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**Special Session on**

**“Solid-state transformers technology and its application”**

**Organized by**

Principal Organizer(s): Marcelo A. Perez, Mariusz Malinowski, Freddy Flores

## **Call for Papers**

Theme: Large scale integration of renewable energy and the increasing incorporation of storage elements will impose a big challenge to the power flow control at the distribution level. Solid-state transformers (SST) will become a key element to provide a high efficiency and controllable bidirectional power flow in distribution grids. These devices not only provide voltage level scaling but they also provide control of power transfer bidirectionally, voltage stabilization in terms of amplitude and frequency, filtering of harmonics and transients and direct integration of storage systems. In this special section new configurations, power topologies, control schemes and different implementations are expected to be shown.

Topics of interest include, but are not limited to:

- SST configurations.
- New converter topologies for SST.
- Control of power transfer, voltage stabilization and power quality in SST.
- Ancillary services provided by SST.
- Implementation issues and examples.