

## Item No. 12

<b>APPLICATION NUMBER</b>	<b>CB/13/02037/VOC</b>
<b>LOCATION</b>	<b>Double Arches Quarry, Eastern Way, Heath And Reach, Leighton Buzzard, LU7 9LF</b>
<b>PROPOSAL</b>	<b>Removal of Condition 11 of planning permission CB/10/03034 - The wind turbine shall not emit greater than expected amplitude modulation the level of broadband noise emitted by a turbine at blade passing frequency.</b>
<b>PARISH</b>	<b>Heath &amp; Reach</b>
<b>WARD</b>	<b>Heath &amp; Reach</b>
<b>WARD COUNCILLORS</b>	<b>Cllr Versallion</b>
<b>CASE OFFICER</b>	<b>Abel Bunu</b>
<b>DATE REGISTERED</b>	<b>13 June 2013</b>
<b>EXPIRY DATE</b>	<b>12 September 2013</b>
<b>APPLICANT</b>	<b>Arnold White Estates</b>
<b>AGENT</b>	<b>Engena Limited</b>
<b>REASON FOR COMMITTEE TO DETERMINE</b>	<b>Departure from the Development Plan</b>
<b>RECOMMENDED DECISION</b>	<b>Variation of Condition – Recommended for Approval</b>

### Recommendation

That Planning Permission be **GRANTED** subject to the following:

### RECOMMENDED CONDITIONS

- 1 The development shall begin not later than five years from the date of this permission.

Reason: To comply with 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 maximum height of the turbine hereby permitted, when measured from the turbine base to the blade tip in the vertical position, shall be no greater than 149 metres.

Reason: For the avoidance of doubt and in the interest of visual amenity. (Policies BE8 S.B.L.P.R & 43 DSCB)

- 3 **No development shall take place until full details of the turbine, including make,model, design, power rating, sound power levels and tonal assessment have been submitted to and approved in writing by the Local Planning Authority.**  
**Reason: To ensure that the turbine is in accordance with the details submitted in the Environmental Statement and protect the amenities of the neighbouring residential properties.**  
**(Policies BE8 S.B.L.P.R and 43 DSCB)**
- 4 **No development shall take place until details of the external appearance and colour finishes of the turbine and details of the design, including samples of the external materials and the associated infrastructure hereby permitted have been submitted to and approved in writing by the Local Planning Authority.**  
**Development shall be carried out in accordance with the approved details and retained as such thereafter.**  
**Reason: To protect the visual amenities of the area.**  
**(Policies BE8 S.B.L.P.R & 43 DSCB)**
- 5 **No development shall take place until a Construction Method Statement (CMS) has been submitted to and approved in writing by the Local Planning Authority. Development shall be carried out in accordance with the approved details. The CMS shall identify:**  
**i) Areas on site designated for the storage of heavy duty plant and equipment, including vehicles, and car parking facilities for construction site operatives and visitors;**  
**ii) Activities like earth moving, aggregate mixing, crushing, screening, and piling and on-site storage and transportation of raw material;**  
**iii) Working practices to control emissions of dust and mud arising from on-site activities, including details of wheel-wash facilities;**  
**iv) Working practices for protecting nearby dwellings, including measures to control noise and vibration arising from on-site activities as set out in British Standard 5228:2009 Noise and Vibration Control on Construction and Open Sites;**  
**v) Details of bunded facilities for any storage of oils, fuels or chemicals;**  
**vi) Details of the temporary construction compound; and vii) A programme for the construction works.**  
  
**Reason: To protect the amenities of the neighbouring residential properties and highway safety.**  
**(Policies BE8 S.B.L.P.R & 27 & 43 DSCB)**
- 6 **The temporary construction compound shall be removed no later than three months from the date of commissioning of the turbine and the ground restored to its previous condition within six months of such removal, unless otherwise agreed in writing by the Local Planning Authority.**  
**Reason: To protect the character and appearance of the surrounding area and to ensure that the compound is removed within an acceptable timeframe as the structure is temporary.**  
**(Policies BE8 S.B.L.P.R & 43 DSCB)**
- 7 **No development shall take place until a traffic management scheme for**

