficient.

206. 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, skylarks, grey partridge, red coloured starlings, 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
- Impact on horses as stables positioned 635 metres from one turbine.
- During construction the effect on trees in the village which have Tree Preservation Orders, removal of hedges and destruction of garden walls which formed part of the original Hilton Manor Estate.
- Would the concrete structure increase the flooding to properties as problems with flooding already in Coolpool as a low lying area.

207. Residual matters

- Data submitted by the applicant is incorrect and unreliable, specifically noise levels and traffic survey results, amount of householders it would supply and the emission savings are based only on coal – fired power production figures.
- 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
- Have provisions been made for site restoration/remediation fund at the end of the project.
- Other renewable energy sources e.g. Biomass generator would provide 100 times more power.
- Virtually no difference or material changes made from the first application submitted.
- Not enough space between the villages for a development of this size with narrow site area of only 2 miles.
- Unviable unless heavily subsidised by the government e.g. on shore wind farms are complaining of proposed tax increases to 20% which would make 150 planned wind farms (Hilton/Seamer) unviable. Sunday Times Articles 17<sup>th</sup> May.
- Leaflet distributed by applicant March/April 2009 biased and distorted information, feel the newsletter is not classed as consultation under PPS22 and is communication.
- Television / telecommunications interference when blades operating
- Similar application in Appleton Wiske, Hornby, Wellbury and Deighton areas
- Minor changes to the service tracks etc proposed by Broadview will not reduce the visual impact.
- Planning Inspector recognised importance of rural landscape in the 'Pylon Enquiry' which stated that 50m high electricity pylons should be located away from Boy Hill.

208. The letters of support include several standard letter types which repeat comments of support. 11 different letter formats have been submitted by 134 individuals with some individuals submitting more than one letter type. The letters of support typically cite the following reasons:
- Wind power is an excellent alternative to importing fossil fuels from overseas.
  - Why compete in the increasingly volatile and dangerous market when we can harness the energy available right here on our doorstep.
  - Climate change is an immediate fact. It is important we reduce our carbon emissions and it would be irresponsible to not reduce our carbon emissions.
  - By building wind farms we can make a small yet significant contribution towards stopping global warming.
  - This decision will have a very important impact on future generations.
  - A small visual impact is irrelevant when thinking about increasing oil prices, melting ice caps and atmospheric pollution.
  - This scheme will not give a negative impact on the surrounding countryside and will be an attractive feature of the landscape.
  - The site where the turbines are located is relatively isolated.
  - New technologies are always controversial but what choice do we have.
  - The impacts locally will be outweighed by the wider environmental benefits
  - Could potentially turn the wind farm into a tourist attraction
  - Wind energy is clean and free
  - Britain needs to be able to generate energy without relying on imports from other countries
  - The proposal would be beneficial to the local economy generating contracts for the local area

## **PLANNING POLICY**

### **National Planning Policy**

209. 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
210. 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.

211. 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**

212. The relevant policies within the Regional Spatial Strategy (RSS) are outlined below:

*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.

213. 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**

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

**Local Planning Policy**

215. 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).
216. 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 the 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**

217. 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**

218. 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.

219. Regional Spatial Strategy Policy 39 - *Renewable Energy Generation* details minimum sub regional targets for electricity produced by renewable sources by 2010 of the following areas:

- Northumberland 212MW
- Durham 82MW

- Tyne & Wear 22MW
  - Tees Valley 138MW (which includes Darlington, Middlesbrough, Stockton, Hartlepool, Redcar and Cleveland)
220. 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.
221. RSS Policy 41 relates to Onshore Wind Development and 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.
222. 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, developers receiving subsidies from government and wind farms being a poor choice for the Tees Valley region in terms of meeting renewable energy generation targets. Whilst these comments are noted, 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.
223. A number of objections have also been received in respect to there 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. These are not considered to be material planning considerations in relation to this proposal.

