From: Charles W Green [mailto:[redacted]
Sent: 18 December 2014 23:40
To: MYG
Subject: Mynydd y Gwynt Windfarm: for the attention of Emré Williams (Case Manager)

Dear Mr Williams

I attach SNAP's written submission for today's deadline, for the attention of yourself and Mr Asquith please.

Although the whole document, including appendices, is some 4,500 words long, the main document is only about 1,000 words long and serves as a summary.

Please let me know if your 'library' does not contain any of the documents referenced in the footnotes and I will email them to you.

I would like to reserve the right, please, to attend and speak at any OFH or ISH, depending on the agenda for such hearings.

Best wishes

Charles Green

On behalf of SNAP

C W Green
[redacted]

Shropshire North Against Pylons (SNAP)

[redacted]

Mr Philip Asquith
Examining Authority
c/o The Planning Inspectorate
3/18 Eagle Wing
Temple Quay House
2 The Square
Bristol, BS1 6PN

18 December 2014

Dear Mr Asquith

Application by Mynydd y Gwynt Ltd for an Order Granting Development Consent for the Mynydd y Gwynt Wind Farm

1. Shropshire North Against Pylons (SNAP) made a submission dated 12 November 2014 and was permitted to participate in the Preliminary Meeting on 20 November as an 'Other Person'. The Examining Authority's First Written Questions referred to these submissions at Ref No. 1.8. This present written representation further addresses the points raised, as well as other references in the ExA's First Written Questions.

ExA's First Written Questions, Ref No. 1.8

2. At the Preliminary Meeting the applicant maintained that the correct approach to grid connection was that adopted for Clocaenog Forest, namely that *"there were no obvious reasons why the grid connection might not be approved"*. This approach was similar to that adopted for Brechfa Forest West. The relevant parts of the decision letters for both cases are included here as Appendix 1. For convenience, paragraph 4.9.3 of EN-1 is also reproduced on Appendix 1.

3. Two points arise from the approach taken in these decision letters:

   i) Our consultation response to the Mynydd y Gwynt ES noted[1] that this interpretation of policy is not accepted as being appropriate to the Mid Wales Connection; that the NG MWC Project is subject to major public opposition throughout North Shropshire and Mid Wales; and that the Welsh Government takes the view that such infrastructure is unnecessary to serve wind farms predicated by TAN 8 (see the quotation below from John Griffiths' letter of July 2011). It cannot be assumed that there is no obvious reason why permission would be refused for this grid connection scheme.

[1] See our attached Appendix 3, page 2, paragraph 6 (consultation response submitted in July 2013)

Furthermore, our previous submission (paragraphs 6 and 7) noted that a potential obvious reason for refusal by the Secretary of State has already been identified by an Inspector, for an essential part of the integral grid connection proposals envisaged by the Mynydd y Gwynt windfarm proposal. That is because the proposal is against Welsh Government policy as set out in Mr Griffiths' letter of (6th) July 2011 which stated that:

Provided development is limited to the maximum capacities above, we do not believe that there is a need for the large, visually intrusive, high voltage grid network infrastructure and associated sub station of the kind proposed within Mid Wales.

ii) In both cases the SoS has failed to comment on the first sentence of 4.9.3, namely the absolute imperative (where no simultaneous grid connection application is made) that the applicant must include the indirect, secondary and cumulative effects of its proposed grid connection. In the current case, the applicant has failed to comply with this requirement.

4. Part of our case is that the windfarm proposals in mid Wales and the grid connections for them as proposed by Scottish Power and National Grid, are part of one single overall strategically linked project, as envisaged by TAN 8. As such, the effects of that overall project should also be addressed in a unified way, which should be via a Strategic Environmental Assessment (SEA). Some of the evidence demonstrating that the mid Wales windfarms and Grid Connection Projects are a single strategic project is set out in Appendix 2.

5. The conclusions from that evidence in Appendix 2 are that:

i) There has been a long standing single unified strategic plan, known to the Welsh Government and all relevant parties since 2004, to construct wind farms in mid Wales to generate electricity and export this electricity to England via a new pylon line starting within mid Wales. The 'collector' system outlined in the Arup 2004 report for the mid Wales grid and prospective wind farms is the same as the plan brought forward in the SPEN and NG mid Wales Connection Projects.

ii) The Mynydd y Gwynt applicant has proposed a preferred grid connection via the proposed Carno 3 windfarm. The combined maximum output from the two windfarms will exceed 100MW and therefore to export the electricity there would need to be a 400kV grid connection.

