

RESPONSE TO THE INSPECTOR'S MATTERS & ISSUE ON BEHALF OF WALTER ENERGY – MATTER 7:
ENVIRONMENT & RESOURCES

- 1.1 By way of introduction our client, Walter Energy, owns and operates Aberpergwm Mine at Glynneath. Aberpergwm Mine supplies high quality anthracite coal, including specialist metallurgical coal for use in pulverised coal injection at the TATA Steel Works in Port Talbot. The mine also supplies coal for use at Aberthaw Power Station along with high quality domestic coal products which are distributed nationwide. In July 2014, a Planning Application (Ref: P2014/0729) was submitted to Neath Port Talbot County Borough Council for the continued, long-term development of Aberpergwm Mine, including a major extension and reconfiguration of the underground coal workings, the creation of a mine waste repository and mine surface development. The application is due to be determined later this year.

Key Issue

Do the policies and proposals on this matter achieve the relevant objectives of the LDP in a sustainable manner consistent with the Wales Spatial Plan (WSP) and national policy? Are they based on robust and credible evidence? Are they clear, reasonable and appropriate?

- 1.2 As stated in our previous representations, we have serious concerns that the Council's policies in respect of future coal working (particularly Policy M1, Policy M2 and the identified 'coal safeguarding areas') will not fully achieve the relevant objectives of the LDP/WSP in relation to the sustainable and efficient use of natural resources. The intention/thrust of the WSP, as well as other national minerals planning policy (including the MPPW and MTAN2), is to ensure that natural resources are utilised sustainably and efficiently and that finite mineral resources are safeguarded from unnecessary sterilisation. The LDP does not currently propose to safeguard any deep/underground coal resources despite there being existing, proposed and potential future underground mining in the Plan area. Given this, there is the potential for this coal to be needlessly sterilised, for example through 'operational sterilisation' as the result of the development of sensitive surface structures (such as wind turbines). To be clear, operational sterilisation occurs when workable coal is left in-situ during underground mining operations as a consequence of the presence of sensitive surface structures and the resultant liabilities of the mine operator under the Subsidence Act and related licensing obligations to the Coal Authority. The potential for underground coal reserves to be operationally sterilised as a result

of ‘sensitive non-mineral surface development’ is highlighted in the attached pre-application advice letter from the Coal Authority – dated 3rd July 2014 (see Appendix A).

- 1.3 In summary, we do not consider that the minerals policies contained within the LDP are appropriate or consistent with national policy (including the WSP). The minerals policies do not meet the soundness tests set out in Local Development Plans Wales (2005) including the consistency tests (particularly C1, C2 and C3) and the coherence and effectiveness tests (in particular CE2).

Minerals

Is the policy framework sufficient to deal with all future proposals for coal mining including underground operations?

- 1.4 As stated throughout our previous representations, given that the County Borough has substantial deep coal reserves and existing, proposed and potential future proposals for underground coal working (with related surface developments, including mine waste disposal and colliery infrastructure) that are likely to come forward during the Plan period, the LDP needs a policy and related text concerning underground coal operations. This would provide the necessary framework and context for decisions on this form of coal mining and would balance with the policy and text for surface coal operations. The level of current and anticipated future interest in deep (underground) coal extraction in the Neath Port Talbot County Borough is a relatively unique and locally distinctive issue. As mentioned previously, the coal is of high quality and is an important component element in steel production. The working of such coal is important to the local, national and international economy. The Local Development Plan needs to take account of this locally distinctive issue and ensure that an appropriate policy framework is in place to assess future planning proposals over the course of the Plan period.
- 1.5 We are disappointed that despite our comments/objections in relation to the LDP Deposit Plan (and the objections of The Coal Authority and Coal Pro) the Council did not propose to amend the Minerals section of the LDP/insert a new policy dealing with future deep (underground) mining proposals and the safeguarding of known deep coal reserves from needless sterilisation as part of their ‘Focused Changes’.

1.6 We consider that an additional policy dealing with underground coal proposals/safeguarding is necessary to make the LDP sound. This would ensure consistency and is both logical and justified given the potential strategic importance of sustaining supplies of high quality coals (which supply both the energy supply market and the local steel industry) from underground sources in the County Borough. In our view the LDP is not sound in its current form as the approach to future coal working is inconsistent and does not have sufficient regard to policies in MTAN 2: Coal, including specific references to underground coal working as follows (paragraph 226, emphasis added):

'In considering an application for coal working by underground mining, the MPA will need to be satisfied, in addition to other relevant considerations for coal working, that:

- *the arrangements for the disposal of waste materials arising from the development are acceptable;*
- *the level of likely subsidence is acceptable;*
- *the methods of transporting coal and colliery waste are acceptable; and*
- *the siting and design of any surface development is acceptable.'*

1.7 It appears from the LDP Proposals Map that the Council are seeking to safeguard 'primary' and 'secondary' shallow coal reserves i.e. coal to be extracted by opencast methods. There does not appear to be any safeguarding afforded to deep coal i.e. coal to be extracted by underground methods. As demonstrated by the Pen Y Cymoedd Wind Farm appeal (see Decision Letter and Planning Permission attached at Appendix B) and the recent Hirfynydd Wind Farm appeal – which is currently ongoing – it is possible for deep coal reserves to be operationally sterilised or their extraction hindered by development of sensitive surface features, such as wind turbines. The Mining Statement of Common Ground prepared during the course of the Hirfynydd Wind Farm appeal highlights the substantial levels of underground coal that can be operationally sterilised as a result of the presence of sensitive surface development (see Appendix C). We can only assume that the Proposals Map has drawn the coal resource information from the National Minerals Map of Wales, which the topic paper clearly indicates is showing only shallow coals of potential economic interest for opencast extraction. It has not taken full account of "*all available information*" (MPPW, paragraph 15) and information from "*coal producers*" (MPPW, paragraph 16) on the extent of the coal

resource or proposals for future extraction of the deep coal resource. Clearly the topic paper at paragraph 3.1.2 and 3.1.5 indicates an intention to take account of underground coal working and the safeguarding of these resources. This aim is echoed by the Coal Authority's Planning Policy Objectives in regards to deep coal resources/sensitive surface developments.

- 1.8 In addition to the above, since the publication of the NPT Deposit Plan a major Planning Application (including EIA) has been submitted for the long-term development of underground coal working and related surface development at Aberpergwm Mine. These proposals are of a strategic scale, have considerable potential importance for the County Borough (and South Wales) and have a potential positive bearing on levels of coal supply from the County Borough across the whole of the plan period. It is also likely that other related proposals, such as the potential reopening of the Treforgan drift (to provide a secondary access), will also come forward during the Plan period. To provide some level of certainty to both the mine operator as well as local communities we consider there is strong justification for the LDP to acknowledge these potential developments and to provide a policy framework for considering these proposals as they are brought forward during the Plan period. MPPW seeks to provide certainty in the future extraction of energy minerals, and states that '*Mineral Planning Authorities should therefore consider all available information on the extent of energy mineral resources*' (paragraph 15, emphasis added). Furthermore MTAN2 (paragraph 43, emphasis added) states that:

'...where the CA or the coal industry has knowledge of long term proposals for underground coal working, they should inform the MPA. This will enable any potential impacts to be considered for other proposals coming forward in the LDP.'

- 1.9 It is clear from MTAN2 that the MPA should be acknowledging in the LDP current and potential future underground coal working at Aberpergwm Mine. Furthermore, the MPA should be putting in place a policy framework to deal with future underground coal operations and to ensure that workable underground coal reserves are safeguarded from sensitive development which may lead to their sterilisation. This issue is brought further into focus given that a TAN8 Strategic Search Area (for wind energy developments) is located in the Borough. It is vital that a policy framework is put in place to provide a level of certainty and resolve potential future land-use conflicts between underground (deep) coal mining and sensitive surface developments. In practical terms, without an appropriate policy framework in place it is likely that there will be repeated planning appeals as a result of this land-use conflict (and the LDP

would have failed to address a locally important land-use issue). This is obviously not in the public interest.

Are Policies M1 and M2 sufficiently clear? Do they need rewording to be consistent with national policy?

1.10 In our view, Policy M1 needs re-wording and clarifying. It is currently unclear whether it is the Council's intention to safeguard primary and secondary surface coal resources *only* or to safeguard primary/secondary surface coal resources and deep coal that has the potential to be worked during the Plan period. If the Council's intention is the former, we do not consider this to be consistent with the thrust and intent of the WSP, MPPW or MTAN2. To ensure that workable, deep coal resources are not needlessly sterilised, the mineral safeguarding areas (as referred to in Policy M1) should include areas of known deep coal which have the potential to be worked in the Plan period – including the proposed Aberpergwm underground extension area.

1.11 In conclusion, the minerals policies contained within the LDP do not meet the soundness tests set out in Local Development Plans Wales (2005) as they are not consistent with national policy (thus fail to meet tests C1, C2 and C3) and are not coherent or effective (thus fail to meet test CE2). In our opinion, the LDP does not currently include an effective or appropriate policy framework for determining underground (deep) coal mining proposals nor does it safeguard known deep coal reserves with the potential to be worked during the Plan period from needless operational sterilisation. To resolve these failings the following amendments should be made in respect of the LDP:

- The Council's mineral/coal safeguarding area (as referenced in Policy M1) should include areas of known underground (deep) coal reserves which have the potential to be worked during the Plan period – including existing/proposed underground coal reserves at Aberpergwm Mine;
- A new policy should be inserted in the LDP in respect of underground (deep) coal operations to provide a framework for determining future planning applications and to provide greater clarity/certainty on this locally distinctive issue.

Appendix A – Pre-application advice from the Coal Authority (03/07/14)



The Coal
Authority



INVESTOR IN PEOPLE

200 Lichfield Lane
Berry Hill
Mansfield
Nottinghamshire
NG18 4RG

Tel: 01623 637 119 (Planning Enquiries)

Email: planningconsultation@coal.gov.uk

Web: www.coal.gov.uk/services/planning

Mr S. Heaton
Heaton Planning Ltd

[By Email Only: simon@heatonplanning.co.uk]

03 July 2014

Dear Mr Heaton

PRE APPLICATION ADVICE – Aberpergwm Underground Coal Mine, Glynneath, Neath Port Talbot County Borough

Thank you for your consultation letter which we received on the 18 June 2014 seeking the views of The Coal Authority on the above in its capacity as a statutory consultee. We have obviously been aware of your longstanding interest and investment in the Aberpergwm project.

The Coal Authority is a non-departmental public body sponsored by the Department of Energy and Climate Change. As a statutory consultee, The Coal Authority has a duty to respond to planning applications and development plans in order to protect the public and the environment in mining areas.

As the owner of the coal, The Coal Authority encourages and **supports** planning proposals which are seeking to extract coal in environmentally and socially acceptable ways to meet the energy market requirements. Modern energy mineral extraction can be by underground, surface or indeed by new unconventional hydrocarbon methods.

The Coal Authority established a specialist department, Planning and Local Authority Liaison, to manage statutory consultee duties. We respond to all stages of emerging local planning policies, provide free pre-application advice upon request and comment upon planning applications. We aim to add value to the planning system with our knowledge and information to raise the profile of coal as an energy mineral and the legacy of past coal mining.

It is essential that the local planning policies and the planning application determination processes take account of the presence of minerals. The fundamental principle of minerals planning is that minerals can only be worked where they are found. Consequently alongside this it is equally important that minerals are not unnecessarily

sterilised by non-mineral surface development since this could prejudice future generations' ability to meet their needs. It can also be the case that sensitive non-mineral surface development can further sterilise minerals in operational terms, i.e. the ability to mine coal using underground methods. Indeed such operational sterilisation did occur in the district of Selby where a new glass making factory sterilised the operational face of Kellingley Colliery such that an alternative faces had to be developed.

Obtaining financial securities as part of the Coal Authority's licensing process is required to cater for potential subsidence damage to surface development caused by underground mining in case of potential default by the licensee. As we have indicated previously the level of financial security that the Coal Authority will require will increase in proportion according to the level of potential subsidence risk to the non-mineral surface development which is consented above planned underground coal workings.

The UK energy mix includes coal and therefore it is important that proposals come forward to ensure the continued supply of good quality indigenous coal for the market. Coal currently provides the basis for around 35-40% of the electricity generated in the UK. You will be undoubtedly be aware of RWE's carbon capture work underway at the Aberthaw Power Station through which RWE propose to retain a need for indigenous coal production in South Wales for the foreseeable future.

The Coal Authority believes that the indigenously mined coal is preferable than reliance upon imports. Coal supplied from within the UK offers security against the volatility of international coal prices, freight rates, exchange rates and a reliance on port capacity. It should, therefore, be recognised that the importation of coal from many thousands of miles away has its own environmental footprint by way of increased transport related carbon and sulphur emissions. The ability of the industry to continue its significant contribution to the energy supply in the UK is dependent equally on success in an extremely competitive energy market place and success through a rigorous planning system.

We will of course comment on your planning application in due when consulted in accordance the planning regulations. As you will be aware we also commented on the proposal to erect wind turbines on the land above Aberpergwm mine. Those comments will have been passed to the Inspector as part of the LPA's appeal documentation.

Yours sincerely

R. A. Bust

Miss Rachael A. Bust *B.Sc.(Hons), MA, M.Sc., LL.M., AMIEnvSci., MInstLM, MCMI, MRTPI*
Chief Planner / Principal Manager

Disclaimer

The above consultation response is provided by The Coal Authority as a Statutory Consultee and is based upon the latest available data and records held by The Coal Authority on the date of the response. The comments made are also based upon only the information provided to The Coal Authority in relation to this specific planning proposal. The views and conclusions contained in this response may be subject to review and amendment by The Coal Authority if additional or new data/information (such as a revised Coal Mining Risk Assessment) is provided by the Local Planning Authority or the Applicant for consultation purposes.

Appendix B – Pen y Cymoedd Decision Letter and Planning Permission Notice



Mr John Woodruff
Project Manager
Natural Power Consultants Ltd
Office 9, Harbour House
Y Lanfa
Aberystwyth
SY23 1AS

Energy Development Unit
Area A, 3rd Floor
3 Whitehall Place,
London SW1A 2AW

Direct line: 0300 068 5681
Direct fax: 0300 068 5003

Yr ref: 425-L-NPC-DECC-2
Our ref: 01.08.10.04/448C

www.decc.gov.uk

Date: 8 May 2012

Dear Sir

ELECTRICITY ACT 1989 ("the Act")
TOWN AND COUNTRY PLANNING ACT 1990

APPLICATION FOR CONSENT TO CONSTRUCT AND OPERATE A 299MW
WIND TURBINE GENERATING STATION SOUTH OF THE HEADS OF THE
VALLEY ROAD (A465) BETWEEN NEATH AND ABERDARE, SOUTH WALES

I. THE APPLICATION

1.1 I am directed by the Secretary of State for Energy and Climate Change ("the Secretary of State") to refer to the application dated 17 November 2009 ("the Application") on behalf of Pen y Cymoedd Wind Farm Limited ("the Company") for the consent of the Secretary of State under section 36 of the Act ("section 36 consent") to construct and operate a 299MW wind turbine generating station south of the Heads of the Valley road (A465) between Neath and Aberdare, south Wales ("the Development") and for a direction under section 90(2) of the Town and Country Planning Act 1990 ("section 90 direction") that planning permission for the Development be deemed to be granted.

1.2 In accordance with the Electricity Works (Environmental Impact Assessment) (England and Wales) Regulations 2000 ("the EIA Regulations") the Company also submitted on 17 November 2009 a document, entitled "Pen y Cymoedd Wind Energy Project Environmental Statement November 2009". The Company supplemented this document with a further document entitled "Pen y Cymoedd Wind Energy Project Supplementary Environmental Information August 2010". The documents describe the Development and give an analysis of its likely significant environmental effects. The documents are hereafter referred to in this letter as the "Environmental Statement". The

Environmental Statement was advertised and placed in the public domain and an opportunity given to those who wished to comment on it to do so.

1.4 Neath Port Talbot County Borough Council (“NPT”) and Rhondda Cynon Taf County Borough Council (“RCT”) (together, “the relevant planning authorities”) entered into discussions with the Company and the Department over the terms on which they would be content for the Development to proceed. As a result of these discussions, 70 conditions to be attached to any section 90 direction were agreed in principle between the Company, the relevant planning authorities and the Department (“the Planning Conditions”).

1.5 In view of the conclusion of these discussions neither of the relevant planning authorities has maintained any objection to the Development providing that the Planning Conditions are imposed should the Secretary of State be minded to grant section 36 consent and issue a section 90 direction in respect of the Development.

1.6 In addition to the Planning Conditions the Company entered into an unilateral undertaking under section 106 of the Town and Country Planning Act 1990 on 26 March 2012 (“section 106 Agreement”). The section 106 Agreement commits the Company to provide:

- a contribution of £3 million for the management of the Habitat Management Plan approved pursuant to Planning Condition (47) and creation of an off-site Honey Buzzard habitat;
- £350,000 for a cycle route and the marketing of the route;
- funding of an ecological clerk of works and peat protocol officer; and
- funding the cost of training four apprentices to at least City and Guilds Level 3 Diploma grade, or equivalent qualification.

II. THE DEVELOPMENT

2.1 The Application envisages that the Development should have 84 turbines, with a combined generating capacity of 299MW. During the course of the consideration of the application concern was raised about the acceptability of some of the individual turbines on the grounds of either their visual impact or being sited on areas of deep peat. As a result of these concerns the Company initially indicated its agreement not to construct five individual turbines, identified as numbers 19, 20, 36, 37 and 47 on Figure 4.1 of the Environmental Statement. After further discussions with RCT and the Countryside Council for Wales, the Company also agreed not to construct individual turbines identified as numbers 78, 80 and 84 on Figure 4.1 of the Environmental Statement. Turbine numbers 78 and 80 were to be sited on the Mynydd Ystradffernol, an area considered to be the most important peat habitat within the application site.

2.2 The Secretary of State notes that the Company has now entered into obligations under section 106 of the Town and Country Planning Act 1990 in the form of unilateral undertakings (dated 9 December 2010 and 5 September 2011), which include:

- a. a commitment not to construct turbine numbers 19, 20, 36, 37 and 47 (9 December 2010); and
- b. a commitment not to construct turbine numbers 78, 80 and 84 (5 September 2011).

2.3 The Secretary of State considers that in view of the undertakings given by the Company in respect of these eight turbines, it is appropriate for him to assess the Application on the basis that they will not be included in it. However, as explained further in section IV below, their inclusion or omission from the Development is a matter of very considerable significance in evaluating the visual and other impacts of the Development, and if section 36 consent is to be granted to the Development, the Secretary of State would not wish there to be any possibility of the eight turbines being constructed without a full and thorough public consideration of the issues this would raise (which under the law as it stands currently would take the form of an application for development consent to extend a generating station with a capacity of over 50MW under the Planning Act 2008). It is for this reason that the Secretary of State believes that it would be appropriate for him not to include in any section 36 consent or section 90 direction that he may give in respect of the Application conditions that would permit the construction of turbine numbers 19, 20, 36, 37, 47, 78, 80 and 84: it would be undesirable if it were considered possible at a future date, when their construction may no longer be prevented by the Company's undertakings, that it was permitted by a consent and direction granted in response to the Application. Accordingly the Secretary of State considers it appropriate that any consent and direction which he gives in this case should explicitly exclude the eight turbines.

