

- Date:** March 19, 2014
- Time:** 12:00pm- 1:00pm
- Location:** Entergy Transmission Headquarters
- PDH:** 1 Contact Hour
- Cost:** Attendance free. Lunch available for purchase in Entergy cafeteria, or bring your own.
- RSVP:** Required to Jeremy Blair by March 17, 2014 via email to jeremy_blair@selinc.com
- Topic:** Power System Operational Planning
- Presenter:** Dr. Yong Fu, Assistant Professor, Mississippi State University



Abstract: The smart grid development in the United States is targeted at modernizing the current electricity grid for addressing ongoing challenges of energy, economics, and environment. The security-constrained unit commitment (SCUC), which represents one of the most widely used operational planning tools by electricity grid operators, models the behavior of the electricity grid's physical layer, conducts a system-level coordination among electricity generation, transmission, and distribution sectors, and provides decisions on electricity grid economics, reliability and environments. This presentation will discuss capabilities and performances of various solution algorithms through technical discussions and numerical testing. Advanced topics on the large-scale SCUC engine development are also discussed in this presentation, which will benefit academic researchers, software developers and system operators when they design, develop and assess effective models and algorithms for effectively operating electricity infrastructure.

Biography: Dr. Yong Fu is an Assistant Professor in the Electrical and Computer Engineering Department at Mississippi State University. He received his B.S. and M.S. degrees in Electrical Engineering from Shanghai Jiao Tong University, China, in 1997 and 2002, respectively. In 2006, he received his Ph.D. degree in Electrical Engineering from Illinois Institute of Technology, Chicago. From 2006-2009, he was a senior research associate at the Robert W. Galvin Center for Electricity Innovation at Illinois Institute of Technology, Chicago. He has over 15 years of research experience in the area of power system operation and has published over 30 IEEE Transactions journal papers. He serves as a PI or co-PI on several projects including Smart Grid, Electric Ship Research, Micro-CHP, and Synchrophasor. He is a recipient of the NSF CAREER Award in 2012. He serves as an editor for IEEE Transactions on Power Systems, IEEE Power Engineering Letters, and the Journal of Electric Power Components and Systems.