

ELECTRIC ENERGY T&D – Canada - October 2016

Power Points | CIGRE 2016, the Leading Event for Power Systems Experts

By Terry Wildman, Editor-in-Chief



Every year there are dozens of conferences dedicated to electrical transmission and distribution.

One of the key events is CIGRE Paris for Power Systems experts.

During 5 days, there were no less than 249 exhibitors attended by many more experts than ever – technical experts, decision makers, top power product manufacturers, TSOs, DSOs, universities, the entire power systems stakeholders, and more.

It was announced that Robert Stephen (South Africa) was named as the new President of CIGRE and the new Treasurer, Michel Augonnet (France). Mark Waldron (United Kingdom) has been re-elected as Technical Council Chairman.

What is CIGRE?

CIGRE is a permanent non-governmental and non-profit International Association. Based in France, it was founded in 1921 and is dedicated to the development of the power supply sector through the identification and the development of solutions to industry issues.

With members in more than 80 countries, it is the leading worldwide organization on Electric Power Systems, covering their technical, economic, environmental, operational, organisational and regulatory aspects. (www.cigre.org)



CIGRE key figures

58 National Committees

Working Groups: 241 working groups, 3 801 Experts including 295 women from 64 countries.

Many publications: <u>www.e-cigre.org</u>

Tutorials (NEW): 52 participations from Study Committees – 63 tutorials delivered **Many Events:** Symposia, CIGRE 2016 Technical Exhibition, etc..

Aims of CIGRE

- Facilitate and develop the exchange of knowledge and information, in all countries as regards the production, transmission and distribution of electricity.
- Add value to the knowledge and information exchanged
- Make managers, decision makers and regulators aware of synthesis of CIGRE's work, in the area of electric power systems.

CIGRE 2016 Session

CIGRE 2016 is an event designed to meet the expectations of all participants through a week-long Technical Programme & Exhibition.

During the Opening Ceremony, Claudio FACCHIN, President Power Grids Division at ABB Ltd. made a speech on *The Big Shift - Enabling the Evolving Power System*.



"Electricity continues to be the most versatile and widely used form of energy but has also been a major contributor to carbon emissions. With growing awareness and focus on mitigation, the challenge we face is to balance the growing demand for electricity with minimal environmental impact. This has led to an influx of renewables into the grid and their often remote location and intermittent nature, combined with a significant increase in distributed generation has created new supply side challenges.

At the same time we also see new demand loads like electric vehicles and data centers as well as smarter homes and buildings. All these complexities require the evolving power system to be increasingly flexible and interconnected, as well as more reliable and intelligent. This is also driving the development of ultra-high-voltage AC and DC transmission, more eco-efficient and resilient products, power quality and grid stabilization technologies, service and asset health management solutions as well as emerging innovations like energy storage and micro grids. And key to managing this 'big shift in power' is the increasing digitalization and automation of the grid, the growing deployment of software and the convergence of information and operational technologies, as the power sector leverages the internet of things, services and people."

Followed by the opening panel on distributed generation impact on the bulk connected network – a global perspective, with a musical interpretation to illustrate the conference. "Electric energy systems are in a transition phase all over the world. Now we are moving into a direction of shared responsibility."

Followed by a workshop on large disturbances: System Disturbances & Market Disturbances

During 5 days, many tutorials, 16 group discussion meetings, 16 'poster sessions' (to allow delegates to meet with papers authors) and private meetings.

These included:

- Protection and Automation
- Materials and Emerging Test Techniques
- System Technical Performance
- Distribution Systems and Dispersed Generation
- Substations
- Electricity Markets and Regulation
- System Development and Economics
- System Environmental Performance
- Transformers
- Information Systems and Telecommunications
- Rotating Electrical Machines
- Overhead Lines
- HVDC and Power Electronics
- System Operation and Control
- High Voltage Equipment
- Insulated Cables

A technical exhibition ran in parallel in the same location with 249 exhibitors, the top names of the Industry, from all over the world.

With 89 countries represented, CIGRE has become the international leading event for technical experts worldwide sharing knowledge to improve the electric power systems for today and tomorrow.

The 47th Session will take place in 2 years in Paris (August 2018).





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