2.4 Clearly the number of turbines in a development has a bearing on its overall generating capacity. In view of his decision not to permit the construction of just under 10% of the total number of turbines proposed in the Application, it is necessary for the Secretary to consider whether there should be any corresponding reduction in the maximum generating capacity permitted by any consent or direction which he may give in response to the Application. The Secretary of State considers that such a reduction would not be appropriate. Wind turbines are evolving and it may be possible that by the time the construction of the Development starts wind turbines would be of such an output so as to achieve the same capacity as was originally proposed (299MW) with a reduced number of turbines. He is of the view that this would be acceptable, and indeed desirable given the need for renewable energy explained below, provided that the terms of any consent and direction which he

may give are such that the maximum height of the wind turbines eventually used is not permitted to exceed 145 metres to tip of blade, the height which has been assessed in his consideration of the Application.

III. SECRETARY OF STATE'S CONSIDERATION OF THE PLANNING CONDITIONS

3.1 The Secretary of State has considered the Planning Conditions carefully. He notes that Planning Condition (20) allows for a tolerance of 50 metres for micro-siting whereas Planning Condition (21) allows a tolerance of up to 100 metres for up to nine individual wind turbines and Planning Condition (22) allows a tolerance of 100 metres for wind turbine number 61.

3.2 He has been informed that the reason for Planning Condition (21) is that the turbines identified are those most likely to impact on deep peat but that this would not be able to be confirmed until after tree-felling had been completed and further surveys undertaken. In order to minimise the impact these wind turbines may have on deep peat the Secretary of State believes it advisable to allow a greater degree of tolerance than that stated in Planning Condition (20). The Secretary of State is of the opinion that not all nine turbines will need to be positioned outside the 50 metre tolerance but in order to minimise the potential impact on deep peat agrees that a tolerance of 100 metres should be allowed to move any such turbine to a position that will achieve that result. It is important that any such movement does not have an appreciable adverse environmental impact, such as an increased visual impact to local residents.

3.3 The tolerance permitted pursuant to Planning Condition (22) is due to the possible impact the foundation of wind turbine 61 may have on the water supply of a local resident. The Company has indicated that it is agreeable to micro-siting wind turbine 61 to a position outside the resident's water catchment area. Given the fact that it is the resident's only source of water the Secretary of State has decided on a precautionary basis to allow a greater tolerance which could allow for wind turbine 61 to be moved to a position which would have no impact on the resident's water supply without impacting further on sensitive areas should that prove necessary.

3.4 In these instances the Secretary of State agrees that these are exceptional circumstances and agrees that Planning Conditions (21) and (22) should be included.

3.5 The Secretary of State has also considered the remainder of the Planning Conditions carefully and agrees that they are suitable for inclusion in any section 90 direction which he may give.

IV. SECRETARY OF STATE'S CONSIDERATION OF OBJECTIONS AND OTHER REPRESENTATIONS AND DECISION ON THE HOLDING OF A PUBLIC INQUIRY

4.1 As stated in paragraph 1.5 above, neither of the relevant planning authorities has maintained any objection to the Development, and the Secretary of State is not therefore obliged under paragraph 2(2) of Schedule 8 to the Act to cause a public inquiry to be held.

4.2 Paragraph 3(2) of Schedule 8 to the Act, however, requires the Secretary of State to consider all objections that he has received pursuant to the Electricity (Applications for Consent) Regulations 1990 (made under paragraph 3(1) of Schedule 8), (“the Applications Regulations”), together with all other material considerations, in order to determine whether it would nevertheless be appropriate to hold a public inquiry.

4.3 The Secretary of State received over 140 individual letters from local residents and other members of the public, organisations, Member of the Welsh Government and Member of Parliament objecting to the Application under the Applications Regulations. He also received letters of objection together with petitions containing over 500 signatures which were made after the period allowed for pursuant to the Applications Regulations, and has nonetheless considered them also.

4.4 Sub-paragraphs 4.4(a) to 4.4(ad) below summarise the objections made in respect of the Application and how the Secretary of State has considered them.

4.4(a) Conduct of the Welsh Government

It has been said that the Welsh Government “bullied” the relevant planning authorities not to object to the application.

Secretary of State’s response

The Secretary of State has been informed that the Minister for Environment and Sustainable Development at the Welsh Government wrote to all local planning authorities in Wales in July 2011. His letter highlighted the need for local planning authorities in Wales to take into account the Welsh Government’s energy policy and aspirations as set out in “A Low Carbon Revolution”¹ which identifies Wales’ sustainable renewable energy potential to 2020/2025 and set out the Welsh Government’s aspirations that the potential for onshore wind would be to provide 2 gigawatts of capacity. His letter also stated that any decisions

¹ Available at <http://wales.gov.uk/topics/environmentcountryside/energy/renewable/policy/lowcarbonrevolution/?lang=en>

regarding major wind developments in Wales should take into account the maximum capacities for each of the Strategic Search Areas identified in TAN 8 (the Secretary of State deals with his consideration of TAN 8 in paragraph 4.4(x) below).

The Welsh Minister's letter went on to say that, for the avoidance of doubt local planning authorities should take into account the Welsh Government's Planning Policy Wales and Technical Advice Note 8 (TAN 8) when determining planning applications for energy related projects in Wales.

The Secretary of State considers that it is not inappropriate for those who have formulated planning policies to write to local planning authorities bringing to their attention the relevance of those policies or specific aspects of them to particular kinds of application which they may be considering. He also considers it reasonable to expect that local planning authorities are capable of taking due account of such communications without compromising the integrity of their decision-making processes in particular cases – and he assumes that this was the case with NPT's and RCT's consideration of the Application. Moreover, in the case of NPT the letter was not even issued until after the Council had taken its decision not to object (see paragraph 4.4(c) below).

4.4(b) Rhondda Cynon Taf County Borough Council's ("RCT") consideration of the Development

It has been said RCT objected to the Development but subsequently withdrew its objection subject to the removal of three turbines.

Secretary of State's response

The Secretary of State has been informed that RCT's Co-ordinating Development Control Committee resolved at its 18 May 2011 meeting to object to the Development. If RCT had maintained its objection and notified it to the Secretary of State in accordance with the Act (Schedule 8) and the Applications Regulations, then the Secretary of State would have been obliged under paragraph 2 of Schedule 8 to the Act to hold a public inquiry into the Development before taking his decision on whether or not to grant section 36 consent. However, in light of RCT's initial objection the Company proposed to remove the three turbines considered by RCT to be the most visually obtrusive and have the most impact on identified areas of peat and subsequently entered into a section 106 obligation not to construct them (see paragraph 2.2(b)

above). RCT considered the proposal again at its meeting of 4 October 2011 and resolved to remove its objection to the Development subject to conditions being attached to any deemed planning permission the Secretary of State may grant.

Schedule 8 to the Act and the Applications Regulations provide that notice of an application is served on the relevant planning authority and that should the relevant planning authority notify the Secretary of State within four months that it objects then the Secretary of State shall cause a public inquiry to be held. However, the Applications Regulations also provide that the period for the relevant planning authority's consideration of applications can be extended by agreement with the applicant, and that where a local authority has objected, it may subsequently withdraw that objection. Guidance² on the processing of applications for section 36 consent states that the relevant planning authority's views should be made on a "Form B". In this case RCT returned its Form B, dated 6 October 2011, certifying that it did not object to the Development or request that a public inquiry be held into the Application before the Secretary of State took his decision. The Secretary of State considers that for the purposes of determining whether a mandatory public inquiry is to be held, the relevant notification of RCT's final view on the Application is that expressed in the Form B dated 6 October 2011 and that any initial objection was not maintained.

4.4(c) Neath Port Talbot County Borough Council's ("NPT") consideration of the Development

It has been said NPT's decision not to object was premature given the then ongoing discussions to remove three additional wind turbines.

Secretary of State's response

NPT returned its Form B on 14 January 2011 certifying that it did not object to the Development or request that a public inquiry be held before any decision on the Development was taken. NPT did not object subject to the Secretary of State attaching conditions to any section 90 direction he may give and the Company entering into an obligation under section 106 of the Town and Country Planning Act 1990. Planning Conditions have been agreed (see paragraph 1.4 above) and the obligation has

²

http://www.decc.gov.uk/assets/decc/what%20we%20do/uk%20energy%20supply/development%20consents%20and%20planning%20reform/guidance/1_20100226102253_e_@@_section36guidance.pdf

been entered into (see paragraph 1.6 above) therefore the conditions for NPT not objecting have been satisfied.

NPT's assessment of the application was on the basis of 79 wind turbines being constructed after the Company had given an undertaking not to construct five wind turbines which formed part of the Development. As indicated in paragraph 4.4(b) above the Company proposed the removal of a further three wind turbines which were to be sited in RCT's area. The Secretary of State does not agree with the objection that NPT's decision was premature. He takes this view in the knowledge that NPT was satisfied that the impacts of the 79 wind turbines were not such that it should object to the Development. If anything had happened subsequently that could have been expected to cause NPT to wish to revisit its decision, the Secretary of State could have taken this into account. But there is no reason to suppose that what in fact happened (chiefly the removal of a further three turbines) would be detrimental to the interests of NPT or anyone in NPT's area and therefore cause NPT to come to a different decision to that contained in its Form B.

4.4(d) Countryside Council for Wales' ("CCW") consideration of the Development

It has been said that the Secretary of State failed to take into account the clear objection by the CCW that the Development would be inappropriate in landscape terms to the area.

Secretary of State's response

The CCW are the statutory advisors to Government on sustaining natural beauty, wildlife and the opportunity for outdoor enjoyment throughout Wales. The CCW objected to the application on 1 February 2010 on the grounds that the Development would be inappropriate because of its detrimental effect on the landscape and visual amenity and its effects on peatland habitat. However, following a number of meetings with the Company; the submission of further environmental information and the Company's undertaking not to construct wind turbine numbers 36 and 37 (see paragraph 2.2(a) above), which are considered to have the most impact on views from the Brecon Beacons National Park, the CCW withdrew its objection 29 October 2010. The CCW's decision to withdraw its objection was subject to the imposition of conditions to be attached to and section 90 direction deemed to be granted (see paragraph 1.4 above) and the signing of an obligation under section 106 of the Town and Country Planning Act 1990 (see paragraph 1.6 above).

On 10 August 2011 RCT emailed the CCW requesting further clarification in respect of the steps the CCW took to withdraw its objection on the residual impacts to the Brecon Beacons National Park. The CCW responded on 24 August 2011 indicating that the decision was deemed to be so important that it was considered at internal Directors Team meetings together with supporting visuals from the Company and advice from its own landscape consultants. The CCW Directors Team considered all landscape information presented to it (including internal and external advice/guidance and concerns) as well as the Supplementary Environmental Information, minutes and actions of numerous formative meetings, and decisions and commitments that had been made regarding habitat mitigation and compensation offered by the Company to offset the environmental impacts of the Development. After much debate and having explicitly examined the benefits and dis-benefits specifically the need for renewable energy to mitigate the impacts of climate change, plus mitigation for the long term versus the dis-benefits, the CCW concluded that the Development represented a significant contribution towards long-term sustainability. As such the revised landscape proposals submitted by the Company, ie the deletion of wind turbine numbers 36 and 37, were welcomed by the CCW as the intention was to mitigate the landscape and visual impacts of the Development. The CCW agreed that the residual impact on the Brecon Beacons National Park was not significant enough to justify the removal of more wind turbines which could have an impact on the viability of the Development and the effective use of Strategic Search Area F³. The CCW felt that, on balance, the overall modifications to the Development were enough for it to reconsider its objection of 1 February 2010 and its subsequent withdrawal on 29 October 2010.

In summary the CCW confirmed that it had fulfilled its statutory responsibilities and had been consistent with its mission statement and that it was important to understand and remember that the protection of the environment involves difficult decisions, between the need to address climate change and the protection of the immediate environment where development is proposed.

Finally the CCW welcomed the Company's commitment not to construct wind turbine numbers 78, 80 and 84 (see paragraph 2.2(b) above) which goes some way to alleviate its concerns about the impact the Development would have on the deep peat resource at Mynydd Ystradffernol.

³ Indicated as TAN 8 – Map 7 – Wales available at <http://wales.gov.uk/topics/planning/policy/tans/tan8/?lang=en>

4.4(e) The Development is within sight of the Brecon Beacons National Park ("the Park")

It has been said that the Development would be intrusive when viewed from the Park.

Secretary of State's response

National policy sets out specific criteria (sometimes known as the "Silkin test") which must be satisfied before consent is granted to construct nationally significant energy infrastructure in National Parks⁴. Where such infrastructure is proposed outside the boundaries of a National Park but it may have impacts within them, regard must be had to the purposes of designating the Park⁵, and while the fact a proposed project will be visible from within a designated area should not in itself be a reason for refusing consent, the aim should be to avoid compromising the purposes of designation and such projects should be designed sensitively given the various siting, operational, and other relevant constraints.

In this case, the Secretary of State has been informed that no part of the Development is situated in the Park. However the boundary of the Park lies some 3.6km to the north of the nearest turbine of the Development and parts of it will be visible from parts of the Park. Accordingly, while there is no policy requirement to apply the Silkin test criteria in this case, the Secretary of State considers it appropriate to do so on this occasion, because they provide an useful and appropriate framework for indicating how he has discharged his duty to have regard to the purposes of the Park's designation in the light of the Development's potential impacts on the Park, as well as for explaining how he has assessed the Development's potential impact on certain other cherished landscapes in the light of other material considerations.

⁴ See paragraphs 5.9.9 to 5.9.13 of the Overarching National Policy Statement for Energy (EN-1). Available at <http://www.decc.gov.uk/assets/decc/11/meeting-energy-demand/consents-planning/nps2011/1938-overarching-nps-for-energy-en1.pdf>. The National Policy Statements designated under the Planning Act 2008 in July 2011 are material considerations for the Secretary of State in considering section 36 consent applications and in any event reflect pre-existing section 36 policy. See also paragraph 5.5.6 of Planning Policy Wales (March 2002), which is a material consideration for the Secretary of State in this case.

⁵ See section 11A of the National Parks and Access to the Countryside Act 1949, inserted by the Environment Act 1995. The purposes, set out in section 5 of the 1949 Act, are those of conserving and enhancing their natural beauty, wildlife and cultural heritage; and of promoting opportunities for the understanding and enjoyment of their special qualities by the public.

The Silkin test criteria are as follows:

- the need for the development, in terms of national (UK) considerations, and the impact of permitting it or refusing it upon the local economy;⁶
- the cost of, and scope for, providing the development outside the designated area or meeting the need for it in some other way;
- any detrimental effect on the environment and the landscape, and the extent to which that could be moderated.

Bullet Point 1

The Government are committed to meeting the UK's legally binding target to cut greenhouse gas emissions by at least 80% by 2050, compared to 1990 levels. Analysis shows that moving to a secure, low carbon energy system is challenging, but achievable.⁷

The UK economy is reliant on fossil fuels, and they are likely to play a significant role for some time to come. Most of our power stations are fuelled by coal and gas. The majority of homes have gas central heating, and on our roads, in the air and on the sea, our transport is almost wholly dependent on oil. However, the UK needs to reduce its dependence on a high carbon energy mix: to reduce greenhouse gas emissions, and to improve the security, availability and affordability of energy through diversification. By 2050, we can expect that fossil fuels will be scarcer, but will still be in demand, and that prices will therefore be far higher. Further, the UK's own oil and gas resources will be depleting and, worldwide, the costs and risks of extracting oil in particular will increase. Continuation of global emissions, including greenhouse gases like carbon dioxide, at current levels could lead average global temperatures to rise by up to 6°C by the end of this century. This would make extreme weather events like floods and droughts more frequent and increase global instability, conflict, public health-related deaths and migration of people to levels beyond any recent experience. Heat waves, droughts, and floods would affect the UK. To avoid the most dangerous impacts of climate change, the increase in average global temperatures must be kept to no more than 2°C, and that means global emissions must start falling as a matter of urgency.

⁶ In relation to economic impacts, see also section 5.12 of EN-1, cited in note 5 above.

⁷ See generally Part 2 and Sections 3.3 and 3.4 of EN-1, cited in note 5 above.

An increase in renewable electricity is essential to enable the UK to meet its commitments under the EU Renewable Energy Directive. It will also help improve our energy security by reducing our dependence on imported fossil fuels and decrease greenhouse gas emissions.

In order to secure energy supplies that enable us to meet our obligations for 2050, there is an urgent need for new (and particularly low carbon) energy infrastructure to be brought forward as soon as possible, and certainly in the next 10 to 15 years, given the crucial role of electricity as the UK decarbonises its energy sector. A failure to decarbonise and diversify our energy sources now could result in the UK becoming locked into a system of high carbon generation, which would make it very difficult and expensive to meet our 2050 carbon reduction target.

The UK has committed to sourcing 15% of its total energy (across the sectors of transport, electricity and heat) from renewable sources by 2020 and new projects need to continue to come forward urgently to ensure that we meet this target. Large scale deployment of renewables will help the UK to tackle climate change. Onshore wind is the most well-established and currently the most economically viable source of renewable electricity available for future large-scale deployment in the UK.

The Secretary of State also notes that the Welsh Government has an aim of 4.5 kilowatt hours per day per person installed onshore wind generation capacity by 2015/2017⁸. To do this, the Welsh Government will optimise “the use of the existing strategic search areas set out in Technical Advice Note 8 on Planning for Renewable Energy⁹ (“TAN 8”).”

The Company estimates that spending in Wales as a result of the Development would be in the region £11 million per annum during construction and £4 million per annum during operation. It is also to fund four apprenticeships for local young people which would provide training to at least a City and Guilds Level 3 Diploma in electrical power engineering in wind turbine operation and maintenance or an equivalent qualification.

It is therefore clear that there is an urgent need for the Development and that it would have a positive impact on the local economy.

⁸ A Low Carbon Revolution –The Welsh Assembly Government Energy Policy Statement March 2010 – <http://wales.gov.uk/docs/desh/policy/100331energystatementen.pdf>

⁹ <http://wales.gov.uk/desh/publications/planning/technicaladvicenotes/tan8/tan8main1e.pdf?lang=en>

Bullet Point 2

Wind turbines have to be located in areas where the wind conditions are conducive to that form of electricity generation. There are a number of such areas in Wales, although the site of the Development is perhaps unusual in terms of the scale of wind farm development which it can potentially accommodate: it is rare for there to be opportunities to construct wind farms on this scale onshore in England and Wales.

In TAN-8, which is a material consideration for the Secretary of State, the Welsh Government identified a series of strategic search areas and set out its policy that "large scale (over 25MW) onshore wind developments should be concentrated" in these areas. The site of the Development is wholly within Strategic Search Area F (Coed Morgannwg) as identified in TAN 8. Its location is therefore consistent with Welsh Government policy on the siting of large scale wind farms.

Given the lack of onshore sites for wind farm developments of this size; the fact that its location is consistent with Welsh Government planning policy; the fact noted above that onshore wind is the most well-established and currently the most economically viable source of renewable electricity; and the urgent need for new renewable electricity generating capacity, the Secretary of State therefore did not consider it necessary for the Company to have considered other sites for a development on this scale (or other ways of generating similar quantities of renewable electricity), or to give further consideration to such matters himself.

Bullet Point 3

As with many developments there will inevitably be an effect on the landscape. The Secretary of State accepts that wind farms can be seen as either enhancing a landscape or detracting from it, and that many people take the latter view more or less strongly. The Secretary of State also accepts that the Development will impact on the view from the Park when viewed from certain parts of the Park in a way which will be perceived by many of those who have made representations to him as detracting from the natural beauty of the Park.

