



SPECIAL SESSION VII

Advanced simulation tools and models for power system dynamics

ORGANIZED BY

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The rapid evolution of power systems is driven by particular factors, which are making the system increasingly composite and complex, with elements of different nature interacting with each other at different time scales. The analysis of power systems in such composite and complex scenarios will require the use of advanced simulation tools and models, ensuring an accurate and comprehensive analysis of the system. The special session is dedicated to all those aspects related to the challenge of modelling and simulating power system dynamics. Advanced tools for planning and operational studies can be developed for a wide range of applications: the use of EMT simulations of large portions of the system will be more and more necessary, and the use of hybrid simulations combining EMT and phasor RMS models is also gaining increasing attention in academia and industry. In this context, the development of accurate and detailed simulation models for the analysis of power system dynamics is a fundamental factor, which can be addressed from different points of view, for conventional elements of the power systems as well as for emerging and innovative technologies.