



Power and Energy Conference at Illinois

February 19–20, 2016

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Welcome to the IEEE 2016 Power and Energy Conference
at Illinois, a perfect place to investigate future power and energy technologies presented by leading industry and academic experts in the power and energy field.



FRIDAY, FEBRUARY 19, 2016

7:30 AM	Breakfast and Registration			Lobby
8:15 AM	Welcome by PECE Co-Directors			Chancellor
8:30 AM	Keynote Speaker - GARY HELM <i>PJM: Managing Grid Evolution Through Markets</i>			Chancellor
9:15 AM	Break			
9:30 AM	A1-Micrigruds Technology J. Zhang	A2-Transient Stability I Quad S. Mohapatra	A3-DC-AC Inverters Alma Mater P. Krein	A4-Machine Design Lincoln S. Sudhoff
10:50 AM	Break			
11:00 AM	B1- Grid-Level Renewables Technology S. Bose	B2-Power System Signal Processing - Quad H. Zhu	B3- DC-DC Converters Alma Mater R. Pilawa	B4-Transportation Electrification Lincoln Y. Cao
12:00 PM	Lunch - Welcome by Prof. William Sanders			Chancellor
1:00 PM	Keynote Speaker - SCOTT SUDHOFF <i>System-Level Design of DC Microgrids</i>			Chancellor
1:45 PM	Break			
2:00 PM	Poster Session: Numbers 1-10 - Alma Mater & 11-20 - Lincoln			Alma Mater & Lincoln
3:00 PM	Break			
3:15 PM	C1- Power System Loads Technology P. Sauer	C2-Economics Quad G. Gross	C3-PV Maximum Power Point Tracking - Alma Mater J. Kimball	C4-Grid-tied Power Electronics Lincoln T. Modeer
4:35 PM	Break			
4:45 PM	Industry Presentations			

FRIDAY, FEBRUARY 19, 2016 (CONT.)

	Industry Presentations		
4:45 PM	Technology	Quad	Technology & Quad
4:45 PM	John Deere	Clemson University	
5:25 PM	Ameren	ABB	
6:00 PM	Banquet - Welcome by Prof. Pete Sauer		
8:00 PM	Social Event - After Hours at Houlihan's		

SATURDAY, FEBRUARY 20, 2016

7:45 AM	Breakfast and Registration			Lobby
8:30 AM	Keynote Speaker - RALPH TAYLOR <i>DC-link Capacitors for Electric Drive Applications</i>			Chancellor
9:15 AM	Break			
9:30 AM	D1- Transient Stability 2 K. Shetye	D2-Power System Optimization Z. Tate	D3-Control in Power Electronics Y. Lei	D1-Technology D2-Quad D3-Alma Mater
10:30 AM	Break			
10:45 AM	E1- Power System Faults S. Guo	E2-Motor Drives and Machine Applications K. Haran	E3-Power Converter Applications R. O'Connell	E1-Technology E2-Quad E3-Alma Mater
11:45 PM	Lunch & Awards			Chancellor
1:15PM	Quad	Technology	ComEd	Quad & Technology
2:45 PM	PowerPoint Karaoke Presentations			
	Tours			Lobby

PECI Thanks our Industry Supporters

Thanks to industry representatives from the following companies who will make presentations on Friday from 4:45 pm – 6:00 pm: **JOHN DEERE** - Jim Shoemaker - “Electric Machines for Off-Road Mobile Equipment;” **CLEMSON UNIVERSITY** - Jesse Leonard - “Duke Energy eGRID Center;” **AMEREN** - Owen Doyle - “Ameren’s Innovation Center at Research Park;” and **ABB** - Joseph Silver - “An Introduction to ABB Power Consulting.” **COMED's** Aleksi Passo will present, “ComEd Smartgrid and Technology,” on Saturday from 1:15 pm – 2:00 pm (please see the schedule for locations). These companies are leaders in the Power and Energy area, and many University of Illinois power group grads have joined their ranks. We encourage you to take this opportunity to learn how each one is applying power and energy research.