### **Renewable Energy Targets**

224. Objectors have commented on existing targets for renewable energy within the RSS and existing provision of renewable energy schemes within Tees Valley, siting the ones listed below. They believe that there is no reason to blight the area in view of the other schemes within the region.
225. One of the specific concerns of the local Action Group (SHWAG) relates to the inefficiencies of wind turbines as against other forms of energy generation, with wind turbines generally being 30% efficient and wood chip power stations being 75% efficient. Whilst comments on efficiency are noted, the situation remains that wind turbines and their efficiency is an accepted part of National Planning Policy which this application needs to be considered against. SHWAG believe that the operational 30MW biomass power station at Wilton could provide enough power for 53,000 homes whilst the part



approved Teesside Renewable Energy Plant could produce power for a further 530,000 homes (which they advise is more than a 1000MW wind farm or 550 2MW turbines).

226. The current status in Tees Valley in respect to Renewable Energy (which contributes to the RSS targets) is;

Position at June 2009

### Operational

<u>Site Location</u>	<u>District</u>	<u>Renewable Energy Type</u>	<u>Installed capacity</u>
High Volts	Hartlepool	Wind Farm 3 no. turbines	
Sebcomp 10 Wilton	Redcar and Cleveland	Biomass Power Station	30 MW

### Approved but not yet operational

<u>Site Location</u>	<u>District</u>	<u>Renewable Energy Type</u>	<u>Installed capacity</u>
Royal Oak	Darlington	Wind Farm 5 x 1.3 MW Turbines	6.5 MW
Middlesbrough Football Club	Middlesbrough	Wind Turbine 1 x 3MW	3 MW
Teesside Offshore	Redcar and Cleveland	Wind farm 30 x 3MW turbines	90MW
Corus Onshore	Redcar and Cleveland	Wind farm 18 Turbines	

Teesside offshore still requires some on shore development to be approved.

### Current applications in the planning process

<u>Site Location</u>	<u>District</u>	<u>Renewable Energy Type</u>	<u>Installed capacity</u>
Land adjacent to Howe Hills Farm	Sedgefield	Wind farm 10 x 2.5 MW Turbines	25 MW
Red Gap Farm Wolviston	Hartlepool	Wind farm 5 x 3 MW Turbines	15 MW
Seamer / Hilton	Stockton	Wind farm 3 x 3 MW Turbines	9 MW
Teesside Renewable Energy Plant	Redcar and Cleveland	Biomass powered generator	300MW

227. The above does not include schemes which have been through the Scoping Process but not yet made it to planning application submission stage.

228. Teesside Energy from Waste Plant, Haverton Hill – operational 20MW, to increase to 30MW 2009. This involves a mixed waste incineration process which is not classed as an eligible renewable energy source as defined by the Department for Business, Enterprise and Regulatory Reform (BERR) and is therefore not considered to contribute to the 2010 and 2020 renewable energy targets.
229. SHWAG consider that the total installed capacity from all schemes currently in the planning process and at scoping (which includes Gaia Power biomass 45MW) would be 495MW, from schemes which they consider to be acceptable to the public and if implemented by 2012, would exceed the RSS 2020 target for Tees Valley. Whilst these comments are noted relating to the Tees Valley region, potentially surpassing RSS targets on energy supply via renewable resources, these are not ceiling limits.
230. The RSS requirement for 138MW (10%) by 2010 and 20% by 2020 is to facilitate the achievement of these by the dates specified, which at the moment has not been achieved within the Tees Valley. In view of 2010 being only a few months away and taking into account the length of time it takes for schemes to become operational taking into account the submission, approval, appeal and constructional phases which are the main impacts, it is now considered necessary to focus on the 2020 target. In view of the above, although there are renewable energy schemes either approved, operational or in the planning application process, these are currently making a limited contribution to the overall 2010 / 2020 targets. Furthermore, all non operational schemes will be subject to a wide range of influences which may affect their ability to becoming operational. It is therefore considered that the proposed scheme would represent a modest yet valuable contribution towards the 2020 target for the production of energy from renewable sources in the region.
231. As background information, Darlington Borough Council have advised the following with regard to the Onshore Wind Energy Development in County Durham position as at June 2009 is as follows;
- Total Operational = 51.22MW
  - Approved but not yet operational = 75MW
  - Therefore total approved = 126.22MW
  - Currently in planning application process = 27.5MW
  - Currently in pre planning application – Scoping stage = 98.25MW
  - Therefore total approved and in planning / pre planning stages = 251.97MW
  - Total Refused = 15.5MW

### **Traffic, Transport and Highway Safety**

232. The Head of Technical Services has considered the proposed development in respect to the traffic impacts of the construction phase of development, route identifications for abnormal loads and Heavy Goods Vehicles, traffic flows (existing and proposed) and traffic speeds. The local Highway's Authority have undertaken there own traffic surveys to assess route capacities and have raised no concerns with respect to the amount of traffic that would use the Hilton / Seamer road during the construction phase of the development. Following construction, there would be a need for maintenance vehicles to access the site, however, these are very limited in number.

