

## Special Issue

# Protection and Communication Techniques in Modern Power Systems

### Message from the Guest Editor

The protection systems of modern grids are facing new challenges and opportunities due to the development towards future Smart Grids. The complexity of the system increases when the share of distributed renewable energy sources increases. Simultaneously, the new communication technologies enable new kinds of solutions for protection. The IEC 61850 standard has been established enabling seamless communication between IEDs (intelligent electronic devices). It is widely accepted in the field, but there are still challenges in practical implementation. Furthermore, the recent revisions of the standard are enabling new applications reaching beyond traditional substation automation. When developing advanced novel solutions, the basic requirements of protection should be kept in mind: reliability, selectivity, stability, speed, and sensitivity. Evaluation of these aspects might also be a challenge in a modern complex system.

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### Message from the Editor-in-Chief

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