However, in order to reduce the impact to as low as reasonably practicable the Secretary of State has decided not to give consent to those turbines which would have the most visual impact when viewed from inside the Park (see section II above). He has also taken into

account, and given significant weight to the views expressed by the Countryside Council for Wales (see paragraph 4.4(d) above). Overall, the Secretary of State is of the view that the detrimental impact on the environment and landscape of the Development as modified by the removal of these turbines is not such that it should be rejected, given its other beneficial effects.

Conclusion

Taking account of the above, the Secretary of State is of the view that granting consent to the Application would not compromise the purposes of the National Park's designation, and that its visual impacts on the Park are not such as to require him to refuse consent.

4.4(f) The landscape value of the area and visual impact on local communities

It has been said that a view of the area appeared on a postage stamp; that the Development will scar locally important landscape areas; and would have an adverse visual impact on the communities in the Rhondda Valley and Cynon Valley.

Secretary of State's response

The Secretary of State has been informed that the view of Pen ych formed part of a first day cover set of stamps entitled "A British Journey - Wales", which was the third in the series covering the scenery of Wales issued in June 2004. Pen ych is described as one of the few flat-topped mountains in Europe. It overlooks the village of Blaenrhondda, which is the site of the largest undefended Iron Age settlement in south east Wales. No turbines are to be located on the Pen ych and when the Development is viewed from Blaenrhondda the number of turbines visible would be low (approximately 5-6 dependent upon the orientation of the view) and they would not be highly visible.

The Secretary of State has been informed that the site of the Development is adjacent to a Special Landscape Area identified in the Cynon Valley Local Plan; that the site overlaps the eastern edge of a Strategic Landscape Area identified in the Rhondda Local Plan; and that a large proportion of the Development is contained within part of the Afan Forest Park.

A Special Landscape Area and Strategic Landscape Area are areas of special landscape, wildlife or historic interest which can be protected or enhanced by supporting specific practices, usually of an agricultural nature. Such designations are of local importance and therefore do not carry the same weight given to an area designated as being of national designation. It therefore follows that, while of importance to the local area, a development proposed in or in close proximity to these areas does not carry the same presumption against development as that afforded a similar development which impacts on a National Park.

The Secretary of State has considered the impact the Development would have on landscape and visual amenity of the Brecon Beacons National Park (see paragraph 4.4(e) above) and has concluded that such impact is not unacceptable in planning terms having regard to the positive impacts of the Development, in particular the contribution which it could make to satisfying the urgent national need for renewable electricity generation. He sees no reason to consider coming to a different conclusion for the Special Landscape Area and the Strategic Landscape Area.

The Secretary of State has been informed that the visual impact of the Development on the local communities in the Rhondda Valley were addressed in detail by RCT. This resulted in the deletion of those turbines considered to have the most visual impact on the residents of the Valley (see paragraphs 2.1 and 4.4(b) above). The Secretary of State is content that the visual impact of the Development when viewed from the communities of Blaencwm, Blaenrhondda, Treherbert and Tynewydd would not be such so as to warrant the removal of any additional turbines or refusal of consent to the Application.

4.4(g) Impact on the Dare Valley Country Park

It has been said that the Development would have a negative impact on the enjoyment of local residents, particularly those in Cwmdare, and visitors to the Country Park.

Secretary of State's response

The Secretary of State has been informed that the Dare Valley Country Park is an area of open access countryside of over 500 acres which opened in 1974 and that it was previously the site of 19 coal mines. At

the head of the Country Park stands the glacial Tarren y Bwlfa and it is from this that the Dare Valley was formed some 15,000 years ago and gouged out the wide, deep valley that exists today.

The Secretary of State has also been informed that there is an uninterrupted view of Tarren y Bwlfa when viewed from "The Ridings" in the Landare suburb of Cwmdare. This is considered the best viewpoint for assessing what, if anything, could or should be done to reduce the impact the Development would have on the Country Park. In order to do so the Secretary of State considers it necessary to set out the background to the turbines in question. Visualisation 5 of the Environmental Statement indicates that turbine numbers 74, 78, 79, 80, 81, 82 and 83 would be visible, in whole or in part, when viewed from The Ridings. Turbine numbers 78 and 80 have now been removed (see paragraph 2.3). The magnitude of the view for each of the remaining turbines is as follows; 74 (tip of blade); 79 (hub), 81 (hub), 82 (hub) and 83 (blade).

The tip of the blade of turbine 74 is to the south west and does not break the skyline of Tarren y Bwlfa, its visual impact is considered therefore to be *de minimis* when viewed from the Ridings.

The blade of turbine 83 would break the skyline to the north west of Tarren y Bwlfa. However when viewed from The Ridings the impact would be in the periphery of one's vision and is considered acceptable in visual terms as all one would see would be one rotating blade at any given time.

Turbine numbers 79, 81 and 82 all break the skyline of Tarren y Bwlfa mainly central in a north to south pattern. It is these turbines which would have the greatest visual impact. The Secretary of State has considered whether they should be relocated further to the west so as not to break the skyline of Tarren y Bwlfa when viewed from the Country Park or The Ridings. He has been informed that in addition to the removal of turbine numbers 78 and 80 on the ground of their impact on deep peat they were also deleted along with turbine number 84 in accordance with the wishes of RCT to reduce the impact the Development would have on the communities in the Upper Rhondda (Blaencwm, Blaenrhondda, Treherbert and Tynewydd). Moving the turbines further west would, in the opinion of the Secretary of State, just be removing one problem and replacing it with another, by that he means removing turbines 78, 80 and 84 for peat and visual grounds and replacing them with turbines 79, 81 and 82 in similar locations which would mean additional impact on the communities of the Upper Rhondda as mentioned earlier.

The Secretary of State has considered whether further turbines should be removed altogether. He is of the opinion that the Development as a whole, leaving aside the turbines referred to in paragraph 2.3 above, is in the national interest (see paragraph 4.4(e) above) and has concluded that its impact is not unacceptable in planning terms having regard to the positive impacts of the Development, in particular the contribution which it could make to satisfying the urgent national need for renewable electricity generation. He does not consider that the views of any of the remaining turbines from the Dare Valley Country Park is such as to justify refusing consent in respect of them on the basis their adverse visual impact outweighs the national need.

4.4(h) Proliferation of wind turbines in the area

It has been said that the area is already impacted upon by the Maesgwyn and Maerdy wind farms and that the Development will mean that local residents would be living in a wind factory environment.

Secretary of State's response

The Secretary of State has been informed that there are several wind farms within a radius of 15km of the site of the Development and at various stages of development, that is, applied for, consented but construction not yet started, under construction or operational. Not including the Development, in total these wind farms amount to 127 turbines ranging in height from 76 metres to 145 metres.

The Secretary of State has carefully considered the question of whether the cumulative adverse visual and amenity impacts of the Development and other wind farms at any of the stages of development listed above would be unacceptable in planning terms. He has concluded that this is not the case, having regard to a number of factors. He notes in particular the separation distance and the geographical locations between the site of the Development and the majority of the other wind farms concerned; the fact that the area in question is mainly covered by forestry plantation and has a panoramic skyline; and that TAN 8 (see paragraph 4.4(x) below) states "within (and immediately adjacent to) the SSA's, the implicit objective is to accept landscape change, i.e. significant change in the landscape character from wind turbine development". The Secretary of State is accordingly of the opinion that the landscape and visual of the interaction between the Development and neighbouring wind farms is acceptable in planning terms.

4.4(i) There is no need for the Pen y Cymoedd windfarm

It has been said that the Pen y Cymoedd windfarm is neither in the local, national or international interest and that the premise upon which windfarms are based, ie global warming, has been discredited.

Secretary of State's response

See Bullet Point 1 of paragraph 4.4(e) above for the reasons why the Secretary of State is of the view that renewable projects such as the Development are in the national need.

4.4(j) Cost of renewable energy projects

It has been said that the economic case for wind power is unsupportable and that the Renewables Obligation has meant an increase in electricity bills.

Secretary of State's response

As already noted, national policy on new energy infrastructure has identified an urgent need for new electricity generating capacity, particularly in the form of renewable energy and specifically including both onshore and offshore wind. That policy is a material consideration in the determination of the Application and it was formulated in the knowledge that some form of support is needed to encourage all forms of renewable energy generation. There is nothing special about the Development from that point of view.

Currently, the main financial mechanism by which the Government incentivises deployment of large scale renewable electricity generation is the Renewables Obligation ("RO"). The Department's analysis for the Annual Energy Statement 2011 estimates that the impact of the RO on average household electricity bills in 2011 (including VAT) at the electricity consumption level before the impact of other policies, is an increase of £20, of which around half, i.e. £10 (in 2010 prices) is accounted for by wind.

The Department appointed Arup and Ernst and Young in October 2010 to look at the deployment potential and generation costs of renewable

electricity technologies in the UK up to 2030, taking into account sensitivities as to the range of cost inputs, investor behaviour and barriers to deployment¹⁰. The Department published a consultation on proposed new banding levels under the RO for the period 2013 - 2017 on 20 October 2011.¹¹ This proposed a 10% reduction in the support rates for onshore wind. The consultation closed on 12 January 2012 and the Government Response setting out the new bands is expected to be published in spring 2012. The determination of the Application is not an appropriate place in which to revisit issues about the appropriate level of support for particular renewable technologies which formed part of that consultation.

4.4(k) Noise

It has been said that the guidance for assessing noise impacts from wind turbines, ETSU-R-97, is flawed and noise nuisance from wind turbines has left people unable to sleep.

Secretary of State's response

The Secretary of State notes that the Company's assessment is based on the good practice assessment methods in ETSU-R-97: The Assessment and Rating of Noise from Wind Farms, as endorsed by Planning Policy Statement 22: Renewable Energy and its Companion Guide¹² and national policy statement EN-3 on Renewable Energy Infrastructure¹³.

Following concerns raised about the consistency of approaches taken to the practical application of ETSU-R-97, the Government commissioned consultants Hayes Mckenzie to carry out a research project to analyse matters arising in the consideration of noise impacts when determining wind farm planning applications in England. The report has now been published¹⁴.

¹⁰ Available at <http://www.decc.gov.uk/assets/decc/11/consultation/ro-banding/3237-cons-ro-banding-arup-report.pdf>

¹¹ http://www.decc.gov.uk/en/content/cms/consultations/cons_ro_review/cons_ro_review.aspx

¹² Available at <http://communities.gov.uk/publications/planningandbuilding/pps22> and <http://www.communities.gov.uk/publications/planningandbuilding/planningrenewable>

¹³ Available at <http://www.decc.gov.uk/assets/decc/11/meeting-energy-demand/consents-planning/nps2011/1940-nps-renewable-energy-en3.pdf>

¹⁴ Available at <http://www.decc.gov.uk/assets/decc/11/meeting-energy-demand/wind/2033-how-noise-impacts-are-considered.pdf>

The report has highlighted the potential problems faced by local planning authorities dealing with noise assessments for wind farm sites, both in terms of the way the documents are structured, and in the variations in the way some factors are taken into account in the assessments. It suggested that further good practice guidance is required to confirm and, where necessary, clarify and add to the way ETSU-R-97 is implemented in practice. The Institute of Acoustics is leading a working group to produce such guidance. The Government continues to support ETSU-R-97. Current methods used in practice to implement the ETSU-R-97 guidance continue to apply until supplementary good practice guidance is published.

In addition Planning Conditions (28) – (34) set the noise limits not to be exceeded by the operation of the Development and procedures to be followed when a complaint is made. The Secretary of State takes the view that the Planning Conditions will ensure a reasonable degree of protection, both externally by day and at night. Given that any increase in ambient noise levels that nonetheless comply with those limits would be unlikely to cause significant harm to local living conditions at existing local residential properties the Secretary of State sees no necessity for a more onerous approach.

It follows that any noise problem that might otherwise mean that a decision to permit the construction and operation of the Development could potentially infringe local residents' rights under Article 8 of the European Convention on Human Rights, would not do so, since the imposition of appropriate planning conditions would ensure that any interference with those rights would not be disproportionate.

4.4(l) Safety

It has been said that incidents at other wind farms have shown that wind turbines are unsafe because they are liable to blades shearing off, ice being thrown from the blades and turbines catching fire.

Secretary of State's response

The Secretary of State has been informed that experience indicates properly designed and maintained wind turbines are a safe technology. There has been no example of injury to a member of the public. The very few accidents that have occurred involving injury to humans have been caused to those working with turbines, as a result of a failure to observe manufacturers' and operators' instructions, as can happen with any

industrial machine. The only source of possible danger to human or animal life from a wind turbine would be the loss of a piece of the blade or, in most exceptional circumstances, of the whole blade. Many blades are composite structures with no bolts or other separate components. Blade failure is therefore most unlikely. Even for blades with separate control surfaces on or comprising the tips of the blade, separation is most unlikely.

In those areas where icing of the blades does occur, fragments of ice might be released from the blades when the machine is started. Most wind turbines are fitted with vibration sensors which can detect any imbalance which might be caused by icing of the blades; in which case operation of machines with iced blades could be inhibited.

The Secretary of State is aware that on 8 December 2011, during gale force winds in Scotland, a wind turbine caught fire at Ardrossan Wind Farm, near the A78 in North Ayrshire and was destroyed after it exploded into flames. The Secretary of State is also aware that wind turbines are regularly subjected to some tough conditions without problems. But while wind turbines manufactured today incorporate the highest quality and safety standards, as with any technology it would be impossible to eliminate all risk as the potential for a fire always exists when electronics, flammable oils and hydraulic fluids exist in the same enclosure. The Ardrossan incident appears to have come about as a result of a highly unusual combination of circumstances, so that it can only be considered as a freak accident. It would not be appropriate to regard this as a reason to refuse consent to wind farm applications. Moreover, even at Ardrossan, although the wind turbine exploded no person was injured as the incident only resulted in a small fire in a field which was extinguished before the fire brigade arrived.

4.4(m) Impact on nature conservation

It has been said that the Development would cause changes in hydrology which would affect the adjacent peat bog; fatalities to birds and bats and that no account had been taken of the cumulative impacts of neighbouring wind farms; impact on the breeding and feeding grounds of protected species of birds, such as raptors; and impact on the habitats of mammals.

Secretary of State's response

The Environment Agency ("EA") who are responsible for hydrology matters has not objected to the Development subject to conditions being attached to any planning permission which the Secretary of State may

give. Planning Conditions are included to ensure that contaminated surface water does not affect any watercourse or any adjoining land, including peat bog.

The Secretary of State has been informed that section 8 of the Environmental Statement considers ecology and includes the predicted impacts, including cumulative impacts, on birds, bats and other mammals. The Environmental Statement contained a “confidential annex” which gave fuller details of the impacts the Development was expected to have on birds and mammals. This confidential report contained details of locations of sensitive and protected species, including honey buzzard, goshawk, merlin, hobby, peregrine falcon, badger, pine martin and otter. In view of the details contained in the report and in order not to give temptation to illegal activity, such as egg stealing or badger baiting, the confidential report was only circulated to statutory consultees and the Royal Society for the Protection of Birds Cymru and was not placed on the public register. The Secretary of State agreed with that approach as being in the best interests of the birds and mammals.

Both the EA and the CCW have informed the Secretary of State that, subject to conditions, they see no reason why the Development should have an impact on protected species of birds and mammals. In addition the Royal Society for the Protection of Birds Cymru has written to say that the inclusion of conditions, particularly a habitat management and restoration plan, would satisfy them that adequate steps had been taken to avoid significant adverse impact on Annex 1¹⁵ bird species such as nightjars; mitigate against any adverse residual impact on Annex 1 bird species; and provide a significant biodiversity net gain.

To this effect Planning Conditions are included to ensure that construction works are not undertaken until; (i) a capture and release programme for reptiles has been agreed; (ii) schemes are put in place to reduce to as low as is reasonably practicable the impacts the Development may have on protected species of birds and mammals; (iii) a scheme is in place to monitor any such effects; (iv) a construction environmental management plan is in place; (v) a habitat management plan is in place; and (vi) a reinstatement, restoration and aftercare plan is in place. The Secretary of State considers that these arrangements adequately cover the protection of protected species of birds, mammals and reptiles.

¹⁵ Annex 1 of the European Council Directive on the Conservation of Wild Birds (79/409/EEC)

The Secretary of State is aware that a number of wind farms elsewhere in the world have resulted in significant bird mortalities through collision. However, as studies of a number of UK wind farms have shown, this is by no means always the case, and with regard to the Development, the combination of comparatively low densities of birds within and overflying the Site and the location and distribution of the wind turbines outside any bird concentrations makes it unlikely that bird collisions would be a significant problem.

4.4(n) Peat Bog

It has been said that the impact on shallow and deep peat has not been evaluated or addressed; and that several turbines, namely 52, 53, 54, 55, 56, 60 and 63, are to be situated on deep peat which is not shown in the Environmental Statement.

Secretary of State's response

The Secretary of State is aware that section 40 of the Natural Environment and Rural Communities Act 2006 (as amended) ("NERC") places a duty on him, in carrying out his functions to have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biological diversity in accordance with the United Nations Environmental Programme Convention on Biological Diversity 1992. He has been informed that deep peat has been identified, pursuant to section 42 of the NERC, as being a habitat of principal importance for that purpose.

In considering the impact the Development may have on deep peat the Secretary of State has taken into account the guidelines produced by, amongst others, the Countryside Council for Wales, the Forestry Commission and the Joint Nature Conservation Committee, who all indicate that deep peat is defined as peat being of a depth greater than 0.5 metres. It is this depth which the Secretary of State considers the most relevant to his consideration as to whether he should grant section 36 consent for the Development. However in reaching his conclusions he has also considered the potential impact on peat at a lesser depth.

The Company has informed the Department that during the assessment and site design a major peat probing exercise took place using GPS units to ensure an accurate dataset. The survey methodology is contained in Appendix 4.4, Volume 4A of the Environmental Statement with the results shown on page 241 of Volume 4A.

The results of the surveys undertaken by the Company indicate that the turbines mentioned in the objection would be sited in peat with a depth ranging as follows:

turbine number 52: 0.6 -1.3 metres*

turbine number 53: 0.1 – 0.2 metres

turbine number 54: 0.7 – 1.7 metres

turbine number 55: 0.1 – 0.8 metres

turbine number 56: 0.1 – 0.3 metres

turbine number 60: 0.0 – 0.7 metres*

turbine number 63: 0.1 – 0.4 metres

* within 100 metres of the coordinates specified in Schedule 1 to the Planning Conditions.

The Secretary of State is therefore confident that turbine numbers 53, 56 and 63 will not be sited in deep peat. The Company has informed the Secretary of State that peat depth probe points within 50 metres of turbine numbers 54 and 55 indicate a peat depth ranging from 0.1 and 1.7 metres, and within 100 metres of turbine number 60 a peat depth ranging from zero to 0.7 metres. As regards turbine number 52, the Company also informed the Department that due to forest cover it was not possible to obtain probe data at its location but probe points within 100 metres indicate a depth range of between 0.6 and 1.3 metres. The Secretary of State notes that turbine 52 is one which is being allowed an increase in tolerance for micro-siting in order to minimise any impact on deep peat (see paragraph 3.2 above).

The Secretary of State has also been informed that the Planning Conditions include a protocol to minimise the impact on peat and the establishment of a committee to consider the effects the Development may have on peat and for the Company to take into account any recommendations the committee makes in relation to the final siting of the wind turbines. The committee will comprise of invited representatives of the Countryside Council for Wales, the Environment Agency, the Local Planning Authorities, the Company and their consultants and main contractors, and the Forestry Commission Wales. This is considered necessary given that the location and depths of additional areas of peat will only become clear after deforestation is completed and to minimise the impact the Development may have on peat. Furthermore the deletion of wind turbine numbers 78 and 80 from the Development will mean there

will be a lesser impact on areas of peat already identified on the Site (see paragraphs 2.1 and 2.3 above). The Secretary of State also notes the CCW is content that any impacts on peat are acceptable in the light of the proposed mitigation.