**the implementation of the permission has been submitted to, and approved in writing by the Local Planning Authority. The scheme shall include arrangements for exceptional loads and appropriate temporary signage and shall be implemented in accordance with the approved details.**

**Reason: In the interests of highway safety.  
(Policies BE8 S.B.L.P.R & 27 & 43 DSCB)**

- 8 **No development shall take place until a scheme of foul drainage for the constructional and operational phases of the development has been submitted to and approved in writing by the Local Planning Authority. Development shall be carried out in accordance with the approved details.**

**Reason: To ensure appropriate drainage.  
(Policies BE8 S.B.L.P.R & 43 DSCB)**

- 9 The development shall not be brought into use until a scheme of ecological mitigation has been submitted to and approved in writing by the Local Planning Authority. The development shall be carried out in accordance with the approved scheme. The scheme shall include:

- i) Details of the management programme controlling the habitats and vegetation in the immediate vicinity of the turbine;
- ii) The position of 20 Schwegler 1FF bat boxes to be agreed in consultation with the Bedfordshire Bat Group;
- iii) A scheme of post-implementation monitoring to be agreed with Natural England.

This scheme shall include techniques such as Anabat recording at turbine height, bat transects on site and corpse searches, as well as monitoring bird strike mortality.

**Reason: To ensure that biodiversity interests are protected.  
(Policies BE8 S.B.L.P.R and 43 & 57 DSCB)**

- 10 The rating level of noise immissions from the wind turbine, (including the application of any tonal penalty) when determined in accordance with the attached Guidance Notes, shall not exceed 35dB LA90 at any dwelling except those identified in the table below for any relevant 10m height 10 minute mean above ground level measured integer wind speed between 1-10m/s. In the case of the six dwellings identified in the tables attached to this condition, the rating level of noise immissions from the wind turbine, (including the application of any tonal penalty) when determined in accordance with the attached Guidance Notes, shall not exceed the decibel value identified for the relevant integer 10m measured wind speed set out in the tables and:

A. Prior to the First Export Date the wind farm operator shall submit to the Local Planning Authority for written approval a list of proposed independent consultants who may undertake compliance measurements in accordance with this condition.

Amendments to the list of approved consultants shall be made only with the prior written approval of the Local Planning Authority.

B. Within 21 days from receipt of a written request of the Local Planning Authority, following a complaint to it alleging noise disturbance at a dwelling, the wind farm operator shall, at its expense, employ a consultant approved by the Local Planning Authority, to assess the level of noise immissions from the wind farm at the complainant's property in accordance with the procedures described in the attached Guidance Notes. The written request from the Local Planning Authority shall set out at least the date, time and location that the complaint relates to.

Within 14 days of receipt of the written request of the Local Planning Authority made

under this paragraph (B), the wind farm operator shall provide the information logged in accordance with paragraph (G) to the Local Planning Authority in the format set out in Guidance Note 1(e).

C. Prior to the commencement of any measurements by the independent consultant to be undertaken in accordance with these conditions, the wind farm operator shall submit to the Local Planning Authority for written approval the proposed measurement location identified in accordance with the Guidance Notes where measurements for compliance checking purposes shall be undertaken. Measurements to assess compliance with the noise limit of this condition shall be undertaken at the measurement location approved in writing by the Local Planning Authority.

D. Prior to the submission of the independent consultant's assessment of the rating level of noise immissions in accordance with paragraph (E), the wind farm operator shall submit to the Local Planning Authority for written approval a proposed assessment protocol setting out the following:

- i. the range of meteorological and operational conditions (which shall include the range of wind speeds, wind directions, power generation and times of day) to determine the assessment of rating level of noise immissions; and
- ii. a reasoned assessment as to whether the noise giving rise to the complaint contains or is likely to contain a tonal component

The proposed range of conditions shall be those which prevailed during times when the complainant alleges there was disturbance due to noise, having regard to the written request of the Local Planning Authority under paragraph (B), and such others as the independent consultant considers likely to result in a breach of the noise limits. The assessment of the rating level of noise immissions shall be undertaken in accordance with the assessment protocol approved in writing by the Local Planning Authority.

