



Technical Paper Sessions

Paper Session 1.A: Best Paper Session I

10/14/2019 from 10:00 to 11:30 in RSC TBD

Chair: TBD

Co-Chair: TBD

- **Paper #145:** Phani Harsha Gadde and Sukumar Brahma, “Realistic Microgrid Test Bed for Protection and Resiliency Studies”
 - **Paper #116:** Horacio Silva-Saravia and Hector Pulgar-Painemal, “Effect of Wind Farm Spatial Correlation on Oscillation Damping in the WECC System”
 - **Paper #120:** Reza Khalilisenobari and Meng Wu, “Optimal Participation of Price-Maker Battery Energy Storage Systems in Energy, Reserve and Pay as Performance Regulation Markets”
 - **Paper #175:** Mohammadreza Maddipour Farrokhifard, Mohammadreza Hatami, Vaithianathan “Mani” Venkatasubramanian, Gilles Torresan, Patrick Panciatici and Florent Xavier, “Clustering of Power System Oscillatory Modes Using DBSCAN Technique”
 - **Paper #177:** Yuqi Zhou and Hao Zhu, “Bus Split Sensitivity Analysis for Enhanced Security in Power System Operations”
 - **Paper #241:** Cody Newlun, Armando Figueroa-Acevedo, James Mccalley, Anne Kimber and Efrain O’Neill - Carrillo, “Co-Optimized Expansion Planning to Enhance Electrical System Resilience in Puerto Rico”
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Paper Session 1.B: Best Paper Session II

10/14/2019 from 10:00 to 11:30 in RSC TBD

Chair: TBD

Co-Chair: TBD

- **Paper #56:** Andre Langner and Ali Abur, “Role of the Reference Bus in Three-Phase State Estimation”
- **Paper #69:** Vanja Svenda, Aleksandar Stankovic, Andrija Saric and Mark Transtrum, “Probabilistic Network Observability of a Hybrid Power System with Communication Irregularities”
- **Paper #146:** Yuanrui Sang, Jiayue Xue, Mostafa Sahraei-Ardakani and Ge Ou, “Comparing a New Power System Preventive Operation Method with a Conventional Industry Practice During Hurricanes”
- **Paper #223:** Shubo Zhang, Hongxing Ye, Fengyu Wang, Yonghong Chen, Stephen Rose and Yaming Ma, “A Data-Aided Security Constraint Prescreening Technique and Application to Real-World System”
- **Paper #279:** Tianlu Gao, Wei Gao, Jun Zhang and Wenzhong Gao, “Small-Scale Microgrid Energy Market Based on PILT-DAO”
- **Paper #317:** Suvagata Chakraborty, Arun-Karthick Manoharan, Anton Hettiarachchige-Don, Visvakumar Aravinthan and Mohammad Heidari Kapourchali, “Model for Evaluating the Reliability of Cyber Component in Power Distribution Systems”

Paper Session 1.C: Best Undergraduate Paper Session

10/14/2019 from 10:00 to 11:30 in RSC TBD

Chair: TBD

Co-Chair: TBD

- **Paper #5:** Peimeng Guan and Jiankang Wang, "Optimal Adaptive Coordinated Cyber-Attacks on Power Grids Using Epsilon-Greedy Method"
 - **Paper #94:** Phillip Donner, Raymond Blaine and Aaron St. Leger, "Unsupervised Machine Learning for Anomaly Detection in Synchronphasor Network Traffic"
 - **Paper #236:** Bo K. Yesel, Jonathan J. Eslinger, Michael Nord, Daisy Flora Selvaraj and Prakash Ranganathan, "Feasibility Study of Solar Energy System at the University of North Dakota"
 - **Paper #295:** Maheesa Sivagnanam, Subaranjany Selvanayagam, Nimanthi Nandasiri, Aravinthan Visvakumar, Thiruvaran Tharmarajah and Vinothine Shanmugarajah, "Analysis of Large Scale Distributed Generation on Radial Distribution System: Case Study in Sri Lanka"
 - **Paper #229:** Shelby Pickering, Ian Rostkowski, Shannon Foley, Matt Huebsch, Zaran Claes, David Ticknor, James Okullo, Brandon Heath, Armando Figueroa-Acevedo and James McCalley, "Power System Resource Adequacy Evaluation Under Increasing Renewables for the Midwestern Us"
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Paper Session 1.D Undergraduate Paper Session

10/14/2019 from 10:00 to 11:30 in RSC TBD

Chair: TBD

Co-Chair: TBD

- **Paper #97:** Kshitij Singh, Shubham Wani, Mansi Jain and Pratik Bajaria, "A Distributed Algorithm for Dynamic Dispatch of Thermostatically Controlled Loads"
 - **Paper #23:** Abdullah Alassaf and Lingling Fan, "Dynamic Mode Decomposition in Various Power System Applications"
 - **Paper #15:** Zachary O'Toole, Christian Moya, Connor Rubin, Alec Schnabel and Jiankang Wang, "A Cyber-Physical Testbed Design for the Electric Power Grid"
 - **Paper #218:** Charles Thangaraj, Alexander Nagle, Kyle Kremzeir, Moayad Kutby, Mohammed Aldayel and Mashhor Alshrieef, "Utilizing Small Scale Mobile PV to Offset Residential Grid Consumption"
 - **Paper #153:** Clare Lamers, Clay Ozuna, Hao Huang and Katherine Davis, "A Unified Power System Model to Analyze the Benefits of Electric Vehicles in Power Grid"
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Paper Session 2.A: Stability I (Power System Analysis Track)

10/14/2019 from 12:30 to 2:00 in RSC TBD

Chair: TBD

Co-Chair: TBD

- **Paper #163:** Roghieh Abdollahi, Pierluigi Pisu, David Schoenwald and Zoleikha Biron, "Decentralized Servomechanism Control Design for Inter-Area Oscillations Damping in Power System"
- **Paper #312:** Biswajit Biswas, Seyedmahdi Moghadasi, Sukumar Kamalasan and Sumit Paudyal, "Integrated Transmission Systems Convex Optimal Power Flow Considering Security Constraints"
- **Paper #237:** Wenzong Wang, Zhangxin Zhou and Garng Huang, "A Novel Wide-Area Storage-Based Control for Transient Stability Enhancement"
- **Paper #256:** Sonam Kharade, Sushama Wagh and Navdeep Singh, "Synchronized Operating Point Stability of Multimachine Power System Using Holomorphic Embedding in Kuramoto Framework"
- **Paper #319:** Sheikh Jakir Hossain and Sukumar Kamalasan, "Online Measurement Based Power System Reduced Order Model Generation and Validation"
- **Paper #207:** Syed Muhammad Hur Rizvi and Anurag Srivastava, "Comparative Analysis of PMU Based Corridor Voltage Stability Indices and Enhanced Approach"

