

**DARLINGTON BOROUGH COUNCIL**  
**PLANNING APPLICATIONS COMMITTEE**

**COMMITTEE DATE: 19 October 2011**

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<b>APPLICATION REF. NO:</b>	<b>11/00160/FUL</b>
<b>STATUTORY DECISION DATE:</b>	<b>13/06/11</b>
<b>WARD/PARISH:</b>	<b>Sadberge and Whessoe</b>
<b>LOCATION:</b>	<b>Moor House, Barmpton , Darlington</b>
<b>DESCRIPTION:</b>	<b>Erection of 6 wind turbines, one anemometer mast plus associated access tracks, crane pad and control building.</b>
<b>APPLICANT:</b>	<b>Banks Developments Ltd</b>

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**THE APPLICATION**

This planning application relates to the erection of six wind turbines in a rural location to the north of Darlington, midway between the villages of Barmpton and Great Stainton.

In summary, the proposal entails:

- Six wind turbine generators with a maximum height of 125 metres.
- A control building measuring 16m x 6m (5m high) including electricity sub-station
- Temporary laydown area and construction compound area
- Construction of a new access to Bishopton Lane
- Construction of 4 km of new access tracks
- Construction of crane pads adjacent to each turbine
- Underground electrical cabling
- One “lattice type” anemometer mast with a maximum height of 80m

In detail the proposals will contain the following elements :

### **Turbines**

Each of the 6 turbines proposed for the site will begin generating power at wind speeds of around 3-5 metres per second (m/s) and would shut down at wind speeds around 25 m/s. The applicants state that they will generate power for approximately 85% of the time.

### **Foundations**

The turbine base would typically be an 18 metres x 18 metres square of concrete around 3.5 metres deep. Following construction, the layer of topsoil and turf originally excavated from the foundation area would be reinstated.

### **Wind Monitoring Mast**

A new anemometer mast is required to monitor the performance of the wind turbines by gathering data on wind speeds and direction. The mast will be of a free standing steel lattice design and will be a maximum of 80 metres in height.

### **Access Tracks**

To access and service the wind turbines, approximately 4 km of new access tracks will be constructed to link the turbines to the public road network. The tracks will typically be five metres wide and constructed from crushed stone.

### **Compound & Traffic**

A temporary compound will be needed during the construction phase for the storage of plant and materials. Traffic travelling to and from the site will use an agreed route. The preferred access route for turbine delivery is from the A66 south of the site, onto Bishopton Lane for the latter part of the journey.

### **Cabling & the Grid Connection**

Underground cables linking the turbines will generally be laid alongside the access tracks. A control building will be built in a compound area from which the electricity generated by the turbines will be fed into the local grid. The electrical output of the proposal is such that the grid connection will be routed a short distance to the North West of the site to join the national grid. If above ground this would be on wooden poles.

In addition to the above there may be a need to locate a small single storey building within the application area to house a primary radar which would mitigate the adverse impact of the development on the Durham Tees Valley Airport. No details of this are known at this stage.

## **SITE DESCRIPTION**

The application site consists of approximately 276 hectares of arable land of which 2.5 hectares will be occupied by the wind turbines and their associated infrastructure. There are some agricultural barns located within the site currently used for storage purposes. The area is gently undulating and includes a number of hedgerows of varying degrees of quality together with a scattering of individual trees. There is a small plantation of woodland on the eastern side of the site and a small SSSI beyond the northern boundary of the site.

The site is not subject to any landscape, ecological or cultural heritage designations which is one of the reasons the applicants have chosen this location. Within their Non Technical Summary the applicants give other reasons why Moor House has been chosen as follows:

*A landscape assessment carried out on behalf of the North East Assembly demonstrated that this part of Darlington had 'some potential' for a wind farm in this location. Emerging planning policy in Darlington also identifies this part of the district as the area where turbines will have the least landscape and visual impact. In addition, the environmental statement demonstrates that the site has suitable highway access and is a sufficient distance from residential properties to protect residents from unacceptable noise or shadow flicker effects.*

*A detailed mapping exercise undertaken by Banks Developments has highlighted that there are few suitable sites for commercial wind energy development in Darlington. Once the various constraints to development were combined onto one map only seven areas in the borough area were identified. We have looked at each of these areas in more detail and in our opinion the Moor House site is considered to be the best site to accommodate a commercially viable wind farm development.*

The features of the site area will be highlighted in more detail later in this report when the various impacts of the development are considered individually.

## **PLANNING HISTORY**

There has been a single previous planning application on this site.

Planning application 09/00741/FUL was submitted by Moor House Wind Farm Ltd in November 2009. That scheme was different from the current amended scheme in that it contained a total of ten turbines. Four of the turbines were planned to be 110 metres tall and six were planned to be 100 metres. The planning application was refused permission by the Planning Applications Committee on 10 November 2010 for the following reason:

*In the opinion of the Local Planning Authority the proposed development would adversely affect the character of the local landscape and visual amenity to an unacceptable level when seen from various viewpoints including nearby settlements and public rights of way to the detriment of the enjoyment of the countryside and the amenities of local residents contrary to policy E26 of the Local Plan taking into account the Wind Farm Development and Landscape Capacity Studies: East Durham Limestone and Tees Plain (NEA / ARUP 2008) and Addendum (ANEC / ARUP October 2009)*

An appeal has been submitted against that decision and a Public Inquiry is due to take place in February 2012.

In submitting this revised proposal the applicants have stated that the overall impacts will be less than the original scheme :

*In planning terms the reduction in the number of turbines presents a number of potential changes which help to address the concerns of the Local Planning Authority :*

*Separation distances between turbines and properties are increased*

*The spread of turbines within panoramic view points is decreased*

*The noise of the turbines at sensitive properties is decreased (notwithstanding the fact that this was previously found to be acceptable)*

*The potential for shadow flicker is reduced to the extent that is predicted not to occur*

*It has to be acknowledged that the quantity of renewable electricity which would be generated by this version of the wind farm would be lower. However the selection of larger 2.5 MW turbines would offset this to some extent.*

## **PLANNING POLICY BACKGROUND**

There are a number of planning policies that are relevant to wind turbine development and these are highlighted below where they relate to the Moor House proposals.

National Guidance.

Planning Policy Statement 1: Delivering Sustainable Development PPS1 sets out the Government's overarching planning policies on the delivery of sustainable development through the planning system. In addition there is a supplement entitled Planning and Climate Change which sets out how planning should contribute to reducing emissions and stabilising climate change.

Planning Policy Statement 7 Sustainable Development in Rural Areas (PPS7) sets out the Government's planning policies for rural areas, including country towns and villages and the wider, largely undeveloped countryside up to the fringes of larger urban areas.

Planning Policy Statement 9 Biodiversity and Geological Conservation (PPS9) sets out planning policies on protection of biodiversity and geological conservation through the planning system.

Planning Policy Statement 5 – Planning for the Historic Environment (PPS 5) sets out the Government's policy on heritage protection including archaeological remains on land, and how they should be preserved or recorded both in an urban setting and in the countryside.

Planning Policy Statement 22 – Renewable Energy (PPS22) sets out the Government's policies for renewable energy, which planning authorities should have regard to when preparing local development documents and when taking planning decisions. Also the Companion Guide: Planning for Renewable Energy.

Planning Policy Guidance 24 – Planning and Noise (PPG24) guides local authorities in England on the use of their planning powers to minimise the adverse impact of noise. It outlines the considerations to be taken into account in determining planning applications both for noise-sensitive developments and for those activities which generate noise.

Regional Guidance

The Coalition Government has indicated its intention to abolish Regional Planning Policy in the form of Regional Spatial Strategies. At the time of writing the courts have ruled that the Government has not carried out the necessary changes in legislation for the RSS to cease to take force and at present the intent to abolish is not considered a material consideration. Even when RSS is abolished it is understood that the evidence base which was collected in producing the RSS will still be capable of being material to planning decisions. This was confirmed in a letter from the Government's Chief Planner to all local authorities in July 2010. This is relevant to Moor House because the regional evidence base included two landscape capacity studies which relate to the Tees Plain and which were cited in the refusal reason of the previous planning application.

The Regional Spatial Strategy for the North East was finalised in 2008 following an Examination in Public in 2006. As highlighted above the evidence base for the RSS policies included the North East Renewable Energy Strategy.

The Local Development Plan – the adopted Core Strategy

Local Wind Farm Development Guidance:

Landscape Appraisal for Onshore Wind Development (GONE 2003).

Landscape Capacity Study for the East Durham Limestone area and the Tees Plain (North East Assembly and ARUP 2008 plus addendum).

## **RESULTS OF CONSULTATION AND PUBLICITY**

This revised planning application has again attracted a large amount of interest from members of the public and other third parties consulted by the Local Planning Authority.

There have been many letters of objection to the proposals and these have taken the form of individual letters and pre written letters available online to print off and sign. There are a number of different versions of the pre written letters highlighting different issues.

There has also been a measure of support for the proposals and this have taken the form of individual letters from members of the public.

