CALL FOR PAPERS

Journal of Modern Power Systems and Clean Energy (MPCE)

Special Section on Distributed Energy Networks for Enhancing the Grid Resilience

Despite the low probability of occurrence, the high impact of extreme weather events and natural disasters on electric power grids demands system-wide multi-faceted resilience studies. These studies primarily focus on prediction and preparation (before the event), response (during the event) and recovery (after the event) with the key objective of reducing, and in some cases eliminating, the electricity supply interruptions. The solutions commonly include a better management of available resources through asset optimization, leveraging system-wide monitoring and modern control algorithms, and benefitting from advanced and emerging technologies. This Special Issue aims at addressing the challenges and opportunities in applications of innovative solutions to achieve a resilient distribution grid.

Topics of interest for this Special Section include, but are not limited to:

- Prediction, prevention, response, and recovery structures for electric power systems
- Computations methods and algorithms for power grid resilience
- Distribution grid resilience indices, measurement and quantification
- Damage assessment and component supply chain management
- Applications of networked microgrids in resilience enhancement
- Impact of distributed generation and renewable energy proliferation on resilience
- Resilience of energy hubs and integrated infrastructures
- Identifying and preventing cascading failures in distribution networks
- Communication-oriented response and recovery
- Resilience in cyber-physical systems
- Machine learning based outage management
- Data analytics for resilience improvement

Submission Guidelines: This special section solicits original and unpublished work. Authors must refer to the MPCE author guidelines at http://www.mpce.info/ch/index.aspx for the additional information on content and format.

Important Dates

Paper Submission Deadline: November 16, 2018
Acceptance Notification: May 10, 2019
Date of Publication: July 1, 2019

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