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SERVICES



Power Monitoring Process

How can Anecto help you?

Anecto today leverages 20+ years' experience in power conversion and control technologies. Wind energy clients benefit greatly from Anecto's experience, gained from supporting product design teams with Design Verification Testing (DVT), reliability prediction and solutions in the Power Electronics arena.

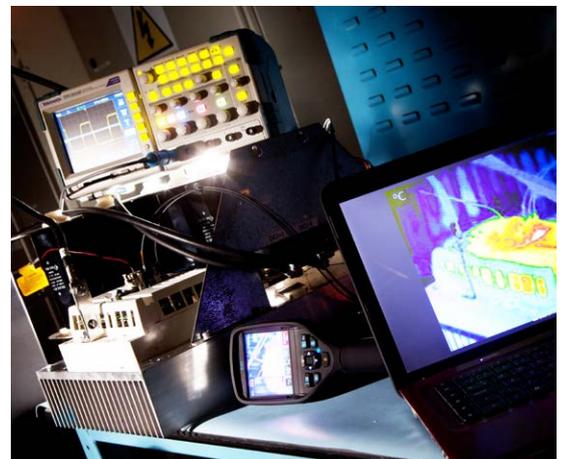
INSPECTIONS AND VALIDATION TESTING

What we offer

Anecto Engineering services help analyse and identify the factors contributing to early life failures in key wind turbine Power Electronic components.

These include:

- Corrosion
- Humidity
- Temperature extremes
- Vibration & shock
- Pressure
- Mechanical fatigue
- Electrical Stress



The use of sensory technology, power monitoring and data logging equipment enables Anecto Engineering to understand the application environment. This provides data for potential failure modes and makes it possible to conduct performance health checks of the power assembly units. **Learn more**

Operation and Maintenance

Operation and maintenance costs for onshore wind farms account for 10-15% of total generation expense. The situation offshore is much higher with recent reports indicating costs of 25%.

Reliability

The reliability of turbine components is critical as any failures can have a significant impact on profitability. Not only is there a cost in the replacement of faulty components but there is also a loss of revenue from a reduction in electricity sales caused by turbine downtime during the repairs.

What fails?

Anecto can help alleviate the costs associated with in-field failures. Data from the Institute for Solar Energy Supply Technology (ISET) in Germany show electrical equipment and control system failures to be the most frequent. These failures occur with an average frequency of 2.5 to 5.5 incidents per ten machine years. Anecto can help reduce these occurrences, thus saving money and reducing downtime.

DIAGNOSTICS AND FAILURE ANALYSIS

Pinpointing failures and reducing costs

Services include:



- Customised diagnostic and test equipment
- Field service diagnostic tools
- Component level debug and root cause analysis
- Real time monitoring solutions
- Bespoke testing on common frequency converters
- Remote data analytics

Learn More

RELIABILITY IMPROVEMENTS & REPORTING

ISO 17025 accredited test laboratory



Diagnostics and failure analysis techniques outlined above enable Anecto Engineering to develop reliability improvements and recommendations for your power components / asset.

The benefits of being an ISO accredited test laboratory mean that Anecto Engineering can simulate the application in-house under stress conditions.

In-house laboratory capabilities include:

- Power test laboratory for typical Inverter / Converter components
- Thermal and mechanical shock capabilities
- Accelerated Stress Testing (AST) capabilities
- MTBF predictions

Learn More

ABOUT ANECTO

Anecto was established as a centre of excellence in 1994 to provide development, engineering and test support services to the high-tech multinational sector and has since developed into a leading independent ISO 17025 accredited and Power Electronics test laboratory. Major global market sectors served include, energy, life sciences, medical devices, military and automotive electronics. The company also works with a number of trusted world-wide partners to provide the very best in product test services. **Enquire today.**