



Monthly CREW Update

September 2012

Here is an update on past and upcoming activities as well as opportunities:

1. Seminar series:

On September 28, 2012, Manish Mohanpurkar of Colorado State University, gave a presentation entitled “Framework for Investigating Impacts of Wind Energy Penetration on Unscheduled Flows in Bulk Interconnections”. PhD student Manish started his talk with an explanation of unscheduled flows in transmission lines and how to estimate them considering the market and technical needs. Manish discussed the impact of wind energy penetration on the nature of existing unscheduled flows; analyses were based on simulations of actual wind farms parameters such as load and output generation. Among their current projects, Manish and his colleagues are developing a loop detection algorithm. During the concluding remarks, Manish mentioned that his research group is working on the automation of the loop flow framework.

2. Seminar series:

Please join us on our next monthly seminars, which will take place on CU campus (DLC Collaboratory room 1B50), at 11am-12pm, on the following Fridays:

- October 19: Branko Kosovic of National Center for Atmospheric Research (NCAR)
<http://www.ral.ucar.edu/directory/>
- November 9: Jay Diffendorfer of Rocky Mountain Geographic Science Center, USGS
<http://rmgsc.cr.usgs.gov/rmgsc/staff/diffendorfer.shtml> and
- December 7, 2012: Wenzhong (David) Gao of Denver University (DU)
<http://www.du.edu/secs/departments/ece/facultyandstaff/davidgao.html>

As in the past, the seminars will be broadcast live, and this semester we are using Adobe Connect. Please spread the words to interested parties and join us on those next seminars!

Should you have any suggestions for speakers or topics of discussion for the future seminar series, we would like to hear from you! Please contact Florence Bocquet at [bocquet at colorado dot edu](mailto:bocquet@colorado.edu) with your suggestions.

Important note The recordings of all previous seminars are available on the CREW website at: <http://crew.colorado.edu/SeminarRecordings>

This link is also easily accessible from the CREW home page: <http://crew.colorado.edu/>

3. Due to large scale deployment of smart meters, increasing penetration of renewable energy resources and aging workforce, the utility industry is facing challenges

in the field of energy forecasting. To help the industry improve forecasting practices, Power Systems Planning and Implementation Committee (PSPI) and Power and Energy Education Committee (PEEC) are co-sponsoring the **Global Energy Forecasting Competition 2012 (GEFCom2012)**, which is being organized by IEEE Working Group on Energy Forecasting, a working group under PSPI Committee. The competition will bring together the state-of-the-art techniques for energy forecasting, serve as the bridge to connect academic research and industry practice, promote analytics in power engineering education, and prepare the industry to overcome forecasting challenges in the smart grid world. The competition includes two tracks: load forecasting and wind forecasting. The competition starts on 8/31/2012 and ends on 10/31/2012.

For more information, please visit: <http://www.gefcom.org/>

The entry form is provided here:

<https://docs.google.com/spreadsheet/viewform?formkey=dDdWT1d1NGdnMXBxZ1VMaE4zYjhndUE6MQ>

4. Proposal solicitation from DoD, where the proposal submission will open on August 27, 2012. The objective of the program is to develop a process for real-time radar location of targets in cluttered environments, specifically air traffic targets in environments complicated by complex natural (e.g., hills and valleys) and manmade (e.g., wind turbines) features. For more information, please visit the two following websites:

<http://www.dodsbir.net/solicitation/default.htm>

and

http://www.dodsbir.net/sitis/display_topic.asp?Bookmark=43033



5. The 5th Annual Green Technologies Conference announces "Rethink, Reimagine and Recreate Energy Technologies" on Thursday Apr 4, 2013 and Friday Apr 5, 2013 in Denver, Colorado. Some important dates are:

- Submission Deadline: Nov 15, 2012

- Notification Due: Dec 20, 2012

- Final Version Due: Jan 21, 2013

For example of topic areas of interest and much more information, please visit:

<http://www.wikicfp.com/cfp/servlet/event.showcfp?eventid=25046©ownerid=41283>

For the latest information, please check the Green Technologies Conference website:

<http://www.ieeegreentech.org>

Abstract submission deadline: November 15, 2012.

6. New Book Announcement: "Grid Integration and Dynamic Impact of Wind Energy" by Vijay Vittal and Raja Ayyanar, Arizona State University
Springer Series in Power Electronics and Power Systems
ISBN978-14419-9322-9 ISBN 978-1419-9323-6(e Book)

Wind based renewable energy generation has had a significant resurgence in the past decade. This is primarily due to advances in technology driven by the advent of variable speed wind turbine generators, which include doubly fed induction generator based wind turbines as well as full converter permanent magnet synchronous machine based wind turbines. This book presents an account of the salient aspects of the various wind turbine

technologies, details of the associated power electronic converters and their controls, and a comprehensive discussion of the impact of wind turbine generators on system dynamic performance of the electric grid.

8. Please alert students, recent graduates, and colleagues to the following opportunity:

- a. Earth-related job search engine: EarthWorks is an extensive listing of physical science jobs. Numerous categories of interest: Renewable Energy, Electrical Engineering, Environmental Engineering, Climate/Atmospheric Science, etc. Please visit: <http://www.earthworks-jobs.com/>

Happy Fall!

(If you wish to unsubscribe from our emailing list, please email Florence Bocquet at [hocquet at colorado dot edu](mailto:bocquet@colorado.edu))

