

ICHQP 2022

20th International Conference
on Harmonics and Quality of Power
Naples, Italy, May 29th - June 1st 2022



PANEL SESSION

Session Title

The Points of View of TSOs and DSOs on the Effects of Energy Transition on Power Quality: Trends, Challenges and Costs

Session Type

Panel, May 30th 2022, 11:00-12:30 (CET)

Abstract

Electrical Power Systems are undergoing massive changes worldwide to transition to about 40% of sustainable renewable energy by 2030 in Europe and USA, a policy which includes closing conventional fossil fuel power plants.

Both planning and operation are changing in response to the increasing integration of Power Electronic Interfaced Generation (PEIG) and Power Electronic Interfaced Devices (PEID) at all voltage levels. Moreover, the use of power cables at all voltage levels, increasing amount of fluctuating, sometimes unbalanced, production and an overall reduction of system strength are expected. All of these changes will affect Power Quality. Reducing the consequences of degraded Power Quality, which is known to have severe financial implications, could be one of the most challenging problems to be managed by system operators.

Vertical coordination between TSOs and DSOs and horizontal coordination between TSOs are of utmost importance when facing the new challenges for system operators, due to the need of a holistic vision, and this is particularly true for Power Quality.

The panel will give the opportunity of hearing and discussing TSOs and DSOs points of view on the trends, challenges and costs of Power Quality in the presence of the undergoing energy transition.

The Panel is co-organized with Italian PES Chapter PE31.

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