

2014 6th IEEE Power India International Conference (PIICON 2014)

**Delhi, India
5-7 December 2014**

Pages 1-519



**IEEE Catalog Number: CFP1433C-POD
ISBN: 978-1-4799-6043-9**

6th IEEE POWER INDIA International Conference 2014

Table of Contents

Technical session-1

(Industrial Application (IA-1))

1569973353	Development of Automated pH Monitoring & Control System Through USB Data Acquisition	1
	by Aparna V; Sanjay Kolloju	
1569991013	Voltage Control and Load Leveling of Synchronous Reluctance Generator Based DG Set	7
	by Bhim Singh; Ram Niwas; Ambrish Chandra; Rezkallah Miloud, RM	
1569993123	Artificial Neural Network Based Implementation of Oommen's Curve	13
	by Tarikul Islam; Md. Firoz Khan; Shakeb Khan	
1569995847	Design and Implementation of Digital PID Controller Using FPGA for Precision Temperature Control	18
	By Prachi Rusia; Sandeep Bhongade	
1569996821	Thermodynamic Study of Compound Mica-Epoxy Resin Based on Dissipation Factor Tests-Internal Energy	22
	by Hernan J. Reyno; Francisco Amortegui	
1569996823	Thermodynamic Study of Compound Mica - Epoxy Resin Based on Dissipation Factor Tests-Enthalpy	27
	Hernan J. Reyno; Francisco Amortegui	
1569997319	Optimization of Co-generation System Operation	33
	by Vivek Pandurangan; Om P Malik	

Technical session-1
Power System-1 (PS-1)

- 1569973737 **STATCOM Modeling for Power Flow Analysis 39**
by Shagufta Khan; Suman Bhowmick
- 1569978115 **Two-Area AGC in Interconnected System Under the Restructured Power System Using BFO Controller 45**
by Shivank Shukla; Sushil Gupta; Yogendra Arya
- 1569980993 **Power Trading and Congestion Management Using Real Power Rescheduling 51**
by Sushil Gupta; Richa Bansal; Mukesh Saini; Partibha Sharma
- 1569984387 **A Novel Power Flow Model of a Static Synchronous Series Compensator (SSSC) 57**
by Shagufta Khan; Suman Bhowmick
- 1569987769 **Computation of Vibrations in Aluminum Structures for Power System Application Using ABAQUS Software 63**
By Shabana Urooj; Monika Singh; Monika Singh; Shilpi Ghosh; Ruchi Dohare; Snigdha Sharma; Ankesh Yadav
- 1569987909 **Analysis of Particle Contamination in Gas Insulated Busducts Operating on DC Voltages 69**
by Nagarjuna Reddy; J. Amarnath; Rama Rao
- 1569988235 **Time Latency Compensation of Wide Area Damping Controller 73**
by Akshay Sharma

Technical session-1

Industrial Electronics-1 (IE-1)/ Power Electronics- Session -1 (PE-1)

- 1569996773 **Power Factor Correction in a Brushless DC Motor Drive Using an Isolated-Luo Converter** 79
by Vashist Bist; Bhim Singh
- 1570019807 **Analytical and Comparative Evaluation of Advanced Digital PWM Control Techniques** 85
by Sandeep Banerjee; Dheeraj Joshi; Madhusudan Singh; Rahul Sharma
- 1570027571 **A New Gabor Wavelet Transform Feature Extraction Technique for Ear Biometric Recognition** 91
by Karuna Soni
- 1569994559 **Efficient Operation of IM Drive Through Selection of Optimal V/f Ratio** 94
by Mini Sreejeth; Madhusudan Singh; Parmod Kumar
- 1569995909 **Development of a Low Cost and Reliable Power MOSFET Gate Driver for Bridge Configuration** 99
by Joydip Jana; Hiranmay Saha
- 1569995985 **Small-Signal Analysis of Boost Converter, Including Parasitics, Operating in CCM** 105
By Haytham AbdEl-Gawad; Vijay K Sood

Technical session-1
Renewable energy system-1(RES-1)