### Objections

45 individual letters and E Mails objecting to the proposal have been submitted raising the following issues:

- Loss of character to Bishopton Conservation Area from numerous schemes proposed.
- Fewer turbines this time but much higher so the visual impact remains
- Arup report suggests 5km separation between wind farms – this and others nearby will be closer.
- Roads to the site not suitable for large scale development.
- Cumulative effect of this and nearby proposals will exceed Arup's recommendations.
- Wind turbines are not efficient
- Noise impact both audible and low frequency will affect nearby properties.

- Property values will fall.
- Visual impact will be considerable – lower the height.
- Possible interference with TV and mobile phones.
- Impact on Sadberge – noise and visual – will be considerable.
- Danger to aircraft using nearby airport.
- Arup report indicates impact on Sadberge would be “severe”.
- Aerodynamic Modulation noise possibly affecting nearby properties – noise report does not address this problem.
- “Ketton Country” will be severely affected – noted in Local Plan and Rights of Way Improvement Plan as an important area within the Borough.
- Loss of residential enjoyment due to “wind farm landscape” being created nearby. Gardens will become unusable.
- Detrimental impact on health from sleep deprivation and shadow flicker.
- Impact on bats and other wildlife.
- Subsidies for wind power make other renewable options less attractive.
- Benefits of proposals should be ploughed back into local community.
- There will be an unacceptable increase in traffic on local roads.
- Wind turbines are inefficient – often not operating for extended periods.
- There are alternative renewable generation options which are less visually intrusive.
- Offshore options are less harmful to the landscape.
- All local villages will be affected by the cumulative impact of this and other proposals.
- Numerous proposals in the locality should be considered strategically not on a piecemeal basis.
- Ice may fall off blades in winter causing danger to the public.
- Loss of agricultural land.
- Wind farm should be located in less sensitive industrial areas.
- Why should these developments get approved in rural areas when other industrial proposals do not?
- Nuclear power should be supported more.
- Walkers and horse riders will be affected by the visual impact of the wind turbines.
- Detrimental impact on local rural businesses such as tourism and walking etc.

There were five different types of pre written letters of objection submitted. A total of 129 of these letters were received and the issues raised therein reflect those listed above.

The local ward Member has stated his support for the objectors.

The local Member of Parliament objects to the proposal on grounds of visual impact on the local countryside and the ongoing cumulative impact of this and other approved and proposed wind farms nearby.

#### Letters of support.

Eight individual letters of support have been submitted - the reasons given for supporting the proposed development were:

- Green and cheap renewable energy to be supported.

- Reduction in numbers make it acceptable now
- The site is isolated from nearby dwellings and is windy
- Not as noisy as people say
- Helps slow down climate change – less pollution – better than coal and nuclear
- Support providing they are not near houses.
- Helps meet renewable energy targets

A number of **Parish Councils** were consulted and the following objected to the proposed development:

- East and West Newbiggin
- Bishopton
- Great Stainton
- Little Stainton
- Sadberge
- Morden
- Stillington and Whitton

Reasons for objecting to the proposal are summarised as follows :

- Cumulative impact of so many proposals nearby recently approved and built
- Noise and disturbance from construction traffic.
- Structures are out of scale with the rural surroundings within which they are located
- Visually dominating and out of context with the countryside.
- Airport safety will be compromised
- No assurances have been given that noise nuisance will not occur as a result of the turbines' operation.
- Revised scheme will still impact visually as the turbines are higher
- A proper development policy should be created for the next round of applications in this area relating to the 2020 renewable energy targets.
- Too close to other approved wind farms.
- TV and phone reception will be affected.

In addition the Seven Parishes Action Group objects to the proposals. This group represents East and West Newbiggin, Bishopton, Great Stainton, Little Stainton ,Sadberge, Great Burdon and Redmarshall. Their concerns reflect those of the individual Parish Councils above.

Barmpton Parish Council does not object to the application but have not given any reasons in support.

Other Consultees.

**Durham Tees Valley Airport –**

Objections have been raised; the airport have issued the following statement :

“We have assessed the details and our calculations show that, at the given positions and heights, all six of the wind turbines will penetrate Durham Tees Valley Airport’s safeguarded surfaces (as defined within Civil Aviation Authority Document CAP168). The minimum penetration will be some 13m through the Outer Horizontal Surface while the maximum penetration will be some 25m through the Outer Horizontal Surface, therefore posing an increased safety risk to aircraft operating within the vicinity of the aerodrome.

We can also confirm that the rotation of the wind turbine blades within this development would be detected by Durham Tees Valley Airport’s primary radar creating clutter; e.g. in the form of twinkling or the formation of tracks on the screen. This effect can be highly distracting for a controller and cause confusion when trying to distinguish between real aircraft and false targets. As a result, the safe operation of the airport would be seriously compromised.

Therefore on the grounds of the Airport’s safeguarded surfaces being penetrated by all six wind turbines and the creation of radar clutter, Durham Tees Valley Airport strongly **objects** to this proposal”.

**Natural England** – No objections to the proposals. The additional details and assurances that were agreed under the previous application remain in place for this proposal save for some habitat enhancements that have been lost as a result of the reduced number of turbines. Natural England have no objections with regard to landscape impact/hedgerow removal, rights of way, agricultural/soil resource protection, protected species (Badgers, Birds, Great Crested Newts, Bats and Otters/Water Voles). Conditions should be imposed relating to the above.

**CPRE** – Objects for the following reasons :

- Although fewer turbines, they are significantly higher
- Very close to the current Newbiggin Wind Farm application
- Other sites nearby : The Isles, Lambs Hill, Foxton plus Walkway existing – cumulative effect will be overpowering.

**Northumbrian Water** – No objections.

**Ministry of Defence** – No objections.

**Ramblers Association** – Concerns regarding the location of turbines T2 and T5 in relation to nearby public rights of way. Applicants have suggested creating a permitted path away from the turbine .

**Northern Gas** – No objections.

**Stockton – on - Tees Borough Council** – Considers there will be no detrimental impact on highway safety in their Borough as access will be from within Darlington Borough. The visual impact on Stockton will be limited as the site is some 5 km from the borough boundary. Furthermore the proposal achieves the 5km separation distance from the approved Lambs Hill scheme, which is as recommended within the Arup reports on Landscape Capacity.



The reduction in numbers of turbines from 10 to 6 will result in a reduced visual impact, despite the increase in height.

Concerns expressed regarding the cumulative impact of this proposal in association with others proposed and approved nearby.

**English Heritage** – No objections but concerns expressed regarding the cumulative effect of the numerous similar proposals emerging in the locality.

**CE Electric** – No objections.

**Highway Engineer** – No objections provided a number of conditions are imposed relating to access route to the site at construction time, site access improvements, on site infrastructure and delivery protocols. The aforementioned to be achieved via a Transport Management Plan.

**Highways Agency** – No objections providing a condition is imposed relating to the agreed abnormal loads and Transport Management Plan .

**The BBC** – they were consulted in relation to possible impacts on television reception. No objections were raised to this proposal; a condition is proposed to ensure any reception problems are mitigated.

**Environment Agency** – No objections subject to a surface water drainage condition.

**Durham County Archaeologist** – No objections subject to conditions.

**Environmental Health Officer** – Is content to impose conditions relating to potential noise generating issues in line with advice supplied by Parsons Brinckerhoff who reviewed information supplied on noise issues by the applicants. This includes amplitude modulation issues.

**One North East** – No overall objections but concerned regarding cumulative effects of this and nearby proposals/approvals for similar developments. Also aware of objections from the local airport and would expect a solution to this issue before any approval is given for the development.

**Durham County Council Landscape Section** - They were consulted again as they have much experience in studying the impacts of numerous wind turbine proposals in County Durham and beyond and for this reason extracts of their comments are included below in some detail to assist Members in their deliberations over this application.

The extract below is taken from the previous application for ten turbines and is intended to remind Members of the overall impacts of wind turbine development in the landscape.

