



# India SMART UTILITY Week 2024

12-16 March 2024 | Hotel Lalit, New Delhi

[www.isuw.in](http://www.isuw.in)

10<sup>th</sup> International Conference and Exhibition on  
Smart Energy and Smart Mobility



## ISUW 2024 Post Event Report

Organiser

**ISGF**  
India Smart Grid Forum

### Supporting Ministries

MINISTRY OF POWER  
GOVERNMENT OF INDIA

MINISTRY OF NEW AND  
RENEWABLE ENERGY  
GOVERNMENT OF INDIA

नीति आयोग  
National Institute for Transforming India

CENTRAL ELECTRICITY AUTHORITY  
MINISTRY OF POWER  
GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI  
DEPARTMENT OF WATER RESOURCES,  
RIVER DEVELOPMENT & GANGLA REJUVENATION  
GOVERNMENT OF INDIA

MINISTRY OF ELECTRONICS &  
INFORMATION TECHNOLOGY  
GOVERNMENT OF INDIA

MINISTRY OF HEAVY INDUSTRIES  
GOVERNMENT OF INDIA

TATA  
POWER

TATA POWER-DDL  
Towards a Greener Tomorrow

BSES  
BSES Yamuna Power Limited

BSES  
BSES Rajdhani Power Limited

DELHI ELECTRICITY BOARD  
GOVERNMENT OF INDIA

# Celebrating 10 Years of India Smart Utility Week (ISUW): The Tenth Anniversary Edition of ISUW 2024, an International Conference and Exhibition held in New Delhi with Experts Participants from Thirty-Five Countries



*Speakers (L-R): Reji Kumar Pillai, President, ISGF and Chairman, Global Smart Energy Federation (GSEF); Sandeep Zanzaria, MD and CEO, GE T&D India Ltd; Richard Schomberg, IEC Ambassador on Smart Energy; Sudeep Jain, Additional Secretary, MNRE; H.E Hervé Delphin, Ambassador of European Union to India; Ghanshyam Prasad, Chairman, Central Electricity Authority; H.E Jan Thesleff, Ambassador of Sweden to India, Sri Lanka, Bhutan, Nepal and Maldives; H.E Philipp Ackermann, Ambassador of Germany to India; Siva Gunda, Commissioner and Vice Chair, California Energy Commission; N Venu, Managing Director and CEO, India and South Asia Region, Hitachi Energy; Deepak Garg, Founder, Chairman and CEO, Smart Energy Water; Reena Suri, Executive Director, ISGF*

The 10th edition of ISGF's flagship annual event, the **India Smart Utility Week (ISUW) 2024**, an International Conference and Exhibition on Smart Energy and Smart Mobility was held from 12 – 16 March 2024 in New Delhi, India. ISUW 2024 has witnessed participation of visionary leaders, utility CEOs, regulators, policy makers and subject matter experts from 25+ countries. From the overwhelming feedbacks we received, ISUW 2024 was an astounding success attended by 2000+ Delegates including 200+ utility officials from 32 Utilities from India and overseas and 241 eminent speakers shared their knowledge and ideas.

ISUW 2024 provided an effective platform for interactions during sessions on varied themes such as Digitalization of Utilities, Digitalization Roadmaps, Digital Twins; Emerging Technologies for Utilities (in collaboration with Department of Science and Technology); Global Lessons on Smart Metering (in collaboration with REC, IntelliSmart, PFC and USAID/SAREP); Energy Positive Smart Buildings and Campuses (in collaboration with USAID/SAREP); Virtual Power Plants (VPPs) and Power System Flexibility; The Cooling Challenge – Cooling as a Service against Monthly Fee through District Cooling Systems (DCS) (in collaboration with BEE and GIZ, Germany); Climate Resilience of Future Grids (in collaboration with Coalition for Disaster Resistant Infrastructure); Nuclear Renaissance and the Role of SMR in Net Zero Power Systems; Super Grids for Energy Transition and

