

Time	Day 1 (Tuesday 24 October 2017)
9:00am – 9:45am	ACES 2017 Opening Ceremony Level 4, Simpore Junior Ballroom
9:45am – 10:30am	Coffee/ Tea Break
10:30am	ACEPT 2017 programme commences
10:30am – 1.00pm	Tutorial Speaker: Prof Jinjun LIU, Xi'an Jiaotong University Topic: Small-signal stability of power systems with multiple electronic power converters (LINK to Abstract and Speaker Biography) Level 4, Simpore 4913 Session Chair: Dr VB SRIRAM, Nanyang Technological University, Singapore
1:00pm - 2:00pm	Lunch and Exhibition
2:00pm - 3:30pm	Session 1: Renewable Energy. Smart Grid Integration (RESGI) Level 4, Simpore 4913 Session Chair: Prof Fook Hoong CHOO, Nanyang Technological University, Singapore
2:00pm - 2:15pm	1.1: Allowable Capacity Calculation of Distributed Generation in Different Distribution Network Author List: Yu Su, Niancheng Zhou, Qianggang Wang and Tao Wang Organization: State Key Laboratory of Power Transmission Equipment & System Security and New Technology (Chongqing University), Chongqing, China and Nanyang Technological University, Singapore Presenter: Yu SU
2:15pm - 2:30pm	1.2 Probabilistic Analysis of Maximum Allowable PV Connections across Bidirectional Feeders within a Distribution Network Author List: Hassan Al-Saadi, Rastko Zivanovic and Said F. Al-Sarawi Organization: School of Electrical and Electronic Engineering University of Adelaide, Adelaide, Australia Presenter: Hassan AL-SAAD
2:30pm - 2:45pm	1.3 Artificial Bee Colony Based Optimal Allocation of Micro-turbines for Voltage Stability Improvement of Distribution Systems Author List: Abhishek Gupta, Saurabh Ratra and Rajive Tiwari Organization: Department of Electrical Engineering, Malaviya National Institute of Technology, Jaipur, India Presenter: Rajive TIWARI
2:45pm - 3:00pm	1.4 Voltage Enhancement by Basic Active Power Curtailment of Low-Voltage Grid-Connected PV Systems in View of Complex Power Flow Theories and Real World Testing and Measurement Results Author List: Keping You and Thomas Reindl Organization: Solar Energy Research Institute of Singapore, National University of Singapore Presenter: Keping YOU
3:00pm - 3:15pm	1.5 Comparison of Energy Production Cost for MVAC and MVDC Offshore Wind Farm Distribution System Author List: Sanket C. Raval, Ravi Botta and Hemant N. Raval Organization: Department of Electrical Engineering, G.M.B Polytechnic-Rajula, Gujarat, India; Department of Electrical Engineering, Pandit Deendayal Petroleum University, Gujarat, India and Department of Electrical Engineering, L.D College of Engineering, Gujarat, India Presenter: Sanket RAVAL
3:15pm - 3:30pm	1.6 A Study on Ocean Wave Power and Utilization For Indian Coastal Region Author List: Ajay kumar Maurya and S. P. Singh Organization: Department of Electrical Engineering, Indian Institute of Technology Roorkee, India Presenter: Ajay kumar MAURYA

3:45pm – 4:00pm	Coffee/Tea Break
4:00pm - 5:15pm	Session 2: Materials and Components (REMC) Level 4, Simpore 4913 Session Chair: Prof Alessandro ROMAGNOLI, Nanyang Technological University, Singapore
4:00pm - 4:15pm	2.1 On the self starting of Darrieus turbine :An Experimental investigation with secondary rotor Author List: Palanisamy Mohan Kumar, Kulkarni Rohan Ajit, Mohan Ram Surya ,Narasimalu Srikanth and Teik-Cheng Lim Organization: Energy Research Institute @Nanyang Technological University, Singapore and School of Science and Technology, Singapore University of Social Sciences, Singapore Presenter: Palanisamy MOHAN KUMAR
4:15pm - 4:30pm	2.2 Pitch angle control for Horizontal axis wind turbine: A comparative study Author List: Srikanth Narasimalu and Brindha Chellaiah Organization: Energy Research Institute @Nanyang Technological University, Singapore and School of Mechanical and Aerospace Engineering, Nanyang Technological University, Singapore Presenter: Brindha CHELLAIAH
4:30pm - 4:45pm	2.3 Additive Manufacturing Process towards Wind Turbine Components Author List: Kannappan Lakshmanan, Narasimalu Srikanth and Loganathan Pranava Saai Organization: Nanyang Technological University, Singapore Presenter: Kannappan LAKSHMANAN
4:45pm - 5:00pm	2.4 Supersonic particle deposition coatings for improved Tribological performance of offshore wind turbines gears Author List: Loganathan Pranava Saai, Narasimalu Srikanth, Kannappan Lakshmanan and Sekar Manoj Organization: Energy Research Institute @Nanyang Technological University, Singapore Presenter: LOGANATHAN Pranava Saai
5:00pm - 5:15pm	2.5 Opportunities for Natural Fiber Reinforced Composites towards Tropical Wind Turbine Material Needs Author List: Dhivya Sundar, Srikanth Narasimalu, Yang Yaowen and Sandeep Sharma Organization: Energy Research Institute @Nanyang Technological University, Singapore; School of Civil and Environmental Engineering, Nanyang Technological University, Singapore and Department of Textile Technology, Bannari Amman Institute of Technology, Tamil Nadu, India Presenter: Dhivya SUNDAR
5:15pm – 5:30pm	2.6 Influence of Boundary Condition Assumption on Thermoelectric Generator Geometry Design Author List: Dongxu Ji, Josep Pou, Reeni Joseph Roshan and Alessandro Romagnoli Organization: School of Electrical and Electronic Engineering, Nanyang Technological University, Singapore and School of Mechanical and Aerospace Engineering, Nanyang Technological University, Singapore Presenter: Dongxu JI
5:30pm – 6:00pm	End of Day 1 Programme Collection of Certificate of Participation
From 6:00pm	SIEW Networking Reception (Level 4, Marina Bay Sands)

