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13 ENVIRONMENTAL MITIGATION AND MONITORING PLAN – THE ONSHORE COMPONENTS

13.1 INTRODUCTION

COWL is committed to constructing and operating Rhyl Flats wind farm to high environmental standards.

This section provides a summary of the mitigation measures as well as proposed commitments to monitoring.

13.2 MITIGATION AND MONITORING

A summary of mitigation measures is presented in *Table 13.1*.

Mitigation measures proposed during construction will be adopted by COWL and imposed as conditions of contract on the Engineering, Procurement and Construction (EPC) contractor and any sub-contractors employed to build the wind farm.

Mitigation measures proposed during operation will be adopted by COWL and imposed as conditions of the contract on the EPC contractor where relevant to the design of the wind farm.

Table 13.1 Mitigation Measures to be Implemented during Construction and Operation

Environmental Issue/Impact	Mitigation Measures
Ecology and Ornithology	• Loss of habitat of nature conservation interest will be avoided where possible. • Where tree loss is unavoidable, the trees to be felled during construction will be subject to prior survey to establish if nesting birds, bats or other protected species are present. Appropriate mitigation measures will be implemented in consultation with CCW. • Prior to construction the route will be walked to check for the presence of protected species and any necessary measures taken in consultation with CCW. • Where the working corridor passes within 500 m of ponds or drains COWL will, if necessary, install amphibian fencing to avoid impacts on great crested newt, which may be migrating to and from breeding ponds. The exact locations and requirements will be informed by further surveys at a suitable time of year, prior to construction. • Should any protected species be identified once construction works commence, CCW will be contacted and any appropriate mitigation measures will be agreed and implemented.

Environmental Issue/Impact	Mitigation Measures
	• Electrocution risk will be minimised by having a distance of approximately 2 m between wires to reduce the likelihood that birds can bridge them (Janss 2000). • Collision risk to coastal birds will be avoided by tunnelling the cable beneath the shoreline habitats. • Bird deflectors will be fitted to the overhead line where it passes close to (within 300m) water bodies and other wetland habitats. Exact locations will be determined by field survey of the final overhead line route prior to construction. • Topsoil and subsoil will be stripped and stored separately within the working width and reinstated appropriately. Topsoil from any habitats of nature conservation value will be stored separately from topsoil from other areas. The duration of storage will be as short as possible to reduce the risk of long term damage to the soil structure and biota.
Terrestrial Archaeology	• Archaeological coring across the foreshore, provided for in respect of marine mitigation, will continue to the landfall junction chamber and along the extent of any trenches required between the chamber and the substation. • Where Holocene material is apparent, provision will be made for complete recovery of cores. • In the event that earthwork or cropmark features are identified from the walkover and/or review of air photographs, then these will be marked as exclusion zones on scheme masterplans, including contract documents. Where an exclusion zone would impinge on construction and an archaeological origin to the feature is suspected, then further archaeological investigation will be undertaken to resolve the situation. • Subject to the provisions of the WSI, an archaeological watching brief will be carried out during: groundworks associated with construction of the substation and compound; groundworks associated with the installation of any temporary compounds and access tracks; and groundworks associated with the installation of each pole.
Noise	• Following the guidance contained within *BS 5228 : 1997 Noise and vibration control on construction and open sites Part 1 : Code of practice for basic information and procedures for noise and vibration control* will minimise the potential for disturbance by any construction activity.

Environmental Issue/Impact	Mitigation Measures
Traffic and Transportation	The Construction Method Statement will be agreed with the Distribution Network Operator and will cover issues such as: • Access to the route for construction vehicles and personnel. • Pre-construction surveys. • Timing of works. • Any requirements for clearance provisions and traffic management on the A55 or other local roads. • Informing police and highways authorities. • Implementation of traffic management measures (particularly for abnormal loads). • Agree routes with the Local Authorities.
Socio-economics	Due to the limited nature of the construction and operational activities, it is not anticipated that the onshore elements of the development, including the underground cabling, would give rise to significant impacts on the local economy.
Landscape and Visual Amenity	• The transmission lines have been routed to avoid sensitive areas, such as St George conservation area and existing woodland blocks (such as Coed y Geufron and Coed Pen-y-bryn). • The cabling has been placed underground in the larger settlement areas of Belgrano and Towyn. • The transmission lines have been routed a suitable distance from: groups of properties (such as Bodtegwel Terrace); local attractions, including Kinmel Park and Tan-y-mynydd fishing lakes; and listed buildings (Fadre Farm and Bodoryn Cottages).