

IEEE Sweden PE/PEL Chapter

## **IEEE Seminar on “Modelling and impact of distributed generation on system dynamics” by Prof Jovica Milanovic, University of Manchester**

Date: December 17<sup>th</sup>, 2020

Time: 11:45-13:00 (11:45 News from PE/PEL Sweden Chapter, lecture starting at 12:00)

Location: Virtual Event in MS Teams.

Registration (by Dec 15<sup>th</sup>): [https://simplesignup.se/private\\_event/175346/399c24afd0](https://simplesignup.se/private_event/175346/399c24afd0)

### **Abstract:**

Power systems are increasingly characterised by large presence of variable and intermittent converter connected renewable energy sources (RES). Further, the future will see blurred boundaries between transmission and distribution system, a mix of different generation technologies, typically power electronics interfaced, demand and storage with significant temporal and spatial uncertainty, proliferation of power electronics and higher reliance on the use of measurement data. One of the consequences is that the total inertia of the system is reduced. In order to control such complex system and to ensure its stability and security at acceptable cost, system modelling and analysis need to cater for significantly increased uncertainties. This presentation focuses on new approach to modelling of RES to meet these challenges, and on impact of RES on system dynamics. Examples of probabilistic stability studies including RES are discussed.

### **Biography of the presenter:**



**Jovica V Milanovic** received Dipl.Ing. and M.Sc. degrees from the University of Belgrade, Yugoslavia, Ph.D. degree from the University of Newcastle, Australia, and D.Sc. degree from The University of Manchester, UK. Currently, he is a Professor of Electrical Power Engineering and Deputy Head of Department of Electrical and Electronic Engineering at The University of Manchester, UK, and Visiting Professor at the University of Novi Sad and the University of Belgrade, Serbia.

He has published over 550 research papers (100+ in IEEE Transactions) and reports, given about 30 key-note speeches at international conferences and presented about 150 courses/tutorials and lectures to industry and academia around the world. Among other roles and duties, Prof. Milanovic is a Fellow of the IET, Fellow of the IEEE, Distinguished IEEE PES Lecturer, Regional Representative for Europe, Middle east and Africa in the IEEE PES Governing Board, and a member of the Customer Engagement Group an independent customer group helping to shape Electricity North West's (one of six DNO in the UK) business plans to ensure that they address the needs and preferences of their current and future customers and stakeholders.

*Welcome!*

*Dr. Ambra Sannino - Chair of the IEEE Sweden PE/PEL Joint Chapter*