233. Access arrangement has been amended since the earlier application to create a stagger between accesses on the northern and southern sides of the Hilton / Seamer Road. This prevents the accesses having an engineered appearance which was a specific concern of the earlier proposal.
234. Visibility splays and access provisions have been accepted by the Head of Technical Services
235. It will be necessary for the Highway to be fully inspected by the Highway Authority prior to the commencement of any development so that a full report can be recorded on the condition of the highway. Once construction is complete a further inspection should be carried out to determine what reinstatement work is required to the local highway network. A condition has been recommended accordingly.
236. Taking into account the proposed traffic routes and the numbers of vehicles to be utilising the network throughout the construction phase, it is acknowledged that the short term traffic disturbance will have an adverse effect on Hilton village due to an increase in development traffic, however the implementation of a Traffic Management Plan should ensure that highway safety risks are kept to a minimum.
237. Driver delay: Accidents and Safety; Air quality; Noise assessment; Community Severance; have all been considered and their impacts, whilst noted, are considered to be acceptable.
238. Driver distraction has been raised as a specific concern from objectors due to turbine positioning. However PPS22 guidance regarding the proximity to roads suggests that drivers are faced with a number of varied and competing distractions during any normal journey, and drivers are required to take reasonable care to ensure their own and others' safety. Wind turbines are therefore not to be treated any differently from other distractions a driver must face and should not be considered particularly hazardous. These turbines are located adjacent to a lightly trafficked rural road that will generally be used by the same drivers who are unlikely to be distracted by the presence of wind turbines. Shadows across the highway have been considered and it is also not expected to be a driver distraction.
239. Objections have been raised in respect to the majority of the key areas considered by the Head of Technical Services and these have been taken into account in the response provided by the Heat of Technical Services. Taking this into account, it is considered that the proposed development would not have any significant undue impact on the highway network or its associated safety which would warrant refusal of the application.
240. In conclusion The Head of Technical Services has no objections to this application subject to the imposition of conditions in respect of a 'dry run' to be undertaken, a Traffic Management Plan, Highway condition surveys and landscape conditions to preserve and enhance existing trees and hedgerow.
241. 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.

242. 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.
243. Several objections have been raised in respect to the impact of the turbines on the surrounding highway network in relation to safety margins from the highway, blade shearing, ice formation on blades, shadow flicker and proximity to public footpaths. 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.*
244. The Head of Technical Services has asked for further information to be submitted in respect to the proximity of the turbines in relation to the highway, as a result of a response from NYCC Highways to the application for the wind farm which has been submitted to Hambleton District. Additional information has been requested from the applicant and 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**

245. Since the original application was made (ref: 08/2372/EIS) a four turbine wind farm has been proposed at Bullamoor, located approximately 17km south west of the proposed Hilton -Seamer wind farm. The Bullamoor proposal is located within Hambleton District Council and is currently awaiting determination. (Possibly November 2009). A cumulative assessment including a Zone of Theoretical Visibility plan (ZTV) has been provided within the Hilton -Seamer wind farm LVIA Addendum chapter. The assessment concludes that the Hilton -Seamer wind farm proposal would not result in the occurrence of cumulative landscape effects. However, it is acknowledged that there could be a visual link between the 2 sites from views afforded from elevated ground that lies above the Bullamoor site. From certain vantage points which include land within the North Yorkshire National Park, the Hilton -Seamer wind farm would be visible. However, it is considered that with the benefit of distances in excess of 20km that this visual link is insufficient to constitute a cumulative impact. Whilst the turbine's at Hilton - Seamer would be visible from a greater distance these elevated viewpoints would be looking down on to the turbines which would be set against a back drop of

countryside rather than sky and therefore viewed as part of a wide landscape that currently containing many other larger structures, for example industrial development at Billingham, Thornaby Lackenby and Wilton.

