

C61400-11 Subcommittee Report for CAA Standards Committee Meeting
November 1, 2013

The new (third) edition of the CAN/CSA-IEC 61400-11:13 – “Wind Turbine Generator Systems - Part 11: Acoustic Noise Measurement Techniques” has been approved as a National Standard of Canada as of September 27, 2013 and is now available for sale at shop.csa.ca. At this point it is published only in English.

The Ontario Ministry of the Environment makes reference to the second edition in their 2008 “Noise Guidelines for Wind Farms”, their “Compliance Protocol for Wind Turbine Noise” and in many of the Renewable Energy Approvals issued for wind energy projects. It is not known if or when the MOE documents will switch to referencing the third edition. Alberta Utilities Commission in Rule 012 “Noise Control”, effective April 1, 2013, makes reference to the “latest version” of the standard.

As mentioned in the update provided to the CAA Standards Committee Meeting in May of 2013, one of the key changes in the third edition is that the averaging time for the sound measurements has been reduced from 1 minute to 10 seconds. While this is positive from the perspective of getting more data for each wind speed bin faster, it also has the practical effect of requiring access to finer data for wind turbine power output and better synchronization of the data from various sources.

It appears that measurements in Canada may need to be completed in conformance to either the second or third edition of the standard for the foreseeable future; practitioners will need to have the flexibility to be able to do both. For example, to deal with this increased speed of data acquisition required in the third edition, HGC Engineering is using a system that provides the benefit of wireless communications between the weather station, the sound level analyser and the turbine data collection system, providing real time feedback on the validity of the measurements, minimizing lost data.

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