E. The wind farm operator shall provide to the Local Planning Authority the independent consultant's assessment of the rating level of noise immissions undertaken in accordance with the Guidance Notes within 2 months of the date of the written request of the Local Planning Authority made under paragraph (B) unless the time limit is extended in writing by the Local Planning Authority. The assessment shall include all data collected for the purposes of undertaking the compliance measurements, such data to be provided in the format set out in Guidance Note 1(e) of the Guidance Notes. The instrumentation used to undertake the measurements shall be calibrated in accordance with Guidance Note 1(a) and certificates of calibration shall be submitted to the Local Planning Authority with the independent consultant's assessment of the rating level of noise immissions.

F. Where a further assessment of the rating level of noise immissions from the wind farm is required pursuant to paragraph 4(c) of the attached Guidance Notes, the wind farm operator shall submit a copy of the further assessment within 21 days of submission of the independent consultant's assessment pursuant to paragraph (E) above unless the time limit has been extended in writing by the Local Planning Authority.

G. The wind farm operator shall continuously log power production, nacelle wind speed, nacelle wind direction and nacelle orientation at the wind turbine all in accordance with Guidance Note 1(d). 10m height wind speeds averaged over 10 minute periods shall be measured at a location approved by the local planning authority for comparison with noise levels, for the duration of the noise level compliance check survey. Rainfall shall also be measured during any measurement regime at a location approved by the local authority in writing.

These data obtained shall be retained for the life of the planning permission. The wind farm operator shall provide this information in the format set out in Guidance Note 1(e) to the Local Planning Authority on its request, within 14 days of receipt in writing of such a request.

H. Once the Local Planning Authority has received the independent consultant's noise assessment required by this condition, including all noise measurements and audio recordings, where the Local Planning Authority is satisfied of an established breach of the noise limit, upon notification by the Local Planning Authority in writing to the wind farm operator of the said breach, the wind farm operator shall within 14 days propose a scheme for the approval of the Local Planning Authority. The scheme shall be designed to mitigate the breach and to prevent its future recurrence. This scheme shall specify the timescales for implementation. The scheme shall be implemented as approved by the Local Planning Authority and according to the timescales within it. The scheme as implemented shall be retained thereafter unless otherwise agreed with the Local Planning Authority. For the purposes of this condition, a "dwelling" is a building which is lawfully used as a dwelling house and which exists or had planning permission at the date of this consent.

Table 1 - Between 07:00 and 23:00 - Noise level dB LA90, 10-minute

Location	Measured wind speed at 10 meter height (m/s) within the site averaged over 10-minute periods											
	1	2	3	4	5	6	7	8	9	10	11	12
<p>The dwellings identified as H14-H19, Overend Green as specified in the Double Arches Wind Turbine Environmental Statement Volume 1: Main text July 2010 paragraph 7.3.3</p> <p>National Grid Ref  H14-H17 = 493263 228805  H18 = 493357 228735  H19 = 493365 228682</p>	35	35	37	39	41	43	45	47	49	51	53	55

Table 2 - Between 23:00 and 07:00 - Noise level dB LA90, 10-minute

Location	Measured wind speed at 10 meter height (m/s) within the site averaged over 10-minute periods											
	1	2	3	4	5	6	7	8	9	10	11	12

The dwellings identified as H14-H19, Overend Green as specified in the Double Arches Wind Turbine Environmental Statement Volume 1: Main text July 2010 paragraph 7.3.3  National Grid Ref H14-H17 = 493263 228805 H18 = 493357 228735 H19 = 493365 228682	<b>43</b>	<b>43</b>	<b>43</b>	<b>43</b>	<b>43</b>	<b>43</b>	<b>44</b>	<b>45</b>	<b>47</b>	<b>49</b>	<b>50</b>	<b>52</b>
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Reason: To ensure that the amenities of neighbouring occupiers are not prejudiced by excessive noise.

