

# **Smart Grid Technologies for Smart Nations**

http://sites.ieee.org/isgt-asia-2018/

# **Call for Papers**

The 8<sup>th</sup> International Conference on Innovative Smart Grid Technologies (ISGT Asia 2018), sponsored by the IEEE Power & Energy Society (PES), will be held from 22-25 May 2018 in Singapore, the world's gateway to Southeast Asia. The IEEE PES ISGT Asia 2018 conference will be a melting pot of participants from academia, industry, research and development organizations, electric power utilities, power and energy sector service providers to discuss, share and exchange ideas related to state-of-the-art innovations in smart grid technologies for the future grid. The theme of this year's conference is "Smart Grid Technologies for Smart Nations" and includes industrial panel sessions, keynote speeches, tutorials, papers and poster presentation.

With 6 technical streams spread over 3 days there will be plenty of opportunities for you to showcase your work in front of professionals in the smart grid sector at this hugely popular, one of a kind conference.

# **Conference Topics:**

The conference organizing committee invites contributions in all areas related to smart grid technologies, including (but not limited to) the following:

## 1. Grid Operation and Management

Smart grid planning, forecasting, operation, stability, reliability, grid dynamics management, T&D interface issues and solutions, Grid modelling, Real-time simulation, Co-simulation, fault diagnostics and self-healing, active distribution network operation and management

# 2. Computational Intelligence Applications, Information and Communication Technologies (ICT), and Cyber-Security

Computational Intelligence Applications in Smart Grid Algorithms for modeling, control and optimization, roles of ICT in smart grids, smart metering, data acquisition and monitoring, sensor networks, Information and communication protocols and standards, big data analytics, data management, and cyber security

#### 3. Renewable Generation and Distributed Energy Resources Integration

Generation and demand forecasting and prediction, demand side management, grid integration of

distributed energy resources, impacts of renewables on energy markets and prices, stability and power quality issues, system planning/operation with higher DER penetration, safe disconnection, islanded systems, grid connected energy storage systems and their control, electric vehicle charging technologies and its impact in grid operation

#### 4. Power Electronics and Control and Protection systems for Smart Grids

Smart grid protection solutions, optimal integration of Plug-in electric vehicle, power electronic interface for smart grid operation and control, power system monitoring, control, protection, situational awareness and control, Smart micro-grids and nano-grids

#### 5. Emerging Technologies and End-user Systems

DC Microgrids and Nanogrids networks, smart buildings, smart home automation and energy management, smart cities solutions, sustainable energy technologies and challenges, Stakeholder's opportunities and risks, customer side systems, user behaviour and flexible demand, energy prices both wholesale and retail

# 6. Electricity Market, Innovative Business Mechanism, Policy/Regulatory Aspects

Regulatory aspects, policies, standards, electricity market mechanics, design and business models, economic impact on energy marker price, Agent-based market modelling, decision making under uncertainty, smart grid awareness



## **Important Dates:**

Tutorial/Special Session proposal submission deadline: 30 November 2017 Tutorial/Special Session decision notification: 15 December 2017 Regular Paper submission deadline: 31 January 2018 Regular Paper decision notification: 28 February 2018 Final Paper submission deadline: 10 March 2018 Early Bird registration: 20 March 2018

E-mail: <u>isgtasia2018@gmail.com</u> Website: <u>http://sites.ieee.org/isgt-asia-2018/</u>

