

Dr. Zhixin Miao is currently an Assistant Professor in the Department of Electrical Engineering, University of South Florida. Dr. Miao received his B.S. degree in Electrical Engineering from Huazhong University of Science and Technology (1992). He obtained his M.S. degree in Electrical Engineering from Nanjing Automation Research Institute (1997). He received his Ph.D. degree in Electrical Engineering from West Virginia University in 2002.

Dr. Miao worked with the relay department in Nanjing Automation Research Institute from 1992-1999 and with the planning department in Midwest Independent Transmission System Operator from 2002-2009.

### **Research Interests**

His research interests include smart grid automation, electric power system modeling and simulation, microgrid technologies to integrate renewable energy and energy storage, and power market.

### **Recent Publications**

- Z. Miao, A. Domijan, and L. Fan, "Investigation of Microgrids with Both Inverter Interfaced and Direct AC Connected Distributed Energy Resources," IEEE Trans. Power Delivery, vol. 26, no. 3, pp. 1634-1642, July 2011.
- Z. Miao, A. Domijan, and L. Fan, "Negative Sequence Compensation for Unbalance in Distributed Energy Resources Interfacing Inverters," International Journal of Power and Energy Systems (accepted).
- Z. Miao, and L. Fan, "The Art of Modeling High-Order Induction Generator in Wind Generation Applications," Simulation Modelling Practice and Theory, vol. 16, no. 9, Oct. 2008.
- Z. Miao, L. Fan, D. Osborn, and S. Yuvarajan, "Control of DFIG based Wind Generation to Improve Inter-Area Oscillation Damping," IEEE Transactions on Energy Conversion, vol. 24, no. 2, pp. 415-422, June 2009.
- Z. Miao, L. Fan, D. Osborn, and S. Yuvarajan, "Wind Farms with HVDC Delivery Inertial Response and Load Frequency Control," IEEE Trans. on Energy Conversion, vol. 25, no. 4, pp. 1171-1178, Dec. 2010.