



## 28 February - 04 March 2023 | New Delhi



# **POST EVENT REPORT**

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in India Smart Utility Week



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## The 9<sup>th</sup> India Smart Utility Week (ISUW) 2023

#### 28 Feb - 04 March 2023, The Lalit, New Delhi

After two digital editions, ISUW returned with a bang in March 2023 in New Delhi.Distinguished experts from around the world collaborated on evolving technologies for the Net Zero Power and Transportation Sectors.

The 9th edition of India Smart Utility Week (ISUW), a five-day international conference and exhibition, was held in New Delhi from February 28 to March 4, 2023, and was attended by over 2200 delegates. ISUW 2023 was attended by Visionary Leaders, Utility CEOs, Regulators, and Subject Matter Experts from around the world, including 236 Senior Officials from 31 Utilities in India. ISUW 2023 featured 264 presentations/speeches by experts from over 22 countries. The event provided an excellent opportunity for Utility Leaders, Regulators, Government Officials, and Technology Providers to network and share experiences.

Reji Kumar Pillai, President of ISGF and Chairman of the Global Smart Energy Federation (GSEF), welcomed participants to ISUW 2023, and the following luminaries delivered inaugural keynotes: N Venu, Managing Director and CEO of Hitachi Energy; Praveer Sinha, MD and CEO of The Tata Power Company Limited; Richard Schomberg, President of RJS Energy, EDF Fellow, and IEC Ambassador for Smart Energy; Eddie Widiono, Former President of PT PLN and and Founder-Chairman of PJCI, Indonesia; Abel Tella, Director General of Association of Power Utilities of Africa; Mohammed Al Ta'ani, Secretary General of Arab Renewable Energy Commission; Helvio Neves Guerra, Director of Brazilian Electricity Regulatory Agency (ANEEL); Robert Denda, Global CEO of Gridspertise; and Luciano Martini, Chair-Executive Committee of ISGAN. Reena Suri, Executive Director of the ISGF, delivered the Vote of Thanks.



Guests(L-R)- Eddie Widiono, Gerald Salge, Mani Vadari, N Venu, Robert Denda, Abel Tella, Reji Kumar Pillai, Praveer Sinha, Luciano Martini, Helvio Neves Guerra, Richard Schomberg, Reena Suri

Parallel workshops were held with NITI Aayog, USAID, BEE, GIZ, APUEA, US DOC, USIBC, FCDO, and DoT on a variety of topics. There were concurrent sessions on water distribution and city gas distribution. Bilateral Smart Grid workshops were also held with the United States, the European Commission, and Germany to facilitate knowledge sharing, project partnerships, collaboration, and knowledge dissemination.





## **ISUW 2023 Key Themes**



## **ISUW 2023: Program Structure**

28 <sup>th</sup> February 2023 Tuesday	1 <sup>st</sup> March 2023 Wednesday	2 <sup>nd</sup> March 2023 Thursday	3 <sup>rd</sup> March 2023 Friday	4 <sup>th</sup> March 2023 Saturday
Special Workshops & Master Classes	Conference & Exhibition	Conference & Exhibition	Conference, Exhibition and ISGF Innovation Awards	Technical Tours & Cultural Tours
	ISGF INNOVA	TION AWARDS : 03	MARCH 2023	
				8

## **Supporting Ministries**























## ISUW 2023: Glimpses of the Exhibition





















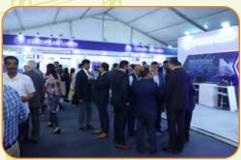












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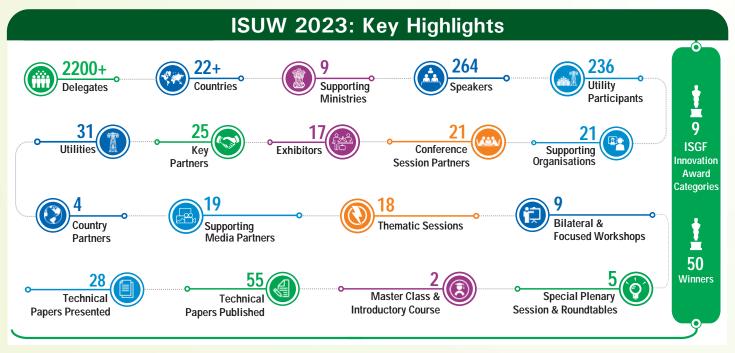






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**Supporting Organisations** 







## **GLIMPSES OF MASTER CLASSES AT ISUW 2023**

## **DAY 1: 28 FEB 2023 (TUESDAY)**

Introductory Course on Transformer Models and Generative Artificial Intelligence Tools OCPP Technical Workshop and Training



Speakers of the Session: Parul Shribatham, Assistant Manager Technical Services, ISGF; Shashi Bala, Business Analyst, ISGF; Nitin Sharma, Assistant Manager Technical Services, ISGF; Reji Pillai, President, ISGF; Pranav Raikote, AI Researcher, Plexflo; Mukesh Kala, Senior RPA Analyst, UiPath MVP; Shubham Bhardwaj, AI Researcher, Walking Tree; Sneha Singhania, Senior Manager, Marketing and Communications, ISGF



Speakers of the Session: Lonneke Driessen-Mutters, Executive Director, Open Charge Alliance; Rama Krishna Singh, Head-EV Business Unit, Tata Power; Jai Prakash Singh, Business Head E- Mobility, Ador Digatron Pvt. Ltd; Girish Ghatikar, Energy Leader, Digital Innovation and Emerging Technologies, General Motors (GM) and Chair of ISGF Working Group

#### Energy Transition to Net Zero Power System – Strategies and Pathways



Speakers of the Session: Stefan Tenbohlen, Head of Institute of Energy Transmission and High Voltage Engineering, University of Stuttgart; Mani Vadari, Founder and President, Modern Grid Solutions; Anant Venkateswaran, Industry professional, ISGF and Hitachi Energy; Andrew Ginter, VP-Industrial Security, Waterfall Security Solutions (Online)