Paper ID

- 1569992659 **A UVT Based Control for Single-Stage Grid Interfaced SPV System with Improved Power Quality** 110
by Bhim Singh; Chinmay Jain; Sagar Goel
- 1569994829 **Islanding Detection of Grid Connected Distributed Generation Using Symmetrical Components** 116
by Prashant Tiwari; Om P Malik
- 1569995537 **Analysis of Effect of Various Parameters on Solar Photovoltaic Syste** N/A
by Pathik Chamaria; Anirudh Dube; Rajveer Mittal; Satvir Singh Deswal
- 1569996721 **Modified EPLL Based Control to Eliminate DC Component in a Grid Interfaced Solar PV System** 122
by Arun Verma; Bhim Singh; D Shahani
- 1569996835 **Productive Use of Distributed Renewable Generation Source with Electric Vehicle in Smart Grid** 128
by Lokesh Panwar; Rajesh Kumar; Srikanth Konda
- 1569996891 **Doubly Fed Induction Generator Based Standalone Wind Energy Conversion System with MPPT Capability** 134
by N Krishna Swami Naidu; Bhim Singh

Technical session-2
Industrial Applications-2 (IA-2)

Paper ID

1569998425	Aging Compound Mica - Epoxy Resin as a State Function 140 by Hernan J. Reyno; Francisco Amortegui
1569998779	Real Time Road Traffic Congestion Detection and Optimal Path Selection Using Smartphone 145 by Joydip Dhar; Gaurav Garg
1569998841	Implementation of VaReB Technology on Electric Vehicle 151 by Tanmay Parashar; Aseem Mathur; Dhruv Kohli; Anirudh Dube; Rajveer Mittal
1569998863	Operational Optimization of Turbo-Generator (TG) Cycle of a 500MW Coal-Fired Thermal Power Plant 156 by Goutam Khankari Khankari; Sujit Karmakar
1570000863	Wide Area Measurements Based Centralized Controller to Stabilize an Inverter Fed Islanded Microgrid 162 by S N Raju P; Trapti Jain
1570000965	Temperature Rise Test 168 by Viswanatha C
1570006607	Moisture Measurement of Transformer Oil Using Thin Film Capacitive Sensor 172 by Tarikul Islam; Md. Firoz Khan; Shakeb Khan

Technical session-2
Power System- 2 (PS-2)

Paper ID

1569994639	Optimal Coordination of Overcurrent Relays Using Gravitational Search Algorithm with DG Penetration	177
	by Jayant Tripathi; Adhishree Shrivastava; Ram Krishan	
1569994909	Economic Load Dispatch Calculator	183
	By Monu Singh	
1569995273	Dynamic Stability Enhancement of Power System Using PSO Optimized Fuzzy Power System Stabilizer	189
	by Ritika Arora; Surender Dahiya	
1569996047	Voltage Stability Monitoring Based on Feed Forward and Layer Recurrent Neural Networks	195
	by Pradyumna Sahoo; Ramaprasad Panda; Prasanta Satpathy; Subrat Paul	
1569996405	Detection and Location of Faults in Underground Cable Using MATLAB/SIMULINK/ANN and OrCad	199
	by Kunal Hasija; Abhishek Kumar; Shelly Vadhera; Anurag Kishore	
1569996715	Adaptive Damping Controller for a Superconducting Generator	204
	by Felix Vincent De Paul; Om P Malik	
1569997127	Measurement of Resistivity of Surface Layer Material in Laboratory	210
	Mahadev	

Technical session-2**Power electronics -2 (PE-2)****Paper ID**

1569997915	A DVR Based on Back-to-Back Stacked Multicell Converter with Modified PSPWM 215 by Rohit Chandra; Arun Kumar Kapoor
1569998815	Fuzzy Integrated Sliding Mode Controller for Vector Controlled PMSM 221 by Shoeb Hussain; Mohammad Bazaz
1569999689	A Novel Wavelet Modulation Scheme for Single Phase Inverter 227 by Ankit Yadav; Madan Mohan Tripathi
1569999699	A 3x6 Pulse NPC-VSC Based 100 MVar STATCOM Modeling and Applications 233 by Radheshyam Saha; Bhim Singh
1570004345	An Advance Compensated Mho Relay for Protection of TCSC Transmission Line 239 by Ashok Manori; Manoj Tripathy; Hari Om Gupta
1570006715	Impacts of Interconnection of SOFC to a Radial Distribution System 245 by Mini Thomas; Parveen Terang
1570014961	A PFC Based Power Quality Improved Bridgeless Converter for Welding Applications 251 by Swati Narula; G. Bhuvaneswari; Bhim Singh