4.4(o) The value of wind farms in energy policy terms

It has been said that generation from wind power is inefficient and unreliable; will not make any significant contribution to reducing emissions of greenhouse gases and will require “back-up” generation supplied by fossil fuelled power stations.

The Secretary of State does not accept the argument that energy generated from wind sources is inefficient. He is of the view that while wind power is intermittent by nature, that is the wind does not blow in the right direction or at the right speed all of the time everywhere that turbines are located, it does not follow that wind turbines are inefficient as a technology or that a sufficient number of well designed wind farms cannot produce enough generation to make a meaningful contribution to the Government’s overall energy policy which is to have a secure and diverse supply of generating capacity. The Secretary of State considers that on-shore wind power generation significantly contributes to the Government’s targets for generating capacity from renewable energy and the Development will similarly contribute to the Government’s objectives of secure and diversity of the supply of generating capacity and to meet both the Country’s national and international obligations.

The Secretary of State accepts that a certain amount of back-up fossil fuel generation capacity may be required to provide electricity during periods when wind powered generation is not available but demand is high. He is of the view that such instances would be limited and not outweigh the benefits which would be accrued in terms of an overall reduction in greenhouse gas emissions arising from more widespread use of electricity generated by wind farms.

4.4(p) The impact on local amenity and local people

It has been said that the Development will cause interference to television or radio reception; the Development would detract from the enjoyment of walking in the area; ramblers should be allowed free and unrestricted passage over common land; there should be compensation paid for blight; and wind turbines have a significant adverse impact on tourism.

Secretary of State's response

The Secretary of State has been informed that the Planning Conditions include measures to mitigate against any interference to television or radio reception; ensure that Public Rights of Way are unaffected by the Development except where a diversion order has been obtained so that any impact on the rights of walkers is minimised and that the wind turbines will be removed at the Company's expense after the Development ceases to generate electricity. The Secretary of State is of the view that these measures adequately cover the concerns expressed.

The matter of planning blight and compensation is covered by other legislation.

There is no concrete evidence to suggest that wind farms damage tourism. In some cases wind farms attract tourism, eg wind turbines at other locations such as Swaffham and Delabole attract thousands of visitors per year. The Secretary of State acknowledges that some local people feel strongly that the Development will adversely impact on tourism as people visit the Black Mountains and Rhondda Valley for peace and quiet and their scenery. On the other hand other local people have made representations that they believe that the Development will encourage tourism because of its novel value. Overall, the Secretary of State takes the view that the Development has the potential to have both a positive and negative effect on tourism but considers the measures which the Company has agreed to undertake to provide additional cycle routes and market those routes should be beneficial to encouraging additional tourism to the local area.

4.4(q) The value of windfarms in industrial and economic terms is overstated

It has been said that the wind turbines will be built abroad adding to the UK's balance of payments deficit; Danish experience shows that when subsidies are removed the wind turbine industry begins to collapse; much of the money will be sourced from public funds under the Renewables Obligation with profits going overseas; and local employment opportunities have been overstated by the Company.

The Secretary of State's response

None of these objections have been supported by argument or evidence of a kind that would justify the Secretary of State in departing either from the national policies or EU single market principles which they call into question. Some, such as where the turbines are manufactured, are arguably not material considerations at all, others refer to matters on which the Secretary of State does not put any significant weight in reaching a decision on the Application.

4.4(r) Carbon Footprint

It has been said that the carbon footprint for the Development cannot be paid back by the amount of savings made by the wind farm.

Secretary of State's response

The objection was based on turbines being built on a "peat" site. Consideration of how the Development would impact on peat is given in paragraph 4.4(n) above.

More generally, chapter 2 of the Environmental Statement contains a calculation, on a worst case basis, of the carbon payback period of the Development. Appendix 2.1 and 2.2 of Volume 4A of the Environmental Statement provides a detailed analysis of the input data used in calculating the carbon payback (these calculations are likely to demonstrate a worse case on carbon payback than will actually be the case for the Development as now proposed owing to the removal of eight turbines some in areas of peat (see paragraph 2.3 above)).

On a worst case scenario it is estimated that some 8.6% (1,126,600 MWh over 25 years) of the total energy produced throughout the lifetime of the Development will be consumed during its manufacture, construction, operation and decommissioning. In comparison the minimum amount of electricity generated over the same period would be 13,100,000 MWh. Taken into account the carbon payback this would result in a net generation of clean energy of 11,973,400 MWh which in carbon terms equates to a minimum of 4,430,158 tCO₂ and potentially up to a maximum of 10,488,698 tCO₂ depending on the generation fuel mix.

4.4(s) The role of DECC Ministers and the holding of a public inquiry

It has been said that the Development is contrary to the functions which the Secretary of State has to comply with under the terms of the Countryside Act 1968; and without holding a public inquiry into the application, the Government's assurances that they would listen to local public opinion is a sham.

Secretary of State's response

The Secretary of State's decision on whether to use his discretion and hold a public inquiry into the application for the Development is given in the conclusion at the end of this Section.

Section 11 of the Countryside Act 1968 provides that in the exercise of their functions relating to land under any enactment every Minister, government department and public body shall have regard to the desirability of conserving the natural beauty and amenity of the countryside. As noted above (paragraph 4.4(e) and footnote 4), a more specific duty applies as regards the exercise of functions in relation to National Parks, namely the duty to have regard to the purposes of conserving and enhancing their natural beauty, wildlife and cultural heritage, and of promoting opportunities for the understanding and enjoyment of their special qualities by the public.

Under the Electricity Act 1989 (Schedule 9), the Secretary State, in considering the Application, must consider the desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest and of protecting sites, buildings and objects of architectural, historic or archaeological interest.

The Secretary of State also has the duty of considering what a developer can reasonably do to mitigate any effects which the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites, buildings or objects. Other relevant duties include those imposed on the Secretary of State by section 3A of the Act, in relation to protecting the interests of consumers and ensuring that reasonable demands for electricity are met.

None of the above duties relating to the countryside in itself requires the Secretary of State to refuse consent to an application to construct and operate a wind farm in an attractive rural setting. Nor do they require him

to hold a public inquiry into the Application. Rather, they require him, in considering an application such as that for the Development, to give careful consideration and an appropriate degree of weight to the matters to which these duties refer. This he has done, as shown in particular by the imposition of a condition requiring a number of turbines that would have unacceptable visual impacts not to be constructed, as well as other mitigation measures provided for in the Planning Conditions.

It is perfectly possible to “listen to local people” without conducting a public inquiry. The Secretary of State received letters of support in addition to those who objected to the Development, as indicated in paragraph 4.3 above. In considering these representations, the Secretary of State has to consider what he considers to be their merits rather than their number and, in the case of objections, to balance them against the benefits of the Development. He has carefully considered all the representations made and this decision letter contains his views on the key objections which have been made. He has also noted that the Company has made alterations to the Development as originally proposed as a result of representations received during the consultation process. He has also been informed that members of the Department’s Energy Development Unit visited the area and held meetings with both objectors to and supporters of the Development. The Secretary of State therefore rejects any suggestion that the Government’s assurances to listen to local people is a sham.

4.4(t) The environmental implications were not fully considered

It has been said that the environmental impact statement was not impartial; the overall package, that is the overhead line, grid connection, upgrading of access roads and quarrying was not properly assessed; and no consideration was given to the justification for the selection of the Pen y Cymoedd site.

Secretary of State’s response

The environmental impact assessment was produced in accordance with the requirements of the Electricity Works (Environmental Impact Assessment) (England and Wales) Regulations 2000. No evidence has been supplied to support the allegation that it was not properly and professionally prepared in a fair and impartial way.

The Secretary of State does not agree that ancillary works were not assessed. He has been informed, for example, that Section 16 of the

Environmental Statement gives details of the grid connection and Section 4 gives details of the borrow pits.

An environmental impact assessment is not required to consider alternatives if none were considered by the developer. In this case, the site of the Development is within Strategic Search Area F (see paragraph 4.4(x) below). The Secretary of State notes that it is not suggested that there are alternative locations for the scale of development proposed in the Application either elsewhere in Strategic Search Area F or in the other Strategic Search Areas set out in TAN 8. He therefore considers the Company's approach of focusing on the site of the Development to have been reasonable. Although it is acknowledged that not every site within the Strategic Search Area will be appropriate for wind farm development, the fact that the site accords in general terms with Welsh Government planning policy is a material consideration for the Secretary of State, but the apparent absence of suitable alternatives, or at least of consideration of such alternatives, does not mean that the scrutiny given to the potential adverse impacts of the Development should be any less or the weight which he gives to particular adverse impacts should be any less than would otherwise be the case. He has given careful consideration to the merits or otherwise of the site as set out in the Environmental Statement and the representations which he has received and he concludes that the site is appropriate for a wind farm development of the scale envisaged.

4.4(u) The companies involved in the Development and their behaviour

It has been said the Company paid for the consent as evidenced by the Community Trust Fund.

Secretary of State's response

The Secretary of State has been informed that the Company has covenanted to establish a Community Trust Fund. The Government has no objection to communities benefiting financially from hosting a wind farm. However, this Trust Fund is not being treated as a material consideration for the purposes of the Secretary of State's determination of the Application.

4.4(v) Shadow and Strobe Flicker

It has been said that the location and mass of the Development represents a serious threat to human health and well being due to the shadow of the moving blades and when the blades reflect the sun back to the viewer.

Secretary of State's response

Under certain combinations of geographical position and time of day, the sun may pass behind the 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'. It only occurs inside buildings where the flicker appears through a narrow window opening. The seasonal duration of this effect can be calculated from the geometry of the turbine and the latitude of the site. A single window in a single building is likely to be affected for a few minutes at certain times of the day during short periods of the year. The likelihood of this occurring and the duration of such an effect depends upon:

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

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

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

- there are fewer times when the sun is low enough to cast a long shadow;

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

At distance, the blades do not cover the sun but only partly mask it, substantially weakening the shadow. This effect occurs first with the shadow from the blade tip, the tips being thinner in section than the rest of the blade. The shadows from the tips extend the furthest and so only a very weak effect is observed at distance from the turbines.

Shadow flicker can be mitigated by siting wind turbines at sufficient distance from residences likely to be affected. A recent report entitled "Update of UK Shadow Flicker Evidence Base"¹⁶ prepared by Parsons Brinckerhoff for DECC found that a rule that shadow flicker only occurs within 10 x rotor diameters of a turbine gives an appropriate area for the assessment of shadow flicker. Therefore if the turbine has 90m diameter blades (as is intended in this case), the potential shadow flicker effect could be felt up to 900m from a turbine. The Secretary of State notes that there are two residential properties within 900 metres of the site of the proposed Development but neither of them are within 130 degrees either side of north. He also notes that the Planning Condition (59) requires the alleviation of any shadow flicker which may occur.

Turbines can also cause flashes of reflected light, which can be visible for some distance. It is possible to ameliorate the flashing but it is not possible to eliminate it. Careful choice of blade colour and surface finish can help reduce the effect. Light grey semi-matt finishes are often used for this. Other colours and patterns can also be used to reduce the effect further. The Secretary of State has been informed that Planning Condition (18) allows for the final appearance of the wind turbines to be approved by the LPA.

4.4(w) There is no need for further generating capacity in south west Wales as most of the electricity generated would be transmitted to England

It was said that the electricity generated by the Development will be transmitted to England with no benefit to Wales; and the capacity of the already approved wind farm developments in south west Wales is more than enough to supply all of the area's needs.

¹⁶ Available at

<http://www.decc.gov.uk/assets/decc/What%20we%20do/UK%20energy%20supply/Energy%20mix/Renewable%20energy/ORED/1416-update-uk-shadow-flicker-evidence-base.pdf>

Secretary of State's response

Wind farms have to be located where there is abundant wind. In Great Britain this will often mean that they are relatively remote from the major centres of electricity demand. However, Great Britain has an integrated system for electricity generation and transmission which means that electricity generated in one part of the Country can be consumed in another part as demand arises. This allows electricity to be transmitted in bulk on higher voltage networks, sometimes over quite large distances, while most end-users are connected to lower voltage local distribution networks, generally operating over shorter distances. In the Secretary of State's view it is by no means certain that the electricity generated by the Development would invariably be consumed in England.

Furthermore this is a renewable energy proposal and as such would contribute to the UK's legal obligations to reduce emissions of greenhouse gases and provide benefit to the economic well being of the local and surrounding area (see paragraph 4.4(e) above).

4.4(x) Contrary to the objectives of the Welsh Government

It has been said that granting section 36 consent to the Development will exceed the onshore wind generating capacity identified in the Welsh Government Technical Advice Note 8 (TAN 8).

Secretary of State's response

The Secretary of State has been informed that the Welsh Government's energy policy and aspirations are set out in "A Low Carbon Revolution"¹⁷. The Welsh Government's aspirations include for a provision of 2 GW of capacity being provided by onshore wind generation. In order to facilitate the potential output of renewable energy the Welsh Government has issued TAN 8. An important function of TAN 8 is to restrict the proliferation of large scale wind farms outside the areas identified as being capable of absorbing such wind farms. In July 2011 the Minister for Environment and Sustainable Development wrote to stakeholders to provide clarity on the issue of the maximum installation capacities for onshore wind within the Strategic Search Areas (SSA) identified in TAN 8. The identified maximum capacities for each of the SSAs identified in TAN 8 are as follows: SSA A 212MW; SSA B 430MW; SSA C 98MW; SSA D 212MW; SSA E 152MW; SSA F 430 and SSA G 132MW.

¹⁷ Available at <http://wales.gov.uk/topics/environmentcountryside/energy/renewable/policy/lowcarbonrevolution/?lang=en>

The Development would be sited wholly in SSA F. From the information available the maximum output of the wind turbines (excluding the Development), which are currently in the planning system or have been consented or are in operation, amounts to a total of 165.5MW. Taking into account the maximum capacity of the Development (299MW) then the total possible for SSA F would be 464.5MW. This is more than that identified as being the maximum capacity for SSA F, ie a possible exceedance of some 8% of the maximum capacity, and it would occur only if all developments currently the subject of planning applications were constructed as proposed. This may well not happen, and if it does, it can only be because the relevant planning decision-makers, having before them the details of actual applications rather than the generic assumptions about possible applications on which the maximum capacities in TAN 8 were inevitably based, have concluded that the visual impacts of each development (both individually and cumulatively with others) are acceptable.

4.4(y) Compatibility with coal mining operations and potential landslide

It has been said the 25 year operational life of the Development would inhibit the recovery of coal reserves; that there is no clear indication of what the Company's approach would be to stabilisation if voids were encountered during further site investigation; and that there is the potential danger of landslide if blasting occurs.

Secretary of State's response

As regards the impact on the mining of deep coal, the objection relates to wind turbine numbers 1 to 11 and 14 to 20 indicated on Figure 4.1 of the Environmental Statement which are to be sited above potential mine workings.

NPT has informed the Department that a consent exists for the extension of underground take and mine surface area at Pentreclwydau South Mine (known as Unity Mine), Cwmgwrach, Neath. Unity Mine Ltd has also informed the Department that in addition to the extant consent from NPT it also holds conditional and un-conditional licences from the Coal Authority. Unity Mine Ltd has objected to the Development stating that it could sterilize millions of tonnes of coal in order that ground movements do not damage the wind turbines. The Department notes from NPT's consent that wind turbine numbers 14 to 20 are in the area of underground take. NPT's consent does not extend to the area under

wind turbine numbers 1 to 11. Wind turbine numbers 19 and 20 do not now form part of the Development (see paragraph 2.3 above) and therefore are discounted for the purposes of consideration of the objection.

Unity Mine Ltd submitted an application under the Review of Minerals Planning requirements of Schedule 14 to the Environment Act 1995 to NPT on 9 January 2012¹⁸. The application has yet to be determined by NPT. In the environmental statement which accompanies that application it is stated that the mine currently operates using the pillar and stall mining technique. This involves the cutting of coal by machine in a grid pattern that retains a proportion of coal within the mine to support the roof of the seam. It would be carried out using long-established principles and will ensure that mine workings will not have an adverse impact on existing surface structures. The environmental statement also states that the mine has proven reserves of 20 million tonnes (Mt), a likely additional reserve of 15Mt and that estimates of other seams within the Coal Authority licensed area indicates similar resource figures. On the basis of the potential reserves and resources and current recovery rates it is estimated the mine has the potential to operate for at least 35 years and up to 70 years. The Secretary of State also notes that the coal seams in question are at a depth in excess of 350 metres and as such the piles required for the foundations of the wind turbines would have no impact on deep mine operations. By contrast, notwithstanding the depth of the coal seams, it is possible that mining operations in them could damage wind turbines above them unless their foundations are specially reinforced.

As regards opencast coal mining, paragraph 10.3.83 of the Environmental Statement indicates that the site of the Development is not within 800 metres of the boundary of an opencast site for which the Coal Authority is determining whether to grant a licence to remove coal by opencast methods. NPT and RTC have confirmed that it has no application for consent to undertake opencast mining in the area. The Secretary of State is therefore of the opinion that the Development would have no impact on existing surface coal workings or on any proposed in the foreseeable future or during the 25 year life of the Development.

The position with regard to minerals policy is set out in the Welsh Government's Minerals Technical Advice Note 2 (MTAN2), namely that due regard should be taken of the extent to which surface development

¹⁸ Details are available at:

<https://planning.npt.gov.uk/detail.asp?AltRef=P2012/0049&ApplicationNumber=P2012%2F0049&AddressPrefix=&submit1=Go>

would affect the ability to extract minerals which represent a national asset. Such policy imperatives include the safeguarding of underground reserves and the phasing of surface developments to ensure that they do not preclude the economic extraction of minerals necessary for the needs of a modern society. The Secretary of State considers that the potential effects on the possibility of future coal extraction do represent a material consideration of importance to the objectives of national energy policy. He is therefore of the view that he should take a precautionary approach in considering this issue. This approach would avoid potential sterilisation of valuable mineral resources and foreseeable impacts should mining take place underneath turbine numbers 1-18 at some time during the operational life of the Development. It would be inappropriate if in harnessing one source of energy the benefit to the national economy of another should be prejudiced.

If it was accepted that the Unity Mine reserves would be extracted during the operational life of the Development then it would be important to ensure that suitable mitigation would be incorporated at the outset rather than rely on remediation should subsidence or underground vibration occur in such a way as to affect the Development. Unity Mines are confident that mining under turbine numbers 14 to 18 would take place in the next few years and that mining under turbine numbers 1 to 11 would take place later but during the lifetime of the Development. The Company was not convinced that the mining of the Unity Mine coal reserves would represent a realistic prospect under turbine numbers 1 to 11 during the 25 year operational life of the Development on the ground that there is currently no consent to mine under those turbines.

The Secretary of State considers that there is sufficient evidence for him to conclude that the need for extraction of the Unity Mine reserves (in whole or in part) could be a realistic prospect, albeit that it might only occur towards the end of the 25 year operational life of the Development. He accepts that there are a number of imponderables such as securing the legal ability to extract the reserves. The exploitation of domestic energy resources accordingly represents an economic imperative of national importance and of relevance in terms of the diversity and security of energy supply, a consideration identified in the Energy National Policy Statements. In the circumstances the Secretary of State concludes that any decision with regard to the Development project should not preclude or pre-empt the potential exploitation of the coal reserves at the Unity Mine.

