“Building a strong smart grid” has been listed as one of the goals in the Chinese government’s Nation Twelfth Five-Year Plan. In 2010, as world’s largest utility, the State Grid Corporation of China (SGCC), announced plans to invest $250 billion in electric power infrastructure upgrades between 2011 and 2015, among which $45 billion is earmarked for smart grid technologies. Another $240 billion between 2016 and 2020 will be added to complete the smart grid projects. China’s another national utility-China Southern Power Grid, also launched its smart grid roadmap in 2011 to build a smart, efficient, reliable, and green grid in next 10 years. Ultimately, the goal of the Chinese government is to build a strong national smart grid capable of transmitting power from conventional and renewable energy sources to the remote load centers. Besides the advances in substation and distribution systems, ultra-high voltage (1000kV AC and ±800kV DC) transmission is a salient feature in the Chinese smart grid definition and development compared to the other countries. In this special issue, we invite original and unpublished submissions discussing new smart grid theories, technologies, challenges, and products developed in China. Pilot projects, demonstration or field application experiences, discussions on policy issues and methods to evaluate the benefit brought by smart grid will also be given consideration for publication.

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

- Power system planning and operation with ultra-high voltage transmission
- Advanced FACTS and HVDC technologies
- Smart substation and smart dispatch
- Energy management and control for smart grid
- Grid integration of renewable energy, electric vehicles and storages
- Wide-area modeling and control
- Smart metering infrastructure and demand-side programs
- Communication and information systems for smart grid
- Microgrids
- Regulation and standards for smart grid in China
- Performance and experiences from field tests and large-scale demonstrations in China

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 abstracts including a cover letter with authors’ contact information to, Dr. Jianhui Wang, via e-mail at: jianhui.wang@anl.gov.

Important Dates
Aug. 1, 2013: Deadline for extended abstract submission
Oct. 1, 2013: Completion of first-round review
Mar. 1, 2014: Deadline for full paper submission
Nov. 1, 2014: Final decision notification
Dec. 1, 2014: Publication materials due

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