Energy Security: Cross Border Electricity Trade in South Asia and Interconnection of Regional Grids in Asia (in collaboration with GO15, USAID and Hitachi Energy); Long Duration Energy Storage Systems (LDES); Policy and Regulatory Support for Fast Tracking the Transition to Net Zero Power Systems; Evolving Trends in Electric Mobility; Digital Tools for DER Management; Smart Utilities Integration - Electricity + City Gas + Water; Power Markets and Carbon Markets (In Collaboration with CERC, BEE and IEX); Evolving Trends in Utility Automation (In Collaboration with C-DAC)

Special workshops on emerging innovative technologies were also held as part of ISUW 2024 such as: Workshop on Immersive Technologies – Augmented Reality, Virtual Reality, Mixed Reality, Assisted Reality, Metaverse etc; OCPP Technical Workshop and Training; 8th IEC - IEEE Smart Energy Standardization Coordination Workshop were part of ISUW 2024. Master Class on Energy Transition Strategies and Pathways to Net Zero Power Systems was conducted with experts with USA and Canada.

Bilateral Workshops at ISUW 2024 included: 13th EU - India Smart Energy Workshop (in Collaboration with European Union); 10th US – India Smart Energy Workshop on with the themes of Resource Adequacy Planning for Net Zero Power Systems and Energy Storage Systems (in collaboration with US Dept of Commerce, USAID and CSIS); 1st India - Brazil Smart Energy Workshop (in collaboration with LATAM Smart Grid Forum and India-Brazil Chamber of Commerce) on the themes of T&D Loss Reduction and Biofuels; 3rd India - Germany Smart Energy Workshop (in collaboration with GIZ) on the theme of Demand Response; Workshop on Innovative Technologies for Energy Transition (in collaboration with the UK Government).

The event also witnessed a special plenary session on "The Short List of Climate Actions that will Work" delivered by Michael Barnard, Founder of "The Future is Electric".

25 Technical Papers were presented at ISUW 2024 which were selected through Call for Technical Papers. Two Technical Tours were part of ISUW 2024 - Tour-1 covered National Load Dispatch Centre (NLDC), Renewable Energy Management Centre (REMC) and Tata Power's Smart Grid Lab and 10 MW Battery Energy Storage System (BESS); and Tour 2 covered the 800 kV HVDC terminal station in Agra.

This year 8th ISGF Innovation Awards were conferred on 41 outstanding innovations and individuals under 11 categories out of 260 nominations received. These awards are given to recognize and promote some of the outstanding innovations by utilities, technology providers start-ups and visionary leaders.

ISUW 2024 Conference and Exhibition was inaugurated on 13 March 2024. The Inaugural ceremony witnessed special addresses by Luciano Martini, Chair, International Smart Grid Action Network (ISGAN); Richard Schomberg, IEC Ambassador on Smart Energy; N Venu, Managing Director and CEO, India and South Asia Region, Hitachi Energy; Deepak Garg, Founder, Chairman and CEO, Smart Energy Water; Sandeep Zanzaria, MD and CEO, GE T&D India Ltd; Siva Gunda, Commissioner and Vice Chair, California Energy Commission; H.E.Philipp Ackermann, Ambassador of Germany to India; H.E.Jan Thesleff, Ambassador of Sweden to India, Sri Lanka, Bhutan, Nepal and Maldives; H.E.Hervé Delphin, Ambassador of European Union to India; and Sudeep Jain, Additional Secretary, MNRE. The inaugural address was delivered by Ghanshyam Prasad, Chairman, Central Electricity Authority. Welcome Address was delivered by Reji Kumar Pillai, President, ISGF and Chairman, Global Smart Energy Federation (GSEF) and Vote of Thanks was delivered by Reena Suri, Executive Director, ISGF.