IEC-IEEE Smart Energy Standardization Coordination Workshop (In Collaboration with BIS, ISGF, IEC and IEEE)



Speakers of the Session: Dinesh Chand Sharma, Director Standardization, Policy, SESEI; Ravindra Desai, Global Member IEEE; Richard Schomberg, IEC Ambassador and Chairman, IEC Smart Energy; Phil Beecher, President and CEO, Wi-SUN Alliance; N Murugesan, Former DG, CPRI and Advisor -ISGF





## **GLIMPSES OF CONFERENCE SESSIONS**

## DAY 2: 01 MARCH 2023 (WEDNESDAY)

#### Inauguration of ISUW 2023



Speakers of the Session: Eddie Widiono, Former President PT PLN and Founder-Chairman, PJCI, Indonesia:Decarbonization Initiatives in Indonesia; Robert Denda, Global CEO, gridspertise: Decarbonization initiatives at Enel; Mani Vadari, Founder and President, Modern Grid Solutions; N Venu, Managing Director & CEO, Hitachi Energy: Decarbonization initiatives within Hitachi; Helvio Neves Guerra, Director, Brazilian Electricity Regulatory Agency (ANEEL): Decarbonization initiatives in Latin America; Abel Tella, Director General, Association of Power Utilities of Africa: Decarbonization initiatives in Africa; Reji Kumar Pillai, President, ISGF and Chairman, Global Smart Energy Federation (GSEF); Praveer Sinha, MD & CEO, Tata Power Company Limited: Decarbonization initiatives within the Tata Group; Luciano Martini, Chair-Executive Committee, ISGAN): Decarbonization initiatives in ISGAN Member States; Helvio Neves Guerra, Director, Brazilian Electricity Regulatory Agency (ANEEL); Richard Schomberg, IEC Ambassador and Chairman, IEC Smart Energy Systems Committee and Vice President-EDF: Decarbonization initiatives in Europe; Reena Suri, Executive Director, ISGF

# Theme-A: Session-1: Vision for a Net Zero Power Sector (Session Partner-Hitachi Energy)

Speakers of the Session: Gerhard Salge, Global CTO of Hitachi Energy; Ganesh Srinivasan, CEO, Tata Power-Delhi Distribution Ltd; Richard Schomberg, President, RJSenergy, EDF Fellow; and IEC Ambassador for Smart Energy; Gaurav Bhatiani, Director Energy & Environment, RTI

Theme-A: Session-2: Evolving Architecture of the Net Zero Power Sector



Speakers of the Session: Luciano Martini, Chair-Executive Committee, ISGAN; Mukesh Dadhich, Head-Business Development, Sustainability and Clean Technology, BSES Yamuna Power Limited; Mani Vadari, Founder and President, Modern Grid Solutions; Vida Rozite, Policy Analyst and Project Manager - Digital Demand Driven Electricity Networks Initiative, International Energy Agency; Amitabh Singhal, Power Systems Expert, L&T PT&D - Digital Solutions; Ravi Seethapathy, Chairman- Biosirus & Working Group Chair - ISGF





Theme-E: Session-1: Regulations for the Net Zero Power System



Speakers of the Session: Reji Kumar Pillai, President, ISGF and Chairman, GSEF; Enrique Gutierrez, Project Lead – Regulatory Energy Transition Accelerator, International Energy Agency; Jean-Michael Glachant, Director, Florence School of Regulation; Rahul Tongia, Senior Fellow, CSEP; PK Pujari, Former Chairperson, CERC and Former Secretary, Ministry of Power; RP Singh, Chairman, UP Electricity Regulatory Commission; RN Sen, Former Chairman, WBERC and Christopher Villarreal, President, PluggedIn Strategies, USA

Theme-E: Session-2: Customer Experience in the Digital Age



Speakers of the Session: Anjali Vishwakarma, Executive Engineer, MPPKVVCL; Manoj Salvi, CEO, Tata Power Ajmer Distribution Ltd; Anant Venkateswaran, Advisor, ISGF and Hitachi Energy; Divyesh Kr Sharma, Sr Associate Director-Energy & Utilities, RTI India; Elad Shaviv,Director-Business Development, Israel Electricity Corporation; Akilur Rahman, CTO – India, Hitachi Energy; Sabyasachi Pattanaik, Director, Regulatory Affairs and Market Development, Oracle India

9<sup>th</sup> US - India Smart Grid Workshop (In Collaboration with US DOC and USIBC)



 Speakers of the Session: Sham Chaudhuri, Sales Director - Analytics, Decision Intelligence Solution & Assessment Services, Xylem; Jayant
Amresh, Business Manager – Grid Solutions, Black & Veatch; Nishita Parte, Digital CoE Leader, Veolia; Arindam Maitra, Associate Vice President- Grid Modernization, Larsen & Toubro; Dr. Ganesh Das, Chief Collaboration and Innovation, Tata Power; Suvendra Senapati, Head - Sales & Commercial Services (EMEA & IAPAC Regions); Sandip Sinha, Regional VPSales,
Trilliant Networks India; Rajesh Bansal, former CEO, BSES Rajdhani Power Ltd India; Reji Kumar Pillai, President, ISGF & Chairman, GSEF; Girish Ghatikar, Board of Governors Member and Chair- ISGF Session Special Session on Hydrogen Mission (Lead by NITI Aayog & MNRE)



Speakers of the Session: Chandra Prakash Tiwari, Head-Technology & Process Engineering (Generation), Tata Power Company Ltd; Rajnath Ram, Adviser - Energy, NITI Aayog; Nina Fenton, Head of Regional Representation for South Asia, European Investment Bank and Reji Kumar Plillai, President, ISGF & Chairman, GSEF; KR Jyothilal, Additional Chief Secretary - Energy, Government of Kerala (on Video)





Smart Communications for Smart Utilities and Smart Cities (In Collaboration with DOT, TEC and TSDSI)



