
Electrical & Computer Engineering
S E M I N A R
Louisiana State University

**Grid Modernization: Challenges,
Opportunities, and Solutions**

Jianhui Wang

Argonne National Laboratory

Abstract—Our aging grid infrastructure faces increasing challenges from multiple sources including greater demand variability, stricter environmental regulations and growing cyber security concerns. Advanced smart grid technologies provide possible solutions to tackle these challenges. Meanwhile how to best utilize these new devices and technologies such as PMUs and electric vehicles remains a challenge by itself. In this talk, I will address various topics which span a multitude of areas including demand response, stochastic optimization for renewable integration, microgrids and cyber security. I will present the technical issues in implementing these technologies and corresponding potential solutions.

Bio—Dr. Jianhui Wang is the Section Manager for Advanced Power Grid Modeling at Argonne National Laboratory. He is the Secretary of the IEEE Power & Energy Society (PES) Power System Operations Committee. He has authored/co-authored more than 150 journal and conference publications. He is an editor of Journal of Energy Engineering and Applied Energy. He received the IEEE Chicago Section 2012 Outstanding Young Engineer Award and is an Affiliate Professor at Auburn University and an Adjunct Professor at University of Notre Dame. He has also held visiting positions in Europe, Australia and Hong Kong including a VELUX Visiting Professorship at the Technical University of Denmark (DTU). Dr. Wang is the Editor-in-Chief of the IEEE Transactions on Smart Grid and an IEEE PES Distinguished Lecturer. He is the recipient of the IEEE PES Power System Operation Committee Prize Paper Award in 2015.

When: Tuesday, 14 February 2017, 10:00 - 11:00

Where: Room 117 EE Building

Info: <http://www.lsu.edu/eng/ece/seminar>