(Policies BE8 S.B.L.P.R and 43 DSCB)

- 11 Within 21 days from receipt of a written request of the Local Planning Authority, following a complaint to it alleging noise disturbance at a dwelling which relates to amplitude modulation, the wind farm operator shall, at its expense, employ a consultant approved by the Local Planning Authority, to assess whether there is greater than expected amplitude modulation from the wind farm at the complainant's property. The written request from the Local Planning Authority shall set out at least the date, time and location that the complaint relates to. Within 14 days of receipt of the written request of the Local Planning Authority made under this condition, the wind farm operator shall provide the information logged in accordance with this condition to the Local Planning Authority in the format set out in Guidance Note 1(e).
- i) Prior to the commencement of any measurements by the independent consultant to be undertaken in accordance with this condition, the wind farm operator shall submit to the Local Planning Authority for written approval the proposed measurement location identified. Measurements to assess compliance with the noise limit of condition 2 shall be undertaken at the measurement location or locations approved in writing by the Local Planning Authority.
  - ii) Prior to the submission of the independent consultant's assessment of the level of amplitude modulation in accordance with the requirements of this condition, the wind farm operator shall submit to the Local Planning Authority for written approval a proposed assessment protocol setting out the range of meteorological and operational conditions (which shall include the range of wind speeds, wind directions, power generation and times of day) to determine the assessment of the amplitude modulation.
  - iii) The proposed range of conditions shall be those which prevailed during times when the complainant alleges there was disturbance due to noise, or are identified as causing greater than expected amplitude modulation, having regard to the written request of the Local Planning Authority, and such other conditions as the independent consultant considers likely to result in a breach of the noise limits.
- The assessment of the noise immissions shall be undertaken in accordance with the assessment protocol approved in writing by the Local Planning

Authority.

iv) The wind farm operator shall provide to the Local Planning Authority the independent consultant's assessment of greater than expected amplitude modulation within 2 months of the date of the written request of the Local Planning Authority unless the time limit is extended in writing by the Local Planning Authority. The assessment shall include all data collected for the purposes of undertaking the compliance measurements, such data to be provided in the format set out in Guidance Note 1(e) of the Guidance Notes.

The instrumentation

used to undertake the measurements shall be calibrated in accordance with Guidance Note 1(a) and certificates of calibration shall be submitted to the Local Planning Authority with the independent consultant's assessment of the amplitude modulation noise immissions.

v) The wind farm operator shall continuously log power production, nacelle wind speed, nacelle wind direction and nacelle orientation at the wind turbine all in accordance with Guidance Note 1(d). 10m height wind speeds averaged over 10 minute periods shall be measured at a location approved by the local planning authority for comparison with noise levels, for the duration of the noise level compliance check survey. Rainfall shall also be measured during any measurement regime at a location approved by the local authority in writing.

These data obtained shall be retained for the life of the planning permission. The wind farm operator shall provide this information in the format set out in Guidance Note 1(e) to the Local Planning Authority on its request, within 14 days of receipt in writing of such a request.

vi) Once the Local Planning Authority has received the independent consultant's noise assessment required by this condition, including all noise measurements and audio recordings, where the Local Planning Authority is satisfied of an established breach of condition 2, upon notification by the Local Planning Authority in writing to the wind farm operator of the said breach, the wind farm operator shall within 14 days propose a scheme for the approval of the Local Planning Authority. The scheme shall be designed to mitigate the breach and to prevent its future recurrence. This scheme shall specify the timescales for implementation. The scheme shall be implemented as approved by the Local Planning Authority and according to the timescales within it. The scheme as implemented shall be retained thereafter unless otherwise agreed by the Local Planning Authority.

Reason: To ensure that the amenities of neighbouring occupiers are not prejudiced by excessive noise.

