

Towards active, sustainable digital networks that are resilient and integrated from UHV to distribution

CHENGDU SYMPOSIUM 2019

Chengdu, China, 20-25 September 2019

THEME

Today, new global energy challenges are emerging. The application of the huge number of new technologies and new equipment makes the electric power system more complex. The deep integration of information technology and power systems brings not only intelligence, but also challenges to the energy system. To deal with those new challenges and achieve goals such as the UN Sustainable Development Goals for 2030, Paris Agreement and air pollution abatement, we need to reconsider and investigate the issue of energy development and provide effective systematic solutions for the upgrading of the power systems.

The aim of the CIGRE symposium **Chengdu 2019** is to provide a forum for recent research findings and operational experiences related to sustainable, active and digital development of power systems (from UHV to distribution), and in particular, to address recent technical advances and policy developments that allow transmission and distribution networks to enter their next era.

VENUE

Chengdu is one of the most famous historical and cultural cities of China, and it is a city that you will never want to leave once you come. It offers a great variety of attractions, entertainment and lifestyles.

Chengdu has plenty of world natural and cultural heritage sites such as Qingcheng Mountain, the Dujiangyan Irrigation System, Panda base, and national scenic spots such as Wuhou Temple, Dufu

Thatched Cottage, Jinsha Relics, Xiling Snow Mountain. The Intercontinental Century City Chengdu will be the venue for all technical sessions.



PROGRAMME

The technical program sessions opens with keynote addresses and a welcome reception on September 23, 2019. Before that day, we will offer a technical visit to $\pm 500\text{kV}$ convertor station or Zipingpu hydropower station. Tours of Chengdu will also be organized for accompanying persons.

Individual Study Committee meetings and Working Group meetings will take place from September 20 to 21.

PREFERENTIAL SUBJECTS

The preferential subjects for the symposium are:

PS1- Planning for a future sustainable grid

- Global experience and economics of major interconnections
- Transmission and distribution grid planning scenarios for de-carbonisation scenarios
- Managing grid congestion
- Planning for electrification of heating, cooling and transport applications and uncertain load shape
- Metropolitan network planning methods
- Evolving DC network options for different voltage levels
- Planning of wide-area protection and automation systems

PS2-Integrating distributed energy resources to build a sustainable future and integrating renewable

- Distributed renewable and dispersed energy solutions, application and integration
- Microgrid solutions, application and integration
- Designing the grid of the future in a more sustainable environment
- Experience with total life cycle asset management across all voltage levels
- Impacts of distributed energy resources on protection and automation
- Using asset analytics tools to improve asset management

PS3 – Technology solutions for a future sustainable power system

- Smarter substation technologies and applications
- Distribution substations and new technologies
- Smart communications, protection and automation
- Cyber-security in the future network
- Global experience and prospects for UHV and superconducting cables
- Digital substations and the Internet of Things (IOT)
- Load control (both direct and indirect), demand integration, customer flexibility and storage technologies

The participation of postgraduate research students is encouraged. The symposium hosts a student poster session with best paper awards. Please

indicate young authors where appropriate.

PAPER PUBLICATION

Papers will be available to download one month in advance of the symposium for registered participants. One month after the symposium, papers can be purchased on the CIGRE online library (www.e-cigre.org). CIGRE Science & Engineering will publish the 6 best papers selected from the symposium. The Technical Committee will produce a summary report of the symposium for publication in Electra.

REGISTRATION

Registration will be opened on 1st October 2018. Together with preliminary programme information, synopsis and paper templates will be available on: www.cigre2019-chengdu.org.

COMMITTEES

The Symposium Technical Committee is composed of the chairmen of the following study committees:

- Koji Kawakita (B3) :leading
- Christine Schwaegerl (C6): leading
- Rannveig Løken (B5)
- Konstantin Staschus (C1)
- Henk Sanders (C3)
- Olga Sinenko (D2)

The Local Organizing Committee is chaired by Baosen Zheng

The Technical Committee is co-chaired by Christine Schwaegerl and Koji Kawakita.

SUBMISSION OF SYNOPSES

Participants wishing to present and publish papers should submit synopses by the following instructions on www.cigre2019-chengdu.org, where the synopses and paper templates are also available. All synopses, papers, and presentations must be in English. Please note authors should be available to present at the symposium.

DEADLINES (NEW)

Receipt of synopsis:..... 1st December 2018
Notification of acceptance: 18th January 2019
Receipt of full paper: 30th June 2019