If extraction of coal from the Unity Mine reserves is to take place at some time in the future then it follows that any decision to grant consent for the Development should be conditional upon suitable mitigation measures

being incorporated into the project to safeguard the physical integrity of the turbine structures and the economic potential of the sub-surface minerals. The Secretary of State is satisfied from previous evidence that the foundation details of the turbines could be designed to deal with potential subsidence risk and suitable compensatory arrangements arrived at to secure remediation of tower tilt should this occur. This would be dependent upon either the statutory regime for subsidence compensation in force at the time or alternative private arrangements between the wind farm and minerals operators. In addition the pattern and programme of mineral extraction could be phased to take account of the presence of the turbines, their operational life and the requirement to provide surface support for other features, such as existing buildings.

The Secretary of State has noted that Planning Condition (69) requires the Company to agree prior to the commencement of the Development a Stability Report for turbine numbers 14 to 18 which will ensure the Development would be built so that mine workings have no adverse impact on the foundations of the wind turbines and their associated surface structures. In addition Planning Condition (70) requires a similar report to be undertaken for turbine numbers 1 to 11 prior to the construction of those particular turbines. The Secretary of State is of the view that the Development will not impact on the extraction of coal from below wind turbine numbers 1 to 18 of the Development.

MTAN2 indicates that development in areas identified as containing coal resources can be allowed provided it is of a temporary nature and can be completed and the site restored to a condition that does not inhibit extraction within a reasonable timescale – this would include windfarms. The Development will have a life of 25 years at the end of which the above ground structures would have to be removed and the land restored. As can be seen above, the mine is expected to have a working life of 35 years and possibly for as long as 70 years. The Secretary of State therefore is of the view that the Development will not sterilise coal reserves and is of a temporary nature and therefore is in accordance with the requirements of MTAN2.

The Secretary of State has been informed that Planning Condition (14) requires a construction method statement to be approved by the RPA. Any approved method statement will include details of the measures for the avoidance of potential constraints through detailed micro-siting of individual wind turbines or Site investigation. This will include any necessary engineering mitigation measures where potential constraints cannot be entirely avoided.

If voids are encountered then stabilisation will be by means of drilling and grouting and partial or total extraction, depending on the depth of the mine workings, and possibly ground compaction. If voids and/or groundwater is encountered during ground investigation and prior to stabilisation then schemes will be required to be produced in accordance with the requirements of the Planning Conditions.

The Secretary of State also been informed that the Environmental Statement indicates that it is unknown whether blasting will be required in the borrow pits. In the event that blasting is required then it will be in accordance with best practice guidance contained in Appendix L: Best Practice for Blasting of Minerals Technical Advice Note 2: Coal¹⁹. The Secretary of State has been informed that Planning Condition (35) requires this guidance to be adhered to in the event that blasting is required to be undertaken.

The Secretary of State is of the view that these measures will safeguard the future extraction of coal from under the Site of the Development and that any blasting would not cause landslide.

4.4(z) The Development should be a biomass station

It was said that the site of the Development should be developed as a biomass power station using forestry waste and fast growing wood which could provide an income for local farmers and create permanent jobs in the local community.

Secretary of State's response

The Secretary of State notes the view expressed that a biomass power station would be more beneficial to the local community. His function in relation to the Application is to consider whether the Development is acceptable in energy policy, planning and environmental terms, not whether some other possible development might be, from one perspective or another, a "better" use of the site. It is a matter for the applicant concerned as to what type of station it applies for, eg wind, biomass, solar etc. In this case the applicant has applied for a wind turbine generating station and it is that application which the Secretary of State has to consider on its merits.

¹⁹ Available at: <http://wales.gov.uk/docs/cabinetstatements/2009/090120coaltanen.pdf>

4.4(aa) There should be a separation distance of at least 2kms from the nearest turbine to residences

It has been said that the same approach as that issued by the Principal Planner in the Scottish Government and contained in Scottish Planning Policy 6: Renewable Energy (“SPP6”) should also apply to the siting of the Development.

Secretary of State’s response

The Secretary of State has been informed that SPP6 has been superseded by “A statement of the Scottish Government’s policy on nationally important land use planning matters”²⁰. The relevant section is as follows:

“A separation distance of up to 2km between areas of search and the edge of cities, towns and villages is recommended to guide developments to the most appropriate sites and to reduce visual impact, **but decisions on individual developments should take into account specific local circumstances and geography. Development plans should recognise that the existence of these constraints on wind farm development does not impose a blanket restriction on development, and should be clear on the extent of constraints and the factors that should be satisfactorily addressed to enable development to take place.** Planning authorities should not impose additional zones of protection around areas designated for their landscape or natural heritage value.” [*DECC emphasis*]

In Wales guidance on proximity of wind turbines to residential dwellings is set out in Technical Advice Note (TAN) 8: Planning for Renewable Energy. This states that 500m is currently considered a typical separation distance between a wind turbine and residential property to avoid unacceptable noise impacts, however when applied in a rigid manner it can lead to conservative results and so some flexibility is advised.

In any event, the purpose of any separation distance policy in relation to onshore wind farms is to avoid possible unacceptable noise impacts. In the present case, as noted above, the Secretary of State is satisfied that

²⁰ Available at <http://www.scotland.gov.uk/Publications/2010/02/03132605/0>

adequate steps have been and will be taken to avoid such impacts (see further paragraph 4.4(k) above).

4.4(ab) Traffic movements

It has been said that the local road infrastructure is inadequate to allow safe access to the site of the Development.

Secretary of State's response

The Secretary of State has been informed that a detailed traffic impact assessment is contained in Section 14 of the Environmental Statement. That assessment indicates that major plant and equipment would be brought in via Swansea Docks and transported to the site of the Development via the A483 Trunk Road then onto the M4 Motorway and onto the A465 Trunk Road before exiting onto the A4061 near Hirwaun and onwards into the site. Planning Condition (16) requires a traffic management plan which takes into account the commitments given in Section 14 of the Environmental Statement to be approved in writing by the LPAs. The Secretary of State has been informed that the LPAs are content that heavy construction traffic movements would not be such so as to cause any significant inconvenience to local residents or their safety. He therefore sees no need to impose any further restrictions on the movement of construction traffic. He places no weight on the impact of operational traffic as such traffic would be *de minimis*.

4.4(ac) National Planning Policy Framework ("NPPF")

It has been said that a decision on the Application should not be taken until after the NPPF has been published as it would give the power of veto to local residents over the location of wind turbines.

Secretary of State's response

The NPPF has now been published. It sets out the Government's planning policies for England and how these are to be applied. It does not set out policies for Wales. In the present case, the statements of planning policy which are relevant are those in Planning Policy Wales, the local development plan, TAN-8, Energy Wales: A Low Carbon Transition, and the Energy National Policy Statements.

4.4(ad) Miscellaneous

It has been said that the site contains a number of archaeological features of national importance; the views of local residents and local Community Councils were not properly considered; by not holding a public inquiry the Secretary of State is not fulfilling his duties set out in the Act and would be in breach of the Human Rights Act 1998; the turbine type should not be left to a later date; the colour of the wind turbines should be subject to public consultation; and the height of the wind turbines should be restricted to no more than 145 metres.

Secretary of State's response

The Secretary of State has been informed that Planning Conditions require an archaeological investigation to be undertaken and any finds of importance to be preserved in situ, where practicable.

The Application was advertised in accordance with the requirements of the Applications Regulations. In addition the Secretary of State has been informed that local public meetings were held and that notices were placed in the vicinity of the application site as well as in towns and villages in the Rhondda and Cynon Valleys and via the distribution of newsletters to over 37,000 local households. As already noted, all representations made to the Secretary of State by local people in respect of the Application have been properly considered.

In the absence of outstanding objections from the relevant planning authorities (as in the present case), Schedule 8 of the Act gives the Secretary of State the discretion as to whether to hold a public inquiry into an application made under section 36 of the Act. There is clearly no automatic right under that Act or the European Convention on Human Rights for all planning applications to be considered by way of a public inquiry; and there is nothing about the circumstances of the Application which the Secretary of State considers has the effect that the Human Rights Act 1998 requires him to exercise his Schedule 8 discretion in a particular way before determining it.

The final choice of turbine type is a matter for the Company to decide in light of any relevant legal, technical or commercial constraints. The Planning Conditions state that final colour of the wind turbines has to be agreed with the LPA who act on behalf of the local community.

Planning Condition (17) restricts the maximum height of the wind turbines to 145 metres to tip of blade.

THE SECRETARY OF STATE'S CONCLUSION ON WHETHER TO HOLD A PUBLIC INQUIRY INTO THE APPLICATION.

4.5 The Secretary of State has carefully considered the views of those who are of the opinion that he should only make his decision after holding a public inquiry into the Application. In considering these views, the Secretary of State has taken into account the views expressed by the relevant planning authorities, statutory consultees, the Welsh Government and others. He has noted that neither of the relevant planning authorities has maintained an objection nor has any of the statutory consultees or the Welsh Government, formally asked him to hold a public inquiry into the Application before taking his decision. However he is aware that numerous non-statutory bodies and individuals have. On the other hand the Secretary of State is also aware that non-statutory bodies and individuals support the Application and have requested that he grants consent without holding a public inquiry. While there is no mandatory requirement for the Secretary of State to call a public inquiry he has to consider carefully whether to use his discretionary power to call for a public inquiry to be held into the Application.

4.6 In doing so the Secretary of State has recognised that this application has caused a great deal of debate as to its merits. On the one hand there are those who cherish the environment of the Rhondda Valley, Cynon Valley, Black Mountains and the Brecon Beacons National Park and do not want to see it changed. On the other hand there are those who cherish the environment of the Rhondda Valley, Cynon Valley, Black Mountains and the Brecon Beacons National Park but are concerned about the need to take action to reduce emissions of gases which contribute to global warming. The Secretary of State considers that both sides of the argument have been represented to him at sufficient length and in sufficient depth for him to be able to take a properly considered and informed decision on the Application without first calling a public inquiry.

4.7 A public inquiry would consider the facts of the case, with the inspector reporting back to the Secretary of State with his or her report, conclusions and recommendations. The question therefore arises as to what factual information would the Secretary of State require an inspector to report back to him, that he does not already have, on which to take his decision on the Application. The Application has been under consideration by the Department for some two years, and was the subject of consultation by the Company with the local community. The Secretary of State does not consider that a public inquiry

would be likely to add materially to his understanding or consideration of the Application. The Secretary of State therefore has decided not to use his discretionary power to call for a public inquiry to be held into the Application.

4.8 The Secretary of State has carefully considered the views of the relevant planning authorities, consultees and others, the matters set out above and all other material considerations. For the reasons given above, he does not consider that any of the objections responded to above raise any issues that need further probing in the form of a public inquiry. He is therefore satisfied that it would not be appropriate to cause a public inquiry to be held into the Application.

V. SECRETARY OF STATE'S CONSIDERATION OF THE ENVIRONMENTAL INFORMATION

5.1 The EIA Regulations prohibit the Secretary of State from granting section 36 consent unless he has first taken into consideration the environmental information, as defined in those Regulations.

5.2 The Secretary of State is satisfied that the Environmental Statement is sufficient to allow him to make a determination on the Application and that the Company has followed the applicable procedures in the EIA Regulations.

5.3 The Secretary of State has considered the environmental information carefully; in addition to the Environmental Statement, he has considered the comments made by the relevant planning authorities, those designated as statutory consultees under regulation 2 of the EIA Regulations and others.

5.4 Taking into account the extent to which any environmental effects will be modified and mitigated by measures the Company has agreed to take or will be required to take either under the conditions attached to the section 36 consent or the Planning Conditions or by regulatory authorities including the Environment Agency, the Secretary of State believes that any remaining adverse environmental effects will not be such that it would be appropriate to refuse section 36 consent or the deemed planning permission for the Development.

VI. SECRETARY OF STATE'S CONSIDERATION OF POSSIBLE EFFECTS ON A EUROPEAN SITE

6.1 The Conservation of Habitats and Species Regulations 2010, as amended, ("the Habitats Regulations") require the Secretary of State to consider whether the Development would be likely to have a significant effect on a European Site, as defined in the Habitats Regulations.

6.2 If this is the case, he must undertake an appropriate assessment of the implications for the European Site in view of its conservation objectives. The

section 36 consent may then only be granted if it has been ascertained that the Development will not adversely affect the integrity of such a site unless there are no feasible alternatives and imperative reasons for overriding public interest apply.

6.3 The Secretary of State notes that the site of the Development is approximately 3kms from the Blaen Cynon Special Area of Conservation ("SAC"); approximately 5kms from the Coedydd Nedd a Mellte SAC; and approximately 6kms from the Cwm Cadlan SAC. The CCW indicated that the Development on its own would be unlikely to have a significant effect on the SACs. However the CCW did indicate that it was possible that the in-combination effects, when taking into account the proposed electricity sub-station near Rhigos, could have an impact on the Marsh fritillary butterfly which is a feature of the Blaen Cynon SAC. In light of this the Department has undertaken an assessment of the likely significant effects of the Development on its own and in combination with other proposals in the area. The report enclosed with this letter confirms that the Development will not have a significant effect on European Sites or their features, either alone or in combination with other plans or projects.

6.4 CCW also informed the Secretary of State that there should be no significant adverse impact on the European Sites provided that the mitigation measures detailed in the Environmental Statement are carried out in full. CCW also recommended that conditions be attached to any permission granted and as a result Planning Conditions have been agreed which protect and/or enhance the European Sites and their constituent components.

6.5 The Secretary of State's judgement is that the Development, with all mitigation and management measures in place, will not have a significant effect on European Sites alone or in combination with other plans or projects and therefore an Appropriate Assessment under the Habitats Regulations is not required. The Secretary of State therefore finds no reason for refusing section 36 consent on these grounds.

VII. SECRETARY OF STATE'S DECISION ON THE APPLICATION

7.1 The Secretary of State has carefully considered the views of the relevant planning authorities, consultees and others, the matters set out above and all other material considerations. In particular, the Secretary of State considers the following issues material to the merits of the Application:

- i) adequate environmental information has been provided for him to judge the Development's impact;

- ii) the Company has identified what can be done to mitigate any potentially adverse impacts of the Development;
- iii) the matters specified in paragraph 1(2) of Schedule 9 to the Act have been adequately addressed by means of the mitigations set out in the Environmental Statement and he has judged that the likely environmental impacts are acceptable;
- iv) the fact that legal procedures for considering a generating station application have been properly followed;
- v) the views of the relevant planning authorities, the views of others submitted to the Secretary of State following publication of the Application under the Applications Regulations, the views of statutory consultees under the EIA Regulations and 2010 Regulations, the environmental information and all other relevant matters have been considered;
- vi) that, to the extent that it is necessary or desirable to address any of the objections received to the Application in his decision, none of them is such as to justify refusal of consent or a section 90 direction, given the comments made in section II above, the imposition of the Planning Conditions and the matters referred to in his responses to objections set out in section 4.4 above;
- vii) his policies on the need for and development of new electricity generating infrastructure as set out in the *Overarching National Policy Statement for Energy (EN-1)*²¹ (in particular, sections 3.3 and 3.4) and the *National Policy Statement for Renewable Energy Infrastructure (EN-3)*²², designated by him on 19 July 2011 under the Planning Act 2008 following the approval by Parliament, and the reasons given for those policies in those national policy statements, all of which are material considerations for the purpose of considering the Application; and
- viii) the policies of the Welsh Government as set out in Planning Policy Wales; TAN 8; and Energy Wales: A Low Carbon Transition.

²¹ See <http://www.decc.gov.uk/assets/decc/11/meeting-energy-demand/consents-planning/nps2011/1938-overarching-nps-for-energy-en1.pdf>

²² See <http://www.decc.gov.uk/assets/decc/11/meeting-energy-demand/consents-planning/nps2011/1939-nps-for-fossil-fuel-en2.pdf>

7.2 The Secretary of State notes that in his opinion the objections which have been raised against the Application on a variety of landscape and visual grounds are by far the most significant. For the reasons given in section 4.4 above, he considers that all the other objections raised against the Application are either irrelevant, of limited weight, or relate to potential adverse effects which can and will be more or less fully mitigated. He acknowledges that the potential landscape and visual impacts of the Development are in a different category, because the ability of a developer to mitigate such impacts is inevitably limited, and because of the high value which is placed on many of the landscapes affected, either locally or in the form of a national designation. The Secretary of State attaches considerable weight to these impacts, as can be seen, for example, by his decision to impose a condition preventing the construction of those turbines which would have had the most harmful effect on some of these landscapes. However, in the final analysis, and taking account of the various statutory duties which he is under to have regard to matters relating to the landscape and other values of the countryside (see paragraph 4.4(s) above), the Secretary of State has nevertheless decided that in his judgment, enough has been done and (under the Planning Conditions) will be done to justify him in giving appreciably greater weight to those material considerations relating to energy policy which, for the reasons given above, weigh in favour of granting section 36 consent and deemed planning permission in respect of the Development, than to those adverse impacts of the Development which will remain after mitigation. In reaching his conclusion the Secretary of State is aware of the value placed on the landscape by those who frequent the Rhondda Valley, Cynon Valley, Black Mountains and the Brecon Beacons National Park. He also notes that the site of the Development itself has no national or international designation and is within the Welsh Government's Strategic Search Area F (see paragraph 4.4(x) above), and he concludes that UK Government policy on renewable energy and its international obligations and commitments to reduce emissions of gases which contribute to global warming, to which the Development will contribute, mean that, on balance, the benefits of the Development outweigh the negative effects and that he should therefore allow the Development to proceed.

7.3 The Secretary of State, having regard to the matters specified in paragraph 7.1 above, has decided to grant consent for the Development pursuant to section 36 subject to: (i) a condition that the Development shall be in accordance with the particulars submitted with the application; (ii) the exclusion of wind turbine numbers 19, 20, 36, 37, 47, 78, 80 and 84; and (iii) a condition as to time within which the Development must commence.

7.4 The Secretary of State believes that the Planning Conditions will ensure that the Development proceeds in a form and manner that is acceptable in planning policy terms, and therefore he has decided to issue a section 90(2) direction that planning permission be deemed to be granted subject to the Planning Conditions.

7.5 I accordingly enclose the Secretary of State's consent under section 36 of the Act; and a direction under section 90(2) of the Town and Country Planning Act 1990.

VIII GENERAL GUIDANCE

8.1 The validity of the Secretary of State's decision may be challenged by making an application to the High Court for leave to seek a judicial review. Such application must be made as soon as possible and in any event not later than three months after the date of the decision. Parties seeking further information as to how to proceed should seek independent legal advice from a solicitor or legal adviser, or alternatively may contact the Administrative Court at the Royal Courts of Justice, Strand, London WC2 2LL (General Enquiries 020 7947 6655).

8.2 This decision does not convey any approval or consent or waiver that may be required under any enactment, by-law, order or regulation other than section 36 and Schedule 8 of the Act and section 90 of the Town and Country Planning Act 1990.

Yours faithfully

Giles Scott
Head
National Infrastructure Consents

DEPARTMENT OF ENERGY AND CLIMATE CHANGE
CONSTRUCTION AND OPERATION OF A WIND TURBINE GENERATING STATION ON LAND
TO THE SOUTH OF THE HEADS OF THE VALLEY ROAD BETWEEN NEATH AND ABERDARE,
SOUTH WALES

CONSENT UNDER SECTION 36 OF THE ELECTRICITY ACT 1989

1. Pursuant to section 36 of the Electricity Act 1989 the Secretary of State for Energy and Climate Change (“the Secretary of State”) hereby consents to the construction, on the area of land outlined red on Figure 1, attached hereto, of a wind turbine generating station on land to the south of the Heads of the Valley Road between Neath and Aberdare, south Wales (“the Development”). This consent is granted to Pen y Cymoedd Wind Farm Limited, its assigns and successors (“the Company”).