Paper Session 2.B: Cyber Physical Systems I (Emerging Topics Track)

10/14/2019 from 12:30 to 2:00 in RSC TBD

Chair: TBD

Co-Chair: TBD

- **Paper #99:** Amir Gholami, Mohammad Mousavi, Anurag K. Srivastava and Ali Mehrizi-Sani, "Cyber-Physical Vulnerability and Security Analysis of Power Grid with HVDC Line"
 - **Paper #26:** Darius Khezrimotlagh, Javad Khazaei and Arash Asrari, "MILP Modeling of Targeted False Load Data Injection Cyberattacks to Overflow Transmission Lines in Smart Grids"
 - **Paper #27:** Md Abul Hasnat and Mahshid Rahnamay-Naeini, "A Data-Driven Dynamic State Estimation for Smart Grids Under DOS Attack Using State Correlations"
 - **Paper #248:** Helton Do Nascimento Alves, Arturo Bretas and Newton Bretas, "Smart-Grids Cyber-Attack Defense: A Solution Based on an Incremental Learning Support Vector Machine"
 - **Paper #40:** Tierui Zou, Arturo Suman Bretas, Nader Aljohani and Newton Geraldo Bretas, "Malicious Data Injection Attacks: A Relaxed Physics Model Based Strategy for Real-Time Monitoring"
 - **Paper #239:** Vivek Kumar Singh, Steven Perez Callupe and Manimaran Govindarasu, "Testbed-Based Evaluation of SIEM Tool for Cyber Kill Chain Model in Power Grid SCADA System"
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Paper Session 2.C: Microgrid I (Renewables Track)

10/14/2019 from 12:30 to 2:00 in RSC TBD

Chair: TBD

Co-Chair: TBD

- **Paper #142:** William Danilczyk, Yan Lindsay Sun and Haibo He, "Angel: An Intelligent Digital Twin Framework for Microgrid Security"
 - **Paper #247:** Tarek Masaud, "Impact of Seasonal Net Load Variation on Load Shedding Ratio in Islanded Microgrid Operation"
 - **Paper #190:** Oscar Azofeifa, Siddhartha Nigam, Olaoluwapo Ajala, Christopher Sain, Samuel Utomi, Alejandro Domínguez-García and Peter Sauer, "Controller Hardware-in-the-Loop Testbed for Distributed Coordination and Control Architectures"
 - **Paper #68:** Hossein Salehfar and Shravan Kumar Akula, "Frequency Control in Microgrid Communities using Neural Networks"
 - **Paper #39:** Sulaiman Almutairi, Zhixin Miao and Lingling Fan, "Operation of Parallel Grid-Supporting PVs"
 - **Paper #14:** Maximiliano Ferrari, Emilio Piescorovsky, Joshua Hambrick and Travis Smith, "Cost-Effective Three-Phase Current Amplifier Interface for Real-Time Simulator with Relays In-the-Loop"
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Paper Session 2.D: Distribution System Modeling (Distribution Systems Track)

10/14/2019 from 12:30 to 2:00 in RSC TBD

Chair: TBD

Co-Chair: TBD

- **Paper #47:** Shaziya Rasheed and Abhijit R. Abhyankar, "Investigating the Effect of Load Modeling on Network Reconfiguration of a Distribution System"
- **Paper #49:** Shammya Saha, Eran Schweitzer, Anna Scaglione and Nathan Johnson, "A Framework for Generating Synthetic Distribution Feeders Using OpenStreetMap"
- **Paper #102:** Fankun Bu, Yuxuan Yuan, Zhaoyu Wang, Kaveh Dehghanpour and Anne Kimber, "A Time-Series Distribution Test System Based on Real Utility Data"
- **Paper #214:** Yuan Liu and Pavel Etingov, "Distribution-Level Phasor Measurement Units Application to Composite Load Model Validation"
- **Paper #4:** Mingsui Sun, Mahsa Ghorbani, Edwin Chong and Sid Suryanarayanan, "A Comparison of Multiple Methods for Short-Term Load Forecasting"
- **Paper #174:** Kshitij Girigoudar, Daniel K. Molzahn and Line a. Roald, "On the Relationships Among Different Voltage Unbalance Definitions"

Paper Session 2.E: Converter and Inverter Design (Power Electronics Track)

10/14/2019 from 12:30 to 2:00 in RSC TBD

Chair: TBD

Co-Chair: TBD

- **Paper #3:** Ethan Chun and Mahmoud Kabalan, "Effects of Controller Saturation on Domain of Attraction Estimation of Droop-Controlled Inverter"
 - **Paper #24:** Sepehr Saadatmand, Mohamad Saleh Sanjari Nia, Pourya Shamsi, Mehdi Ferdowsi and Donald C Wunsch, "Heuristic Dynamic Programming for Adaptive Virtual Synchronous Generators"
 - **Paper #274:** Sudarshan Tejanag Harave and Fernando Mancilla-David, "Suppressing Circulating Current in the Modular Multilevel Converter Using Line-to-Line Voltage Correction Modules"
 - **Paper #105:** Sepehr Saadatmand, Mohamad Saleh Sanjari Nia, Pourya Shamsi and Mehdi Ferdowsi, "Dual Heuristic Dynamic Programming Control of Grid-Connected Synchronverters"
 - **Paper #280:** Hector R. Robles-Campos and Fernando Mancilla-David, "A Control Scheme in the dq Reference Frame for Hexverter-Based Systems"
 - **Paper #123:** Charul Kalaria, Victor Ogunkanmi, Avery Hagle, Ryne Swanbum and Bill Diong, "On the Distortion of Pulse-Width-Modulated Five-Level Asymmetric Multilevel Inverters"
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Paper Session 2.F: Resiliency (Power System Analysis Track)

