

## Call for Papers

### Special Issue on

# “Electricity Market Design and Operation”

#### Important Dates

Full Paper Submission: **Jun. 30, 2020**

Final Decision Notification: **Aug. 31, 2020**

Publication of Special Issue: **Nov. 30, 2020**

Electricity deregulation has been underway for nearly three decades. In recent years, power systems are changing rapidly. The driving forces are the emerging smart grid technologies, information and communication technologies, high penetration of renewable energies, demand side participation, and application of big data. These changes contribute to a more comprehensive and in-depth reform of electricity market in terms of design and operation. For example, more demand-side resources can be controlled automatically and remotely, so that end-users can participate in electricity markets more flexibly through aggregators. Moreover, developing countries such as China are also facing some challenges in the process of electricity market reform. For example, how to cover the long-term transmission and generation investment under the electricity market. Therefore, the electricity market designs still need to be studied to address the underlying challenges.

This Special Issue will bring together researchers and practitioners from industry, research laboratories, academia and government to discuss challenges and opportunities related to electricity market reform. Specifically, construction and operation of electricity market call for a deep understanding of multiple aspects, such as the coordination mechanism among different markets, renewable energies' integration, electricity market operation evaluation, big data application, various flexible loads' behaviors, market entities' responsibility determination and etc. In order to promote the future development and construction of the electricity market, theories and solutions need to be developed.

#### Topics of interest include, but are not limited to:

- Design and analysis of electricity market and ancillary service market, including energy and ancillary service dispatching, pricing, and settlement.
- Evaluation of electricity market operations, including market power assessment, risk management, and transmission congestion management.
- Bidding strategies analysis of electricity market participants, including electric power market experiment simulation, electricity price forecasting, and bidding behaviors evaluating in power market.
- Modeling, optimization and control of flexible loads in electricity market, including the integration of demand response into energy market and ancillary service market.
- Transmission and distribution cost analysis in deregulated power systems.
- The government role determination in electricity market, including the methods of government interference and transitional policy development.

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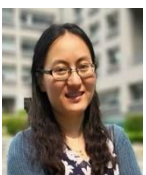
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