Technical session-2

Renewable energy system-2 (RES-2)-

Paper ID

- 1569997521 **Load Frequency Control of a Hybrid Renewable Power System with Fuel Cell System** 257
by Swati Rawat; Shailendra Singh; Kshitij Gaur
- 1569998171 **Comparative Analysis of MPPT Techniques for PV in Domestic Applications** 263
by Sarthak Jain; Anant Vaibhav; Lovely Goyal
- 1569998317 **Fault Detection in GCPV Plant Using Graphical User Interface** 269
by Nitin Rai
- 1569998855 **A Review on Optimal Sizing and Siting of Distributed Generation System** 274
by Peeyoosh Gupta; Manjari Pandit; D P Kothari
- 1569998859 **PMSG Based Grid Integrated Wind Energy Conversion System with Controlled Power Injection** 280
by Jayadeep Srikakolapu; Shailendra Sharma; Bhim Singh
- 1569998917 **A Novel Approach to Improve Power Output of PV Array Under Different Shading Conditions** 286
by Himanshu Sekhar Sahu; Sisir Kumar Nayak
- 1569998935 **Realization of Load Based Pricing with Integration of Renewable Generation for a Household** 292
by Ankita Gupta; Rajesh Kumar

Technical session-3
Industrial applications-3 (IA-3)

Paper ID

1570013637	SPIDER: A GSM/GPRS Based Interconnected Phasor Measurement Unit (PMU) System 298 by Mijaz Mukundan
1570014209	A Smart Grid 304 by Tapas Halder
1570022679	Robust Servo Performance of Repetitive Controller for Periodic Reference Signals 310 by Ujjwal Mondal; Anindita Sengupta
1570024369	Design Approach of Weighting Matrices for Optimal Controller Design for Autonomous Mobile Robot 314 by Shahida Khatoon; Dr. Ibraheem; Kaukab Naz
1570024401	Designing of Multi-objective Simulated Annealing Algorithm for a Temperature Control System 320 by Ruchi Bansal
1570024727	Automatic Switching of Home Appliances One Sensor to Many System Approach 326 by Sunny Sanyal; Simpy Sanyal
1570024867	Investigation of Optimal Control Approaches for Inverted Pendulum 331 by Sk Jha; Anil Yadav; Prerna Gaur

Technical session-3
Power System—3 (PS-3)

Paper ID

1569998413	Pollution Performance of HVDC Insulator Strings Under Normal and Faulted Conditions 337 by Subba Reddy B; Alok Verma
1569998463	A Novel Approach to Determine Optimal Location of TCSC for Congestion Management 343 by Anwar Siddiqui; Mohd Tauseef Khan; Fahad Iqbal
1569998489	Congestion Management Using Improved Inertia Weight Particle Swarm Optimization 349 by Anwar Shahzad Siddiqui; Md Sarwar; Shahzad Ahsan
1569998499	Distributed Generation in Unbalanced Mesh Distribution System with Different Unbalances 354 by Ashwani Sharma; B ravi Teja
1569998519	Analysis of Time Delay in a Wide-Area Communication Network 360 by Mini Thomas; Nilanjan Senroy; Ankur Singh Rana
1569998623	Computation of Current and Temperature Distribution for High Temperature Low Sag Conductors 366 by Subba Reddy B; Diptendu Chatterjee; Shakthi Prasad
1569998911	Studies on Corona Degradation of Polymeric Insulators 372 by Subba Reddy B; Shakthi Prasad; Rajalingam M

Technical session-3
Power electronics-3 (PE-3)

