

Cefn Meiriadog and Glascoed Road Residents and Users Group

Registration identification number 10031184

**NWWFC
EN020014**

Re: Comments on further post-hearing documents

'Inspector's Report on the Conjoined Public Inquiry'

1. The Group notes the submission by Pinsent Masons of the 'Inspector's Report on the Conjoined Public Inquiry' relating to projects in mid Wales. It notes that the "Llandinam 132kV Line" application has points of similarity with the NWWFC application.

2. The Report's relevance to the NWWFC clearly covers the whole length of the proposed overhead line in respect of landscape and visual effects. However as with its earlier submissions, the Group's main, though not exclusive, focus is on the Cefn Meiriadog area.

3. Since it is assumed that the Report will be considered in detail by the Panel, the Group seeks merely to draw attention to certain comments by the Inspector.

4. In paragraphs 406 and 407 the Inspector describes the nature of the landscape to be affected in words virtually transferable to the landscape which would be affected by the NWWFC, says the proposed OHL would be an uncharacteristic feature, and points out in response to SPM on permanency and decommissioning, that "25 years is a long time and many people alive at the time of the OHL's erection would not live to see its removal".

5. The Group contends that the concerns expressed by the Inspector in paragraph 447 apply particularly in the case of the NWWFC to Plas Newydd in Cefn Meiriadog and to Berain. The major architectural importance of Plas Newydd, its setting and relationship to features like the Bryn (limestone ridge) and to Berain have been consistently downplayed by SPM, indeed have been virtually ignored. Allowing a heavy duty double pylons to passing barely 200m from it would represent a brutal infliction on this key heritage asset and its setting, one which could be entirely avoided if the undergrounding of the connection were started only slightly further south from where it is currently planned.

6. The Inspector's discussion in Paragraphs 458-469 of alternative routes has parallels with the tortured reasoning which SPM used to justify the selection of the NWWFC route finally chosen, going against the results of its consultation suggesting that the route chosen was in fact the least suitable, and that it was a pre-determined decision.

7. In Paragraphs 474-475 the Inspector finds that use of the trident design on part of route "would result in a much more environmentally acceptable solution on ground lower than 250m above sea level." While this depends on there being less resistive ground, the Group would ask whether this has been considered in the case of NWWFC, and if not, why not?

8. The Group notes that SPM has repeatedly used the fact that the NWWFC route landscape is not designated as a National Park or AONB to argue for its proposal. The Llandinam Inspector comments as follows in paragraph 725, referring to a part of the Llandinam route: "Section B is not in a designated landscape. Nonetheless, its scenic qualities are particularly high and it is contiguous with and appears comparable in quality to an existing AONB". The

Group would argue that this is precisely the case with long stretches of the NWWFC route.

SP Manweb's 'Lifetime Costs Report'

9. The Group also notes SP Manweb's 'Lifetime Costs Report' published on 3 November. It welcomes the fact that SP Manweb has finally acknowledged the need for a cost comparison of this nature, but finds some issues with some of the figures involved, the major concern being with the figures for 'Operations, maintenance and fault repair costs (COM)' (p. 24).

10. SP Manweb state in the report: "From information contained within the National Fault and Interruption Reporting Scheme (NAFIRS) 2013/2014, the SP Manweb fault rate for 132kV underground cables is 3.2 per 100km per year. This compares to the England & Wales average of 2.4 and the National average of 2.6. This fault rate data represents a mix of older type pressurised cables and more modern XLPE cables". And then: "For the Lifetime cost calculation we have used the SP Manweb figure of 3.2 faults per 100 km".

11. Yet it is precisely this use of SP Manweb's own figure of 3.2 faults per 100km which was criticised in the Llandinam Inquiry. Criticisms were based on points made in the document 'Closing Submissions On Behalf Of Powys County Council', included as Annex 9 of the Report. These are as follows, with appropriate paragraph references:

'760. In relation to reliability, Mr Paalman [of SPM] stated in his proof that "service performance [of underground cables] is reliable provided that third party interference can be prevented". He expanded on this in examination in chief stating that underground cables are typically installed in city centres, where there is lots of other infrastructure and digging up of roads and footpaths.'

'761. The statistics put forward by Mr Paalman asserted a fault rate of 3.2 permanent faults per 100km per year. Even if those statistics are reliable and they remain good for the location here, for a route of 9.3km (as proposed by SPM) there would be 0.29 faults per year or 7.4 for the 25 year life of the development, ...'

'762. It is not accepted these are appropriate statistics to rely upon. It is clear from Mr Paalman's appendix 8 (the system and equipment performance for five years ending March 2012 that the 3.2 faults per year do not relate to national statistics but to SPM's own figures. The proper statistics are that nationally there are 2.6 faults per 100km per year, and in England and Wales there are 2.3 faults per 100km per year. PCC [Powys County Council] can see no reason why this cable would be any more likely than the average for England and Wales to fail. This would suggest that the true figures are closer to 0.21 faults per year or 5.3 for the 25 year life of the development a route of 9.3km (as proposed by SPM), ...'

'763. Further it is not accepted that statistics about the reliability of underground lines in an urban network can properly be translated to an intensely rural location such as that proposed here. Mr Paalman contradicted himself on this in examination in chief, at one point saying his statistics were on an urban network, and later saying that there was no breakdown for the statistics between rural and urban locations. Mr Paalman's argument was that while cables in the country would be less likely to be dug up, they may fail when they try to expand and contract, especially if the land is undulating. However no good answer was given to the

Inspector's very perceptive question of why this could not be resolved by simply putting slack into the cable. That is a clear and obvious solution.'