(Policies BE8 S.B.L.P.R and 43 DSCB)

12 **No development shall commence until a scheme detailing the investigation and alleviation of any potential interference to telecommunication links, caused by the turbine hereby permitted, has been submitted to and approved in writing by the local planning authority through consultation to the appropriate telecommunication providers. The approved mitigation measures shall be carried out prior to the erection of the turbine.**

**Reason: To ensure that the impact of the turbine on telecommunications links is adequately mitigated.**

**(Policies BE8 S.B.L.P.R and 43 DSCB)**

- 13 **The wind turbine hereby approved shall operate in accordance with a shadow flicker mitigation scheme which shall be submitted to and approved by the Local Planning Authority prior to the operation of any wind turbine unless a survey carried out on behalf of the developer in accordance with a methodology approved in advance by the local planning authority confirms that shadow flicker effects would not be experienced within habitable rooms within any dwelling.  
Reason: To ensure shadow flicker is adequately mitigated.  
(Policies BE8 S.B.L.P.R and 43 DSCB)**
- 14 The planning permission is for a period from the date of the installation until the date occurring 25 years after the date of Commissioning of the Development. Written confirmation of the date of commissioning of the development shall be provided to the Local Planning Authority no later than 1 calendar month after that event.  
Reason: In the interests of visual amenity and landscape protection.  
(Policies BE8 S.B.L.P.R and 43 DSCB)
- 15 Not later than 3 months from the date that the planning permission hereby granted expires, or if the turbine ceases to operate for a continuous period of 6 months then, unless otherwise agreed in writing with the Local Planning Authority, it shall be dismantled and removed from the site and the land reinstated to its former condition.  
Reason: To ensure that the turbine is removed at the end of its operational life and to safeguard the character of the locality.  
(Policies BE8 S.B.L.P.R and 43 DSCB)
- 16 All electrical cabling on site shall be buried underground unless otherwise approved in writing by the Local Planning Authority.  
Reason: For the avoidance of doubt and in the interests of visual amenity.  
(Policies BE8 S.B.L.P.R and 43 DSCB)
- 17 If, during development, contamination not previously identified is found to be present at the site then no further development (unless otherwise agreed in writing with the Local Planning Authority) shall be carried out until the developer has submitted, and obtained written approval from the Local Planning Authority for, an amendment to the remediation strategy detailing how this unsuspected contamination shall be dealt with.  
Reason :To protect and prevent the pollution of controlled waters (particularly the underlying principal aquifer and EU Water Framework Directive drinking water protected area) from potential pollutants associated with current and previous land uses in line with National Planning Policy Framework (NPPF; paragraphs 109, 120, 121), EU Water Framework Directive, Anglian River Basin Management Plan and Environment Agency Groundwater Protection (GP3:2012) position statements A4 to A6, D1 to D4 and N7.
- 18 Prior to commencement of development, a verification report demonstrating completion of the works set out in the approved remediation strategy and the effectiveness of the remediation shall be submitted to and approved in writing by the Local Planning Authority. The report shall include results of sampling and monitoring carried out in accordance with the approved verification plan to demonstrate that the site remediation criteria have been met. It shall also, include any plan (a long-term monitoring and maintenance plan) for longer-term monitoring of



pollutant linkages, maintenance and arrangements for contingency action, as identified in the verification plan, and for the reporting of this to the Local Planning Authority.

Reason: To protect and prevent the pollution of controlled waters (particularly the underlying principal aquifer and EU Water Framework Directive drinking water protected area) from potential pollutants associated with current and previous land uses in line with National Planning Policy Framework (NPPF; paragraphs 109, 120, 121), EU Water Framework Directive, Anglian River Basin Management Plan and Environment Agency Groundwater Protection (GP3:2012) position statements A4 to A6, D1 to D4 and N7.

- 19 Piling or any other foundations designs using penetrative methods shall not be permitted other than with the express written consent of the Local Planning Authority, which may be given for those parts of the site where it has been demonstrated that there is no resultant unacceptable risk to ground water. The development shall be carried out in accordance with the approved details.

Reason: To protect and prevent the pollution of controlled waters (particularly the underlying principal aquifer and EU Water Framework Directive drinking water protected area) from potential pollutants associated with current and previous land uses in line with National Planning Policy Framework (NPPF; paragraphs 109, 120, 121), EU Water Framework Directive, Anglian River Basin Management Plan and Environment Agency Groundwater Protection (GP3:2012) position statements A4 to A6, D1 to D4 and N7.

- 20 No infiltration of surface water drainage into the ground is permitted other than with the express written consent of the Local Planning Authority, which may be given for those parts of the site where it has been demonstrated that there is no resultant unacceptable risk to controlled waters. The development shall be carried out in accordance with the approved details.

Reason: To protect and prevent the pollution of controlled waters (particularly the underlying principal aquifer and EU Water Framework Directive drinking water protected area) from potential pollutants associated with current and previous land uses in line with National Planning Policy Framework (NPPF; paragraphs 109, 120, 121), EU Water Framework Directive, Anglian River Basin Management Plan and Environment Agency Groundwater Protection (GP3:2012) position statements A4 to A6, D1 to D4 and N7.

- 21 Prior to the commencement of development a scheme showing full details of the levels of the proposed access road for the site in relation to flood zones, shall be submitted to and approved in writing by the Local Planning Authority. The access road shall thereafter be constructed in accordance with the approved plans.

Reason: To ensure that flood risk from fluvial sources does not increase as a result of the access road construction.  
(Policy 49 DSCB)

- 22 The turbine shall be fitted with 25 candela omni-directional red lighting at the highest practicable point and this shall be retained for the lifetime of the turbine.

Reason: In the interests of air safety.  
(Policies 8 S.B.L.P.R and 43 & 44 DSCB)

- 23 No development shall commence until the applicant or developer has secured the implementation of a Written Scheme of Archaeological Investigation which has been submitted to and approved in writing by the Local Planning Authority. The said development shall only be implemented in accordance with the scheme thereby approved.  
Reason: To record and advance understanding of the significance of the heritage asset.  
(Policies 8 S.B.L.P.R and 43 & 45 DSCB)
- 24 The development hereby permitted shall not be carried out except in complete accordance with the details shown on the submitted plans, numbers 3100.013; Technical Information contained within Environmental Statement dated July 2010 Volumes 1-4 (inclusive) and Transport Assessment dated July 2010.  
Reason: For the avoidance of doubt.

### **Notes to Applicant**

1. In accordance with Article 31 of the Town and Country Planning (Development Management Procedure) (England) Order 2010, the reason for any condition above relates to the Policies as referred to in the South Bedfordshire Local Plan Review (SBLPR) and the emerging Development Strategy for Central Bedfordshire (DSCB).
2. This permission relates only to that required under the Town & Country Planning Acts and does not include any consent or approval under any other enactment or under the Building Regulations. Any other consent or approval which is necessary must be obtained from the appropriate authority.
3. The granting of this permission does not absolve the applicants from complying with the relevant law protecting species, including obtaining and complying with the terms and conditions of any licences required, as described in Part IV B of Circular 06/2005.
4. **Guidance Notes for Noise Conditions**  
These notes are to be read with and form part of the noise conditions. They further explain the conditions and specify the methods to be deployed in the assessment of complaints about noise immissions from the wind farm. The rating level at each integer wind speed is the arithmetic sum of the wind farm noise level as determined from the best-fit curve described in Note 2 of these Guidance Notes and any tonal penalty applied in accordance with Note 3. References to assessment of rating levels does not apply to the assessment of greater than expected amplitude modulation. Reference to ETSU-R-97 refers to the publication entitled "The Assessment and Rating of Noise from Wind Farms" (1997) published by the Energy Technology Support unit (ETSU) for the Department of Trade and Industry (DTI).

5. **Note 1 applies to planning condition 10 and Note 1(e) & 1(d) also applies to planning condition 11**

(d) Values of the LA90,10-minute noise statistic required for condition 10 should be measured at the complainant's property, using a sound level meter of EN 60651/BS EN 60804 Type 1, or BS EN 61672 Class 1 quality (or the equivalent UK adopted standard in force at the time of the measurements) set to measure using the fast time weighted response as specified in BS EN 60651/BS EN 60804 or BS EN 61672-1 (or the equivalent UK adopted standard in force at the time of the measurements). This should be calibrated in accordance with the procedure specified in BS 4142: 1997 (or the equivalent UK adopted standard in force at the time of the measurements). Measurements shall be undertaken in such a manner to enable a tonal penalty to be applied in accordance with Guidance Note 3.

