

**SECTION 36 OF THE ELECTRICITY ACT 1989 AND SECTION 90(2)
OF THE TOWN AND COUNTRY PLANNING ACT 1990 (AS
AMENDED)**

**APPLICATION BY VATTENFALL WIND POWER LTD FOR
PROPOSED 17 TURBINE WIND FARM AT LLANBADARN FYNYDD**

**STATEMENT OF CASE FOR SESSION 1 ON BEHALF OF
VATTENFALL WIND POWER LTD**

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1 INTRODUCTION

- 1.1 This Statement of Case has been prepared on behalf of Vattenfall Wind Power Ltd ("Vattenfall") in relation to its proposed 17 turbine Llanbadarn Fynydd wind farm ("the Proposed Development").
- 1.2 An application was submitted to the Secretary of State for Business Enterprise and Regulatory Reform for consent to construct and operate the Proposed Development under section 36 of the Electricity Act 1989 and deemed planning permission under section 90(2) of the Town and Country Planning Act 1990 (as amended) dated 30 November 2007 ("the Application"). Powys County Council ("the Council") objected to the Application and as a result, in accordance with paragraph 2(2) of Schedule 8 of the Electricity Act 1989, it is being determined by the Secretary of State following a public inquiry ("the Inquiry").
- 1.3 The following have been conjoined with the Application and will be considered together at the Inquiry:
- (a) Application by Fferm Wynt Llaithddu Cyf dated 7 May 2008 for consent to construct and operate a 66.7MW wind turbine generating station in Powys, Mid-Wales ("Llaithddu");
 - (b) Application by Celtpower Limited dated 9 May 2008 for consent to construct and operate a 126MW wind turbine generating station in Powys, Mid-Wales ("Llandinam");
 - (c) Application by RES UK & Ireland Limited dated 27 March 2009 for consent to construct and operate a 100MW wind turbine generating station in Powys, Mid-Wales ("Llanbrynmair");
 - (d) Application by RWE Npower Renewables Limited dated 11 December 2008 for consent to construct and operate a 130-250MW wind turbine generating station in Powys, Mid-Wales ("Carnedd Wen");
 - (e) Application by SP Manweb plc dated 2 December 2009 to install and keep installed a 132kV overhead electric line connection from Llandinam Wind Farm to Welshpool Substation in Powys, Mid-Wales.

2 THE PROPOSED DEVELOPMENT

- 2.1 The Llanbadarn Fynydd proposal comprises:

- (a) The construction and operation of up to 17 turbines each with an installed capacity of up to 3.5MW. The turbines would have a maximum height to blade tip of 126.5m;
- (b) Associated infrastructure, including transformers (either internal or external), access tracks, sub-station and 80m meteorological mast. Also crane hardstandings alongside each turbine base and a temporary construction compound;
- (c) Underground cabling;
- (d) Borrow pits; and
- (e) Off-site highway works.

3 PROCEDURAL BACKGROUND AND REASONS FOR INQUIRY

3.1 The Council considered the Application and the Carnedd Wen application at a meeting on 13 March 2012 and resolved to object to both proposals. The Council's reasons for objecting to the Application were reported to the Secretary of State as:

1. National Policy NPS EN-1 and EN-3 has a requirement that overarching weight be given to meeting the (renewable) energy need. In this respect and with regard to criteria for 'good design' for renewable energy infrastructure, proposals are expected to comply with the principles set out in the Overarching Energy NPS-EN1 and be designed to mitigate impacts such as landscape and visual impact, noise and effects on ecology. It is also recognised that where adverse impacts are considered, within the context of longer term and cumulative impacts and, where the adverse impacts (after mitigation) outweigh the benefits or cannot be overcome, then consent should be refused where longer term and cumulative impacts would be sufficiently adverse (after mitigation) to outweigh the benefits. In the Local Planning Authority's view, the National Policy Requirements and prevailing Welsh Government and Local Policies cannot be met in the following respects:

2. The delivery route chosen by the Applicant has significant unresolved issues as follows:

a. The existing Class III highway C1057, which is proposed to form part of the internal access route for construction vehicles, is narrow and lacks adequate width or passing places and use of this road by vehicles generated by the development will adversely affect the safety of existing highway users. Furthermore, the substandard width of highway proposed over the Vastre on the Class III C2058 will lead to conditions prejudicial to highway safety.

b. The inadequate and lack of detail submitted for the Pool Road and Kerry Road turn, for abnormal loads, does not confirm that the route to the site can be negotiated and identifies private property being damaged. In addition, the likely delays, congestion and inability to negotiate the turn will have a significant detrimental affect on the safety and free flow of the travelling public.

