Selected Technical Papers for Presentation and Publication – India Smart Utility Week (ISUW) 2020

Technical Papers Selected for Presentation at ISUW 2020

Paper No	Title of Technical Paper	Main Author Name	Organization Name
1	Cyber Physical Security of Critical Infrastructure	Aamir Hussain Khan	TPDDL
11	Standards and Interoperability of Equipment and Systems	Amit Jindal	PwC
16	Rise of algorithmic trading in today - Changing electricity market	Anindya Pradhan	Tata Consultancy Services
25	Minimized operational cost and enhanced battery life in solar, battery and building integrated EV charging station.	Bharat Gupta	Vision Mechatronics
36	Empowering Energy Efficiency Deployments with Blockchain	Christopher Peoples	Energy Blockchain Consortium
44	Pooling electric vehicles and residential systems for ancillary services - Concept and demonstration	Fabian Niedermeyer	Fraunhofer IEE
50	Explainable Artificial Intelligence (XAI): towards Malicious SCADA Communications	Harditya Sarvaiya	VJTI
56	Grid Security	Kshama Joshi	Accenture Technology Center India
59	Enedis IoT smart grid solutions for more efficiency	Laurent Karsenti	Enedis
68	Blockchain Technology Application to DER Implementation Strategy for India	ML Sachdeva, NS Sodha	NA
73	Tariffs a tool to create flexibility	Magnus Linden	SWECO
80	IIElectrix H2020 Project - SHAKTI demonstration	Pierre-Jacques LE QUELLEC	Enedis
84	Smart Grid and Utility Challenges	PT Seenath Beevi	Kerala SEB
85	India Moving Towards Solar Energy	Purnima M. Gupta	NA
86	Hybrid Microgrid set up in Laboratory for Practical Alimentation of Electrical Engineering Students	Rahul Singh	Aligarh Muslim University
88	AGC in a Deregulated Interconnected Power System with STATCOM and Battery Energy Storage	Rajesh Joseph Abraham	Indian Institute of Space Science and Technology
99	Improving revenue assurance theft detection to a new technology landmark	Rui Mano	Choice Technologies

101	Transforming Campuses into Grid Interactive Buildings Using PEER Strategies	Sanjay Kumar	Green Business Certification Inc.
103	Communications Solutions for Smart Grids and Smart Meters	Sanjeev Rana	Tata Power Delhi Distribution Limited
105	Power Quality Improvement & Performance Enhancement of Permanent Magnet Brush-less DC Motor	Saurabh Manglik	Jacobs Engineering
106	Smart meter data enabled transition to energy efficient cooling	Shalu Agrawal	Council on Energy, Environment and Water
107	Revenue Modelling of the Electric Vehicle Charging Infrastructure in India - A case study of Delhi NCR	Shinjini Singh	The Tata Power Company Limited
112	Indian Power Sector's current stance on topmost disruptive trends in smart grid industry and roadmap for sustaining growth amidst them	Shweta Agarwal	Landis+Gyr
115	Exploring alternative energy sources to supplement and cover the downtime of wind and solar to improve the resilience of Smart Grids	Srinivasa Murthy Lolla	Bio Electrical & Energy Systems
124	Electric Vehicle Infrastructure Planning for Indian Distribution Sector	Tripta Thakur	Maulana Azad National Institute of Technology, Bhopal

Technical Papers Selected for Publication (Only) in Springer Journal

S. No	Title of Technical Paper	Main Author Name	Organization Name
1	Cyber Physical Security of Critical Infrastructure	Aamir Hussain Khan	TPDDL
2	Smart Green Transport Grid open platform for Multi-Modal E-Mobility Deployment	Abhijit Malankar	GIZ
11	Standards and Interoperability of Equipment and Systems	Amit Jindal	PwC
15	Integrated Network Management System	Anil Kumar Ojha	Tata Power Delhi Distribution Limited
16	Rise of algorithmic trading in today - Changing electricity market	Anindya Pradhan	Tata Consultancy Services
21	Cyber-Physical Security of Smart Grid Infrastructure Using Strategies in PEER Rating System	Archita Vijayvargia	Green Business Certification Inc.
22	Electric Vehicle and Charging Stations in Distribution System: Practical Experience	Ashutosh Pailwan	Adani Electricity Mumbai Ltd

