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# *Interactive comment on* "Proposal for Generic Characterization of Electrical Test Benches for AC- and HVDC-Connected Wind Power Plants" *by* Behnam Nouri et al.

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Dear authors, The manuscript is providing a good overview about grid integration testing on test benches and is linking to actual discussion of harmonization. It describes all relevant parts of test benches, standardized testing und future testing.

1. For me there is missing a discussion about the dynamic change of impedances, this occurs often by changing the grids topologies and with special regard during UVRT-Testing with standard inductive voltage dividers. 2. According to the wind torque emulator chapter: The intended use is emulating the wind turbine behavior combined with HiL simulations of the entire wind turbine, as mentioned it can be done either in torque



controlled or speed controlled mode. "The motor drive system is used to simulate wind profiles to the shaft of ET's generator" –this is inaccurate. Further information: Neshati, Mohsen, et al. "Hardware-in-the-loop drive train control for realistic emulation of rotor torque in a full-scale wind turbine nacelle test rig." 2016 European Control Conference (ECC). IEEE, 2016.

Specific Comments: Figure 3: Naming the grid connected converters as DC Grid Emulator is very unusual, Active front end (AFE) or active rectifier unit (ARU) would be more common Line 151: please correct to Fraunhofer IWES, Fraunhofer Institute for Wind Energy Systems Table 1: IWES CGI rating 15 MVA , Wind emulator rating 10 MW - Wind Emulator rating seems to be the motoring power, therefore the unit should be MW.

Line 202-203: the drive system is not capable of providing mechanical loads.

I agree with Björn Andresen, it's an overall good article.

Best regards Torben

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