3. There is an absence of provision of a Strategic Traffic Management Plan (sTMP) that has been agreed by the Highways Authorities for Powys and other relevant bodies such as the Police, that would serve to acceptably mitigate by coordination, timetabling and cooperation with the Highways Authorities the effects of large scale traffic movements generated on the Powys road system that would otherwise not have the capacity to sustain such traffic movement. Without the sTMP to which a suitable Network Management Legal Control Mechanism could be applied, the adverse cumulative impact upon the road network generated by uncoordinated large scale HGV and AIL vehicle movements to the site would have significant and adverse effects on the road system in Mid Wales sufficient to justify the recommendation of refusal of this development in respect of failing to satisfying the requirements of National Policy NPS EN-1 and EN-3 in respect of adverse impacts (after mitigation) outweighing the benefits.

4. The proposal fails to meet the requirements of Planning Policy Wales (February 2011) in respect of transport implications (Section 8.7) pertaining to accessibility of the site; the environmental impact of both the transport infrastructure and traffic generated and; the effects on the safety and convenience of other users of the transport network.

5. The requirement for the provision of an acceptable highway access and any new roads and accesses sufficient to service the development without unacceptable environmental impacts is a stipulation of Policy E3 of the Powys Unitary Development Plan (adopted March 2010) and endorsed by generic Policy GP1 of this document. The proposal therefore fails to satisfy the requirement of adopted County UDP policies in respect of providing acceptable and adequate highway access to serve this development.

6. The unacceptable landscape and visual impact of the applications including the detrimental effect on tourism and other economic factors.

7. A lack of certainty as to whether the proposed developments would contribute or result in the necessity for significant grid infrastructure development which may have the potential for further adverse impact on the landscape including visual, economic and environmental well-being of the area.

3.2 At a meeting on 25 September 2012, the Council considered the Llandinam, Llaithddu and Llanbrynmair wind farm applications and the Llandinam 132kV overhead line and

resolved to object to them. The Secretary of State announced his decision to conjoin these applications with Llanbadarn Fynydd and Carnedd Wenn on 23 October 2012.

3.3 The Inspector has published a programme for the Inquiry, summarised below:

- (a) Opening Session (4 June – 6 June 2013): opening submissions, interpretation and application of planning and energy policy;
- (b) Session 1 (3 September – 18 October 2013): SSA C – landscape, cultural heritage, noise and health, local transport, peat/hydrology, wildlife;
- (c) Session 2 (5 November – 20 December 2013): SSA B – landscape, cultural heritage, noise and health, local transport, construction/peat/hydrology/forestry, wildlife;
- (d) Session 3 (21 January – 28 February 2014): Llandinam grid connection – design, need, landscape, cultural heritage, wildlife and ecology, way-leaves and easements;
- (e) Session 4 (18 March – 25 April 2014): matters in common/cumulative effects - landscape, strategic transport, socio-economic effects including tourism, wildlife and ecology
- (f) Closing Session (20 May – 30 May 2014): planning balance, general conditions/legal undertakings, closing statements, other applications.

3.4 This Statement of Case sets out Vattenfall's case for Session 1.

4 VATTENFALL'S CASE FOR SESSION 1

4.1 From the Council's objections, the Secretary of State's Statement of Matters issued on 12 December 2012 and Outline Statements of Case submitted by Consultees and Third Parties, Vattenfall considers that the following matters are in issue in relation to the Application, which are pertinent to Session 1:

- (a) The individual landscape and visual impact of the Proposed Development and cumulative impacts with other wind farms in SSA C;
- (b) Highway safety and engineering issues arising from direct access to the site from the public highway, including the C1057 (if unresolved from June 2013 SEI and discussions regarding the statement of common ground); and
- (c) The individual noise impacts of the Proposed Development and cumulative impacts with other wind farms in SSA C (if raised by residents and unresolved).

