

Application by Vattenfall, dated 30 November 2007 for consent under Section 36 of the Electricity Act 1989 to construct and operate a 59.5 MW wind turbine generating station in Powys, Mid Wales ("Llanbadarn Fynydd")

Application by Fferm Wynt Llaithddu Cyf, dated 7 May 2008 for consent under Section 36 of the Electricity Act 1989 to construct and operate a 66.7 MW wind turbine generating station in Powys, Mid Wales ("Llaithddu")

Application by CeltPower Limited, dated 9 May 2008 for consent under Section 36 of the Electricity Act 1989 to construct and operate a 126 MW wind turbine generating station in Powys, Mid Wales ("Llandinam")

Application by RES UK & Ireland Limited, dated 27 March 2009 for consent under Section 36 of the Electricity Act 1989 to construct and operate a 100 MW wind turbine generating station in Powys, Mid Wales ("Llanbrynmair")

Application by RWE NPower Renewables Limited, dated 11 December 2008 for consent under Section 36 of the Electricity Act 1989 to construct and operate a 130-250 MW wind turbine generating station in Powys, Mid Wales ("Carnedd Wen")

Application by SP Manweb plc, dated 2 December 2009 for consent under Section 37 of the Electricity Act 1989 to install and keep installed a 132 kV overhead electric line connection from the proposed Llandinam Wind Farm to Welshpool Substation

Statement of Common Ground

Transport

Statement of Common Ground between SP Manweb plc and Welsh Government (Transport  
Division)

NOVEMBER 2013

## 1 INTRODUCTION

### Purpose of this Statement of Common Ground

- 1.1 This Statement of Common Ground ('SOCG') has been prepared by SP Manweb Plc ('SP Manweb'). For the purpose of this SOCG, SP Manweb and Welsh Government (Transport Division) will jointly be referred to as 'the Parties'.
- 1.2 The purpose of this SOCG is to set out areas of agreement between the Parties about the application for consent under Section 37 (s37) of the Electricity Act 1989, which has been made by SP Manweb to the Secretary of State, for consent to install and keep installed a new 132 kV overhead line over a distance of 35 km and within a 100 m corridor from Llandinam Repowering Wind Farm to the Welshpool Grid Substation ('the Application') and as an interested party in the five wind farm applications as the statutory licence holder of the distribution network in Mid Wales and as a promoter of the SP Manweb proposed Mid Wales Connection Project, a Nationally Significant Infrastructure Project under the Planning Act 2008, which is related to these and other wind farm applications.
- 1.3 In this SOCG, the Application is referred to as the 'Llandinam Scheme' or alternatively 'the proposed overhead line'. It is intended that this SOCG will provide information to facilitate a smooth and efficient Inquiry process and will give a clear position of the state and extent of agreement between the Parties as at the date on which this SOCG is signed and submitted to the Secretary of State.

## 2 THE APPLICATION & UPDATED ENVIRONMENTAL STATEMENT

- 2.1 The Application which was made in 2009 was accompanied by an Environmental Statement (ES) (the 2009 ES). In December 2010, SP Manweb produced and submitted supplementary environmental information in response to post application feedback ('the 2010 ES Addendum'). The 2010 ES Addendum included two amendments to the proposed development where the proposed overhead line was moved outside of the original 100 m corridor (following ground surveys and discussions with landowners).
- 2.2 SP Manweb has noted the comments raised by the former Countryside Council for Wales (now Natural Resources Wales) in its letter dated 24 October 2012 and the reasons stated by Powys County Council (Powys CC) in its Form B response dated 30 October 2012 concerning the need for and design of the proposed overhead line. SP Manweb assessed the technical implications of developing suggested design changes. The outcome of this technical assessment is now concluded and has been incorporated into the 2013 Updated ES (see below).
- 2.3 To ensure that the original ES is up to date, SP Manweb has revisited the 2009 ES and 2010 ES Addendum and undertaken additional work in response to comments received. SP Manweb has also undertaken an analysis of the relevant undergrounding policy set out in National Policy Statement for Energy Networks Infrastructure (NPS EN-5) in as well as an analysis of alternative design and routeing options. The NPS EN-5 Paper is included as Appendix 05a and The Review of Needs Case and Alternatives as Volume 5 of the Updated ES.
- 2.4 All of this work is captured in the Updated ES, which was submitted on 29th October 2013. It is agreed that the Updated ES forms the full and complete Environmental Statement for the purposes of the Electricity Works (Environmental Impact Assessment) (England and Wales) (Amendment) Regulations 2000 (the EIA Regulations) and it is further agreed that the Updated ES contains sufficient environmental information to enable the Secretary of State to make his determination.