10/14/2019 from 12:30 to 2:00 in RSC TBD

Chair: TBD

Co-Chair: TBD

- **Paper #111:** Payman Dehghanian, Jinshun Su, Mostafa Nazemi and Bo Wang, "Distributed Wind Power Resources for Enhanced Power Grid Resilience"
 - **Paper #285:** Maad Alowaifeer, Abdulllah Alamri and a.P. Sakis Meliopoulos, "Microgrid Energy Management System for Normal and Emergency Operating Conditions"
 - **Paper #64:** Ahmet Oner and Ali Abur, "Strategic Placement of Distributed Generators Against Extreme Events"
 - **Paper #96:** Agustriadi Agustriadi, Kevin Marojahan Banjar-Nahor, Yvon Bésanger and Ngapuli Irma Sinisuka, "Modeling, Simulation, and Prevention of July 23, 2018, Indonesia's Southeast Sumatra Power System Blackout"
 - **Paper #77:** Alfonso Jose Cruz Feliciano, Milad Ghiasi Rad, Celine Irvine and Santiago Grijalva, "Electrical Grid Smart Cable Detach Mechanism and Emergency Communication Network"
 - **Paper #13:** Farshina Nazrul Shimim, Maryam Bahramipناه and Hashem Nehrir, "Resilient and Extreme-Event-Aware Microgrid Using Energy Storage and Load Curtailment"
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Paper Session 2.G: New Trends in Power System Markets (Economics Track)

10/14/2019 from 12:30 to 2:00 in RSC TBD

Chair: TBD

Co-Chair: TBD

- **Paper #92:** Arun Venkatesh Ramesh and Xingpeng Li, "Security Constrained Unit Commitment with Corrective Transmission Switching"
- **Paper #170:** Sina Parhizi and Amin Khodaei, "Active/Reactive Locational Pricing in Distribution Networks"
- **Paper #72:** Zhichao Shi, Hao Liang and Venkata Dinavahi, "Energy and Reserve Dispatch with Renewable Generation Using Data-Driven Distributionally Robust Optimization"
- **Paper #30:** Kavya Ashok, Shreyas Kulkarni, Steven Moore, Santiago Grijalva and Deepak Divan, "Residential Load Management Using System Frequency and Grid Voltage as Price Indicators"
- **Paper #2:** Gerald Thomas Heydt and Timothy Bichler, "Collaborative Efforts in Mexico / United States Power Engineering Education"

Paper Session 3.A: Visualization (Emerging Topics Track)

10/14/2019 from 2:00 to 3:30 in RSC TBD

Chair: TBD

Co-Chair: TBD

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- **Paper #79:** Thomas Overbye, Jessica Wert, Adam Birchfield and James Weber, "Wide-Area Electric Grid Visualization Using Pseudo-Geographic Mosaic Displays"
 - **Paper #158:** Romel Angel Cardenas Javier, Victor Gonzalez Sanchez, Mario Arrieta Paternina, Francisco Alexander Zelaya Arrazabal, Alejandro Zamora Mendez and Vicente Torres Garcia, "A Matlab and PowerFactory-Based WAMS Simulator"
 - **Paper #89:** Ikponmwosa Idehen, Wonhyeok Jang and Thomas Overbye, "PMU Data Feature Considerations for Realistic, Synthetic Data Generation"
 - **Paper #192:** Sean Mccolley, John Pierre, Victor Bershinsky and Thomas Vanhoudt, "Visibility of WECC Wide Area System Tests Measured from the Consumer Level"
 - **Paper #265:** Savanna New, Hannah Nano, Jarrad Havemann, Zian Wang, Mitchell Posey, Ernie Hogan, Khoi Chu, Devin McCormick, Tarek Youssef and Bhuvaneswari Ramachandran, "Design and Implementation of a Real-Time Energy Monitoring and Reporting System"
 - **Paper #16:** Anandini Gandluru, Shiva Poudel and Anamika Dubey, "A Non-Exhaustive Search Algorithm to Identify Distribution Grid Operational Topology"
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Paper Session 3.B: Protection and Relays (Power System Analysis Track)

10/14/2019 from 2:00 to 3:30 in RSC TBD

Chair: TBD

Co-Chair: TBD

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- **Paper #266:** Md. Rashidul Islam, Jakir Hasan, Md. Najmul Huda and Mohammad Ashraf Hossain Sadi, "Fault Ride Through Capability Improvement of DFIG Based Wind Farms Using Active Power Controlled Bridge Type Fault Current Limiter"
 - **Paper #180:** Yousaf Hashmy, Qiushi Cui, Zhihao Ma and Yang Weng, "Arcing Fault Detection with Interpretable Learning Model Under the Integration of Renewable Energy"
 - **Paper #131:** Rezoan Shuvro, Mitun Talukder, Pankaz Das and Majeed M. Hayat, "Predicting Cascading Failures in Power Grids Using Machine Learning Algorithms"
 - **Paper #269:** Mohamadsaleh Jafari, Temitayo Olowu, Arif Sarwat and Mohammad Ashiqur Rahman, "Study of Smart Grid Protection Challenges with High Photovoltaic Penetration"
 - **Paper #293:** Hussain Beleed, Brian Johnson and Herbert Hess, "An Investigation of the Impact of D-FACTS Devices Implementations on the Mho Distance Elements"
 - **Paper #21:** Hamid Khodabandehlou, Iman Niazazari, Hanif Livani and M. Sami Fadali, "Event Classification in Distribution Networks Using a Quotient Gradient System"
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Paper Session 3.C: Machine Learning Applications (Emerging Topics Track)

10/14/2019 from 2:00 to 3:30 in RSC TBD

Chair: TBD

Co-Chair: TBD

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- **Paper #254:** Steven Buchhop and Prakash Ranganathan, "Residential Load Identification Based on Load Profile using Artificial Neural Network (ANN)"
 - **Paper #226:** Ishan Khatri, Xishuang Dong, John Attia and Lijun Qian, "Short-Term Load Forecasting on Smart Meter Via Deep Learning"
 - **Paper #95:** Dimitra Ignatiadis, Gonzague Henri and Ram Rajagopal, "Forecasting Residential Monthly Electricity Consumption using Smart Meter Data"
 - **Paper #308:** Anubhav Nath, Reetam Sen Biswas and Anamitra Pal, "Application of Machine Learning for Online Dynamic Security Assessment in Presence of System Variability and Additive Instrumentation Errors"
 - **Paper #203:** Dan Rosa De Jesus, Paras Mandal, Shantanu Chakraborty, Tomonobu Senjyu and Miguel Velez-Reyes, "Data Fusion Based Hybrid Deep Neural Network Method for Solar PV Power Forecasting"
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Paper Session 3.D: Power Electronics Applications (Power Electronics Track)