- 4.2 Whilst Vattenfall reserves its position to respond in detail to any evidential case that is made against the Llanbadarn Fynydd scheme, at this stage it envisages that its evidence to the Inquiry will be limited to the matters listed in paragraph 4.1.
- 4.3 The advocate who will appear on behalf of Vattenfall at Inquiry will be Mr Patrick Robinson, Partner at Burges Salmon LLP.
- 4.4 Vattenfall will call witness evidence to deal with the following subject areas:
- (a) Mr Ian Gates, AMEC Environment & Infrastructure UK Limited, regarding landscape and visual effects;
 - (b) Mr Peter Mansell, Key Transport Consultants Ltd, regarding local transport issues; and
 - (c) Mr Darren Humpheson, URS Corporation, regarding noise.
- 4.5 The Appellant reserves the right to amend or add to this list of professional witnesses in the light of the Council's Statement of Case and representations received from Interested Third Parties, particularly in relation to hydrology and wildlife.
- 4.6 Whilst Vattenfall does not agree with the Council's reasons for objection, they are clearly worded and specific. The Council also provided an Outline Statement of Case in January 2013 and an updated Outline Statement of Case in May 2013. Given the specificity of the wording in these documents, Vattenfall is entitled to assume that all of the grounds of objection of the Council to the Proposed Development are included within them and will prepare its witness evidence accordingly. In Session 1, Vattenfall will produce evidence on the matters set out below:
- (a) The Council's reasons for objection and its position set out in the updated Outline Statement of Case and its Statement of Case;
 - (b) Outline Statements of Case and Statements of Case made by Consultees; and
 - (c) Outline Statements of Case and Statements of Case made by Third Parties.

5 VATTENFALL'S EVIDENCE

5.1 Landscape

- (a) In his evidence Mr Gates will say with regard to landscape issues that the proposed Llanbadarn Fynydd Wind Farm is acceptable based upon the conclusions of the original landscape assessment carried out in 2007 and the SEI carried out in 2013. In support of this conclusion Mr Gates will draw upon the following key points:

- (i) The minimal loss of landscape elements required to construct and operate the proposed development and the abundant nature of the affected landscape elements. This is allied to the fact that the land-use of the application site is overwhelmingly agricultural consisting of fields of improved grassland divided by post and wire fencing or hedgerows composed of non-native species interspersed with blocks of coniferous plantations. It will be demonstrated that this is a landscape whose appearance and many of whose characteristics have been heavily modified by human activity and as such is appropriate to host a wind farm.
- (ii) The application site's land-use has resulted in the prevailing aesthetic and perceptual characteristics within and immediately around the application site being suitable for the operation of a wind farm. The application site is a large scale landscape but does not benefit from high levels of wildness, tranquillity and isolation. It presents different landscape characteristics from the upland and valley landscapes that are commonly found in and around SSA C which result in the application site being more suitable for hosting a wind farm.
- (iii) The majority of the application site was located within the boundaries of SSA C as defined under TAN8 in 2005. Subsequently the entire Llanbadarn Fynydd Wind Farm application site was included within the boundaries of SSA C as revised in the 2006 TAN 8 Annex D Study and the 2008 Local Refinement of TAN 8 Strategic Search Areas B & C Review Exercise. Whilst the latter was authorised in 2008 for development control purposes, it has not been adopted and does not constitute development plan policy. As defined in TAN8 *"Within and immediately adjacent to SSAs, the implicit objective is to accept landscape change i.e. a significant change in landscape character from wind farm development."*
- (iv) With regard to national landscape designations the operation of the proposed Llanbadarn Fynydd Wind Farm would have no effect upon any national landscape designations in Wales. Although the landscape assessment concluded that there would be no significant effects upon the Shropshire Hills AONB and no objection has been raised from the AONB, the Updated Outline Statement prepared by Powys County Council purports to have established a link between the Llanbadarn Fynydd application site and the AONB and that it would have "a

considerable harmful effect upon the AONB". The landscape and visual evidence will therefore examine and repudiate Powys County Council's claim with regard to effects upon the Shropshire Hills AONB and demonstrate that Llanbadarn Fynydd Wind Farm will be acceptable with regard to effects upon all landscape designations.