246. The wind turbines would be accessed via three separate junctions, as the original application (ref: 08/2372/EIS). However, the location of the two proposed access tracks from Seamer Road within Stockton on Tees has been revised from the original application.
247. The LVIA Addendum states that the “construction of the two principle accesses with their visibility splays would involve the loss of approximately 110m of hedgerow and the reinstatement of 130m of native species hedgerow located a few meters back from the existing hedge line or following the curved lines of entrances.”
248. The existing hedgerows, where still present grow in close proximity to the road, following the gentle undulation and sweep of the road and surrounding topography. Whilst new opening would be created the new access track arrangements allow replacement hedgerows which are acceptable for both the temporary access and longer term decommissioning. I.e. hedges won't have to be removed when the Wind Farm is dismantled. There is scope for additional hedgerow planting along the blue line boundary of the application. This is the subject of a condition.
249. In conclusion, the Councils Landscape Architect have fully considered the Landscape and Visual impact of the proposal as well as a detailed assessment of tree works as a result of construction and its associated traffic and have raised no objections to the proposals subject to the imposition of controlling conditions. These have been recommended accordingly.

### **Traffic Noise**

250. 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
251. The majority of these vehicles are standard road vehicles such as vans and Heavy Goods Vehicles (HGV's), 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.
252. Following traffic surveys being carried out by the Councils Highways Department, the increase in highway traffic as a result of the construction phase and maintenance following construction will not be significant.

## **Turbine Noise**

253. Objection was received with respect to a disclaimer placed on the noise assessments. This has since been removed by the applicants agent who has advised that they are confident that the data used in the assessment, has been collected, analysed and presented correctly and that this has been done in accordance with the appropriate national policy, guidance and best practice and that noise monitoring equipment was sited, calibrated, utilised and maintained appropriately.
254. 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.
255. 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, when recommending approval, to condition the maximum noise levels allowable from the turbines and for monitoring surveys to be undertaken where necessary.
256. Having considered the submitted information, the Council's Environmental Health Unit have raised no objection in principle to the development, however, 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.
257. 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**

258. 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.*

259. 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**

260. 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.
261. 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.
262. The applicant's 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. Natural England previously raised concern over the extent of evidence within the previous application (08/2372/EIS) which formed one of the two reasons for refusal. The applicant has submitted additional information in respect to Great Crested Newts and impacts on bats. In considering the findings of the ecological surveys and the proposed mitigation, Natural England has raised no objection subject to micro siting of turbine no.4 from an adjacent hedgerow and subject to conditions being imposed relating to mitigation works. Due to the scale and nature of Wind Turbines, the micro siting is normally a matter which is left to be dealt with by condition to take into account any unforeseen site constraints / ground conditions etc. A condition has been recommended accordingly.
263. 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. The development has a limited footprint and the land between the SNCI and turbines remains agricultural.
264. This site is designated for its flora and fauna and taking TVWT have considered the proposal and concluded there would be no undue impacts on this area.

### **Ornithology**

265. 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.
266. 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.
267. 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.

### **Cultural Heritage**

268. No Scheduled Ancient Monument lies within the site boundary, although 2 lie within 5km, these being Castle Hill (approx. 0.5km to the north west of Middleton on Leven and Tunstall Medieval Settlement (approx. 1.7km to the east of Newby).
269. The nearest Historic Parks include Arncliffe Hall (approx. 10km to the south), Albert Park in Middlesbrough, Ropner Park in Stockton and Wynyard Park.
270. There are several Listed Buildings within reasonable proximity to the proposed turbines, the nearest being located within the villages of Hilton, Seamer and Middleton on Leven and others being more sporadic located buildings associated with farms and similar rural properties. All are Grade II Listed apart from the Grade I Church of St Peter in Hilton, which is a single storey small structure with no spire or tower, located centrally within the village and surrounded in the main by more modern residential development.
271. Nearby Conservation Areas (those within 5km) include Stokesley, Hutton Rudby and Thornton.
272. Taking into account the location of the Scheduled Ancient Monuments, Historic Parks, Listed Buildings and Conservation Areas in respect to the application site, whilst the turbines would be visible from some of these locations, it is not considered that the proposed turbines would have an undue detrimental impact on these features or their settings, as it is considered there is adequate intervening distance which would result in the turbines forming part of the much wider setting and not impacting on the form, presence and setting which makes each of these features important for heritage reasons.