6. Furthermore, the proposed grid connection is solely to take the electricity from the wind farm(s) - nothing else[2]. There is no current proposal to strengthen the distribution network as envisaged in Annex C to TAN 8[3] - there would be a flow of electricity from mid Wales into England, and no flow of electricity into mid Wales.

[2] See highlighted section on page 5 of our attached Appendix 3

[3] TAN 8 Annex C paragraph 2.13

7. Mynydd y Gwynt wind farm application should be refused because the EIA information is incomplete.

ExA's First Written Questions, Ref No. 1.1

8. Any presumption in favour of granting consent to this application must be balanced against a calculation of the limited benefits in CO_2 and other greenhouse gas reductions, against its many environmental and social harms, including indirect, secondary and cumulative harms, and against the intermittent and unreliable nature of the wind energy it would generate.

ExA's First Written Questions, Ref No. 1.10 and 6.9

9. Re noise, the wind farm industry now recognises that Amplitude Modulation is generated by windfarms[4]. There was a separate hearing session on the topic at the Mid Wales (Powys) Conjoined Wind Farms Public Inquiry.[5] The Inspector's report for that Inquiry (now with DECC) is expected to contain a condition dealing with AM. A similar condition should be incorporated in any consent for this application.

ExA's First Written Questions, Ref No. 2.17 and 2.18

10. With 27 turbines the swept area of the blades would be about 42 acres in area if the rotor diameter were 90m, and 58 acres if it were 105m. With a maximum height to blade tip of 125m (in both cases) this area would be centred 80m above ground for the 90m diameter, and 72.5m above ground for the 105m diameter. That means that the lowest point the blades would reach would be 35m above ground for the 90m diameter and 20m above ground for the 105m diameter.

11. Off-site planting of any trees to shield views, including views of grid connections, would be unlikely to reach maturity in the 25 year lifetime of the proposed windfarm.

Yours sincerely

Charles Green

C W Green
On behalf of SNAP

4 RenewableUK, Wind Turbine Amplitude Modulation: Research to Improve Understanding as to its Cause and Effect, December 2013

5 On Thursday 3 April 2014

Extracts from Secretary of State's decision letters

A: Brechfa Forest West – letter dated 12 March 2013

Grid Connection

22. The Application contains no provision for connection to the electricity grid, a matter which was a concern to some interested parties during the examination and was raised in representations made after the close of the examination. The Secretary of State agrees with the Examining Authority (at ER 4.163) that this matter should be considered in the light of policy set out in section 4.9 of the Overarching National Policy Statement for Energy (EN-1) and that there are no obvious reasons why an application for a grid connection is likely to be refused. The Secretary of State also agrees with the ExA that there is no requirement at this stage to go further in this matter and reach a definite conclusion on the adequacy of the route for a grid connection (ER 4.156, ER 4.167).The Secretary of State, therefore,accepts the ExA's assessment and finds no reasons to depart from his conclusions (ER 4.167).

B: Clocaenog Forest – letter dated 12 September 2014

Grid Connection

4.30 The Secretary of State is aware that the Application contained no provision for connection to the electricity grid, a matter which was of concern to some parties. However, he notes that the ExA considered the issue in relation to the policy set out in section 4.9 of the Overarching National Policy Statement for Energy (EN-1) which accepts that not all applications for grid connections will be submitted at the same time as the applications for the development to which they will be linked.

4.31 The Secretary of State also notes that that there was some concern about the lack of detailed information about the impacts of the grid connection (with two route options being considered – one to a northern connection point and one to a southern one, with the northern one being preferred by the relevant network operator, SP Manweb). However, he is aware that the grid connection will be subject to a separate consent application which will be subject to public scrutiny and that the ExA considered there were no obvious reasons why the grid connection might not be approved (ER 2.19). The Secretary of State agrees with the ExA's view on this matter.