Vote for the Best Student Paper Award

There will be awards given at the Saturday lunch to two students (winner and runner-up) for the best overall paper and presentation. Please use your PECI login at any of the laptops near the registration table to **vote** for the best paper award. Or vote using your cellphone by scanning in the QR code below:

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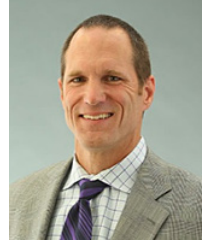
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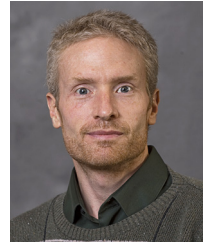
GARY HELM

Gary Helm earned master's degrees in Electrical Engineering and Finance and a B.S. degree in Horticulture from The Pennsylvania State University. He has worked in industry for over twenty-five years managing air quality issues including policy, strategy, permitting and environmental markets for a merchant generation company, and since joining PJM, evaluating strategic issues for PJM Interconnection, focusing on the impact of environmental legislation/regulation, fuel supply and infrastructure, and broad economic trends on electricity markets and grid operations. Mr. Helm co-authored, “Coal Capacity at Risk for Retirement in PJM: Impact of EPA Transport and Hazardous Air Pollutant Rules,” and was the PJM project manager for the Eastern Interconnection Planning Collaborative’s Gas-Electric System Interface Study. His current focus is on the potential impacts to PJM of the Clean Power Plan.



SCOTT SUDHOFF

Scott D. Sudhoff received the B.S. (highest distinction), M.S., and Ph.D. degrees from Purdue University in 1988, 1989, and 1991, respectively. From 1991–1993, he worked for P.C. Krause and Associates and from 1993 to 1997 was at the University of Missouri - Rolla. In 1997 he joined Purdue University where he is the Michael and Katherine Birck Professor of Electrical and Computer Engineering. Professor Sudhoff's interests include electric machinery, power electronics, marine and aerospace power systems, applied control, and evolutionary computing. Much of his current research focuses on the multi-objective optimization of power magnetic components and power electronics based power systems. He is a fellow of IEEE, served as Editor-in-Chief of *IEEE Transactions on Energy Conversion* and currently serves as Editor-in-Chief of *IEEE Power and Energy Technology System Journal*.



RALPH TAYLOR

Ralph Taylor received his BSEE from North Carolina State University and started his automotive career with General Motors, Delco Electronics Division, in 1979. He first worked in manufacturing development of controls and software for high-volume automated test and assembly equipment, such as radio testers, flip-chip and substrate assembly systems, and an assembly robot (the fastest, most repeatable robot ever tested by GM research). He then moved to controller design and software for various body and chassis systems, including security systems, ABS controllers, and speed-sensitive steering systems. In 1990, Mr. Taylor worked on power electronics for electric drive vehicles (EDVs), including design of EDV components, such as battery management systems, system controllers that convert user inputs to torque commands, inverters for various EDVs including electric scooters, autos, heavy-duty trucks and off-road construction equipment, as well as architecture and design of power electronics systems for various demonstration electrified vehicles around the world. For the past three years, he has focused on finding a replacement for the DC-link capacitors used in EDV inverters. Currently, Mr. Taylor is a staff development engineer at Delphi Electronics and Safety and is a co-chair of the APEC Transportation Power Electronics Committee.