(v) The proposed Llanbadarn Fynydd Wind Farm will have limited effects upon landscape character as defined in LANDMAP aspect areas. The landscape evidence will demonstrate how significant landscape effects will be restricted to parts of the three LANDMAP Visual and Sensory Aspect Areas in which the proposed wind farm will be located. It will demonstrate that for other more distant Visual and Sensory Aspect Areas and the aspect areas for the four other LANDMAP aspect layers the magnitude of landscape change would be insufficient to result in significant landscape effects upon key characteristics identified in the LANDMAP descriptions. Consequently the landscape and visual evidence will show that effects upon landscape character as represented by LANDMAP aspect areas are also acceptable.

(b) In his evidence Mr Gates will say with regard to cumulative landscape and visual issues within SSA C that the proposed Llanbadarn Fynydd Wind Farm is acceptable. This conclusion is based upon analysis of the cumulative information set out in the February 2013 SEI and further environmental information accompanying the LVIA proof of evidence that reflects the changes to the turbine layouts at Llaith Ddu and Llandinam Repowering that have taken place subsequent to the submission of the SEI. In support of this conclusion Mr Gates will draw upon the following key points:

(i) Any significant landscape and visual cumulative effects that will arise as a consequence of the interaction of wind farms operating within SSA C will be largely confined to SSA C and some of its immediate environs and as such they will be in accordance with the acceptability of cumulative effects as set out in the Second Draft Interim Control Guidance on Wind Farms developed in Powys in 2008.

(ii) The proposed Llanbadarn Fynydd Wind Farm has been designed so as to be acceptable in landscape and visual terms both when operating on its own and in combination with other proposed wind farms in SSA C.

(iii) The proposed Llanbadarn Fynydd Wind Farm would have only a relatively weak cumulative landscape and visual relationship with the proposed wind farms on the western side of the Ithon Valley (Llaith Ddu,

Llandinam Repowering and Hirddywel) resulting in cumulative landscape and visual effects that will be acceptable within the context of an SSA.

- (c) In his evidence Mr Gates will say with regard to visual effects and residential visual amenity that the proposed Llanbadarn Fynydd Wind Farm is acceptable based upon the conclusions of the original visual assessment carried out in 2007 and the SEI carried out in 2013. In support of this conclusion Mr Gates will draw upon the following key points:
- (i) The visual assessment concludes that no significant visual effects will be experienced by residents in any settlements including Llanbadarn Fynydd.
 - (ii) A limited number of significant visual effects will be experienced by residents in some of the isolated residential properties within 2.5km, a proportion of which are under the ownership of landowners who will benefit financially from the operation of Llanbadarn Fynydd Wind Farm. In the view of the landscape consultants who advised Powys County Council this distribution of significant residential visual effects within an SSA “... *does not justify a recommendation for refusal.*”
 - (iii) The visual assessment concludes that significant visual effects will be sustained by recreational visual receptors using a limited number of public rights of way. These will include some parts of two sections of a national trail: Glyndwr’s Way, as well as public rights of way that cross the application site and some in its immediate vicinity, particularly to its south-west. However it is contended that a good proportion of these public rights of way are disconnected, do not exist on the ground and/or are difficult or impossible to follow with the consequence that numerically these significant visual effects would be sustained by a small number of visual receptors.
 - (iv) The visual assessment concludes that there will be no significant visual effects upon vehicular visual receptors using any ‘A’ or ‘B’ roads. Only vehicular visual receptors travelling along the two minor roads that pass through the application site will sustain temporary significant visual effects.
 - (v) Due to the height, movement and scale of turbines most wind energy developments will result in some significant adverse visual effects. The limited number of visual receptors assessed as likely to sustain

significant visual effects compared to the total number of potential visual receptors provides a strong indication that the location and layout of Llanbadarn Fynydd Wind Farm has been well chosen and carefully developed to minimise the occurrence of significant visual effects.

- (vi) With regard to potential effects upon the residential visual amenity of residents in the closest properties the visual assessment concluded that residents at none of the closest properties could be considered to be likely to legitimately consider that the turbines would have an 'overbearing' effect nor could their presence result in 'unsatisfactory living conditions arising that could lead to these properties being widely regarded as an unattractive and thus unsatisfactory (although not necessarily uninhabitable places) in which to live. The three properties within the application site that have been assessed as sustaining the relatively highest potential effects upon the residential visual amenity of their residents are under the control of landowners who will benefit financially from the operation of Llanbadarn Fynydd Wind Farm.