Time	Day 2 (Wednesday, 25 October 2017)	
8:50am – 9:00am	Announcements Level 4, Simpor 4911-4912	
9:00am - 10:30am	Plenary Session A Level 4, Simpor 4911-4912 <i>Plenary Chair: Prof Jason LAI, Virginia Polytechnic Institute and State University (Virginia Tech), USA</i>	
9:00am – 9:30am	Speaker: Professor Deepakraj DIVAN, Professor, John E Pippin Chair, GRA Eminent Scholar and Director of the Center for Distributed Energy at the Georgia Institute of Technology in Atlanta, GA Topic: Autonomous Grid Edge Control – An Enabler for the Future Grid	
9:30am - 9:55am	Speaker: Mr Shri Gireesh B. PRADHAN Chairperson, Central Electricity Regulatory Commission (CERC), India Topic: Grid Integration of Renewable Energy in India	
9:55am - 10:20am	Speaker: Mr Bernard BLEZ Director, ENGIE Lab CRIGEN (Center for Research and Innovation on Gas and New Energies, Paris) Topic: Microgrids in Southeast Asia, stakes and solutions within ENGIE	
10:20am – 10:45am	Speaker: Mr Paul GARDNER Global Segment Leader, Energy Storage, DNV GL – Energy Topic: DNV GL's Energy Transition Outlook 2017: impacts of rapid electrification and high renewables growth in Asia	
10:45am - 11:00am	Coffee/Tea Break	
11:00am - 12:30pm	Parallel Session 3: Microgrid Level 4, Simpor 4913 Session Chairs: Roch DROZDOWSKI-STREHL, Nanyang Technological University, Singapore and Dr Per Christer Lund, Norwegian Embassy Singapore	Parallel Session 4: Energy Storage Level 4, Simpor 4911 - 4912 Session Chair: NYUNT Wai and Prof Hoay Beng GOOI Nanyang Technological University, Singapore
11:00am – 11:15am	3.1 Software development approach for accelerated microgrid controller development Author List: Yanling Li, Aditya Venkataraman, Shreya Dutta, Luis M. Costa, Jiang Tianxiang, Nils Siebert, Robert Plana, Philippe Tordjman, Chek Fok Foo and Fook Hoong Choo Organization: Energy Research Institute @Nanyang Technological University, Singapore and GE ALSTOM, France Presenter: Yanling LI <Industry Presentation. Not available in Proceeding> Abstract Link	4.1 Strain and Defects Engineering of Phosphorene Author List: Andrey A. Kistanov, Yongqing Cai, Kun Zhou, Sergey V. Dmitriev, Narasimalu Srikanth, Danial Saadatmand and Yong-Wei Zhang Organization: School of Mechanical and Aerospace Engineering, Nanyang Technological University, Singapore; Energy Research Institute @Nanyang Technological University, Singapore; Institute of High Performance Computing, The Agency for Science, Technology and Research, Singapore; Institute for Metals Superplasticity Problems, Russian Academy of Sciences, Russia; National Research Tomsk State University,

		Tomsk, Russia and Department of Physics, University of Sistan and Baluchestan, Zahedan, Iran Presenter: Andrey A. KISTANOV
11:15am - 11:30am	3.2 Micro grid stakes and solutions within the REIDS Program Organization: ENGIE, France Presenter: Antoine BALLEREAU <Industry Presentation. Not available in Proceeding> Abstract Link	4.2 Modified Strong Tracking Cubature Kalman Filter for LiFePO4 Storage System Author List: Pengfeng Lin, Peng Wang, Jianfang Xiao, Chi Jin, Junbo Jia, Wei Da Toh and Xiangyu Zhang Organization: Interdisciplinary Graduate School, Nanyang Technological University, Singapore; School of Electrical and Electronic Engineering, Nanyang Technological University, Singapore; Energy Research Institute @Nanyang Technological University, Singapore and Clean Energy Research Center, Temasek Polytechnic, Singapore Presenter: Pengfeng LIN
11:30am - 11:45am	3.3 LVRT Capability Enhancement for Grid Connected Distributed Synchronous Generators Using Switch-in Braking Resistors Author List: Shi Cong Yang, Abhisek Ukil, Souvik Dasgupta, Amit K. Gupta and VSK Murthy Balijepalli Organization: School of Electrical and Electronic Engineering, Nanyang Technological University, Singapore and Rolls-Royce Singapore Presenter: Shi Cong YANG	4.3 Thermal Management System Design for Batteries Packs of Electric Vehicles: A Survey Author List: Xiongbin Peng, Akhil Garg, Jian Zhang and Li Shui Organization: Department of Mechatronics Engineering, Shantou University, Guangdong, China Presenter: Xiongbin PENG
11:45am - 12:00pm	3.4 Virtual Synchronous Generators for microgrid stabilization : Modeling, implementation and experimental validation on a microgrid laboratory Author List: Mustapha Amine Rahmani, Yann Herriot, Sylvain Lechat Sanjuan and Lionel Dorbais Organization: Advanced Electronics and Power Electronics department , Schneider Electric, France Presenter: Tushar MENON	4.4 Switching-Based Charger with Time Division Charging Control Scheme for Parallel Charging Author List: Pang-Jung Liu, Yu-Chi Hsu, Chia-Hung Yen and Chun-Cheng Hung Organization: Department of Electrical Engineering, National Taipei University of Technology, Taiwan Presenter: Yu-Chi HSU
12:00pm - 12:15pm	3.5 Implementation of DC/DC Converter with High Frequency Transformer (DHFT) in Hybrid AC/DC Microgrid Author List: Jianfang Xiao, Xuan Bac Nguyen, Peng Wang, Jingjing Huang and Qing Zhou Organization: Energy Research Institute @Nanyang Technological University, Singapore; School of Electrical Engineering, Xi'an University of Technology, Xi'an, China and Beijing Institute of Radio Measurement, Beijing, China	4.5 A Variable Duty Cycle Pulse Train Charger for Improving Lead-Acid Battery Performance Author List: Xerxex Dan G. Gumera, Aileen B. Caberos and Shu-Chuan Huang Organization: ASML Taiwan, Hwa-Ya Technology Park, Taoyuan County, Taiwan; Department of Electrical Engineering, National Taipei University, Taiwan; Department of Electrical Engineering, Tatung University, Taiwan and Department of Electrical and Electronics Engineering, MSU-Iligan