### 3 THE CONJOINED INQUIRY

3.1 A combined public inquiry ('the Inquiry') under section 62(3) and Schedule 8 of the Electricity Act 1989 ('the 1989 Act') is being held into the following applications made under sections 36 and 37 of the 1989 Act:

- Llanbadarn Fynydd Wind Farm
- Llaithddu Wind Farm
- Llandinam Repowering Wind Farm
- Llanbrynmair Wind Farm
- Carnedd Wen Wind Farm
- The Application.

Together these are known as 'the Wind Farm Applications'.

3.2 The Wind Farm Applications are also for directions under s90 of the Town and Country Planning Act 1990 that planning permission be deemed to be granted for each of the above-mentioned proposed developments.

3.3 The Wind Farm Applications were made to the Secretary of State by the above-mentioned companies stated in the first page of this SOCG between 2007 and 2009. They consist of proposals to construct and operate onshore wind generating stations with installed capacities ranging between 59.5 MW and 130-250 MW on land located within Strategic Search Areas (SSAs) B and C (as identified in Technical Advice Note 8: Planning for Renewable Energy, 2005 (TAN 8)) in the County of Powys in Mid-Wales.

3.4 The Secretary of State has appointed Mr Andrew Poulter BA, BArch, RIBA an Inspector in the Planning Inspectorate Wales, to hold the Inquiry on his behalf. The procedure to be followed at the Inquiry into the Wind Farm Applications is governed by the Electricity Generating Stations and Overhead Lines (Inquiries Procedure) (England and Wales) Rules 2007 ('the Inquiry Rules').

3.5 An Introductory Meeting was held on Wednesday 28th November, 2012 in Llandrindod Wells. A Pre-Inquiry meeting under rule 9 of the Inquiry Rules was held at 10.00 a.m. on Monday 18 February 2013 and 10.00 a.m. on Monday 25 February 2013 at The Pavilion, Spa Road, Llandrindod Wells, Powys, LD51 5EY.

3.6 An Inquiry Timetable has been agreed between the parties to the Inquiry. The Inquiry format is topic based, on a rolling programme, and arranged to include separate sessions on SSA B, SSA C, the Llandinam Scheme, and cumulative effects. Session 3, which will consider the Application, starts Tuesday 21 January 2014. Session 4, which considers matters in common and cumulative effects, starts Tuesday 18 March 2014.

3.7 The deadline for submission of this SOCG is 26 November 2013.

#### **The Proposed Overhead Line and its Description**

3.8 The proposed overhead line runs generally eastwards for approximately 35 km and comprises land that, for the purposes of this Application, is described as the 'proposed route' and the overhead line will be erected upon the route shown on Fig 1.2 in the 2013 Updated ES. The proposed route passes through the following Community Council areas: Mochdre; Kerry; Llandyssil; Montgomery; Forden; and Trewern.

