

Top 28-ISUW 2023 Technical Paper Selected for Presentation

SI. No	Theme	Title of the paper	Author	Organization
1	New and Emerging Technologies and Trends	Power Quality Monitoring & Analysis for Optimized Quality Power Delivery	Manas Kundu	Asia Power Quality Initiative
2	New and Emerging Technologies and Trends	Impact of Harmonics on losses and life expectancy of distribution transformers: A Case Study	Ritu	TATA POWER Delhi Distribution Limited
3	Cyber Security for the Digitalized Grids	A Framework for VAPT services in Digital Substations	Amulya	GRIDsentry Pvt Ltd
4	Foundational Blocks for Smart Grids	Solar Powered Smart Switching Multilevel Inverter for Smart Grid	Suvetha Poyyamani Sunddararaj	M. Kumarasamy College of Engineering
5	Disruptive Innovations for Utilities	Situational Awareness of Grid using Wide Area Monitoring and Analytics based on WAMS- GETCO Project	Mukesh Gulabsinh Gadhvi	SLDC GETCO Gujarat
6	Disruptive Innovations for Utilities	Monitoring of Remote SS through Robotics, Augmented Reality and Artificial Intelligence	Ravi Sahu	TATA Power Co Ltd
7	Disruptive Innovations for Utilities	RDS (Rural Digital Substation)	Ganesh Murlidhar Mane	TP Western Odisha Distribution Limited
8	Smart Water	Innovative smart water metering in a multi- utility environment	Rashed Mohamed Al Mazrooei	Abu Dhabi Distribution Company (ADDC)



9	Regulations for the Evolving Smart Energy Systems	Regulations to enhance distribution level flexibility for renewable energy integration	Harsha V Rao	Council on Energy, Environment, and Water (CEEW)
10	Regulations for the Evolving Smart Energy Systems	Exploring Virtual Power Purchase Agreements (VPPA) for increasing RE penetration in C&I segment of India	Shivali Dwivedi	RTI International
11	Smart Water	Smart Solutions for Strengthening Drinking Water Supply Value Chain	Subhajyoti Majumder	Cognizant Technology Solutions Pvt. Ltd.
12	Electric Mobility	Design And Development of Grid-Tied Off- Board Intelligent Charging Station	Brijesh Singh	KIET Group of Institution
13	Electric Mobility	The need for a framework and Govt. policy to encourage retrofit existing petrol / diesel vehicles ~ a case study on ic engine based two wheeler being converted into hybrid to address both price and pollution issues	Srinivasa Murthy Lolla	Bio Electrical & Energy Systems
14	Disruptive Innovations for Utilities	Drone based surveillance of Overhead LT Network	Anjan Mitra	CESC LTD.
15	Disruptive Innovations for Utilities	Al-based predictive maintenance implementation in wind Turbine Based on SCADA Data	S. Majid Rezaee	Spin Engenharia



16	Disruptive Innovations for Utilities	Power Demand/Load Forecasting Using Artificial intelligent and Machine learning for power utilities	Akshat Kulkarni	SCOPE T&M Pvt Ltd
17	Smart City Gas Distribution	Digital technologies transforming the City Gas Distribution value chain from source to consumer	Diggamber Singh	ABB India Limited
18	Disruptive Innovations for Utilities	Wearable Devices	M.L. Sachdeva	CEA
19	Disruptive Innovations for Utilities	Centralized & Decentralized Approach for Safe, Reliable Power Supply using IT-OT	Chintamani Chitnis	TP Central Odisha Distribution Ltd (TPCODL)
20	Foundational Blocks for Smart Grids	IElectrix Project – Results and lessons learned from the Indian demonstration in Delhi	Pierre-Jacques Le Quellec	Enedis
21	Foundational Blocks for Smart Grids	Leveraging Data in Power Distribution	Raman Garg	REC Ltd
22	Foundational Blocks for Smart Grids	Communication Solutions for Smart Grids and Smart Cities	Vinit Mishra	E&Y
23	New and Emerging Technologies and Trends	Inhouse Robotic process automation (RPA)	Harsh Raj	Noida Power Company Limited
24	New and Emerging Technologies and Trends	Smart Energy Communities	Purnima M Gupta	Former Economic Advisor, Central Electricity Authority



25	Foundational Blocks for Smart Grids	Foundational Blocks for Smart Grids-ESS Applications and Business Cases	N Ilamaran	NSURE RELIABLE POWER SOLUTIONS PVT LTD
26	INDIA @ 100 in 2047: Vision for the Indian Power System	Data-driven Cognitive Model for enhancing Sustainability Footprint of Customer-base of Electricity Industry	Surekha Deshmukh	IEEE PES
27	Foundational Blocks for Smart Grids	Demand-side flexibility as a demand response mechanism - Review	Robins Anto	IIT Roorkee, Uttarakhand, India
28	Smart Grids for Smart Cities	Feasibility Study for Implementing Smart Interactive Street Lightning under Smart City Concept	Manan Pathak	Aditya Silver Oak Institute of Technology, Silver Oak University