Paper ID

- 1570015699 **Sliding Mode Controller with Adaptive Sliding Coefficient for Buck Converter** 378
by Mini Namboothiripad; Arpita Das
- 1570015735 **Design of Type-III Controller for DC-DC Switch-Mode Boost Converter** 384
by Arnab Ghosh; Subrata Banerjee
- 1570016201 **Modified Hysteresis Switching Scheme for 3-Phase Voltage Source Inverter** 390
by Ankit Yadav; Madan Mohan Tripathi
- 1570016649 **Single Current Sensor Based Vector Control of AC/DC Front End Converter** 397
by Himanshu Misra; Amit Kumar Jain
- 1570016767 **New Hybrid Cascade Multilevel Inverter with Less Number of Switches** 402
by Varsha Singh
- 1570016775 **Analysis of Fourth-Order Double Boost Converter** 408
by Veerachary M
- 1570016785 **Analysis and Design of Zero-voltage Switching High Gain Interleaved Boost Converter** 414
by Veerachary M

Technical session-3
Renewable energy system-3 (RES-3)

Paper ID

1570000047	Multi Step Ahead Forecasting of Wind Power by Genetic Algorithm Based Neural Networks 420 by Sumit Saroha; Sanjeev Aggarwal
1570002315	Reactive Power Cost Characteristics for Synchronous Generator in Deregulated Electricity Markets 426 by Ashwani Sharma; Rajender Kumar
1570002521	Solar PV Array Fed Cuk Converter-VSI Controlled BLDC Motor Drive for Water Pumping 432 by Rajan Kumar; Bhim Singh
1570014367	Solar Water Pumping System Employing Induction Drive with High Level Boost Converter 439 by Jayadeep Srikakolapu; Haris Ahmed; Toshi Sharma; Bhoopendra Singh
1570015939	Techno-Economic and Environmental Impacts of Hybrid Generation to Supply a Load in Visakhapatnam 446 by Sai Sri Harsha Chandavarapu; Sharif Shaik; Ravi Sharma
1570016529	Application of Bridge-Type FCL for Betterment of FRT Capability for DFIG-Based Wind Turbine 450 by Umesh Chaudhary; Praveen Tripathy; Sisir Kumar Nayak
1570016571	Techno Economic Analysis for PV-wind-DG-Battery IHRES with SGA 456 by Ranjeeta Khare; Yogendra

Technical session-4
Industrial application-4(IA-8)

Paper ID

1570025679	Design of Controller for Pantograph-Catenary System Using Reduced Order Model 462 by Priya Mahajan; Rachana Garg; Vidushi Gupta; Parmod Kumar
1570026087	Improved Block Cipher Customized for Multimedia Security 467 by Sakshi Dhall; Saibal Pal; Kapil Sharma
1570026119	Modeling of 3-Phase Induction Motor Including Slot Effects and Winding Harmonics 472 by Anshul Mishra; Bharat Singh Rajpurohit
1570026141	Short-Term Load Forecasting of UPPCL Using ANN 478 by Madan Mohan Tripathi; Kishan Bhushan Sahay; Anil Pandey; Dinesh Chandra
1570026147	Optimizing Testing Efforts Based on Change Proneness Through Machine Learning Techniques 484 by Ashish Tripathi; Kapil Sharma
1570026191	New Multi-Functional DR Gates and Its Application in Code Conversion 488 by Anurag Rao; Anil Dwivedi
1570026211	Investigation of Intelligent Robust Controller for a Position Control System 493 by Sk Jha; Anuli Dass

Technical session-4
Power System- 4(PS-4)