10/14/2019 from 2:00 to 3:30 in RSC TBD

Chair: TBD

Co-Chair: TBD

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- **Paper #57:** Mohammad Altimania, Mohamad Saleh Sanjari Nia, Mehdi Ferdowsi and Pourya Shamsi, "Analysis and Modeling of a Non-Isolated Two-Phase Interleaved Boost Converter with Diode-Capacitor Cells in the DCM"
 - **Paper #66:** Kaiyu Liu, a. P. Sakis Meliopoulos, Boqi Xie, Chiyang Zhong and Jiahao Xie, "Quasi-Dynamic Domain Modeling of Line-Commutated Converters with the Analytical Approach"
 - **Paper #31:** Rafael Cisneros-Magaña, Aurelio Medina and Claudio Rubén Fuerte-Esquivel, "Time Domain Analysis of Power Quality Adverse Effects of Grid Interconnected Photovoltaic Generation"
 - **Paper #270:** Anant Singh, Prasanna U R, Kaushik Rajashekara, Vinay Rathore, Lazar Ben-Brahim and Adel Gastli, "A Soft Switching Single Stage Isolated Three Phase Bidirectional PFC Converter for Electric Vehicles Charging"
 - **Paper #125:** Anushree Ramanath, Abhijit Kshirsagar, Sreekanth Thamballa and Ned Mohan, "Equivalent Modeling, Design and Analysis of Integrated Magnetics Ćuk Converter"
 - **Paper #305:** Rama Kolla, Zhengyu Wang, Zhixin Miao and Lingling Fan, "Realization of Enhanced Phase Locked Loop using Raspberry Pi and LabVIEW"
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Paper Session 3.E: Demand Response (Economics Track)

10/14/2019 from 2:00 to 3:30 in RSC TBD

Chair: TBD

Co-Chair: TBD

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- **Paper #215:** Junkai Liang and Wenyuan Tang, "Optimal Trading Strategies in Continuous Double Auctions for Transactive Energy"
 - **Paper #209:** Xiaochu Wang and Wenyuan Tang, "Designing Multistep Peak Time Rebate Programs for Curtailment Service Providers"
 - **Paper #253:** Brian Morrow, Claire Krokker, Daisy Selvaraj and Prakash Ranganathan, "Improving LMP Based Day Ahead Forecasts Using Auto Regressive Integrated Moving Average (ARIMA) With Shadow Pricing, EFORD Rates, and Transmission Loss Ratios"
 - **Paper #283:** Mehdi Saleh, Karthik Saikumar and Kory Hedman, "Pricing Implications of Transmission Security Modeling in Electric Energy Markets"
 - **Paper #19:** Abdullah Algarni, Sid Suryanarayanan and Toru Namerikawa, "Integrating Demand Response Aggregators with Negawatt Trading Mechanisms in Electricity Markets"
 - **Paper #117:** Zhongyang Zhao, Caisheng Wang, Huaiwei Liao and Carol Miller, "Data-Driven Analysis of Regional Capacity Factors in a Large-Scale Power Market: A Perspective from Market Participants"
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Paper Session 3.F: Power System Security (Power System Analysis Track)

10/14/2019 from 2:00 to 3:30 in RSC TBD

Chair: TBD

Co-Chair: TBD

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- **Paper #33:** Daniel Zuniga Vazquez and Neng Fan, "Two-Stage Stochastic Power Grid Expansion Considering Multiple N-1-1 Contingencies"
 - **Paper #110:** Harsh Bhandari, Vijay Vittal, Gerald Heydt, Faustino Quintanilla and Wesley Knuth, "Ranking of Bulk Transmission Assets for Maintenance Decisions"
 - **Paper #84:** Xiaping Zhang, Jason Ausmus, Pankaj Sen and Joseph Mercer, "Remedial Action Scheme Utilization Practices for Operational Studies in West Interconnection"
 - **Paper #58:** Megha Gupta and Abhijit R Abhyankar, "Impact of Active Distribution Network on Contingency Analysis of Transmission System"
 - **Paper #272:** Tamer Ibrahim and Ahmed Mohamed, "DNN-Based Contingency Screening Module for Voltage Stability Analysis"
 - **Paper #168:** Santosh Sharma, Qihua Huang, Ahmad Tbaileh and Qifeng Li, "Scenario-Based Analysis for Disaster-Resilient Restoration of Distribution Systems"

Paper Session 3.G: Microgrid II (Renewables Track)

10/14/2019 from 2:00 to 3:30 in RSC TBD

Chair: TBD

Co-Chair: TBD

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- **Paper #103:** Maximiliano Lainfiesta, Joaquin Guillaumon, Queen Okon and Xuewei Zhang, "Optimal Design of Microgrid At an Industrial Complex"
 - **Paper #113:** Venkateswaran Lakshminarayanan, Goutham Selvaraj, Kaushik Rajashekara, Lazar Ben-Brahim and Adel Gastli, "Hardware in Loop (HIL) Testing of Energy Management Controller for Electric Vehicle Integrated Microgrid"
 - **Paper #124:** Anas Alosey and Jae-Do Park, "Multi-Agent System Using Jade for Distributed DC Microgrid System Control"
 - **Paper #268:** Ogbonnaya Bassey, Bo Chen, Karen Butler-Purry and Chen Chen, "Dynamic Simulation of Distribution Systems and Microgrids for Reconfiguration Studies Using PSCAD/EMTDC"
 - **Paper #41:** Arash Asrari, Meisam Ansari and Bibek K. C., "Real-Time Congestion Prevention in Modern Distribution Power Systems via Demand Response of Smart Homes"
 - **Paper #282:** Farhad Angizeh, Kien Chau, Khashayar Mahani and Mohsen Jafari, "Energy Portfolio-Based Joint Flexibility Scheduling of Coordinated Microgrids"
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Paper Session 4.A: Optimal Operation (Economics Track)

10/14/2019 from 3:45 to 5:15 in RSC TBD

Chair: TBD

Co-Chair: TBD

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- **Paper #141:** Xinbo Geng and Le Xie, "Chance-Constrained Unit Commitment via the Scenario Approach"
 - **Paper #194:** Shruti Singh and David Wenzhong Gao, "Noiseless Consensus Based Economic Dispatch Algorithm in Conjunction With STATCOM Controller for Reactive Power Compensation in Islanded Microgrids to Enhance Voltage and Power Stability"
 - **Paper #289:** Haixiang Zhang, Jianan Liu, Dongliang Xiao and Wei Qiao, "Security-Constrained Optimal Power Flow Solved with a Dynamic Multichain Particle Swarm Optimizer"
 - **Paper #78:** Sruthi Davuluri, Rupamathi Jaddivada and Marija Ilic, "Enabling Customers Through Distributed Economic Dispatch"
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Paper Session 4.B: State Estimation (Power System Analysis Track)