C: EN-1, Paragraph 4.9.3

4.9.3 If this option is pursued, the applicant(s) accept the implicit risks involved in doing so, and must ensure they provide sufficient information to comply with the EIA Directive including the indirect, secondary and cumulative effects, which will encompass information on grid connections. The IPC must be satisfied that there are no obvious reasons why the necessary approvals for the other element are likely to be refused. The fact that the IPC has decided to consent one project should not in any way fetter its subsequent decisions on any related projects.

Evidence that the proposed mid Wales windfarms and grid connection projects are part of one single overall strategically linked project, flowing out of TAN8

1. The Arup report that underpinned TAN 8, commissioned by the Welsh Assembly Government, acknowledged that in order to connect the contemplated mid Wales windfarms a new point of supply from the grid network is required:

   Limitations therefore apply not only to the ability to export generation but also to the expansion of load.

   The total level of distributed generation that might be expected to connect to the Mid Wales network by 2010 could be as high as 600 MW, with a further 300 MW in Western Power Distribution's area linked to SP MANWEB's network. In order to accommodate all of this in an unconstrained fashion it would be essential to establish a new point of supply from the grid network somewhere in the mid Wales area. National Grid Transco have indicated that this connection is technically feasible.

   In parallel with establishing a new GSP it is proposed by SP MANWEB to substantially reinforce the 132kV network to achieve two aims:

   - *Allow the phased expansion of the network in anticipation of the increase in generation*
   - *Provide a 'collector system' in the event that a new GSP is established* [6]

2. The 'collector system' is exactly what the National Grid Mid Wales Electricity Connection Project is.

3. The Arup 2004 report continues:

   Larger capacity connections will need to be connected at higher voltages and the integration of large wind farms (or other generators), in excess of 100 MW would be connected directly to the 275 kV/400 kV grid lines that exist in Wales.

   For wind farms up to 100 MW connection at the distribution level would be the first choice but where this maybe constrained the grid could be considered if local connection is possible. For wind farms in excess of 100 MW then probably the grid will be the only option to enable this sizeable power to flow to demand locations of an appropriate size.[7]

4. National Grid's website corroborates this cut-off of 100MW for connection to the grid:

   New Transmission Connections
   Connections to the NETS in England and Wales tend to be larger than those in Scotland. Generators are required to be at least 100MW to be connected to the Transmission

6 Welsh Assembly Government, Facilitating Planning for Renewable Energy in Wales: Meeting the Target, Final Report – Research Contracts 105/2002 and 269/2003, Arup, 7 July 2004 (Arup 2004), Appendix C Grid Considerations Study, page 10 section 4.1 – Network requirements - Mid Wales Zone, 2nd to 5th paragraphs

7 Arup 2004, Appendix C Grid Considerations Study, pages 12 and 14 section 5 Connecting to the National Grid 5, 1st and last paragraphs

System in England and Wales, which is different to Scotland, where smaller generation is connected.[8]

5. National Grid held a meeting between themselves, Scottish Power and wind farm developers at the Mid-Wales User Workshop, Shrewsbury, 21 June 2007. Slides presented at this User Workshop included:

Objective
The aim of the User Workshop is to work with developers to establish a process which confirms the robust user commitment required to support transmission development in Mid Wales, and to identify any major issues for both developers and National Grid.

Mid Wales - Work To Date

- *Extensive discussion with industry stakeholders*
- *Approached Ofgem seeking funding for Mid Wales overhead line route corridor study*
- *Mid Wales user group seminar continues this process*

and

Application Process

- *'Normal' process applies*
- *SP will collate distribution connection applications and liaise with National Grid*
- *SP will consider the need for an extension in time to make an offer*

6. National Grid and Scottish Power, in their documentation, have indicated that an overall strategic approach is being taken to the connection of mid-Wales windfarms to the grid:

This is a complicated project and involves a number companies who are responsible for delivering different parts [the constituent elements of the project are listed as 1) New wind farms, 2) New local 132,000 volt (132 kV) connections, 3) New substation and 4) New national 400,000 volt (400 kV) connection][9]

The first conclusion of SPEN's Initial Strategic Optioneering Report of March 2011 was to: *support National Grid's proposal for the extension of their 400kV Transmission System into Mid Wales.*[10]

The trigger for the start of the strategic optioneering process was the concurrent connection applications made by several developers of 'larger' wind farms schemes directly to National Grid early in 2007. In June 2007 National Grid held a workshop with representatives from SPEN, developers and other interested parties to discuss options to determine the commitment from new wind farm developers for transmission capacity in Mid Wales, TAN 8 Strategic Search Areas B, C and D.