	Presenter: Jianfang XIAO	Institute of Technology, Iligan City, Philippines Presenter: Xerxes Dan G. GUMERA	
12:15pm - 12:30pm	3.6 A DC Microgrid Integrated Dynamic Voltage Restorer with Model Predictive Control Author List: Benfei Wang, Jian Ye, Ujjal Manandhar, Abhisek Ukil and Hoay Beng Gooi Organization: School of Electrical and Electronic Engineering, Nanyang Technological University, Singapore and School of Electrical and Computer Engineering, Auckland University, New Zealand Presenter: Benfei WANG	4.6 Optimal Depth-of-Discharge Range and Capacity Settings for Battery Energy Storage in Microgrid Operation Author List: Leonardy Setyawan, Jianfang Xiao and Peng Wang Organization: Energy Research Institute @Nanyang Technological University, Singapore and School of Electrical and Electronic Engineering, Nanyang Technological University, Singapore Presenter: Leonardy SETYAWAN	
12:30pm - 12:45pm	3.7 Scalability as a key microgrid challenge and Meralco's load side management initiatives Organization: Meralco Presenter: Reimark R. de GUZMAN <Industry Presentation. Not available in Proceeding> Abstract Link	4.7 System Frequency Regulation in Singapore Using Distributed Energy Storage Systems Author List: Yu Wang, Hongchang Li, Yan Xu and Yi Tang Organization: School of Electrical and Electronic Engineering, Nanyang Technological University, Singapore Presenter: Yu WANG	
12:45pm - 1:00pm	-	4.8 Enhancement of Load Frequency Control by Using a Hybrid Energy Storage System Author List: Xiangyu Zhou, Chaoyu Dong, Jingyang Fang and Yi Tang Organization: School of Electrical and Electronic Engineering, Nanyang Technological University, Singapore and School of Electrical and Information Engineering, Tianjin University, China Presenter: Xiangyu ZHOU	
1:00pm – 2:00pm	Lunch and Exhibition		
2:00pm - 3:30pm	Parallel Session 5: Microgrid and Smart Grid (MGSG) Level 4, Simpor 4911 Session Chair: Prof Katherine KIM, Ulsan National Institute of Science and Technology, Korea	Parallel Session 6: Renewable Energy, Power Electronics (REPE) Level 4, Simpor 4912 Session Chair: Dr Choe Jung-Muk Michael Virginia Polytechnic Institute and State University (Virginia Tech), USA	Parallel Session 7: Renewables. Policy & Financing (RPF) Level 4, Simpor 4913 Session Chair: Prof AbuBarkr S BAHAJ, Southampton University, UK
2:00pm – 2:15pm	5.1 Game Theory Based Distributed Energy Trading for Microgrids Parks Author List: Tianyang Zhao, Fook Hoong Choo, Longqi Zhang,	6.1 A Stand-Alone Hybrid PV/Fuel Cell Power System using Single-Inductor Dual-Input Single-Output Boost Converter with Model Predictive Control	7.1 Energy Management with IoT monitoring and 7kWp PV system at Suksasongkroh Chiang Mai School Author List: Montri Ngadot, Worrajak

	<p>Yang Gu and Peng Wang Organization: Energy Research Institute @Nanyang Technological University, Singapore and School of Electrical and Electronic Engineering, Nanyang Technological University, Singapore Presenter: Tianyang ZHAO</p>	<p>Author List: Benfei Wang, Liang Xian, Ujjal Manandhar, Jian Ye, Abhisek Ukil and Hoay Beng Gooi Organization: School of Electrical and Electronic Engineering, Nanyang Technological University, Singapore and School of Electrical and Computer Engineering, Auckland University, New Zealand. Presenter: Benfei WANG</p>	<p>Muangjai and Phiched Thanin Organization: Department of Electrical Engineering, Faculty of Engineering, Rajamangala University of Technology Lanna, Thailand; College of Integrated Science and Technology, Rajamangala University of Technology Lanna, Thailand and Department of Electrical Engineering, Faculty of Engineering, North-Chiang Mai University, Thailand Presenter: Montri NGAODET</p>
2:15pm – 2:30pm	<p>5.2 Advanced Control Techniques for Micro-grids Power Quality Improvement Author List: Sibtain ul Hassan, Zain ul Abideen and Tahir Izhar Organization: Department of Electrical Engineering, University of Engineering & Technology, Lahore, Pakistan Presenter: Tahir IZHAR</p>	<p>6.2 A Comparative Study of Control Topologies for Single-Phase UPS Inverter System Author List: Santosh Kumar Singh and Sumit Ghatak Choudhuri Organization: Department of Electrical Engineering, Indian Institute of Technology Roorkee, India Presenter: Sumit GHATAK CHOUDHURI</p>	<p>7.2 Solution Study of Energy Storage for Renewable in Power Market Author List: Qian Zhao, Ashwin M. Kambadkone and Gordon Rong Organization: Experiment Power Grid Centre, Agency for Science, Technology and Research, Singapore; Department of Electrical and Computer Engineering, National University of Singapore and Lloyds Register Global Technology Centre Presenter: Gordon RONG</p>
2:30pm – 2:45pm	<p>5.3 Impact of DTR System On The Transmission Line Reliability Model Author List: Jiashen Teh Organization: School of Electrical and Electronics Engineering Universiti Sains Malaysia (USM), Penang, Malaysia Presenter: Jiashen TEH</p>	<p>6.3 A Novel Converter Topology Based STATCOM For Reactive Power Compensation Author List: Smrithi K, Sharun Vittappan and Jayanand B Organization: Department of Electrical Engineering, Government Engineering College, Thrissur, India Presenter: Smrithi K</p>	<p>7.3 Economic opportunities and challenges of a green hydrogen economy in Singapore Organization: ENGIE, France Presenter: Isabelle MORETTI <Industry Presentation. Not available in Proceeding></p>

