

MID-WALES (POWYS) CONJOINED PUBLIC INQUIRY
ELECTRICITY ACT 1989 (SECTIONS 36, 37, 62(3) & SCHEDULE 8)
TOWN AND COUNTRY PLANNING ACT 1990

LLANBRYNMAIR WIND FARM

STATEMENT OF CASE FOR SESSION 4 (SSA B)
ON BEHALF OF RES UK AND IRELAND LTD

INTRODUCTION

1. This is the Statement of Case (SoC) prepared and submitted on behalf of RES UK and Ireland Limited ("RES") in relation to its application ("the Application") for consent pursuant to Section 36 of the Electricity Act 1989 to construct and operate the Llanbrynmair wind farm in Powys, Mid-Wales ("the Development").
2. This SoC should be read in the light of the outline SoC, dated 21st January 2013 and the SoC for session 2. Pursuant to the Inquiry Timetable¹, this SoC addresses the matters to be covered in session 4 of the Inquiry.
3. Session 2 addressed the individual impacts of the proposed developments at Llanbrynmair and Carnedd Wen and the landscape and visual cumulative effects of the proposed developments in SSA B. Matters in Common and the cumulative effects of all proposed developments before the Inquiry will be

¹ See ID/4 at 6.0 and p.11

considered in session 4.² The topics to be considered in session 4 are:³ landscape, transport (strategic), socio-economic effects (including tourism), wildlife and ecology.

4. The contents of previous SoC's are not repeated in this SoC.
5. RES will call the following witnesses to give evidence (but reserves its right to call additional witnesses on separate topics, on receipt of all of the parties' Session 4 SoCs):
 - Marc Van Grieken LUC – cumulative landscape and visual effects; and
 - Kevin Martin Aecom – cumulative transport.

GRID CONNECTION

6. There is a requirement for a grid connection which could comprise:
 - Overhead lines from the respective generating stations to the hub;
 - The construction of the hub; and
 - The 400 kV overhead line from the hub to the grid supply point.
7. Four wind farm developers: Vattenfall, Fferm Wynt Llaithddu Cyf ("FWL"), RES UK & Ireland Limited ("RES") and RWE Npower Renewables Limited ("RWE") have commissioned a report from Mott MacDonald to consider possible connection options. Evidence will be produced to session 4 to explain the options.
8. According to the SP Mid Wales Connections Third Strategic Optioneering Report (SOR3), SP Manweb has connection agreements in place for 720.6

² *ibid* p.11

³ *ibid*

MW of proposed wind generation. Of these wind farms, five are the subject of the Mid Wales (Powys) Conjoined Wind Farms Public Inquiry:

- Llanbrynmair RES (SSA B) - 90MW;
- Carnedd Wen RWE (SSA B) - 150MW;
- Llaithddu Fferm Wynt Llaithddu Cyf (SSA C) - 80MW;
- Llanbadarn Fynydd Vattenfall (SSA C) - 59.5MW;
- Llandinam repowering Celt Power Ltd (SSA C) - 102MW

9. SP Manweb proposes (see SOR3) to connect the first four of these wind farms via new 132 kV circuits to the proposed National Grid substation at Cefn Coch, whereas the fifth (Llandinam repowering) would be connected via a new 132 kV circuit to the existing 132 kV substation at Welshpool, which is the nearest point where capacity is available.

10. SOR3 proposes a single 132 kV Heavy Duty Wood Pole (HDWP) line (capacity 176 MVA) from SSA C to Cefn Coch to connect all the contracted wind generation in SSA C (except Llandinam repowering). For SSA B, SOR3 states that the contracted generation totals 465 MW. To connect all this to the 400 kV hub at Cefn Coch, SOR3 proposes mainly HDWP circuits with a short length of double circuit tower line. The main part of the connections to Llanbrynmair and Carnedd Wen would consist of a single HDWP line to each wind farm, and were these to be the only two new wind farms connected in SSA B, it is likely that, instead of the 132 kV tower line, each of these HDWP circuits would extend all the way to Cefn Coch.

11. The evidence demonstrates that up to 160 MW of wind generation, most probably in SSA C, could be connected to SP Manweb's 132 kV network at Welshpool. Further generation in SSA C and likely generation in SSA B would require one or two 132 kV circuits from SSA B to Legacy about 70 km

distant from SSA B, which is considered to be an unusually long way at this voltage level for this amount of generation. There are technical issues concerning voltage regulation, which are on the limit of acceptability but which could (potentially) be satisfactorily managed. There would also be significantly more power lost in transmission at 132 kV compared with 400 kV.