3.9 The direction of the proposed route is agreed to be as follows:

3.10 The route starts at the proposed Customer Substation (SO 04758363) at Bryn Dadlau on the Waun Ddubarthog Ridge, an upland plateau lying above 400 m Above Ordnance Datum ('AOD') and heads in a broad east to north-easterly direction, crossing the A483 Llandrindod Wells to Newtown Road and skirting the base of Glog

before crossing the B3455 and traversing the open slope of Kerry Hill below the Kerry Ridgeway Regional Trail. Just north of Block Wood, it swings to a more northerly alignment, passing to the east of Pentre and Sawmills and crossing the A489 and Mule Valley just to the west of Glanmule. The route then continues northwards through the undulating farmland dropping down to cross the Mule Valley for a second time near Upper Maenllwyd, before rising up again to cross the undulating elevated farmland (around 200 m AOD) between Abermule and the Llandyssil Valley. From here it descends to the edge of the Severn Valley, where it converges on the B4385 and the Machynlleth to Shrewsbury rail line near Court Calmore. It continues to run close to and parallel the railway, crossing the low-lying fields of the Camlad Valley before rising up again and traversing the lower slopes of the eastern side of the Severn Valley around 100 m AOD. Passing to the west of Forden and Leighton Hall, the proposed overhead line then terminates just south of the B4381 Leighton Road before cabling under this road and into the Welshpool Grid Substation approximately 1 km east of Welshpool (SJ 24130673).

- 3.11 The design comprises 382 wood pole structures, including two terminal poles at either end. The 35 km of route between these terminal poles comprises a mix of intermediate poles, section and section/ angle poles, single poles and failure containment poles. Pole heights are up to approximately 16 m above ground level.

#### 4 MATTERS AGREED BETWEEN THE PARTIES

- 4.1 The Parties are AGREED on all matters, excluding those outlined in section 5 below, and in particular are AGREED on the following points:

##### Policy Context

- 4.2 The Welsh Government set out its policy for the future of transport in Wales in "One Wales: Connecting the Nation - The Wales Transport Strategy" published in April 2008. This policy includes objectives such as reducing greenhouse gas emissions, reducing environmental impact from transport, integrating local transport, improving access between key settlements and sites, enhancing international connectivity and increasing safety and security. The delivery of the One Wales Strategy was to be achieved in partnership with the Regional Transport Consortium which each produces its own Regional Transport Plan (RTP). The Llandinam site falls within the Mid-Wales Transport Consortium (TTaCC) which produced its RTP in 2009. There are no specific transport-related policies that affect the Llandinam overhead line scheme in the RTP.
- 4.3 The Welsh Government has issued a series of technical advice notes to support Planning Policy Wales. Technical Advice Note 18 (TAN18) deals with all matters relating to transport. TAN18 sets out how the transport elements of a development should be assessed although it makes no direct reference to the construction impact of development or to wind farm developments. However, the principles of TAN18 have been adopted in the development of the transport strategy for the Llandinam scheme.
- 4.4 Section 8 of the Powys Unitary Development Plan (UDP) sets out the general position of transport and also reviews the highway improvement schemes in the county in section 8.5. It notes proposals for by-passes of both Newtown and Builth Wells. Since adoption of the Powys UDP proposals for a Newtown by-pass have proceeded with an ECI (Early Contractor Involvement) contractor being appointed earlier in the year. Draft orders are expected to be published in spring 2014. However there is no completion date as yet for that scheme it is therefore unlikely the route will be of benefit to the wind farms or overhead line schemes. The scheme at Builth Wells is not as advanced as that at Newtown although it does have a safeguarded route within the Powys UDP. In summary the Powys UDP places no particular requirements on developers of wind farms or overhead electric lines in terms of transport requirements or schemes that need to be taken into account during the anticipated construction period.

### Conclusions

- 4.5 There are no specific transport polices that relate to the wind farm or overhead line schemes as such the schemes impacts are assessed based on the good practice guidance set out in TAN 18 in a similar manner to other developments that require planning permission.

### STMP and AIL Regulations

- 4.6 Deliveries of components (e.g. wood poles, steelwork, conductors, ducts, cable drums) would be via articulated and rigid HGVs. The wood poles would form the most significant element of the deliveries for the project.
- 4.7 The initial movements would be the poles would be delivered from pole supplier to the temporary pole area. Typical articulated vehicle dimensions for the delivery of a 16 m pole would be width 3.1 m, height 4.9 m and length including trailer 18 m (16 m is the maximum pole length currently, and only 7 - 8 would be required; other poles are generally 14 m in length).
- 4.8 Poles above 18 m would require special highways authority permission, although no such poles are currently anticipated.
- 4.9 The maximum allowable gross weight of a Vehicle/Trailer/Load Combination is 44 tonnes on UK roads and we do not exceed this for any loads. None of the loads meets the AIL regulations and the stmp does not apply.