<p>2:45pm – 3:00pm</p>	<p>5.4 Enumerated-MPC-based Dynamic Voltage Restorer using LC Filter with Damping Resistor Author List: Jian Ye, Benfei Wang, Ujjal Manandhar, Abhisek Ukil and Hoay Beng Gooi Organization: School of Electrical and Electronic Engineering, Nanyang Technological University, Singapore and School of Electrical and Computer Engineering, Auckland University, New Zealand Presenter: Benfei WANG</p>	<p>6.4 Design and Implementation of a Bidirectional DC-DC Forward/Flyback Converter with Leakage Energy Recycled Author List: Yi-Ju Lu, Tsorng-Juu Liang, Ci-Hong Lin and Kai-Hui Chen Organization: Green Energy Electronics Research Center (GREERC) / Advanced Optoelectronic Technology Center (AOTC), Department of Electrical Engineering, National Cheng Kung University, Tainan, Taiwan Presenter: Ci-Hong LIN</p>	<p>7.4 Coordinated Bidding Strategy in Synchronized Electricity and Natural Gas Markets Author List: Zhenya Ji and Xueliang Huang Organization: School of Electrical Engineering Southeast University Nanjing City, China Presenter: Zhenya JI</p>
<p>3:00pm – 3:15pm</p>	<p>5.5 AC Sparse Modeling for False Data Injection Attack on Smart Grid Author List: Jia-qi Ruan, Huai-zhi Wang, Yi-tao Liu, Saddam Aziz, Jian-chun Peng and Gui-bin Wang Organization: Department of Mechatronics and Control Engineering, Shenzhen University, Shenzhen, China Presenter: Gui-bin WANG</p>	<p>6.5 Simulation and Modeling Of SEPIC Converter With High Static Gain For Renewable Application Author List: Dr. P. Usha Rani and S. Saravanan Organization: Department of Electrical And Electronics Engineering, RMD Engineering College, India and Department Of Electrical And Electronics Engineering, Magna College of Engineering, India Presenter: Usha RANI P</p>	<p>7.5 Global Trends of Energy Efficiency Programs: 2010 to 2025 Author List: Syeda Fouzia Hafeez and Santosh d Dalvi Organization: Mechanical Department, ARMIET Engineering College, Maharashtra , India and Mechanical department, Lokmanya Tilak College of Engineering, Maharashtra, India Presenter: Syeda Fouzia HAFEEZ</p>
<p>3:15pm – 3:30pm</p>	<p>5.6 Energy Efficiency Improvement with k-means Approach to Thermal Comfort for ACMV Systems of Smart Buildings Author List: Deqing Zhai, Tanaya Chaudhuri and Yeng Chai Soh Organization: School of Electrical and Electronic Engineering, Nanyang Technological University, Singapore; Energy Research Institute @ Nanyang Technological University, Singapore</p>	<p>6.6 Reduction of Common Mode Voltage of 2-level Voltage Source Inverter-fed Machine Author List: Zaixing Wang, Fan Fei, Jin Seng Lam, Kye Yak See, Xiong Liu, Michael Adam Zagrodnik and Amit Kumar Gupta Organization: Rolls-Royce @NTU Corporate Lab, Singapore; School of Electrical and Electronic Engineering, Nanyang Technological University, Singapore and Rolls-Royce Singapore</p>	<p>7.6 A Generic Method to Model Carbon Emission of Combined Cycle for Environmental Power Dispatch Author List: Rémy Rigo-Mariani, Keck Voon Ling and Jan Maciejowski Organization: Cambridge Centre for Advanced Research and Education in Singapore Ltd, School of Electrical and Electronic Engineering Nanyang Technological University, Singapore and Department of Engineering, University</p>

	and Interdisciplinary Graduate School, Nanyang Technological University, Singapore Presenter: Tanaya CHAUDHURI	Presenter: Fan FEI	of Cambridge, UK Presenter: Rémy RIGOMARIANI
3:30pm – 4:00pm	Coffee/Tea Break		
4:00pm - 5:30pm	Special Session 1: Hybrid and Electric Aircraft Technologies Level 4, Simpor 4911 Session Chair: Dr Amit GUPTA, Rolls-Royce Singapore	Parallel Session 8: Renewable Energy Control (REC) Level 4, Simpor 4912 Session Chair: Prof Georgios KONSTANTINOU, UNSW, Australia	REIDS Steering Committee Meeting (Closed Door) Level 4, Simpor 4913
4:00pm – 4:15pm	Speaker 1: Prof Peter MALKIN, Newcastle University, UK Topic: From More-Electric To Hybrid Electric Aircraft 4:00pm – 4:20pm	8.1 Maximum Power Point Tracking for Tidal Turbine Generator Author List: Mingxing Wen and N Srikanth Organization: School of Electrical and Electronic Engineering, Nanyang Technological University, Singapore and Energy Research Institute @Nanyang Technological University, Singapore Presenter: Mingxing WEN	
4:15pm – 4:30pm	Speaker 2: Prof Kaushik RAJASHEKARA, University of Houston, USA Topic: Power Generation and Distribution Architectures for More Electric and Hybrid Electric Aircraft Systems 4:20pm – 4:40pm	8.2 Performance Analysis of Buck Boost Converter Fed Standalone Solar Air Cooling System Author List: D. Shobha Rani, R. Gangadhar Reddy and Muralidhar M Organization: Department of Electrical and Electronics Engineering, Institute of Aeronautical Engineering, Hyderabad, India and Department of Electrical and Electronics Engineering, S V University College of Engineering, Tirupati, India Presenter: D. Shobha RANI	
4:30pm – 4:45pm	Speaker 3: Dr Min ZHANG, University of Bath, UK Topic: Superconducting propulsion system for electric aircraft 4:40pm – 5:00pm	8.3 Modelling a Droop Controlled Multi PV Inverter System to Study Effects of System Parameters on Oscillatory Modes Author List: Ayesha Firdaus, Sukumar Mishra and Chandrashekar Narayan Bhende Organization: Department of	