*Wind Farm Development and Landscape Capacity Studies: East Durham Limestone and Tees Plain (NEA / ARUP 2008) and Addendum (ANEC / ARUP October 2009)*

*The landscape capacity study subdivides the area into landscape zones which it assesses in terms of sensitivity and appropriate wind farm typology. The site lies within Zone 23 which it describes as:*

*“A gently undulating farmed landscape. Field boundaries are generally formed by hedges with quite frequent hedgerow trees. Pockets of deciduous woodland are scattered throughout the zone, often associated with watercourses. Settlement is generally comprised of scattered farms with the villages of Great Stainton with its church tower, Little Stainton and Brafferton located towards the periphery of the zone. The zone is crossed by overhead power lines”. (Table 2, P 41)*

*The sensitivity of the zone is assessed as ‘medium’ and the largest wind farm typology potentially acceptable is assessed as being ‘Small-Medium small’ or ‘between 7.5-18MW or 4-6 turbines approx’ due to the scale and grain of the land-cover and settlement pattern. In terms of capacity, Zone 23 is identified as having ‘some’ capacity and specifically:*

*“In principle the landscape could have the capacity to accommodate more than one medium small-small development (i.e. 4-6 turbines per development)”. (Table 8, P59).*

### *Physical Impacts*

*The direct physical impacts of the proposals on the fabric of the landscape – the development of access tracks, operational areas, and the removal of short sections of hedgerow vegetation - would be relatively low. From what I’ve seen of the draft ‘Agriculture Management Plan’ these impacts would be more than offset by the proposed hedgerow and tree planting and the buffering of ponds.*

### *Landscape Impacts.*

*Within around 2 km of the site impacts would generally be high. The turbines would be prominent or dominant features in typical views. With the exception of the localised screening effects of hedges and undulating terrain, together with some scattered plantations, the turbines would be fairly consistently visible. Views would be largely from isolated properties, the edges of villages and the minor roads and public rights of way connecting them. The local landscape has some characteristics that make it less sensitive to, or provide a rationale for, wind development: the broad scale and simplicity of the landform and land-cover in some views, for example. This is, however, a very rural landscape in which the development of very tall structures would radically transform its existing character and become a dominant and defining characteristic. This is generally true for development of this nature in a rural landscape wherever it occurs.*

*Within the 2km to 5km range the landscape remains very open other than within built up areas. The turbines would be widely visible and often relatively prominent features although locally screened by topography in patches along the Skerne and in pockets of dead ground north of Preston Lodge and north of Elstob Hill. In the open landscapes elsewhere in this zone the turbines would again be fairly consistently visible throughout the area. Impacts would be typically in the ‘medium’ range. Views would include those from isolated properties, the edges of towns and villages, the minor roads and public rights of way connecting them and sections of major roads: the A66, the A167 and the A1(M). In some of these views the landscape has some characteristics that make it less sensitive to wind development although views are more variable in character - in some cases being from, or taking in, finer grained landscapes in the foreground with less of an obvious ‘rationale’ for wind development.*

*In views within distance ranges of around 5 – 15km the turbines would be widely visible as small but noticeable features. Given the scale of the area the representative viewpoints can only give a small sample of the types of views in which the turbines would be visible. In some views the landscape has an urban fringe or semi-rural character with urban and industrial development*

*and overhead services visible. In other views the character of the landscape is very rural. In some views the turbines would be seen against the sky, in other views against the Cleveland Hills. I would generally assess the impacts of the proposals in views across this area as being slightly higher than some of the values assigned in the Landscape and Visual Assessment ( LVIA) but would agree that they are generally of a low or low-medium order*

#### *Impacts on settlements*

*The area in which the proposals would have their most significant impacts contains a number of settlements. The turbines would be prominent features of the local environment, visible from some residential properties and from roads and recreational footpaths / bridleways serving those communities. In this respect they are not unique and the situation here would be similar to that in the locality of some existing and approved wind farms elsewhere in the region.*

*The most substantial impacts would fall on Barmpton, Little Stainton and Sadberge. While there would be impacts on other settlements, I don't believe the proposals would have the potential to dominate their visual environment at distances of >2 km in the shallow views typical of this landscape.*

#### **Turbine size, number and location**

*The reduction in the number of turbines brings the proposals within the scale identified in the ARUP landscape capacity study as being appropriate to this area. The changes proposed don't otherwise alter the conclusions drawn in my response of 01/04/2010.*

*For nearby residential properties the reduction in number – and particularly the removal of turbines from either extremity – would generally reduce impacts relative to the former scheme as the increased distance would compensate for the increase in size. For some properties differences would be minor. I wouldn't consider the effects in any case to be 'overbearing' in the way the term is commonly understood by inspectors at inquiry.*

*The increase in the scale of turbines would be appreciated in near to middle distance views but balanced by the reduction in number and reduced lateral extent I would consider impacts on the character of the local landscape to be of a slightly lower order than the previous scheme.*

#### **Cumulative impacts**

*The situation has changed since the refusal of the original scheme with the approval of four turbines at Lamb's Hill. At the time the original application was determined there was a substantial gap between the proposals and the nearest operational or approved scheme and potential cumulative impacts were therefore of a relatively low order. If Lamb's Hill is approved the situation will be rather different, as it will occupy the gap between the existing Butterwick / Walkway complex and Moorhouse (Figure 1 below).*

*Development at Moorhouse would extend the area in which turbines are generally prominent features in the landscape south-eastwards towards Darlington (Figure 2 below). The zones of potential visual dominance of Lamb's Hill and Moorhouse which I take to be roughly 20 x tip height would meet at Great Stainton but would not overlap to a significant degree.*

*The separation distance between the two would be around 5km, which is the distance recommended in the ARUP report for the separation of wind farms in this area. The report concluded that "...any additional two wind farm clusters separated by around 5km (from existing, consented or each other) may be acceptable in the Tees Plain "least impact" area", although this conclusion was based on the assessment of a number of individual scenarios which did not include Lamb's Hill.*

*The development of both Moorhouse and Lamb's Hill would lead to a continuous belt of what might be described as 'wind farm landscape' between the edge of Darlington and Thorpe Leazes near Stockton and there would be a wide range of vantage points within that area – including minor roads, footpaths, villages and isolated properties – from which both developments were prominent or dominant features.*

*The cumulative effect of Moorhouse would be to both increase the extent of the area in which wind farms were a dominant element and intensify the experience of development within that area. I would expect the highest combined impacts to be in the vicinity of Great Stainton, although not within the village itself where properties generally look either towards the east or the south. The nearest photomontage / cumulative photomontage to that area is the one from Hauxley Farm (viewpoint 6) which has more open views towards the site than Great Stainton itself. In that particular view the Lamb's Hill turbines would be relatively small features assimilated or screened on the skyline by vegetation and I wouldn't consider the cumulative effect of the two schemes to be particularly acute.*

*In sequential views from footpaths and minor roads serving communities in the area between Moorhouse and Lamb's Hill there would be a strong sense of being within a 'wind farm landscape'. This situation would not be unique. There are other areas in the region, and particularly in County Durham, where cumulative impacts of this order or higher have been considered acceptable – for example the areas around Tow Law and Haswell Plough. The extent to which that level of impact is acceptable is very much a matter of judgement, and one for which we have no commonly agreed thresholds.*

*As the ARUP report did not model this scenario (existing and consented development + Moorhouse + Lamb's Hill) its findings need to be handled with some caution and are in any case inconclusive. In terms of the overall capacity of the Tees Plain I would see the proposals as being reasonably consistent with its findings that two additional clusters in this area might be acceptable. That conclusion in the Addendum bore the caveat "if it can be shown that there would be no possibly unacceptable effects on local landscape character and scale" (Page 15). This is a matter on which judgements will vary. My own judgement is that the proposals in combination with existing development would not have an unacceptable effect on the scale and character of the local landscape but would bring the area close to capacity. The separation distance between the developments and the gently rolling topography in which views tend to be shallow and interrupted at times by vegetation are both factors in this.*

The above analysis can be summarised as follows –

- 1.** The proposals would be widely visible and would have significant effects on the character of the landscape of the Tees Plain within around 5km of the site. This level of impact is typical of development of this kind wherever it occurs. What physical impacts it did have would be offset by landscape improvements in and around the site.
- 2.** The proposals lie close to a number of residential properties but at sufficient distances that they should not have an overwhelming impact on the visual amenity of residents. In

removing four of the turbines from the scheme the distance between turbines and the nearest residential properties is increased.

3. The proposals lie relatively close to a number of settlements. The turbines would be prominent, and at times dominant, features of their visual environment, visible from some residential properties and from roads and recreational footpaths / bridleways serving them. . The development is not considered to have an ‘overwhelming’ impact on their visual environment and that impacts would be comparable to those of schemes considered acceptable elsewhere in the region.
4. The relatively open and broad-scale character of parts of the local landscape provides as much of a rationale for development of this scale here as it does elsewhere on the Tees plain.
5. The proposals would be consistent with the findings of the Landscape Appraisal and ARUP Landscape Capacity Study in respect of the scale of development in this location.
6. The effect of the reduced number and increased size would generally be to reduce impacts on nearby residential properties and the local landscape.
7. Cumulative impacts with existing and approved wind farms in the vicinity would be at their highest in the area between the proposals and the proposed Lamb’s Hill wind farm.

## **PLANNING ISSUES**

The main issues for Members to consider in this case are:

- Planning Policy
- Landscape and visual impact
- Ecology Issues
- Residential amenity including noise and shadow flicker
- Aviation issues
- Other issues raised by consultees.
- Whether the revised proposal addresses the reasons for refusing planning permission for the previous planning application for ten wind turbines.

### Planning Policy Guidance

The relevant national planning policies in this case are Planning Policy Statement 1 (PPS1) – Delivering Sustainable Development and Planning Policy Statement 22 (PPS22) – Renewable Energy.