The British Wind Energy Association (now known as RenewableUK) notified their members that there was an opportunity ***for developers to become part of a strategic***

8 http://www2.nationalgrid.com/UK/Services/Electricity-connections/New-connection

9 National Grid Project News Spring 2011 Mid Wales connection, page 2

10 SP Energy Networks - SP Mid Wales Connections - Initial Strategic Optioneering Report (Version H1), March 2011, page 11, paragraph 7.1

infrastructure development project *for the provision of new wind farm connections in Mid Wales* [our emphasis][11]

This Second Strategic Optioneering Report supports National Grid's proposal for the extension of their 400 kV Transmission system into mid Wales, and provides for a harmonized, integrated and efficient local 132 kV collector network utilizing National Grid's proposed hub locations at Cefn Coch or Abermule point.[12]

7. There has been a strategic effort to minimise transmission losses along the combined 'collector system':

As outlined in the options, connection of the contracted generation at 132 kV only would require a significant number of long 132 kV circuits into mid Wales. These multiple circuits, being some 50km to 60km long, result in high power losses.

Furthermore, the use of long distribution circuits can have a significant effect on voltage issues, stability and power flow/sharing.

This report also shows that a multiple 132 kV circuit solution has significantly higher losses and cost when compared to a 400 kV solution. Furthermore, the additional environmental impacts of long multiple 132 kV route options make these 132 kV only solutions far from optimal and efficient, with local 400 kV connection and transmission being the most optimal, efficient and environmentally endurable way to connect the contracted wind generation in mid Wales point.[13]

SP Manweb has agreements to connect around 630MW of electricity from proposed wind farms in Mid Wales. National Grid has a duty to connect this electricity to the national electricity network, and would do this via the proposed new 400 kV connection. . . . We have a duty to provide a connection for the wind farms from the date they start to generate.[14]

11 SP Energy Networks - SP Mid Wales Connections - Second Strategic Optioneering Report, March 2012, page 17, paragraph 5.1

12 SP Energy Networks - SP Mid Wales Connections - Second Strategic Optioneering Report, March 2012, page 23, paragraph 7.3

13 SP Energy Networks - SP Mid Wales Connections - Second Strategic Optioneering Report, March 2012, page 23, paragraph 7.6 to 7.8

14 National Grid Mid Wales Connection, Connecting wind farms through Mid Wales and Shropshire, Proposed connection: an overview, Autumn/Winter 2014-15, page 6

Mynydd-y-Gwynt Environmental Statement

Response to consultation by Shropshire North against Pylons (SNAP)

Grid Connection

1. The ES states (2.25) that the proposed wind farm will be connected to the National Grid at a proposed new sub station at Cefn Coch. This is an error. There will be no grid connection available at Cefn Coch unless, firstly, the sub station has been constructed, and secondly, a 400kV connection has been made to the Grid at Lower Frankton, Shropshire (the National Grid Mid Wales Connection project). The grid connection for these proposals at Mynydd-y-Gwynt is not a connection to Cefn Coch, but to Lower Frankton, the nearest place on the existing grid.

2. Neither of these proposals has yet been the subject of an application for planning permission, which in the case of the sub station would be to Powys CC, and in the case of the Mid Wales Grid connection, would be to the Planning Inspectorate, as a major infrastructure scheme. No line has yet been chosen for the grid connection.

