RES has been at the forefront of the wind industry for over three decades. Our core activity is the development, construction and operation of wind farms worldwide.

Drawing on over 30 years expertise in the development, installation and operation of remote meteorological and power performance measurement systems our instrumentation specialists have overcome the logistical and safety challenges of mast and system installation and operation in icy northern latitudes, deserts and far offshore.

RES has developed and/or built almost 9GW of wind energy and over 145 utility scale renewable energy projects. We have an unrivalled reputation for quality mast installation, design and monitoring.

With over 600 meteorological mast systems installed across 18 countries, the RES Instrumentation team is proud to have provided average data availability exceeding 99%.

**Our Services**

- Measurement system design, construction, installation and commissioning
- Install tubular masts up to 90m in elevation
- Deploy and manage Remote Sensing Devices (RSD’s)
- Mast & measurement system maintenance
- Provision of IRATA qualified rope access technicians trained in the handling of instrumentation and measurement sensors
- Turbine power performance testing
- Acoustic monitoring services

"We aim to deliver the highest quality instrumentation and mast installation services with a view to maximising data quality and availability whilst minimising measurement uncertainty."
Mast Installation & Maintenance Capabilities

Our in-house mast installation team has global experience both onshore and offshore. Ranging from the installation and commissioning of tubular masts in the UK and in such diverse locations as South Africa, Australia and Sweden through to the maintenance of lattice structures in Turkey and on offshore masts. All our technicians are highly experienced and IRATA qualified.

Measurement Services: Instrumentation & Remote Sensing

Our mast based measurement systems are designed to meet the requirements set-out in the rigorous power performance standard IEC61400-12-1. We have the capability to design, construct and install all types of remote measurement systems, as well as acting as the client representative for wind resource assessments and power performance verification projects. We can project manage system construction, commissioning and maintenance. RES’ in-house team can manage data recovery, processing, data quality, analysis and reporting.

Remote Sensing Devices (RSD’s) such as LiDAR & SODAR are important technologies in defining wind characteristics on potential wind farm sites. Our unrivalled expertise offers our clients valuable insights into the constraints and suitability of these devices in the development process. RES own and operate a range of these technologies for wind resource assessment and power performance verification, offering a system rental, operation and maintenance service to clients.

Data Management & Reporting

As part of the system design, deployment and management service, we can offer a bespoke data management and reporting service to our clients to ensure excellent data availability and the highest quality data. We check system integrity and sensor operation on a weekly basis, analysing trends and identifying erroneous data. We offer data recovery, on and offsite data storage and reporting on both a weekly and monthly basis.

Acoustic Services

Our in-house acoustic services team have been project co-ordinators on leading European research into wind turbine noise, were involved in producing the guideline ETSU-R-97, acted as peer reviewer for the Institute of Acoustics Good Practice Guide to the Application of ETSU-R-97, and contributed to the RenewableUK work on Amplitude Modulation.

Our acoustic services include background noise surveys in accordance with recommended guidance on wind farm noise assessment. The equipment has the required calibration and functionality for remote data recovery. The team also has the ability to process the data and derive noise limits. Other acoustic services include condition compliance measurements, turbine emission testing in accordance with the standard IEC 61400-11, operational and construction noise assessments, and reporting for the environmental impact assessment that forms part of the planning application for a proposed development.

Health Safety, Quality & Environment

Our dedicated team of professional in-house Health, Safety, Quality & Environmental advisors ensure all procedures are adhered to for working at height, in isolated locations and offshore environments. RES is at the forefront of health & safety developments in the renewable sector and we are proud to have been awarded several RoSPA gold awards as well as being accredited to ISO 9001, ISO14001, OHSAS18001 and under the Achilles scheme.

RES are experts in acquiring and managing high quality data. Our measurement expertise, gained over 30 years has contributed to achieving our portfolio of almost 9GW capacity - placing RES at the forefront of the renewables industry. We are confident our service will help you to maximise your project value and minimise your uncertainty, call us to find out how.

Please contact us:
E RMS@res-ltd.com | T +44 (0) 141 404 5689

RES Measurement Services, Renewable Energy Systems Ltd,
Colonsay House, GSO Business Park,
East Kilbride, Lanarkshire, G74 5PG