SWCC Qualified Testing Organizations

This is a list of testing organizations that are qualified to test wind turbines for the purpose of SWCC certification and are currently offering this service. These organizations meet the requirements of section I (Qualified Testing Organizations) of the SWCC Certification Policies.



High Plains Small Wind Test Center

- an NREL Regional Test Center

Mail: Barry Kaaz, Colby Community College, 1255 South Range, Colby, KS 67701

Contact: Barry Kaaz, Mobile 785-462-0411, Office 785-460-5429

Contact: Ruth Douglas Miller, Office 785-532-4596 **Email:** rdmiller@ksu.edu, barry.kaaz@colbycc.edu

Web: wac.ece.ksu.edu/?q=node/13

Test site location: KSU Agricultural Research property just south of Colby, KS, at 39.38 N, 101.08 W.

Turbines tested to date: Currently testing turbines under the NREL grant, and accepting applications for other

turbines.

Accreditation: N/A

Other Comments: Mean average wind speed is 6.5 to 7 m/s at 30 m, and strong directional winds, prevailing N-S are common in all months of the year, so we anticipate rapid durability testing. Site has space for at least four turbines but only one at a time over 20 kW.

National Renewable Energy Laboratory (NREL)

National Wind Technology Center (NWTC)

Mail: 1617 Cole Boulevard, Golden, CO 80401

Phone: (303) 384-6987 Contact: Arlinda Huskey

Email: Arlinda. Huskey@nrel.gov

Web: www.nrel.gov/wind

Test site location: USA: NWTC, Boulder, Colorado

Turbines tested to date: > 30

Accreditation: Accredited by the American Association of Laboratory Accreditation (A2LA) in accordance with ISO/IEC 17025:2005 to conduct tests per IEC 61400-11 acoustic noise, -13 mechanical loads, -12 power performance, -21 power quality, -23 blade, -22 safety and function, and -2 safety and function and duration, MEASNET Acoustic Noise, MEASNET Power Performance, MEASNET Power Quality, AWEA Small Wind Turbine Performance and Safety Standard, and BWEA Small Wind Turbine Performance and Safety Standard. A2LA certificate number 1239.01.

UL/WTAMU Advanced Wind Turbine Test Facility

- a partnership of UL and West Texas A&M University **Mail:** UL LLC, 333 Pfingsten Road, Northbrook, IL 60062

Email: wind@ul.com
Web: ul.com/wind

Test site location: Canyon, TX

Turbines tested to date: Currently installing turbines

Accreditation: UK MCS

Other Comments: UL's WT wind facility is currently accepting applications for testing and certification to AWEA 9.1, UK MCS, Japan, Canadian, and UL 6142 requirements. The facility allows ample space for all sizes of turbines, dramatically favorable wind resources and is permanently staffed with qualified engineers and technicians onsite. Heavy equipment is also available onsite to assist with foundation installation and turbine erection.

Windward Engineering

- an NREL Regional Test Center

Mail: 10768 S. Covered Bridge Canyon, Spanish Fork, UT 84660

Phone: (801) 372-4972

Email: <u>info@windwardengineering.com</u> **Web:** <u>www.windwardengineering.com</u> **Test site location:** Spanish Fork, UT

Turbines tested to date: >9. Not all for the purpose of collecting IEC test data.

Accreditation: N/A

Comments: We are limited for space and resources with 6 existing or proposed installed turbines already. Client willing to do their own installation and testing will get quicker results. The test site wind is excellent for producing performance and duration test data rapidly. It should be noted that we are involved with producing small wind turbines with Endurance Wind Power as well as running the test facility for Windward Engineering.

The Wind Energy Institute of Canada (WEICan)

Mail: 21741 Route 12, North Cape, Prince Edward Island, Canada, COB 2B0

Phone: (902) 882-2746 Email: info@weican.ca Web: www.weican.ca

Test site location: North Cape, Prince Edward Island, Canada

Turbines tested to date: WEICan has tested over 20 wind turbines rated from 1kW to 500kW. Since 2006 we have partnered with DEWI the German wind institute for testing of large wind turbines and are now offering power performance, power quality, duration, and noise tests; in accordance with IEC 61400 on small and large wind turbines. Presently we have two small wind turbines being tested to IEC 61400-12-1, -2, -11, and -21.

Accreditation: We are currently investigating the resources required to become accredited.

Other Comments: We have been doing power performance and durability testing since 1981 and have tested as well as participated in R&D activities on many wind turbines during that period. We are currently investigating the resources required to become accredited. WEICan also works with DEWI who are accredited to provide certification for international markets. If requested by the client, WEICan will test to other standards such as: AWEA, BWEA or CSA standards: C61400-2,-11,-12-1 and -21. WEICan has compiled twenty years of wind data at the test site; as well as a detailed report from DEWI which gives results of the sites wind regime and characteristics.

For more information, corrections or additions please contact:

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