3. Government policy relating to grid connections is clear. It is set out in EN1, as follows:

> *4.9.2 The Planning Act 2008 aims to create a holistic planning regime so that the cumulative effect of different elements of the same project can be considered together. The Government therefore envisages that wherever possible, applications for new generating stations and related infrastructure should be contained in a single application to the IPC or in separate applications submitted in tandem which have been prepared in an integrated way. However this may not always be possible, nor the best course in terms of delivery of the project in a timely way, as different aspects may have different lead-in times and be undertaken by different legal entities subject to different commercial and regulatory frameworks (for example grid companies operate within OFGEM controls). So the level of information available on the different elements may vary. In some cases applicant(s) may therefore decide to put in an application that seeks consent only for one element but contains some information on the second. Where this is the case, the applicant should explain the reasons for the separate application.*
>
> *4.9.3 If this option is pursued, the applicant(s) accept the implicit risks involved in doing so, and must ensure they provide sufficient information to comply with the EIA Directive including the indirect, secondary and cumulative effects, which will encompass information on grid connections. The IPC must be satisfied that there are no obvious reasons why the necessary approvals for the other element are likely to be refused. The fact that the IPC has decided to consent one project should not in any way fetter its subsequent decisions on any related projects.*
>
> The crucial part of this policy, in relation to grid connection, is that whatever route is taken by the developer, they *must ensure they provide sufficient information to comply with the EIA Directive including the indirect, secondary and cumulative effects, which will encompass information on grid connections.*

4. Whilst the Mid Wales Grid Connection project, together with the Cefn Coch sub station, is predicated upon a number of wind farm developments, none of these have yet

received planning approval, and the first tranche of applications is not due to complete inquiry sitting until May 2014, following which the reporting and decision period is unlikely to result in a decision before sometime in 2015. The Mynydd-y-Gwynt wind farm is unlikely to be sufficient in itself to warrant investment in the grid connection, and therefore it cannot be assumed that the proposals are a practical or economic proposition.

5. To comply with Government policy the proposals must provide sufficient environmental information of the grid connection to meet the directive. This is a policy expressed as an imperative, without the usual hints of exceptions, such as "normally" and the like. The grid connection to Lower Frankton is an indirect effect of this proposal (along with others), and must therefore be assessed in the ES for this project. Since the information is not presented, nor available, then the ES is deficient, and the application which it purports to support will be premature.

6. It is noted that the Secretary of State has taken the view elsewhere that where there are no obvious reasons why the necessary permissions for the "other element" (ie, grid connection) are likely to be refused, then the policy would be met. Whilst this interpretation of policy is not accepted as being appropriate to the Mid Wales Connection, the facts are that no application for the connection has yet been made; that it is subject to major public opposition throughout North Shropshire and Mid Wales; and that the Welsh Government takes the view that such infrastructure is unnecessary to serve wind farms predicated by TAN 8. It cannot be assumed that there is no obvious reason why permission would be refused for this so far unspecified scheme.

Policy Considerations

7. This section of the ES is defective because it fails to recognize the policy set out in the extracts above.

8. The approach to Technical Advice Note 8 set out in paragraphs 3.47 et seq of the ES is noted. To the extent that the application seeks support from TAN8 (eg paras 3.53, 3.54) it should be noted that policy for energy generation is not devolved to the Welsh Government, and therefore the "targets" set out in TAN8 are no more than aspirations, and have not been so since February 2011. Therefore we contend that any aspect of policy which draws upon the targets of TAN8 should be given no weight. TAN 8 has many other deficiencies which are exhaustively set out in the submissions of the Alliance to the Inspector presently holding the inquiry into 5 windfarms in Mid Wales[15], and which apply to much of the case being put forward in the ES.

9. It is wrong to state in the ES that provision has fallen "woefully" short of the targets in TAN 8 – that is an expression of opinion which is out of place in an ES. All the indications are that the targets and the advice which flowed from them was a woeful mis-application of the powers of the Welsh Assembly, and a woeful abrogation of their duty to protect Britain's finest landscapes.

10. The Applicant's analysis of the Welsh Government's recent statements on the Advice Note are noted, and in particular the Minister's statement concerning the nature of any

[15] See Inquiry documents ALL-009 and ALL-010 at http://bankssolutions.co.uk/powys/documents/objector-documents/

grid connection. However, if support is to be drawn from the observation in 2.13 of TAN8 that new high voltage lines "will also provide a stronger more reliable network for electricity users in the western mid Wales area", it should be noted that National Grid have stated that the purpose of the Mid Wales Grid Connection is only to serve the proposed windfarms[16], and that it is not predicated on any improvement in supply to mid Wales (for which there is no evidence, and therefore no benefit).

