

# Special Session on

## Efficient and Reliable DC Protection Technologies

# Organized and co-chaired by:

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## **Call for Papers**

### **Technical Outline of the Session and Topics:**

Direct Current (DC) power systems' protection presents a major challenge due to the absence of natural zero current crossing points, low impedance, and fast fault propagation. Thanks to their features, DC protection devices allow the safe and fast commutation of the fault current. Selective protection and fast fault isolation are key features that any direct current circuit breaker (DCCB) should attain, assuring minimal power outages and the effective protection of sensitive electronic components.

This Special Session focuses on the discussion of challenges and emerging solutions suitable for the fast and reliable protection of DC power systems.

#### Topics of the Session include, but are not limited to:

- DC circuit breakers
- Hybrid circuit breaker technologies
- Transient over voltage and lightning protection
- Coordination of DC protection devices
- Failure mode analysis in DC protections
- Solid-state circuit breaker technologies
- Wide Bandgap (WBG) semiconductor-based DC protections
- Fault-tolerant DC protection systems
- Over voltage /over current protection
- Efficiency optimization of DC protection devices
- Cost reduction strategies
- Commutation mechanisms for DC protections

## Author's schedule:

Deadline for submission of special session papersApril 15, 2024Notification of acceptanceJune 10, 2024Deadline for submission of final manuscriptJuly 01, 2024Early submission is highly encouraged for early decision notifications!

All the instructions for paper submission are included in the conference website: <u>www.iecon-2024.org</u>

