WORKSHOP AGENDA

February 18, 2011
Monteith Research Center (MRC), Room 136
Centennial Campus, NC State Univ.

8.15 am-8.45 am    Coffee and cookies

8.45 am-9.00 am    Opening Remarks by:
                   Dan Stancil (ECE Dept. Head), Aranya Chakrabortty, NCSU

•   Session I: Computing, Control & Power Markets

9.00 am-9.30 am    Bruce McMillin, Missouri S&T
                   Title: Information Flow Analysis of Energy Management in a Smart Grid

9.30 am-10.00 am   Frank Mueller, NCSU
                   Title: Hardware-Software Support for Next-Generation Power Control

10.00 am-10.30 am  Tariq Samad, Honeywell
                   Title: Smart Grid ‘Beyond the Meter’ – Technologies for Demand Response & Energy
                   Management in Homes, Buildings and Industry

10.30 am-10.50 am  Bruno Sinopoli, Carnegie Mellon University
                   Title: Models and Control Strategies for Data Center Energy Efficiency

10.50 am-11.00 am  Break

11.00 am-11.30 am  Sean Meyn, Univ. of Illinois
                   Title: Dynamic Models for Electric Power Markets

11.30 am-12.00 pm  Steven Low, Caltech
                   Title: Caltech Smart Grid Research

12.00 pm-1.00 pm   Lunch

•   Session II: Smart Grid Communications & Cyber-Security

1.00 pm-1.30 pm    Sumit Roy, Univ. of Washington
                   Title: Networked Estimation in a Smart Distribution Management System
1.30 pm-2.00 pm  Deepa Kundur, *Texas A&M*
Title: Cyber Attack Impact Analysis of the Smart Grid

2.00 pm-2.30 pm  Manimaran Gonvindarasu, *Iowa State Univ.*
Title: Cyber-Physical Security of Power Grid Control Systems

2.30 pm-3.00 pm  Rakesh Bobba, *Univ. of Illinois*
Title: Secure Sharing of PMU Data in the Smart Grid: Requirements and Challenges

3.00 pm-3.30 pm  Coffee Break

- **Session III: Research Vision for a Robust Smart Grid Infrastructure**

3.30 pm-4.00 pm  Marina Thottan, *Bell Labs*
Title: Secure Data Centric Platform for Enabling Smart Grid Applications

4.00 pm-4.30 pm  Sami Ayyorgun, *Telcordia Research*
Title: Telcordia Research on Smart Grids

4.30 pm-5.00 pm  Eva Wu, *SUNY Binghamton*
Title: Fault Coverage and Reliability in the Operation and Planning of Dynamic Systems

5.00 pm-5.20 pm  George Michailidis, *Univ. of Michigan*
Title: Monitoring Problems for Smart Grids

5.20 pm-5.35 pm  Subhashish Bhattacharya, *NCSU*
Title: Smart Grid Research in FREEDM Systems Center

5.35 pm-6.00 pm  Questions & Discussions

6.00 pm–7.30 pm  Dinner

**February 19, 2011**
**Keystone Science Center, Suite 100**
**Centennial Campus, NC State Univ.**

8.30 am -9.00 am  Coffee and cookies

9.00 am -9.30 am  Dave Bertagnolli, *ISO New England*
Title: Detection and Classification of Power System Events

9.30 am-9.50 am  Mo Yuen Chow, *NCSU*
Title: Time-sensitive Complex Networked Control Systems

9.50 am-10.10 am  Michael Devetsikiotis, *NCSU*
Title: Modeling Service Systems and Delays for Power Distribution & Storage

10.10 am-10.30 am  Laurel Varnado, *NC Solar Center*
Title: Boosting the Grid’s IQ through Appropriate Policies and Rate Design
10.30 am-10.50 am  Aranya Chakrabortty, NCSU
Title: Network-theoretic Modeling & Control of Power Systems using Synchrophasors

10.50 am-12 noon  Panel Discussion
Panelists: Roy, McMillin, Meyn, Govindarasu, Bertagnolli

12 noon  Wrap up and lunch