## **Archaeology**

273. The Environmental Statement which accompanies the application states that there is no direct evidence for prehistoric or Roman activity within the study area, but the presence of activity in the surrounding vicinity indicates some potential for remains of all periods to be present. The ES recommends that as part of a mitigation strategy, the footprint of the proposed development area is subject to geophysical survey.
274. 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 relating to the carrying out of a phased programme of Archaeological Work which they have detailed. An appropriate condition has been recommended accordingly.

## **Air Traffic Safety (Aviation and Radar)**

275. 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 produced from multiple turbines can appear as fast moving objects, mimicking the returns from aircraft themselves. However, such effects can be acceptable or can be mitigated against sufficiently to allow a development to be consented.
276. The Civil Aviation Authority had advised that it is essential that the Durham Tees Valley Airport Operator be consulted and that there might be a requirement to install aviation obstruction lighting and for the turbines to be painted white. NATS further advise that should the application be approved, then the developer should provide details to the Defence Geographic Centre to allow their plotting on aeronautical maps.
277. 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.
278. The MoD have advised that although this scheme is in line of sight to the Air traffic Control radar at RAF Leeming, the anticipated effect has been assessed as manageable. Based on expert advice the MoD have advised of a need for the southern most turbine to be fitted with aviation lighting in the interests of Air Safety and for Defence Estates to be informed of certain details if planning permission is granted.
279. In view of the requirement for lighting of the turbines by the MoD, in accordance with comments received from the Civil Aviation Authority it is also considered necessary to ensure the turbines are painted white. Conditions

have been recommended to deal with aviation lighting, turbine colour and the MoD being informed of specific details.

280. National Air Traffic Services (NATS) have advised that although the proposed development is likely to impact on their electronic infrastructure, they have no safeguarding objection to the proposal.
281. Newcastle Airport advised in respect to consultation on application 08/2372/EIS that they have no objection to the proposal which is located beyond their 30km consultation zone. Newcastle Airport has not responded to the consultation exercise in respect to this application.

### **Wind Turbine Icing**

282. 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.
283. 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.'*
284. 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.
285. 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.
286. In view of the guidance from PPS22, it is considered that the issue of ice throw from moving turbines could be dealt with by a control system to prevent the turbines operating when there is an ice build up on the blades. With regard to ice throw from static turbines, this would not be significantly different from ice formation on structures such as pylons or tall buildings which themselves are located much closer to public areas or rights of way. The turbines are sited to accord with the set off distance from public areas as detailed within PPS 22 and as such, it is considered that risk of ice throw would not be a significant issue.

## **Shadow Flicker**

287. 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.*

288. PPS 22 further advises 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 a distance of ten rotor diameters of a turbine. Therefore if the turbine has 90m diameter blades as being proposed, the potential shadow flicker effect could be experienced up to 900m from a turbine. The nearest property in Hilton is approx. 900m away whilst the nearest property in Seamer is approx. 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.
289. The applicants agent has advised that the disclaimer initially attached to shadow flicker information is incorrect and has advised that TNEI are confident that the information used in the reports has been collected, analysed and presented correctly and that this has been done in accordance with the appropriate guidance and best practice. TNEI are confident that the data, analysis and results are valid for the purposes of the Planning Application.

## **TV and communication link interference**

290. 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.
291. The applicant has advised that no radio-communication links have been identified as crossing or being in close proximity to the site whilst there have been no objections raised from such communication providers.
292. 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 there 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**

293. 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.
294. 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 comments on the previous application raised no objection to the turbines or their impacts on the surrounding rights of way network.
295. In respect to the previous comments of the North Yorks Moors National Park Authority, they concurred 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 advised that they recognised the need to accommodate suitable renewable energy developments in the Region and 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.
296. 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 this area.