Design and operational strategies of urban micro-grid that benefits utilities, consumers as well as the environment with Mudgal Minimized operational cost and enhanced battery life in solar, battery and building integrated EV charging station Minimized operational cost and enhanced battery life in solar, battery and building integrated EV charging station AEEE Sassament of charging technologies currently used to charge electric two and three wheelers in India Sasidharan AEEE Simpowering Energy Efficiency Deployments with Blockchain Blockchain Tenpowering Energy Efficiency Deployments with Peoples Storage - The Next Generation Power Sector Debmalya Sen Ilron India Pvt. Ltd. Verma Importance of Smart Grid Development in India Importance of Smart Grid Development in India Dr. Arup Sinha Consulting Fraunhofer IEE Sulosu Gogal Bhageria Blockchain based Peer to Peer Power Trading Blockchain based Peer to Peer Power Trading Blockchain based Peer to Peer Power Trading Gogal Bhageria Technology An effective Techno-commercial solution for the DISCOMS Explainable Artificial Intelligence (XAI): towards Malicious SCADA Communication SCADA Communication Scavaraiya Secured Automatic Meter Reading for Implementation of SAMAST framework in India Fracticular Accenture Technology Center India Accenture Technology Center India Accenture Technology Center India Mahendra Development of Advanced Computing (C-DAC) Tender Grid Security Accenture Technology Center India Accenture Technology Center India Mahendra Development of Advanced Computing (C-DAC) Tender Grid Security Accenture Technology Center India Mahendra Development of Advanced Computing (C-DAC) Tender Grid Integration in order to get smart grids Magnus Linden Mayank Kandpal Mayank K				
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Blockchain Peoples Consortium Storage - The Next Generation Power Sector Debmalya Sen IESA Preventing water Pollution using AMI and IoT Dinkar Kumar Verma Iltron India Pvt. Ltd. Importance of Smart Grid Development in India Dr. Arup Sinha Virtuoso Consulting Pooling electric vehicles and residential systems for ancillary services - Concept and demonstration Riedermeyer Sudjost Technology Blockchain based Peer to Peer Power Trading Gopal Bhageria SUJOSU Technology An effective Techno-commercial solution for the DISCOMs An effective Techno-commercial solution for the DISCOMs SCADA Communications SCADA Communications Harditya Sarvaiya Explainable Artificial Intelligence (XAI): towards Malicious SCADA Communications Harditya Sarvaiya Find Security Kshama Joshi Accentrology Center India Grid Security Kshama Joshi Accentrology Center India Freendology Center India Freendology Center India Centre for SAMAST framework in India Mahendra Development of Advanced Computing (C-DAC) Finedis IoT smart grid solutions for more efficiency Laurent Karsenti Enedis Challenge the day-ahead in order to get smart grids Magnus Linden SWECO Challenge the day-ahead in order to get smart grids Magnus Linden SWECO Challenge the day-ahead in order to get smart grids Magnus Linden Mayank Kandpal Adnate Electricity Mumbai Distribution Mobility Solutions for redressal of power failure complaint in Mumbai Distribution Mobility Solutions for redressal of power failure complaint in Mayank Kandpal Adnate Electricity Mumbai Limited Blockchain Technology Application to DER Implementation MIL Sachdeva, NS Sodha NA Vehicle to Grid Integration in Context of India: Vehicle to Moreshwar NA	31			AEEE
Preventing water Pollution using AMI and IoT Dinkar Kumar Verma Itron India Pvt. Ltd.	36		•	
Importance of Smart Grid Development in India Dr. Arup Sinha Virtuoso Consulting	37	Storage - The Next Generation Power Sector	Debmalya Sen	IESA
Pooling electric vehicles and residential systems for ancillary services - Concept and demonstration Fabian Niedermeyer	39	Preventing water Pollution using AMI and IoT		Itron India Pvt. Ltd.
ancillary services - Concept and demonstration Niedermeyer Blockchain based Peer to Peer Power Trading Gopal Bhageria SUJOSU Technology Hassle free meter reading in remotely located scattered Agricultural Areas through IoT based LPWAN technology - An effective Techno-commercial solution for the DISCOMs Explainable Artificial Intelligence (XAI): towards Malicious SCADA Communications Harditya SCADA Communications SCADA Communications SCADA Communication and Sharing in Smart Grid with Renewable Energy System using Cyber Physical System Firefly Optimization and Sharing for Implementation of SAMAST framework in India Secured Automatic Meter Reading for Implementation of SAMAST framework in India Secured Secured Sulting Security Centre for Development of Advanced Computing (C-DAC) Enedis IoT smart grid solutions for more efficiency Challenge the day-ahead in order to get smart grids Magnus Linden SWECO Magnus Linden SWECO Magnus Linden Mayank Kandpal Adani Electricity Mumbai Distribution MIL Sachdeva, NS Sodha NS Sodha Vehicle to Grid Integration in Context of India: Vehicle to Moreshwar NA	41	Importance of Smart Grid Development in India	Dr. Arup Sinha	
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SCADA Communications Sarvaiya Energy Optimization and Sharing in Smart Grid with Renewable Energy System using Cyber Physical System Sarvaiya Karthikeyan R Velammal Institute of Technology Fechnology Kshama Joshi Accenture Technology Center India Fechnology Center India Samast framework in India Fendis IoT smart grid solutions for more efficiency Enedis IoT smart grid solutions for more efficiency Enedis Cantre for Development of Advanced Computing (C-DAC) Enedis IoT smart grid solutions for more efficiency Enedis Magnus Linden SWECO Adanish Ahuja BESS Rajdhani Power Ltd Mobility Solutions for redressal of power failure complaint in Mumbai Distribution Blockchain Technology Application to DER Implementation Strategy for India Vehicle to Grid Integration in Context of India: Vehicle to Moreshwar NA	49	Agricultural Areas through IoT based LPWAN technology -		RESEARCH AND DEVELOPMENT
Renewable Energy System using Cyber Physical System 67 Grid Security 8 Kshama Joshi Accenture Technology Center India 57 Secured Automatic Meter Reading for Implementation of SAMAST framework in India 58 Enedis IoT smart grid solutions for more efficiency Enedis IoT smart grid solutions for more efficiency Challenge the day-ahead in order to get smart grids Magnus Linden SWECO Challenge the day-ahead in order to get smart grids Magnus Linden SWECO Mobility Solutions for redressal of power failure complaint in Mumbai Distribution ML Sachdeva, Strategy for India Wehicle to Grid Integration in Context of India: Vehicle to Moreshwar NA	50		•	VJTI
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67 Mobility Solutions for redressal of power failure complaint in Mumbai Distribution 68 Blockchain Technology Application to DER Implementation Strategy for India 71 Vehicle to Grid Integration in Context of India: Vehicle to Moreshwar Power Ltd Adani Electricity Mumbai Limited ML Sachdeva, NS Sodha NA	60	Challenge the day-ahead in order to get smart grids	Magnus Linden	SWECO
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Strategy for India NS Sodha 71 Vehicle to Grid Integration in Context of India: Vehicle to Moreshwar NA	67		Mayank Kandpal	·
-	68			NA
	71			NA