Speakers of the Session: Phil Beecher, Chair, Wi-SUN Alliance; Sushil Kumar, DDG (IoT) – TEC, DOT; Yogendra V. Patwardhan, Associate Sales Director, Hitachi Energy; Alex Vikas, ADG, DOT; Andres Carvallo, Texas State University (Online); Jani Vehkalahti, CTO, Wirepas (Online)



Speakers of the Session: Dhermender Singh, ESDS; Rajesh Kapoor, TSDSI; Alex Vikas, ADG, DOT; Bhargav Thakar, Vi (Online); Brejesh Lall, IIT Delhi (Online)

## Welcome Reception and Dinner









WELCOME TO ISUW 2023

Welcome Reception and Memento Distribution to Partners of ISUW 2023

ISUW 2023 WELCOME RECEPTION PARTNER







## **GLIMPSES OF CONFERENCE SESSIONS**

## DAY 3: 02 MARCH 2023 (THURSDAY)

Theme-A: Session-3: Climate Proofing of Future Grids and Advanced Materials for Extreme Weather Events



Speakers of the Session: Stefan Tenbohlen, Head of Institute, Institute of Energy Transmission and High Voltage Engineering, University of Stuttgart; Reji Kumar Pilai, President ISGF & Chairman, GSEF; Arindam Maitra, AVP of Grid Modernization at L&T Power Transmission & Distribution (PT&D), USA; Faizan khan, Founder & CEO, Tensor Dynamics Private Limited; Ravi Seethapathy, Chairman – Biosirus; and WG Chair, India Smart Grid Forum; Michael Potter, Founder, Geeks Without Frontiers and Senior Fellow, International Institute of Space Commerce (Online) Theme-B: Session-1: Vision for A Net Zero Transport Sector in India (In Collaboration with UK Government)



Speakers of the Session: Reji Kumar Pillai, President, ISGF & Chairman, GSEF; Anand Singh, Assistant General Manager, ISGF; Suresh Jain, Professor, IIT-Tirupati and IIT-Delhi; Abhay Bakre, DG, Bureau of Energy Efficiency; Girish Ghatikar, Energy Leader, Digital Innovation and Emerging Technologies, General Motors (GM) and Working Group Chair, ISGF; Jayant Kumar, Global Vice President, L&T PT&D Digital Solutions

#### Theme-C: Session-1: 250 Million Smart Meter Rollout – Progress and Challenges

Session: AMI Rollout under RDSS Program



Speakers of the Session: Manoj Sharma, Executive Director, PFC Ltd; Rene Boeringer, CEO, Cuculus; Sunil Singhvi, Chief Executive Officer -Energy SBU, Secure Meters Ltd; Anil Rawal, Managing Director and Chief Executive Officer, IntelliSmart Infrastructure; Abhijit Grewal, Marketing Director, Silicon Lab; Subrata Das, Head of Oracle Energy and Water, India; Marc Delandre, Chairman, G3-Alliance; Yogesh Kumar, Director-Commercial, MVVNL; Avner Matmor, Founder, President and CEO, Yitran; Phil Beecher, President and CEO, Wi-SUN Alliance

Session: AMI Advanced Applications

Speakers of the Session: Cedric Lavenu, Research Engineer at EDF and Chair of G3-Alliance Technical Working Group; Vijay Panpalia, AVP- Product Engineering, SEW; Ajay Kumar Sharma, Senior Vice President, BSES Rajdhani Power Limited; Saurav Shah, Executive Director, PFC Ltd; Deepti V Dutt, Head - Strategic Initiatives - Public Sector, AWS; Yogesh Valunjkar, CEO, KGreens; Paresh Patel, CEO and President, System Level Solutions; Ramana Rao Elchuri, VP, Sales & Business Development, Cyanconnode; Ashish Sahay, Country Manager and Sales Director, Wirepas





Theme-B: Session-2: 50k Electric Bus Program



Speakers of the Session: Girish Ghatikar, Energy Leader, Digital Innovation and Emerging Technologies, General Motors (GM) and WG; Ashish Kundra, Principal Secretary, Transport, Government of NCT; Prasanna Patwardhan, President, BOCI; Kulwant Singh, Advisor, Bus World Foundation; Nishant Arya, Vice Chairman, JBM; Virendra Goel, Chief-BD EV Charging, Tata Power Company Ltd; Roshan Toshniwal, Association Director, and Head of Centre for Future Mobility, OMI Foundation

Theme-E: Session-3: AI, ML, Robotics and Generative AI Tools for Utilities



Speakers of the Session: Sanjay Prasad, Chief Information Officer, CESC Limited; Pritam Muppuri. Business Development Manager, Public Sector, Amazon Internet Services Pvt Ltd; Anant Venkateswaran, Industry professional, ISGF and Hitachi Energy; Luciano Martini, Chair-Executive Committee, ISGAN; Sumit Gupta, CEO, AssetPlus; Pranav Raikote, Al Researcher, Plexflo; Nitin Tanwar, Founder and CEO, Climate Connect Digital

#### District Cooling System (DCS) (In Collaboration with BEE, GIZ and APUEA)



**Speakers of the Session:** Vikram Murthy, National Chair-Environment Protection and Safety, ISHRAE; Aseem Goyal, Sr. Manager – Business Development, India, Tabreed; Mikael Jakobsson, President, APUEA



Speakers of the Session: Mikael Jakobsson, President, APUEA; Bhaskar Natarajan, Director Programme, AEEE; Arijit Sengupta, Director, BEE; Tarun Katiyar, CEO, Tata Power Trading Company Ltd; Aarti Nain, NIUA Advisor, UNEP India Urban Cooling Program, UNEP; Bhupinder Godara, Professor, Practice, Mechanical Engineering, IIT Delhi