### **Impact on Overhead Power Lines**

297. The proposed wind farm is located within relative close proximity to an overhead power line which splits the site. In considering this application, the National Grid raised strong concerns in respect to the proximity of the turbines to the power line, quoting a new National Grid Policy that the turbines should be 5 x rotor diameters away from the power lines. Concern was also raised that the position of the turbines did not meet the minimum spacing recommended within PPS 22 of Turbine height + 10% which in the case of these turbines would be 137.5m. Confirmation that the proposed turbines would meet the turbine height + 10 % distance has since been submitted and accepted by the National Grid.
298. It is understood that the PPS22 guideline for spacing from power lines relates to a safety matter in case of a turbine toppling over where as the National Grid's latest Policy for spacing relates to accelerated wear as a result of air turbulence created by the turbine. Following discussions between the National Grid and the applicant, National Grid have withdrawn their objection, and instead have requested the applicant contribute to the monitoring of the affects of the wind farm on the overhead lines, carrying out monitoring works both before and after operation.
299. The local action group (SHWAG) consider the request by the National Grid to use the wind farm to carry out monitoring works for its impacts on the overhead power line is outwith the planning approval being sought. These comments are noted, however, the mitigation recommended by National Grid is considered to be as a result of the proposed development and as such is considered to be relevant to the considerations of this proposal and therefore suitably conditioned.
300. Whilst objections to the wind farm have been received based on the impacts of the development on the power lines, in view of the National Grids initial concerns relating to accelerated wear and not to safety, and taking into account their latest comments indicating no objection, it is considered that the proposed development would not unduly compromise the overhead power lines or adversely affect safety associated with them, however, a condition has been recommended relating to the monitoring work.

### **Grid Connection**

301. The Environmental Statement has listed several options for making a connection to the National grid from the turbines. 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,
302. 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. A condition has been recommended accordingly.

303. Objection was received in respect to the Grids capacity to take the additional supply from the wind farm. With regard to capacity to accept the electricity from the wind farm the National Grid have advised that for such a small amount of generation the proposed wind farm would be connected through the Distribution Network Operator (DNO) not directly into the National Grid and that Grid Network capacity is not an issue for these proposed turbines.
304. The applicants agent has advised that the disclaimer initially attached to Grid Connection information is incorrect and has advised that TNEI are confident that the information used in the reports has been collected, analysed and presented correctly and that this has been done in accordance with the appropriate guidance and best practice. TNEI are confident that the data, analysis and results are valid for the purposes of the Planning Application.

### **Property Prices**

305. 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.

### **Viability of the Site**

306. The applicant has predicted the wind farm would generate between 29,340 MWh and 33,060MWh of electricity, providing for the domestic needs of between 6243 and 7034 households, which has been contested by objectors as an unrealistically high assessment, advising that turbines are inefficient and that the assumed load factors (efficiency rates) are not being achieved on other wind farms within the area. Other objection relates to the overall viability of the site and the fact that they have to be subsidised by Government.
307. Whilst all these matters are noted, the predicted electricity generation information is only background information. 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**

308. 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.

309. 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.*

310. 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**

311. 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. A condition is recommended in this regard.
312. 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**

313. 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. There may be a requirement for a degree of flexibility for the absolute final siting (micro siting) within the zones, taking into account ground conditions and other variables. A condition has been recommended to control this. It is considered that movements within these parameters would not give rise to any fundamental issues which have not already been addressed within this report (subject to the two closest turbines to the highway remaining turbine height + 10% away). Furthermore, the development if approved and installed would need to accord with the Environmental Statement as submitted.

### **Other Matters**

#### **Impact on Horses**

314. 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.'*

- 315 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.*
- 316 . 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**

317. 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.*
318. 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.



