

Why use an RETL for your wind energy testing services?



When ordering testing services for wind energy, a manufacturer or OEM has choices on what kind of service provider to use. Three distinct categories of laboratories can be distinguished with increasing level of quality assurance:

- laboratories that claim to follow the IEC testing Standards
- laboratories that are ISO/IEC 17025 accredited to IEC testing Standards
- IECRE renewable energy test laboratories (RETLs) that have been assessed and accepted for testing to specific IEC Standards in accordance with the IECRE System's procedures and operational documents

What is an RETL?

An RETL participates in proficiency testing on a global basis with a large pool of participants. The larger the pool, the better the comparison of performance will be.

Without any exception, an RETL is assessed by technically competent peers who know exactly what the items impacting the quality of test results are. This assessment also includes witnessing of ongoing tests.

An RETL is assessed with respect to competence areas based on IEC Standards.

An RETL will also have ISO/IEC 17025 accreditation.

An RETL will be periodically re-assessed and a subset of the issued reports will be checked for compliance with the IEC Standards guaranteeing continuously consistent, complete, accurate, and thorough quality.

An RETL works together with other RETLs and certification bodies to develop clarification sheets which may result in, and contribute to, amendments and corrigenda for IEC Standards to ensure a global unified application of the standards.

RETL reports are mutually recognized to be accepted by any certification body participating in the IECRE System.

How does this add value for the end user?

All RETLs are held to the highest possible quality standards in the industry.

All RETLs have ongoing scrutiny of their personnel, equipment, procedures and test reports, ensuring this quality.

Test reports issued by an RETL are accepted by any certification body participating in the IECRE System through mutual recognition, reducing the need to repeat tests and facilitating international trade.

There is a formal appeal process through which an RETL is held accountable.

How to verify if a laboratory is an RETL?

1. Visit: www.iecre.org/members/testlabs for a list of accepted RETLs in the different renewable energy sectors.
2. Click on the laboratory of choice, this will provide you the location of the accepted laboratory.
3. Click on the "Scope" tab. This will show the IEC Standard(s) with which the RETL has been assessed and accepted.

Will an RETL cost more?

The RETL may have to pay a small fee to the IECRE System. This fee is used for the administration of the IECRE System, confidentially tracking reports, dispute resolution, etc.

Will test reports be published?

Test reports will be sent by the RETL to the client. A copy of the front page will be sent to the IECRE secretariat for registration. No content of the test report will be published. The number of the test report may be published on a certificate if the test report is used as part of conformity assessment.

Can I use an RETL only for certification?

An RETL can also provide services outside of the range of certification. Any service can be provided independently on a stand-alone basis such as performance verification or load measurements. The acceptance within the IECRE as an approved RETL guarantees the quality of these services based on IEC Standards as well.

Services currently covered by RETL

Anemometer calibration as per	IEC 61400-12-1
Power performance measurements as per	IEC 61400-12-1
Mechanical load measurements as per	IEC 61400-1
Full-scale structural testing of rotor blades as per	IEC 61400-23
Acoustic noise measurements as per	IEC 61400-11
Measurements of electrical characteristics as per	IEC 61400-21

Additional services expected to be added in the near future include

Lidar classification as per	IEC 61400-12-1
Lightning protection system testing as per	IEC 61400-24
Safety and function testing as per	IEC 61400-1
Site suitability as per	IEC 61400-15
Gearbox testing as per	IEC 61400-4



IEC System for Certification to
Standards Relating to Equipment for
Use in Renewable Energy Applications

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