10/14/2019 from 3:45 to 5:15 in RSC TBD

Chair: TBD

Co-Chair: TBD

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- **Paper #106:** Vahid Sarfi, Amir Ghasemkhani, Iman Niazazari, Hanif Livani and Lei Yang, "Decentralized Dynamic State Estimation with Bimodal Gaussian Mixture Measurement Noise"
 - **Paper #286:** David Kelle and Ali Abur, "Improving Performance of Multi-Area State Estimation using Spectral Clustering"
 - **Paper #82:** Emeka Obikwelu and Sakis Meliopoulos, "CT Instrumentation Channel Error Correction using Dynamic State Estimation."
 - **Paper #81:** Felipe Wilches-Bernal, Josh Wold, Ricky Concepcion and Jamie Budai, "A Method for Correcting Frequency and RoCoF Estimates of Power System Signals with Phase Steps"
 - **Paper #155:** Zhengyu Wang, Lingling Fan and Zhixin Miao, "Data-Drive Dynamic Model Identification for Synchronous Generators"
 - **Paper #93:** Yiqi Zhang and Yuan Liao, "Optimal Line Parameter Estimation Method for Mid-Compensated Transmission Lines"

Paper Session 4.C: Microgrid Applications (Power Electronics Track)

10/14/2019 from 3:45 to 5:15 in RSC TBD

Chair: TBD

Co-Chair: TBD

- **Paper #45:** Abdulhakim Alsaif, Zhixin Miao and Lingling Fan, "Comparison of Islanding and Synchronization for a Microgrid With Different Converter Control"
 - **Paper #100:** Sepehr Saadatmand, Mohamad Saleh Sanjari Nia, Pourya Shamsi, Mehdi Ferdowsi and Donald C Wunsch, "Neural Network Predictive Controller for Grid-Connected Virtual Synchronous Generator"
 - **Paper #128:** Abdallah a. Smadi, Hangtian Lei and Brian K. Johnson, "Distribution System Harmonic Mitigation Using a PV System with Hybrid Active Filter Features"
 - **Paper #321:** Anusha Kandula, Vishal Verma, Sarika Solanki and Jignesh Solanki, "Comparative Analysis of Self-Synchronized Virtual Synchronous Generator Control and Droop Control for Inverters in Islanded Microgrid"
 - **Paper #156:** Denisse Alejandra Meza Soria, Satish Ranade and Olga Lavrova, "Exploring the Leakage Inductance of Transformers Used in Dual Active Bridge"
 - **Paper #129:** Mohamad Saleh Sanjari Nia, Sepehr Saadatmand, Mohammad Altmania, Pourya Shamsi and Mehdi Ferdowsi, "Analysis of Various Transformer Structures for High Frequency Isolation Applications"
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Paper Session 4.D: Volt-Var. Control (Distribution System Track)

10/14/2019 from 3:45 to 5:15 in RSC TBD

Chair: TBD

Co-Chair: TBD

- **Paper #304:** Aasheesh Deshmukh, Md Rakib Ur Rahman and Visvakumar Aravinthan, "Feeder Level Linear Voltage Drop Model for Active Radial Distribution System Operation in the Presence of Distributed Generation"
 - **Paper #301:** Shahrzad Mahdavi and Aleksandar Dimitrovski, "Coordinated Voltage Regulator Control in Systems with High-Level Penetration of Distributed Energy Resources"
 - **Paper #28:** Chiyang Zhong, Boqi Xie and a. P. Sakis Meliopoulos, "Distribution Network Voltage Profile Optimization via Multi-Stage Flexible Optimal Power Flow"
 - **Paper #149:** Hamdi Albusnashee and Roy Mccann, "DER Coordination Strategy for Volt/VAR Control Using IEC61850 GOOSE Protocol"
 - **Paper #157:** Vanja Svenda, Mai Vu and Aleksandar Stankovic, "Reactive Power Optimization for Flat Voltage Profiles in Distribution Networks"
 - **Paper #148:** Anusree Mandali, Lili Dong and Allen Morinec, "Advanced Supplemental Controller for a Static VAR Compensator in Power Systems"
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Paper Session 4.E: Energy Storage I (Renewables Track)

10/14/2019 from 3:45 to 5:15 in RSC TBD

Chair: TBD

Co-Chair: TBD

- **Paper #65:** Chiebuka Eyisi, Ameena Saad Al-Sumaiti, Konstantin Turitsyn and Qifeng Li, "Mathematical Models for Optimization of Grid-Integrated Energy Storage Systems: A Review"
- **Paper #132:** Lin Yang, Xiaohan Zhang and Chengzong Pang, "Battery Energy Storage-Based Strategy for Suppressing Wind Farm's Subsynchronous Oscillation"
- **Paper #52:** Roozbeh Karandeh, Tumininu Lawanson and Valentina Cecchi, "A Two-Stage Algorithm for Optimal Scheduling of Battery Energy Storage Systems for Peak-Shaving"
- **Paper #169:** Mohamed Abuagreb, Hussain Beled and Brian Johnson, "Energy Management of a Battery Combined with PV Generation"
- **Paper #74:** Yixuan Chen, Yuanxiao Zhao, Guangchao Geng, Quanyuan Jiang, Wenlong Liu and Lingfang Li, "Suppression Strategy of Ultra-Low Frequency Oscillation in Yunnan Power Grid with BESS"
- **Paper #48:** Gad Monga Ilunga, Mary Thompson, Osamuyi Obadolagbony and Santiago Grijalva, "Optimal Energy Storage-Grid Coordination for Hospitals: Prototype Development"

Paper Session 4.F: Reliability (Power System Analysis Track)

10/14/2019 from 3:45 to 5:15 in RSC TBD

Chair: TBD

Co-Chair: TBD

- **Paper #6:** Sai Kiran Kanchari Bavajigari and Chanan Singh, "Investigation of Computational Advantage of using Importance Sampling in Monte Carlo Simulation"
 - **Paper #91:** Hongming Zhang, Jiawei Ning, Haoyu Yuan and Mani Venkatasubramanian, "Implementing Online Oscillation Monitoring and Forced Oscillation Source Locating at Peak Reliability"
 - **Paper #205:** Nga Nguyen, Saleh Almasabi and Joydeep Mitra, "Capacity Credit Evaluation of Wind Farm Considering Impact of Turbine Hub Level"
 - **Paper #139:** Umair Shahzad and Sohrab Asgarpour, "Probabilistic Risk Assessment of an Active Distribution Network using Monte Carlo Simulation Approach"
 - **Paper #86:** Ali Parizad and Konstadinos Hatziaodoniu, "Multiobjective Optimization of PV/Wind/ESS Hybrid Microgrid System Considering Reliability and Cost Indices"
 - **Paper #255:** Ramin Kaviani and Kory Hedman, "Identifying an Exploitable Structure for the Core Problem of Load-Redistribution Attack Problems"
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Paper Session 4.G: Stability II (Power System Analysis Track)