319. The Health and Safety Executive have advised that they do not have control over such sites until it becomes an operational work place and as such does not get involved in the planning stages of such developments. However, the HSE expect potential risks to public safety within the planning framework which is PPS22 and its associated companion guide. It is considered that the impacts of the scheme have been assessed adequately against the guidance contained within PPS22 and its companion guide, specifically in respect to proximity of turbines to publically accessible areas, ice throw, turbine collapse and other similar matters of risk as detailed elsewhere in this report.
320. Within objections raised in respect to the proposed development, reference has been made to a web site which details Wind Turbine Accident Data (Caithness Wind farms Information Forum [www.caithnessswindfarms.co.uk](http://www.caithnessswindfarms.co.uk)). The data from this site advises that it includes all documented cases of wind turbine related accidents which could be found and confirmed through press reports or official information releases up to March 31st 2009. The document relates to accidents and fatalities throughout the world from the 1970's to the present day indicating 60 fatalities. Of the 60 fatalities, 44 were wind industry or support workers, 16 were public fatalities (2 from road accidents from turbine transportation, 3 from driver distraction, and 5 from aircraft collision, 1 strangulation, 1 suicide, 1 electrocution and 1 collision from a parachutist). It is considered that this information does not contradict government guidance in PPS22 in relation to safety.
321. The turbines are located a minimum distance of turbine height + 10% away from the highway and buildings which is considered to accord with the guidance of PPS 22 and in view of all the comments above it is considered that the proposed scheme would not unduly compromise safety.

### **Loss of agricultural land**

322. Whilst there will be a loss of agricultural land as a result of the proposed development, the loss will be limited as agricultural operations will be able to continue to occur beneath the turbines without affecting the turbine operation, as advised within the governments companion guide to PPS 22. The proposal would therefore only result in a negligible loss of land and is accepted in this regard.

### **Surface Water**

323. Local objections have been raised in respect to the potential flooding and poor drainage being caused by the development. 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. The Environment Agency has however requested a condition be imposed to ensure surface water drainage is adequately controlled. A condition has been recommended to address this matter.

### **Toilet facilities and foul drainage**

324. The Environment Agency, in considering application 08/2372/EIS, requested information be submitted in respect to the proposed toilet facilities to be

provided at the site, prior to determination of the application. The Environment Agency considers adequate information has been submitted in respect to Foul Drainage for this proposal and as such conditions are not considered necessary in this regard.

### **Setting a precedent for Wind Farm Development.**

325. A number of objections have been received in respect to approval for this wind farm setting a precedent for other wind turbines either at the same site or elsewhere. Whilst these comments are noted, all applications have to be 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.
326. Objections have been received in respect to the impact of construction traffic on properties sited within close proximity to the side of the highways. Whilst these concerns are noted, no objections have been raised by the Highways Authority with regards to the suitability of these roads.

### **CONCLUSION**

327. The proposed development has been considered in the context of the Environmental Statement and its associated impacts, in particular in respect to traffic and transport, noise, landscape and visual, wildlife, ground conditions, cultural heritage, safety, surrounding settlements and residential amenity and aviation. The impacts of the proposal have been considered against national, regional and local planning guidance and whilst it is considered the erection of wind turbines of the scale proposed will have an impact on many of the above referenced matters and in particular on the character and appearance of the landscape, it is considered that the impacts are acceptable for the reasons cited within the main body of this report. It is considered however, that in order to adequately control and mitigate the impacts of the development that a wide range of conditions are required to be imposed.
328. It is considered that the proposals accord with the guidance of PPS 1, PPS7, PPS9, PPS22 and PPS 24, Regional Spatial Strategy Policies 39, 40 and 41 and Saved Local Plan Policies GP1, EN4, EN11 and EN13.

**Corporate Director of Development and Neighbourhood Services**  
**Contact Officer Mr. Andrew Glossop**  
**Telephone No 01642 527796**  
**Email address [andrew.glossop@stockton.gov.uk](mailto:andrew.glossop@stockton.gov.uk)**

**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 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 Guidance 15: Planning and the Historic Environment

Planning Policy Guidance 16: Archaeology and Planning

Planning Policy Statement 22: Renewable Energy

Planning Policy Guidance 24: Planning and Noise

Regional Spatial Strategy

Adopted Stockton on Tees Local Plan (June 1997)

ODPM Circular 06/2005 Biodiversity and Geological Conservation

**WARD AND WARD COUNCILLORS**

Ward Ingleby Barwick East

Ward Councillors Councillor K C Faulks, D C Harrington, A M Larkin