ISUW 2024 conference provided ample opportunities for delegates to engage in intellectually stimulating interactions with other speakers and attendees. ISUW 2024 offered an excellent platform for utility and government officials, regulators, and experts from technology companies and academia for networking and experience sharing with their peers from around the globe. Most Indian utilities, regulatory commissions and government departments participated in the discussions on the latest developments, trends and technologies. The event was supported by Ministries of Power; New and Renewable Energy, NITI Aayog; Jal Shakti; Electronics and IT; Heavy Industries and Central Electricity Authority. Renowned Institutions supporting the event were Global Smart Energy Federation(GSEF), India CGD Forum; Central Board Of Irrigation And Power (CBIP), Bus Operators Confederation of India (BOCI); Indo-German Energy Forum; VJTI, Association of Power Utilities of Africa (APUA), Natural Gas Society, PHD Chamber of Commerce, ETSI, International Smart Grid Action Network (ISGAN), The European Committee for Standardization (CEN), The European Committee for Electrotechnical Standardization (CENELEC), Asia Pacific Urban Energy Association (APUEA) and CIGRE India. 18 reputed Media Houses joined ISUW 2024 as Supporting Media Partners.

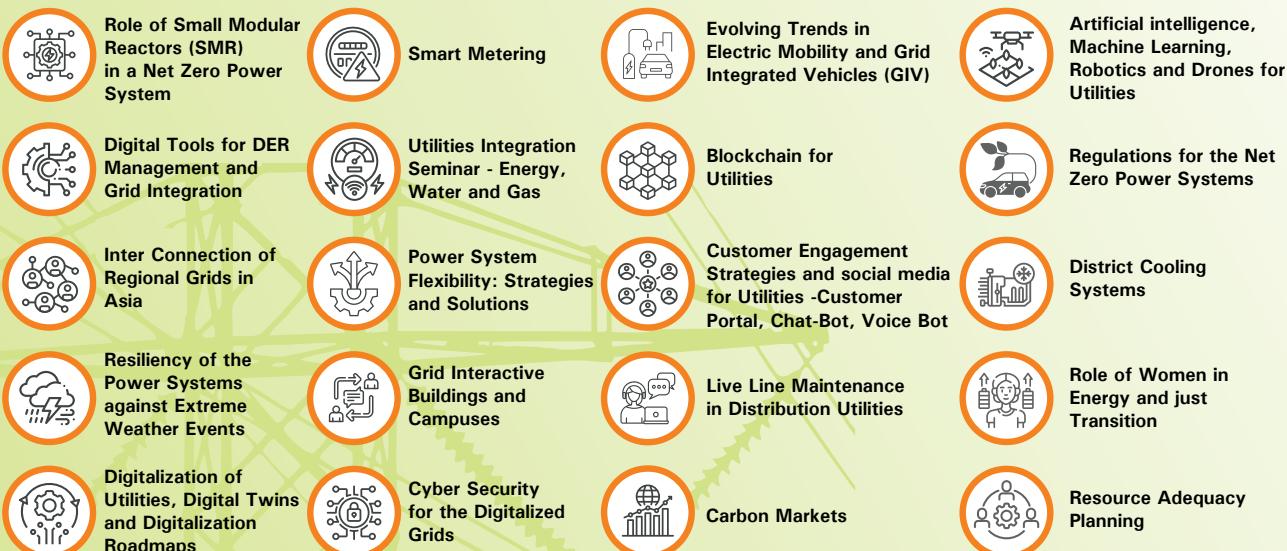
At the Exhibition of ISUW, Ministry of Electronics and IT; Tata Power, Smart Energy Water; GE Vernova; L&T PTD Digital Energy Solutions; G3 Alliance; Wi-SUN Alliance; Yitran; Oracle; European Union; CDAC; Cuculus

India; TekUncorked; Trilectric, Tauras; Phoenix Contact and Plutoman showcased their latest products and technologies.

ISUW 2024 was joined by Host Utilities The Tata Power Company Limited; Tata Power Delhi Distribution Limited; BSES Rajdhani Power Limited; BSES Yamuna Power Limited; and Uttar Pradesh Power Corporation Limited. Smart Energy Water and GE Vernova were Platinum Partners. L&T PTD Digital Energy Solutions joined as Gold Partner. Hitachi Energy joined as Welcome Reception Partner. Trilliant was Lanyard Partner. ISGF Innovation Awards Partner was NEDO, Japan and its knowledge partner was FCDO, UK Government. Silver Partners were Wi-SUN Alliance, G3 Alliance; Yitran; Oracle Energy and Water. Country Partners were GIZ, Germany, European Union; FCDO, UK Government; USAID, USA; India Brazil Chamber of Commerce and LATAM Smart Grid Forum, Brazil. Bronze Partners were AutoGrid, part of Uplight; Itron; TekUncorked; Wirepas; Cucusus India; Kimbal Technologies; and Trilectric. UL Standards and Engagement joined as the Knowledge Partner. Overall, ISUW 2024 was an enriching experience for all stakeholders.

