Voltage Regulation and System Control

Chairs: Florin Capitanescu & Pierluigi Mancarella

Day/Date(s)

Wednesday, June 25 - 08:00 AM - 10:20 AM

SESSION #7

1 - M. Menga, C. Iurlaro, G. Cassettino, S. Bruno, M. La Scala

Formulation and Test of a Predictive Dispatch Problem for the Optimal Management of Energy Resources and Operating Reserve in Isolated Distribution Networks

2 - A. Pomarico, A. Berizzi, G. Coletta, S. Tessitore, C. Pisani, G. M. Giannuzzi

A Novel Algorithm for Defining Secondary Voltage Regulation Control Areas

3 - O. F. Arowolo, J. Stiasny, J. L. Cremer

Exploring Extrapolation of Machine Learning Models for Power System Time Domain Simulation

4 - R. Shirvani, A. Bosisio, A. Pomarico, A. Berizzi, C. Mosca, P. Cuccia, P. Tisti

A Data-Driven Approach for Clustering Extra High Voltage Buses: A Case Study on the Italian Transmission Network

5 - L. Bost, F. S. Fernandes, R. J. Bessa

AI-assistant for Intelligent Design of Controllers in Power Systems

6 - M. Tarle, M. Larsson, G. Ingestrom, L. Nordstrom, M. Bjorkman

Offline to Online Reinforcement Learning for Optimizing FACTS Setpoints

Resilience and Uncertainty

Wednesday, June 25 - 05:00 PM - 07:35 PM

SESSION #9

1 - Y. Dai, R. Preece

Impact of Modeling Assumptions on Fragility Curves for Power Grid Resilience Against Extreme Weather

2 - I. Diahovchenko, A. Keane

Clustering for Power System Stability

3 - C. Sofia Gouveia, C. Reiz, R. Bessa, J. P. Lopes, M. Kezunovic

Risk Assessment of Future Power Systems: Assuring Resilience of Electrification for Decarbonization

4 - O. Damanik, D. Van Hertem, H. Ergun (Remotely)

Mitigating large-scale offshore wind farm shutdowns during severe storms using an adaptive robust optimization approach

5 - F. K. Helmkamp, T. Mollemann, I. Zettl, S. Kortmann, A. Ulbig

Safe Trajectory Sets for Online Operation of Power Systems under Uncertainty

6 - P. Apablaza, S. P. Lovengreen, R. Moreno, P. Mancarella

Valuing Distributed Energy Resources Flexibility in a Risk-Aware and Uncertain Low- Carbon Power System Planning Context

7 - L. M.Ramirez, J. Vilela, R. Moreno, B. Fanzeres, P. Medina

Generating Alternative Transmission Line Routes: A Balanced Approach to Technical and Socio Environmental Criteria