10/14/2019 from 3:45 to 5:15 in RSC TBD

Chair: TBD

Co-Chair: TBD

- **Paper #178:** Mohammadreza Hatami, Mohammadreza Maddipour Farrokhifard and Vaithianathan "Mani" Venkatasubramanian, "Modal Damping Estimation: An Alternative for Hilbert Spectral Analysis"
 - **Paper #217:** Mohammad Sadi, Ahmed Abuhussein and Ranjay Singh, "Fuzzy Logic Controlled Bridge Switch-Type Flux-Coupling Non-Superconducting Fault Current Limiter for Transient Stability Enhancement of Power System"
 - **Paper #246:** Shruti Ranjan and Abhijit R. Abhyankar, "An Approach for Site Selection to Integrate Renewable Energy Sources Based on Power System Parameters"
 - **Paper #252:** Bhagyashree Umathe, Sonam Kharade, Sushma Wagh and Navdeep Singh, "Bifurcation Point Tracking in Generator Outage Scenario Using Nested Holomorphic Embedding Power Flow Method"
 - **Paper #143:** Olaoluwapo Ajala, Alejandro Dominguez-Garcia, Peter Sauer and Daniel Liberzon, "A Second-Order Synchronous Machine Model for Multi-Swing Stability Analysis"
 - **Paper #114:** Benjamin Francis, Jacob Nuttall, Mark Transtrum, Andrija Saric and Alex Stankovic, "Network Reduction in Transient Stability Models using Partial Response Matching"
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Paper Session 5.A: Control Applications (Emerging Topics Track)

10/15/2019 from 9:00 to 10:30 in RSC TBD

Chair: TBD

Co-Chair: TBD

- **Paper #210:** Duc Tran, Edward Sanchez and Masoud Nazari, "Model Predictive Energy Management for Building Microgrids With IoT-Based Controllable Loads"
- **Paper #109:** Chris Briere, Hector Pulgar and Seddik Djouadi, "Exploring Optimal Control Strategies for Enhanced Grid Frequency Regulation"
- **Paper #189:** Zhenhua Wang, Haibo He and Yan Sun, "Robust Frequency Control of Power Systems Under Time-Varying Loads"
- **Paper #63:** Sudipta Paul and D. Subbaram Naidu, "Nonlinear Optimal Tracking Control of Wind Energy Conversion System in Partial Load Region"
- **Paper #310:** Robin Bisht, Arun Suresh and Sukumar Kamalasan, "Multiple Single Phase Inverters Based Combined Active Power Management and Voltage Regulation of Power Distribution System Based on a Novel Optimal Control Architecture"
- **Paper #75:** Serafin Ramos Paz, Fernando Ornelas Tellez and Jesus Rico Melgoza, "Robust Nonlinear Optimal Control for Voltage-Frequency and Active-Reactive Power Regulation in Microgrids"

Paper Session 5.B: New Trends (Renewables Track)

10/15/2019 from 9:00 to 10:30 in RSC TBD

Chair: TBD

Co-Chair: TBD

- **Paper #287:** Hamid Tahery and Sadik Kucuksari, "Offshore Wind Farm Collection Cable Layout Optimization Through Cost Minimization"
 - **Paper #219:** Shwetank Agrawal, Barjeev Tyagi, Vishal Kumar, Pramod Agarwal and Pawan Sharma, "A Simplified and Effective GMPP Tracking Algorithm for Solar Photovoltaic System"
 - **Paper #224:** Emily Royal, Keun Lee and Pankaj K. Sen, "Electrical Energy Consumption, Energy Efficiency and Energy Conservation in Commercial Sector and "LEED" Certification"
 - **Paper #88:** Alexander Headley, Clifford Hansen and Tu Nguyen, "Maximizing Revenue from Electrical Energy Storage Paired with Community Solar Projects in NYISO Markets"
 - **Paper #18:** Abdullah Alburidy and Lingling Fan, "Loss Locational Sensitivity in Distribution Systems"
 - **Paper #232:** Tushar Sethi and Ward Jewell, "Demand Response and Solar to Mitigate Peak Load"
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Paper Session 5.C: Distributed Resource Management (Distribution Systems Track)

10/15/2019 from 9:00 to 10:30 in RSC TBD

Chair: TBD

Co-Chair: TBD

- **Paper #187:** Md Kamruzzaman and Mohammed Ben-Idris, "A Smart Charging Strategy for Electric Vehicles to Increase their Hosting Capacity in Distribution Systems"
 - **Paper #191:** Rahul Jha and Anamika Dubey, "Local Smart Inverter Control to Mitigate the Effects of Photovoltaic (PV) Generation Variability"
 - **Paper #12:** Preetham Goli, Suresh Makkena, Srinivasa Rao Gampa and Debapriya Das, "Fuzzy Ant Colony Optimization Technique for Predefined Performance of Distribution Systems Considering DGs and Shunt Capacitors"
 - **Paper #59:** Severin Nowak, Liwei Wang and Yu Christine Chen, "Measurement-Based Optimal Power Flow with Linear Power-Flow Constraint for DER Dispatch"
 - **Paper #67:** Hossein Salehfar and John Beuning, "PV Penetration Optimization with WAM Smart Inverters Through Reduction of Power System Distribution Losses"
 - **Paper #85:** Meisam Ansari, Mostafa Ansari and Arash Asrari, "A Framework for Simultaneous Management of Greenhouse Gas Emission and Substation Transformer Congestion via Cooperative Microgrids"
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Paper Session 5.D: Machines and Transformers

10/15/2019 from 9:00 to 10:30 in RSC TBD

Chair: TBD

Co-Chair: TBD

- **Paper #38:** Darshit Shah, Bhanu Baddipadiga, Mariesa Crow and Mehdi Ferdowsi, "A Solid State Transformer Model for Proper Integration to Distribution Networks"
- **Paper #136:** Subash Pokharel and Aleksandar Dimitrovski, "Analytical Modeling of a Ferromagnetic Core Reactor"
- **Paper #167:** Hang Shao, Sufei Li, Chiyang Zhong and Thomas Habetler, "Multi-Objective Design Optimization of Synchronous Reluctance Machines Based on the Analytical Model and the Evolutionary Algorithms"
- **Paper #130:** Mohamad Saleh Sanjari Nia, Sepehr Saadatmand, Mohammad Altimania, Pourya Shamsi and Mehdi Ferdowsi, "Analysis of Skin Effect in High Frequency Isolation Transformers"
- **Paper #264:** Monika Madhusoodan, Ragini Meshram, Sushama Wagh, N. M. Singh and a. M. Stankovic, "Robust Control of Solid State Transformer Using Dynamic Phasor Based Model with dq Transformation"
- **Paper #201:** Kartikeya Jayadurga Prasad Veeramraju and Jonathan Kimball, "An Improved Method for the Practical Determination of Core and Copper Losses in High Frequency Switchmode Transformers"