We are happy to announce that ISUW 2025 will be held from **04 – 08 February 2025 in New Delhi**. For Partnership, Exhibition and Participation queries, please write to us at [isuw@isuw.in](mailto:isuw@isuw.in). For more details, kindly visit [www.isuw.in](http://www.isuw.in).

## ISUW 2024 KEY THEMES



## ISUW 2024 PROGRAM STRUCTURE

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 and Cultural Tours
<b>ISGF INNOVATION AWARDS: 15 MARCH 2024</b>				

ORGANIZED BY



India Smart Grid Forum

## ISUW 2024 SUPPORTING MINISTRIES



MINISTRY OF POWER  
GOVERNMENT OF INDIA



MINISTRY OF NEW AND  
RENEWABLE ENERGY  
GOVERNMENT OF INDIA



नीति आयोग  
National Institute for Transforming India



MINISTRY OF POWER  
GOVERNMENT OF INDIA  
CENTRAL ELECTRICITY AUTHORITY



MINISTRY OF JAL SHAKTI  
DEPARTMENT OF WATER RESOURCES,  
RIVER DEVELOPMENT & GANGA REJUVENATION  
GOVERNMENT OF INDIA

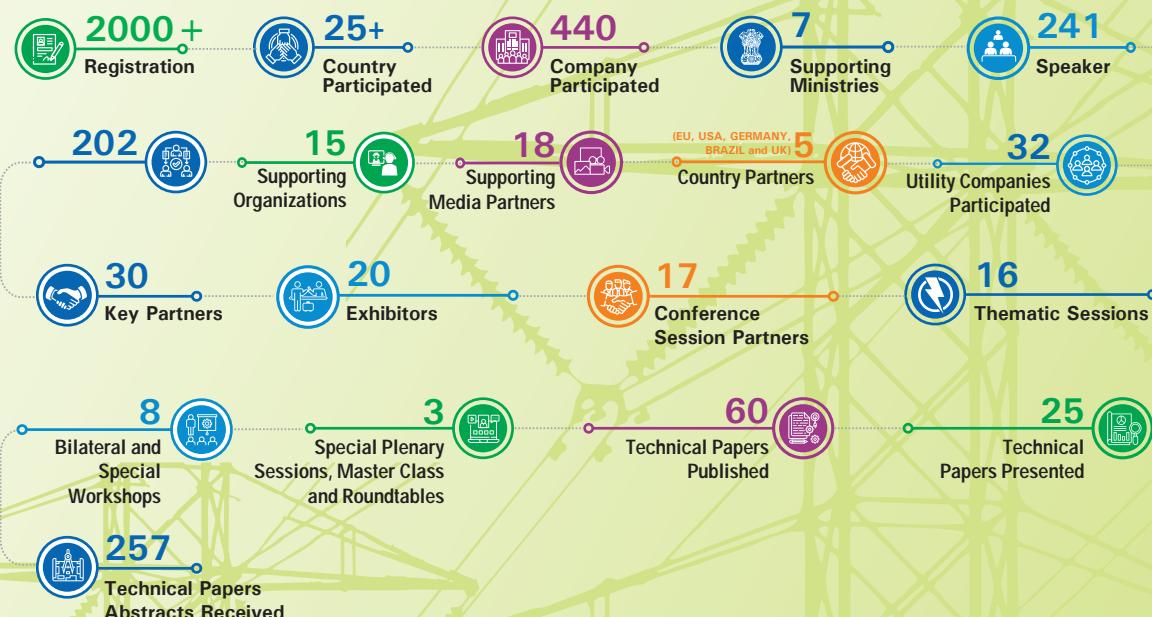


MINISTRY OF ELECTRONICS &  
INFORMATION TECHNOLOGY  
GOVERNMENT OF INDIA



MINISTRY OF HEAVY INDUSTRIES  
GOVERNMENT OF INDIA

## ISUW 2024 KEY HIGHLIGHTS



11  
ISGF Innovation  
Award Categories



41  
ISGF Innovation Award  
Winning Companies



25  
ISGF Innovation Award  
Certificate of Merit Winners



168  
ISGF Innovation Award  
Nominations Received

## ISUW 2024 GLIMPSES OF THE EXHIBITION



# ISUW 2024 KEY PARTNERS

## Host Utilities



## Co-Host Utility



## Gold Partner



Digital Energy Solutions  
Power Transmission & Distribution



## Welcome Reception Partner



HITACHI  
Inspire the Next

@Hitachi Energy



## Silver Partners

### G3-Alliance

### ORACLE

Energy and Water



## ISGF Innovation Awards Partner



## ISGF Innovation Awards Knowledge Partner

## Country Partners



## Bronze Partners



## Session Partners



## Knowledge Partner



## SUPPORTING ORGANIZATIONS



**APUEA**  
Asia Pacific Urban Energy Association



**CENELEC**  
EUROPEAN COMMITTEE  