73	Tariffs a tool to create flexibility	Magnus Linden	SWECO
79	Learnings and Model for UK SMETS 2 (3G, ZigBee, Mesh) Rollout	Paresh Patel	System Level Solutions, Inc.
80	IIElectrix H2020 Project - SHAKTI demonstration	Pierre-Jacques LE QUELLEC	Enedis
84	Smart Grid and Utility Challenges	PT Seenath Beevi	Kerala SEB
85	India Moving Towards Solar Energy	Purnima M. Gupta	NA
86	Hybrid Microgrid set up in Laboratory for Practical Alimentation of Electrical Engineering Students	Rahul Singh	Aligarh Muslim University
88	AGC in a Deregulated Interconnected Power System with STATCOM and Battery Energy Storage	Rajesh Joseph Abraham	Indian Institute of Space Science and Technology
95	Critical Infrastructure Asset Discovery and Monitoring for Cyber Security	Reddi Hareesh	Centre for Development of Advanced Computing (C-DAC)
99	Improving revenue assurance theft detection to a new technology landmark	Rui Mano	Choice Technologies
101	Transforming Campuses into Grid Interactive Buildings Using PEER Strategies	Sanjay Kumar	Green Business Certification Inc.
102	AMI roll-out Strategies & Business model adoption: Tata Power-DDL Case Study	Sanjeev Rana	Tata Power Delhi Distribution Limited
103	Communications Solutions for Smart Grids and Smart Meters	Sanjeev Rana	Tata Power Delhi Distribution Limited
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113	Turning Disruption into Opportunity: Smart Energy Management for E-Mobility and Virtual Power Plants	Sleman Saliba	ABB AG
114	Cyber physical security for last mile in smart grid	Sonali Srivastava	Landis+Gyr

115	Exploring alternative energy sources to supplement and cover the downtime of wind and solar to improve the resilience of Smart Grids	Srinivasa Murthy Lolla	Bio Electrical & Energy Systems
119	Energy Storage System: Applications & Case Study	Swajjal Rastogi	SMEC India Private Limited
123	Forecasting of power demand for distribution utilities using Machine Learning models	Tanmoy Mitra	Assam Power Distribution Company Limited
124	Electric Vehicle Infrastructure Planning for Indian Distribution Sector	Tripta Thakur	Maulana Azad National Institute of Technology, Bhopal
126	Adaption and assessment of Machine Learning algorithms in security operations centre for critical infrastructure	Yeshwanth M V	Centre for Development of Advanced Computing