

The RSE MV/LV hybrid AC/DC Test Facility

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One of the aims of the research project MISSION (Multivector Integrated Smart Systems and Intelligent microgrids for accelerating the energy transition), recently funded, is to develop a demonstrator inside the Distributed Energy Resource Test Facility (DER-TF) of RSE to validate a MV/LV hybrid AC/DC distribution grid. This research infrastructure will improve the DER-TF capability for the experimentation of: i) innovative logic for the recognition, identification and counterfeeding of the MV distribution networks faulty feeder; ii) hybrid AC/DC distribution networks with three front-end-converter and a bipolar DC microgrid; iii) advanced measurement infrastructures of network quantities and cable joints diagnostic; iv) ICT architectures and cyber security solutions.