		Electrical Engineering, Indian Institute of Technology Delhi, Hauz Khas, New Delhi, India and School of Electrical Sciences, Indian Institute of Technology Bhubaneswar, Bhubaneswar, Odisha, India Presenter: Ayesha FIRDAUS	
4:45pm – 5:00pm	Speaker 4: Prof Martin HENZ, National University of Singapore Topic: Electric personal air vehicles 5:00pm – 5:20pm	8.4 Time series analysis and pattern recognition of strategies of balance responsible parties for short-term electricity flexibility toward renewable energy integration Author List: Andreas Essl, Philip Rodemeyer, Stefan Voegel, Michael Wueger and Reinhard Haas Organization: Austrian Association for Energy Economics (AAEE/IAEE) TU Vienna, Austria; Energy-Control Austria, Austria and Energy Economics Group (EEG) TU Vienna, Austria Presenter: Andreas ESSL	
5:00pm – 5:15pm	Speaker 5: Dr Amit GUPTA, Rolls-Royce Singapore Topic: How More Electric Technology is Shaping Aero Engine Design 5:20pm – 5:40pm	8.5 Subsea Cable Health Monitoring System Author List: Surathi Srikanth Rao and Narasimalu Srikanth Organization: Energy Research Institute @Nanyang Technological University, Singapore and School of Electrical and Electronic Engineering, Nanyang Technological University, Singapore Presenter: Surathi Srikanth RAO	
5:15pm – 5:30pm	-	-	
5:30pm	End of Day 2 Programme Collection of Certificate of Participation		
6:00pm	SIEW Networking Reception (Level 4, Marina Bay Sands)		

Time	Programme. Day 3 (Thursday, 26 October 2017)	
8:50am – 9:00am	Announcements Level 4, Simpor 4911-4912	
9:00am - 10:30am	Plenary Session B Level 4, Simpor 4911-4912 <i>Plenary Chair: Prof Lalit Goel, Nanyang Technological University, Singapore</i>	
9:00am – 9:30am	Speaker: Professor Kaushik RAJASHEKARA Distinguished Professor of Engineering, Department of Electrical & Computer Engineering, University of Houston, USA, IEEE Fellow and Member, IEEE Transportation Electrification Community Topic: Flying Cars – Requirements and Propulsion Strategies	
9:30am – 10:00am	Speaker: Dr Jay GIRI Former Director, Power Systems Technology and Strategic Initiatives, GE Grid Software Solutions and Affiliate Associate Professor, Department of Electrical Engineering, University of Washington, USA IEEE Fellow, and Member, IEEE Power & Energy Society Topic: Evolution of EMS Control Centers – PMU Synchrophasor Solutions	
10:00am - 10:25am	Speaker: Professor AbuBakr S BAHAJ Professor of Sustainable Energy, Head, Energy and Climate Change Division, Southampton University, UK Topic: Sustainable Energy across Scales	
10:25am – 10:50am	Speaker: Mr William Gaillard Sales Director, South Asia, Siemens Gamesa Topic: Wind Turbine technology trends and its impact on Cost of Energy	
10:50am - 11:00am	Coffee/Tea Break	
11:00am - 12:30pm	Parallel Session 9: Smart Grid Level 4, Simpor 4913 Session Chair: Prof Xueshen CUI, North China Electric Power University, China	Parallel Session 10: Power Electronics (PE1) Level 4, Simpor 4911 – 4912 Session Chair: To be advised
11:00am – 11:15am	9.1 Cyber Security in the Energy World Author List: Ang, Chee Kiong Gary and Utomo Nugroho Prananto Organization: DNV GL Energy Advisory, Clean Technology Centre, Singapore Presenter: ANG, Chee Kiong Gary	10.1 Second-order Sliding-mode Control of Synchronous Buck Converter Based on Sub-optimal Algorithm Author List: Liu Songbin, Feng Zhiyuan, Gu Yang, Koh Leong Hai and Wang Peng Organization: Energy Research Institute @Nanyang Technological University, Singapore and Northeast Petroleum University. Heilongjiang Province, China Presenter: Songbin LIU
11:15am - 11:30am	9.2 An ANN based Damping Controller for VSC-HVDC System Author List: Kai Liao, Yan Xu, Koh Leong Hai and Yichen Qiao Organization: School of Electrical and Electronics Engineering, Nanyang Technological University, Singapore	10.2 On-line Auto-tuning Technique of Switching Frequency for Resonant Converter Considering Resonant Components Tolerance and Variation Author List: Yen-Shin Lai and Min-Hsiang Yu Organization: Center for Power Electronics Technology, Taipei Tech, Taiwan

	<p>and School of Electrical and Information Engineering, The University of Sydney. Australia Presenter: Yan XU</p>	<p>Presenter: Yen-Shin LAI</p>
<p>11:30am - 11:45am</p>	<p>9.3 Recognition model of air conditioning electricity consumption behaviors for demand response based on k-means clustering Author List: Liming Liu, Bo Wang, Zheng Wang, Fei Wang and Kangping Li Organization: State Key Laboratory of Alternate Electrical Power System with Renewable Energy Sources (North China Electric Power University), Baoding, China; State Key Laboratory of Operation and Control of Renewable Energy & Storage Systems (China Electric Power Research Institute), Beijing, China and Department of Electrical and Computer Engineering, University of Illinois at Urbana-Champaign, Urbana, USA Presenter: Liming LIU</p>	<p>10.3 Maximizing Photovoltaic Array Energy Usage Within a House Using Model Predictive Control Author List: Aziz Ahmad, Timothy N. Anderson, Tek Tjing Lie and Akshya K. Swain Organization: Department of Electrical & Electronics Engineering, Unitec Institute of Technology, Auckland, New Zealand; School of Engineering, Computer & Mathematical Sciences, Auckland University of Technology, Auckland, New Zealand and Department of Electrical & Computer Engineering, The University of Auckland, Auckland, New Zealand Presenter: Aziz AHMAD</p>
<p>11:45am - 12:00pm</p>	<p>9.4 Interval Pricing Scheme of Demand Response to Maximize Benefits of Utility and Participants under a Vertically Integrated Electric Industry of Thailand Author List: Siripha Junlakarn, Naebboon Hoonchareon and Kollawat Keskamol Organization: Energy Research Institute, Chulalongkorn University Bangkok, Thailand and Department of Electrical Engineering Faculty of Engineering, Chulalongkorn University, Bangkok, Thailand Presenter: Kollawat KESKAMOL</p>	<p>10.4 Characterization of SiC Power Devices for Dual active Bridge Converter Author List: Yeo Howe Li and Venkata Ravi Kishore Kanamarlapudi Organization: Energy Research Institute @Nanyang Technological University, Singapore Presenter: Howe Li YEO</p>
<p>12:00pm - 12:15pm</p>	<p>9.5 Wrapper feature selection based multiple logistic regression model for determinants analysis of residential electricity consumption Author List: Yili Yu, Bo Wang, Zheng Wang, Fei Wang and Liming Liu Organization: State Key Laboratory of Alternate Electrical Power System with Renewable Energy Sources (North China Electric Power University), Baoding, China; State Key Laboratory of Operation and Control of Renewable Energy & Storage Systems (China Electric</p>	<p>10.5 Design of a State-space Controller Employing a Deadbeat State Observer for UPS Inverters Author List: Seungryul Moon, Jung-Muk Choe and Jih-Sheng Lai Organization: Future Energy Electronics Center, Virginia Polytechnic Institute and State University, Blacksburg, VA, USA Presenter: Jung-Muk CHOE</p>