### Description of the highway network

#### A and B classified road network

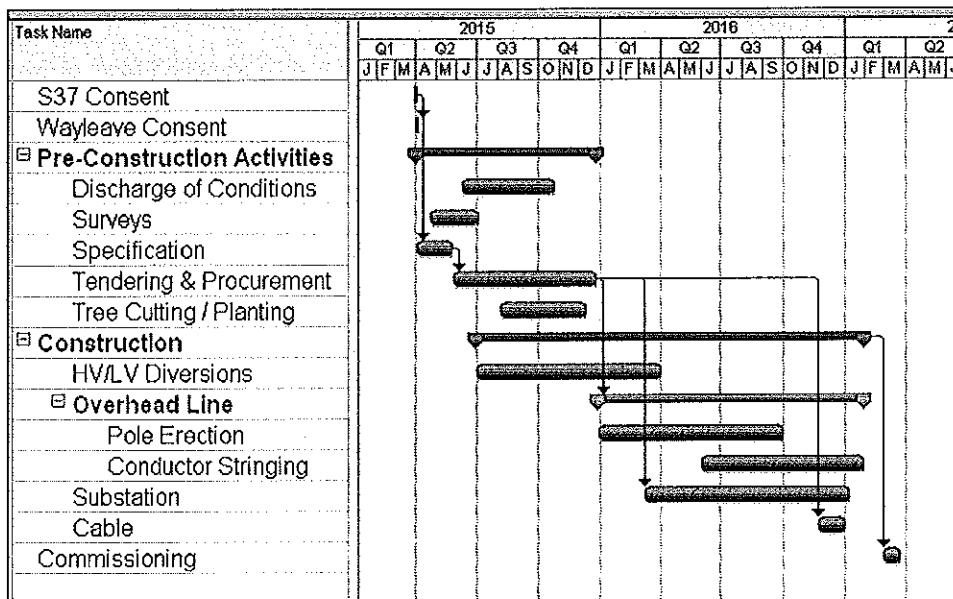
- 4.10 Final supply areas served from A and B roads have yet to be agreed but it is assumed that delivery vehicles would use the national road network/primary routes to gain access to the region.
- 4.11 From the north and east of the proposed overhead line route corridor these national road network and primary routes would be the A483, A495 and A458 to Welshpool which forms the northerly limit of the proposed overhead line.
- 4.12 From the south and east of the proposed overhead line these routes would be the A470, A44 and then along the A483 towards Newtown the southerly extent of the overhead line.

#### Unclassified roads and off road tracks

- 4.13 The local highway network is affected by sections that have weight limits, except for access, unmanned level crossings, road narrowing and chicanes, acute corner alignments and changes in gradient.

### Programme

- 4.14 It is expected that, with a staff of approximately 25, the construction of the overhead line will achieve approximately 2/3rds of a kilometre per week based on working at more than one concurrent location. The anticipated construction period will therefore be approximately 18 months, which will include a 4 month period for the erection of the conductors. Overhead power line constructions with cable section installations follow a standard sequence of activities. For this single circuit wood pole line with cable sections the pre-construction and construction activities would typically be described as follows:



4.15 Whilst the overall construction of the overhead line may take up to 18 months to complete, time will be limited to a matter of a few weeks for each section of line. This will vary from section to section based on the provision of any necessary access arrangements to the individual pole locations, erection of the structures and subsequent reinstatement of ground and removal of any materials or temporary apparatus used in the construction process.

**Storage area locations**

4.16 The final locations of these temporary storage areas are not yet finalised but will be spaced to give coverage across the proposed route at the northern, central and southern sections to minimise the distances to be travelled for the equipment to the erection sites and ensure no adverse impacts arise or excessive distances are undertaken.

