



Center for Advanced Power Engineering Research

**2017 IAB Fall Meeting**

November 9-10, 2017

Tally Center - Mountains Ballroom

2610 Cates Ave

Raleigh, NC 27606

**Agenda**

**Thursday November 9, 2017**

12:30 -1:00 pm	<b>REGISTRATION</b>	
1:00 – 1:15 pm	Welcome, Safety, Introductions , Objectives of the Meeting and In the News	Steven Whisenant CSC Chair
1:15 – 2:15 pm	<b>Session I - CAPER Sponsored Senior Design Projects</b>	Steven Whisenant
	CAPER SDP #1: Spring 2017 – Final presentations	Johan Enslin
	Problem Statement	Andrew Kling Duke Energy
	Clemson Team	Joe Hodges SCE&G
	NC State Team	Kevin Chen NC State
	UNC Charlotte	Andrew Kling Duke Energy
2:15-3:00 pm	CAPER SDP #2 – Fall 2017 – Initial presentations	Badrul Chowdhury
	Problem Statement	Joe Hodges SCE&G
	Clemson Team	Lynda Shafer Santee Cooper
	UNC Charlotte Team	Daniel Fain Duke Energy
	NC State Team	Mark Goettsch Duke Energy
3:00 – 3:15 pm	<b>BREAK</b>	



Center for Advanced Power Engineering Research

3:15 –4:15 pm	<b>Session II – University Power Curriculums - A Student Perspective</b>	Randy Collins
	Clemson University	Klaehn Burkes SRNL
	UNC Charlotte	Cara Chacko Duke Energy
	NC State	Catie McEntee NC State
	Panel Session – Creating the Perfect Power Education	All Speakers
4:15 – 5:30 pm	<b>Session III – Teaching and Learning Styles</b>	Steven Whisenant
	How Personality, Preferences, and Procedures can Perfect Performance: Multiple Learning Styles in the Engineering Classroom	Megan Patberg NC State
	Experience with On-line Classes	Badrul Chowdhury UNC Charlotte
	Experience with Video Classes	Mesut Baran NC State
	Experience with Hybrid Classes	Randy Collins Clemson
	Panel Discussion	All Speakers
5:30– 6:30 pm	<b>RECEPTION – Tally Center - Mountains Ballroom</b>	
	<b>Industry Job Fair</b>	Students, Industry, Faculty
5:30 – 6:30 pm	<b>SDP #2 Collaboration Meeting</b> Tally Center – Room 5101-Executive Board Room	All SDP #2 Team Members
6.30 – 8:30 pm	<b>DINNER – Tally Center - Mountains Ballroom</b>	Johan Enslin
	“What Really Happened During the Solar Eclipse”	Adam Quinn Duke Energy



## Center for Advanced Power Engineering Research

### Friday November 10, 2017

7:30 - 8:00 am	<b>REGISTRATION and Breakfast</b>	
8:00 – 8:15 am	Highlights from Day 1 and Objectives for today	Steven Whisenant CSC Chair
8:15–10:30 am	<b>Session IV - CAPER Project Updates</b>	Johan Enslin Clemson University
	<b>Base Projects:</b>	
	<b>DM-01:</b> Cyber Vulnerability Assessment of Electrical Power of Systems using Distributed Synchronphasors	UNC Charlotte/NC State Team
	<b>PD-03:</b> Customer-Oriented Planning Strategies for Active Distribution Systems	NC State/Clemson Team
	<b>Enhancement Projects:</b>	
	<b>EHP-01-PD:</b> Resilient Distribution Systems and Optimization	UNC Charlotte/Clemson Team
	<b>EHP-02-PG:</b> Development and Demonstration of a 40 kW Photovoltaic Synchronous Generator (PVSG)	NC State/Clemson Team
	<b>EHP-03-EP:</b> How State Regulators are Attributing Costs and Benefits to Distributed Generation	NC State/UNC Charlotte Team
10:30–10:45 am	<b>BREAK</b>	
10:45-12:30 pm	<b>Session V – Power System Data Applications</b>	Ning Lu
	Smart City	Brad Klenz SAS
	Cyber Security and Data Analytics	K. Eric Harper ABB
	Using Meter Data for DER Integration, Asset Management and Grid Hardening	Frederic Dubois Landis & Gyr
	Panel Discussion	All
12:30–1:15 pm	<b>LUNCH (Tally Center - Mountains Ballroom)</b>	
1:15 – 1:30 pm	Wrap up, 2018 Projects and next meeting Adjourn	Steven Whisenant



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1:30 – 4:00 pm **Closed Meeting - IAB Members Meeting** Gregg Turbeville  
**Tally Center - Room 4132**

New Industry Member – Siemens

Mike Carlson

New Project Proposals

PIs

1. Wensong Yu – NC State
2. Weimin Wang – UNC Charlotte
3. Kumar Venayagamoorthy – Clemson
4. Mo-Yuen Chow – NC State
5. Badrul Chowdhury – UNC Charlotte
6. Tiefu Zhao – UNC Charlotte

2018 Project Selection Process and Prioritization

Other Business