PPS1 states that the development of renewable energy should be promoted and encouraged. It clearly states that the wider environmental and economic benefits of all renewable energy applications, either directly or indirectly, are material considerations that should be given significant weight in determining whether proposals should be granted planning permission.

In environmental and economic terms, this application has the potential to generate up to 15 MW installed capacity of renewable electricity at any given time, potentially supplying up to 8300 households via the electricity grid operated by NEDL. Grid connection will be made to the

north west of the site near Brafferton which the applicants consider is capable of accepting additional input from the site.

PPS22 sets out the Government's policies for renewable energy, which planning authorities should have regard to when preparing local development documents and when taking planning decisions.

It states that; landscape and visual effects are only one consideration to be taken into account in assessing a planning application, these must be considered alongside the wider environmental, economic and social benefits that arise from renewable energy projects. These are all material considerations that should be given significant weight in determining whether proposals should be granted planning permission.

Reference has been made to the two Arup reports that were commissioned in 2008 and 2009 by the North East Assembly and its successor the Association of North East Councils.

It must be stressed that these documents are not Supplementary Planning Guidance and do not have great weight in planning terms when considering the acceptability or otherwise of wind turbine developments.

At the time however Durham District Councils and Darlington and Stockton considered that with a large number of wind turbine developments being proposed in the region, some kind of technical appraisal should be made of the capacity of the landscape to accept such developments without harming its character to an unacceptable degree.

The 2008 report was completed and its conclusions are detailed above in the Durham County Council Landscape Section report. In essence it recommended that in the zone within which Moor House is situated "the landscape could have the capacity to accommodate more than one medium small – small scale development (i.e. 4-6 turbines per development)".

During the course of preparing the 2008 report, circumstances on the ground changed and new proposals for wind turbine development emerged which had made some assumptions for the Darlington area out of date. In 2009 therefore an addendum was produced for the area around Moor House which included updated scenarios of cumulative impacts of proposed and existing wind farms, however Lambs Hill was not seen as a proposed development at that time so was not considered.

The Landscape report above concludes that the proposed development is broadly in line with the recommendations of the Landscape Appraisal for Onshore Wind Development (GONE 2003) in that the area within which Moor House is located can accommodate some medium scale development.

Core Strategy policy CS3 supports the development of renewable energy schemes. Significant weight will be given to the wider environmental, economic and social benefits arising from renewable energy schemes whilst considering the anticipated effects, individually and cumulatively, upon:

**a) The surrounding natural, built, historic and cultural landscape and townscape including buildings, features, habitats and species of national and local importance**

**b) Residential amenity including visual intrusion, air, dust, noise, odour, traffic generation, recreation and access**

It is considered that the proposed scheme will comply with the above criteria as explained in further detail below.

**c) The operation of air traffic and radar systems**

Wind turbines may interfere with the operation of radar by limiting the capacity to handle air traffic and aircraft instrument landing systems as well as potentially creating the risk of collision from low flying aircraft. Durham Tees Valley Airport, the Civil Aviation Authority (CAA), the National Air Traffic Services (NATS) and the Ministry of Defence have been consulted on this application. Objections have been received from the local airport; the applicants hope to resolve this issue in time for the Committee Meeting.

Landscape and Visual Impact.

The site is not subject to any landscape, ecological or cultural heritage designation and as such the site's sensitivity to wind turbine development is accordingly reduced. In addition a detailed mapping exercise undertaken by the applicants highlighted that there were few suitable sites for commercial wind energy development in Darlington. Once the various constraints to development were combined onto one map only seven areas in the Borough were identified

Wind turbines by their scale and tendency to be formed in groups, will always have a visual impact upon the landscape within which they are located and an impact on the amenities of people who live in the locality. The degree of impact depends on the form and character of the landscape and the perceptions of the public who are affected by the development.

The turbines will be visible over a wide area; however the fact that they are visible does not necessarily mean that they are visually harmful to such an extent as to warrant refusing planning permission.

The advice given within the Senior Landscape Officer's report above is comprehensive and appraises the proposals from a number of different aspects with a view to covering all the landscape concerns expressed by local residents and others.

Government guidance stresses that the protection of residential amenity is one of the most important issues to consider when determining wind turbine proposals. Experience has shown that a 500 metre buffer from dwellings is usually sufficient to avoid unacceptable visual and noise impacts on residents – although other advice has been voiced suggesting a greater distance is desirable. Where dwellings are owned by residents with a financial interest in the development then reduced separation distances may be acceptable.

Noise issues are covered later, but bearing in mind the analysis of visual impacts on local residents and villages provided above, officers are of the opinion that the erection of six wind turbines as proposed would not harm residential amenity or visual amenity more generally to an unacceptable degree. It is noted that the threshold stated in the Arup report has been complied with– this threshold was highlighted by Members during consideration of the previous planning application for 10 turbines.

Cumulative impacts of this proposal taken with other existing and approved sites nearby have been analysed within the DCC Senior Landscape Officer's report above where it was concluded

that the current proposal would not be likely to take the combined impact of existing and approved developments in the locality above an unacceptable threshold. However it is considered that should this application be approved, then this particular locality will be at capacity as far as wind turbine development is concerned.

#### Physical Impacts Including Ecology and Protected Species

Extended discussions have previously taken place between the applicants, Natural England and Council countryside officers with a view to providing substantial mitigation to offset the potential impact of the development on the ecology and biodiversity of the application site and its environs.

Mitigation to protect badgers and protected birds has been included within the submitted Environmental Statement which is satisfactory to Natural England. Measures such as timing vegetation clearance to be outside the breeding season are proposed for example. Similarly the impact on bats is restricted as the design of the layout has avoided placement of turbines within 50 metres of woods and hedgerows.

The scheme has been designed to minimise hedgerow loss and in discussions with the Council the applicants have agreed on and off site enhancements to habitats and biodiversity such as improvements to Catkill Lane, enhancing uncultivated field margins, watercourses and ponds, and these measures have the support of Natural England. These benefits will be achieved via the completion of a Section 106 legal agreement prior to the commencement of development.

#### Noise Issues

The Council's Environmental Health team have assessed the potential noise issues that may arise from the proposed development in accordance with the relevant guidance that covers proposals for wind farms. This is provided in PPS22 and in The Assessment and Rating of Noise from Wind Farms that is referred to as ETSU-R-97.

PPS22 sets out the Government policy and approach on renewable energy. In relation to noise, it states:

*Renewable technologies may generate small increases in noise levels (whether from machinery such as aerodynamic noise from wind turbines, or from associated sources - for example traffic). Local planning authorities should ensure that renewable energy developments have been located and designed in such a way to minimise increases in ambient noise levels. The 1997 report by ETSU for the Department of Trade and Industry should be used to assess and rate noise from wind energy developments.*

The 1997 ETSU report 'describes a framework for the measurement of wind farm noise and gives indicative levels thought to offer a reasonable degree of protection to wind farm neighbours, without placing unreasonable restrictions on wind farm development or adding unduly to the costs and administrative burdens on wind farm developers or local authorities'.

The ETSU-R-97 report describes the method of how and where ambient (background) noise measurement surveys should be undertaken. It also establishes the levels of turbine noise that are acceptable in different locations and situations, as either a fixed limit, a level relative to the prevailing background noise level, or a combination of both of these.



The noise conditions are, in addition, divided into day and night periods. For the daytime consideration is given to the amenity for outside spaces and is based on the times normally associated with leisure such as at weekends and during evenings but any day time limit would apply throughout the day. For the night period (23:00 to 07:00) consideration is given to the impact of the noise on sleep and therefore the emphasis is on the amenity of indoor spaces within residential properties. Higher noise levels are considered appropriate for any properties with a financial interest in the development.

The assessment of wind turbine development proposals should follow the methodology detailed in ETSU-R-97 and if constructed, should comply with the noise limits established by and that result from applying this method. Satisfactory evidence that the wind turbines can comply with the ETSU-R-97 requirements and that noise levels arising from the proposed development would be within the noise limits determined from the guidance would therefore demonstrate that noise control measures for the scheme are both appropriate and can be achieved.

Some commentators insist that ETSU –R-97 is out of date and therefore irrelevant to current noise assessments of wind turbine proposals, however numerous Appeal Inspectors have emphasised that this is currently the methodology adopted within PPS22 and it is this to which Local Planning Authorities should have regard.

There is the further issue of *Aerodynamic Modulation (AM)* about which much has been written in recent planning appeals.

The available evidence has been examined along with the details submitted by the applicants and it is concluded that there is a “greater than average risk of AM at this site” and it is suggested that a suitable planning condition should be attached to any permission granted but this may be difficult to do whilst ensuring the condition adheres to the five tests required by Government.

The applicants have included reference to AM within their Environmental Management Plan, however a more robust planning condition is preferred by Officers. It is therefore proposed to impose a condition used in an appeal decision in December 2009 (and suggested for the previous application for ten turbines) which will, in response to a complaint of amplitude modulation, require the wind farm operator to employ an independent consultant to assess the complaint and if necessary implement a scheme of mitigation. See condition 22 below for full details of this condition and its note.