TECHNICAL SESSIONS - Friday, February 19

Presentation format: 15 minutes, 5 minutes for questions

9:30 A1: Microgrids - Chair: J. Zhang		Technology
9:30	Tamer Rousan University of Illinois at Urbana-Champaign	Distribution Automation Reliability Analysis Using Markov Models
9:50	Hadis Moradi, Amir Abtahi and Mahdi Esfahanian Florida Atlantic University	Optimal Operation of a Multi-Source Microgrid to Achieve Cost and Emission Targets
10:10	Onur Kahveci, Thomas J. Overbye, Nathan H. Putnam, and Ahmet Soylemezoglu University of Illinois at Urbana-Champaign	Optimization Framework for Topology Design Challenges in Tactical Smart Microgrid Planning
10:30	Mohammad Rasoul Narimani, Paul Nauert, Jhi-Young Joo, Mariesa L. Crow Missouri University of Science and Technology	Reliability Assessment of Power System at the Presence of Demand-Side Management
9:30 A2: Transient Stability I - Chair: S. Mohapatra		Quad
9:30	Shahrokh Akhlaghi University of New York at Binghamton	Optimal PMU Placement Considering Contingency-Constraints for Power System Observability and Measurement Redundancy
9:50	Meimanat Mahmoudi and Kevin Tomsovic University of Tennessee - Knoxville	A Distributed Control Design Methodology for Damping Critical Modes in Power Systems
10:10	Amirhossein Sajadi and Kenneth A. Loparo Case Western Reserve University	Transient Voltage Stability of Offshore Wind Farms Following Faults on the Collector System
10:30	Li Bin, Zhou Lin, Yu Xirui, Zheng Chen, Liu Jinhong, Xie Bao Chongqing University	New Control Scheme of Power Decoupling Based on Virtual Synchronous Generator
9:30 A3: DC-AC Inverters - Chair: P. Krein		Alma Mater
9:30	Shahrokh Akhlaghi, Arash Akhlaghi and Ali Asghar Ghadimi University of New York at Binghamton	Performance Analysis of the Slip Mode Frequency Shift Islanding Detection Method Under Different Inverter Interface Control Strategies
9:50	Hamid Mahmoudi, Mohsen Aleenejad, and Reza Ahmadi Southern Illinois University at Carbondale	Topology Exploration and Control of a Filter-less Z-Source Inverter
10:10	Mohamed Trabelsi, Sertac Bayhan, Morcos Metry, Haitham Abu-Rub, Lazhar Ben-Brahim, Robert Balog Texas A & M University at Qatar	An Effective Model Predictive Control for Grid-Connected Packed U Cells Multilevel Inverter
10:30	J. Leonard, J. C. Fox, R. Hadidi, B. Gislason and M.H. McKinney Clemson University	Experimental PWM Method Validation of a 9-level 4.16 kV Series Connected H-bridge Grid Simulator
9:30 A4: Machine Design - Chair: S. Sudhoff		Lincoln
9:30	Andrew Kasha and Scott D. Sudhoff Purdue University	Multi-Objective Design Optimization of a Surface-Mounted Modular PermanentMagnet Pole Machine

9:50	David Loder, Reed Sanchez, Matthew Feddersen, Kiruba Haran, Mike Sumption, Mike Tomsic, Jinji Yue, and David DoI University of Illinois at Urbana-Champaign	A Conduction Cooled Nb ₃ Sn Racetrack Coil: Design, Construction, and Testing
10:10	Ruiyang Lin and Scott D. Sudhoff Purdue University	A Hybrid Model To Calculate Air Gap Flux Density for a V-shape Interior Permanent Magnet Machine
11:00	B1: Grid Level Renewables - Chair: S. Bose Technology	
11:00	Carlos Josué López, Osvaldo Añó, and Diego M. Ojeda-Esteybar National University of San Juan, Argentina	Hydrothermal Scheduling with Variable Head Hydroelectric Plants: Proposed Strategies Using Benders Decomposition and Outer Approximation
11:20	Moyuan Chen, Sofia M. Santos, and Afshin Izadian Purdue University	Torque-Assisting Compressed Air Energy Storage Hydraulic Wind Drivetrains
11:40	Kofi Essel Hagan, Olufemi Olatunji Oyebanjo, Tarek Masaud, and Rajab Challoo Texas A & M University - Kingsville	A Probabilistic Forecasting Model for Accurate Estimation of PV Solar and Wind Power Generation
11:00	B2: Power System Signal Processing - Chair: H. Zhu Quad	
11:00	Ahmad Abdullah Electric Power Engineers, Inc.	Towards a New Paradigm for Ultrafast Transmission Line Relaying
11:20	Ke Chen, Wu Ai, and Bing Chen Huazhong University of Science and Industry	A Simulation Study on Tracking and Restructuring Ac Signals Based on Enhanced Sogi-pll
11:40	Kang-Ping Li, Fei Wang, Zhao Zhen, Zengqiang Mi, Hongbin Sun, Chun Liu, Bo Wang, and Jing Lu North China Electric Power University	Analysis on Residential Electricity Consumption Behavior Using Improved K-means Based on Simulated Annealing Algorithm
11:00	B3: DC-DC Converters - Chair: R. Pilawa Alma Mater	
11:00	Nasir and Jon Cobb Bournemouth University	CM Noise Reduction of Isolated Converter by Balancing Technique
11:20	Shahid Iqbal University Sains Malaysia	Double LLC Resonant Tanks Based DC-DC Converter with Integrated Dual Transformers for PV Power Systems
	Veda Samhitha Duppalli and Scott D. Sudhoff Purdue University	PAPER WITHDRAWN: Proximity Effect Loss in a High Frequency Core-Type Transformer
11:00	B4: Transportation Electrification - Chair: Y. Cao Lincoln	
11:00	Merve Yıldırım, Eyyüp Öksüztepe, Burak Tanyeri, and Hasan Kürüm Firat University, Turkey	Design of Electronic Differential System for an Electric Vehicle With In-Wheel Motor
11:20	Thomas Navidi, Yue Cao, and Philip T. Krein University of Illinois at Urbana-Champaign	Analysis of Wireless and Catenary Power Transfer Systems for Electric Vehicle Range Extension on Rural Highways
11:40	Seshadri Srinivasa Raghavan Purdue University	Impact of Demand Response on Electric Vehicle Charging and Day-Ahead Market Operation

