



IEEE Sweden PE/PEL Chapter

IEEE on-line seminar "Integration of Inverter-Based Resources, an example of ERCOT" by Dr Julia Matevosyan

Date: December 9th, 2021 Time: 3:30-5:00 PM Location: On-line via Teams (link will be obtained at registration) Registration (<u>by Dec 7th</u>): in <u>vTools</u>

Abstract:

As generation resources mix is changing towards being dominated by inverter-based resources (such as wind, PV, batteries) at least during some hours during a year, a number of challenges are being encountered and need to be resolved by system operators. This presentation will discuss some challenges and solutions applied by Electric Reliability Council of Texas (ERCOT) to accommodate growing number of wind, solar and storage resources. The presentation will specifically focus on stability challenges in weak grid areas, inertia and frequency control challenges and improvements in study tools and modelling accuracy.

Biography:



Julia Matevosyan is Chief Engineer at ESIG (Energy Systems Integration Group) and has more than 20 years of experience in the power industry. Prior to joining ESIG, Julia was the Lead Planning Engineer of the Electric Reliability Council of Texas (ERCOT). In her time with ERCOT, she worked on adequacy of system inertial response, system flexibility, frequency control and performance issues related to high penetration levels of inverter-based generation and ancillary services market design. Julia received her BSc from Riga Technical University in Latvia, and her MSc and PhD from the Royal Institute of Technology (KTH) in Sweden.

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