### Shadow Flicker

Under certain combinations of geographical position and time of day, the sun may pass behind rotors of a wind turbine and cast a shadow over neighbouring properties. When the blades rotate, the shadow flicks on and off; the effect is known as ‘shadow flicker’.

A residential property must usually be within 10 rotor diameters of the turbine in order to experience shadow flicker. For this proposal, the applicant has stated that no residences will be affected. In the event that shadow flicker occurs, mitigation should be ensured through a condition which controls a programming system that stops the wind turbine(s) when shadow flicker could occur. Subject to the use of appropriate conditions, it is considered that any detrimental effect on local residents through incidences of shadow flicker can be satisfactorily controlled and that this would not therefore be a sufficient ground on which to refuse planning permission.

### Aviation

After protracted negotiations with the Durham Tees Valley Airport in relation to the earlier planning application for 10 turbines, the applicants came to an agreement to supply radar equipment which would have mitigated the impact of the development on the operations of the airport. Conditions were suggested by the airport and agreed with the applicants. It is likely that the equipment would have needed to be housed in a small building within the application site.

At the time of drafting, no such agreement is in place for this proposal and the Airport maintain an objection to the proposal.

### Traffic and public right of way impacts

The development proposals will generate abnormal load movements during the construction phase. A range of traffic management measures will be employed to enable the safe movement of abnormal loads. Traffic impact has been assessed and it has been demonstrated that construction traffic will not create significant impact on the surrounding highway network. The construction phase will last approximately ten months, after which the development will generate negligible traffic volumes. The Highways Agency has raised no objection to the proposed development and the Council Highway Engineer has recommended certain conditions to any approval given.

The two public footpaths and bridleway that run alongside and across the site are to be maintained, including through the construction phase to allow continued access for the public. Natural England have commented that they are satisfied that the rights of way will be retained and their condition enhanced by the developers.

### Television Interference

Wind turbines have the potential to disrupt analogue TV signals within the local vicinity. The outcome of this interference is a 'ghosting' effect on the TV screen. To assess the impact of the Moor House wind farm proposal on television reception, the BBC Windfarms Tool website was used. This concluded that the current proposal was unlikely to affect homes if approved.

In the event of reception problems, the applicant suggests improving the receiving aerials or providing the affected households with an alternative source of television signals through a different transmitter, an existing cable connection or a digital system, which could be dealt with as a condition of planning.

### Loss of agricultural land

Natural England are content that the proposals will not raise any significant agricultural or soil resource protection issues – the majority of the site is classified as Grade 3 agricultural land in line with other areas in the locality – only the tracks and turbine bases will be lost to agriculture with the intervening land remaining in such use.

### Impact on Bishopton Conservation Area

The Durham County Council Landscape Section report above confirms the following:

*The most substantial impacts would fall on Barmpton, Little Stainton and Sadberge. While there would be impacts on other settlements, it is not believed the proposals would have the potential to dominate their visual environment at distances of >2 km in the shallow views typical of this landscape.*

Bishopton lies some 3.5 kilometres from the application site and as such officers consider that the direct visual impacts upon this village will be minimal and not sufficient to warrant a refusal of planning permission.

### Ice Throw

Some concerns have been expressed that ice forming on the turbine blades may fall off and injure members of the public. PPS 22 Companion Guide refers to a British Wind Energy report which estimates that the specific weather conditions required for ice to build up as being less than one day per year. The proposed turbines will be located in agricultural land and fenced off to prevent unauthorised access. Furthermore the turbines will automatically shut down if ice forms and creates an aerodynamic imbalance.

Various letters of representation have been received in relation to the proposed wind farm development. It is considered that the majority of issues raised by objectors have been covered in this report. However some representations received have raised issues that are not considered to be relevant to the determination of the planning application. For information, the following issues have been held by appeal inspectors *not* to be material planning considerations:

- Loss of value to a property
- Wind speed at the site
- Efficiency of the technology
- Safety of the turbines
- Questioning Government targets or policy.

### Other Matters

The applicants have proposed a scheme of planning gain to the Council in the event that planning permission is granted for the development. They have offered a contribution of £50,000 towards the establishment of a so called Warm Zone within Darlington which would bring increased energy efficiency to existing dwellings through measures such as loft and wall insulation. The developer considers this is a material consideration as this planning gain would be financed by profit from the development and as such there is a link between the two. Officers however take the view that such a planning gain would not be directly related to the development itself and as such would not be material to the final decision. The advice of officers therefore is that this offer of planning gain should not influence Members in the determination of this planning application.

## **CONCLUSION**

It is accepted that this amended wind farm proposal would make a reduced contribution towards the overall supply of renewable energy, but still contribute towards reaching regional and national targets in terms of energy production. There is very strong and consistent National policy support for renewable energy projects. The scheme would have significant benefits in this respect, and the key consideration in determining the application is whether or not this

policy support for the proposal outweighs any environmental or social impacts the proposal may have.

In terms of visual impact, the proposed wind turbines due to their scale and design will undoubtedly have an impact on the landscape, and will be highly visible features in the locality. Any impacts the proposed development will have on the wider landscape however are considered to be commensurate with the benefits the turbines will provide in terms of the production of renewable energy.

It is considered, taking into account the views of the Durham County Council Landscape Section, that the application is consistent with policy CS3 in that whilst it would be significantly visible it would not result in a material adverse impact on the landscape sufficient to warrant refusing planning permission, bearing in mind the benefits of the expected contribution to renewable electricity generation.

On this basis the PPS22 Companion Guide is quite clear; landscape and visual effects are only one consideration to be taken into account in assessing a planning application, these must be considered alongside the wider environmental, economic and social benefits that arise from renewable energy projects. These are all material considerations that should be given significant weight in determining whether proposals should be granted planning permission'.

In environmental terms the application has the potential to generate between 15MW installed capacity of renewable electricity at any given time, potentially supplying supply between 8300 households with renewable electricity via the national grid.

**At the time of drafting, the Durham Tees Valley Airport maintain an objection to the proposed development on airport safety grounds relating to radar interference. In view of this objection, Officers do not feel that they can recommend approval of the development if it is maintained at the time of the Committee Meeting on 19<sup>th</sup> October 2011.**

**However the applicants are hopeful that ongoing discussions with the airport will enable them to remove their objection, much as they did for the previous application for 10 turbines. If this occurs then Recommendation B below will be put to Members (together with condition 32 which relates to the airport's safety concerns).**

**If however the objection is maintained then Recommendation A below will be put to Members.**

### **RECOMMENDATION A**

That permission is refused for the following reason :

As advised by the PAG Wind Farm Coordinator of Peel Airports Group, all six of the wind turbines will penetrate Durham Tees Valley Airport's safeguarded surfaces (as defined within Civil Aviation Authority Document CAP168). The minimum penetration will be some 13m through the Outer Horizontal Surface while the maximum penetration will be some 25m through the Outer Horizontal Surface, therefore posing an increased safety risk to aircraft operating within the vicinity of the aerodrome.

It is also confirmed that the rotation of the wind turbine blades within this development would be detected by Durham Tees Valley Airport's primary radar creating clutter in the form of twinkling or the formation of tracks on the screen. This effect can be highly distracting for a

controller and cause confusion when trying to distinguish between real aircraft and false targets. As a result, the safe operation of the airport would be seriously compromised.

In view of the above therefore it is considered that the development would compromise public safety to an unacceptable degree and be contrary to policy CS3 of the Borough of Darlington Core Strategy.

### **RECOMMENDATION B**

That subject to the applicants entering into a Section 106 Agreement relating to off site habitat and biodiversity improvements, the development be permitted with the following conditions:

#### **Time Limits**

1. The development hereby permitted shall be begun before the expiration of five years of the date of this decision.

*Reason: Pursuant to the requirements of Section 91 of the Town and Country Planning Act 1990, as amended by Section 51 of the Planning and Compulsory Purchase Act 2004.*

2. The planning permission hereby granted shall be for a temporary period only, to expire 25 years after the first commercial export of electricity from the site. Written confirmation of the date of commercial electricity export shall be provided to the Local Planning Authority within one month after the event.

*Reason: To provide certainty over the duration of the development.*

#### **Approved Drawings**

3. Unless otherwise required by conditions attached below, this permission shall relate to the following drawings: PA01,PA02,PA03,PA04,PA05,PA06,PA07,PA08,PA09 AND PA10.

*Reason: For the avoidance of doubt as to what has been approved.*

#### **Decommissioning**

4. Not later than six months before the date on which the planning permission hereby granted expires, all wind turbines, ancillary equipment, buildings, crane platforms and access roads shall be dismantled and removed from the site and the land reinstated to its former condition in accordance with a scheme to be submitted to the Local Planning Authority for written approval prior to the commencement of development. The scheme to be submitted shall include the dismantling and removal of all turbines, equipment, buildings, and access roads above existing ground levels and the removal of turbine bases and crane platforms to a depth of one metre below existing ground levels.

