WIND AND SOLAR OPERATIONAL SERVICES

We manage over 200 MW of solar and 2 GW of wind projects and have been managing renewable energy projects for over 20 years.
RES has extensive experience of managing project finance with a wide range of lenders and investors. This has shaped our approach, where we strive to ensure project compliance whilst maximising project revenues.

Our service delivery model continues to evolve to meet the changing needs of our customers. We have built up extensive in-house engineering and technical expertise to manage a wide range of systems built by other contractors as well as our own. We understand the risks and pitfalls of wind and solar assets, and our team offers independent expertise to solve problems, minimise downtime or enhance performance.

Our highly skilled team of engineers and technical specialists cover areas including HSQE, HV, SCADA, condition monitoring, data capture and analysis, system design, plant optimisation, maintenance management, performance testing and more.

We operate over 2 GW of wind, solar and storage for a range of investors.

Ever since our first project was commissioned in the early 1990's RES has performed the role of Asset Manager on wind assets. Since this time it has become increasingly evident that many owners were dealing with the challenges of high operational costs, lost production and time delays related to Operations and Maintenance (O&M) and engineering works on their assets.

RES has developed a series of in house operational capabilities and as a result is able to step in and support owners by offering independent operational services, using the RES team of in house experts coupled with strong and proven relationships with our approved framework of suppliers.

As an independent third party with a centralised team of experts plus asset and site management staff located near our clients projects, we are able to manage each element of a specific task from analysis to planning, implementation, work monitoring, safety management and supervision.

- » Project compliance
- » Financial management
- » HSQE
- » Engineering
- » Technical
- » Contracting
- » Procurement

SERVICES

- Asset inspections and testing
- Main component replacement
- High/Low voltage systems management, inspections, maintenance and repairs
- Power performance analysis
- Condition monitoring and reliability engineering
- Life and condition assessment
- End of warranty and defect liability inspections
- Civil infrastructure assessment, management, inspection, maintenance and repairs
- Asset upgrades and corrective works
- Due diligence
- Owner's Engineer
- PAC and FAT Tests

CASE STUDIES

1.3 MW GEARBOX EXCHANGE

A turbine Original Equipment Manufacturer (OEM) failed to accept Condition Monitoring Data that could have allowed the proactive exchange of a gearbox at risk of failure. The gearbox subsequently failed and RES were invited to step in and manage the repair works. The RES Operations Team were able to quickly mobilise on site, planning the exchange, managing the crane pad testing, lifting operations, component supply and logistics, the onsite gearbox exchange and final commissioning.

The end result for the client was to halve the OEM quoted repair time and lost generation plus reduce the overall repairs costs by 40%. Following the successful completion of the gearbox exchange RES were contracted to provide the same service two months later on another failed gearbox.

GRID TRANSFORMER EXCHANGE

Following the failure of a site grid transformer, our client instructed RES to organise the replacement of the transformer. This included the assessment of the failed transformer, full HV network review, site infrastructure preparation for vehicle logistics and lifting, all procurement and contracting required for the refurbishment of the existing transformer, full planning and supervision of the lifting, transformer commissioning and clearance of the site.

WIND TURBINE STATUTORY INSPECTIONS

RES implemented a full scope inspection, maintenance and repair service to ensure the efficient management of all wind turbine statutory compliance requirements and the safe operation of all equipment. The service was offered alongside the sign off of all work and statutory compliance by in house 'competent engineers'. The outcome of these changes to the client will be reduced operational costs, reduced turbine downtime, a standardised statutory compliance programme, fully auditable system with inspection and maintenance records plus assurance of legislative compliance.

CIVIL INFRASTRUCTURE UPGRADES

RES has completed a large volume of civil infrastructure inspection, testing, design and upgrade works for various clients' projects. There may often be a requirement to perform civil work when heavy plant is used on operational sites for asset repairs. RES are able to determine if the infrastructure is suitable for the use required or if it remains compliant in regard to the original build specifications. On average RES performs more than 30 civil infrastructure testing and repair works for our clients each year. In addition, to assist our clients with compliance management and budgeting, we have also prepared civil infrastructure inspection and maintenance plans where these were not provided by the Engineer, Procure, Construct (EPC) contractor.

ABOUT US

RES (Renewable Energy Systems) has developed and/or built over 13 GW of renewable energy capacity worldwide and support an operational portfolio of assets exceeding 3 GW. RES is active in a range of energy technologies including onshore & offshore wind, solar, energy storage and transmission & distribution.

power for good

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