Paper ID

1569999025	Plugin Power Flow 499 by Suresh Varwandkar; Mailrengam Hariharan
1569999027	Application of Phasor Measurement Unit in Adaptive Protection for Loss of Excitation in a Generator 505 by Supriyo Senapati; Konika Bhattacharya; Jiban Krishna Das
1569999035	Effect of Exciter Gain on Small Signal Stability of Power System 510 by Ayesha Firdaus
1569999061	TMS320F28335 Based Single Phase Overcurrent Protection Implementation Using Numerical Relay 515 by Gayatri Kshirsagar; Gourang Mulay; Saket Yeolekar
1569999085	Concoction of UPFC for ORPD Using Hybrid GAPSO Approach for Power Loss Minimisation 520 by Shilpa Subhash Shrawane
1569999657	System Integrity Protection Scheme for Southern Grid 524 by Muthu; Sampige; P R Raghuram; Sharath Lavadiya; S S Rangarajan; S Nigam
1569999705	Short-Term Load Forecasting of Ontario Electricity Market Considering the Effect of Temperature 529 by Kishan Bhushan Sahay; Nimish Kumar; Madan Mohan Tripathi

Technical session-4
Power electronics-4 (PE-4)
Paper ID

1570016907	Improved Performance of LQR Controller in CSC Based STATCOM Using Genetic Optimization	535
	by Sandeep Gupta; R. k. Tripathi	
1570016933	A Level Shifted PWM Technique for Controlled String Source MLI	541
	by Koppineni Subbarao; Atti Srinivas	
1570016977	Regenerative Braking for Induction Motor Drive	546
	by Sharad Kumar Agrawal; Vikash Kumar; Aftab Alam; Parashuram Thakura	
1570024459	Performance Investigation of a Single-Phase, Unidirectional AC/DC Buck-Converter Fed DC Motor Drive	552
	by Abdul Bhat; Tabish Mir	
1570024635	Circuit Models for EMC Analysis of CM Current in Three-Phase Motor Drive Systems	558
	by Diego Bellan	
1570025859	Design and Performance Analysis of a Single Phase PWM Inverter	563
	by Narendra Kumar; Sachin Singhal; Dheeraj Joshi	
1570026011	A Three-Phase 9-Level Inverter with Reduced Switching Devices for Different PWM Techniques	569
	by Ravi Yadav	

Technical session-4
Renewable energy system-4(RES-4)

Paper ID

- 1570016929 **A PWM Based Sliding-mode Control for Negative Impedance Stabilization in DC Micro-girds** **575**
by Suresh Singh; Deepak Fulwani
- 1570016987 **Potential Estimation and Implementation Strategies for Solar Rooftop Photovoltaic in Delhi** **581**
by Mayank Garg; Sai Shankar Balakrishnan; Hari Bansal
- 1570017059 **Simulation and Model Verification of Shoe Embedded Piezoelectric Energy Harvester** **587**
by Satrajit Chakrabarty; Pramit Saha; Soumya Goswami; Sayan Sarkar
- 1570017759 **A Survey on Dynamic Power Management Approach in Wireless Sensor Networks** **593**
by Anuradha Pughat; Vidushi Sharma
- 1570018523 **Design & Implementation of MPPT Algorithm for Battery Charging with Photovoltaic Panel Using FPGA** **599**
by Joydip Jana; Konika Bhattacharya; Hiranmay Saha
- 1570022437 **Short Term Wind Forecasting Using Logistic Regression Driven Hypothesis in Artificial Neural Network** **604**
by Sheshnag Chitlur; Saurabh Agarwal; Rajesh Kumar
- 1570023355 **Grid Integration of Large Capacity Solar PV Plant Using Multipulse VSC with Robust PLL Based Control** **610**
by Ikhlaq Hussain; Bhim Singh

Technical session-5

Industrial application-5(IA-5)

Paper ID

1570026221	A Power Quality Improved Bridgeless Converter Based Computer Power Supply 616 by Shikha Singh; Bhim Singh; G. Bhuvaneswari; Vashist Bist
1570026287	Vienna Converter for Three-Level Inverter Fed Induction Motor Drive 622 by G Bhuvaneswari; Bhim Singh; Sandeep Madishetti
1570026289	Position Control of Two Link Robot System by PD & Fuzzy Controller 628 by Ajit Sharma; Bharat Bhushan
1570026311	Secure Cancelable Fingerprint Key Generation 634 by Aditi Bhateja; Kapil Sharma
1570028751	Effects of Various Factors on Electric Load Forecasting: An Overview 638 by Priti Gupta; Shahida Khatoon; Ibraheem Dr; Arunesh Singh
1570030595	LabVIEW Based Online Monitoring and Control of PMDC Motor Speed 643 by Narendra Kumar; Nitin Singh; Ashish Kulkarni
1570032207	Design of a Hysteresis Voltage Control Based Interline -DVR (IDVR) with VA Optimization 647 by Vasudevanaidu Pudi