4.17 Each temporary storage area would contain 250-300 poles and foundation baulks and would be approximately 2,500 m<sup>2</sup> in size.

4.18 The temporary storage areas are in addition to the main contractor compound where the steelwork, conductors and other equipment, secured stores and offices are, it is anticipated that all the compounds will be located within the 100m line width to ensure their impacts were evaluated as part of the ES process.

**Deliveries and methodologies**

**The A and B classified road network**

4.19 These routes will be used to allow the bulkier materials and poles to be delivered to (these will use none A11 vehicles i.e. Articulated and rigid HGV's) the local area for transshipment as required. These Larger loads comprising the poles, conductors and cable would not be sourced locally and therefore would travel the greatest distance. Final supply areas have yet to be agreed but it is assumed that delivery vehicles would use the national road network/primary routes to gain access to the region.

4.20 From the north and east of the proposed overhead line route corridor these national road network and primary routes would be the A483, A495 and A458 to Welshpool which forms the northerly limit of the proposed overhead line.

4.21 From the south and east of the proposed overhead line these routes would be the A470, A44 and then along the A483 towards Newtown the southerly extent of the overhead line.

**Unclassified roads and off road tracks**

- 4.22 From the proposed three storage areas spread evenly across the route, which will hold all the equipment necessary to construct the proposed overhead line, the poles and other equipment such as the fixing wire/stays, and conductors would be transported along the primary road network by rigid HGV's with crane equipment if possible and then on to the unclassified road network to gain access to the fields / construction corridor most likely by tractors and trailers. The southerly section from the A483 junction with the unclassified road leading to the Llandinam Wind Farm has an acute bend and restricted junction arrangement which will require the equipment to be lifted into the field and transported across it and then lifted back onto the adopted highway to remove the need to carry out highway improvements. This methodology will be used on other sections of the route if required as it would have no adverse impacts on the highway.
- 4.23 The local highway network is affected by sections that have weight limits, except for access, unmanned level crossings, road narrowing and chicanes, acute corner alignments and changes in gradient. These have been reviewed as part of the initial routing strategy but will be further reviewed in detail for the implications of the field access points. There are alternative routes that will accommodate the needs of the construction vehicles that ensure the impacts are not considered adverse.
- 4.24 Lorries would firstly carry the poles from the manufacturer to the temporary storage areas for the poles. Deliveries would typically come in loads of around 50 poles. Based on the need to delivery approximately 800 individual poles in total each of the three temporary storage areas would have a maximum of six bulk deliveries. The delivery lorries are of an articulated type with an extending trailer bed. The overall lorry length is based on the longest pole being 16 m with a 2 m overhang and is therefore not an accompanied load.
- 4.25 Each delivery would normally be phased to be around 5 to 10 days apart to ensure the scale of the pole stack at the does not reach a height where it would be visually intrusive on the local area. These will usually remain operational for two to three months. The 17 tonne lorries (rigid with overhang) would then deliver the poles to positions adjacent to the final pole erection locations.
- 4.26 The 17 tonne lorries would carry four poles in each load (two H-pole sets), and would typically take out three loads per day based on 6 month period, 383 locations/130 days = 3 loads.
- 4.27 Deliveries of plant would occur at the start and finish of the construction period (e.g. tractors and tree felling / chipping equipment, excavators, tensioner's, mobile elevated working platforms).
- 4.28 Light vehicles (including 4x4) and vans bringing construction staff to site will occur throughout the construction period.
- 4.29 Deliveries of components (e.g. wood poles, steelwork, conductors, ducts, cable drums) would be via articulated and rigid HGVs. The wood poles would form the most significant element of the deliveries for the project.
- 4.30 The initial movements would be the poles would be delivered from pole supplier to the temporary pole dump. Typical articulated vehicle dimensions for the delivery of a 16 m pole would be width 3.1 m, height 4.9 m and length including trailer 18 m (16 m is the maximum pole length currently, and only 7 - 8 would be required; other poles are generally 14 m in length).
- 4.31 Poles above 18 m would require special highways authority permission, although no such poles are currently anticipated. The maximum allowable gross weight of a Vehicle/Trailer/Load Combination is 44 tonnes on UK roads and we do not exceed this for any loads.
- 4.32 Contractors' delivery vehicle - from pole dump to field entrance (rigid). These would typically be a Volvo type 17 tonne flatbed fitted with a crane and front / rear pole carrying gantries. Dimensions: Width 3.0 m, Height 4 m and Length 11 m. Overall the poles will overhang the vehicle with red markers etc. as required. These