Speakers of the Session: Jemma Green, Founder and CEO, Powerledger; MAKP Singh, Member, CEA; Rahul Sethi, Founder & Metaverse Coach, Metaverse911; Reena Suri, Executive Director, ISGF; Hemalatha Bhaskar, Blockchain Business Development Lead - Public Sector India, AWS; Sombuddha Chaudhary, Head-D&IT, Tata Power Delhi Distribution Ltd; Santosh K Mishra, Partner, PWC (Online)





12th EU - India Smart Grid Workshop in Collaboration with European Union

Inaugural Session and Session on Curtain Raiser of Smart Grid Observatory Session on EU – India Smart Grid Demonstration Projects



Speakers of the Session: Atul Bali, Director, National Smart Grid Mission; Jean-Michel Glachant, Principal Advisor, FSR Global, Florence School of Regulation; Matthieu Craye, International Relations Officer, DG ENER, European Commission; Swetha Ravi Kumar, Head of FSR Global, Florence School of Regulation



Speakers of the Session: Thomas N. Mikkelsen, Bridge - Head of Joint Communication Task Force; Pierre-Jacques le Quellec, Senior Project Coordinator, Enedis; Ganesh Das, Chief - Collaboration and Innovation, Tata Power Company Ltd; Ramit Debnath, Fellow, Cambridge University; Sunil Sharma, DGM Sustainability and Cleantech, BSES Yamuna Power Ltd; Zakir Hussain Rather, IIT-Bombay

#### Session on Flexibility Through Smart Grids and Key Takeaways and Next Steps



Speakers of the Session: Ishant Purohit, Energy Specialist, IFC; Swetha Ravi Kumar, Head of FSR Global, Florence School of Regulation; Patrick Clerens, European Association for Storage of Energy (EASE); Ravi Kadam, CERC; Ganesh Das, Chief - Collaboration & Innovation, Tata Power; Bernhard Voelcker, Project Manager, GIZ; Edwin Koekkoek, First Counsellor Energy and Climate Delegation of EU to India





2<sup>nd</sup> Germany - India Smart Grid Workshop (In Collaboration with GIZ)



Speakers of the Session: Abhinav Bhatnagar, Manager, Secure Meters; Gautam Kumar, CTO, Intellismart; Ganesh Das, Chief - Collaboration & Innovation, Tata Power Company Ltd; Sharanbir Bal, Associate, Vice President, Accenture; Rahul Dwivedi, CEO-RECPDCL and ED-REC Ltd; Arvind Gujaral, Managing Director - India Business, Bidgely; Sunil Kumar Sharma, Project Manager, GIZ

Theme-E: Session-5: Energy Positive Buildings and Campuses (In Collaboration with GBCI)



Speakers of the Session:Mili Majumdar, Managing Director, GBCI; Vikram Murthy, National Chair-Environment Protection and Safety, ISHRAE; Tanmay Tathagat, Director, EDS Global, (Executing Net-Zero / Grid Interactive Buildings & Campuses); OD Naidu, Sr Principal Engineer-R&D, Hitachi; Aun Abdullah,Head ESG, Lodha Group; Amit Jain, Head-ESCO, Tata Power Trading Company Ltd; Amit Chadha, Lead, Schneider Electric India; Rashi Gupta, Founder and CEO, Vision Mechatronics Pvt Ltd

#### Theme-E: Session-7: Policies and Regulations to Promote Digital Management of Rooftop PV (In Collaboration with IEA)





Speakers of the Session: Vida Rozite, Policy Analyst and Project Manager - Digital Demand Driven Electricity Networks Initiative, International Energy Agency; Reji Kumar Pillai, President, ISGF and Chairman, GSEF; Anil Rawal, MD & CEO at Intellismart Infra Pvt Ltd.; Astha Gupta, Lead India Analyst and Coordinator, International Energy Agency; SC Saxena, Executive Director, Grid Controller of India Limited; BB Mehta, Director (SLDC), Odisha Power Transmission Corporation Ltd; Rahul Chandra, Head of Gridspertise India; Shivani Sharma, Principal Technical Consultant, Power Consulting, Hitachi Energy; Shivaram Bikkina, Chief-Rooftop and C&I, Tata Power Renewable Energy Ltd; Bhalchandra Gawai, Executive Engineer, MSEDCL; Tirthankar Mandal, Head, Energy Policy, WRI India; Vijay, Bescom; Ramesh. V. Dethe MSEDCL; Mridul Chada, Bridge to India; Santosh Kumar, BESCOM; Sanjay Verma, MGVCL; Helvio Neves Guerra, Director, Brazilian Electricity Regulatory Agency (ANEEL); Davi Rabelo Viana Leite, Regulation Specialist, Brazilian Electricity Regulatory Agency (ANEEL); Jaiane Batista Alves Padilha, Brazilian Electricity Regulatory Agency (ANEEL); Jean-Michel Glachant, Principal Advisor FSR Global-Florence School of Regulation; Murali Baggu, Laboratory Program Manager - Grid Integration Energy Systems Integration NREL; Alvaro Lopez- Peńa, International Consultant on Clean Energy Transitions; Luciano Martini, Executive Committee Chair, ISGAN; Chris Martell, Managing Director of GSES and Task Manager of Photovoltaic Power Systems (PVPS) Program, Task 18 on Off-Grid and Edge-of-Grid Photovoltaic Systems





Cross-Border Electricity Trade in the South Asian Region (In collaboration with the EU)



Speakers of the Session: V K Agarwal, Senior Advisor, SAREP; Isabelle
Gerkens, Head Regulation & Market, Elia Grid International; SK Soonee,
Former CEO Grid India; Rohit Bajaj, Head Business Development,
Regulatory Affairs & Strategy, IEX; Swetha Ravi Kumar, Head of FSR
Global, Florence School of Regulation; Jean-Michel Glachant, Principal
Advisor, FSR Global; Kapil Dev, Head of New Energy Markets

#### Smart Water Distribution (In Collaboration with CBIP)

Inaugural Session and Session on National Mission for Clean Ganga (NMCG)