*Reason: To provide certainty over the duration of the development.*

5. If any of the turbines hereby permitted ceases to be operational for a continuous period of 6 months, or such period of time as may otherwise be agreed in writing by the Local Planning Authority, all of its above ground elements plus one metre of each turbine base and associated

crane pad below ground level, as well as any access track that directly serves it, shall be removed within the ensuing period of not more than six months, or as may otherwise be agreed in writing by the Local Planning Authority, and the land reinstated to its former condition.

*Reason: To ensure that the development is carried out in an efficient manner.*

### **Layout and Appearance**

6. Development shall not commence until details of the surface finish of the access tracks and crane bases have been submitted to and approved in writing by the Local Planning Authority. The development shall be carried out in accordance with the approved details.

*Reason: To mitigate the visual impact of the development*

7. Development shall not commence until full details of the turbines, including make, model, power rating, design, external finish and colour, hub height, turbine base to tip height, blade measurements, existing site levels and finished site levels, including the finished level of each turbine base, have been submitted to and approved in writing by the Local Planning Authority. The development shall be carried out in accordance with the approved details and shall be so retained for the lifetime of the development unless otherwise agreed in writing by the Local Planning Authority.

*Reason: To mitigate the visual impact of the development*

8. The maximum height of the wind turbines hereby permitted when measured from the existing ground level to blade tip in vertical position, shall be no greater than 125 metres.

*Reason: For the avoidance of doubt*

9. Development shall not commence until full details of the site control building, including details of the materials and colours to be used on its external surfaces and security fencing have been submitted to and approved in writing by the Local Planning Authority. The development shall be carried out in accordance with the approved details.

*Reason: In the interests of visual amenity*

10. All of the turbine blades shall rotate in the same direction in relation to their horizontal axis.

*Reason: To mitigate the visual impact of blade movement*

11. The turbines shall be located in the positions shown on drawing PA03 unless otherwise agreed in writing by the Local Planning Authority .

*Reason: For the avoidance of doubt*

### **Cabling**

12. All electrical cabling between the individual wind turbines and the on-site control building shall be located underground. Thereafter, the excavated ground shall be reinstated to its former condition within three months of the commissioning of the wind turbines.

*Reason: To mitigate the visual impact of the development*

### **Construction Works**

13. Development shall not commence until details of the site compound, temporary structures and temporary security fencing to be used in connection with the construction of the development together with detailed proposals for the restoration of the site compound and any other land associated with temporary structures have been submitted to and approved in writing by the Local Planning Authority. The development shall not be carried out otherwise than in accordance with the approved details. Within six months of the commissioning of the wind farm, the compound, temporary structures, temporary security fencing and ancillary materials shall be removed and the ground restored to its previous condition in accordance with the approved details. For the purposes of this condition, commissioning shall mean the date upon which the grid connection to the wind farm is first energised

*Reason: In the interests of visual amenity*

14. Development shall not commence until a Construction Method Statement has been submitted to and approved in writing by the Local Planning Authority. The Construction Method Statement shall include details relating to surface water drainage, the prevention of silt-laden run-off, the treatment of sediment-laden water, site lighting, fuel, oil and chemical storage, and dust management. Development shall not take place except in accordance with the approved Construction Method Statement.

*Reason: In the interests of protecting the amenity of neighbouring occupiers and the environment*

15. Site establishment and civil and electrical ground works (including roads, foundations, substation, site control building) shall only take place between the hours of 08:00 – 18:00 on Mondays to Fridays inclusive, 08:00 – 13:00 hours on Saturdays, with no such work on a Sunday or Bank Holiday working unless otherwise approved in writing by the Local Planning Authority.

*Reason: In the interests of protecting the amenity of neighbouring occupiers and the environment*

16. Turbine delivery and erection shall only take place between the hours of 08:00 – 22:00 on Mondays to Fridays inclusive, 08:00 – 13:00 hours on Saturdays, with no such work on a Sunday or Bank Holiday unless otherwise approved in writing by the Local Planning Authority following a request by the Police and Highways Agency.

*Reason: In the interests of protecting the amenity of neighbouring occupiers and the environment*

17. Turbine testing and adjustment activities prior to commissioning shall only take place between the hours of 08:00 – 22:00 on any day.

*Reason: In the interests of protecting the amenity of neighbouring occupiers and the environment*

### **Operational Noise**

18. The rating level of noise emissions from the combined effects of the wind turbines, (including the application of any tonal penalty) when assessed in accordance with the attached Notes, shall not exceed the values set out in the tables below. For any noise sensitive property not specified in the tables below the noise limits for the nearest geographical location listed in the tables shall apply.

Between 23:00 and 07:00 hours (Noise Level in dB  $L_{A90, 10min}$ ):

Location	Wind Speed at 10 m height (m/s)									
	3	4	5	6	7	8	9	10	11	12
H1 Mount Pleasant Farm	43.0	43.0	43.0	43.0	43.0	44.2	46.7	49.2	51.5	53.6
H2 Carr House	43.0	43.0	43.0	43.0	43.0	43.0	44.8	47.1	49.3	51.3
H3 Dale House Farm	45.0	45.0	45.0	45.0	45.0	45.0	45.9	47.9	49.7	51.3
H4 Burdon Grange Bungalow	43.0	43.0	43.0	43.0	43.0	43.0	43.7	45.4	47.1	48.6
H5 Barmpton	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.7	44.8
H6 Little Ketton Farm	43.0	43.0	43.0	43.8	46.4	49.1	51.7	54.3	56.8	59.0
H7 Copper Garth	43.0	43.0	43.0	43.7	45.9	48.0	50.0	52.0	53.8	55.5
H8 Burdon Grange	43.0	43.0	43.0	43.0	43.0	43.0	43.7	45.4	47.1	48.6

At all other times (Noise Level in dB  $L_{A90, 10min}$ ):

Location	Wind Speed at 10 m height (m/s)									
	3	4	5	6	7	8	9	10	11	12
H1 Mount Pleasant Farm	39.1	40.3	41.6	42.9	44.3	45.8	47.5	49.4	51.6	53.9
H2 Carr House	40.1	41.0	42.1	43.2	44.5	45.8	47.3	48.9	50.5	52.3
H3 Dale House Farm	45.0	45.0	45.0	45.0	45.0	45.9	47.3	48.8	50.3	51.9
H4 Burdon Grange Bungalow	39.7	40.6	41.6	42.6	43.7	44.9	46.1	47.4	48.7	50.1
H5 Barmpton	39.2	40.2	41.2	42.2	43.1	44.0	44.9	45.7	46.6	47.4
H6 Little Ketton Farm	41.7	43.5	45.3	47.2	49.1	51.1	53.2	55.2	57.3	59.4
H7 Copper Garth	42.1	44.0	45.8	47.3	48.7	50.1	51.4	52.7	54.1	55.7
H8 Burdon Grange	39.7	40.6	41.6	42.6	43.7	44.9	46.1	47.4	48.7	50.1

*Reason: in the interests of protecting the amenity of neighbouring occupiers.*

19. Within 28 days of a written request by the Local Planning Authority, following the receipt by the Local Planning Authority of a complaint, the wind farm operator shall supply a written report from a consultant approved by the Local Planning Authority, providing a detailed assessment of level of noise emissions from the wind farm at the complainant's property following the procedures described in the attached Notes.

*Reason: in the interests of protecting the amenity of neighbouring occupiers.*



20. The wind farm operator shall continuously log wind speed, wind direction and power generation data for each wind turbine. Within 28 days of a written request by the Local Planning Authority, following the receipt by the Local Planning Authority of a complaint, the wind farm operator shall supply such wind speed, wind direction and power generation data for each wind turbine as may be set out in the Local Planning Authority's written request.

*Reason: In the interests of protecting the amenity of neighbouring occupiers.*

21. No development shall commence until there has been submitted to the Local Planning Authority details of a nominated representative for the development to act as a point of contact for local residents (in connection with conditions 18-20 above) together with the arrangements for notifying and approving any subsequent change in the nominated representative. The nominated representative shall have responsibility for dealing with any noise complaints made during the construction, operation and decommissioning of the wind farm and liaison with the Local Planning Authority.

*Reason: To ensure a satisfactory development and to safeguard residential amenity.*

22. On the written request of the local planning authority, following a complaint to it considered by the local planning authority to relate to regular fluctuation in the turbine noise level (amplitude modulation), the wind farm operator shall at its expense employ an independent consultant approved in writing by the local planning authority to undertake the additional assessment outlined in Guidance Note 5 to ascertain whether amplitude modulation is a contributor to the noise complaint as defined in Guidance Note 5. If the said assessment confirms amplitude modulation to be a contributor as defined in Guidance Note 5, the local planning authority shall request that within 28 days of the completion of the noise recordings referred to in Guidance Note 5, the developer shall submit a scheme to mitigate such effect. Following the written approval of the scheme and the timescale for its implementation by the local planning authority the scheme shall be activated forthwith and thereafter retained.