5.2 Transport

- (a) In his evidence Mr Mansell will say with regard to local transport issues (in particular the access to the Wind Farm off the A483 trunk road, and the interaction of the Wind Farm traffic with the Class III county highway C1057 and unclassified county highway U1298) that the proposed Llanbadarn Fynydd Wind Farm is acceptable based upon the findings of the February 2013 and June 2013 SEI. For the avoidance of doubt, the Strategic Traffic Management Plan (sTMP) for Mid Wales Wind Farm and all cumulative movements of construction traffic, including HGVs and construction workers, and Abnormal Indivisible Load vehicles transporting the turbine components, on the A483 and further afield will be addressed at Session 4 of the Public Inquiry and are not, therefore, covered by this statement of case.
- (b) In support of this conclusion, Mr Mansell will draw upon the following key points:
 - (i) The main access to the site (the Western Access) from the A483 as included in the February 2013 SEI has been agreed with Welsh Government as highway authority for the A483;
 - (ii) Since the preparation of the February 2013 SEI, a meeting was held with officers of the Council on 10th April 2013 at which the required amendments to the scheme where it interacts with the Class III county highway C1057 and unclassified county highway U1298 were discussed. These amendments were incorporated in the June 2013 SEI

and, subject to a few minor points of detail were considered acceptable by Mr David Williams of the Council. The minor changes have been incorporated into the scheme and a statement of common ground produced which it is hoped will be agreed and signed avoiding the need for Inquiry time in Session 1 to discuss this topic.

5.3 Noise

- (a) In his evidence Mr Humpheson will say with regard to noise issues that the proposed Llanbadarn Fynydd Wind Farm is acceptable based upon the findings and conclusions of the 2007 Environmental Statement and the 2013 SEI. In support of this conclusion, Mr Humpheson will draw upon the following key points:
- (i) Since the preparation of the 2007 Environmental Statement, there has been no change to national policy (Wales, Scotland and England) regarding onshore wind turbines. ETSU-R-97, which is referred to in TAN 8, remains the principal guidance document on the assessment and rating of noise from wind turbines. It is the accepted standard for wind farm developments in the UK.
 - (ii) A “Good Practice Guide to the Application of ETUS-R-97 for the Assessment and Rating of Wind Turbine Noise” was published by the UK Institute of Acoustics in May 2013. The Guide was endorsed by the Welsh Assembly on 22 May 2013 and the Minister for Energy and Climate Change has stated in a letter to the IoA, dated 20 May 2013, that *“[the Minister] is happy to accept that it [the Guide] represents current industry good practice, and to endorse it as a supplement to ETSU-R-97”*. Mr Humpheson will state that the draft recommendations of the 2012 consultation document were adopted within the 2013 SEI and he will also state that 2013 SEI was carried out in accordance with the recommendations of the Guide.
 - (iii) The operational noise assessment reported in the 2013 SEI (including the subsequent errata for Lower Foel) replaces in its entirety the operational noise assessment reported in the 2007 ES due to changes in baseline measurement practices and wind turbine noise calculation methodologies.
 - (iv) Operational noise limits within the SEI (and ES) were based on the separate fixed limits of (40 dB $L_{A90(10min)}$) for day time, 43 dB $L_{A90(10min)}$ for night time and for those dwelling having a financial involvement in the wind farm, 45 dB $L_{A90(10min)}$. Subsequently Powys County Council

has requested a single noise limit of 40 dB $L_{A90(10min)}$, regardless of time period, for non-stakeholder properties.

