S2-06 "Integration of Wind Farms into Transmission and Distribution Power Systems: Main Technical Aspects (Power Quality, Protection Issues, Dynamic Behavior and Stability, ...)"

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Abstract

Electricity generation based on wind energy conversion has experienced (and is still experiencing) a remarkable growth in the last decade. Besides the constrains generally imposed by the advent of dispersed generation on power networks, the connection of wind farms into both French transmission and distribution systems. Different aspects will be considered: grid capacity requirements and steady-state configuration, power quality issues, protection system and decoupling of the wind farm, voltage and frequency control, dynamic behavior and stability.