

## **The Alliance**

### **Conjoined Public Inquiry Session 4**

#### **Further Transport Conditions**

Further to the document “Alliance Session 4 Transport Conditions suggestions for PCC” we suggest the following points are included in addition to and in enhancement of those proposed by PCC.

**1. Conditions relating to all 5 Windfarms** in respect of the **delivery of Abnormal Load (AIL) convoys** to each site:

Prior to the start of construction all AIL delivery proposals shall be trialled by a full size convoy of two AIL vehicles plus escort vehicles configured for the largest loads to be carried, one in length and one in height and width. At locations where physical works are required prior to the passage of AILs the trial load vehicles will be permitted to be reduced in size during the passage of the restriction. The trial vehicles shall be driven at speeds corresponding to fully loaded AIL transporters. The trials shall be witnessed by the relevant Highway Authorities, other relevant Statutory bodies (e.g. Network Rail) and Observer(s) from Local Community Councils, the Alliance and other interested parties.

- a. All AIL convoys to each of the sites shall have a police escort.
- b. Prior to the start of construction the Developer shall obtain from the Police confirmation in writing that they have the necessary resources to satisfy the Developer’s proposed programme of AIL deliveries subject to the other demands on their resources such as, but not restricted to, the need to provide escorts to AIL deliveries to other Windfarm developments and other projects such as the Grid Connection project. Unless otherwise confirmed in writing by the Police only one AIL convoy per day can be escorted anywhere in Wales.
- c. Convoys are not permitted at weekends or public holidays and are to avoid major events such as the Royal Welsh Show.

- d. Convoys shall not be permitted to pass the Welshpool Livestock Market at the A483/ A458 junction near Welshpool on market days.
- e. Convoys shall be prevented from passing through the following Towns/ Communities during the morning and evening peak times of 7am to 10am and 3pm to 7pm.

Pant

Llanymynech

Four Crosses

Welshpool

Llanfair Caereinion

Llanerfyl

Llangadfan

Foel

Newtown

Dolfor

Llanbadarn Fynydd

Crossgates

Llandrindod Wells

Llanelwedd

Builth Wells

Erwood

Llyswen

Bronylls

- f. Convoys will not be permitted to travel during lighting up time.
- g. Notwithstanding the Police requirement for one convoy per day anywhere in Wales in the event that it becomes possible to escort more than one convoy per day only one convoy per day will be permitted through any of the communities listed in 'f' above.
- h. On any approved access route from the Port to the site Lay-bys/ Lay over areas/ hold points, capable of accepting an entire AIL convoy allowing passing by two way traffic, shall be provided on single

carriageway roads of 7.3 metres width or less at intervals of no greater than two miles.

**2. Conditions relating to all 5 Windfarms** in respect of the **delivery of all construction traffic, including AIL convoys** to each site.

- a. Timings as in 1f above
- b. Each Developer shall provide a Bond at a level set by the Highway Authority to cover the costs of repairs to the public highway of damage caused by Wind Farm construction traffic.

**3. Specific Conditions relating to AIL deliveries to Llaithddu Wind Farm**

- a. Prior to the start of construction the Developer must prove, by means of a physical trial with an AIL vehicle, that passage under Crossgates Rail Bridge on the A483 north of Llandrindod Wells can be achieved in a safe manner with sufficient clearance to allow for variations in the exact line of approach and position of the vehicle beneath the bridge. The trial AIL vehicle shall model the highest load that will be delivered to the site. The trial shall be witnessed by the Highway Authority, Network Rail and other interested parties including the Alliance.
- b. The Developer shall also show that in the event of the A483 lowering and narrowing proposed by the Llandinam Windfarm being carried out prior to the delivery of AILs to Llaithddu, that passage of the widest vehicle is possible between the proposed pedestrian barriers.
- c. Prior to the start of construction the Developer must prove, by means of a physical trial with an AIL vehicle, that passage through Castle Square, Builth Wells can be achieved in a safe manner with sufficient clearance to allow for variations in the exact line of approach and position of the vehicle. The trial AIL vehicle shall model the longest load that will be delivered to the site. The trial shall be witnessed by the Highway Authority, PCC, and other interested parties including the Alliance.