Speakers of the Session: Kamal Verma, Chief Executive Officer - Water Business Group, Triveni Engineering & Industries Ltd; Sourav Daspatnaik, Managing Director, Swach Environment Private Limited; AK Dinkar, Secretary, CBIP; S.N. Tripathi, Regional Executive Director (Hydro) & Executive Director (Project Management), NTPC Limited; Rajneesh Chopra, Global Head – Business Development, VA Tech WABAG Limited

Session on Monitoring of Water Standard / Service Delivery Under Har Ghar Jal Scheme



Speakers of the Session: Abha Sargaonkar, Sr Principal Scientist, NEERI; Pradeep Singh, Director (JJM-IV) Department of Drinking Water and Sanitation, Ministry of Jal Shakti, Government of India; Amit Kumar, Executive Engineer, UP Jal Nigam (Urban); SN Tripathi, Regional Executive Director (Hydro) & Executive Director (Project management), NTPC Limited; Saiba Gupta, Research Analyst, Council on Energy Environment and Water (CEEW)





Speakers of the Session: Abha Sargaonkar, Sr Principal Scientist, NEERI; Anand Subramanian, Regional Vice President - Middle East and Africa, SEW; Anshuman, Associate Director, Water Resources, TERI; Baban Kumar, Sr. Principal Scientist, CSIR-CSIO





#### Special Plenary 2: Architecture and Energy Systems for Colonizing the Moon and the Mars



Speakers of the Session: Reji Pillai, President, ISGF and Chairman, GSEF; Michael Potter, Founder, Geeks Without Frontiers and Senior Fellow, International Institute of Space Commerce (Online); Samer El Sayary, Architect and Researcher on Outer Space Architecture (Online); Madhu Thangavel, Professor, University of Southern California (Online)

## **GLIMPSES OF CONFERENCE SESSIONS**

## DAY 4: 03 MARCH 2023 (FRIDAY)

THEME-B: Session-3: Evolving Trends in Electric Mobility -Green Mobility, Grid Integrated Vehicles (GIV), Autonomous Ground Vehicles (AGV) THEME-C: Session-2: Digitalization of Utilities, Digital Twins and Digitalization Roadmaps



Speakers of the Session: Girish Ghatikar, Energy Leader, Digital Innovation and Emerging Technologies, General Motors (GM); George Hunt, Chief Strategy Officer (CSO), SEW; Arindam Maitra, AVP of Grid Modernization, L&T Power Transmission and Distribution (PT&D); Murli Baggu, Laboratory Program Manager, NREL; Suddhasatta Kundu, Senior Manager, Energy & Utilities, RTI India



Speakers of the Session: S Samanta, Chief-D&IT (T&D), Tata Power Company Ltd; Elad Shaviv, Director-Business Development, Israel Electricity Company; Jayant Kumar, Vice President & business head, Digital Energy Solutions; Richard Schomberg, IEC Ambassador and Chairman, IEC Smart Energy Systems; Rajgopal Gohar, Business Head and Executive, SEW; Sainath Bandhakavi, Sr. Specialist Solutions Architect - Power & Utilities, AWS; Vinit Mishra, Technology Consulting Power and Utility, E&Y; Jagdish Chitre, CEO, KIGG Systems India Pvt Ltd



**THEME-D: Session-1: Electric Highways** 





Speakers of the Session: Girish Ghatikar, Energy Leader, Digital Innovation and Emerging Technologies, General Motors (GM) and Working Group Chair, ISGF; Nilesh Kane, Chief-Mumbai Distribution, Tata Power Company Ltd; Anant Venkateswaran, Advisor, ISGF and Hitachi Energy; N Mohan, CEO, Transport Department, Govt of Delhi

Theme-C: Session-3: Power System Flexibility -Strategy and Solutions



Speakers of the Session: KVS Baba, Former CMD, POSOCO; Shivani Sharma, Principal Technical Consultant, Power Consulting, Hitachi Energy; SR Pandey, Member Gujarat Electricity Regulatory Commission; Ravi Seethapathy, Chairman – Biosirus; and Working Group Chair, India Smart Grid Forum; P Devanand, Chief-PSSC & Technical Services, Tata Power Co Ltd; Patrick Clerens, Secretary General, European Association for Storage of Energy; Munish Sharma, Team Lead-ESG & Sustainability, BSES Rajdhani Power Ltd; BB Mehta, Director, GRIDCO, Odisha; Jayant Kumar, Global Vice President, L&T PT&D-Digital Solutions; Mohammed Al Taani. Secretary General, Arab Renewable Energy Commission ARECP



Theme-D: Session-2: MW-Scale Charging Systems for EVS, Trucks and Buses, Boats, Planes and Mining Machinery

Speakers of the Session: Anand Singh, AGM, India Smart Grid Forum; Manoj Gupta, Exec. Vice President, JBM Group; AK Jain, Chair of ETD-51, BIS; Max Goeldi, Vice President and Market Manager, HPC; Jai Prakash Singh, Business Head E- Mobility, Ador Digatron Pvt. Ltd

#### Theme-E: Session-6: Carbon Markets (in Collaboration with IEX)



Speakers of the Session: Manoj Kumar Singh, Founder, Net Zero Think; Gaurav Bhatiani, Director Energy & Environment, RTI;Murali Baggu, Laboratory Program Manager – Grid, Integration Energy Systems Integration NREL; Indranil Chatterjee, VP, IEX; Vishal Vij, Head-Renewables and New Business Solutions Tata Power; Arindam Maitra, AVP of Grid Modernization at L&T Power Transmission & Distribution (PT&D)





#### Interconnection of Regional Grids in Asia – South Asia Grid, GCC Grid, ASEAN Grid (In Collaboration with EU, USAID, ISA)

Session: Envisioning Trans-Regional Energy Connectivity between the South Asia Region – Southeast Asia Region – Gulf Region - Prospects and Opportunities Session: Development of Power Market for Regional and Inter Regional Power Trade