12. On balance, if all five wind farms are to be connected, it is considered that the alternative of the 400/132 kV hub at Cefn Coch is preferable.
13. It would also allow for the connection of future wind generation without the need for further long 132 kV circuits, when TAN8 (Garrad Hassan) identified 740 MW wind generation potential in mid Wales (SSAs B, C and D).
14. It is considered that such evidence can be given on a joint basis in a Hearing session.

TRANSPORT (STRATEGIC)

15. Environmental information has been submitted to the Inquiry which addresses:
 - The likely environmental effects arising from proposals for highway works to the Strategic Road Network (SRN) to facilitate the delivery of AIL's into Mid-Wales for wind farms in SSA B and C;
 - The likely environmental effects on the Strategic Road Network (SRN) of non-AIL construction traffic into Mid-Wales for wind farms in SSA B and C;
 - The impact of the Llanbrymair wind farm on the SRN.

(i) AIL Traffic

16. The environmental information prepared by AMEC on behalf of Vattenfall, FWL, RES and RWE and submitted as part of the December 2013 SEI demonstrates in respect of the proposed works to facilitate AIL Traffic:

- Significant effects on ecology are unlikely to occur;
- No direct effects on known or recorded heritage assets have been identified. No significant effects have been identified;
- No significant landscape effects have been identified, given the small scale of the works and the close connection with existing busy trunk roads;
- No significant visual effects will occur;
- No significant effects were identified as a result of the works identified in the STMP;
- There is no objection from Welsh Government (“WG”) (the relevant Highway Authority).

(ii) Non-AIL Construction Traffic

17. The impact of non-AIL construction traffic on the SRN has been undertaken using a Cumulative Impact Model and the IEA Guidelines for the Environmental Assessment of Road Traffic.

18. Evidence will be produced which demonstrates that the impact will be acceptable and, in particular, that:

- The daily cumulative impact of overall construction traffic from the wind farm proposals on the SRN does not exceed the 30% increase in overall traffic identified by the IEA Guidelines as the screening threshold for potentially significant impacts;
- The cumulative impact from overall construction traffic is not significant and acceptable;

- The daily cumulative impact of HGV construction traffic from the wind farm proposals on the SRN does not exceed the 30% increase in overall traffic identified by the IEA Guidelines as the screening threshold for potentially significant impacts⁴;
- The cumulative impact of HGV traffic is not significant and acceptable;

19. It is considered that such evidence can be given on a joint basis in a Hearing session.

(iii) Llanbrynmair Traffic on the SRN

20. Environmental information has been presented which demonstrates that the impact of Non-AIL traffic from Llanbrynmair on the SRN will be acceptable. This is not disputed by WG.

21. The evidence addresses the predicted traffic impact associated with the Llanbrynmair wind farm and demonstrates that:

- The construction traffic impact on the SRN is not discernible;
- The HGV construction traffic impact is negligible;
- In both cases, the 30% threshold (set out above) is not exceeded.

LANDSCAPE

22. The cumulative landscape and visual impact of Llanbrynmair and Carnedd Wenn has been considered in session 2. Such evidence will be relied upon but not repeated.

23. In session 4, the applicant's evidence will address the potential cumulative effect of proposals in SSA-B and SSA-C and the additional contribution the Llanbrynmair wind farm, noting the preliminary evaluation of landscape and

⁴ The A483 south of Newtown and Dolfor is one exception requiring further consideration in 2016.

visual effect of its likely proposed grid infrastructure will have on the potential cumulative landscape and visual change experienced within the Mid-Wales area as a result of the implementation of TAN 8.

24. The applicant's evidence to session 4 will demonstrate *inter alia* that:

- A study area of 20km radius from the outer extents of SSA-B and SSA-C has been adopted to consider the maximum potential extent of significant cumulative visual effects. Evidence on the potential cumulative landscape effects arising between SSA-B and C was presented by RES in Session 2;
- There will be no significant cumulative landscape effect arising from the addition of the Llanbrynmair wind farm to the baseline of existing and proposed wind farms in SSA C;
- There will be no significant cumulative visual effects arising from the addition of the Llanbrynmair wind farm to the baseline of existing and proposed wind farms in SSA C;
- There will be no significant cumulative landscape and visual effects arising between wind energy developments and associated grid transmission infrastructure located in SSA-B and those located in SSA C;

25. The potential for significant landscape and visual effects of likely overhead line grid connections are judged to be contained within 1km of proposed wood pole connections and within 2.5km of proposed 132kV steel tower connections.