*Reason: In the interests of protecting the amenity of neighbouring occupiers.*

## **Highways**

23. Prior to the commencement of the development hereby permitted, a Traffic Management Plan shall be submitted to and approved in writing by the local planning authority and the Highways Agency. The Traffic Management Plan shall include details of all roadways (temporary or otherwise), and appropriate signage, to be used for the conveyance of construction materials, plant and equipment. The Traffic Management Plan shall confirm the routes to be used for transportation of abnormal loads both during construction of the turbines and during their decommissioning. The Traffic Management Plan shall include a road condition survey of the roadways to be used for the conveyance of construction materials, both pre and post construction. The Management Plan shall include a procedure for approval of the temporary removal of highway furniture. The development shall be carried out in accordance with the approved Traffic Management Plan unless otherwise approved in writing by the local planning authority.

*Reason: In the interests of highway safety*

**Archaeology**

24. No development shall take place until the applicant, or their agents or successors in title, has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation, including a timetable for the investigation, which has been submitted by the applicant and approved in writing by the Local Planning Authority. The Scheme shall provide for:

- i) the proper identification and trial trench evaluation of the extent, character and significance of archaeological remains within the application area in accordance with a brief issued by the County Durham Archaeology Section; the evaluation is to be undertaken following the approval of planning permission,
- ii) an assessment of the impact of the proposed development on any archaeological remains identified in the trial trench evaluation phase; a report on the results is to be submitted to the planning authority;
- iii) proposals for the preservation in situ, or for the investigation, recording and recovery of archaeological remains and the publishing of the findings, it being understood that there shall be a presumption in favour of their preservation in situ wherever feasible;
- iv) sufficient notification and allowance of time to archaeological contractors nominated by the developer to ensure that archaeological fieldwork as proposed in pursuance of (i) and (iii) above is completed prior to the commencement of permitted development in the area of archaeological interest; and
- v) notification in writing to the County Durham and Darlington County Archaeologist of the commencement of archaeological works and the opportunity to monitor such works."

*Reason: To comply with policy E34 of Borough of Darlington Local Plan as the site may potentially contain features of local archaeological importance.*

25. The archaeological mitigation strategy shall be carried out in accordance with the approved details and timings, subject to any variations agreed in writing by the local planning authority.

*Reason: To comply with policy E34 of Borough of Darlington Local Plan as the site may potentially contain features of local archaeological importance.*

26. A copy of any and all analysis, reporting (evaluation and post-excavation and/or final reports), publication or archiving required as part of the above mitigation strategy shall be deposited at the County Durham Historic Environment Record within six months of the date of completion of the development hereby approved by this permission or such other period as may be agreed in writing by the local planning authority.

*Reason: To comply with policy E34 of Borough of Darlington Local Plan as the site may potentially contain features of local archaeological importance.*

**Ecology - Badgers**

27. No development shall take place unless in accordance with the mitigation detailed within Chapter 7 of Moor House Environmental Statement AESL June 2010' including, but not

restricted to adherence to spatial restrictions (no setts are within 50m of a turbine or access track); undertaking confirming surveys as stated (Table 7.8, Table 7.9); adherence to precautionary working methods (method statement provided should be agreed with local authority before planning permission granted); implementation of a monitoring scheme (paragraph 7.166).

*Reason: To conserve protected species and their habitat.*

### **Ecology - Birds**

28. No development shall take place unless in accordance with the mitigation detailed within the protected species report Table 7.8 of the Moor House Environmental Statement AESL February 2011, including, but not restricted to:

- Any on site vegetation clearance should avoid the bird breeding season (March to end of August), unless a checking survey by an appropriately qualified ecologist has confirmed that no active nests are present immediately prior to works (Table 7.8 of Supplementary report to Chapter 7 of Moor House Environmental Statement AESL February 2011.)
- A breeding bird monitoring scheme implemented following construction (section 7.167)

*Reason: To conserve protected species and their habitat.*

### **Ecology - Bats**

29. No development shall take place unless in accordance with the mitigation detailed within the protected species report Table 7.8 of the Moor House Environmental Statement AESL February 2011, including, but not restricted to undertaking confirming surveys as stated; adherence to precautionary working methods; post-construction monitoring (section 7.165)

*Reason: To conserve protected species and their habitat.*

### **Ecology – Habitat Mitigation/Enhancements**

30. Development shall not commence until a strategy for landscape and biodiversity mitigation has been submitted to and approved in writing by the planning authority. The strategy for landscape mitigation shall be based upon the proposals set out in drawing ES07 and shall demonstrate the means by which the landscape and biodiversity of the area will be protected and enhanced. The strategy for landscape mitigation shall include the following:

- (a) On and off-site planting including hedgerow and hedgerow tree planting.
- (b) Provision of enhanced field margins
- (c) Enhancement of Catkill Lane
- (d) A programme of phasing for the landscape mitigation works contained in the strategy
- (e) Provision for the ongoing care and maintenance of the works during the life of the development

The development shall not be carried out or operated except in accordance with the approved scheme of landscape mitigation, phasing and maintenance management.

*Reason: To mitigate the landscape and biodiversity effects of the development.*

### **TV Reception**

31. Prior to the commencement of the development hereby permitted, a scheme shall be submitted and approved in writing by the Local Planning Authority setting out the protocol for the assessment of television interference in the event of any complaints, including the remedial measures to be taken within six months of commissioning. Operation of the wind turbines shall not take place except in accordance with the approved protocol.

*Reason: To mitigate any interference with electromagnetic transmissions.*

### **Aviation**

32. Development shall not commence until a detailed scheme for the provision to air traffic controllers of Durham Tees Valley Airport (“the Airport”) of Additional Radar Information (as defined in the Note below) in respect of aircraft and other radar returns over or within 3 nautical miles of the boundary of the site which is the subject of this planning permission has been submitted to and approved in writing by the local planning authority in consultation with the Airport operator and all necessary approvals for the installation, testing and operation of the requirements of the approved detailed scheme have been obtained to the satisfaction of the local planning authority in consultation with the Airport operator, including the regulatory approval by the Civil Aviation Authority where necessary.

*Reason: To mitigate interference with radar.*

33. The wind farm shall not commence operation until the requirements of the approved detailed scheme have been installed, effected, tested and become operational and any further necessary approvals for the same, including the regulatory approval of the Civil Aviation Authority, have been obtained, all to the satisfaction of the local planning authority in consultation with the Airport operator. Any variation to the approved scheme, including its implementation, shall not take place except with the prior written consent of the local planning authority.

*Reason: To mitigate interference with radar.*

### **Shadow Flicker**

34. Prior to the commissioning of the development hereby approved, a scheme to alleviate the incidence of shadow flicker at any affected property shall be submitted to and approved in writing by the Local Planning Authority. At the request of the occupant of the affected property which existed prior to the grant of planning permission within 920 metres of the nearest turbine an assessment will be carried out to verify whether shadow flicker is occurring. If it is demonstrated to be occurring, the turbines producing shadow flicker shall be programmed to be shut down during the conditions which cause the shadow flicker effects. The development shall be carried out in accordance with the approved details.

*Reason: in the interests of the amenity of neighbouring residential properties.*

### **Ice Throw**

35. The turbines shall not be operated except in accordance with a scheme detailing measures to minimise the potential for ice throw from turbine blades to impact on the safe use of public highways and rights of way adjoining the development which has first been submitted to and approved in writing by the Local Planning Authority.

*Reason: To minimise any impact on the safe use of public rights of way near the development.*

### **Environmental Management Plan**

36. Prior to the commencement of any works, a revised Environmental Management Plan shall be submitted to and approved in writing by the local planning authority. This shall include details relating to:

- the prevention of silt-laden run-off;
- the treatment of sediment-laden water;
- site lighting;
- the location of contractors compounds and the parking and storage of related vehicles and machinery;
- fuel, oil and chemical storage;
- surface water drainage;
- the protection of private water supplies
- the means of construction of any watercourse crossings;
- staff facilities and drainage;
- the prevention of mud and debris being tracked onto local roads;
- dust management;
- works to the public highway;
- fencing and security
- concrete management
- details of the re-instatement of the ground, post-construction.
- the protection of wildlife habitats
- the management of operational turbine noise (including any amplitude modulation)
- procedures for the periodic review of the Environmental Management Plan

Development shall be carried out in compliance with the approved Environmental Management Plan, unless otherwise approved in advance in writing by the local planning authority.

*Reason: In the interests of protecting the amenity of neighbouring occupiers and the environment*

### **Public Footpaths**

37. Before development commences, a permissive path shall be created as shown on the plans submitted to the Local Planning Authority on 7<sup>th</sup> October 2011.

*Reason : In the interests of protecting the amenity of users of the local footpath network.*

**NOTE FOR THE ECOLOGY CONDITIONS**

The developer may need to obtain a Natural England licence prior to commencement of works.

**NOTE FOR THE AVIATION CONDITIONS**

These notes are to be read with Conditions 32-33.

