

Industry Conference & NSF/DOE Annual Site Visit

Nov. 15-16, 2016

INDUSTRY PRE-CONFERENCE

Monday, Nov. 14, 2016 Crowne Plaza, 401 W. Summit Hill Drive, Knoxville, TN 37902

6:00–9:00 Industry Reception private dining room off Crowne Plaza restaurant (informal event for available industry/SAB guests)

DAY 1: INDUSTRY CONFERENCE

Tuesday, Nov. 15, 2016 Crowne Plaza, Knoxville, TN 37902

7:30–8:30	Registration and Buffet Breakfast (Summit Lobby and Salon B & C)				
8:30–8:45	Opening & Welcome (Grand Summit Ballroom)				
8:45–9:15	Zhiwei Wang, President , GEIRI North America, "Introduction to GEIRI NA and HVDC Technology Development in China"				
9:15–9:45	Jose Conto, Principal, Dynamic Studies System Planning, ERCOT, "System Planning Activities Focused on Dynamic Issues at ERCOT"				
9:45–10:15	Break (Mezzanine)				
10:15–10:45	David Schoenwald, Principal Member Technical Staff, Sandia National Laboratories, "WECC-BPA Project Using PMU Data to Damp Inter-area Oscillations"				
10:45–11:15	Clifton Black, Senior Research Engineer, Southern Company, "Overview of T&D Research at Southern Company"				
11:15–11:45	Jeff Hildreth, Principal Engineer , Bonneville Power Administration, "BPA Operation Challenges Now and Projected Involving HVDC and Growing Renewables"				
11:45–1:00	Lunch (Salon B & C)				
1:00-4:00	Student Presentations				
	Power System Modeling and Estimation (Summit I) Session Chair - Hector Pulgar	Power Electronics (Summit II) Session Chair - Kennedy Aganah			
1:00–1:20	Battery Energy Storage Emulation in a Converter-based Power System Emulator Jessica Boles, UTK	On the Asymmetry of Sequence Impedances over Frequency Ignacio Vieto, RPI			

DAY 1: INDUSTRY CONFERENCE (CONTINUED)

1:20–1:40	Semi-nonlinear Model Reduction and Its Application for Power Systems Denis Osipov, UTK	Harmonic Stability Analysis and Controller Parameter Design of Three- phase Inverter-based Multi-bus AC Systems Based on Sequence Impedances Wenchao Cao, UTK	
1:40–2:00	Dynamic State Estimation of a Synchronous Generator with Unknown Parameters Alireza Rouhani, NEU	High Efficiency GaN-based Power Supply for Multi-load Wireless Power Transfer Ling Jiang, UTK	
2:00–2:20	Improving Network Parameter Error Detection via Multiple Measurement Scans Yuzhang Lin, NEU	Cascaded Multilevel Inverter Topology for Distributed DC Sources Benozir Ahmed, TU	
2:20-2:40	Break (Mezzanine)		
2:40-4:00	Power System Control (Summit I) Session Chair – Greg Murphy	Power System Monitoring and Data Analysis (Summit II) Session Chair - Meng Wang	
2:40–3:00	Distributed Voltage and Reactive Power Control of a Power Grid Using Shapley Value: A Cooperative Game Theory Approach Arif Arifin, TU	Modeling PMU Estimation Error Jiecheng Zhao, UTK	
3:00–3:20	A Novel Decentralized Dynamic Demand Control Strategy for Power System Frequency Regulation Qingxin Shi, UTK	Methodology to Assess Criticality of Large Power Transformers in the Bulk Electric System Micah J. Till, UTK	
3:20–3:40	An Optimal Thevenin Equivalent Estimation Method and Its Application to the Voltage Stability Analysis of a Wind Hub Stephen Burchett, RPI	Validation of Real-time System Model in Western Interconnection Yidan Lu, UTK	
3:40-4:00	Flywheel Energy Storage Model, Control, and Location for Improving Stability: The Chilean Case Horacio Silva-Saravia, UTK	Real-time Recovery of PMU Data with Hankel Matrix Yingshuai Hao, RPI	
4:00-5:00	Student–Industry Event (Salon A)		
6:00–9:00	Industry and Faculty Dinner Meeting (Salon B)		

DAY 2: NSF/DOE ANNUAL SITE VISIT

Wednesday, Nov. 16, 2016 Crowne Plaza, Knoxville, TN

7:00–8:00	Registration and Buffet Breakfast (Summit Lobby and Salon B& C)				
8:00–8:15	Welcome Remarks (Grand Summit Ballroom) Jimmy Cheek, UTK Chancellor				
8:15–8:45	CURENT Overview Kevin Tomsovic, CURENT Center Director, UTK				
8:45–11:00	Research Thrust Overviews				
8:45–9:30	Monitoring and Modeling Thrust Overview Yilu Liu, Deputy Director and Monitoring Thrust Leader & Ali Abur, NEU Campus Director and Modeling Thrust Leader				
9:30–9:45	Break (Mezzanine)				
9:45–10:30	Control and Actuation Thrust Overview Joe Chow, RPI Campus Director and Control Thrust Leader & Fred Wang, Technical Director and Actuation Thrust Leader				
10:30–11:00	CURENT Engineered Systems Overview Leon Tolbert, Engineered Systems Thrust Leader				
11:00–11:45	Site Visit Team Executive Session (Executive Boardroom 1)	Industry & SAB Feedback Session (Grand Summit Ballroom)	Private Meeting for Deans (Executive Boardroom 2)		
11:45–12:45	Lunch (Salon B & C)				
12:45–1:15	Innovation and Industry Collaboration Program Overview Brad Trento, Industry Liaison Officer (Grand Summit Ballroom)				
1:15 –1:30	Student bus transport to Min H. Kao, UTK (meet in lobby, bus will be in front of hotel and leave at 1:30)				
1:15–2:15	SVT Private Session with Industry (Grand Summit Ballroom)				
2:15–2:30	Industry bus transport to Min H. Kao, UTK (meet in lobby, bus will be in front of hotel and leave at 2:30)				
2:30–3:45	Lab Tour and Poster Session (1st and 4th floor of Min H. Kao)				
3:45: 4:00	Industry bus transport to Crowne Plaza (bus will be outside the first floor entrance of Min H. Kao and leave at 4:00)				
3:45-4:00	Break (1st floor and 4th foor hallways)				
4:00–4:45	Education and Outreach Program Overview Chien-fei Chen, Director of Education, Outreach and Diversity (Min H. Kao, Rm 622)				