2. Subject to paragraph 3(1), the Development shall be of up to 299 MW capacity and comprise:

- (a) up to 76 wind turbine generators; each not exceeding a height of 145 metres AOD to tip of blade;
- (b) up to 4 anemometry masts each not exceeding a height of 100 metres AOD;
- (c) underground 33kV/132kV electrical cabling;
- (d) a 33kV/132kV electricity substation;
- (e) access tracks;
- (f) borrow pits; and
- (g) the necessary buildings (including administration offices) and civil engineering works.

3. Subject to any minor changes which may be approved by the LPA (as defined in Condition (1) of the conditions of deemed planning permission (“the Planning Conditions”) set out in paragraph 6 below), the Development shall be constructed and operated in accordance with the details contained in the application dated 17 November 2009, in so far as the latter do not conflict with any provision of the Planning Conditions or of paragraphs 2, 4, or 5 of this consent, or with the terms of any scheme, strategy, programme, statement, plan, details, procedure or report to be approved by the LPA under the Planning Conditions, or any planning permission granted by the LPA.

4. The Development shall not include the wind turbines identified as numbers 19, 20, 36, 37, 47, 78, 80 and 84 on Figure 4.1 of the Environmental Statement (as defined in Condition (1) of the Planning Conditions) and any associated infrastructure.

5. The commencement of the Development (as defined in Condition (1) of the Planning Conditions) shall take place within five years from the date of this consent or such longer period as the Secretary of State may hereafter direct in writing.

DIRECTION TO DEEM PLANNING PERMISSION TO BE GRANTED UNDER SECTION 90 OF THE TOWN AND COUNTRY PLANNING ACT 1990

CONSTRUCTION AND OPERATION OF A WIND TURBINE GENERATING STATION ON LAND TO THE SOUTH OF THE HEADS OF THE VALLEY ROAD BETWEEN NEATH AND ABERDARE, SOUTH WALES

6. The Secretary of State in exercise of the powers conferred on him by section 90(2) of the Town and Country Planning Act 1990 hereby directs that planning permission for the Development be deemed to be granted subject to the following conditions:

Definitions and interpretation

(1) In these conditions unless the context otherwise requires:

“AOD” means above ordnance datum;

“CCW” means the Countryside Council for Wales and its successors;

“the commencement of Development” means the date upon which the Development shall begin by the carrying out of a material operation as defined in Section 56 of the Town and Country Planning Act 1990 excluding any operations relating to ground and soil investigations, investigations or works in respect of ground contamination, archaeological investigations, geological investigations, site clearance, tree felling or removal, or the erection of fencing, hoardings or site compound buildings;

“the commissioning of the Development” means the date upon which the Development first supplies electricity on a commercial basis, or, where the Development is constructed in phases pursuant to Condition (9), in respect of any phase shall mean the date upon which that phase first supplies electricity on a commercial basis;

“Company” means Pen y Cymoedd Wind Farm Ltd and its successors in title and assigns;

“deep peat” means peat with a depth greater than 0.5 metres;

“Development” means the onshore wind turbine generating station on land south of the Heads of the Valley road between Neath and Aberdare, south Wales comprising up to 76 wind turbines with a combined generating capacity of up to 299MW and ancillary development as outlined in paragraph 2 above;

“EA” means the Environment Agency and its successors;

“Ecological Clerk of Works and Peat Protocol Officer” means a person or persons employed by the Company in accordance with the terms of Condition (52);

"emergency" means circumstances in which there is reasonable cause for apprehending imminent injury to persons, serious damage to property or danger of serious pollution to the environment;

"Environmental Statement" means the document entitled "Pen y Cymoedd Wind Energy Project Environmental Statement November 2009;

"FCW" means the Forestry Commission Wales and its successors;

"LPA" means Rhondda Cynon Taf County Borough Council and/or Neath Port Talbot County Borough Council, as appropriate, and their successors as local planning authorities for the areas in which the Site is located;

"the main Development" means the construction work commencing with the placing of the first concrete for the foundation of the first wind turbine forming part of the Development;

"open areas" means areas which are not under forestation;

"RSPB" means the Royal Society for the Protection of Birds and its successors;

"Supplementary Environmental Information" means the document entitled "Pen y Cymoedd Wind Energy Project Supplementary Environmental Information August 2010;

"Site" means the area of land delineated by a solid red line on Figure 1; and

"turbine number" means a turbine forming part of the Development and shall be construed with reference to the list of turbine numbers and corresponding map references set out at Schedule 1.

References in these conditions to any scheme, strategy, programme, statement, plan, details, procedure or report to be approved by the LPA (each an "approved document"), or to doing of anything in accordance with any approved document shall be construed as including references to such amendments, modifications or substitutions of the approved document as shall have been agreed in writing by the LPA.

The Site

- (2) The construction of the Development shall only take place within the Site.

Reason: To ensure that no construction takes place beyond the boundary of the area which is the subject of this planning permission.

Time Limits

- (3) The construction of the Development shall begin before the expiry of five years from the date of this permission.

Reason: To strike a balance between the time it may take to put in place the necessary pre-construction measures required - for example, tendering, obtaining the necessary financing, micro-siting of the turbines - and minimising the impact of any period of uncertainty for those who may be affected pending the decision to begin construction works.

Duration of Permission

- (4) This planning permission shall authorise the Development to remain on the Site:
- (a) for a period of 25 years from the date of the commissioning of the Development, or where the Development is commissioned in phases for a period of 25 years from the date of the commissioning of the last phase of the Development; or
 - (b) until 31st March 2042,
- whichever is the sooner.

Reason: In the interests of visual amenity and safety.

Pre-construction requirements

- (5) The commencement of the Development shall not take place until a scheme to minimise the impact on peat on the Site has been submitted to, approved in writing by, and deposited with LPA. The scheme shall:
- (a) provide for a peat impact minimisation protocol in accordance with paragraphs 19.1.7 to 19.1.11 of the Supplementary Environmental Information, entitled “The Peat Impact Minimisation Protocol (Protocol)”;
 - (b) be governed by the principles, aims and objectives set out in Section 19.2 of the Supplementary Environmental Information;
 - (c) provide for the iterative use of the Scottish Government Carbon Calculator for Wind Farms on Peatlands (“Nayak calculator”) as a guide throughout the peat impact minimisation process; and
 - (d) be implemented as approved.
- (6) No work associated with the Development shall take place on site until a strategy for the mitigation of potential adverse impacts on protected species mitigation strategy (listed in the Schedules of the Conservation of Habitats and Species Regulations 2010 and nesting birds) has been submitted to, approved in writing by, and deposited with

the LPA, in consultation with the CCW and EA. The protected species strategy shall include:

- (a) a comprehensive survey report which details the methods and timings of surveys undertaken following FCW best practice and the results of the surveys;
 - (b) details of mitigation measures to be provided, appropriate for the species present, including a timetable of when the mitigation will be in place;
 - (c) a method statement for the works detailing the methods, timing, and phasing of works which seeks to minimise the impacts on any protected species present, in line with best practice guidelines;
 - (d) proposals for monitoring pre-, during and post-construction, which shall include mechanisms to initiate and direct any remedial works required. The applicant shall undertake remedial works, as directed by the LPA, in consultation with the CCW and shall be implemented as approved.
- (7) No work on the Site shall take place until there has been submitted to, approved in writing by, and deposited with the LPA a scheme for the surveying for reptiles on open areas of the Site and details of a capture and release programme if reptiles are found, including the identification of a suitable receptor site and any fencing works needed. The scheme shall be implemented as approved and the capture and release programme shall be implemented prior to any vegetation clearance in open areas of the Site.
- (8) Where any species listed under Schedules 2 or 5 of the Conservation of Habitats and Species Regulations 2010 are found to be present on any part of the Site then no works associated with the construction of the Development shall take place on that part of the Site until a licence to disturb any such species has been granted in accordance with the aforementioned Regulations and a copy thereof has been produced to the LPA.

Reason: To protect the function of peat as a carbon store by minimising the local impacts of the Development on peat and in the interests of nature conservation.

Phasing of the Development

- (9) The commencement of the Development shall not take place until there has been submitted to, approved in writing by, and deposited with the LPA a detailed phased construction programme. The construction of the Development shall take place in accordance with the approved programme.

Reason: To ensure satisfactory phasing of the Development.

Suppression of Dust and Dirt

- (10) The commencement of the Development shall not take place until there has been submitted to, approved in writing by, and deposited with the LPA a scheme for the provision of wheel cleansing facilities for heavy commercial vehicles and any mobile plant which has an operating weight exceeding three tonnes. Such approved facilities shall be installed in accordance with a timescale to be approved in writing by the LPA and shall be maintained throughout the period of the construction of the Development.
- (11) All heavy commercial vehicles and any mobile plant which has an operating weight exceeding three tonnes associated with the construction of the Development leaving the Site shall on each occasion, prior to leaving, pass through the wheel cleansing facilities provided pursuant to Condition (10).
- (12) The commencement of the Development shall not take place until there has been submitted to, approved in writing by, and deposited with the LPA a scheme employing all reasonable measures for the suppression of dust during the period of the construction of the Development. The measures approved in the scheme shall be employed throughout the period of construction of the Development.
- (13) All open bodied heavy commercial vehicles carrying dust creating materials, for example, dry loose aggregate, cement or soil, into and/or out of the Site shall be sheeted.

Reason: To ensure that mud and deleterious material is not deposited on the public highway.

Construction Method Statement and Construction Environmental Management Plan

- (14) The commencement of the Development shall not take place until a Construction Method Statement (CMS) has been submitted to, approved in writing by, and deposited with the LPA. The CMS shall be implemented as approved. The CMS shall apply the best practicable methods to the mitigation, control and remediation of environmental impact during the construction of the Development, and shall include:
 - (a) detailed contractor arrangements, monitoring and contingency proposals, including a pollution prevention plan, and the identification of an ecological clerk of works;
 - (b) management arrangements setting out how the developer, contractors and regulators will work together to ensure that the provisions of the CMS are carried out;
 - (c) a site construction environmental management plan (CEMP) based on up to date ecological and hydrological surveys undertaken after the felling of trees on the Site and prior ecological and hydrological investigation that provides for the

use of best practice working methods, and for a monitoring scheme to ensure that construction works avoid damage to the environment and that any necessary licences have been obtained;

- (d) a scheme for the protection of watercourses, drainage systems, wetlands and the water environment from impact from the Development including:
 - 1. measures to prevent pollution and methods for the containment of spillages, and
 - 2. detailed measures for stream crossings to allow surface water flows to pass beneath or through tracks, and to prevent any polluting discharge from haul roads from entering the water environment;
- (e) measures to be taken to protect the rights, interests and safety of users of public rights of way crossing the Site, and open access land within the Site during the construction of the Development;
- (f) proposals for the demarcation and protection of Sites of Special Scientific Interest, Biodiversity Action Plan and Local Biodiversity Action Plan habitats and Scheduled Ancient Monuments within or adjoining the Site;
- (g) measures for the management and disposal of contaminated soils;
- (h) measures for the storage of all fuels, oils, cement, concrete and chemicals on impervious bases away from watercourses or water features;
- (i) details, including the volume and source, of any material to be imported to site for backfilling trenches, or constructing access tracks;
- (j) proposals for the management of foul water, including concrete wash-out;
- (k) details of track design and construction, including the excavation and make up of internal access roads and hard standings, including measures to address silt-laden run off from any working, temporary and permanent access roads, soil storage and other engineering operations;
- (l) detailed measures to minimise disturbance to and the impacts on breeding birds;
- (m) details of all handling, storage and re-use on site of soil and peat, including details of receptor areas and methods of translocation where it is proposed to translocate peat from the site;
- (n) details of proposed opening, working and re-instatement of on-site borrow pits; and

(o) any other details which are not specified above but are identified in paragraphs 4.12.1 to 4.12.2 of volume 1 of the Environmental Statement.

- (15) In the event the Development is constructed in phases the CMS and CEMP approved pursuant to Condition (14) shall apply to the first phase and shall be updated and approved by the LPA to contain a set of principles that shall apply to any subsequent phase so that relevant lessons learned during the first phase are applied in any subsequent phase.

Reason: To prevent pollution of the water environment, and to avoid damage to the natural environment.

Construction Traffic

- (16) The commencement of the Development shall not take place until a Traffic Management Plan has been submitted to, approved in writing by, and deposited with the LPA. The approved plan shall include the measures detailed in section 14 of the Environmental Statement and be adhered to throughout the period of the construction of the Development.

Reason: To ensure the safe and efficient use of the strategic road network and local roads.

Turbines

- (17) The maximum height of the turbines at blade tip shall not be more than 145 metres AOD.
- (18) The commencement of the Development shall not take place until the other details of the size, design and external appearance of the turbines have been submitted to, approved in writing by and deposited with the LPA. The Development shall be carried out in accordance with the approved details.
- (19) Unless required for health and safety purposes, or for aviation purposes, no part of the Development shall display any name, logo sign or advertisement or means of illumination without the prior written approval of the LPA.
- (20) Subject to Condition (21), each turbine shall be sited within 50 metres of the location given by the grid co-ordinates specified for it in the table at Schedule 1 and shown for illustrative purposes on Figure 1, annexed hereto, and any associated infrastructure shall be sited accordingly.
- (21) If any of turbine numbers 23, 25, 34, 39, 46, 48, 52, 62 and 82 cannot otherwise be sited in a location where its foundation will be on an area of deep peat, that turbine may be sited anywhere within 100 metres of the grid co-ordinates specified for it in the table at Schedule 1, if it is demonstrated to and approved in writing by the LPA that such

siting would reduce the impact of the Development on deep peat without causing any material adverse change to what any of its other environmental impacts (in particular, landscape and visual impacts) would (but for this increase in micro-siting tolerance) have been, and any associated infrastructure shall be sited accordingly.

- (22) Turbine number 61 shall be sited within 100 metres of the grid co-ordinates specified for it in the table at Schedule 1, in a position to be agreed in writing by the LPA, where the LPA considers that this increase in micro-siting tolerance will not cause any material adverse change to what any of the turbine's other environmental impacts (in particular, landscape and visual impacts) would (but for the increase) have been, and any associated infrastructure shall be sited accordingly.
- (23) The blades of all the wind turbines shall rotate in the same direction.
- (24) If any turbine ceases to be operational for a continuous period of 12 months it shall, unless otherwise agreed in writing by the LPA, be dismantled and removed from the Site. That part of the Site shall be restored in accordance with a detailed scheme to be submitted to the LPA within two months after the said 12 month period and which is subsequently approved in writing by and deposited with the LPA.

Reason: In the interest of visual amenity, and to permit adjustment to enable safe construction in the light of any engineering, environmental or heritage constraints discovered through the requirements of any further surveys undertaken pursuant to the terms of any of the Conditions of this permission. Condition (21) is to minimise the impact on deep peat. Condition (22) is in the interest of protecting private water supplies.

Electricity Substation

- (25) The commencement of the Development shall not take place until details of the size, design and external appearance of the electricity substation building and means of enclosure have been submitted to, approved in writing by and deposited with the LPA. The Development shall be carried out in accordance with the approved details.

Reason: In the interest of visual amenity.

Electricity Cables

- (26) The commencement of the Development shall not take place until details, including the design of trenches and any mitigation measures to minimise impact and drainage of peatland habitats, of the cabling on the Site between the turbines and the on-Site and off-Site electricity substations have been submitted to, approved in writing by and deposited with the LPA. The Development shall be carried out in accordance with the approved details.

Reason: In the interest of visual amenity and to minimise drainage of peatland habitats.

Noise

- (27) All activities associated with the construction of the Development shall be carried out in accordance with British Standard 5228, 2009: Code of practice for noise and vibration control on construction and open sites – Part 1 – Noise, Part 2 - Vibration.
- (28) The level of noise emissions generated by the operation of the Development, measured at dwellings which lawfully exist or having planning permission for construction at the date of this permission, shall not exceed the values set out in Table 1 or Table 2 (as appropriate) when measured and calculated in accordance with the attached Guidance Notes. The coordinate locations to be used in determining the location of each of the dwellings listed in Tables 1 and 2 shall be those listed in Table 3.

Table 1: The $L_{A90,10min}$ dB Wind Farm Noise Level Between 23:00 and 07:00 hours

Property	Standardised Wind Speed at 10 m Height, ms^{-1}						
	4	5	6	7	8	9	10
23 Heol Gwranfryn	43	43	43	43	43	43	43
Maengwyn	43	43	44	45	45	45	45
Waungron	43	44	45	45	45	45	45
Bwllfa Dare Terrace	43	43	43	43	43	44	45
96 Bwllfa Road	43	43	43	43	43	43	43
Greenmeadow Dare Country Park	43	43	43	43	44	45	45
Bryn Hafod House	43	43	43	43	43	43	43
52 Edward Street	43	43	43	43	43	44	45
Fforch Isaf Farm	43	44	45	45	45	45	45
9 Coldra Road	43	43	43	43	43	44	45
47B Brook Street	43	43	43	43	43	44	45
6 Chapel Street	43	43	43	43	43	43	43

80 Villiers Road	43	43	43	43	43	43	43
Llwyn-y-Ffynnon	45	45	45	45	45	45	45
5 Heol Mynydd	43	43	43	43	43	43	43
11 Heol Croeserw	43	43	44	44	45	45	45
Evergreen	44	44	45	45	45	45	45
Old School	44	44	45	45	45	45	45
Troed-y-rhiw	45	45	45	45	45	45	45
3 Heol y Tyla	43	43	43	43	44	44	45
Travancore	43	43	43	43	44	45	45
Fforch-dwm Farm	43	43	43	43	43	45	45
Gyfylchi Farm	43	43	43	43	43	43	44
Glen View	44	44	44	45	45	45	45
Uwch-y-Glyn	43	43	43	43	43	43	44
Bryn Chwyth Farm	43	43	43	43	43	45	45
9 Clyne Terrace	43	43	44	44	45	45	45
Glyn Gwilym Farm	45	45	45	45	45	45	45
41 Parish Road	43	43	43	43	43	45	45

Table 2: $L_{A90,10min}$ dB Wind Farm Noise Level at all other times

Property	Standardised Wind Speed at 10 m Height, ms^{-1}						
	4	5	6	7	8	9	10
23 Heol Gwranfryn	40	40	40	40	40	41	43
Maengwyn	40	42	43	45	45	45	45

Waungron	45	45	45	45	45	45	45
Bwlfa Dare Terrace	38	38	38	38	38	38	38
96 Bwlfa Road	40	40	40	40	41	43	44
Greenmeadow Dare Country Park	42	43	44	45	45	45	45
Bryn Hafod House	40	40	40	40	40	40	41
52 Edward Street	40	40	40	42	44	45	45
Fforch Isaf Farm	41	42	44	45	45	45	45
9 Coldra Road	40	40	42	43	44	45	45
47B Brook Street	40	41	42	43	44	45	45
6 Chapel Street	41	41	42	43	43	43	43
80 Villiers Road	40	40	40	40	41	42	43
Llwyn-y-Ffynnon	45	45	45	45	45	45	45
5 Heol Mynydd	40	40	41	41	41	42	42
11 Heol Croeserw	44	44	45	45	45	45	45
Evergreen	45	45	45	45	45	45	45
Old School	44	45	45	45	45	45	45
Troed-y-rhiw	44	45	45	45	45	45	45
3 Heol y Tyla	40	41	42	44	45	45	45
Travancore	45	45	45	45	45	45	45
Fforch-dwm Farm	40	40	40	40	41	43	45
Gyfylchi Farm	40	40	40	40	41	43	45
Glen View	43	44	45	45	45	45	45
Uwch-y-Glyn	40	41	41	42	43	44	45

