



Upper Ogmores Wind Farm

Abnormal Load Route Assessment

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1 Abnormal Load Delivery Route

1.1 Public Road Access Study

1.1.1 The access study considered various route options to the site. The aim of the study was to determine the route for the major wind turbine component deliveries to the proposed site with the minimal impact on the road network. The route to site has remained unchanged from the original application.

1.1.2 The access study was based on the following assumptions:

- 7 wind turbines with a maximum tip height of 149.9m would be transported.
- Maximum turbine blade length of up to 57.6m, an increase of 6.3m from the original application.
- Maximum vehicle height of 5m, unchanged from the original application.
- Maximum vehicle gross weight of 140 tonnes, unchanged from the original application.
- Trailers with rear steer capacity would be used for deliveries.
- Full road width would be utilised by delivery vehicles (i.e. both carriageways) where necessary.

1.2 Route Selection

1.2.1 The abnormal load delivery vehicle route to site remains the same as the previous route outlined in the original planning application.

1.2.2 In selecting the preferred route to the site, the following criteria have been considered:

- Maximising the use of trunk roads and primary county roads.
- Delivery route used by existing wind farms near to the site.
- Minimising the distance travelled on the public highway.
- Minimising the effect on sensitive receptors such as schools and residential areas.
- Minimising land take and widening works.

1.2.3 The preferred route has been selected on the basis that it fulfils each of the above criteria and is considered to be most suitable for transporting

abnormal loads. The preferred abnormal load route is shown on Figure 1, and is summarised in the following text:

- The abnormal loads will leave Swansea Docks onto the A483;
- travel east along the A483, join M4 at Junction 42;
- leave M4 at Junction 43 onto A465 towards Hirwaun;
- continue along A465 for approximately 30 km until reaching a roundabout;
- exit right off roundabout onto A4061 (Rhigos Road) near Hirwaun;
- continue along A4061 approximately 1km west to a small roundabout;
- exit left off the roundabout and approximately 2.5km further along the A4061 to the Pen y Cymoedd Wind Farm site access;
- continue along Pen y Cymoedd Wind Farm / NRW Forestry tracks for 20km (off the public highway);
- exit left off the NRW Forestry tracks onto the A4107;
- travel east along A4107 for approximately 1km to the proposed Upper Ogmre Wind Farm site access.

- 1.2.4 A swept path analysis of the critical turbine component delivery vehicles has been undertaken. Due to the increase in blade length there are only very minor changes from the previous planning submission. Works to the public highway will be limited to the temporary removal of street furniture. The results of the swept path analysis along the public highway are presented on Figure 2. Widening of the existing NRW Forestry track (between the A4061 and A4107) will be required. The results of the swept path analysis along the NRW Forestry track are presented in Figure 3. Typical forestry track widening details are presented in Figure 4.

2 Access for General Construction Traffic

- 2.1.1 The general construction traffic delivery vehicle route to site remains the same as the previous route outlined in the original planning application.

2.2 Likely Origins/Destinations

- 2.2.1 General construction traffic is likely to comprise heavy goods vehicles delivering construction materials, fuel tankers and staff vehicles. A range of general building materials will be required to construct the Upper Ogmre Wind Farm, including concrete and steel for turbine foundations,

aggregate for access tracks and crane hardstandings, and power and instrumentation cabling.

- 2.2.2 The use of site won stone will significantly reduce the volume of stone imported onto the site to construct the site tracks and hardstands. Aggregate and ready mixed concrete will be sourced locally. The origin of staff vehicles and fuel tankers supplying the generators and plant on site during the construction phase is more difficult to predict at this stage.

2.3 Assumed Routeing

- 2.3.1 It is assumed that vehicles from most suppliers based in the area would follow the M4 and A465 onto the A4061 to approach the site from the north along the A4061 and subsequently the A4107. Assessment of the effect of construction traffic on alternative routes has not been undertaken as these routes are considered most likely.
- 2.3.2 Construction traffic will not be permitted to access the site from the south along the A4061 through Nant y Moel due to issues with bridges and slip planes highlighted by Bridgend County Borough Council. Prior to construction commencing a Construction Traffic Management Plan (CTMP) will be developed in consultation with Bridgend County Borough Council.
- 2.3.3 Traffic generated by each of the activities will remain as per Table 9.4 submitted in the original submission. Concrete and steel delivery numbers for turbine foundations were previously over-estimated, therefore the increase in the foundation size associated with the larger turbines will not have an impact on the construction vehicle delivery numbers presented in the original planning application.