(e) The microphone should be mounted at 1.2 - 1.5 metres above ground level, fitted with a two-layer windshield or suitable equivalent approved by the Local Planning Authority, and placed outside the complainant's dwelling. Measurements should be made in "free field" conditions. To achieve this, the microphone should be placed at least 3.5 metres away from the building facade or any reflecting surface except the ground at the approved measurement location. In the event that the consent of the complainant for access to his or her property to undertake compliance measurements is withheld, the wind farm operator shall submit for the written approval of the Local Planning Authority details of the proposed alternative representative measurement location prior to the commencement of measurements and the measurements shall be undertaken at the approved alternative representative measurement location.

(f) The LA90, 10-minute measurements should be synchronised with measurements of the 10-minute arithmetic average wind speed and with operational data logged in accordance with Guidance Note 1(d), including the power generation data from the turbine control systems of the wind farm.

(g) To enable compliance with the conditions to be evaluated, the wind farm operator shall continuously log arithmetic mean wind speed in metres per second (m/s), arithmetic mean wind direction in degrees from north and rainfall data in each successive 10-minute periods by direct measurement at the meteorological monitoring location approved by the Local Planning Authority. In relation to noise condition 10 it is this procedure, which is determined as valid in accordance with Note 2(b), such correlation to be undertaken in the manner described in Note 2(c). The wind farm operator shall continuously log arithmetic mean nacelle anemometer wind speed, arithmetic mean nacelle orientation, arithmetic mean wind direction as measured at the nacelle and arithmetic mean power generated during each successive 10-minute period for each wind turbine on the wind farm. All 10-minute periods shall commence on the hour and in 10-minute increments thereafter synchronised with Greenwich Mean Time.

(h) Data provided to the Local Planning Authority in accordance with paragraphs (E) (F) and (G) of noise condition 10 and as required under noise condition 2 shall be provided in comma separated values in electronic format.

6. **Note 2 applies to planning condition 10**

(a) The noise measurements should be made so as to provide not less than 20 valid data points as defined in Note 2 paragraph (b).

(b) Valid data points are those measured in the conditions set out in the assessment protocol approved by the Local Planning Authority under paragraph (E) of the noise condition but excluding any periods of rainfall measured at the approved meteorological measurement location provided in accordance with the planning permission on the wind farm site.

(c) Values of the LA90,10-minute noise measurements and corresponding values of the 10-minute ten metre height wind speed for those data points considered valid in accordance with Note 2 paragraph (b) shall be plotted on an XY chart with noise level on the Y-axis and wind speed on the X-axis. A least squares, "best fit" curve of an order deemed appropriate by the independent consultant (but which may not be higher than a fourth order) should be fitted to the data points and define the wind farm noise level at each integer speed.

**Note 3**

(a) Where in accordance with the approved assessment protocol under paragraph (D) of planning condition 10, noise immissions at the location or locations where compliance measurements are being undertaken contain or are likely to contain a tonal component, a tonal penalty is to be calculated and applied using the following rating procedure.

(b) For each 10-minute interval for which LA90,10-minute data have been determined as valid in accordance with Note 2 a tonal assessment shall be performed on noise immissions during 2 minutes of each 10-minute period. The 2-minute periods should be spaced at 10-minute intervals provided that uninterrupted uncorrupted data are available ("the standard procedure").

Where uncorrupted 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.

(c) For each of the 2-minute samples the tone level above audibility (Lta), shall be calculated by comparison with the audibility criterion given in Section 2.1 on pages 104 -109 of ETSU-R-97.

(d) The tone level above audibility (Lta) shall be plotted against wind speed for each of the 2-minute samples. Samples for which the tones were below the audibility criterion or no tone was identified, a value of zero audibility shall be substituted.

(e) A least squares "best fit" linear regression shall then be performed to establish the average tone level above audibility for each integer wind speed derived from the value of the "best fit" line fitted to values within  $\pm 0.5\text{m/s}$  of each integer wind speed. If there is no apparent trend with wind speed then a simple arithmetic mean shall be used. This process shall be repeated for each integer wind speed for which there is an assessment of overall levels in Note 2.

(f) The tonal penalty is derived from the margin above audibility of the tone according to the figure below.

**Note 4**

(a) If a tonal penalty is to be applied in accordance with Note 3 the rating level of the turbine noise at each wind speed is the arithmetic sum of the measured noise level as determined from the best fit curve described in Note 2 and the penalty for tonal noise as derived in accordance with Note 3 above at each integer wind speed within the range set out in the approved assessment protocol under paragraph (E) of the noise condition.

(b) If no tonal penalty is to be applied then the rating level of the turbine noise at each wind speed is equal to the measured noise level as determined from the best fit curve described in Note 2.

(c) In the event that the rating level is above the limit(s) set out in the Tables

attached to the noise conditions or the noise limits for a complainant's dwelling approved in accordance with paragraph (C) of the noise condition, the independent consultant shall undertake a further assessment of the rating level to correct for background noise so that the rated level relates to wind turbine noise immission only.

(d) The wind farm operator shall ensure that all the wind turbines in the development are turned off for such period as the independent consultant or the Local Planning Authority requires to undertake the further assessment. The further assessment shall be undertaken in accordance with the following steps:

i. Repeating the steps in Note 2, with the wind farm switched off, and determining the background noise at each integer wind speed within the range set out in the approved assessment protocol under paragraph (E) of the noise condition.

ii. The wind farm noise at this speed shall then be calculated

iii. The rating level shall be re-calculated by adding the tonal penalty (if any is applied in accordance with Note 3) to the derived wind farm noise at that integer wind speed.

iv. If the rating level after adjustment for background noise contribution and adjustment for tonal penalty (if required in accordance with note (iii) above) at any integer wind speed lies at or below the values set out in the Tables attached to the conditions or at or below the noise limits of 35dB LA90(10min) for other dwellings existing at the time of this approval then no further action is necessary. If the rating level at any integer wind speed exceeds the values set out then the development fails to comply with the conditions.

7. The applicant is advised that photographs of the existing highway that is to be used for access and delivery of materials will be required by the Local Highway Authority. Any subsequent damage to the public highway resulting from the works as shown by the photographs, including damage caused by delivery vehicles to the works, will be made good to the satisfaction of the Local Highway Authority and at the expense of the applicant. Attention is drawn to Section 59 of the Highways Act 1980 in this respect.

8. The Environmental Statement submitted with this application has been taken into account and the following issues considered in detail:

- Landscape and Visual Impact
- Ground conditions, geology and hydrogeology
- Ecology
- Noise
- Shadow Flicker
- Traffic and Transportation
- Aviation
- Electro-magnetic interference
- Minerals and Waste
- Architectural and Cultural Heritage

It is considered that given the siting of the proposal within a working quarry and the wider environmental benefits in terms of the amount of energy that would be produced by the turbine and the saving in terms of tonnes of carbon dioxide would amount to a case for very special circumstances. This would outweigh the harm identified to the Green Belt, the surrounding area, and the residential amenities of the neighbouring properties.

**Statement required by the Town and Country Planning (Development Management Procedure) (England) (Amendment No. 2) Order 2012 - Article 31**

Planning permission has been granted for this proposal. The Council acted pro-actively through positive engagement with the applicant during the determination process. The Council has therefore acted pro-actively to secure a sustainable form of development in line with the requirements of the Framework (paragraphs 186 and 187) and in accordance with the Town and Country Planning (Development Management Procedure) (England) (Amendment No. 2) Order 2012.

- (1) In advance of the consideration of the application the Committee were advised that and a revised parking plan had been received, demonstrating 3 car parking spaces. In addition the Committee were advised of an amendment to Condition 1.
- (2) In advance of the consideration of the application the Committee received representations made under the Public Participation Scheme.