Speakers of the Session: Rajesh Kumar, Sr. GM, Power Grid Corporation of India Ltd; Durga Nanda Bariyait, Senior Director, Transmission Directorate, Nepal Electricity Authority (NEA), Nepal; Abdur Rashid Khan, Project Director (Chief Engineer), Power Grid Company of Bangladesh (PGCB), Bangladesh; V K Agarwal, Ex- ED, POSOCO, SAREP Theme Presentation: Rajiv Ratna Panda, Power Market Specialist, SAREP; Sonam Tobjey, CEO, Bhutan Power Corporation, Royal Government of Bhutan; Pankaj Khurana, Program Specialist, ISA



Speakers of the Session: Namrata Mukherjee, Deputy Chief of Party (Trade &Investments), SAREP; Kapil Dev, MD, New Age Markets in Electricity; Nima Tshering, Interim CEO, Bhutan Electricity Authority; Dilli Bahadur Singh, Chairman, Energy Regulatory Commission, Nepal; Ravi Seethapathy, Chairman – Biosirus; and Working Group Chair, India Smart Grid Forum; SS Barpanda, Director – Market Operations, Grid Controller of India; Swetha Ravi Kumar, Head of FSR Global, Florence School of Regulation; Eddie Widiono, Former President, PT PLN

#### Presentation of Select Technical Papers



Speakers of the Session: Devika Jay, GRIDsentry Pvt Ltd: A Framework for VAPT services in Digital Substations; Mukesh Gulabsinh Gadhvi, SLDC GETCO Gujarat: Situational Awareness of Grid using Wide Area Monitoring and Analytics based on WAMS-GETCO Project; Ravi Sahu and Asish Mhatre, TATA Power Co Ltd: Monitoring of Remote SS through Robotics, Augmented Reality and Artificial Intelligence; Ganesh Murlidhar Mane, TP Western Odisha Distribution Limited: RDS (Rural Digital Substation); Mousam Datta, CESC LTD: Drone based surveillance of Overhead LT Network; Pratik Bajaria, SCOPE T&M Pvt Ltd: Power Demand/Load Forecasting Using Artificial intelligent and Machine learning for power utilities; M.L. Sachdeva, Former CEA: Wearable Devices; Chintamani Chitnis and Rabindranath Tripathy, TP Central Odisha Distribution Ltd (TPCODL): Centralized & Decentralized Approach for Safe, Reliable Power Supply using IT-OT; Manan Pathak, Aditya Silver Oak Institute of Technology, Silver Oak University: Feasibility Study for Implementing Smart Interactive Street Lightning under Smart City Concept; Brijesh Singh, KIET Group of Institution: Design And Development of Grid-Tied Off-Board Intelligent Charging Station; Bollapragada Venkata Ratnam, Bio Electrical & Energy Systems: Framework and Govt. policy for retrofitting existing petrol / diesel vehicles ~ a case study; Suvetha Poyyamani Sunddararaj, M. Kumarasamy College of Engineering; Solar Powered Smart Switching Multilevel Inverter for Smart Grid; Pierre-Jacques Le Quellec, Enedis: IElectrix Project - Results and lessons learned from the Indian demonstration in Delhi; Raman Garg, REC Ltd: Leveraging Data in Power Distribution; Robins Anto, IIT Roorkee: Demand-side flexibility as a demand response mechanism – Review; Manas Kundu, Asia Power Quality Initiative: Power Quality Monitoring & Analysis for Optimized Quality Power Delivery; Harsh Raj, Noida Power Company Limited: Inhouse Robotic process automation (RPA); Purnima M Gupta, Former Economic Advisor, Central Electricity Authority: Smart Energy Communities; Harsha V Rao, Council on Energy, Environment, and Water (CEEW): Regulations to enhance distribution level flexibility for renewable energy integration; Shivali Dwivedi, RTI International: Exploring Virtual Power Purchase Agreements (VPPA) for increasing RE penetration in C&I segment of India; Diggamber Singh, ABB India Limited: Digital technologies transforming the City Gas Distribution value chain from source to consumer; Rashed Mohamed AI Mazrooei, Abu Dhabi Distribution Company (ADDC): Innovative smart water metering in a multi-utility environment; Subhajyoti Majumder and Kumar Mayank, Cognizant Technology Solutions Pvt. Ltd.: Smart Solutions for Strengthening Drinking Water Supply Value Chain





Special Session on LiFE and Relevance of Gender (In collaboration with USAID's SAREP Program)



Speakers of the Session: Reena Suri, Executive Director, ISGF; Ritu Gupta, Financial Controller at Tata Power Delhi Distribution Limited; Farah Ahmed, WS1-Lead SAREP; Garima Garg, Senior Vice President Renew Power; Prachi Kaul, Director - India, Indo-Canadian Institute; Krithika PR, Manager Energy RTI; Bhumika Suri, Training and Events Specialist, USAID-SAREP, RTI International



Speakers of the Session: Rakesh K Goyal, COP SAREP; Krithika PR, Manager Energy RTI; Ritu Gupta, Financial Controller at Tata Power Delhi Distribution Limited; Vida Rozite, Policy Analyst and Project Manager, International Energy Agency ; Prachi Kaul, Director - India, Indo-Canadian Institute

#### Smart City Gas Distribution (In Collaboration with NGS)

Inaugural Session and Session on Pricing Freedom for Natural Gas in India



Speakers of the Session: Kapil Jain, Chief Operating Officer, GAIL Gas; Kamil Bhullar, Research Officer, Energy, Niti Aayog; Kirit Parikh, Chairman, IRADe; DV Shastry, Executive Director, NGS; Deepak Mehta, Head-Business Development, IGX

Session: India's Target to have 15% Gas in Its Energy Mix by 2030



Speakers of the Session: AK Tiwari, Former ED (Pipelines), IOCL; Vipin Chittoda, Senior Consultant, NGS; Anand Subramanian, Regional Vice President, SEW; Rajeev Kumar, Head & Marketing and O&M, IGL

