



## **Call for Papers**

### **POWERCON2018**

*<http://www.powercon2018.org>*

**November 6-8, 2018**

**Guangzhou, China**

#### **Sponsored by**

**Chinese Society for Electrical Engineering (CSEE)**

**IEEE Power & Energy Society (IEEE PES)**

**China Southern Power Grid Co., Ltd. (CSG)**

#### **Hosted by**

**South China University of Technology**

**Guangdong Power Grid Co., Ltd.**

#### **Welcome to POWERCON2018**

The POWERCON brand was co-initiated by CSEE (Chinese Society for Electrical Engineering) and IEEE PES (IEEE Power & Energy Society). This biennial conference started in 1998 in Beijing, China. The subsequent venues were Perth, Australia, in 2000; Kunming, China, in 2002; Singapore in 2004; Chongqing, China in 2006; New Delhi, India in 2008; Hangzhou, China in 2010; Auckland, New Zealand in 2012; Chengdu, China in 2014; and Wollongong, Australia in 2016. POWERCON2018 will be held in Guangzhou, China on 6-8 November, 2018.

POWERCON2018, the 11th in the series, will mainly provide a large forum for the practicing engineers, scholars, researchers and graduate students to meet together to discuss various issues and share the latest developments in electric power engineering and power system technology. The conference will focus on smart grid, UHV transmission, wide area interconnections, distributed generation, renewable energy generation and its integration into

power systems, energy storage, energy saving and emission reduction.

Topics of interest include but are not limited to the following subjects of power system technologies.

## **Main Topics**

### **1. Energy Transition and Future Power System**

- Power system planning and operation in energy transition
- Power system simulation and modeling in energy transition
- Power system protection and control in energy transition
- Strategies for modern power system stability in energy transition
- Power system reliability in energy transition
- Structural change in future power systems

### **2. Electricity Market and Power System Economics**

- Theory of electricity pricing
- Electricity market models and implementation
- Designing trading mechanism in electricity markets
- Electricity market mechanism promoting renewable energy integration
- Ancillary services markets for power transmission and distribution
- Market mechanism in integrated energy systems with electricity, heating and gas
- Demand response

### **3. Smart Grid and Renewable Energy Integration**

- Implementation plan and standards for smart grid
- Development, utilization, and integration of renewable energy
- Advanced metering infrastructure and home area networks
- Intelligent energy and energy internet
- Smart dispatching, security analysis and supervisory control
- Microgrid, energy storage and distributed energy resources
- Charging and discharging of electric vehicles

### **4. DC Transmission and Distribution and Power Systems with Power Electronics**

- UHVAC and UHVDC power transmission
- VSC based HVDC
- New development of FACTS
- Flexible DC distribution networks and microgrids
- Analysis of power systems with power electronics
- Power system protection and control with power electronics

### **5. Cyber-Physical Power Systems**

- Modeling and simulation of cyber-physical power systems
- Combine ICT with electric power grid

- Information security in power system
- Cyber security and structuring communication systems
- Power system analysis for energy complement
- Distribution network and Internet of Things
- Application of WAMS technology

## **6. Advanced Transmission and Distribution Equipment and Technology**

- Eco-friendly transmission and distribution system
- Advanced technology of power distribution
- Insulation monitoring in power system
- Electromagnetic field and high voltage technology
- Condition monitoring and fault diagnosis
- Intelligent O&M of devices and asset management
- Disaster prevention, protection and control

## **7. Emerging Technology**

- Artificial intelligent technology in power system
- Application of big data technology in power system
- Large-capacity and highly efficient energy storage
- Energy conversion with high efficiency
- Application of block chain technology in energy internet
- Smart energy saving and emission reduction
- Application of new materials and superconductivity

## **8. Sustainable Nuclear Power in Harmony with Power Grid**

- Safety of nuclear power
- Modeling and simulation of nuclear power system
- Intelligent operation and maintenance
- Fault diagnosis and risk monitoring and control
- Verification and confirmation of system design
- Physical protection and cyber security

## **Summary of Important Dates**

✓ <b>Deadline of Abstract Submission,</b>	<b>April 30, 2018</b>
✓ <b>Notification of Abstract Acceptance,</b>	<b>June 1, 2018</b>
✓ <b>Deadline of Full Paper Submission,</b>	<b>August 1, 2018</b>
✓ <b>Notification of Full Paper Acceptance,</b>	<b>September 1, 2018</b>
✓ <b>Deadline of Presentation Submission,</b>	<b>September 20, 2018</b>
✓ <b>Deadline of Registration for Paper Publication</b>	<b>September 20, 2018</b>

## **Submission of Abstracts**

Authors are requested to submit an abstract with 500-800 words electronically through the Paper Online Submission website on or before April 30, 2018. All abstracts must be prepared in accordance with the procedures outline in the Authors Kit, available on the PES website <http://www.ieee.org/power> and the conference website.

## **Submission of Full Papers**

Authors are requested to submit a 6-8 page full paper electronically through the Paper Online Submission website on or before August 1, 2018. All papers must be prepared in accordance with the procedures outline in the Authors Kit, available on the PES website <http://www.ieee.org/power> and the conference website. All the accepted papers will be included in the IEEE Xplore database. As a result of this, they will automatically be indexed by EI.

## **Notification of Full Paper Acceptance**

All the submitted abstracts and papers will be reviewed by the POWERCON2018 Technical Committee. The author for correspondence will be notified of the decisions by email regarding their paper by September 1, 2018.

At least one author of each paper MUST complete the registration by registering online for the conference and making successful payment on or before September 20, 2018. A preliminary program will thereafter be announced on the conference website around the end of September 2018.

## **Conference Language**

The official language of the Conference is English.

## **Contact Information**

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## **Venue & Accommodation**

POWERCON2018 will be held in Soluxe Hotel Guangzhou. Detailed information about the hotel and accommodation is posted on the conference website.

## **The Guangzhou City**

Guangzhou is the capital and the political, economic, and cultural center of Guangdong Province. It is located in the southeast of Guangdong Province and in the north of the Pearl River Delta. Crossed by the Tropic of Cancer, it is located between longitude 112°57' to 114°3' east and latitude 22°26' to 23°56' north, bordering on the South China Sea, adjacent to Hong Kong and Macao. It is a regional central city in South China, and China's Southern Gateway to the world.

Guangzhou is a city with beautiful sceneries and pleasant climate. Meanwhile, it is a cultural city with history of more than 2,200 years, which is left behind rich historical sites. All of these allow visitors to have double satisfaction of senses and mind.

## **Website of POWERCON2018**

*<http://www.powercon2018.org>*