

Prof. **ENRICO RAGAINI**
Keynote Speaker

PRESENTATION TITLE
IS DC REALLY COMING BACK?

ABSTRACT

At the dawn of electrical technology, after some initial uncertainty, AC was chosen over DC as the system of choice for power distribution and utilization. About 100 years later, HVDC showed that DC can still have an important role, albeit in a restricted field. Recently, however, we see a comeback of DC in a number of applications: distributed generation, industry, buildings, and power distribution. LVDC and MVDC start to be considered as possible options, and will more and more be in the future. Together with new opportunities and advantages, this brings several challenges to both device manufacturers and system designers. In addition to technology and industrial aspects, regulatory issues and market considerations will have an importance. Some lesson can probably be learned from the past evolution of AC systems.

SHORT CV

Enrico Ragaini (Senior Member, IEEE) graduated in Electronics Engineering at Politecnico di Milano in 1991, and in 1996 he obtained a PhD in Electrical Engineering from the same institution.

After serving 2 years as a Professor at Universidad de Piura, Peru, he joined ABB, first in Corporate Research and then in the Low Voltage Products division.

He held various positions in R&D and Product Management for Low Voltage Circuit Breakers, focusing on electronic protection units, embedded communication and system supervision.

He has been in charge of Technical Training for the ABB Low Voltage Breakers global factory (2004 - 2010), and then Cyber Security manager for the ABB Low Voltage Products division (2011-2014). He is currently with the R&D of ABB Electrification business, in charge of innovation projects.

He is also professor of Electrical Switching Devices at Politecnico di Milano. His research interests include electrical measurements, protection and switching devices, and real-time simulation of power systems.

