CALL FOR PAPERS

Journal of Modern Power Systems and Clean Energy (MPCE)

Special Section on the Coordination of Generation and Bulk AC/DC Transmission Planning and Operation with the Proliferation of Renewable Energy

This special section aims to address and disseminate state-of-the-art R&D results on the coordination of generation and bulk AC/DC transmission planning and operations. Special emphasis is given to the grid modernization scenarios that anticipate the higher proliferation of renewable energy resources that are inherently variable, uncertain and have locational dependencies. The objective of the special section will be to bring together major research contributions and seminal directions from both academia and industry with the goal of fostering interactions among various stakeholders. We seek original papers that offer novel research contributions.

Topics of interest include, but are not limited to:

- Co-optimized planning of generation and transmission resources
- Modeling variable renewable resources and their operational characteristics into bulk system planning
- Planning and operations considering long-term climate impacts, economics and resilience
- Consideration of microgrid planning and resilience within bulk system planning and operations
- Impact of heating, transportation, and fuel infrastructures on power generation and transmission expansions
- Impact of energy efficiency and demand-side measures on bulk power system operations and planning
- Power flow models for generation and transmission operations with high variable renewable penetration
- Value proposition and cost allocation of coordinated generation and transmission planning solutions
- Real-world experiences of AC/DC transmission expansion tailored to higher levels of variable renewables
- Utility and system operator perspectives on integrated resource planning
- Open-source operator and policy maker training tools on coordinated planning and operations

Submission Guidelines: This special section solicits original and unpublished work.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 additional information on content and format.

Important Dates

Paper Submission Deadline: November 22, 2018
Acceptance Notification: June 17, 2019
Date of Publication: September 1, 2019

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