Bryn Chwyth Farm	40	40	42	44	45	45	45
9 Clyne Terrace	45	45	45	45	45	45	45
Glyn Gwilym Farm	45	45	45	45	45	45	45
41 Parish Road	42	42	42	43	45	45	45

Table 3: Coordinate locations of the properties listed in Tables 1 & 2

Property	Easting, Northing
23 Heol Gwraingfryn, Rhigos, CF44 9EJ	292204, 205450
Maengwyn, Penderyn, CF44 9JN	295143, 207759
Waungron, Hirwaun Road	296121, 204956
Bwllfa Dare Terrace, Cwmdare, CF44 8UH	297039, 202707
96 Bwllfa Road, Cwmdare, CF44 8UF	298003, 203252
Green Meadow Stables, Dare Valley Country Park, Aberdare, CF44 7PT	298803, 202386
Bryn Hafod House, Glanrhyd Street, Cwmaman, CF44 6LB	299317, 199693
52 Edward Street, Maerdy, CF43 4EA	297104, 198583
Fforch Isaf Farm, Treorchy, CF42 6TF	295363, 198447
9 Coldra Road, Treherbert, CF42 5ST	293107, 199522
47B Brook Street, Blaenrhondda, CF42 5SA	292669, 200111
6 Chapel Street, Blaencwm, CF42 5EA	291818, 198706
80 Villiers Road, Blaengwynfi, SA13 3TN	289440, 196482
Llwyn-y-ffynnon Farm, Glyncorrwg, SA13 3DB	287491, 199678
5 Heol Y Mynydd, Glyncorrwg, SA13 3BT	287194, 199244
11 Heol Croeserw, Croeserw, SA13 3NU	286678, 195727

Evergreen, 114 Brytwn Road, Cymmer, SA13 3EP	285605, 196025
Old School, Abercregan, SA13 3LL	284822, 196611
Troed-y-rhiw, Abercregan, SA13 3LG	284431, 197426
3 Heol Y Tyla, Duffryn, SA13 3EY	284124, 195618
Travancore, Pentwyn Rd, Cynonville, SA13 3HH	282646, 195313
Fforch-dwm Farm, Tonmawr, SA12 9SS	282095, 197226
Gyfylchi Farm, Tonmawr, SA12 9SP	281025, 195624
Glenview, Railway Terrace, Tonmawr, SA12 9ST	280727, 196211
Uwch-y-Glyn, Tonmawr, SA12 9TA	280077, 196765
Bryn-chwyth Farm, Fairyland Road, Tonna, SA11 3QE	278757, 198681
9 Clyne Terrace, Clyne, SA11 4EW	280739, 200392
Glyn Gwilym Farm, Resolven, SA11 4EG	282578, 201354
41 Parish Road, Cwmgwrach, SA11 5SW	287745, 205237

Note to Table 3: The geographical co-ordinates references are provided for the purpose of locating dwellings to which a given set of noise limits applies.

- (29) Where any or all of the installed wind turbines require to be operationally managed in order to meet the noise limits at any given wind speed or wind direction, the same noise constrained modes shall be retained for the operation of the wind turbines under these same wind speed and wind direction conditions unless otherwise required for reasons of maintenance, safety or grid requirements.
- (30) Within 14 days of the receipt of a written request from the LPA or following a complaint to the LPA from the occupant of a dwelling which lawfully exists or has planning permission at the date of this permission, the Company shall, at the Company's expense, employ an independent consultant approved by the LPA to assess the level of noise emissions from the Development at the complainant's property following the procedures described in the attached Guidance Notes.
- (31) The Company shall provide to the LPA the independent consultant's assessment and conclusions regarding the said noise complaint, including all calculations, audio recordings and the raw data upon which those assessments and conclusions are based. Such information shall be provided within 2 months of the date of the written request of the LPA, as per condition (30), unless otherwise extended in writing by the LPA.

(32) In the event that the results of the above measurements indicate that the specified noise limits have been exceeded at any dwelling then, within 21 days of notification in writing of this by the LPA unless otherwise extended in writing, the Company shall submit in writing to the LPA:

- a scheme of noise control measures to achieve compliance with noise levels in Condition (28) above;
- a timetable for implementation of the noise control measures;
- a programme of monitoring to demonstrate the efficiency of the noise control measures.

The noise control measures will be implemented and the monitoring undertaken in accordance with the scheme and timetable agreed in writing by the LPA.

(33) Wind speed, wind direction and power generation data shall be continuously logged and provided to the LPA at its request and in accordance with the attached Guidance Notes within 28 days of such request. Such data shall be retained for a period of not less than 12 months.

(34) The commissioning of the Development shall not take place until there have been submitted to and approved by the LPA details of a nominated representative of the Company to act as a point of contact for local residents (in connection with Conditions (28) – (33)) together with the arrangements for notifying and approving any subsequent change in the nominated representative. The nominated representative shall also have responsibility for liaison with the LPA in connection with any noise complaint(s) made during the operation of the Development.

Reason: In the interests of local amenity.

Blasting

(35) All blasting associated with the construction of the Development shall only take place in accordance with the best practice guidance contained in Appendix L: Best Practice for Blasting of Minerals Technical Advice Note 2 January 2009.

Reason: In the interests of local amenity.

Local Liaison Committee and Complaints Procedure

(36) Prior to the commencement of the Development the Company shall establish a local liaison committee made up of representatives of the Company and representatives of the main contractors for the Development. The Company shall also invite the LPA and representatives of local communities to join the local liaison committee. The Company shall provide a full secretariat service, determine when to hold meetings and provide a suitable venue.

- (37) The local liaison committee referred to in Condition (36) shall provide a forum in which consultation and the dissemination of information can take place to consider aspects of the Development both during construction and operation on the locality. The local liaison committee shall meet on a regular basis and at least once every quarter unless otherwise agreed by the local liaison committee.
- (38) Prior to the commencement of the Development the Company shall establish a set of procedures for dealing with complaints by members of the local community, such set of procedures to be approved in writing by the LPA and adhered to throughout the construction and operation of the Development.

Reason: To keep local residents informed of how the Development is progressing and to ensure a proper mechanism for dealing with complaints during the construction and operation of the Development.

Pollution Incident Response Plan

- (39) The commencement of the Development shall not take place until a Pollution Incident Response Plan has been submitted to, approved in writing by and deposited with the LPA, in consultation with the EA. The approved plan shall be implemented during the construction and installation of the turbines, access tracks, substation, cabling and all other ancillary works.

Reason: To ensure that measures are in place in the event of a pollution incident.

Archaeology

- (40) The commencement of the Development shall not take place until a scheme of archaeological investigation and a programme for the carrying out of any subsequent work that is considered necessary by the LPA in the light of the results of such investigation have been submitted to, approved in writing by and deposited with the LPA. The approved scheme and programme shall thereafter be implemented.

Reason: To allow the surveying of the site for archaeological artefacts and the recovery of any important archaeological discovery.

Contamination

- (41) In the event that contamination is found at any time when carrying out the approved Development that was not previously identified under Condition (14g), work on the contaminated part of the Site shall cease immediately and shall be reported in writing to the LPA. A Desk Study, Site Investigation, Risk Assessment and where necessary a Remediation Strategy must be undertaken in accordance with the document "Land Contamination: Model Procedures for the Management of Land Contamination CLR11 (*Environment Agency September 2004*)". The documents shall be submitted to and

agreed in writing with the LPA prior to the resumption of work on that part of the Site. Any Remediation Strategy shall be implemented as approved.

- (42) Prior to commencement of any phase of the main Development, a verification report demonstrating completion of the works required pursuant to Condition (14g) in respect of that phase, and any works approved under a Remediation Strategy pursuant to Condition (41) in respect of that phase shall be submitted to and approved, in writing, by the LPA. The verification report shall include results of sampling and monitoring carried out in respect of those works.
- (43) If a verification report submitted pursuant to Condition (42) indicates that the remediation was not effective, construction shall not be carried out on the affected part(s) of the Site until the remediation has been effective. In such case, the Company shall submit for approval by the LPA a programme of contingency action to address any contamination identified pursuant to Condition (14) or (41) but not so far satisfactorily dealt with, and carry out that programme once it has been approved. The process of submitting a verification report and submitting and carrying out a programme of contingency action shall be repeated until remediation has been effective.
- (44) Piling or any other foundation designs using penetrative methods shall not be permitted other than with the express written consent of the LPA, 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 via a scheme that shall be submitted to and approved in writing by the LPA before any such piling or designs are carried out. The scheme shall include details of the method, duration and hours of operation of any piling works and shall be implemented as approved.

Reason: To ensure that contamination is controlled and not allowed to cause harm to the health of human beings nor impact on the integrity of environmentally sensitive areas.

Invasive Species

- (45) The commencement of the Development shall not take place until the Company has prepared a method statement for the appropriate control and management of invasive species, such as Japanese Knotweed (*Fallopia japonica*), Rhododendron (*Rhododendrum pontium*) and Himalayan Balsam (*Impatiens glandulifera*). The method statement shall be submitted to and approved in writing by the LPA, in consultation with the CCW and the EA. The approved method statement shall be implemented as approved and adhered to throughout the period of the construction of the Development.
- (46) Any records of invasive species found on the Site should be copied to the South-East Wales Biodiversity Records Centre, <http://www.sewbrec.org.uk/> and the GB Non-

Native Species Secretariat,
<https://secure.fera.defra.gov.uk/nonnativespecies/home/index.cfm>

Reason: To limit the spread of invasive species of plants.

Habitat Management Programme

- (47) The commencement of the Development shall not take place until a Habitat Management Programme (“HMP”) for the Site has been submitted to the LPA. If the construction of the Development is to take place in phases, the HMP shall make provision for the subsequent phased submission of detailed phase specific habitat management plans, which shall relate to the phased construction of the Development approved pursuant to Condition (9). Construction of any phase of the Development shall not commence until the related phase specific habitat management plan has been agreed in writing by the LPA, in consultation with the CCW and the EA. The HMP and phase specific habitat management plans shall be implemented as approved.
- (48) The HMP approved pursuant to Condition (47) shall include, but not be limited to, provision for:
- (a) objectives for the management and restoration of the natural habitat of the Site;
 - (b) best practice methods for the management, restoration and monitoring of the natural habitat of the Site;
 - (c) habitat management areas identified by a map or maps;
 - (d) the restoration and maintenance of the natural hydrological regime of peat bodies, their carbon storage and sequestration potential;
 - (e) the restoration and maintenance of blanket bog, active bog, wet and dry heath and marshy grassland or other suitable natural habitat, as appropriate to soil conditions, hydrology and topography, with bog being the objective for deep peat;
 - (f) the restoration of native woodland where appropriate, with a recommended emphasis on mineral and organic soils on steeper slopes;
 - (g) the management of stream corridors for nature conservation potential;
 - (h) the management of habitat for nightjar and honey buzzard prioritising feeding and breeding habitat away from turbines where this does not compromise the objectives for peat and bog;

- (i) the improvement of the biodiversity potential of the Site by maintaining and improving wider habitats and ecological functionality, with a emphasis on supporting habitats for appropriate statutory protected species;
 - (j) appropriate habitat management regimes, including grazing if appropriate;
 - (k) avoidance of mulching of removed vegetation where this would significantly impede the natural regeneration; and
 - (l) provisions for monitoring, review and revisions in instances where monitoring identifies that the objectives set out in paragraph 20.1.4 of the Supplementary Environmental Information are not being achieved.
- (49) Any monitoring reports produced pursuant to Condition (47) shall be copied to the appropriate environmental records office.

Reason: In the interest of nature conservation.

Ecological Steering Group

- (50) The commencement of the Development shall not take place until there has been submitted to the LPA, for approval in writing, details for the establishment of an Ecological Steering Group (“ESG”). The details shall include those bodies invited to be members of the ESG and shall include the LPA, the CCW, the EA, the FCW and the RSPB. The ESG shall be established in accordance with the approved details, and upon establishment the ESG shall invite any other body into the ESG as it considers appropriate. The Company may attend any meetings of the ESG but shall not be a member.
- (51) The ESG established pursuant to Condition (50) shall be consulted on:
- the scope and methodologies of pre-construction surveys;
 - the Habitat Management Plans; and
 - the Construction Environmental Management Plan;

and shall provide advice to the LPA and the Ecological Clerk of Works and Peat Protocol Officer in respect of these documents.

Reason: To ensure the Development is constructed in as environmentally sensitive manner as is reasonably practicable.

Ecological Clerk of Works and Peat Protocol Officer

- (52) The commencement of the Development shall not take place until there has been submitted to, approved in writing by, and deposited with the LPA a scheme for the appointment of an Ecological Clerk of Works and Peat Protocol Officer to be employed by the Company. The scheme shall be implemented as approved. All construction

(including works covered by pre-construction project documentation), re-instatement and restoration works within the Site shall be overseen by the Ecological Clerk of Works and Peat Protocol Officer. The Company shall allow the Ecological Clerk of Works and Peat Protocol Officer to provide input and advice in respect of plans for and to influence its actions (and additional actions should method statements prove either not to be effective or ineffectively executed) at affected locations within the Site. Any written reports produced by the Ecological Clerk of Works and Peat Protocol Officer shall be copied to the ESG established pursuant to Condition (50) above. For the avoidance of doubt the term “pre-construction project documentation” referred to above shall mean a reference to one or more of the following documents:

- any scheme or plan approved pursuant to Condition (14);
- the pollution incident response plan approved pursuant to Condition (39);
- the invasive species method statement approved pursuant to Condition (45);
- any approved Site waste management plan; and
- any approved water management plan.

- (53) The Ecological Clerk of Works and Peat Protocol Officer shall be given direct access to the relevant Project Manager(s) at the Company to report any construction activity which in his/her/their view would cause irreversible damage or is outside the terms of an agreed or approved method statement, plan or scheme. The Company shall stop such works until such time as the situation has been investigated and it is possible for works to resume in accordance with the approved method statement, plan or scheme.

Reason: To ensure the Development is constructed in as environmentally sensitive manner as is reasonably practicable.

Aftercare

- (54) The commencement of the Development shall not take place until a Project Reinstatement, Restoration and Aftercare Management Plan has been submitted to and approved in writing by the LPA, in consultation with the CCW and the EA. The approved Plan shall include a programme for the monitoring and aftercare of areas restored following construction works under the Plan and the Plan shall be implemented as approved. Any aftercare shall be for a period of 10 years from its start or such longer or shorter period as may be agreed in writing by the LPA.
- (55) If monitoring or aftercare carried out pursuant to Condition (54) indicate that corrective action is required to improve the effectiveness of any agreed restoration and/or mitigation then proposals of measures to be undertaken shall be submitted to the LPA for approval in writing. Any corrective action shall be implemented by the Company at a time to be agreed with the LPA.

Reason: To ensure that the Development is constructed in as environmentally sensitive manner as is practicably possible through the restoration of ground affected by construction works.

Hydrology

- (56) The commencement of the Development shall not take place until a scheme for the environmental monitoring of local watercourses within the Site has been submitted to and approved in writing by the LPA. The scheme shall identify the relevant baseline water quality levels and be supported by information such as the method and frequency of monitoring and contingency plans to be implemented should any pollution or degradation caused by the Development be recorded. The scheme shall be implemented as approved.
- (57) The commencement of the Development shall not take place until a monitoring scheme to assess peat body water levels and quality within the Site has been submitted to and approved in writing by the LPA and shall include:
- (a) pre construction measurement of water levels;
 - (b) post construction monitoring of the same areas as (a);
 - (c) mechanisms to mitigate any identified impacts; and
 - (d) hydrological regime and catchment studies;

The scheme shall be implemented as approved.

Reason: To ensure that the development does not cause any detriment to water quality of local watercourses and for the satisfactory monitoring of peat body water levels.

Television and radio reception

- (58) The commencement of the main Development shall not take place until a scheme has been submitted to and approved in writing by the LPA to secure the investigation and alleviation of any electromagnetic interference to television or radio reception caused by the Development at premises lawfully in existence at the date of this permission. The scheme and any alleviation measures shall be implemented as approved.

Reason: To ensure that existing TV and radio communications are not adversely affected by the Development.

Shadow Flicker

- (59) The commissioning of the Development shall not take place until a scheme to satisfactorily alleviate the incidence of 'shadow flicker' at any affected premises lawfully in existence at the date of this permission has been submitted to and approved in writing by the LPA. The scheme shall include details of the siting of photocells and measures to control, re-orientate or shut down particular turbines. Unless otherwise agreed in writing with the LPA, any turbine producing 'shadow flicker' effects at any occupied dwelling which existed at the time this permission is granted shall be shut down and the blades remain stationary until the conditions causing those 'shadow flicker' effects have passed. The scheme shall be implemented as approved throughout the period of the operation of the Development.

Reason: To ensure that shadow flicker does not affect existing residents.

Public Rights of Way

- (60) Public rights of way across the Site shall be maintained so as to make it convenient for the exercise of the public rights of way, subject to any diversion or temporary closure orders made in respect of any public rights of way on the Site by the LPA.

Reason: To ensure that the Development causes minimal interference to public rights of way.

Cessation of works, restoration and aftercare of the Site

- (61) Within 12 months of the Site ceasing to be used to produce electricity the Company shall submit to the LPA, for approval in writing, a scheme for the demolition and removal of the surface elements of the Development and foundations to a depth of at least 1.2 metres below ground level (as it was when the Development ceased to be used to produce electricity), which shall be carried out as approved and at the Company's expense.
- (62) The scheme referred to in Condition (61) shall include, but not be limited to:
- (i) details of all structures and buildings which are to be demolished;
 - (ii) details of the means of removal of materials resulting from the demolition; and
 - (iii) the phasing of the demolition and removal.
- (63) Within 3 months of the Development being removed from the Site pursuant to Condition (61) there shall be submitted to and approved in writing by, and deposited with the LPA, in consultation with the CCW and the EA a scheme or schemes of

landscaping, soil replacement, restoration and monitoring. Such scheme or schemes shall include details of earthmoving, planting and the phasing of implementation and shall be implemented as approved and at the Company's expense.

- (64) On completion of the restoration work carried out pursuant to Condition (63), any remaining fixed equipment, machinery and buildings erected or brought onto the Site for the purpose of the demolition and removal scheme approved pursuant to Condition (61) shall be removed from the Site.
- (65) All roads on the Site associated with the Development shall be removed as soon as their purpose in connection with the Development has been fulfilled, provided that such roads are not required for forestry activities or restoration works. The land shall then be restored in accordance with the scheme(s) approved pursuant to Condition (63).
- (66) Any restored area on the Site which is affected by local settlement or surface ponding, other than ponding for ecological purposes, shall be regraded in accordance with a scheme which shall be submitted to, approved in writing by, and deposited with the LPA. The scheme shall be implemented as approved.
- (67) Within 6 months after the scheme(s) of restoration has/have been approved pursuant to Condition (63) there shall be submitted to, approved in writing by, and deposited with, the LPA a scheme or schemes for the aftercare of the Site for a period of 2 years following the completion of the approved measures. The scheme shall be implemented as approved.

Reason: To ensure that the Development is properly decommissioned after it ceases to generate electricity and the Site is reinstated.