	Power Research Institute), Beijing, China and Department of Electrical and Computer Engineering, University of Illinois at Urbana-Champaign, Urbana, USA Presenter: Liming LIU		
12:15pm - 12:30pm	9.6 Design Guidance for Hybrid AC/DC Buildings with the Harmonics Consideration Author List: Chaoyu Dong, Koh Leong Hai, Ong Hueh Chuah, Hongjie Jia, Lei Wang and Zhe Zhang Organization: Energy Research Institute @Nanyang Technological University, Singapore; School of Electrical and Information Technology, Tianjin University, Tianjin, China and Electrical Engineering & Information Technology, Tohoku Gakuin University, Japan Presenter: Chaoyu DONG	10.6 Design and Implementation of High Efficiency Low-profile Bidirectional DC-DC Converter Author List: Arief Noor Rahman, Wei- Chang Lin, Jian- Bo Chen, Jing- Yuan Lin, Yu-Chen Chang, Huang- Jen Chiu and Yao- Ching Hsieh Organization: Department of Electronic and Computer Engineering, National Taiwan University of Science and Technology, Taipei, Taiwan and Department of Electrical Engineering, National Sun Yat-Sen University, Kaohsiung, Taiwan Presenter: Arief Noor RAHMAN	
12:30pm – 2:00pm	Lunch		
2:00pm - 3:30pm	Parallel Session 11: Power Electronics 2 (PE2) Level 4, Simpor 4911 Session Chair: Prof Josep POU, Nanyang Technological University, Singapore	Parallel Session 12: Emerging Technologies (ET) Level 4, Simpor 4912 Session Chair: Dr Narasimalu SRIKANTH, Nanyang Technological University, Singapore	Parallel Session 13: Transportation Electrification 1 (TE1) Level 4, Simpor 4913 Session Chair: Mr Niels DE BOER, Nanyang Technological University, Singapore
2:00pm – 2:15pm	11.1 Flexible Prototype of Modular Multilevel Converters for Experimental Verification of DC Transmission and Multiterminal Systems Author List: Georgios Konstantinou, Salvador Ceballos, Igor Gabiola, Josep Pou, Baburaj Karanayil and Vassilios G. Agelidis Organization: School of Electrical Engineering and Telecommunications, University of New South Wales, Sydney, Australia; Tecnalia Research and Innovation, Derio, Spain; School of Electrical and Electronic Engineering, Nanyang	12.1 Energy recovery from LNG regasification for space cooling-technical and economic feasibility study for Singapore Author List: Ramanathan Subramanian, Bige Tuncer and Matthias Berger Organization: Singapore University of Technology and Design, Singapore and ETH Zurich, Zurich, Switzerland Presenter: Ramanathan SUBRAMANIAN	13.1 Variance Index Based Method for Fault Detection and Classification in Power Transmission Line Author List: Mohammed H.H. Musa, Zhengyou He, Ling Fu, Yujia Deng and Liao Kai Organization: School of Electrical Engineering, Southwest Jiaotong University, Chengdu, China and School of Electrical and Electronic Engineering, Nanyang Technological University, Singapore Presenter: Kai LIAO

	<p>Technological University, Singapore and Department of Electrical Engineering, Technical University of Denmark, Copenhagen, Denmark Presenter: Georgios KONSTANTINOUS</p>		
2:15pm – 2:30pm	<p>11.2 Limitations of Overlap Control for Energy Balancing of the Alternate Arm Converter Under Imbalanced AC Grid Conditions Author List: Jinke Li, Harith Wickramasinghe, Georgios Konstantinou, Josep Pou and Xinmin Jin Organization: National Active Distribution Network Technology Research Center, Beijing Jiaotong University, Beijing, China; School of Electrical Engineering and Telecommunications, University of New South Wales, Sydney, Australia and School of Electrical and Electronic Engineering, Nanyang Technological University, Singapore Presenter: Georgios KONSTANTINOUS</p>	<p>12.2 Embedded thermal management solution for power electronics PCB using additive manufacturing Author List: Vivek Muthu, Cadance Koh Jing Suan, Devinda A. Molligoda, Pradip Chatterjee, Chandana Jayampathi Gajanayake and Amit Kumar Gupta Organization: School of Electrical and Electronic Engineering, Nanyang Technological University Singapore and Rolls-Royce Singapore Presenter: Vivek MUTHU</p>	<p>13.2 Sensor placement analysis for torsional vibration suppression on marine electric propulsion Author List: Aaron Alexander Ayu, Jishnu Kavil Kambrath, Yong-Jin Yoon, Youyi Wang, Yong Liu and Xiong Liu Organization: Rolls-Royce@NTU Corporate Lab, Singapore; School of Electrical and Electronic Engineering, Nanyang Technological University, Singapore; School of Mechanical and Aerospace Engineering, Nanyang Technological University, Singapore and Rolls-Royce Singapore Presenter: Yong LIU</p>
2:30pm – 2:45pm	<p>11.3 LC-StatCom with Symmetrical I-V Characteristic – Total Harmonic Distortion Study Author List: Ghias Farivar, Josep Pou and Anshuman Tripathi Organization: Energy Research Institute @Nanyang Technological University, Singapore Presenter: Ghias FARIVAR</p>	<p>12.3 An Incorporation of DC Microgrid and Inductive Power Transfer for EV Charging Applications Author List: Nguyen Xuan Bac, Wang Peng, Choo Fook Hoong, Xiao Jianfang and Koh Leong Hai Organization: Energy Research Institute @Nanyang Technological University, Singapore Presenter: Xuan Bac NGUYEN</p>	<p>13.3 Design Consideration on Size of Hybrid Electric Marine Vessel's Battery Energy Storage– Ferry Case Study Author List: Rudy Tjandra, Huan Qiu, Yi Tang, Gary Wilson, Xiong Liu, and Pabbathi Venkatesh Organization: Maritime Institute, Nanyang Technological University Singapore; School of Electrical and Electronic Engineering, Nanyang Technological University, Singapore; Rolls-Royce Singapore and Rolls-Royce@NTU Corporate Lab,</p>

