

Interactive comment on “Field-Test of Wind Turbine by Voltage Source Converter” by Nicolás Espinoza and Ola Carlson

Nicolás Espinoza and Ola Carlson

ola.carlson@chalmers.se

Received and published: 22 March 2019

This paper presents test results of new method to test if a wind turbine meets the grid codes using a voltage source converter. What I appreciate very much is that this paper does not report on more simulations (as many other publications do), but on a test setup that has been built to test wind turbines. Building a voltage source converter with a power level of 8 MW and controlling it with such dynamics that it can simulate grid faults is a huge engineering job. This setup makes it possible to do lots of other tests that the current test setups using voltage dividers cannot do. The authors presented this idea in earlier publications. This paper presents test results that show the equipment works. (1) comments from Referees: 1. More than half of the paper presents test results: measurements of voltages, currents and powers under different

[Printer-friendly version](#)

[Discussion paper](#)



circumstances. Can the test of fig 5 be omitted because it does not add anything to fig 6?

(2) author's response As explained in the text the LVRT control is not activated in the small dip test in fig 5 whereas in fig 6 the LVRT mode is activated and the control of active and reactive power starts a small oscillation in active and reactive power. And this can be a message for even larger transients if the dip is larger. For this reason, we believe this case must stay in the paper.

(3) author's changes in manuscript. A note on this will be added to the paper.

Interactive comment on Wind Energ. Sci. Discuss., <https://doi.org/10.5194/wes-2018-37>, 2018.

Printer-friendly version

Discussion paper

