



Agenda

Industry Conference & NSF/DOE Annual Site Visit May 12-16, 2014

INDUSTRY CONFERENCE

Monday, May 12, 2014

Holiday Inn World's Fair Park Knoxville, TN

6:00-9:00 **Reception & Dinner** (informal event for available industry/SAB guests)

INDUSTRY CONFERENCE

Tuesday, May 13, 2014

Holiday Inn World's Fair Park Knoxville, TN

7:00-8:00 Registration and Continental Breakfast (Tennessee Ballroom)

8:00-8:15 **Opening & Welcome** (Medallion Room)

8:15-11:45 **Invited Speakers Presentations**

8:15 – 9:00 Smarter Grid / Sharper Vision; Enhancing System Awareness with Advance Technology

Steve Whitley, President & CEO, NYISO

9:00-9:45 System Reliability vs. Efficiency: Are We Being Redundant?

Brian Fortenbery, Program Manager, EPRI

9:45-10:15 Break

10:15-11:00 Engineering the Grid of the Future

Xiaoming Feng, Corporate Research Fellow, ABB

11:00-11:45 Holy Grails in a Public Grid? Or Tipping All the Way to Fracture?

Leo Casey, Power Architecture Lead Engineer at Google-X, Google

11:45-1:00 Lunch (Tennessee Ballroom)

1:00-4:00 **Technical Paper Presentations** (Parallel Sessions)

	<u>Medallion Room</u>	<u>Carriage Room</u>
1:00-2:20	Power System Monitoring, Modeling, & Estimation <i>Session Chair - Kai Sun, UTK</i>	HVDC & Power Flow Control <i>Session Chair – Jian Sun, RPI</i>
1:00-1:20	A Hybrid State Estimator for Systems with Limited Number of PMUs Murat GöI, NEU	Sequential Quadratic Programming Based Optimal Power Flow with Magnetic Amplifier Zhang Xiaohu, UTK
1:-20-1:40	Linear Phasor Estimator Assisted Dynamic State Estimation Alireza Rouhani, NEU	An Impedance-based Approach to HVDC System Stability Analysis and Control Development Shahil Shah, RPI
1:-40-2:00	Accuracy and Stability Improvement of Synchrophasor Measurement Lingwei Zhan, UTK	Feasibility Study and Design of Hybrid AC/DC High Power Transmission Considering Unbalanced Line Impedances Bo Liu, UTK
2:-00-2:20	A Real-Time Operator Training Simulator for PMU Visualization and EHV Grid Control Micah Till, UTK	Analysis and Design of Start-up Schemes for Modular Multilevel Converter under Different Load Conditions Xiaojie Shi, UTK
2:20-2:40	Break	
2:40-4:00	Power System Control & Stability <i>Session Chair – Shiny Abraham, TU</i>	Power Electronics & Testbeds <i>Session Chair – Daniel Costinett, UTK</i>
2:40-3:00	A Synchrophasor Measurement Based Method for Assessing Damping Torque Contributions from Power System Stabilizers Xinyu “Tony” Jiang, RPI	Development of a Testing Platform for Secondary-Use Electric Vehicle Batteries as Community Energy Storage Systems Thomas Benjamin Ollis, UTK
3:00-3:20	Computing Measurement-Based Voltage Stability Margins for a Wind Power Hub using the AQ-Bus Method Scott G. Ghiocel, RPI	Temperature Dependent Short Circuit Capability and Protection of Silicon Carbide (SiC) Power MOSFETs Zhiqiang Wang, UTK
3:20-3:40	A Method for Distributed Control of Reactive Power and Voltage in a Power Grid: A Game Theoretic Approach Ikponmwoosa Idenhen, TU	Evaluation of Switching Performance of SiC Devices in PWM Inverter Fed Induction Motor Drives Zheyu Zhang, UTK
3:40-4:00	A Study on Fluctuations in	Demonstration of Measurement-based

	Electromechanical Oscillation Frequencies of Power Systems Bin Wang, UTK	Voltage Stability Monitoring and Control Using CURENT Hardware Testbed Liu Yang / Fengkai Hu, UTK
4:00-5:00	Industry / Student Mixer (Crystal Room)	
6:00-9:00	Industry / SAB/Faculty Dinner & Meeting (Tennessee Ballroom)	

NSF-DOE SITE VISIT: DAY ONE

Wednesday, May 14, 2014

Holiday Inn World's Fair Park Knoxville, TN

7:00-8:00	Registration and Continental Breakfast (Tennessee Ballroom)		
8:00-8:20	Welcome (Medallion Room) UTK Chancellor Jimmy Cheek & All Deans		
8:20-9:00	CURENT Overview Kevin Tomsovic, Center Director		
9:00-11:30	Research Thrust Overviews		
9:00-9:55	Control and Actuation Thrust Overview Joe Chow, RPI Campus Director & Thrust Leader; Fred Wang, Technical Director & Thrust Leader		
9:55-10:10	Break		
10:10-11:00	Monitoring & Modeling Thrust Overview Yilu Liu, Deputy Director & Thrust Leader; Ali Abur, NEU Campus Director & Thrust Leader		
11:00-11:30	CURENT Engineered Systems Overview Leon Tolbert, Thrust Leader		
11:30-12:15	Industry Feedback Session (Medallion Room)	Site Visit Team Private Session (Parlor 6)	University Deans Meeting (Parlor 8)
12:15-1:15	Lunch (Tennessee Ballroom)		
1:15-1:45	Innovation and Industry Collaboration Program Overview (Medallion Room) Brad Trento, Industrial Liaison Officer		
1:45-2:45	SVT Private Session with Industry (Crystal Room) <i>Move to Min H. Kao Building (shuttle provided)</i>		
3:00-6:00	Lab Tour & Poster Session		

NSF-DOE SITE VISIT: DAY TWO

Thursday, May 15, 2014

Knoxville Four Points Hotel

7:45-8:15	SVT/University Officials' Breakfast (Parkview Ballroom)	
8:15-9:00	SVT/University Officials' Meeting (Parkview Ballroom)	
<i>Move to Min H. Kao Building (shuttle provided)</i>		
9:30-10:15	Infrastructure Overview (MHK 622) <i>Kevin Tomsovic, Center Director</i>	
10:15-10:30	Break	
10:30-11:30	Education & Diversity Overview – University Education (MHK 622) <i>Chien-fei Chen, Director of Education & Diversity; Fran Li, UTK Campus Director; Daniel Costinett, Co-Director of Education & Diversity; Jesmin Khan, TU</i>	
11:30-12:00	SVT Executive Session (MHK 435)	Student / Faculty Session (MHK 622)
12:00-1:00	SVT/SAB Private Lunch (MHK 434)	Informal Group Lunch (MHK 647)
1:00-2:00	Education Overview – Pre-college Education (MHK 622) <i>Chien-fei Chen, Director of Education & Diversity</i>	
2:00-3:00	SVT/ Student Private Session (MHK 622)	
3:00-3:15	Break	
3:15-4:15	SVT Executive Session (MHK 435)	
4:15-4:45	SVT Question Presentation (MHK 435)	

NSF-DOE SITE VISIT: DAY THREE

Friday, May 16, 2014

Knoxville Four Points Hotel

7:30-8:00	SVT Breakfast (Parkview Ballroom)	
8:00-10:00	Question Response Session (SVT and CURENT Faculty)	
10:00-4:30	SVT Report Writing (Agee Room)	
Lunch/Breaks located in adjacent Sanders Room		
4:30	SVT Departure	