Paper Session 5.E: Sensors and PMU Application (Emerging Topics Applications)

10/15/2019 from 9:00 to 10:30 in RSC TBD

Chair: TBD

Co-Chair: TBD

- **Paper #127:** Meghna Barkakati, Reetam Sen Biswas and Anamitra Pal, "A PMU Based Islanding Detection Scheme Immune to Additive Instrumentation Channel Errors"
 - **Paper #34:** Gagandeep Singh Dua, Dr. Barjeev Tyagi and Dr. Vishal Kumar, "MILP Based Deployment of Micro-PMU in Reconfigurable Active Distribution Network"
 - **Paper #101:** Shreyas Kulkarni, Kavya Ashok, Frank Lambert and Deepak Divan, "Asset Monitoring using Smart Sensing and Advanced Analytics for the Distribution Network"
 - **Paper #186:** Tao Jiang, Linqun Bai, Xue Li and Fangxing Li, "Synchrophasor Measurement-Based Modal Analysis in Power Grids"
 - **Paper #160:** Tazwar Muttaqi, Thomas L. Baldwin and Steve C. Chiu, "Distribution System State Estimation with AMI Based on Load Correction Method"
 - **Paper #20:** Ti Xu, Hanyue Li, Adam Birchfield and Thomas Overbye, "Synthesize Phasor Measurement Unit Data Using Large-Scale Electric Network Models"
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Paper Session 5.F: Cyber Physical Systems II (Emerging Topics Track)

10/15/2019 from 9:00 to 10:30 in RSC TBD

Chair: TBD

Co-Chair: TBD

- **Paper #151:** Vishnu Cherusola Dev, Uddipan Das and Vinod Namboodiri, "Opportunistic Network Sharing for Transporting Smart Grid Data Traffic"
 - **Paper #313:** Lei Wang and Qun Zhou, "Physics-Guided Deep Learning for Time-Series State Estimation Against False Data Injection Attacks"
 - **Paper #238:** Arnab Kundu, Abhijeet Sahu, Katherine Davis and Erchin Serpedin, "Learning-Based Defense of False Data Injection Attacks in Power System State Estimation"
 - **Paper #318:** Ravikumar Gelli, Burhan Hyder and Manimaran G, "Efficient Modeling of HIL Multi-Grid System for Scalability & Concurrency in CPS Security Testbed"
 - **Paper #46:** Shuchismita Biswas and Virgilio Centeno, "A Routing and Link Scheduling Strategy for Smart Grid NAN Communications"
 - **Paper #204:** Philip Hart, Sowmya Acharya and Honggang Wang, "Coherency-Based Detection Algorithm for Synchrophasor Cyberattacks"
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Paper Session 5.G: Demand Response (Emerging Topics Track)

10/15/2019 from 9:00 to 10:30 in RSC TBD

Chair: TBD

Co-Chair: TBD

- **Paper #197:** Mohammadhafez Bazrafshan, Hao Zhu and Nikolaos Gatsis, "Real-Time Voltage-Stability Enhancement via Demand Response"
- **Paper #212:** Ashwin Shirsat and Wenyan Tang, "Identification of the Potential of Residential Demand Response using Artificial Neural Networks"
- **Paper #7:** Anna Stuhlmacher and Johanna L. Mathieu, "Chance-Constrained Water Pumping Managing Power Distribution Network Constraints"
- **Paper #243:** Akintonde Abbas and Badrul Chowdhury, "A Data-Driven Approach for Providing Frequency Regulation with Aggregated Residential HVAC Units"
- **Paper #273:** Mingyue He and Mojdeh Khorsand, "A Data-Driven Based Strategy to Evaluate Participation of Diverse Social Classes in Smart Electric Grids"
- **Paper #22:** Hamidreza Sadeghian and Zhifang Wang, "Integration of Rooftop PV Systems with Decentralized Residential and Commercial Demand Side Management"

Paper Session 6.A: Geometric and Electro Magnetic Disturbance (Emerging Topics Track)

10/15/2019 from 10:45 to 12:15 in RSC TBD

Chair: TBD

Co-Chair: TBD

- **Paper #11:** Yiqiu Zhang, Komal Shetye, Adam Birchfield and Thomas Overbye, "Grid Impact Evaluation of Localized Geomagnetic Field Enhancements using Sensitivity Analysis"
 - **Paper #261:** Rishi Sharma and James D. Mccalley, "Extreme Value Analysis of Geomagnetically Induced Currents Based on Historical Magnetic Field Data"
 - **Paper #242:** Dingwei Wang, Yifu Li, Payman Dehghanian and Shiyuan Wang, "Power Grid Resilience to Electromagnetic Pulse (EMP) Disturbances: A Literature Review"
 - **Paper #228:** Pooria Dehghanian, Komal Shetye, Katherine Davis and Thomas Overbye, "System-Wide Case Study Assessment of Transformer Heating due to Geomagnetic Disturbances"
 - **Paper #154:** Lei Chen, Caisheng Wang, Mahdi Rouholamini, Saeed Alyami and Jihe Cai, "Optimal Mounting Configuration of Fixed Bifacial PV Systems"
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Paper Session 6.B: Renewables (Economics Track)

10/15/2019 from 10:45 to 12:15 in RSC TBD

Chair: TBD

Co-Chair: TBD

- **Paper #260:** Sadegh Vejdani, Adam Kline, Mason Totri, Santiago Grijalva and Richard Simmons, "Behind-the-Meter Energy Storage: Economic Assessment and System Impacts in Georgia"
 - **Paper #276:** Shaobo Zhang and Kory Hedman, "Conditions for Ramp Rates Causing Uplift"
 - **Paper #134:** Matthew Roveto and Yury Dvorkin, "Market Power in Electric Power Distribution Systems"
 - **Paper #35:** Ahmad Abuelrub, Hussien M. K. Al-Masri and Chanan Singh, "Techno-Economic Investigation of a Hybrid Wind-Solar Distribution System using Stochastic Optimization"
 - **Paper #193:** Shruti Singh and David Wenzhong Gao, "Noiseless Consensus Based Algorithm for Economic Dispatch Problem in Grid- Connected Microgrids to Enhance Stability Among Distributed Generators"
 - **Paper #42:** Abdullah Alassaf, Lingling Fan and Ibrahim Alsaleh, "Day-Ahead Distribution Market Analysis via Convex Bilevel Programming"
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Paper Session 6.C: Electric Vehicles (Renewables Track)