lorries are generally escorted so that local traffic in the narrow lanes can be held for a few minutes as the pole is lifted over a hedge etc.

- 4.33 Table 1 indicates the approximate number of vehicle movements associated with the construction and operation of the overhead line.

TABLE 1: ESTIMATED VEHICLE MOVEMENTS

Vehicle Movements	Construction - Numbers per Day	Operation - Numbers per Month
Staff Vehicles	3-5 (light vehicles)	20
Deliveries of components	3-4 (HGV) spread across a number of access points	20
Deliveries of plant	1 HGV	20

- 4.34 The vehicles used are all of a standard size and scale that could be expected on the local network.
- 4.35 The construction traffic associated with the delivery of the overhead line requires no highway improvements to accommodate the vehicles used on either the classified or non classified highway network.
- 4.36 Advance signage to inform local residents that vehicles will be in the local area for a short period of time across the day with contact numbers etc to ensure that the works are taken forward in an informed manner.
- 4.37 Given the above, no significant highways effects from construction traffic are anticipated as the scheme does not require the use of AIL's. The construction vehicles will be at a level where they would not be noticeable when judged against the background traffic flows along the highway network other than at the very local area where access to fields are needed. It is considered that there are no cumulative impacts that need to be assessed as the scheme will not be using vehicles that fall into the description of an AIL and thus no need to be considered as part of the STMP.

**Cumulative impacts**

- 4.38 The assessments highlighted that the A483 to the Llandinam wind farm is the only section where construction activities off the classified network may take place.
- 4.39 The construction periods of each proposal have been reviewed and indicates that the wind turbines will require the A483 improvements to be in place and it is proposed that the overhead line will commence construction at along this section and would be completed before the turbine deliveries take place.
- 4.40 The advance work for the turbines will be undertaken by standard construction vehicles for foundation construction and the two schemes may overlap with these activities. From the session one submissions the route is likely to have some 38 two way hgv movements or 4/5 per hour.
- 4.41 The overhead line has some 3-4 hgv movements per day or 1 per 2 hours.
- 4.42 The potential interaction is therefore low risk however good management with radio linked banks men can ensure that vehicles do not enter/leave whilst opposed thus conflicts will not occur and the delay will be minimised.
- 4.43 These increases are temporary in nature and it is considered that the levels set out do not warrant closer examination of the effects on the local routes or junctions.

**5 MATTERS YET TO BE AGREED BETWEEN THE PARTIES**




- 5.1 This SOCG has been agreed by the Parties to promote the efficient consideration of the Llandinam Scheme (overhead line) at the Inquiry.
- 5.2 It is agreed between the Parties that the Llandinam Scheme (overhead line) will not give rise to any likely significant effects on trunk road traffic or transport, either on its own or cumulatively with other development.
- 5.3 As a result Welsh Government (Transport Division) has no objections to the Llandinam Scheme or the proposed route for the Llandinam Scheme and there are no areas of disagreement between the Parties regarding the Welsh Government's trunk roads.


New 132 kV Overhead Line Connection from  
Llandinam Wind Farm to Welshpool Substation  
Statement of Common Ground 7: Transport

This SOCG is prepared jointly and agreed by the Parties:

Signed by  
For and on behalf of SP Manweb Plc

  
Date: 12/12/13

Signed by  
For and on behalf of Welsh Government  
(Transport Division)

  
Date: 25/11/13