TECHNICAL SESSIONS - Friday, February 19

Presentation format: 15 minutes, 5 minutes for questions

3:15	C1: Power System Loads - Chair: P. Sauer	Technology
3:15	Maziar Isapour Chehardeh, Mishari Metab Almalki, and Constantine J. Hatziaodoniu Southern Illinois University at Carbondale	Remote Feeder Transfer between Out-of-Phase Sources using STS
3:35	Shinichi Takayama and Ryuji Matsuhashi The University of Tokyo	Development of Model for Load Frequency Control in Power System with Large-scale Integration of Renewable Energy
3:55	Abdlmnam Abdrahem, Parimal Saraf, Ramtin Hadidi, A. Karimi, Hamid Sherwali, Elham Makram Clemson University	Design of a Fixed-Order Robust Controller Using Loop Shaping Method for Damping Inter-Area Oscillations in Power Systems
4:15	Eitaro Omine, Masahiro Asari, and Hiromu Kobayash System Engineering Research Laboratory, Japan	The Cooperative Control Method of Customer's Appliances for Stable Operation of Power Systems in Large Penetration of PV
3:15	C2: Economics - Chair: G. Gross	Quad
3:15	Chukwuka Gideon Monyei, Benjamin Chong, Aderemi O. Adewumi, Emmanuel Dike Okelue, and Christian Ighohor Okonta University of Leeds	An Integrated Dynamic Pricing Scheme for Improving the Smartness of Off-Grid Distributed Generation
3:35	Jae Won Lee, Seung Wan Kim, Yong Hyun Song, Sunkyo Kim, and Yong Tae Yoon Seoul National University	Economic Benefit of Energy Storage System for Frequency Regulation
3:55	Jeremiah Deboever and Santiago Grijalva Georgia Institute of Technology	Optimal Scheduling of Large-Scale Price-Maker Energy Storage
4:15	Saeed Mohajeryami, Ailin Asadinejad and Milad Doostan University of North Carolina at Charlotte	An Investigation of the Relationship Between Accuracy of Customer Baseline Calculation and Efficiency of Peak Time Rebate Program
3:15	C3: Photovoltaic Maximum Power Point Tracking - Chair: J. Kimball	Alma Mater
3:15	John A. Magerko III, Yue Cao, and Philip T. Krein University of Illinois at Urbana-Champaign	Quantifying Photovoltaic Fluctuation with 5 KHz Data: Implications for Energy Loss Via Maximum Power Point Trackers
3:35	Venkata Reddy Kota and Muralidhar Nayak Bhukya Jawaharlal Nehru Technological University, Kakinada	A Simple and Efficient MPPT Scheme for PV Module Using 2-Dimensional Lookup Table
3:55	Sally Sajadian and Reza Ahmadi Southern Illinois University at Carbondale	High Performance Model Predictive Technique for MPPT of Grid-tied Photovoltaic System Using Impedance-Source Inverter
4:15	Morcos Metry, Sertac Bayhan, Robert Balog, Haitham Abu Rub Texas A & M University	Model Predictive Control for PV Maximum Power Point Tracking of Single-Phase Sub-Multilevel Inverter

3:15	C4: Grid-tied Power Electronics - Chair: T. Modeer	Lincoln
3:15	Venkata Reddy Kota and Sudheer Vinnakot Jawaharlal Nehru Technological University, Kakinada	Synchronous Reference Frame Based Control of MLI-STATCOM in Power Distribution Network
3:35	Wooyoung Choi, Woongkul Lee, Casey Morris, and Bulent Sarioglu University of Wisconsin-Madison	Modeling Three-Phase Grid-Connected Inverter System using Complex Vector in Synchronous dq Reference Frame and Analysis on the Influence of Tuning Parameters of Synchronous Frame PI Controller
3:55	Mini Rajeev and Vivek Agarwai Indian Institute of Technology Bombay	Closed-Loop Control of Novel Transformerless Inverter Topology for Single-Phase Grid-Connected Photovoltaic System
4:15	Rui Hu and Wayne W. Weaver Michigan Technological University	Dc Microgrid Droop Control Based on Battery State of Charge Balancing