Top 55-ISUW 2023 Technical Paper Selected for Publication

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28	Smart Grids for Smart Cities	Feasibility Study for Implementing Smart Interactive Street Lightning under Smart City Concept	Manan Pathak	Aditya Silver Oak Institute of Technology, Silver Oak University
29	Cyber Security for the Digitalized Grids	Critical Infrastructure Asset Discovery and Monitoring for Cyber Security	Rajesh Pathak	Noida Power Company Limited
30	Cyber Security for the Digitalized Grids	Securing Advanced Metering Infrastructure using PKI	Lagineni Mahendra	CDAC
31	Electric Mobility	Remodeling E-Rickshaw Charging Hub: Bringing a Change in EV Charging Practice & Efficiency	Krishna Porwal	NA
32	Electric Mobility	Photovoltaic Integrated Electric Vehicles Charging stations for Isolated locations	Peeyush Pant	BPIT Delhi
33	Foundational Blocks for Smart Grids	Minimizing dependency on grid power in a residential home with retrofits	S. Paranthaman	TANGEDCO
34	Foundational Blocks for Smart Grids	Smart Energy Audit System for Indian Electricity Distribution Utility	Arup Sinha	Virtuoso Technologies & Consulting Pvt Ltd
35	Foundational Blocks for Smart Grids	250 Million Smart Meters in India – Rollout Strategies and Business Models - Odisha Experience	Nitin Marjara	TP Central Odisha Distribution Limited



36	Disruptive Innovations for Utilities	Paper Less and Contact Less Operation System	Hitesh Gokani	The Tata Power Company Ltd.
37	Disruptive Innovations for Utilities	Challenges for Utilities: Digital Disruption	Shah Zulfiqar Haider	Mitsubishi Research Institute
38	New and Emerging Technologies and Trends	SMART Technology for Remote Station Condition Monitoring	Mahesh Nene	Tata Power
39	New and Emerging Technologies and Trends	Communication Solutions for Smart Grids and Smart Cities	Boya Shi	Ubiik Inc
40	Regulations for the Evolving Smart Energy Systems	Emerging technologies and Regulations in Clean Energy Market	Prashant Karpe	Accenture
41	Evolving Architecture of the 21st Century Grid with Two Way Power Flows	Smart hybrid renewable energy mini-grid for off- grid and grid-connected environments	Dwipen Boruah	GSES India/ Shoolini University
42	Electric Mobility	Integration of EV Battery with Low Voltage Power lines and Study their Impact	Pradeep Aggarwal	BSES Rajdhani Power Limited
43	Electric Mobility	Integrating EV's as an Independent Energy resource	Kshama M Joshi	Accenture Solutions Pvt Ltd
44	Electric Mobility	Powering Indian mobility sector through Battery-as- a-Service model	Shreyans Jain	Accenture
45	Electric Mobility	EVs as Virtual Power Plants (VPP)	Ashish Pandey	TPCODL



46	Electric Mobility	Integration of IOT based Dynamic Load Management to EV Charging Infrastructure	Kumar Gulla	Fluentgrid Limited
47	Disruptive Innovations for Utilities	Customer Engagement Strategies and social media for Utilities - Customer Portal, Chat-bot, Voice-bot	Rupanjana Debnath	Siemens Technology Pvt. Ltd.
48	New and Emerging Technologies and Trends	Remote Supervision System using Body worn Camera	Mousam Dutta	CESC LTD.
49	Disruptive Innovations for Utilities	Auto Sequential Operation of EHV Lines	Kedar K Datar	Tata Power Company Limited
50	Disruptive Innovations for Utilities	BOT based Power Management	Trusha Biswas	Tata Power Company Limited
51	Disruptive Innovations for Utilities	Energy Trading Solution for Infirm OA Consumers	Nitin R Lothe	Tata Power Company Limited
52	Disruptive Innovations for Utilities	Revoltunizing Customer Service	Roopesh Srivastava	Tata Power Company Limited
53	Disruptive Innovations for Utilities	Augmented Operator Advisor in Distribution	Firoz Havaldar	Tata Power Company Limited



54	Disruptive Innovations for Utilities	Transformer LT Cable box Health Monitoring System	C Nandakumar	Tata Power Company Limited
55	Disruptive Innovations for Utilities	Used case of Live Tracking App for EHV/HV Cable safeguarding sites to ensure uninterrupted power supply and fast restoration of supply	Robin Giri	Tata Power Company Limited