Session: New Regulations to Accelerate Natural Gas Infrastructure



Speakers of the Session: KK Jha, Ex Member, PNGRB & Ex Director, Pipeline IOC; Raman Srivastava, Vice President, Regulatory, Corporate Affairs and Risk Management, IGL; R Kannan, DGM (Mktg-RA), GAIL (India) Limited; Aashima Chaney, Senior Manager, ISGF; Neeraj Pasricha, Vice President, Pipeline Infrastructure Limited





## GALA DINNER AND CULTURAL PROGRAMS



## **ISUW 2023 GLIMPSES OF TECHNICAL TOURS**

## DAY 4: 05 March 2023 (SATURDAY)





Tour 1: Northern Regional Load Despatch Centre, New Delhi



Tour 1: TPDDL LAB and 10 MW BESS, New Delhi



Tour 2: 800 kV HVDC Station, Powergrid, Agra









## **ISGF INNOVATION AWARDS 2023**

Best Smart Grid Project in India -Technology Company/Implementing Agency



Hitachi Energy Technology Services Pvt. Ltd. Economical and accurate multi-ended fault locator for power network outage management: Innovative digital solution to keep lives lit PLATINUM AWARD

Best Smart Grid Project in India -Technology Company/Implementing Agency



Smart Energy Water and IntelliSmart Infrastructure Private Limited Powering India with Bharat eSmartMeter App: Naye Bharat Ki Nayi Urja GOLD AWARD

#### Most Innovative Renewable Energy Programs/Projects in India - Solar (Utility Scale)



Post Graduate Government College For Girls The Net Zero Energy Building With Carbon Credits For Sustainable Future: A Case Study In Chandigarh GOLD AWARD

#### Most Innovative Renewable Energy Programs/Projects in India - Solar (Utility Scale)



Madhya Gujarat Vij Company Limited Achievement in Installation of Grid Connected Rooftop Solar Projects under MGVCL GOLD AWARD

#### Most Innovative Renewable Energy Programs/Projects in India - Solar (Utility Scale)



Damodar Valley Corporation Development of Hybrid Microgrid for Stable and Secure Operation of Interconnected power distribution GOLD AWARD

Smart Technology - Electricity

Generation

Most Innovative Renewable Energy Programs/Projects in India - Wind (Utility Scale)



Leap Green Energy Private Limited Advance Analytics and Monitoring Systems in Wind Park DIAMOND AWARD

#### Smart Technology - Electricity Generation



Dr OGKs Renewable Energy Innovations Rooftop Wind Energy Generator Having Radial Flux Multiple Generator Stators with Self Excited Rotor PLATINUM AWARD



CESC Limited (Budge Budge Generation Station) Efficiency Based Online Load Prediction Module GOLD AWARD

Smart Technology - Electricity Transmission



State Load Despatch Center, Odisha Power Transmission Corporation Limited (OPTCL) A smart utility in power transmission of Odisha ensuring integrated operation of power system. PLATINUM AWARD





#### Smart Technology - Electricity Transmission



State Load Despatch Center, Gujarat Energy Transmission Corporation Limited Wide Area Monitoring System (WAMS) using Phasor Measurement Unit (PMU) data & its Analytics for the power system of Gujarat PLATINUM AWARD

## Smart Technology - Electricity Transmission



Tata Consultancy Services Limited Artificial Intelligence Powered Control and Management of Power Networks GOLD AWARD

## Smart Technology - Electricity Distribution



Tamilnadu Generation and Distribution Corporation Limited Implementation Of AMR for Renewable Generators In TANGEDCO DIAMOND AWARD

#### Smart Technology - Electricity Distribution

### Smart Technology - Electricity Distribution

#### Smart Technology - Electricity Distribution



Tata Power Delhi Distribution Limited Co-extruded Power Cable (CCD Cable) DIAMOND AWARD



Indian Institute of Technology Gandhinagar SMART AGENT: A Universal IoT-based Smart Energy Management Device PLATINUM AWARD



Noida Power Company Limited Low-Cost LT Feeder Pillar Outage Monitoring System PLATINUM AWARD

## Smart Technology - Electricity Distribution



Fr. C.Rodrigues Institute of Technology Transformer-Less Inverter with improved gain suitable for Photovoltaic-Grid Interface GOLD AWARD





Tata Power Central Odisha Distribution Limited HT Line Voltage Regulator Transformer -Economical solution to improve voltages in remote areas GOLD AWARD

## Smart Technology - Electricity Distribution



Tata Power Central Odisha Distribution Limited Mobile Substation For Rural Remote Areas GOLD AWARD



#### **Smart Technology - Electricity** Distribution



Tata Power Western Odisha Distribution Limited **Rural Digital Substation GOLD AWARD** 

## Smart Technology - Energy Storage **Systems**



Semco Infratech Private Limited Best Battery Technology Solution Provider of the Year **GOLD AWARD** 



### **Smart Technology - Smart Gas** Distribution



Mahanagar Gas Limited and Asset Plus Consulting Self-metering improvement with AI enabled meter reading for Mahanagar Gas Limited (MGL) Mumbai

GOLD AWARD

**Smart Technology - Smart Water** Distribution

**Smart Technology - Smart Water** Distribution

**Emerging Innovation in Electric Mobility Domain - EV and EVSE** Rollouts



Aumsat Technologies LLP Water leaks detection, tracking, estimation, and remediation by novel non-invasive techniques for smart water management. **DIAMOND AWARD** 



PSG College of Technology Internet of Things (IoT) based Smart Water Supply and Distribution System for Coimbatore City **DIAMOND AWARD** 



Kerala State Electricity Board Limited Innovative Pole Mounted Chargers makes e-mobility accessible to commoners & scaling up DC Fast Chargers making Kerala EV-ready DIAMOND AWARD

#### **Emerging Innovation in Electric Mobility Domain - EV and EVSE Rollouts**



Maharashtra State Electricity Distribution **Company Limited** MSEDCL's EV Initiatives **GOLD AWARD** 