10/15/2019 from 10:45 to 12:15 in RSC TBD

Chair: TBD

Co-Chair: TBD

- **Paper #320:** Sandhya Rani Nadipalli, Srinivas Jeganmohan, Sultan Hakmi and Visvakumar Aravinthan, "Online Market Place for Bilevel EV Charging Control for Urban Community Park and Charge Lots"
- **Paper #164:** Roghieh a. Biroon, Zoleikha Abdollahi Biron and Ramtin Hadidi, "On the Tariff Modification for Future Electric Vehicle Connection to the Grid"
- **Paper #171:** Mohammad Rasoul Narimani, "Demand Side Management for Homes in Smart Grids"
- **Paper #208:** William Becker, Eric Miller, Partha Mishra, Rishabh Jain, Dan Olis and Xiangkun Li, "Cost Reduction of School Bus Fleet Electrification with Optimized Charging and Distributed Energy Resources"
- **Paper #147:** Jubair Yusuf, a S M Jahid Hasan and Sadrul Ula, "Impacts of Plug-in Electric Vehicles on a Distribution Level Microgrid"

Paper Session 6.D: Fault Analysis (Power System Analysis Track)

10/15/2019 from 10:45 to 12:15 in RSC TBD

Chair: TBD

Co-Chair: TBD

- **Paper #288:** Jianan Liu, Haixiang Zhang, Wei Qiao and Liyan Qu, "DC (Optimal) Power Flow-Based Models for Simulation and Mitigation of Overload Cascading Failures"
 - **Paper #176:** Sagnik Basumallik and Sara Eftekharnajad, "Dynamic Islanding in Power Systems Based on Real-Time Operating Conditions"
 - **Paper #227:** Caroline Popiel and Paul Hines, "Understanding Factors that Influence the Risk of a Cascade of Outages due to Inverter Disconnection"
 - **Paper #37:** Wen Fan and Yuan Liao, "Fault Location for Distribution Systems with Distributed Generations without using Source Impedances"
 - **Paper #202:** Hussain Beleed, Brian Johnson and Herbert Hess, "An Exploration of the D-FACTS Influence in the Mho Ground Distance Elements in Presence of Fault Resistance and Parallel Lines Mutual Coupling"
 - **Paper #108:** Rui Fan, Tianzhixi Yin, Renke Huang, Jianming Lian and Shaobu Wang, "Transmission Line Fault Location using Deep Learning Techniques"
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Paper Session 6.E: Electric Vehicles (Emerging Topics Track)

10/15/2019 from 10:45 to 12:15 in RSC TBD

Chair: TBD

Co-Chair: TBD

- **Paper #185:** Jiachen Fan and Zhi Chen, "Cost-Benefit Analysis of Optimal Charging Strategy for Electric Vehicle with V2G"
 - **Paper #183:** Jingyi Yuan, Qiushi Cui, Zhihao Ma and Yang Weng, "Learning EV Placement Factors with Social Welfare and Economic Variation Modeling"
 - **Paper #8:** Yu Hao, Atousa Yazdani and Mahyar Zarghami, "Optimized and Coordinated Charging Methods for Electric Vehicles Cost"
 - **Paper #245:** Shivaraj Mohite, Udaykumar Suryawanshi, Mohd Adil Sheikh, Sushama Wagh and Navdeep Singh, "Impact of Temperature on State of Charge Estimation for an Electric Vehicle"
 - **Paper #315:** Chak Lam Shek, Arun-Kaarthick Manoharan, Srikanth Gampa, Thejas Chandrappa and Visvakumar Aravinthan, "A Diversity-Based Clustering Technique for Implementing Decentralized Node Level Charge Scheduling of Electric Vehicles"
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Paper Session 6.F: Energy Storage II (Renewables Track)

10/15/2019 from 10:45 to 12:15 in RSC TBD

Chair: TBD

Co-Chair: TBD

- **Paper #107:** Akshay Kumar Jain, Adarsh Nagarajan, Ilya Chernyakhovskiy, Thomas Bowen, Barry Mather and Jaquelin Cochran, "Evolution of Distributed Energy Resource Grid Interconnection Standards for Integrating Emerging Storage Technologies"
- **Paper #43:** Javad Khazaei, Faegheh Moazeni, Brennan Trussell and Arash Asrari, "Small-Signal Modeling and Analysis of a Grid-Connected PEM Fuel Cell"
- **Paper #240:** Abdullah Alharbi, Wenzhong Gao and Ibrahim Alsaidan, "Sizing Battery Energy Storage Systems for Microgrid Participating in Ancillary Services"
- **Paper #200:** Vikram Roy Chowdhury, Jie Li, Jonghyun Park, Robert Landers and Jonathan Kimball, "Battery Degradation Modeling and Optimal Usage in a Microgrid Using Markov Decision Process"
- **Paper #211:** Atri Bera, Nga Nguyen and Joydeep Mitra, "Lifetime Revenue from Energy Storage Considering Battery Degradation"
- **Paper #290:** Mohammad Ostadijafari, Rahul Ranjan Jha and Anamika Dubey, "Conservation Voltage Reduction by Coordinating Legacy Devices, Smart Inverters and Battery"

Paper Session 6.F: New Opportunities in Power System

10/15/2019 from 10:45 to 12:15 in RSC TBD

Chair: TBD

Co-Chair: TBD

- **Paper #1:** Gerald Thomas Heydt, Farshad Mohammadi, Mostafa Sahraei-Ardakani and Yousef Al-Abdullah, "Large Scale Desalination: Potential for a Significant Electric Energy Market"
- **Paper #198:** Rodney Itiki, Madhav Manjrekar and Silvio Giuseppe Di Santo, "Comparative Evaluation of Super Grid Topologies Proposed for Europe and Latin America"
- **Paper #51:** Vikramaditya Penmetsa and Keith Holbert, "Climate Change Effects on Solar, Wind and Hydro Power Generation"
- **Paper #309:** Mohammad Asif Iqbal Khan, Arun Suresh, Sumit Paudyal and Sukumar Kamalasan, "Decoupled and Unified Approaches for Solving Transmission and Distribution Co-Simulations"
- **Paper #70:** Gayathri Krishnamoorthy, Rabayet Sadnan and Anamika Dubey, "Distributed PV Penetration Impact Analysis on Transmission System Voltages Using Co-Simulation"
- **Paper #50:** Douglas Bowman, Deepak Ramasubramanian, Roy Mccann, Evangelos Farantatos, Anish Gaikwad and Jay Caspary, "SPP Grid Strength Study with High Inverter-Based Resource Penetration"