



Met Office

Case study:

Whitelee Wind
Farm Control
Centre –
ScottishPower
Renewables

“Using the Met Office’s VisualEyes™ service gives us the control to monitor exact conditions and make real-time, on-the-ground decisions which have helped to increase our efficiency, and most importantly reduce safety risks to our staff and contractors.”

Mark Gailey, SPR Control
Centre Manager



Safe and efficient wind farm operations with VisualEyes™

Challenge

Monitoring weather conditions across a large wind farm portfolio presents a range of challenges. For the health and safety of staff and contractors, as well as the forward planning of equipment and manpower, it’s vital to keep track of real-time and forecast conditions at the site. Cancelling or postponing plant or engineering work is costly so planning for a suitable weather window is vital for efficient operations and to maximise return on investment. Whitelee Wind Farm Control Centre monitors over 20 sites owned by ScottishPower Renewables situated across the country.

Solution

Whitelee Wind Farm Control Centre has access to the Met Office’s VisualEyes™ service via a dedicated website 24 hours a day, 365 days a year. Operational controllers can quickly ascertain which weather elements are affecting, or are likely to affect, individual wind farms. The last two hours of real-time data is available, as well as forecast periods from six hours to 14 days ahead. Weather elements include lightning, wind speed (both at surface and hub-height), snow, rainfall, temperature and visibility. Controllers are alerted when any element breaches set thresholds. With this detailed information, controllers can make informed decisions about maintenance and operations schedules.

Benefits

VisualEyes™ is central to ScottishPower Renewables operations and has reduced the negative impact that weather can have on wind farm operations. The Map Viewer enables the visualisation of both real-time and forecast weather across a variety of timeframes. The Alert Panel clearly shows when criteria are expected to be breached and detailed Planning Charts provide complex information in an easy to understand format. Controllers can monitor changing situations and review operations affected by the weather such as gearbox and blade changes, access to nacelles and the management of high winds and lightning.