Mobility Domain - EV and Charging **Technology/Solution Providers** 

**Emerging Innovation in Electric** 

**Emerging Innovation in Electric** Mobility Domain - EV and Charging **Technology/Solution Providers** 



The Tata Power Company Limited Smart compact EV Charging infrastructure design project - PSS near charger GOLD AWARD



The Tata Power Company Limited End-to-end EV Charging Solutions across India covering 490+ cities & towns **GOLD AWARD** 





Emerging Innovation in Electric Mobility Domain - Smart Innovations in Smart Charging Infrastructure (including Smart Business Models)



BSES Yamuna Power Limited Smart Managed Charging Station GOLD AWARD

Adoption of Disruptive Technology/ Solution - Utility Adoption of Disruptive Technology/ Solution - Utility



Powergrid Corporation of India Limited Automatic identification and preparation of defect reports from tower photos captured during transmission line inspection using Artificial Intelligence DIAMOND AWARD



Noida Power Company Limited AI Learning-Based Theft Detection & Landbase Digitization Using Drone Orthomosaic Imagery PLATINUM AWARD

Adoption of Disruptive Technology/ Solution - Utility Adoption of Disruptive Technology/ Solution - Utility Adoption of Disruptive Technology/ Solution - Utility



Algo8 Al Private Limited Improve the quality of Generation-forecasting using Artificial Intelligence by improving quality of input data PLATINUM AWARD



The Tata Power Company Limited Robotic Process Automation for utility processes GOLD AWARD



Tata Power Delhi Distribution Limited Meter Anomaly detection using Image Analytics GOLD AWARD

## Adoption of Disruptive Technology/ Solution - Industry



Climate Connect Digital Adoption of Artificial Intelligence & Machine Learning for Renewable Generation Forecasting PLATINUM AWARD

## Smart Incubator of the Year



Foundation For Innovation & Research in Science & Technology A Deep Tech incubator working towards innovation and sustainability DIAMOND AWARD

Smart Incubator of the Year



Maker Village Maker Village, ESDM project catalysed by Ministry of Electronics and Information Technology, Government of India supported by Government of Kerala, Kerala Digital University, Kerala Startup Mission PLATINUM AWARD





Best Business Growth and Innovation Best Business Growth and Innovation amongst previous years ISGF **Innovation Award Winners** 

amongst previous years ISGF **Innovation Award Winners** 

India

**SMART UTILITY** Week 2023



VJTI Technology Business Incubator VJTI - TBI A technology-focused incubator that supports start-ups developing novel and impactful products/services. **GOLD AWARD** 



Grid Controller of India Limited Implementation of National Open Access Registry (NOAR) for Pan India Administration of Short Term Electricity Market **DIAMOND AWARD** 



Zypp Electric India's largest Tech Enabled EV-as-a-Service platform PLATINUM AWARD

ISGF President's Award for the Best Contribution towards Promotion of Clean Energy and Grid Modernization



BP Singh, Former Member, Delhi Electricity Regulatory Commission



Ravi Seethapathy, Executive Chairman, Biosirus inc. Canada and the Global Smart Energy Federation (GSEF) Ambassador for Americas

## **CERTIFICATE OF MERIT**

Best Smart Grid Project in India -Utility



Powerthon Team (JVVNL, Asset Plus Consulting<sup>®</sup>, AWS, REC, SINE) Smart Meter data modelling using AI/ML driving AT&C Loss Reduction for JVVNL at Bayana, Bharatpur



**Smart Technology - Electricity** 

Transmission

SCOPE T&M Private Limited Real Time Feeder Monitoring



Smart Technology - Electricity

The Tata Power Company Limited Monitoring of remote S/S through Robotics, Augmented Reality and Artificial Intelligence





## **Smart Technology - Electricity** Distribution



**Tata Power Central Odisha Distribution** Limited Rebar Lacing Pole suspension/tangent type structure

## **Emerging Innovation in Electric Mobility Domain - Electric** Vehicle (2/3/4 Wheelers and **Public Transportation**)



**Baroda Electric Meters Limited** Worldwide First Solar Bicycle Rollout - Disruptive Innovation in Electric Mobility



**Adoption of Disruptive** 

**Technology/Solution - Utility** 

**CESC Limited** CESC-AASTHA(TM) - The Multi-Lingual Intelligent Digital Voice Assistant Enhancing Consumer Interaction & Experience

## **5B Adoption of Disruptive Technology/Solution - Industry**

6A Smart Start-up of the Year

8A Best Business Growth and Innovation amongst previous years ISGF Innovation Award Winners



Indraprastha Gas Limited and Asset Plus **Consulting**<sup>®</sup>

Al based audit and inspection of meter reading inaccuracies for Indraprastha Gas Limited (IGL)



**Radius Synergies International Pvt Ltd** Seamless Transition from Single Point to Multipoint Prepaid Electricity Distribution Model as mandated by UPERC



Husk Power Systems Scaling rural utilities and powering prosperity with frugal innovation

## **ISGF TEAM**







## Join ISGF Online Training Programs





Register Now at : https://indiasmartgrid.org/online-trainings-program

For Queries, Please write to : Team@indiasmartgrid.org





# Announcing Distribution Utility Meet (DUM) 2023 in Kochi, Kerala from 02 - 03 November 2023



## Announcing India Smart Utility Week (ISUW) 2024 in New Delhi from 12 - 16 March 2024

SMART UTILITY Week 2024 12 - 16 March 2024 Q New Delhi			10th Edition of India Smart Utility Week, An International Conference and Exhibition on Smart Energy and Smart Mobilit	
<b>11</b>			isuw@isuw.in	@www.isuw.in
12 March 2024 Tuesday	13 March 2024 Wednesday	14 March 2024 Thursday	15 March 2024 Friday	16 March 2024 Saturday
Special Workshops	Conference and Exhibition	Conference and Exhibition	Conference and Exhibition	Technical Tours, Demonstration and Cultural Tours
1		ATION AWARDS : 15	MARCH 2024	Cultural lours