



IEEE 2nd Global Power, Energy and Communication Conference

Ephesus, Izmir/TURKEY

October 20-23, 2020

Special Session on

Resilient and Secure Communication Networks in a Smart Grid

Developments in sensor technology and communication systems, coupled with the need for reliable power led to the evolution of the power system into a smart grid. Along with the distribution of power the smart grid also includes several intelligent sensors and devices such as the phasor measurement units (PMUs), smart meters, sensors for electric vehicles (EVs), sensors for home automation, etc. These sensors generate data, pertaining to the performance of the various smart grid applications, thereby minimizing the human intervention and increasing the automatic control of the grid. Exchange of data for improved control of the grid also makes it vulnerable to cyber physical attacks. The communication networks used for information exchange should be designed to be resilient to natural disasters such as earthquakes, floods, etc. Security of the data is another major concern that has to be taken into account while planning these networks. The data can be hacked and manipulated to trigger false switching of hardware components resulting in major power outage. The aim of this special issue is to collect state-of-the-art research works being carried out for enhancing the resiliency and security of the smart grid communication networks.

Topics of interest include, but are not limited to:

- Reliability of Smart Grid Communication Networks
- Communication Networks for PMUs, Smart Meters, etc.
- Resilient Communication Networks
- Optimal Placement of Smart Grid Sensors
- Wireless Sensor Networks for Smart Grid
- Vehicle to Grid (V2G) Communication
- Cyber Security in Smart Grid
- Security for Home Area networks
- Microgrids for improved resilience
- Risk mitigation strategies
- Integration of Renewable Energy
- Encryption Methods for Improved Security
- Use of Internet of Things (IoT) for improved Resiliency and Security

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Deadlines of the special session:

Full paper submission (maximum 6 pages):	June 1, 2020
Notification of acceptance:	August 15, 2020
Final submissions due:	September 1, 2020

All the instructions for paper submission are included at the conference website.

<http://www.gpecom.org/2020/index.php/guidelines/>