The detailed scheme referred to in the condition (32) above shall:-

- a) Provide for data supplied by primary radar (“the Additional Radar”), other than the primary radar located at the Airport, which is fully compatible with the radar data processing system used by the Airport; and
- b) Demonstrate that the scheme when operational will ensure that any radar returns from the development will not be displayed to air traffic controllers of the Airport and will not otherwise adversely affect the air traffic control at the Airport.

“Additional Radar Information” means information from a primary radar optimised in order to be interpreted or combined with information from the primary radar (Watchman) located at the Airport.

**NOTES FOR THE NOISE CONDITIONS**

These notes are to be read with Conditions 18-20. They further explain these conditions and specify the methods to be deployed in the assessment of complaints about noise emissions from the wind farm.

**Note 1**

Values of the  $L_{A90, 10min}$  noise statistic should be measured at the complainants property, using a sound level meter of IEC 651 Type 1, or BS EN 61672 Class 1, standard (or the equivalent relevant UK adopted standard in force at the time of the measurements) set to measure using a fast time weighted response. This should be calibrated in accordance with the procedure specified in BS 4142:1997 (or the equivalent relevant UK adopted standard in force at the time of the measurements).

The microphone should be mounted at 1.2 – 1.5 m above ground level, fitted with a two layer windshield or suitable equivalent approved by the Local Planning Authority, and placed outside the dwelling. Measurements should be made in “free-field” conditions, so that the microphone should be placed at least 3.5 m away from the building façade or any reflecting surface except the ground.

The  $L_{A90, 10min}$  measurements should be synchronised with measurements of the 10-minute arithmetic average wind speed and with operational data from the turbine control systems of the wind farm.

To enable compliance with the conditions to be evaluated, the wind farm operator shall continuously log arithmetic mean wind speed and arithmetic mean wind direction data in 10-minute periods by direct measurement of 10 m height wind speeds at a location within the

application site to be agreed by the Local Planning Authority prior to commencement of the development.

**Note 2**

The noise measurements should be made so as to provide not less than 20 valid data points as defined in Note 2 paragraph (b). Such measurements should provide valid data points for the range of wind speeds, wind directions, times of day and turbine operations requested by the Location Planning Authority. In specifying such conditions the Local Planning Authority shall have regard to those conditions which were most likely to have prevailed during times when the complainant alleges there was disturbance due to noise. Upon its request the wind farm operator shall provide all of the data collected under Condition 2 to the Location Planning Authority.

Valid data points are those that remain after data during all periods of rainfall have been excluded.

A least squares, “best fit” curve of a maximum 2nd order should be fitted to the data points and define the rating level at each integer speed.

**Note 3**

Where, in the opinion of the Local Planning Authority noise emissions at the location or locations where assessment measurements are being undertaken contain a tonal component, the following rating procedure should be used.

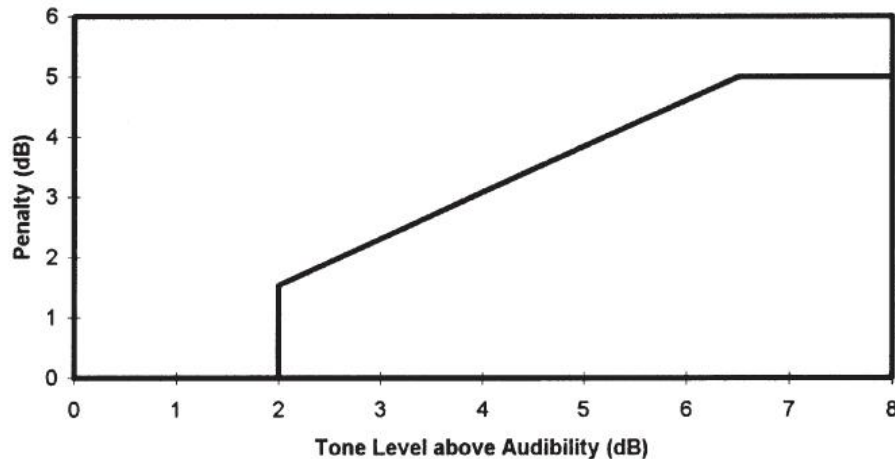
For each 10-minutes interval for which  $L_{A90,10min}$  data have been obtained as provided for in Note 1 a tonal assessment is performed on noise emissions during 2-minutes of each 10-minute period. The 2-minute periods should be regularly spaced at 10-minute intervals provided that uninterrupted clean data are available. Where clean data are not available, the first available uninterrupted clean 2-minute period out of the affected overall 10-minute period shall be selected. Any such deviations from standard procedure shall be reported.

For each of the 2-minute samples the margin above or below the audibility criterion of the tone level difference,  $\Delta L_{tm}$ , should be calculated by comparison with the audibility criterion given in Section 2.1 on pages 104-109 of ETSU-R-97 “The assessment and rating of noise from wind farms”, DTI September 1996.

The margin above audibility is plotted against wind speed for each of the 2-minute samples. For samples for which the tones were below the audibility criterion or no tone was identified, substitute a value of zero audibility.

A linear regression should then be performed to establish the margin above audibility at the assessed windspeed for each integer wind speed. If there is no apparent trend with the wind speed then a simple arithmetic average shall be used.

The tonal penalty is derived from the margin above audibility of the tone according to the figure below. The rating level at each wind speed is the arithmetic sum of the wind farm noise level, as determined from the best fit curve described in Note 2, and the penalty for tonal noise.



#### Note 4

If the rating level is above the limit set out in the conditions, measurements of the influence of background noise should be made to determine whether or not there is a breach of condition. This may be achieved by repeating the steps in Note 2, with the wind farm switched off, and determining the background noise at the assessed wind speed,  $L_3$ . The wind farm noise at this speed,  $L_1$ , is then calculated as follows where the  $L_2$  is the measured level with turbines running but without the addition of any tonal penalty:

$$L_1 = 10 \log [10^{L_2/10} - 10^{L_3/10}]$$

The rating level is re-calculated by adding the tonal penalty (if any) to the derived wind farm noise  $L_1$ . If the rating level lies at or below the values set out in the conditions then no further action is necessary. If the rating level exceeds the values set out in the conditions then the development fails to comply with the conditions.

#### Note 5

Amplitude Modulation (AM) is the regular variation of the broadband aerodynamic noise caused by the passage of the blades through the air at the rate at which the blades pass the turbine tower. ETSU-R-97, "The Assessment and Rating of Noise from Wind Turbines", assumes that a certain level of AM (blade swish) is intrinsic to the noise emitted by the wind turbine and may cause regular peak to trough variation in the noise of around 3 dB and up to 6 dB in some circumstances. The noise assessment and rating framework recommended in ETSU-R-97 fully takes into account the presence of this intrinsic level of AM when setting acceptable noise limits for wind farms.

Where the local planning authority considers the level of AM may be at a level exceeding that envisaged by ETSU-R-97, they may require the operator to appoint an approved independent consultant to carry out an assessment of this feature under Condition 22. In such circumstances, the complainant(s) shall be provided with a switchable noise recording system by the independent consultant and shall initiate recordings of the turbine noise at times and locations when significant amplitude modulation is considered to occur. Such recordings shall allow for analysis of the noise in one-third octave bands from 50Hz to 10kHz at intervals of 125 milliseconds. The effects of amplitude modulation are normally associated with impacts experienced inside properties or at locations close to the property, such as patio or courtyard



areas. For this reason the assessment of the effect necessarily differs from the free-field assessment methodologies applied elsewhere in these Guidance Notes.

If, over a period of 6 months, commencing at a time of the first occasion at which the local planning authority records an amplitude modulation event, the complainant fails to record 5 occurrences of significant amplitude modulation, in separate 24 hour periods, then its existence as a contributor to the noise complaint shall be excluded. If, however, the independent consultant, on analysis of the noise recordings, identifies that amplitude modulation is a significant contributor to the noise complaint then the local planning authority shall be informed in writing.

### **INFORMATIVE**

*The applicant is advised that works are required within the public highway to construct new access road and adjust level of verges, and contact must be made with the Assistant Director: Highways and Engineering (contact Mr.A.Ward 01325 388743) to discuss this matter*

### **SUGGESTED SUMMARY OF REASONS FOR GRANTING PLANNING PERMISSION**

The decision to grant planning permission has been taken having regard to National planning guidance on renewable energy, including Planning Policy Statements and Supplements, the Regional Spatial Strategy and other regional guidance, policies and proposals in the Darlington Local Development Framework Core Strategy set out above, and the Landscape Capacity Study for the East Durham Limestone area and the Tees Plain (North East Assembly and ARUP 2008 plus addendum).

### **SECTION 17 OF THE CRIME AND DISORDER ACT 1998**

The contents of this report have been considered in the context of the requirements placed on the Council by Section 17 of the Crime and Disorder Act 1998, namely the duty on the Council to exercise its functions with due regard to the likely effect of the exercise of those functions on, and the need to do all that it reasonably can to prevent crime and disorder in its area. It is not considered that the contents of this report have any such effect.