National Grid Gas Assets

- (68) The commencement of any phase of the Development shall not take place until a method statement relevant to the phase showing how the Company intends to protect the existing high pressure gas pipeline which crosses the Site has been submitted to, approved in writing by, and deposited with the LPA, in consultation with National Grid Gas.

Reason: To ensure that existing operations on the Site or adjacent to it are not affected by the construction or operation of the Development.

Subsidence

- (69) Prior to the commencement of the Development, Stability Reports for turbine numbers 14 to 18 inclusive shown for illustrative purposes on Figure 1 shall be submitted to, approved in writing by and deposited with, the LPA. The purpose of these reports shall be to prescribe construction methods for these turbines that will ensure that reasonably foreseeable risks arising from the past, present or future mining activity do not

adversely affect their safety, stability or operational effectiveness. The reports shall include foundation details of associated buildings erected on the Site and a completion report containing full information on the investigation and treatment of the Site, including, where relevant, arrangements for the longer-term monitoring of any subsidence and maintenance of the integrity of any foundations and structures. The construction of each turbine shall be carried out in accordance with the relevant approved Stability Report.

- (70) Prior to their construction, Stability Reports for turbine numbers 1 to 11 inclusive shown for illustrative purposes on Figure 1 shall be submitted to, approved in writing by and deposited with, the LPA. The purpose of these reports shall be to prescribe construction methods for these turbines that will ensure that reasonably foreseeable risks arising from the past, present or future mining activity do not adversely affect their safety, stability or operational effectiveness. The reports shall include foundation details of associated buildings erected on the Site and a completion report containing full information on the investigation and treatment of the Site, including, where relevant, arrangements for the longer-term monitoring of any subsidence and maintenance of the integrity of any foundations and structures. The construction of each turbine shall be carried out in accordance with the relevant approved Stability Report.

Reason: To ensure that the sterilisation of mineral extraction does not occur.

Date: 8 May 2012

Giles Scott
Head
National Infrastructure Consents
Department of Energy and Climate Change

NOISE GUIDANCE NOTES

These notes form part of conditions (28) to (34) above. They further explain these conditions and specify the methods to be deployed in the assessment of complaints about noise emissions from the wind farm. Reference to ETSU-R-97 refers to the publication entitled "The Assessment and Rating of Noise from Wind Farm" (1997) published by the Energy Technology Support unit (ETSU) for the Department of Trade and Industry (DTI).

Note 1

Values of the $L_{A90,10min}$ noise statistic shall be measured at the complainant's property using a sound level meter of EN 60651/BS EN 60804 Type 1, or EN 61672 Class 1 quality (or the replacement thereof) set to measure using a 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 shall be calibrated in accordance with the procedure specified in BS 4142: 1997 (or the replacement thereof). These measurements shall be made in such a way that the requirements of Note 3 shall also be satisfied.

The microphone should be mounted at 1.2-1.5 m above ground level, fitted with a two layer windshield (or suitable alternative approved in writing from 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 m away from the building facade or any reflecting surface except the ground at a location that shall be agreed with the Local Planning Authority.

The $L_{A90,10min}$ measurements shall be synchronised with measurements of the 10-minute arithmetic mean average wind speed and with operational data, including power generation information for each wind turbine, from the turbine control systems of the wind farm.

The wind farm operator shall continuously log arithmetic mean wind speed and arithmetic mean wind direction data in 10 minute periods from the hub height anemometers located on the site meteorological masts unless otherwise agreed with the Local Planning Authority, to enable compliance with the conditions to be evaluated. The mean wind speed data shall be 'standardised' to a reference height of 10 metres as described in ETSU-R-97 at page 120 using a reference roughness length of 0.05 metres. It is this standardised 10 m height wind speed data which is correlated with the noise measurements of Note 2(a) in the manner described in Note 2(c).

Note 2

The noise measurements shall be made so as to provide not less than 20 valid data points as defined in Note 2 paragraph (b). Such measurements shall provide valid data points for the range of wind speeds, wind directions, times of day and power generation requested by the Local 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. At its request the wind farm operator

shall provide within 28 days of the completion of the measurements all of the data collected under condition (30) above to the local planning authority.

Valid data points are those that remain after all periods during rainfall have been excluded. Rainfall shall be assessed by use of a rain gauge that shall log the occurrence of rainfall in each 10 minute period concurrent with the measurement periods set out in Note 1(c) and is situated in the vicinity of the sound level meter.

A least squares, "best fit" curve of a maximum 2nd order polynomial or otherwise as may be agreed with the local planning authority shall be fitted between the standardised mean wind speed (as defined in Note 1 paragraph (d)) plotted against the measured LA90,10min noise levels. The noise level at each integer speed shall be derived from this best-fit curve.

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 shall be used.

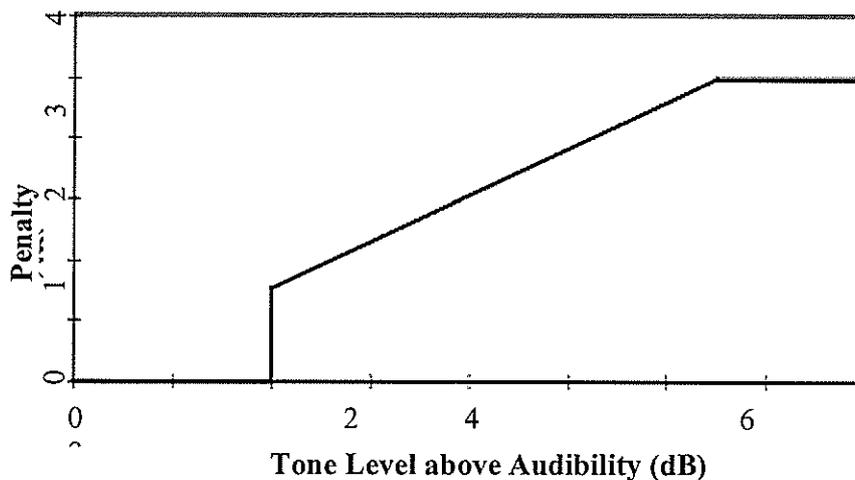
For each 10-minute interval for which LA90,10min data have been obtained as provided for in Note 1, a tonal assessment shall be performed on noise emissions during 2-minutes of each 10-minute period. The 2-minute periods shall be regularly spaced at 10-minute intervals provided that uninterrupted clean 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, as described in Section 2.1 on pages 104-109 of ETSUR-97, shall be reported.

For each of the 2-minute samples the margin above or below the audibility criterion of the tone level difference ΔL_{tm} (Delta Ltm), shall be calculated by comparison with the audibility criterion, given in Section 2.1 on pages 104-109 of ETSU-R-97.

The margin above audibility shall be 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, a value of zero audibility shall be substituted.

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

The tonal penalty shall be derived from the margin above audibility of the tone according to the figure below.



Note 4

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 with any derived penalties resulting from the application of Notes 3.

If the wind farm noise level (including the application of any penalties derived in accordance with these Guidance Notes) is above the limit set out in the conditions, measurements of the influence of background noise shall be made to determine whether or not there is a breach of condition. This may be achieved by repeating the steps in Note 1 & 2 with the wind farm switched off in order to determine the background noise, L3, at the assessed wind speed. The wind farm noise at this wind speed, L1, is then calculated as follows, where L2 is the measured wind farm noise level at the assessed wind speed with turbines running but without the addition of any penalty:

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

The level is re-calculated by adding the penalties (if any) to the wind farm noise.

SCHEDULE 1

Table: the following grid co-ordinates are those referred to in Conditions (20) to (22) above inclusive.

Turbine Number	Easting	Northing
1	283,715	197,736
2	283,562	197,379
3	283,651	197,009
4	283,145	197,088
5	283,185	198,512
6	282,604	198,592
7	283,066	198,887
8	283,576	199,183
9	283,730	199,570
10	283,608	198,811
11	283,543	198,272
12	287,926	202,465
13	287,500	202,146
14	286,946	201,493
15	286,507	200,975
16	286,055	200,691
17	285,484	200,597
18	285,696	200,266
21	287,550	201,699
22	287,994	202,000
23	288,412	202,314
24	288,773	202,753
25	289,316	202,904

26	288,668	202,010
27	288,654	201,619
28	288,845	201,279
29	289,137	201,874
30	289,116	202,326
31	290,105	202,353
32	290,113	202,729
33	289,947	203,067
34	290,444	202,080
35	290,783	202,476
38	291,105	202,210
39	290,819	201,855
40	291,349	201,872
41	291,105	201,484
42	290,210	201,707
43	289,993	201,301
44	290,530	201,429
45	290,611	201,069
46	291,051	200,884
48	290,519	200,673
49	290,756	200,380
50	291,298	200,532
51	290,089	200,398
52	290,248	200,052
53	290,671	199,861
54	290,411	199,474
55	290,880	199,363

56	291,175	199,757
57	289,975	199,680
58	289,720	199,312
59	289,700	200,020
60	289,961	198,990
61	289,697	198,578
62	290,332	198,362
63	290,291	198,723
64	292,927	202,362
65	293,120	202,775
66	293,500	203,099
67	293,478	202,502
68	293,900	202,853
69	294,351	202,698
70	294,628	202,401
71	293,637	202,159
72	294,201	202,086
73	293,950	201,718
74	294,404	201,565
75	293,096	202,021
76	293,408	201,679
77	293,620	201,310
79	294,197	201,042
81	294,494	200,765
82	294,561	200,399
83	294,545	200,005

Appendix C – Mining Statement of Common Ground (Hirfynydd Wind Farm Appeal)

Section 78 Town and Country Planning Act 1990

**Town and Country Planning Appeals (Determination by Inspectors) (Inquiries Procedure)
(Wales) Rules 2003 (as amended)**

Applicant: Wind Ventures UK Limited

Local Planning Authority: Neath Port Talbot County Borough Council

Application by Wind Ventures UK Limited for a revised scheme comprising 9 (previously 14) wind turbines on farmland adjoining forestry East of Crynant and South of Seven Sisters, Neath.

STATEMENT OF COMMON GROUND between:

Neath Port Talbot County Borough Council and Energybuild Limited

Planning Inspectorate Reference: APP/Y6930/A/13/2209942

Hirfynydd Wind Farm

August 2014

Areas of Agreement

The Mine

1. Energybuild is responsible for satisfying all claims made under the Coal Mining Subsidence Act 1991 in relation to subsidence damage which affects land within the Area of Responsibility for the time being designated under their operating licence.
2. In order to secure that Energybuild are able to meet their present and future liabilities in relation to subsidence damage, the Coal Authority requires Energybuild to provide security, in a form and substance approved by the Authority, in relation to their subsidence liabilities.
3. For the purposes of assisting the Coal Authority in determining the amount or value of the security, Energybuild is required under the terms of licence to submit :-
 - (a) Plans and sections showing the date of commencement, the extent, location and nature of the coal-mining operations that the Licensee intends to carry out during the following twelve months;
 - (b) The best estimate of the Licensee, prepared on a basis satisfactory to the Authority, of the anticipated cost of all undischarged and projected claims in relation to subsidence damage;
 - (c) Details of the security proposed by the operator to meet the requirements of the operating licence.
4. The estimated cost of discharging claims in respect of subsidence damage to Hirfynydd wind farm would be subject to individual technical assessment which would include detailed consideration of :-
 - a) the subsurface ground conditions;
 - b) the structural design of the wind farm including :-
 - foundations,
 - form and size of the structures,
 - construction materials,
 - soundness and vulnerability to ground movement;
 - c) the extent of predicted ground movements;
 - d) the likelihood and extent of damage to the structures.
5. Estimates of vertical subsidence, horizontal ground strain, displacement and slope should be made by reference to the National Coal Boards' Subsidence Engineers' Handbook having due regard to its limitations. The calculations should have due regard to any definitively proposed mine layout, operating depths, thickness of extraction and the dimensions and programme of extraction of the mine workings. Where mine layouts cannot be regarded to be definitive, consideration is required to be given to reasonably foreseeable mine layouts.
6. A westward expansion of the mine is proposed in Energybuild's planning application as shown indicatively on Drawing Nos CA10601-001RevA and 002RevA.

7. The operating licence includes for 5 seams. However, the target seams are the Nine Feet and Eighteen Feet, which are ultimately proposed to be worked in all of the zone areas. Indicative mine layouts for a forward 15 year period are shown on the drawings referred to in paragraph 6.
8. Mining operations are currently taking place in the Eighteen Feet seam within Zone 1 and will then progress in a westerly direction into the Nine Feet seam in Zone 2 as shown in Drawing No. CA 10601-001RevA.

The Wind Farm

9. The proposed Hirfynydd Wind farm is not currently within the Area of Responsibility but falls within Zones Z2 and Z3 as shown on Drawing No CA10601-004RevA within Energybuild's planning application.
10. The wind turbines will have a limited tilt tolerance which is to be specified by the turbine manufacturer but is yet to be agreed. The limits will need to have regard to the construction accuracy, settlement loading, operational loads and mining induced movements.
11. Wind turbines utilise complex condition monitoring sensors and software. They are designed to be capable of tolerating an amount of tilt during operation. Excessive tilt would however be expected to result in damage being caused to the turbine and render it unsafe to operate.
12. Design features, to mitigate the impact of subsidence on wind turbines, are required to be designed and built into the foundations and/or turbines to avoid damage occurring.
13. Provided that design features are fully effective, the likelihood and extent of remedial work to a wind turbine, with regard to mining subsidence, could be expected to be limited to the effects of differential subsidence of the ground beneath the turbine which may cause the structure to tilt. Within reason, the vertical component of movement does not in itself pose an issue for wind turbines but tilt could cause damage to the turbines during the working life of the mine.

The Wind Farm and Subsidence

14. On the basis of Energybuild's mining proposals all the turbines within the Hirfynydd Wind Farm would potentially be affected by mining subsidence from the exploitation of both the Nine Feet and Eighteen Feet seams of coal.

15. The programme for the Wind Farm construction and the mine development means that the wind farm will have been constructed prior to the identification of a definitive mine layout. This therefore precludes a phased wind farm construction in sympathy with the mining operations. Additionally, in view of the extensive area of coal within influencing distance of the site of the wind farm, each turbine could be affected by a number of individual subsidence events over its design life (25yrs) exposing the individual turbines to multiple episodes of displacement and tilt that would require the turbine design to facilitate multiple mitigation and remedial work to keep them operational.
16. It is agreed that utilising a multi-entry mine layout and leaving stable coal pillars in-situ would be likely to result in minimal subsidence which is unlikely to have an adverse effect on the operation of the wind turbines. However, it is not the stated intention of Energybuild to leave unworked stable pillars in-situ.
17. Amendments to the mine layout to prevent damage to the wind farm in the absence of any fully effective mitigation measures could result in sterilisation of a significant proportion of the coal resource within the support area for the wind farm. The proportion sterilised would be governed by the acceptable tolerance of the turbines, design of appropriate supporting pillar sizes based on internationally recognised factors of safety to ensure that any surface subsidence would be negligible. The support area for the wind farm is estimated to include some 22 million tonnes of run of mine coal collectively within the Nine Feet and Eighteen Feet seams. In order to mine and avoid damage to the turbines, a system of mining would need to be adopted with stable pillars being left in-situ giving long term support to the overlying surface which would reduce extraction rates to c.23% (5m Tonnes) compared to between approximately 69-88% recovery (15.2-19.4m Tonnes) expected from the proposed longwall, shortwall and multi entry with secondary extraction proposals.
18. Subsidence estimates based on an agreed reasonably foreseeable, but at this stage conjectured, mine layout using the Subsidence Engineers' Handbook (SEH) involving the working of 300m wide panels or the equivalent thereof in both the 9ft and 18ft seams laid out in parallel and overlaid panel-on-panel, indicates that the estimated maximum tilt that the turbine foundations could be subjected to resulting from mining subsidence is as follows:
 - a) Mining only the Nine Feet Seam – 1 in 81 (0.71°);
 - b) Mining only the Eighteen Feet Seam – 1 in 72 (0.80°);
 - c) Combined mining operations in both the Nine and Eighteen Feet seams – 1 in 38 (1.51°);
 - d) Combined effect for both seams having regard to SEH limitations and including a South Wales factor to reflect the complex geological structure in this region (+20%) based on caution – 1 in 32 (1.79°).
 - e) Combined effect of the indicative mine layouts referred to in the ES, shown on the drawings referred to at paragraph 6, having regard to the combination of

longwall panels and multi-entry with secondary pillar extraction utilising the basic principles set out in SEH and adding a local factor of 25% based on caution – 1 in 38 (1.51°).

19. No predictive models are available for estimating the level of subsidence caused by partial pillar extraction used in conjunction with bord and pillar or multi entry working. However, it is agreed that 100% pillar extraction would result in similar levels of subsidence, and therefore tilt, as the longwall mining referred to 18 above. It was also agreed that the level of subsidence would be likely to be proportional to the percentage of extraction (such that, for example, pillar extraction of 80% in both seams would result in a 1:48 (1.19°) tilt, without applying a cautionary South Wales factor.

20. Design Features and Remedial Measures

21. In principle design features are considered in theory to be able to in varying degrees mitigate/remediate mining induced damage. The appellant has provided notional proposals in the URS report dated March 2013 and in other technical references, but as yet these have not been demonstrated as feasible or practicable to NPT/Energybuild's satisfaction to protect against the predicted subsidence at this site.
22. Whilst the principle of design features is agreed, insufficient details are currently available to provide for further agreement for the parties to be able to agree that the reasonably foreseeable predicted levels of mining induced subsidence and tilt can be adequately mitigated. It follows that the ability of the design features/remedial works to adequately mitigate the predicted levels of tilt caused by mining induced subsidence has been included as an item in dispute for the time being. In designing the wind farm it is WV UK Ltd's stated intention is that they are not seeking to limit or constrain the method of mining or mining layout.
23. Liaison between the mine owner / operator and the wind farm developer / operator during the mining operations, in particular the annual review of mine plans, can allow planning of remedial measures where needed on the basis of the projected encroachment of mine workings and the related predictions of subsidence, strain and tilt. Such a liaison between organisations controlling or maintaining infrastructure and operating a deep mine have been common practice in UK coal mining. Such liaison cannot in itself however be relied on to avoid the occurrence of damage to the turbines but would assist in designing and incorporating preventive measures and remedial measures.
24. Monitoring of ground movements on and between the turbines is essential as part of the liaison and remediation planning process. Similarly, such monitoring cannot in itself or in combination with liaison between the mine and wind farm operators be relied on to avoid the occurrence of damage to the turbines but would assist in designing and incorporating preventive measures and remedial measures.

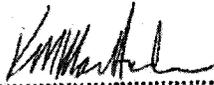
Areas of Dispute with Wind Ventures UK Ltd.

25. Whilst every effort was made to come to an agreement on all the technical issues raised by this planning appeal a number of areas still remain in dispute with Wind Ventures UK Ltd.

26. It is agreed between Energybuild Ltd and Neath Port Talbot County Borough Council that the following are the main technical issues which require further investigation and agreement and if not resolved prior to the Inquiry, will be in dispute at the Inquiry:

- a) Identification of the specific tolerance of the wind farm design;
- b) Implications of the findings of a site investigation which is not proposed to be carried out by WV until after planning consent is obtained;
- c) Ability of the proposed design features/remedial works to adequately protect against the predicted levels of tilt caused by mining induced subsidence.

K M MacAndrew, Golder Associates



(on behalf of Neath Port Talbot County Borough Council

D C Wilshaw, Wardell Armstrong



(on behalf of Energybuild)

Date

13 August 2014