

CONDITION MONITORING SERVICES

Detect drivetrain faults earlier through state-of-the-art vibration, temperature and oil particle monitoring.

Defects/failures detected by condition monitoring include:

- » Gearbox, generator and main bearing failures
- » Gear failure (wear, tooth cracks, etc.)
- » Generator imbalance
- » High speed shaft misalignment
- » Lubrication issues
- » Blade misalignment

We translate alarms and data trends into targeted and potentially cost saving recommendations for action. We are technology agnostic and currently work with five different types of CMS across the 500+ turbines that we undertake Condition Monitoring services for.

WHY?

By accurately assessing the condition of your asset, we optimise performance through targeted maintenance. This preventive and predictive approach allows early detection of the onset of a failure, minimising the impact by:

- » Reducing lead time for spare parts
- » Reducing number and severity of failures
- » Allowing selection of a low wind period for carrying out works
- » Improving safety - why climb a turbine if it is operating well?



CMS SERVICE OFFERING



Regular monitoring and reporting



Event response



End of defects liability and warranty period review



Initial review following takeover



Advice on planning maintenance

INDUSTRY LEADING

RES supports an operational asset portfolio of 5 GW worldwide for a large client base. Our in-house developed diagnostic models are built based on this experience and provide us with efficient tools we need to minimise lost production and increase revenue.

RES is unique in offering a complete reliability and CMS monitoring service, tailored to the needs of its clients.

Other Monitoring Services

Offline CMS campaigns - Monitor turbines with no permanent CMS installed

Temperature condition monitoring from SCADA or retrofitted sensor data

Performance and compliance analysis using SCADA - including grid and lost production analysis

CMS retrofit project management

Foundation monitoring

WE ALSO PROVIDE:

- » Major component replacement
- » End of warranty and end of life assessments
- » 24/7 operational control centre for asset monitoring
- » Review of site works - observing technicians on-site to ensure technical excellence and efficient use of time
- » Reviews of OEM repair proposals and develop alternative, safer, more cost effective solutions by exploring in-situ repair opportunities, local suppliers, condition based maintenance



RES is the world's largest independent renewable energy company active in onshore and offshore wind, solar, energy storage and transmission and distribution. At the forefront of the industry for over 35 years, RES has delivered more than 16 GW of renewable energy projects across the globe and supports an operational asset portfolio of 5 GW worldwide for a large client base. Understanding the unique needs of corporate clients, RES has secured 1 GW of power purchase agreements (PPAs) enabling access to energy at the lowest cost.

CONTACT US