			Singapore Presenter: Rudy TJANDRA
2:45pm – 3:00pm	<p>11.4 Output Double-Line Frequency Ripple Reduction Method for High Power Density Interleaved Boost Converters in Power Factor Correction Applications Author List: Yu-Chen Liu, Katherine A. Kim, Kai-De Chen, Yu-Chen Chang, Bing-Siang Huang, Chia-Wei Chou, Yao-Ching Hsieh, and Huang-Jen Chiu Organization: Department of Electrical Engineering, National Ilan University, Yilan, Taiwan; School of Electrical and Computer Engineering, Ulsan National Institute of Science and Technology, Ulsan, South Korea and Department of Electronic Engineering, National Taiwan University of Science and Technology, Taipei, Taiwan Presenter: Yu Chen LIU</p>	<p>12.4 Utilization of Low Cost RF Harvester Circuit in Harnessing Electrical Energy from Multiband RF Signals Author List: Gerhard P. Tan and Jesse James P. Bautista Organization: Electronics Engineering Department, Technological Institute of the Philippines, Quezon City, Philippines and Access Technology Strategy & Planning Globe Telecom Inc. Taguig City, Philippines Presenter: Gerhard Plaga TAN and Jesse James BAUTISTA</p>	<p>13.4 Modeling and Analysis of Vehicular Power Line Communication System based on BFSK for Vehicle to Grid (V2G) Author List: Lyu Ling, Ma Huanhuan and Zhang Liang Organization: School of Electrical Engineering Northeast Electric Power University, Jilin, China and Energy Research Institute @Nanyang Technological University, Singapore Presenter: Ling LYU</p>
3:00pm – 3:15pm	<p>11.5 Analysis and Design of Isolated Single-Switch Converter for Magnetron Filament Heating Author List: Yueh-Ru Yang Organization: Ming Chi University of Technology New Taipei City, Taiwan Presenter: Yueh-Ru YANG</p>	<p>12.5 A Calculation of The Cost And Energy Savings Resulting From The Replacement of Conventional Lighting With LED Lighting For Karachi, Pakistan Author List: Muhammad Farooq Siddiqui, Talha Javed Soleja and Areeb Waseem Organization: Department of Electrical Engineering, NED University of Engineering and Technology Karachi, Pakistan and Al-Baraka Bank Private Limited Presenter: Muhammad Farooq SIDDIQUI</p>	<p>13.5 A Study of Balancer-Less EDLC Stack in A New Power Electric Motor-Driven Capacitor Scooter System Author List: Keiichi Kaneko, Hideki Omori, Toshimitsu Morizane, Noriyuki Kimura, Mutsuo Nakaoka and Saad Mekhilef Organization: Department of Electrical and Electronic Systems Engineering Osaka Institute of Technology, Osaka, Japan and Department of Electrical Engineering, University of Malaya, Kuala Lumpur, Malaysia Presenter: Keiichi KANEKO</p>

3:15pm – 3:30pm	<p>11.6 Comparison of IGBT Junction Temperature Measurement and Estimation Methods - A Review Author List: Mohamed Halick Mohamed Sathik, Josep Pou, Sundararajan Prasanth, Vivek Muthu , Rejeki Simanjorang and Amit Kumar Gupta Organization: Rolls-Royce@NTU Corporate Lab, Singapore and Rolls-Royce Singapore Presenter: Vivek MUTHU</p>	<p>12.6 Market Design Considerations for Emerging Technologies Organization: Envigour Policy Consulting Inc., Canada Presenter: Mr Bruce CAMERON</p> <p><Industry Presentation. Not available in Proceeding></p> <p>Abstract Link</p>	-
3:30pm – 4:00pm	Coffee/Tea Break		
4:00pm - 5:30pm	<p>Special Session 2 : Solid State Transformer Level 4, Simpor 4911</p> <p>Session Chair: Dr Anshuman TRIPATHI, Nanyang Technological University, Singapore</p>	<p>Parallel Session 14: Renewable Energy. Electrical Machines (REEM) Level 4, Simpor 4912</p> <p>Session Chair: Dr Marcus KOH Leong Hai, Nanyang Technological University, Singapore</p>	<p>Parallel Session 15: Transportation Electrification 2 (TE2) Level 4, Simpor 4913</p> <p>Session Chair: Prof Yu-Chen LIU, National Ilan University, Taiwan</p>
4:00pm – 4:15pm	<p>SST 01 A Modular Front-End Medium-Voltage Solid-State Transformer Author List: Jih-Sheng Lai, Jung Muk Choe, Chih-Shen Yeh, Seung-Ryul Moon, Wei-Han Lai, and Lanhua Zhang Organization: Virginia Polytechnic Institute and State University, USA, Enertronics, USA and Texas Instruments, USA Presenter: Jung Muk CHOE</p>	<p>14.1 Wind Power Generation Planning by Utilizing the Reactive Power Capabilities of Generators Author List: Nand K. Meena, Anil Swarnkar, Nikhil Gupta and K. R. Niazi Organization: Department of Electrical Engineering, Malaviya National Institute of Technology Jaipur, India Presenter: Anil SWARNKAR</p>	<p>15.1 Performance of Series Hybrid Excitation Synchronous Machine in Comparison with Wound Field Synchronous Machine Author List: K. H. Chu, J. Pou, Ramakrishna S and A. K. Gupta Organization: Rolls-Royce@NTU Corporate Lab, Singapore and Rolls-Royce Singapore Presenter: Kin Hey CHU</p>
4:15pm – 4:30pm	<p>SST 02 Control of Active Front-End Converter in Solid-State Transformer with Improved Dynamic Performance during Precharging Author List: Hossein Dehghani Tafti, Cao Shuyu, Venkata Ravi Kishore Kanamarlapudi,</p>	<p>14.2 Accurate Calculation of Winding Resistance and Influence of Interleaving to Mitigate AC Effect in a Medium-frequency High-power Transformer Author List: Annoy Kumar Das, Haonan Tian, Zhongbao Wei, Sriram</p>	<p>15.2 LCL+L filter for three-phase four-wire high power density converter Author List: Yong Liu, Kye Yak See, Rejeki Simanjorang and Jih-Sheng Lai Organization:., School of Electrical and Electronic Engineering, Nanyang Technological University,</p>

