CeltPower Ltd

LLANDINAM REPOWERING AND EXTENSION

RESPONSE TO QUERIES WITH REGARD TO FIRE HAZARD RAISED DURING THE SESSION 4 EVENING MEETING

1. Turbines and fire hazard

1.1   Fire is a hazard for wind turbines as for any form of electricity generating plant or other machinery. Indeed turbine fires are no different than any other fire. The hazard is managed by design standards and by a maintenance regime more rigorous than for conventional generating equipment.

2 Operational experience

2.1   Celtpower is a joint venture of Scottish Power Renewables (SPR) and the Eurus Group. SPR has operated windfarm assets in the UK and Ireland since 1992, including the existing site at Penryddlan and Llidiartywaun and has extensive knowledge and experience of operational requirements of wind turbines. As a company it takes health and safety obligations seriously, and continually reviews arrangements and controls associated with health and safety hazards, including the potential for turbine fire. SPR holds OHSAS:18001 (Safety); ISO:14001 (Environmental) and ISO:9001 (Quality) certification for operational activities. Holding this certification requires external audit of procedures, including safety procedures.

3 Portfolio management

3.1   ScottishPower Renewables is part of Iberdrola, the world leader in wind energy, with operations in almost 40 countries and more than 14,000 megawatts of installed renewables capacity. ScottishPower Renewables operates almost 30 projects, including Whitelee, the UK's largest onshore windfarm. Our portfolio includes some 900 turbines with an installed capacity in excess of 1,400 megawatts. The company adopts a 'portfolio management' approach to operation combining a core of central resources supported by a highly experienced 'Field Operations' team spread across the UK and Ireland, ensuring a strong local presence. A local emergency response rota is operated 24 hours a day, 365 days a year – ensuring all site emergencies are responded to locally.

4 The Renewables Control Centre (RCC)

4.1   The Renewables Control Centre (RCC) located at Whitelee Wind Farm, just outside Glasgow, provides 24 hour monitoring and controls all of the company's windfarms across the country.

4.2   It is the most advanced dedicated renewables control centre in the UK and performs many other functions such as the monitoring and resetting of turbine faults, as well as 'Work Control' and weather profiling for the safe and efficient management of all site works. The SPR Control Centre is also the point of co-ordination for all site-based emergencies, allowing for an immediate and effective central response, supported by immediate local action.

5   Turbine inspection

5.1   In addition to monitoring and control via the RCC, turbines are inspected in accordance with manufacturer recommendations and routine visual inspections are undertaken to identify potential issues before they progress to a more significant level. Work Control arrangements, based on task specific risk assessments, are applied to infrequent non-routine activities such as welding and other forms of 'hot work' which can introduce a higher degree of fire to ensure that these activities can be carried out safely and with the risk of fire reduced to an acceptable level.

6   Turbine smoke detection and emergency response

6.1   The turbines at Llandinam Repowering will have smoke detection systems installed. The RCC will be immediately aware of any fire incidents, which in turn will effect a site specific emergency plan, which will be developed in conjunction with the local emergency services.

6.2   To date SPR have experienced only a few fire emergences throughout the operational life of the entire portfolio, and where these have occurred they have been dealt with quickly and effectively through the site specific emergency plan detailed below with no risk to personnel and very limited environmental impact.

6.3   The site specific emergency plan

- identifies the persons responsible in the event of an emergency
- sets out how an emergency is reported, providing all emergency contact information.
- includes a local fire plan that
    - details how to raise the alarm
    - identifies the location of portable firefighting equipment, escape routes and assembly points
    - provides a system to ensure incidents are recorded, investigated and reported.
    - provides guidance to employees and contractors on what to do in the case of a fire
    - regular inspections of fire signage, escape routes including fire doors
    - fire alarm testing