CALL FOR PAPERS

SPIES 2019
Melbourne, Australia

Special Session on Cyber security for smart grid: Emerging challenges and solutions

SPIES 2019-The International Conference on Smart Power & Internet Energy Systems
April 25-27, 2019, Melbourne, Australia

Cyber security for smart grid: Emerging challenges and solutions

Abstract: Modern power networks such as smart grids are composed of heterogeneous distributed systems including advanced metering infrastructure (AMI), automated substations and supervisory control and data acquisition (SCADA). The heterogeneous subsystems in the smart grid are heavily depended on information and communication technologies (ICT). Integration of ICT networks with the different subsystems of smart grid has facilitated less expensive data acquisition, intelligent control and business decisions through automated mining of collected data resulting into a much better operation and services. However, the integration with ICT networks exposes the smart grid to the open and public networks. This makes grid networks to be exposed to the severe cyber security threats and malicious attacks.

Due to the distributed and heterogeneous nature of the smart grid, different application requirements (latency and bandwidth), limited computational facilities of physical devices, limited opportunity of upgrade-ability, incompatibility of control-software with new versions of OSs, often the systems are forced to be operated on many older versions of OSs.

These issues make applicability of conventional IT security solutions to safeguard the smart grid limited. This special session invites original research papers and survey papers focusing on the emerging technologies, architecture and software solutions to ensure security of the smart grid, cyber standard and requirements for smart grids, cyber vulnerabilities assessment and mitigation techniques for smart grid.

Topics of interest include, but are not limited to:

- Advanced approaches to cyber-attack detection for smart grid and counter measures
- Cyber-attack models and testbeds development for smart grid
- Standards for cyber security assessment of smart grid
- Advanced cryptographic protocols for smart grid
- Smart grid malwares and solutions
- Cyber security for cloud-assisted smart grid
- Big data framework for cyber threat analytics for smart grid
- Advanced smart grid cyber security architecture

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For additional information please visit www.icpies.org

Schedule:

Deadline for submission of special session paper to Special Session Organizer- December 31, 2018

Notification of acceptance – January 31, 2019

Deadline for submission of final manuscripts to the Special Session Organizer-February 15, 2019

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