12. Reflecting the above, the Inspector himself comments: "488. The costs cited... include estimated lifetime costs, with repair costs being much higher than for OHLs. These are based on SPM's own experience and network, although for some reason they are higher than national averages. Be that as it may, either set of statistics are likely to be highly skewed towards urban locations where there is a much greater possibility of roads and footways being dug up. SPM's point about cable expansion is not convincing and in an intensely rural location such as this much lower fault rates and lifetime costs can be anticipated. It should also be remembered that any faults that would occur would not leave any consumer without a supply."

13. Again, discussing different options for undergrounding a part of the route, he further states in paragraph 725: "Undergrounding in Section B would result in significantly less harm overall and thereby achieve a greater degree of compliance with Welsh Government and UDP policies, with no material timing disadvantages... The indicated additional cost ranges from slightly less than £6.65m to £14.8m, but in view of the intensely rural location the lifetime cost element within the above is likely to be overstated."

14. Having adopted the unjustifiably high figure of 3.2 faults per 100km, SP Manweb then state in their 'Lifetime Costs Report' submitted in the present case:

"From information contained within the National Fault and Interruption Reporting Scheme (NAFIRS) 2013/2014, the instance of cable faults on the SP Manweb 132kV underground cables is reported as 50% Damage and 50% non-Damage.

For the purposes of this assessment the total 132kV cable fault data is therefore divided into:

- Non Damage faults = 50% of total
- Damage faults = 50% of total

For the Damage faults we have again categorised the nature of the Damage as 50% Limited Damage and 50% Extensive damage such that in the lifecycle cost calculations we have used:

- Non Damage faults = 50% of total
- Damage faults of limited nature requiring lower cost repair = 25% of total
- Damage faults of extensive nature requiring higher cost repairs = 25% of total."

15. Given the NAFIRS figures one can clearly understand the 50/50 split into Non-Damage Faults and Damage Faults. However the subsequent split of Damage Faults into an equal percentage of "Damage faults of limited nature requiring lower cost repair" and "Damage faults of extensive nature requiring higher cost repairs" appears to be entirely arbitrary.

16. That it is significant in subsequent overall cost calculations becomes apparent when the cost of the former is put at £25,000 and the latter at £600,000. With a factor of 24 involved in the cost differential, more reliable evidence on the relative occurrence of the two levels of fault is required, since a relatively small change in the ratio will have a disproportionately large effect on costs.

17. Further, it is very conspicuous that while SPM have no compunction in completely arbitrarily dividing damage faults in this way, they are silent on any possible division, however arbitrary, between these faults' occurrence in urban and rural locations. It is perfectly clear from the Powys C C and the Inspector's comments from the Llandinam Report, as quoted above, that the figure of 3.2 faults per 100km used by SPM or, more appropriately, the figure of 2.3/2.4 faults per 100km for England and Wales as a whole, that a connection which, like the Llandinam one, is "intensely

rural”, will have a very significantly lower incidence of faults.

18. The arbitrariness of the split of Damage Faults into an equal percentage of “Damage faults of limited nature” costing £25,000 to repair, and “Damage faults of extensive nature” costing £600,000 to repair, taken together with the inappropriateness of applying the figure of 3.2 faults per 100km, render SPM’s figures for O&M for underground cables highly unreliable. Different but perfectly reasonable assumptions could result in very much lower figures for an entirely rural route of this kind. One notes in this connection that examples cited in Group’s submission find that Lifetime costs for O&M for OHL and cables tend to be broadly similar.

19. Rather than go over the arguments again, the Group would refer the ExA back to Paragraphs 21-56 of its own document ‘Comments on responses to ExA’s written questions’ submitted for deadline 2, for its critique of SPM’s O&M figures and costings. It is frankly incomprehensible that the more detailed calculations contained in SP Manweb’s latest document remain as seriously out of kilter as before with the figures available from elsewhere (and even contradict the figures in one of SP’s own documents). This applies to basic factors including the relative incidence of faults in OHL and cables, and the relative costs incurred in repairing them, where SPM’s figures are simply of a different order of magnitude to those reported elsewhere (see previous submission for details and references).

20. It need hardly be stated that SP Manweb’s figures as presented work to make the undergrounding option appear relatively unattractive (i.e. uneconomic) in comparison with OHL. This is most obvious in Lifetime figures for O&M costs over 25 years which add nearly £2.5 million to the overall cost of the project compared with only £0.5m for OHL, where, as stated above, other studies find the two lifetime costs broadly similar.

21. It is impossible to be certain from the figures presented by how much, but for the reasons given above they overstate the cost of undergrounding compared to OHL. Even so, the ‘Pylons the Pressure Group’s’ figures show that the extra amounts involved are less than what residents have indicated they are willing to pay to have the connection put underground.

Cefn Meiriadog C P School and use of Groesffordd Marli to Glascoed Road road

22. In paragraphs 5.3 and 5.4 of its original submission, the Group pointed out the particular difficulties that would be involved in any works traffic using the Groesffordd Marli to Glascoed Road road due to the location of Cefn Meiriadog C P school at its western end and the very congested nature of this narrow road, particularly at school starting and finishing times.

It noted among other things that (1) the school has a high roll with almost all children arriving by car, but that (2) it has no off-road parking; (3) a voluntary one-way system is observed by parents whose children attend the school, but that (4) due to the long detours involved others using this road understandably do not observe it.

24. Photographs taken at around 9am on Friday 23rd October are included to show the nature of the problem and the extreme unsuitability of the road for works traffic.





Martin Barlow

Chair

On behalf of 182 members of the
Cefn Meiriadog and Glascoed Road Residents and Users Group

13.11.15