- (v) The 2013 SEI reported the cumulative assessment of wind turbine noise from Bryngydfa, Garreg Llwyd, Hirddywel, Llaithddu, Llandinam, Neuadd Goch Bank and Llanbadarn Fynydd based upon worst case operations and simultaneous worst case down wind noise propagation from all wind turbines. The 2013 SEI demonstrates that the assessment would achieve the amended noise limits.
- (vi) The Council has also sought agreement from wind farm developers to amend the noise limits of various schemes so that cumulatively there is still wind farm development capacity within the TAN 8 Strategic Search Areas. The lowering of Llanbadarn Fynydd's operational noise limits for non-stakeholders would thus provide sufficient headroom for other schemes to be developed / consented. At the same time the lowering of the limits provides greater protection of residential noise amenity. A table of noise limits has been proposed for the Llanbadarn Fynydd Wind Farm and again these limits would be achieved with no curtailment of the Vestas V90 candidate turbine running in noise mode 3.
- (vii) Although a Vestas V90 3.0MW turbine operating in Mode 3 was assessed, the final turbine model which would be selected when the developer enters into commercial contract negotiations with a range of turbine manufacturers. The final turbine choice would have similar noise emissions to the candidate turbine as it is normal practice to control the noise emissions by a suitable planning condition, rather than by specifying a single turbine type. The Scheme is therefore not constrained to the Vestas V90 3.0MW Mode 3 turbine and a range of turbines from different manufacturers could be used.
- (viii) The 2007 ES reported the findings of the construction noise assessment and it concluded that the separation distances between the work sites and nearest residential dwellings is sufficient that no significant impacts are anticipated. And that during the most intense period of construction, significant changes in traffic levels are not envisaged.
- (ix) The relevant appendix of the 2013 SEI considered other issues such as health effects, low frequency noise and excess amplitude modulation. There is no objective evidence in the UK linking turbine noise with adverse health effects. There is no evidence to suggest that adverse low frequency noise or excess amplitude modulation will occur.

6 OTHER MATERIAL CONSIDERATIONS

6.1 As Vattenfall understands the Council's current position, there are no objections to the Proposed Development in relation to any of the following issues that would be sufficient to justify the refusal of consent:

- (a) Cultural heritage;
- (b) Hydrology;
- (c) Peat;
- (d) Wildlife.

6.2 Vattenfall does not intend to advance witness evidence in relation to any of the above topics but reserves its right to do so in light of Statements of Case produced by the Council and any other party to the Inquiry.

7 STATEMENT OF COMMON GROUND, CONDITIONS AND CORE DOCUMENTS

7.1 Prior to Session 1 of the Inquiry, Vattenfall will:

- (a) Endeavour to agree statements of common ground relating to the matters relevant to Session 1 with the Council and, where appropriate, NRW, RSPB, CPAT, Cdaw, Welsh Government Transport and the Alliance;
- (b) Endeavour to agree draft planning conditions with the Council, in particular those relating to noise; and
- (c) Agree with the main parties a list of core documents which will be referred to by the parties at Session 1. A schedule of documents likely to be referred to relating to the Development is attached as **Appendix 1**. Vattenfall reserves the right to amplify or amend this schedule.

BURGES SALMON LLP

9 JULY 2013

Appendix 1 Schedule of Inquiry Documents

Landscape and Visual Documents

Landscape Guidance

- CPL-LAN-005 Guidelines for Landscape and Visual Impact Assessment. Third Edition. Landscape Institute and Institute of Environmental Management and Assessment. April 2013
- CPL-LAN-004 Guidelines for Landscape and Visual Impact Assessment. Second Edition. Landscape Institute and Institute of Environmental Management and Assessment. March 2002
<http://www.dpea.scotland.gov.uk/Documents/qA344038/A5488038.pdf>
- VATT-LAN-001 Landscape Character Assessment; Guidance for England and Scotland. The Countryside Agency and Scottish Natural Heritage (SNH). April 2002
<http://publications.naturalengland.org.uk/publication/2671754?category=31019>
- VATT-LAN-002 Siting and Designing Wind Farms in the Landscape'. Scottish Natural Heritage. 2009
<http://www.snh.gov.uk/docs/A337202.pdf>
- CPL-LAN-007 Assessing the Cumulative Impact of Onshore Wind Developments, Scottish Natural Heritage. 2012
<http://www.snh.gov.uk/docs/A675503.pdf>
- VATT-LAN-003 Visual Assessment for Wind Farms: Best Practice. Report No F01AA303A University of Newcastle commissioned by SNH. 2002
http://www.snh.org.uk/pdfs/publications/commissioned_reports/f01aa303a.pdf
- CPL-LAN-006 Visual Representation of Wind Farms: Good Practice Guidance, SNH, the Scottish Renewables Forum and the Scottish Society of Directors of Planning. 2006
<http://www.catpaisatge.net/fitxers/guies/eolics/A305436.pdf>
- CPL-LAN-003 Photography and photomontage in landscape and visual impact assessment, Landscape Institute Advice Note 01/11
<http://www.landscapeinstitute.co.uk/PDF/Contribute/LIPhotographyAdviceNote01-11.pdf>
- VATT-LAN-004 Landscape Appraisal for On-Shore Wind Development, Government Office for the North East, (Project reference NEREG/2002/004), Benson, J et al University of Newcastle upon Tyne. 2003
- CPL-LAN-008 LANDMAP Information Guidance Note 3: Using LANDMAP for Landscape and Visual Impact Assessment of Onshore Wind Turbines. NRW. May 2013
<http://www.ccg.gov.uk/landscape--wildlife/protecting-our-landscape/landmap/idoc.ashx?docid=56930f34-e81a-45b8-84de-c4359b84c1f8&version=-1>
- VATT-LAN-005 LANDMAP Information Guidance Note 3: Using LANDMAP for Landscape and Visual Impact Assessment of Onshore Wind Turbines. CCW. June 2010