Technical session-5
Power System- 5(PS-5)

Paper ID

1569999971	Robust FOPID Controller for Load Frequency Control Using Particle Swarm Optimization 653 by Ashu Ahuja
1570000207	Economic Load Dispatch Using Improved Particle Swarm Optimization Algorithms 659 by Nimish Kumar; Uma Nangia; Kishan Bhushan Sahay
1570015151	Design and Modelling of Synthetic Test Circuit to Generate Four Parameter TRV Envelope 665 by Vishal Kumar Gaur
1570015859	Reactive Power Optimization Using GSA 671 by Ambika Ramamoorthy
1570016175	Islanding Detection of Interconnected Grids Based on Synchrophasor Measurements (PMU) 675 by Chandan Kumar; Srinivas Chitturi; Ayush Jain; Somesh Gupta; Sunil Patil; Rajkumar Anumasula; Prithwish Mukhopadhyay
1570016267	Thermal Analysis & Optimization of Temperature Rise in Busbar Joints Configuration by FEM 681 by Jugal Lotiya

Technical session-5
Power electronics-5(PE-5)

Paper ID

1570026027	A Comparative Study of the Hard & Soft Switching of the Flyback Converters 686 by Tapas Halder
1570026255	Design, Modeling and Simulation of a Bridgeless Power Factor Pre-regulator 692 by Merry Mathew Padayattil; Jaison Mathew
1570054985	Instantaneous D-Q Method for UPQC with PI and Fuzzy Controller 698 by Mukul Chourasia; Aurobinda Panda
1570052063	Application of Gene Expression Programming (GEP) in Power Transformers Fault Diagnosis Using DGA 704 by Hasmat Malik

Technical session-5**Renewable Energy Sources- 4 (RES-4)****Paper ID**

1570023821	Performance Analysis of Maximum Power Point Tracking Algorithms for Grid Connected PV System 709 by Hemant Kumar; Ashok Kumar Sharma
1570025383	Performance Analysis of Neural Network and Fuzzy Logic Based MPPT Techniques for Solar PV Systems 715 by Ankit Gupta; Pawan Kumar; Rupendra Pachauri; Yogesh Chauhan
1570025781	Performance of A 100 kWp On-Grid Solar PV System 721 by Annasamudram S R Sekhar; Bhanu Chennapragada
1570025787	Design and Operation for a Standalone DG-SPV-BES Microgrid System 725 by Jincy Philip; Bhim Singh; Sukumar Mishra
1570025979	Method for Evaluating Battery Size Based on Loss of Load Probability Concept for a Remote PV System 731 by Sarangthem Sanajaoba Singh; Eugene Fernandez
1570025983	Small Signal Stability Analysis of Grid Connected Distributed PV and Wind Energy System 736 by Ashu Verma; Ram Krishan; Brijesh Prasad
1570026103	Performance Analysis of 58 kW Grid-Connected Roof-top Solar PV System 742 by Suresh Singh; Rakesh Kumar; Vivek Vijay

Technical session-6
Power system-6 (PS-6)

Paper ID

1570016425	Power System Stability Analysis with Large Scale Penetration of Distributed Generation 748 by Ravi Sharma; Dinesh Jain; Mukhtiar Singh
1570016465	Direct Search Approach for Multiple Distributed Generator Allocation in Radial Distribution Systems 754 by Vijay Babu Pamshetti; Ratna Dahiya
1570016595	Overload Security and Risk Assessment of Overhead Lines 760 by Purobi Patowary; Neeraj Goyal
1570016655	Dynamic Economic Emission Dispatch with Loss & Heat Optimization for a Micro-Grid 766 by Archana Pathak; Manjari Pandit; Yogendra Kumar
1570017001	Frequency Instability and Additive Noise Effects on Digital Power Measurements 772 by Diego Bellan
1570017015	Modified Sequence Circuits for Asymmetrical Three-Phase Loads 777 by Diego Bellan
1570018865	A Cyber Security for a Smart Grid 781 by Tapas Halder

Technical session-6

Powersystem-7 (PS-7)

Paper ID

1570019797	Analysis of Economic Load Dispatch Using Improved Particle Swarm Optimization 787 by Mukesh Kumar
1570020219	SVM Based Zonal Setting of Mho Relay for Transmission Line Having TCSC 793 by Ashok Manori; Manoj Tripathy; Hari Om Gupta
1570020509	Discrimination of Abnormalities and Normal Conditions Using Criterion Function 798 by Dhanashree Kotlar
1570024381	ANFIS Based Identification and Location of Paper Insulation Faults of an Oil Immersed Transformer 804 by Shakeb Khan; Md. Equbal; Tarikul Islam
1570025281	Optimal Coordination of OC for Offshore Wind Farm Integrated to Onshore Grid with VSC-HVDC 810 by Rehana Perveen; Somya Mohanty; Nand Kishor
1570025469	Generalised Approach for Finding Crossing Point in Power System Transient Stability Boundary 816 by Subhasis Mitra Roy; Trilochen Bhatti; Ashu Verma

Technical session-6
Powersystem-8(PS-8)

Paper ID

1570025671	Steady State Voltage Stability Enhancement of Power System Using FACTS Devices 820 by Manisha Rani
1570026041	Modeling and Protection of Electric Vehicle Charging Station 826 by Naveen Ganta; Tony Yip; Xie Yuyu
1570026065	Techno-economic Reasons for Construction of Electrical Substations on Step-like Ground Surface 832 by Vishwanath Hegde; Paramesha K
1570026091	Hourly Load and Price Forecasting Using ANN and Fourier Analysis 836 by Madan Mohan Tripathi; Aditi Agarwal; Abhi Ojha; Sarat Tewari
1570026099	Derating Line Voltages to Limit Steady Overvoltages and Enhance Network Operational Efficiency 842 by Popi Melato; Jan Harm Pretorius; Nhlanhla Mbuli
1570026117	Performance Comparison of DVR by Various Compensation Methods 847 by Rajender Reddy; P v Prasad; G n Srinivas
1570026193	Effect of Compression Ratio on Touch Voltage in Layered Soil 853 by Mahadev Unde

Technical session-6
Renewable Energy Sources-5(RES-5)

Paper ID

1570026197	Comparative Analysis of Simple Boost and Double Carrier PWM Control on PV Powered Z-Source Inverter 859 by Sumit Patil; Palak Parikh
1570026229	Reduction of Power Fluctuation in Grid Connected SPV Plant Through Aggregate Distributed Generation 865 by Majid Jamil; Ahmed Sharique Anees; Mona Subramaniam; Naqui Anwer
1570026309	Design of Adjustable Blade Wind Turbine for Constant Power Generation 871 by Madan Mohan Tripathi; Amit Verma; Rajeev Kumar; Krishna Gopal Upadhyay
1570026345	Statistical Estimation of Wind Power Potential At Hamirpur Region in Himachal Pradesh, India 876 by Sreeramamurthy Kella; Om Parkash Rahi
1570026627	Optimal Sizing of Photo Voltaic/ Wind Hybrid Energy System for Rural Electrification 882 by Yashwant Sawle
1570030397	Back Propagation Algorithm Based Controller for Autonomous Wind-DG Microgrid 886 by Geeta Pathak; Bhim Singh; Bijaya Panigrahi
1570031609	Split-Multistring 3-Level NPC Photovoltaic Inverter Suitable for Partially Shaded Conditions 891 by Santu Giri; Sarbani Mukherjee; Subrata Banerjee

Technical session-7
Powersystem-9(PS-9)

Paper ID

1570026199	Generation Cost and Loss Power Minimization in Intentional Islanded Networks Based on BPSO 897 by Nachapol Wongwantanee; Jai Singh; Bharat Singh Rajpurohit
1570026319	An Analysis of Short-Term Price Forecasting of Power Market by Using ANN 902 by Kishan Bhushan Sahay; Madan Mohan Tripathi
1570026655	Technology Refresh in Instrument Asset Management Systems for Smart Distribution Systems 908 by Y V Pavan Kumar; Ravikumar Bhimasingu
1570027575	Frequency Control of Multi-Area Power System Network Using PSO Based LQR 914 by Naresh Kumari
1570027585	External Fault Identification Experienced by 3-Phase Induction Motor Using PSVM 920 by Hasmat Malik
1570029115	Analysis on AMI System Requirements for Effective Convergence of DA and AMI Systems 926 by Balakrishna Pamulaparthi; Rajagopal Kommu; Swarup
1570029489	Indian Experience of Smart Grid Applications in Transmission and Distribution System 933 Subrata Mukhopadhyay

Technical session-7
Powersystem-10(PS-10)

Paper ID

1570030815	State Estimation Through Optimally Placed PMU 939 by Amita Deswal; Dinesh Jain; Mukhtiar Singh
1570031823	A New Method for Equilibrium Selection in Financial Transmission Right's Auctions 945 by Hossein Khazaei; Moein Sabounchi
1570032217	Design and Prototype of A Digital Instrument for Measuring Single-Phase Power Quality Parameters 951 by Karakana Sriram; Sambhani Madhu Babu; Nageswara Namburi
1570032245	Towards Optimal Placement of Phasor Measurement Units for Smart Distribution Systems 957 by Emad Jamil
1570040727	Performance Evaluation of Voltage Stability Index to Assess Steady State Voltage Collapse 963 by Ashwani Sharma; Priti Prabhakar
1570047533	Lagrange Relaxation - Invasive Weed Optimization for Profit Based Unit Commitment 969 by Veera Venkata Sudhakar Angatha; Chandram Karri; Dr. A. Jayalaxmi
1570047959	Impact of Load Models on Distribution System Performance and Impact of D-STATCOM 975 by Deepmala Wadhwa; Ashwani Sharma

Technical session-7

Renewable energy system-6(RES-6)

Paper ID

1570047941	Probabilistic Analysis of Radial Distribution Network Performance with Varying Wind Speed Levels 981 by Sooraj Narayan K; Ashwani Sharma
1570048687	Control and SRF-q Based Re-synchronization of a Master DG for Microgrids 987 by Moin Hanif; Vinod Khadkikar; Parag Kanjiya
1570054771	Grid Integration of Solar PV Power Generating System Using QPLL Based Control Algorithm 993 by Bhim Singh; Shailendra Dwivedi; Ikhlq Hussain; Arun Verma
1570054787	Solar Powered Water Pumping System Employing Switched Reluctance Motor Drive 999 by Bhim Singh; Anjanee Mishra; Rajan Kumar

Technical session-7

Powersystem-11(PS-11)

Paper ID

1570047981	Comparative Study of Load Frequency Control Using PID and FGPI Controller 1005 by Satish Kumar Meena; Saurabh Chanana
1570047983	Analysis of Unit Commitment Problem Through Lagrange Relaxation and Priority Listing Method 1011 by Vinod Raj; Saurabh Chanana
1570049603	Implementation of Different Optimization Techniques to Solve ELD Problem 1017 by Kishan Bhushan Sahay; Nimish Kumar; Madan Mohan Tripathi
1570054495	SSSC Based POD Controller for Transient Stability 1023 by Maninder Rohal; Ravi Lathwal
1570054701	Reactive Power Compensation in UBRDS Based on Loss Sensitivity Approach 1029 by V v s n Murty; Ashwani Sharma
1570026183	An Optimum and Reliable New Multilevel Inverter Topology for Open End Winding Induction Motor 1034 by M.Baba Fakruddin ; Chinmaya K A ; Lalu.Mudavath

Additional Paper:

1569989529	Application of DVR to Improve Voltage Profile of Indian Railway Traction System 1039 by Goli Chandra Sekhar; V.S. Kale; G. Vamsi Krishna
------------	--