Planning Balance

11. In para 8.599 of the draft ES the conclusions of the LVIA have been described in terms of their significance, and have not been weighted as positive or negative. It is stated that the acceptability of these substantial effects is balanced against the positive benefits to the wider environment and the policy aims of the UK Government. The drawing of any such balance is flawed if it does not include the significant indirect effects of the proposals, as required by the Directive. This proposal must accept a share of the responsibility for the grid connection, consisting of both the Cefn Coch sub station and approaching 50km of 400kV transmission line. Whatever the location of the transmission line, and however much of it is placed underground (a highly disruptive process with long term adverse effects), the effects of the connection are wholly adverse to the landscape.

12. It is the view of SNAP that the adverse effects of concentrations of wind power in mid Wales outweigh the limited benefits in CO_2 reductions, which are equally well obtained elsewhere, such as offshore or through other proven means of low carbon generation.

13. SNAP limits its concerns to matters affecting North Shropshire. The omission of comments on other matters does not indicate consent.

16 E-mail dated 23 January 2013 from Jeremy Lee (Project Manager, Mid Wales Connection) to David Ward stated, inter alia, *"Connecting the proposed windfarms to the electricity network is the sole purpose of the connection and we have no other strategic interest in the [Mid Wales] area"*. Copy attached

Attachment – Correspondence with National Grid

Dear Sirs

I should be grateful if you could assist in clearing up some matters which are of interest to me.

1 The purpose of the Mid Wales connection

It has been my understanding that the Mid wales connection is proposed for the sole purpose of bringing to the grid power generated by wind farms proposed in Mid Wales. There are suggestions that it is also necessary to increase the supply of power to Mid Wales. Whilst I appreciate that once constructed areas connected to this part of the grid would be able to draw power from the grid as a whole, is there any part of the need case for the connection which derives other than from wind farm proposals?

2 Trigger for the connection

I am sure that you are aware of the 5 planning applications for wind turbine generating stations made in Powys, which are to be the subject of an inquiry under the Electricity Act and the Town and Country Planning Act. These are Llanbadarn Fynydd, Llaithddu, Llandinam, Llanbrynmair and Carnedd Wen. They total between 482 and 602MW. The applications also include a transmission line between Llandinam and Welshpool. Could you please tell me whether all or part of these proposals are sufficient to require the construction of the Mid Wales connection. If they would not trigger the connection, could you give me examples of what scale of development might.

Finally, what is your present programme for publishing a preferred line, and for making an application.

This information is needed to enable me to advise parties who are considering engaging in the above inquiry. An early response would therefore be appreciated.

Yours sincerely

David Ward BSc CEng MICE FIHT

From: info@opendebate.co.uk [mailto:info@opendebate.co.uk]
Sent: 23 January 2013 17:08
To: [redacted]
Subject: RE: Mid Wales connection

23 January 2013

Dear Mr Ward,

Mid Wales Connection Project – Connecting wind farms through Mid Wales & Shropshire

Thank you for submitting your comments and questions to the Mid Wales Connection Project team. We understand you attended the briefing for Knockin and Kinnerley Parish Councils before Christmas, which we hope you found useful.

Regarding your first point on the purpose of the connection, the Welsh Government has identified Mid Wales as an important location for onshore wind and a number of windfarms are proposed by developers. We have a statutory duty to connect new generation to the electricity transmission network. Connecting the proposed windfarms to the electricity network is the sole purpose of the connection and we have no other strategic interest in the area. Further information on this can be found in our Project Need Case and Summary documents.

The Need Case also provides the details of which wind farms will be connected by the project (this information can be found on page 13), some of which form part of the Department of Energy and Climate Change's inquiry. We think the DECC inquiry will be very helpful in understanding how much wind farm generation is planned for Mid Wales and we will consider any outcomes that might affect our work. This process is likely to take some time but, at the moment, none of the developers we have connection agreements with have indicated any intention to change their plans so we have to proceed on this basis.

Choosing when to develop our proposals is a careful balance – do we wait until wind farms have consent or do we develop our proposals alongside, so that the connection has planning consent if the wind farms go ahead?

National Grid has a duty to connect new generation when requested and we have to be ready to connect it as soon as it starts generating. For this reason, we develop the proposals in parallel. If it is established there is no longer a need for our connection, then we will not build it.

Finally, concerning the current timeline for the project, this can be found on page 4 of our Project News Issue 3.

I hope you find this information useful and should you require any of the above documents in hardcopy, or require further details, please do not hesitate to contact the community relations team.

Yours sincerely,

The Mid Wales Connection Project Team