TECHNICAL SESSIONS - Saturday, February 20

9:30	D1: Transient Stability 2 - Chair: K. Shetye	Technology
9:30	Ti Xu, Wonhyeok Jang, and Thomas Overbye University of Illinois at Urbana-Champaign	Application of Set-theoretic Method to Assess the Locational Impacts of Virtual Inertia Services on the Primary Frequency Responses
9:50	Kathleen M. Gegner, Komal S. Shetye, James D. Weber, and Thomas J. Overbye University of Illinois at Urbana-Champaign	Visualization of Power System Wide-Area, Time Varying Information
10:10	Felipe Wilches-Bernal, Christoph Lackner, Joe H. Chow, and Juan J. Sanchez-Gasca Sandia National Laboratories	Small-Signal Analysis of Power System Swing Modes as Affected by Wind Turbine-Generators
9:30	D2: Power System Optimization - Chair: Z. Tate	Quad
9:30	V. Vijaya Rama Raju and Dr. S.V. Jayarama Kumar Gokaraju Rangaraju Institute of Engineering & Technology	An Optimal PMU Placement Method for Power System Observability
9:50	Keshava Dilwali, Harivina Gunnaasankaraan, Aparna Viswanath, and Kaushik Mahata University of Newcastle, Australia	Transmission Expansion Planning Using Benders Decomposition and Local Branching
10:10	Kathleen M. Gegner, Adam B. Birchfield, Ti Xu, Komal S. Shetye, and Thomas J. Overbye University of Illinois at Urbana-Champaign	A Methodology for the Creation of Geographically Realistic Synthetic Power Flow Model
9:30	D3: Control in Power Electronics - Chair: Y. Lei	Alma Mater
9:30	Mohsen Aleenejad, Hamid Mahmoudi, Parvin Moamaei, and Reza Ahmadi Southern Illinois University at Carbondale	A Fault-Tolerant Strategy Based on Fundamental Phase Shift Compensation for Three-Phase Multilevel Converters with Quasi- Z-Source Networks

TECHNICAL SESSIONS - Saturday, February 20

Presentation format: 15 minutes, 5 minutes for questions

9:30	D3: Control in Power Electronics (cont.)	Alma Mater
9:50	Dan Shen, Pardis Khayyer, and Afshin Izadian Purdue University	Sliding Mode Extremum Seeking Control for Maximum Power Point Tracking in Wind System
10:10	Hamid Mahmoudi, Mohsen Aleenejad, and Reza Ahmadi Southern Illinois University at Carbondale	A New Modulated Model Predictive Control Method for Mitigation of Effects of Constant Power Loads
10:45	E1: Power System Faults - Chair: S. Guo	Technology
10:45	Luka V. Strezoski and Marija D. Prica Case Western University	Real-Time Short-Circuit Analysis of Active Distribution Systems
11:05	Rene Sander, Daniel Barth, Michael Suriyah, and Thomas Leibfried Karlsruhe Institute of Technology	Short Circuit Detection in HVDC Grids
11:25	Sina Zarrabian, Rabie Belkacemi, Adeniyi Babalola Tennessee Technological University	Intelligent Mitigation of Blackout in Real-Time Microgrids: Neural Network Approach
10:45	E2: Motor Drives and Machine Applications - Chair: K. Haran	Quad
10:45	Jim Orr, Brandon Murray and Mihai Comanescu Penn State Altoona	Design of a Second-Order Sliding Mode MRAS Speed Estimator for the Induction Motor Drive
11:05	Hamid Mahmoudi, Mohsen Aleenejad, Parvin Moamaei and Reza Ahmadi Southern Illinois University at Carbondale	Fuzzy Adjustment of Weighting Factor in Model Predictive Control of Permanent Magnet Synchronous Machines Using Current Membership Functions
11:25	Andy Yoon, Xuan Yi, Jon Martin, Yuanshan Chen, and Kiruba Haran University of Illinois at Urbana-Champaign	A Novel High Speed, High Frequency, Air-Core PM Machine for Aircraft Application
10:45	E3: Power Converter Applications - Chair: R. O'Connell	Alma Mater
10:45	Steven I. Ruddell, Duleepa J. Thrimawithana, Udaya K. Madawala, D. S.B. Weerasinghe and Martin Neuburger University of Auckland	A Novel Single-Phase AC-AC BD-IPT System with Zero Power Ripple
11:05	Lei Zhao, Duleepa J. Thrimawithna, Udaya K. Madawala, Steven Ruddell and Patrin Illeberger University of Auckland	A Push-Pull Converter Based BD-IPT System for Wireless Grid Integration of EVs
11:25	Weichao Zhang and Jonathan W. Kimball Missouri University of Science and Technology	DC-DC Converter Based Photovoltaic Simulator with a Double Current Mode Controller