CPL-LAN-001 Landscape Character Assessment Guidance for England and Scotland Topic Paper 6: Techniques and Criteria for Judging Capacity and Sensitivity. 2004

http://www.naturalengland.org.uk/Images/lcatopicpaper6_tcm6-8179.pdf

VATT-LAN-006 The Holford Rules Guidance for the Routing of New High Voltage Overhead Transmission Lines. Undated.

<http://www.nationalgrid.com/NR/ronlyres/E9E1520A-EB09-4AD7-840B-A114A84677E7/41421/HolfordRules1.pdf>

VATT-LAN-007 Visual Amenity Aspects of High Voltage Transmission. George A Goulty. 1990

Welsh Assembly Government Documents

CD-COM-016 Welsh Assembly Government. Technical Advice Note 8: Planning for Renewable Energy. 2005

<http://wales.gov.uk/topics/planning/policy/tans/tan8/?lang=en>

CD-COM-008 Welsh Assembly Government. Planning Policy Wales. 5th Edition. November 2012

<http://wales.gov.uk/topics/planning/policy/ppw/?lang=en>

Powys County Council Documents

CD-COM-017 Powys County Council. TAN 8 Annex D Study of Strategic Search Areas B (Carno North) and C (Newtown South). Final Issue Report. January 2006

http://www.powys.gov.uk/uploads/media/PowysTAN8_Annex_D_1-10_bi.pdf

VATT-LAN-008 John Campion Associates for PCC and CCW, Powys Landscape Character Assessment. March 2008.

CD-COM-018 Powys County Council. Local Refinement of TAN 8 Strategic Search Areas B and C. Review Exercise. April 2008

CPL-LAN-010 Capita Symonds for Powys County Council. Llaithddu Windfarm Development - Review of Landscape and Visual Impact Assessment. July 2009.

VATT-LAN-009 Capita Symonds for Powys County Council. Llandinam Repowering and Extension Windfarm Development - Review of Landscape and Visual Impact Assessment. July 2009.

Shropshire County Council Documents

VATT-LAN-010 Shropshire County Council. The Shropshire Landscape Typology. September 2006.

VATT-LAN-011 Shropshire Hills AONB Partnership. Shropshire Hills AONB Management Plan 2009-2014.

<http://www.shropshirehillsaonb.co.uk/wp-content/uploads/2010/10/Management-Plan-2009-14.pdf>

VATT-LAN-012 Shropshire Hills AONB Partnership. Shropshire Hills AONB Management Plan 2014 -2019. Draft for Public Consultation.

<http://www.shropshirehillsaonb.co.uk/looking-after/management-plan/>

Noise documents

CPL-NOI-001 ETSU – ‘The Assessment & Rating of Noise from Wind Farms’, The Working Group on Noise from Wind Turbines (Report ETSU-R-97)

<http://webarchive.nationalarchives.gov.uk/+http://www.berr.gov.uk/energy/sources/renewables/explained/wind/onshore-offshore/page21743.html>

VATT-NOI-001 Institute of Acoustics – Consultation – Discussion Document on ‘A Good Practice Guide to The Application of ETSU-R-97 for Wind Turbine Noise Assessment’, July 2012

<http://www.ioa.org.uk/pdf/ioa-discussion-document-july-2012.pdf>

CPL-NOI-005 Institute of Acoustics – ‘A Good Practice Guide to The Application of ETSU-R-97 for The Assessment and Rating of Wind Turbine Noise’, May 2013

<http://www.ioa.org.uk/about-us/news-article.asp?id=270>

VATT-NOI-002 ISO 9613 – 2 ‘Acoustics – Attenuation of sound during propagation outdoors Part 2 : General method of calculation’

CPL-NOI-004 IEC61400-11 ‘Wind Turbine Generator Systems – Part 11: Acoustic Noise Measurement Techniques’

ftp://public-ftp.agl.faa.gov/OMP%20PFC%2006-19-C--00-ORD/EIS%20and%20ROD%20Administrative%20Record/Disk01/!1918-1999/1996/11_99_22274.pdf

Appeal Decisions

VATT-INS-001 Appeal Decision Letter for Kelmarsh Wind Farm. Appeal Ref: APP/Y2810/A/11/2154375. December 2011.

http://www.battlefieldstrust.com/cms/upload/docs/274/windfarm_decision_document.pdf

VATT-INS-002 Appeal Decision Letter for Baumber Wind Farm. Appeal Ref: APP/D2510/A/10/2121089. December 2010.

<http://www.e-lindsey.gov.uk/NR/rdonlyres/140CAAFD-CE38-431B-A3EB-7F6FBCB08B9B/0/BaumberDecision.pdf>

VATT-INS-003 Appeal Decision Letter for Burnthouse and Staffurth’s Bridge Wind Farms. Appeal Refs: F/YR09/0392/F & F/YR09/0272/F July 2011.

<http://www.wiltshire.gov.uk/swcs-m1-hs-pro-vision-56-appeal-f-yr09-0392- -f-yr09-0272-f.pdf>

VATT-INS-004 Appeal Decision Letter for Enifer Down Wind Farm. Appeal Ref: APP/X2220/A/08/2071880. March 2009.

<http://www.denbrookvalley.co.uk/resources/North+Dover+Decision+Mar+2009.pdf>

VATT-INS-005 Appeal Decision Letter for Cleek Hall Wind Farm. Appeal Ref: APP/N2739/A/12/2172629. September 2012.

<http://www.pcs.planningportal.gov.uk/pcsportal/fscdav/READONLY?OBJ=COO.2036.300.12.4636362&NAME=/2172629%20Decision%20letter.pdf>

VATT-INS-006 Appeal Decision Letter for Batsworthy Cross Wind Farm Appeal Ref: APP/X1118/A/11/2162070

<http://www.dpea.scotland.gov.uk/Documents/qA328203/A5796632.pdf>

VATT-INS-007 Appeal Decision Letter for Mynydd Y Gwair, Swansea. Appeal Reference AAP/B6855/A/09/2114013. October 2010.

<http://www.rwe.com/web/cms/mediablob/en/1619378/data/1620876/1/rwe-innogy/sites/wind-onshore/united-kingdom/in-development/the-environmental-statement/Appendix-1.3-Planning-Inspectors-Report.pdf>

VATT-INS-008 Appeal Decision Letter for land south of A465, Hirwaun, Rhondda Cynon Taf. Appeal Reference AAP/L6940/A/07/2058755. November 2008.

<http://www.pennantwalters.co.uk/images/Decision%202058755.pdf>

VATT-INS-009 Appeal Decision Letter for land south of A465, Hirwaun, Rhondda Cynon Taf. Appeal Reference AAP/L6940/A/11/2161275. June 2012.

<http://www.dpea.scotland.gov.uk/Documents/qA320277/A4276951.pdf>

VATT-INS-010 Appeal Decision Letter for Mynydd Pwllyrhebog, South of Clydach Vale. Appeal Reference APP/L6940/A/11/2147835. December 2011

<http://www.swatt.org.uk/Documents/Decision2147835.pdf>

Transport documents

VATT-TRA-001 Welsh Government, Department for Transport and Department for Communities and Local Government – Manual for Streets, 2007.

VATT-TRA-002 The Chartered Institution of Highways & Transportation – Manual for Streets 2, 2010.