26. Graphics are contained within the *Conjoined Cumulative Landscape and Visual – Graphics and Visualisations* document, which includes ZTVs showing the extent of potential visibility of this infrastructure. This

infrastructure will be subject to a separate application by SPEN, who will fully assess the landscape and visual and cumulative landscape and visual effects in full.

NOISE

27. Renewables UK published *‘Wind Turbine Amplitude Modulation: Research to Improve Understanding as to its Cause and Effects - 16 December 2013’*. This extensive report provides additional evidence on the known causes of Enhanced Amplitude Modulation (“AM”). A joint position statement will be prepared by the SSA C and B developers and will be submitted to the Inquiry. The joint statement will discuss sources of enhanced AM, thresholds and reference to AM in planning conditions

ECOLOGY

28. The cumulative effects of Llanbrynmair and Carnedd Wen on ecology and wildlife were fully considered in Session 2. There is no evidence to suggest that there are likely to be any cumulative effects on ecology between areas SSA-B and SSA-C. In the light of the evidence currently before the Inquiry, it is not considered that there is a need for ecological evidence to be submitted to session 4.

SOCIO-ECONOMIC EFFECTS

29. There is no extant objection to either the Llanbrynmair or Carnedd Wen schemes from PCC on the basis of any adverse socio-economic impact.
30. Issues have, however, been raised by Third Parties raising concerns about an adverse impact on tourism. The applicant is not, however, clear on the case being advanced by Third Parties against the application, the application in combination with Carnedd Wen and/or on the cumulative impact of proposals in SSA-B and SSA-C. The applicant therefore reserves the right to respond to evidence submitted by Third Parties on this topic.

31. It is inevitable that the WG policy which seeks to place strategic wind farm developments into seven strategic search areas will lead to a concentration of development in relatively small parts of the country. It is the case that every one of the SSAs is on more elevated ground which will have a degree of attraction to a section of the tourist market. That was recognised from the outset in the process by which the SSAs were identified and then refined. Published policy recognises the inevitable consequences of change to the landscape and from the cumulative effects of a series of such proposals (to reach the overall figures set out firstly in TAN8 in 2005 and now amended by Mr John Griffiths in his role as a WG Minister in July 2011). Any alleged adverse impacts must be considered in this context.

32. The applicant acknowledges that the landscape is an important element contributing to attraction of the area for visitors. However, there have been claims coming forward since the mid 1990s that wind farms damage tourism, especially as almost all sites are in the countryside and rural tourism is a common element of the local economy. Nonetheless, no evidence has come forward to demonstrate that wind farms have resulted in harm to the tourist industry of that area. Studies into tourism numbers and directly involving accommodation providers in areas with a number of wind farms have shown that visitor numbers in these areas have continued to grow even after the wind farms were developed, and adverse reactions from guests have been negligible.

33. The applicant will rely on an number of sources of evidence and previous appeal decisions including:

- BWEA presentation to House of Commons Tourism Committee 2006;

- BIGGAR report into effects of the Clyde Wind Farm on tourism 2006;
- Evidence of Professor Aitcheson to the Fullabrook inquiry 2006;
- Moffat Report on wind farms and tourism in Scotland 2008;
- Summary of report for Visit Scotland 2012;
- BIGGAR report on wind farms and tourism 2012;
- Planning appeal decision - Fraisthorpe, East Riding;
- Planning appeal decision - Hellrigg, Allerdale;
- Planning appeal decision - Batsworthy, North Devon;
- Planning appeal decision - Stroupster, Highland;
- Planning appeal decision – Tir Mostyn, Denbighshire;
- Planning appeal decision – Carland Cross, Cornwall;
- Section 36 decision – Fullabrook, North Devon

34. The applicant will demonstrate that there is not a robust objective basis on which to conclude that the socio-economic impact of the development will be adverse.

35. On the contrary, the applicant will demonstrate that the socio-economic impact of wind farm developments is positive.

28 January 2014