Special Issue on Asset Management in Smart Grid

Electric power system and its components, most of which developed based on the rising electricity demand during economic growth periods of 1970s and 80s, have aged and some are not being replaced quickly. In addition, the integration of variable sources of energy has changed the way assets are being managed for optimal operation. Aging assets and uncertainty in power system load profile and demand management create a challenge for the optimal operation and maintenance of the electricity grid. This issue aims at addressing the challenges and opportunities in deployment of smart grid technologies such as wireless sensors for condition monitoring, intelligent electronic devices (IEDs) to improve transmission and distribution asset maintenance and repair strategies, asset management in microgrids for enhancing power system sustainability, reliability, and efficiency.

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

- Asset management for microgrids with distributed components
- Impact of integration of distributed energy resources on thermal plant maintenance and ratings
- Sensors and intelligent electronic devices (IEDs) for transmission and distribution asset management
- Communication and control technologies for asset management
- Real-time condition monitoring for small power systems
- Impact of asset management and reliability-centered maintenance on power quality in smart grid
- Applications of phase measurement units (PMUs) for asset management
- Analytical methods for reliability-constrained optimal operation of active distribution networks
- Demonstration and field application experience for asset management in smart grid

Submission Guideline:
This Special Issue solicits original work that must not be under consideration for publication in other venues. Two-page extended abstracts are solicited for the first round of review. Authors of selected abstracts will be invited to submit the full papers in the second round. Authors should refer to the IEEE Transactions on Smart Grid author guidelines at http://www.ieee-pes.org/publications/information-for-authors for information about contents and formatting of submissions. Please submit a PDF version of the extended abstracts including a cover letter with authors’ contact information to the Guest Editor-in-Chief of this Special Issue, Dr. Shaghayegh Bahramirad, via e-mail at: shay.bahramirad@sandc.com.

Important Dates:
- Sep 27, 2013: Deadline for extended abstract submission
- October 28, 2013: Completion of first-round review
- January 28, 2014: Deadline for full paper submission
- Sep. 16, 2014: Final decision notification
- Oct. 1, 2014: Publication materials due

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