	<p>Ghias Farivar, Howe Li Yeo, Vaisambhayana Brihadeeswara Sriram, Josep Pou and Anshuman Tripathi Organization: School of Electrical and Electronic Engineering, Nanyang Technological University, Singapore and Energy Research Institute @Nanyang Technological University, Singapore Presenter: Hossein Dehghani TAFTI</p>	<p>Vaisambhayana, Shuyu Cao, Anshuman Tripathi and Philip Carne Kjær Organization: Energy Research Institute @Nanyang Technological University, Singapore; Vestas Wind System A/S, Denmark and Department of Electrical Engineering, Indian Institute of Technology - Bombay, Mumbai, India Presenter: Haonan TIAN</p>	<p>Singapore; Rolls-Royce Singapore and Future Energy Electronics Center, Virginia Tech, Blacksburg USA Presenter: Yong LIU</p>
4:30pm – 4:45pm	<p>SST 03 A Carrier-based PWM method with the double frequency voltage injection for three-level neutral-point clamped (NPC) converters Author List: Kyoung-Pil Kang, Younghoon Cho, Ju-Won Baek, Myung-Hyo Ryu and Ju-Yong Kim Organization: Konkuk University, Department of Electrical Engineering, Seoul, Korea; KERI, Industry Application Research Laboratory, Changwon, Korea and KEPRI, Power Distribution Laboratory, Daejeon, Korea Presenter: Kyoung-Pil KANG</p>	<p>14.3 Dynamic Reactive Power in Compliance with Low Voltage Ride-Through Enhancement for DFIG-based Wind Turbine Author List: E. Gatavi, A. Hellany, M. Nagrial and J. Rizk Organization: School of Computing, Engineering and Mathematics, Western Sydney University, Australia Presenter: Ehsan GATAVI</p>	<p>15.3 Design and Implementation of a High Efficiency Cost Effective EV Charger Using LLC Resonant Converter Author List: Xerxes Dan Gumera, Aileen Caberos and Shu-Chuan Huang Organization: ASML Taiwan; Department of Electrical Engineering, Tatung University, Taipei, Taiwan and EECE Department, MSU-IIT, Philippines Presenter: Xerxes Dan GUMERA and Aileen CABEROS</p>
4:45pm – 5:00pm	<p>SST 04 Modular DAB DC-DC Converter Low Voltage Side DC link Capacitor Two-Stage Charging-up Control for Solid State Transformer Application Author List: Cao Shuyu, V.B. Sriram, Hossein Dehghani Tafti, K.V. Ravi Kishore, Yeo Howe Li, Anshuman Tripathi and Josep Pou Organization: Energy Research Institute @Nanyang Technological</p>	<p>14.4 Improvement of Frequency Stability in Power Electronics-Based Power Systems Author List: Jingyang Fang, Xiaoqiang Li, Yi Tang and Hongchang Li Organization: School of Electrical and Electronic Engineering, Nanyang Technological University, Singapore and Energy Research Institute @Nanyang Technological University, Singapore Presenter: Jingyang FANG</p>	<p>15.4 A Novel Three Phase Infinite Level Inverter (TILI) Topology for Induction Motor Drive Application Author List: Hareesh A, Manisankar B. and Jayanand B. Organization: Government Engineering College, Thrissur, A P J Abdul Kalam Technological University, Kerala, India Presenter: B MANISANKAR</p>

	University, Singapore and School of Electrical and Electronic Engineering, Nanyang Technological University, Singapore Presenter: Shuyu CAO		
5:00pm – 5:15pm	SST 05 Highly Isolated Power Supply Design for Gate Drivers of the Solid State Transformer Author List: Jeongwoo Kim, Younghoon Cho, Ho-Sung Kim and Ju-Yong Kim Organization: Department of Electrical Engineering, Konkuk University, Seoul, Korea; Power Conversion Research Center, KERI, Changwon, Korea and Power Distribution Laboratory, KEPRI, Daejeon, Korea Presenter: Jeongwoo KIM	14.5 Behavior of Responding to Sudden Change of Stand-alone DC Load Supplied by A DFIG with Different Frequency in AC Side Author List: Xueting Wang, Xueshen Cui, Gaukhar Tergemessova, Qihui Liu, Heng Zhang and Jason Lai Organization: School of Electrical and Electronic Engineering, North China Electric Power University, Beijing, China and Future Energy Electronics Center, Virginia Polytechnic Institute and State University, Blacksburg, USA Presenter: Xueshen CUI	15.5 A Communication and Synchronization Multiplex Architecture of the Multi-controller System for the CHB Converter Author List: Li Ting, Michael A. Zagrodnik, Qi Chen, Wang Peng and Mukherjee Suvajit Organization: Nanyang Technological University, Singapore and Rolls-Royce Singapore Presenter: Suvajit MUKHERJEE
5:15pm – 5:45pm	ACEPT 2017 Closing Ceremony Presentation of Best Paper Awards Level 4, Simpor 4911		
5:45pm	End of Day 3 Programme Collection of Certificate of Participation		
6:00pm	SIEW Networking Reception (Level 4, Marina Bay Sands)		