POSTER SESSIONS - Friday, February 19 at 2:00 pm

#1	Andrew Smith, Bradford Kearbey, Yue Cao, and Philip T. Krein University of Illinois at Urbana-Champaign	Modeling and Simulation for More-Electric Aircraft: A Comprehensive MATLAB/Simulink Toolbox
#2	Milan Chen, Zhe Chen University of Missouri - Columbia	A Study of Power Distribution System Reconfiguration based on SAIFI Reliability Index Performance
#3	Carl Haken University of Illinois at Urbana-Champaign	A Wide Dynamic Range Switching Current Regulator for Cost Efficient Magnetic Attitude Control of Nanosatellites (CubeSats)
#4	Ashish Mishra, Bhavna Mewada, and Dr. Stephen Bayne Texas Tech University	Frequency Response of a Power Grid Integrated with Large-Scale Wind Power
#5	Bryan Fay and Naadaa Zakiyyan University of Missouri - Columbia	Optimization of Capacitor Bank Size and Location in IEEE 32-Bus Test System Using PowerWorld
#6	Zhuoqun Shi and Xiaowen Xu University of Missouri - Columbia	PowerWorld Study of Voltage and Power Losses in Distribution Systems with Distributed Generation
#7	Juran Kirihara, Varun Badrinath Krishna, and William H. Sanders University of Illinois at Urbana-Champaign	Efficient Forecasting for Validating Smart Meter Measurements
#8	Omkar Bhandakkar BITS Pilani, Dubai Campus	MHD Power Generation
#9	Jamie Padilla University of Illinois at Urbana-Champaign	The Integration of Renewable Energy on the Electric Grid in San Diego, California
#10	Young-Jin Kim, Leslie K. Norford, and James L. Kirtley, Jr. Argonne National Laboratory	Real-Time Grid Frequency Regulation Using Variable Speed Heat Pumps in Smart Buildings
#11	Seshadri Srinivasa Raghavan University of Maryland	Two-Level Model of the Energy and Transportation Sector Interaction
#12	Kelkar Nikita, Kelkar Prachi, Khonde Akshay, and Vaibhav Vaibhav Pune Institute of Computer Technology	Zero Cross Over - Thyristor Based Temperature Controller – A Damage Control Tool
#13	Jeffrey P. Weinberg, Yue Cao, and Philip T. Krein University of Illinois at Urbana-Champaign	Complete Electrical Battery Model for Transportation Electrification Applications
#14	Kaio Vinicius Vilera and Joseph Euzebe Tate University of Toronto	JavaScript Grid Simulator
#15	Jingchao Zhou, Siyu Liu, Wen Huang, and Xiuling Li University of Illinois at Urbana-Champaign	Application of SiNx Self-Rolled-Up Microtube Platform on Energy Harvest
#16	Andy Lai, Jenny Ho, Yixiong Li, Ashish Satish University of Illinois at Urbana-Champaign	Optimization of Wind Farm and Concentrated Solar Plant Output
#17	Yuto Yamamoto, Ryuji Matsushashi University of Tokyo	Economic Evaluation of Ancillary Services Provided by Electric Vehicles for Controlling Power System Frequency
#18	Payman Dehghanian, Yaping Wang, Gurunath Gurrara, Erick Moreno-Centeno, and Mladen Kezunovic Texas A & M University	Flexible Implementation of Power System Topology Control in Smart Electricity Grids
#19	M. Hernandez, D. Celeita, G. Ramos, M. Ortiz, Y. Africano Universidad de los Andes SB IAS Chapter	2nd Workshop on Power Electronics and Power Quality Applications (PEPQA 2015)
#20	Takács Borbála Budapest University of Technologies and Economics	The Assessment of Domestic-Size Photovoltaic Energy Production

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Thank you from the PECE organizers

We sincerely thank you for your participation in PECE 2016. This year's committee has worked hard to bring together an excellent program of technical and professional presentations covering topics across the power and energy disciplines, along with a poster session especially for undergraduates, and a special event on making presentations. Each year, PECE continues to make improvements and grow in number of paper submissions and attendance. We greatly appreciate your support and feedback in making PECE a continued success.

Special thanks to:

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Thank you,

The PECE 2016 Committee



ILLINOIS

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN