Overall Tentative Schedule for the Oral & Poster Presentations

Day 2 8 th December 2025 09:00 - 10:30	Session-IV	Session-II Session-V	Session-III Session-VI
Day 2 8 th December 2025 16:15 - 17:45		Poster Presentation	as
Day 3 9 th December 2025 09:00 - 10:30	Session-VII Session-X	Session-VIII Session-XI	Session-IX Session-XII
Day 3 9 th December 2025 16:15 - 17:45	Session-XIII Session-XVI	Session-XIV Session-XVII	Session-XV Session-XVIII

Papers for which no registrations have so far been made are presently not included in the oral/poster presentation schedules. However, once the registration for such a paper is completed, it will be included in an appropriate session.

Session - I ${\bf Subject~Area~-~Smart~Grid~and~Power~Systems}$ ${\bf Venue~-~TBA}$

$8^{\rm th}$ December 2025 & 09:00 am to 10:30 am Paper Paper Title Authors ID S Gayathri, An IoT-Enabled Framework for M Monisha. 63 Real-Time Smart Metering with Anant Kumar, Dynamic Tariff Pricings K Shanti Swarup Generative Artificial Intelligence M Monisha, **Enabled Smart Metering** S Gayathri, 64 Framework For Predictive Energy Anant Kumar, Sharing K Shanthi Swarup Santosh V. Singh, Assessment of Unbalance in Tata Prashant V. Navalkar, Power Mumbai Network due to 68 Anil M. Kulkarni. Single-Phase Railway Loads Girish T. Jawale Impact of Cyber Vulnerabilities on Suhani Baru, Automated BESS Mode 123 Khwrwmdao Basumatary, Transitions in Smart Microgrid Anup Shukla VSB Chaitanya Duvvury, Impact of ToD Charges and Power Josna Goud G. Factor on Total Energy Costs of 255 G Bhanu Ganesh. BVRIT Campus Distribution Grid Pradeep Kumar Yemula Data-Driven Fault Classification and Localization in Smart Grids Praneeth N. 288 for Accurate Self-Healing Using P Swati Patro, Multifaceted Machine Learning STP Srinivas Techniques

Session - II Subject Area - Security-Constrained Economic Dispatch Venue - TBA

$8^{ m th}$ December 2025 & 09:00 am to 10:30 am			
Paper ID	Paper Title	Authors	
54	SCED in India: The Duals Behind Dispatch	Debasis De, Sushil K Soonee, R S Abhishek, Deb Chattopadhyay, Saumen Majumdar	
110	Ramping in States Power System in India: Harnessing Flexibility through Integrated SCED	Debasis De, Abhishek R S, Sushil K Soonee, Deb Chattopadhyay	
137	Key Insights from Security-Constrained Economic Dispatch: A Case Study for Uttar Pradesh	Nishant Kumar, Abheejeet Mohapatra, Prabodh Bajpai, Swathi Battula, Sushil Kumar Soonee, Arun Kumar Mishra, Sangeeta	
192	Optimising Power Despatch: Security Constrained Economic Despatch Initiative in Gujarat	Divya Sharma, Vatsalkumar Bhatt, Pandya Darshan Dilipkumar, Naran M. Pindoriya, Utpal Patel, Chetan Darji, A B Rathod, Sushil Kumar Soonee, Debasis De	
278	Security Constrained Economic Despatch for TGSLDC: Architecture, Data Pipeline, and MOD Benchmarking	Avik Ghosh, Pradeep Kumar Yemula, P. Suresh Babu, B. Raja Thirupathi, L. Sarveswar	

Session - III Subject Area - Power Systems Protection, Stability, and Optimization Venue - $\ensuremath{\mathsf{TBA}}$

$8^{ m th}$ December 2025 & 09:00 am to 10:30 am				
Paper ID	Paper Title Authors			
78	Modular Open-loop Eigen-sensitivity Analysis for Computation-efficient Stability Assessment	r Sreenath B, Balabhaskar S S,		
109	Impact of Droop Control on Impedance Trajectories under Stable Power Swings in Grid-Forming Converter-Integrated Power Systems			
171	Transient Response Analysis in IBR-Dominated Power Systems Based on Short Circuit Ratio	Koduri Gowtham, Kiran Teeparthi, Pavan Kumar Yadala		
225	Loss of Synchronism during Grid Disturbances in India	Mithila Aithagani, Anil M. Kulkarni		
229	Virtual Inertia vs Physical Inertia for Improving the Stability of a Heavily Renewable Driven Power System	Ravi Reddi, Deepak Kumar Soni, Vaskar Sarkar		
273	Modal Controllability and Observability Estimation of Critical Power System Modes From MIMO Frequency Scans	Kaustav Dey, Anil M. Kulkarni		

Session - IV Subject Area - Grid Resilience and Security Venue - TBA

 8^{th} December 2025 & 09:00 am to 10:30 am Paper Paper Title Authors IDA Novel Image-Based Swati Agarwal, Watermarking Method for Kondety Tony, 56 Detecting False Data Injection in Manish Pandit, Line Current Differential Relays Ranjana Sodhi Chandan Chaudhary, Evaluating Cascading Failure for Alaaeldein Abdelkader, 73 Grid Resilience under Extreme Mohammed Benidris, Weather Events Joydeep Mitra Hybrid IWSOA-ANN Approach Arti Singhal, for Load Stability During 83 Ashu Verma, Cyber-Attack Blocking Controller Rabindra Mohanty Access Effective Graph Resistance based Vulnerability Assessment Jigyasa Singhai, 88 K Shanti Swarup Framework for Cyber Resilient CPPS Shashank S. Nayan Aahladh, Analyzing Risk in Power Sridevi P Rao, 274 Substations through an Automated Gurunath Gurrala, Vulnerability Assessment Tool Vaibhav Katewa, Vikas Bishnoi, Manoj Kumar

Session - V ${\bf Subject\ Area\ -\ Renewable\ Energy\ Systems}$ Venue - TBA

oth Daniel an 2025 for 00,00 and to 10,20 and

8^{th} December 2025 & 09:00 am to 10:30 am			
Paper ID	Paper Title	Authors	
75	Hydrogen-Based Offshore Wind Farm Energy Storage: Simulation and Sensitivity Analysis	Sree Vyshanvi Mamilla, K Shanti Swarup	
85	A Data-Driven Framework of PV Hosting Capacity Assessment for a Military Garrison	Ujjawal Srivastava, P Amritansh Naidu, Ankit Singhal	
135	Wind Power Forecasting using Auto-Regressive QRF for Operational Reserve Management	Girraj Raigar, Naveen Kumar Thokala, Swathi Battula, Abheejeet Mohapatra	
167	Comparative Assessment of Feedforward and Sequence-Based Neural Networks for Solar Radiation Prediction Model	Bongoni Naresh, Amit Kumar Yadav, Ch Vineeth	
177	Hybrid Energy Storage-Based Power Management Strategy for Stand-alone DC Microgrid	Krishnakant, Chuskit Dolma, Pravin Kumar, Prabodh Bajpai	
222	Sector Coupling between Green Hydrogen and Steel: Machine Learning-based Estimation of Levelized Cost of Steel	Pratham Goel, Naran Pindoriya	

Session - VI Subject Area - Power System Planning and Operations Venue - TBA

8^{th} December 2025 & 09:00 am to 10:30 am Paper Paper Title Authors IDTariff Impact Analysis on Gopalji S. Kalojiya, 94 Peer-to-Peer Energy Sharing in Anupama S. Kowli Residential Communities A Comprehensive Design Archita Vijayvargia, 117 Framework for AT-Fed Railway Abhijit Abhayankar Traction Power Systems Fast Jacobian Evaluation for Islanded Microgrid Load Flow Rasmita Muduli, 120 Using Compact Matrix Operations Debapriya Das for Composite Load Models Deep Analysis for Selective Control and CO2 Emission in 125 Suresh Varwandkar Power Systems Praveen Tripathy, Subhash Kumar, Insights and Analysis from Black Sachin Singh, 130 Start Mock Drill Case Studies Kishore Kalita, using Synchrophasor Technology Saksham Rithe, Sharmistha Dutta Impact Analysis of Zero-Sum False V.V.N Prasad Thota, Data Injection Attacks on 202 Kiran Teeparthi, Peer-to-Peer Energy Trading Sri Phani Krishna Karri

Session - VII

Subject Area - Electric Vehicles and Drives

Venue -			
$9^{ m th}$ De	cember 2025 & 09:00 am to 10:30) am	
Paper ID	Paper Title	Authors	
91	Power Electronics Converter Topologies and Control Methods for On-Board and Off-Board Electric Vehicle Charging Systems: An Overview	Jajjalya Kashyap, E S N Raju P	
93	Decentralized Smart EV Charging with Multi-Agent System Communication and Energy Coordination	Priyansh Dwivedi, Himanshu Tiwari, Pradhyumna Yadav, Murari Kumar, K Shanthi Swarup	
128	Electric vehicle battery charger based on DC-001 charging standard	Vaishnavvignesh G Iyer, Cilaveni Satish Chandra, Ravindranath Adda, Sreenath J G, Praveen Tripathy	
223	Light Load Efficiency improvement of Dual Active Bridge Converter for EV Fast Charging Application	Nagasai G, Ravikumar Bhimasingu	
261	High-Efficiency SIDO-SEPIC with Improved Cross-Regulation for EV Charging Systems	Kamalesh MS, Prabha S Umapathy, Bharatiraja Chokkalingam, Sanal Kumar S, Prasanth Kumar R, Ritika S	
266	Electrifying Mobility : Dynamic Charging for Next-Generation Electric Vehicles	Mahendar Reddy Peddolla, Sanjeeva Reddy B R	

Session - VIII Subject Area - Power System Planning and Operations Venue - TBA

9th December 2025 & 09:00 am to 10:30 am Authors Paper Paper Title IDCo-optimized Flexibility Market Manu Ranjan Sharan, 126 Framework for DSO Enabled Abhijit R. Abhyankar, Market Operations Ankit Singhal Anchal Maurya, Harshit Dhiman, Cost Allocation Mechanism for Agam Jain, 142 Shared Battery Storage Systems: Jeet Vijay Shah, A Game-Theoretic Approach Kartikev Singh Bhadauria, Deep Kiran BIBC-Based Distribution Network Astamita Mishra, Reconfiguration with Optimal 191 Placement and Sizing of Manish Tripathy, Renewable DGs under a 24-Hour Papia Ray Load Profile A Hybrid Clustering-PSO Rasmita Muduli, 228 Framework for Reliable Islanded Debapriya Das Microgrid Expansion Planning Minnakuri Venkateswara Rao. Operational Strategies for Priyam Jain, Enhancing RE Integration into the Vishal Puppala, 230 Grid using Existing Transmission Himanshu Verma, System Gaurab Dash. Goodelli Madhukar, T Muthu Kumar

Session - IX ${\bf Subject~Area~-~Smart~Grid~and~Power~Systems}$ ${\bf Venue~-~TBA}$

9^{th} December 2025 & 09:00 am to 10:30 am

9 th De	9 th December 2025 & 09:00 am to 10:30 am				
Paper ID	Paper Title	Authors			
106	Digitizing Electrical Panels with MQTT and Multi-Network Raspberry Pi Gateways	Anmol Sardhalia, Sheraza Bashir, Ayush Yadav, Nikhat Singla, Dr.Anup Shukla			
131	Impacts of fast voltage boosters with current limiters of droop controlled grid forming inverters during delayed voltage recovery events	Upendran Mukundarajan, K. Shanti Swarup			
195	Performance Assessment of Inverter-Fed Autonomous Microgrid with Uniform and Non-Uniform Delay Utilizing Internal Model Controller	Sneha Goneguntla, Gnana SaiSree Boppudi, Naresh Kumar Vemula, Pratikanta Mishra, Kiran Kumar N			
200	Improving Stability of GFL Inverter in Weak Grid using Paralleled GFM Inverter: Hardware Validation	H R Sai Kiran Pandit, Sarasij Das			
258	An Improved Differential Admittance Based Fault Detection Algorithm for Low Voltage AC Microgrid	Joy Narayan Das, Dr. Biswajit Sahoo, Sandeep Banik			
286	Short-Term Load Forecasting for Energy and Cost Savings: A Case Study	T. Praneeth, Gajangi Arun Kumar, P. Ram Kishore Kumar Reddy, Pradeep Kumar Yemula			

Session - X
 Subject Area - Power Systems Protection, Stability, and Optimization Venue - TBA

$9^{ m th}$ December 2025 & 09:00 am to 10:30 am			
Paper ID	Paper Title	Authors	
61	Advanced Power Grid Feeder Protection and Control Functions for Wildfire Mitigation and Control	Srujana Yenigalla, Nagarjuna Koppakula, Sai Pramod Tati, Priya Kumari, Balakrishna Pamulaparthy	
70	An Integrated Approach for Fault Diagnosis and Localization in DC Microgrid	Anu Bhalla, Bhavesh R. Bhalja	
136	Sequence Component-Based Protection Strategies for Fully Inverter-Dominated Microgrids	Arjita Pal, Rabindra Mohanty, Bijaya Ketan Panigrahi	
170	Transmission Networks Connected With GFM Inverters: Protection Challenges and Opportunities	OD Naidu, Aarthi V, Neethu George, Vedanta Pradhan	
236	Analysis of Grid Protection in the North-East Regional Network of India Using Actual Fault Data Under High Solar PV Penetration	Subhash Kumar, Karan Katariya, Sachin Singh, Subhra Ghosh, Amba Tiwari, Neeraj Kumar, Sajan George, Deepak Pullaguram, Ashok Pradhan	
237	A New Facile Time-Voltage-Current Characteristics for Numerical Distance Relay Coordination in Modern Power Grids and FPGA Implementation	Praneeth N, STP Srinivas, Alivelu Manga Parimi	

Session - XI Subject Area - Artificial Intelligence and Data Analytics in Power Grids Venue - TBA

9 th December 2025 & 09:00 am to 10:30 am				
Paper ID	Paper Title	Authors		
102	Optimized Hybrid CNN-Transformer-LSTM Architecture for Accurate Solar Irradiance Forecasting under Variable Weather Conditions	Shanker M, Vikram Kulkarni		
124	Efficient Wide Area Data Compression- A Ramanujan's Sum-Based Approach	Manish Pandit, Ranjana Sodhi		
144	Sectoral Disaggregation of India's Peak Day Load Curve: A Pathway to Demand Flexibility	Pallavi Buwa, Anupama Kowli		
172	OTC Platforms in Indian Power Markets – Driving Digitalization and Data Analytics for Economy, Efficiency, and Transparency	Vinod Kumar Agrawal, Kapil Dev, Ashish Shrivastav, Sahil Kapoor, Nitesh Jha, Gaurav Rupani, Amit Chauhan, Arunima Mishra, Sushil Kumar Soonee		
183	Cybersecure Line Differential Relay Based on Transient Signatures and Decision Tree Classification	Suryanarayana Gangolu, Rakesh Kumar Panda, Suman M, CH Venkateswarlu		
187	Constrained Loss Function Optimization based Short-Term Load Forecasting	Murari Jha, Ankit Singhal		

Session - XII Subject Area - Control in Power Systems/Power Electronics Venue - TBA

9^{th} December 2025 & 09:00 am to 10:30 am					
Paper ID	Paper Title	Authors			
82	Cyber-Physical Vulnerabilities of Distributed Secondary Control in DC Microgrids: The Role of DoS Attacks and CPLs	Bazila Rashid, K. Shanti Swarup			
129	Controller design for Three level boost converter with single-phase inverter load	Vaishnavvignesh G Iyer, Cilaveni Satish Chandra, Ravindranath Adda, Sreenath J G, Praveen Tripathy			
193	LVRT-Enabled Virtual Synchronous Generator Control for Grid-Forming Inverter-Based Resources	Supriya Sharma, Yashasvi Bansal			
198	A 3-phase 2-level inverter with AC side boost and CMV mitigation scheme	S S Phaniram Musti, Ravikumar Bhimasingu			
220	Modified Control Strategy to Improve the CC-CV Mode Transition Performance in Variable DC-Link Voltage On-Board Chargers	Cilaveni Satish Chandra, Vaishnavvignesh G Iyer, Ravindranath Adda, Sreenath J G, Praveen Tripathy			
226	Controller Output Dynamic Limiting Technique for Overshoot Suppression in Current-Controlled Grid-Following PV Systems	Ajay Jena, Arun Rahul S			

Session - XIII Subject Area - Power System Planning and Operations Venue - TBA

 $9^{\rm th}$ December 2025 & 04:15 pm to 05:45 pm Paper Paper Title Authors IDDecentralized Energy Exchange: A Blockchain-Based Smart contract Tharun Tejavath, 185 Pricing Model for Sustainable Surendra Srinivas Distributed Energy Markets Rajesh Kumar, Utilization of Spinning Reserves in Absar Ahmad, 207 Largest Hydro Electric Power Pavitra Malik. Plant in India-A Base Case B. Raviteja Optimal reliability planning of Dharmendra Trivedi, radial distribution network Naveen Jain, 233 considering hourly energy Umesh Agarwal, availability with renewables Manoj Kumawat integration Raja Shekar Nalluri, Real-Time Oscillation Analytics Bhanu Ganesh Ganta, for Power Grids: A Pradeep Kumar Yemula, 259 Wavelet-Assisted Matrix Pencil Chandra Sekhar Maragoni, Approach in SLDC Operations Nataraj Pathri Markov Modeling Based Reliability Abhishek Harit, 287 Evaluation of Compressed Air Prerna Jain, Energy Storage in Grid Operations Satish Sharma

Session - XIV Subject Area - Control in Power Systems/Power Electronics Venue - TBA

$9^{ m th}$ December 2025 & 04:15 pm to 05:45 pm					
Paper ID	Paper Title Authors				
127	A Soft-Switched Dual Active Push-Pull Converter	Jabi Ali, Mandeep Singh Rana			
252	Remaining Useful Life Prediction of Boiler Feed Pump Motor: A Statistical and Condition Monitoring Approach for Industry 5.0	Koti Reddy Butukuri, Hari Preetham Golla, Pradeep Kumar Yemula, Gali Sridhar, Tadiparti Koti Reddy			
253	Multilevel Inverter for Grid Connected and Standalone applications	Shoubhik Mukherjee, Dr. Rupesh Wandhare, Deepak Gehlot, A.S Krishnapriya			
269	Unbalanced Reference Voltage generation for Grid Forming Inverter Control During Asymmetrical Faults	Sunil Gajula, Ravikumar Bhimasingu			
271	Modified Direct Power Control of Photovoltaic to Grid tied Voltage Source Converter with Active Filtering Capability	Praveen Vankadari, Korivi Yogananda Reddy, Sree Hari J B, Akshay Chabukswar, Avinash Naramu, Rupesh Wandhare			

Session - XV Subject Area - Electric Vehicles and Drives

Venue - TBA

venue - 1BA				
$9^{ m th}$ De	cember 2025 & $04:15 \text{ pm to } 05:45$	5 pm		
Paper ID	Paper Title	Authors		
69	Swarm-Based EV Fleet with Grid-Aware Charging and Traffic-Adaptive Routing in Urban Networks	Greeshma Potnuru, K Shanti Swarup		
256	Assessing Impact of Dynamic Parameters on Electric Vehicle Energy Consumption using Parameter Perturbation Analysis	Bhanu Ganesh Ganta, Raja Shekhar Nalluri, V S B Chaitanya Duvvury, Pradeep Kumar Yemula		
263	Physics-Guided Indicators with PSO-Tuned Regression for EV Battery SOH Estimation	V.Yashwanth, Y.Likhith, B. Nikhil, C. Priyanka, K. H. Phanishree		
267	Optimal EV Charging under Marginal Emission Factors and Time-of-Use Tariffs: Comparison of Telangana and Karnataka	Aishree Boruah, Gaddam Vardhan, Parmar Aryan Jasvantkumar, Pritha Chatterjee		
279	Real-time Monitoring of Energy Dynamics in Electric Vehicles	Bhanu Ganesh Ganta, Pradeep Kumar Yemula, Koti Reddy B		

Session - XVI

Subject Area - Electric Vehicles and Drives

Venue - TBA

9 th December 2025	&	04:15	pm	\mathbf{to}	05:45	pm
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Paper ID	Paper Title	Authors
10	Real-Time Fault Analysis and System Optimization in EV Controllers with Field-Oriented Control: A Practical Investigation on Monitoring Diagnostics and Enhancements	Suganya R, L.M.I. Leo Joseph, K Sreedhar
181	Multilayer Winding Configuration for Variable Pole Induction Motor Drives	Monika Jain, B Prathap Reddy
265	A Constant Switching Controller based DTC Scheme for Speed Control of Five-Phase Open End Winding Induction Motor	C Venkata Subba Reddy, Sabavath Akhila, Nalla Akshitha, Gunji Poojitha, Yadlapalli Ragini
270	Robust Optimal Non-Linear Control Technique for Efficient EV Drive Applications	Akshay Chabukswar, Sree Hari J B, Ponnaganti Sirisha Devi, Korivi Yogananda Reddy, Chekka Supriya, Rupesh Wandhare
272	Simulink-Based Modeling of Regenerative Braking with Energy Recovery Optimization for Electric Vehicles	Sadia Begum, Ujwala Gajula, Gouthami Eragamreddy, Swapna Raghunath

Session - XVII Subject Area - Smart Grid and Power Systems Venue - TBA

9th December 2025 & 04:15 pm to 05:45 pm

9 th December 2025 & 04:15 pm to 05:45 pm			
Paper ID	Paper Title	Authors	
44	Design and Implementation of Blockchain-Enabled P2P Energy Trading Testbed	Shweta Arvind Kadam, Debasmita Panda, Ashutosh Yadav	
84	Operational Analysis of Shipboard DC Microgrid Integrated with Advanced Storage Solutions	Ayush Bhatia, Rabindra Mohanty, Avanish Tripathi	
86	Hybrid Islanding Detection in Grid-Connected PV-Battery Microgrid	Suraj Mishra, P Amritansh Naidu, Bijaya Ketan Panigrahi	
190	Identification and Exploitation of Critical Lines through Targeted LR Attacks	V. Bharat Kumar, Satish Sharma	
210	Experimental Validation of Online Frequency Response Estimation of a Multi-port LTI Apparatus using Power System Ring-down Events	Santosh Singh, Anil Kulkarni	

Session - XVIII

Subject Area - Renewable Energy Systems

Venue - TBA

Venue - TBA				
$9^{\rm th}$ December 2025 & 04:15 pm to 05:45 pm				
Paper ID	Paper Title	Authors		
50	Fault Detection in Unequal-Rated PV Strings Using Normalized Power and Snapshot Median Filtering	Jayakumar J, Justin Salamon M, Aswin Kumar M, Perachi Selvam P, Subramanyam L, Kesavan Nair K.P		
79	Techno- Economic Modeling of a Renewable Hybrid Energy System	Kavya E M, Monisha M, Pasela Ramtej, K Shanthi Swarup		
96	Next-Gen Offshore Wind Year Ahead Forecasting Aided Modelling for Techno-Economic Feasibility	Nidhi Gummaraju, Shri Varshini C, Sree Vyshnavi Mamilla, Greeshma Potnuru, K Shanti Swarup		
247	Capacity credits for renewable energy and value of cross-border transmission in South Asian power systems	Suruchi Uppal, Srishty Jain, Puneet Chitkara, Sushil Kumar Soonee		
281	Techno-Economic Feasibility Analysis of a Building Integrated Agrovoltaics Model	Alan Sam, Bhanu Ganta, Pradeep Kumar Yemula, Rayudu Katuri		

Poster Presentations Venue - TBA 8th December 2025 & 04:15 pm to 05:45 pm Paper Title Authors Paper ID Magam Vasista Sai, Data-Driven Inertia Estimation Shahbazuddin Syed, 62 using BiLSTM and XGBoost for Altaf Q. H. Badar, RES Integrated Power Networks Prachi Salodkar Study of Dielectric Performance of Gyanendra Kumar Kurmi, 65 Insulating Stand-offs Under Basanta Kumar Gautam Lightning Impulse Experimental study of the surface dielectric strength of insulating Akrit Acharva, 66 tubes on basis of geometry under Basanta Kumar Gautam lightning impulse voltages SSSR Sarathbabu Duvvuri, Bala Sai Kiran P. Review of Mathematical Modeling Pinnamraju Sadhvika, 74 and Scheduling Strategies of an Kukkala Varshini, Electric Vehicle Aggregator Majji Vaishnavi, Jillabathula Pavithra, Adaptive Electric Vehicle EMS C Shri Varshini, 76 with Secure V2G Energy Nidhi Gummaraju, Transactions using Blockchain K Shanthi Swarup A Survey on Fault Location, PMU Deployment, and Fault Behavior of Anchal Maurya, 92 Distributed Generators and Active E S N Raju P Loads in Medium-Voltage Distribution Networks

100	Multi-part Innovative Tariff Framework for the Renewables for ambitious Net Zero targets	Sushil Kumar Soonee, Dr Amit Kumar Singh Parihar, Ghansham Thakkar, Himanshu Mishra
104	Improving Wind Energy Forecast Accuracy Using Machine Learning	Tirunagaru V Sarathkumar, T Sanjeeva Rao, Arup Kumar Goswami, T Venkata Prasad
116	Virtualization of Protection in Distribution Substation: An Object-Oriented Approach	Bhaskar Sahu, K. Shanti Swarup
119	Impact of Filters on Grid Connected BESS: Experimental Analysis and Validation	Nivedika Kher, Sonam Gupta, Anup Shukla
143	Detection and Localization of Low-Frequency Oscillations in North Eastern Region of India in the Presence of Inverter Based Resources	Karan Vasudev Katariya, Subhash Kumar, Palash Jyoti Borah, Kishore Kalita, Sajan George, Deepak Reddy Pullaguram, Ashok Kumar Pradhan
196	Directional Overcurrent Relay Coordination in a Microgrid Environment by using Genetic Algorithm, and Breeder Genetic Algorithm	Ravindra Mankar, Pranav Darji

205	A Novel Development of a Single Switch DC DC Circuit for Fuel Cell Systems	Gurijala Sreedhar, CH Hussaian Basha, Likhitha R, Prathibha E, Muralikrishna Boddu
212	Impact of Different Current Limiting Strategies on Stable Power Swing Trajectories in Grid-Forming Converter—Integrated Power System	Balabhaskar S S, Sreenath B, Manas Kumar Jena
219	Shock-Proofing the Grid: Readiness of Indian Electricity Markets for Futures-Based Hedging Instruments	Ribhu Shankar, Dr. Parminder Kaur Bajaj
250	An Enhanced VMD-DT-Based Fault Protection Scheme for AC Microgrid	Sandeep Banik, Dr. Biswajit Sahoo, Prof. Jyoti Prakash Mishra
264	A Hybrid Symmetrical Optimum-Pattern Search tunned PI Based Three-Phase SRF PLL Synchronization System Under Grid Irregularities	Bibhuti Prasad Sahoo, Adityansu Pati, Raseswari Pradhan
280	Adaptive Distance Relay Protecting Transmission Lines Connecting Inverter Based Resources	Chandra Panda, Deepak Pullaguram, Ashok Kumar Pradhan
285	Remaining Useful Life Estimation of Aged Power Transformers: A Case Study Using Degree of Polymerisation and Furan Analysis	Koti Reddy B, Pradeep Kumar Yemula, Vishal Devulapalli, Rammohan Rao Vemula, Bhanu Ganesh Ganta

Online Presentations Presentation Link - TBA $9^{\rm th}$ December 2025 & 09:00 am to 10:30 am Paper Paper Title Authors ID Mahmuda Akter, Design and Modeling of Campus Jannatul Ferdous, 81 Microgrid for Future Sustainable Samiul Hasan Emon. **Energy Operations** Shah Mohazzem Hossain Anil Bhatt, Comparative Analysis of Flywheel Bipin Subedi, and Battery Energy Storage 138 Nita Kumari Phuyal, Systems for Smoothing Aashish Yakami. Photovoltaic Power Output Gaurav Tamrakar Aayush Bhatta, Sandip Timsina, Space Vector Pulse Width Ritesh Basnet, Modulation Inverter Based 141 Urusha Kisi, Indirect Field Oriented Control for Rojan Tamang, Induction Motor Hari Bhusal. Mensun Lakhemaru Techno-Economic and Environmental Assessment of Md. Sabbir Alam, 244 On-Grid Rooftop Solar Integration Shah Mohazzem Hossain for Diesel-Dependent Urban Markets Exploring a Hybrid Renewable Md. Aminul Hoque, 245 Energy System to Meet

Bangladesh's Future Energy Needs

MD. Nahid Billah,

Shah Mohazzem Hossain