- d. Prior to the start of construction the Developer shall provide a viable plan of how AIL deliveries will be implemented given that other proposed Wind Farms, both the subject of this Public Inquiry and other proposals in planning or scoping, are using a co-ordinated approach to manage AIL deliveries but excluding those for Llaithddu.

#### **4. Specific Conditions relating to AIL deliveries to Llandinam Wind Farm**

- a. The proposals to lower the carriageway beneath Crossgates rail bridge shall provide permanent two way traffic.
- b. Prior to the start of construction the proposals to install a temporary bridge across the River Wye shall be approved by the Environment Agency. The proposals shall show that in the event of a 1 in 100 year flood\* event there is no increased risk to property upstream of the bridge location.*(\*Author's note: requiring proposals to cater for a 1 in 100 year event is not extreme. These events occur in many places every year, but not everywhere – i.e. in 100 different locations on average one 1 in 100 year event will occur – these locations can be very localised).*
- c. Prior to the start of construction the Developer will provide a plan approved by all relevant highway authorities of how replacement blades would be delivered to site following the removal of the temporary bridge over the River Wye.
- d. Prior to the start of construction the Developer will carry out a full EIA on the effects on the environment of the works to install the temporary bridge over the River Wye and detail measures to mitigate these effects to the approval of all relevant authorities and private land owners.
- e. Prior to the start of construction the Developer shall obtain full approval of the reinstatement proposals by Welsh Government Highways, PCC, the Environment Agency and all affected landowners.
- f. Prior to the start of construction the Developer will provide a Bond to cover the full reinstatement of all property and highways following the

removal of the temporary bridge and associated highway works on the A483, the B4567 and the A481. The Bond will only be released following approval by all parties of the completed reinstatement.

**5. Specific Conditions relating to AIL deliveries to Llanbrynmair Wind Farm**

- a. Access to the site via the minor road C2031 from Llanerfyl for all construction traffic to Site Access 1 is not permitted.
- b. The minor road from the A470 at Talerddig to the site shall have fully intervisible passing bays and a minimum road width of 4.5metres. After completion of the construction works the road shall be fully repaired and resurfaced to the approval of PCC.

**6. Specific Conditions relating to AIL deliveries to Carnedd Wen Wind Farm**

- a. No specific items but all general items apply

**7. Specific Conditions relating to AIL deliveries to Llanbadarn Fynydd Wind Farm**

- a. No specific items but all general items apply

**8. Specific conditions relating to the construction of Wind Farms on Peat Rich sites such as Llanbrynmair and Carnedd Wen the carbon balance calculation shall be reassessed to allow for:**

- a. A true estimate of the volume of peat excavated allowing for overbreak and collateral damage. All Developers calculations use a 'net area' approach however for example a 5 metre wide access track will require a width of greater than 5 metres to provide a 5 metre running surface, drainage ditches on at least one side, allowance for side slopes in cut and fill plus the effect of straying construction activities. An allowance of 10 metre width is realistic. Given that Carnedd Wen has 48 Km of tracks, 48Km by 5metres is a significant area. This 'overbreak effect' also will occur for turbine bases, compound base construction etc.

- b. A 'Carbon Emissions Factor' as the latest research by the University of Aberdeen, see [www.sciencedirect.com/science/article/pii/S0301421513010896](http://www.sciencedirect.com/science/article/pii/S0301421513010896) (This has the effect of quadrupling the carbon payback period (CPP) alone.)
- c. A true acknowledgement of the drain down effect of excavating through Peat. The Developers calculations allow only 4 metres, whereas in fact this can be up to 100 metres. A conservative figure would be 25 metres. This has a major effect on the amount of peat affected and hence on the CPP.

Should the resultant CPP approach or exceed the lifetime of the Windfarm the Developer shall propose modifications to the scheme to ensure the scheme repays the carbon debt of construction and manufacture within 5 years of commissioning.

#### **9. Specific conditions relating to the Decommissioning of Wind Farms**

- a. Prior to the start of construction the Developer shall provide a Bond to cover the entire cost of decommissioning of the Wind Farm and reinstatement of the site.

#### **10. Additional Comments**

- a. To police these conditions a full time supervisory body should be established funded by the Developers but controlled (possibly) by PCC with input from other interested parties. This organisation shall have enough staff to effectively monitor all the construction activities of the Developer and shall have the power to suspend work should breaches of conditions occur. The public should be informed of how to contact this organisation should they believe a breach of conditions has occurred.