Power Systems Engineering Research Center

Testing and Validation of Synchrophasor Devices and Applications

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PSERC Public Webinar
Tuesday, May 6, 2014
2:00-3:00 p.m. Eastern Time (11:00-12:00 p.m. Pacific)

Description: With the ongoing investments in a smarter electric grid, new algorithms and devices are being developed. Synchrophasor applications for electric transmission systems are one of the most critical smart grid technologies. Synchrophasor devices provide synchronized measurements at high rates for enhanced wide area situational awareness and decision support using new applications. High quality of synchrophasor measurements is vital for most of these applications, especially for real time control. To test the performance of synchrophasor devices and applications, real time modeling and simulation is required. This talk will present research activities related to building a real-time wide area monitoring and control test bed, and using it for testing and validation of synchrophasor devices and voltage stability monitoring applications. Additionally, this talk will discuss development of two new tools using synchrophasor data: the Phasor Measurement Unit Performance Analyzer (PPA) and Real Time Voltage Stability Monitoring (RT-VSM).

Biography: Anurag K. Srivastava is an assistant professor of electric power engineering at Washington State University and the director of the Smart Grid Demonstration and Research Investigation Lab (SGDRIL) within the Energy System Innovation Center (ESIC). He received his Ph.D. degree in electrical engineering from the Illinois Institute of Technology in 2005. He has worked as an assistant research professor at Mississippi State University from 2005-2010, as a senior research associate at the Indian Institute of Technology, Kanpur, India, and as a research fellow at the Asian Institute of Technology, Bangkok, Thailand. His research interests includes power system operation and control using smart grid data. Dr. Srivastava is a senior member of the IEEE, chair of the IEEE Power & Energy Society's (PES) student activities committee, co-chair of the microgrid working group, past-chair of the IEEE PES career promotion subcommittee, and past chair of the IEEE synchrophasor conformity assessment program. He is the recipient of the best paper award from the IEEE Industry Applications Society and is working closely with number of electric power companies. Dr. Srivastava is an associate editor of the IEEE Transactions on Smart Grid, an IEEE distinguished lecturer, and the author of more than 125 technical publications including a book on power system security.

Registration for Webinar Participation: None required. There is no charge for participating!

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PSERC's Webinar Coordinator: Venkataramana Ajjarapu, Iowa State University, vajjarap@iastate.edu.

Professor Ajjarapu welcomes feedback on the webinars and suggestions for future ones.