FOR ELECTROTECHNICAL STANDARDIZATION



**ETSI**  
The Standards People

**GSEF**  
Global Smart Energy Federation

**igof**  
Indo-German  
Energy Forum

**INDIA CGD FORUM**  
India City Gas Distribution Forum



**PHD**  
CHAMBER  
OF COMMERCE AND INDUSTRY  
VOICE OF INDUSTRY AND TRADE



**ISGAN**  
INTERNATIONAL SMART GRID  
ACTION NETWORK

## EXHIBITORS



**TATA POWER**

**TATA POWER-DDL**  
Towards a *Greener* Tomorrow

**SEW**

**GE VERNONA**



**ORACLE**  
Energy and Water

**Wi SUN Alliance**

**G3-Alliance**

**Yitran**



**European Union**



**trilectric**

**PHOENIX CONTACT**

**TAURUS**  
Innovative Technologies

**Plutomen**

**ISGF**  
India Smart Grid Forum

## SUPPORTING MEDIA PARTNERS

**BISinfotech**

**canal+energia**

**CONSTRUCTION  
ARCHITECTURE UPDATE**  
Published by Era Fama Media Group

**ELETIMES**

**ENERGY PORTAL**

**EPR**  
ELECTRICAL & POWER REVIEW

**INDUSTRIAL  
ELECTRICAL**  
YOUR INDUSTRY EXPERT

**MERCOM**  
INDIA

**Metro Rail News**

**PETROFINDER**  
Global Oil & Gas Link

**QUOTIDIANO  
ENERGIA**

**SmartEnergy**

**TechmEzine**  
All About Electronics

**THE POWER**  
www.thepower.in | TIMES.in

**timesEV.com**  
the green world of e-mobility

**TIMESTech.in**

**trade  
india.**

**WATER  
DIGEST**

# PARTICIPATING UTILITIES

## Host Utilities



## Co-Host Utility



## Participating Utilities



Kanpur Electricity Supply  
Company Limited  
A GOVERNMENT OF U.P. UNDERTAKING



# ISUW 2024: GLIMPSES DAY 1

## 12TH MARCH 2024 – (TUESDAY)

### MASTER CLASS

#### Master Class on Energy Transition Strategies and Pathways to Net Zero Power Systems



**Speakers of the Session:** (L-R) – Anant Venkateswaram, Industry Professional, ISGF and Hitachi Energy; Rahul Tongia, Senior Fellow, CSEP; Glenn Pritchard, Manager-Advanced Grid Operations & Technology, PECO

#### 8th IEC - IEEE Smart Energy Standardization Coordination Workshop (In collaboration with BIS, IEC and IEEE) (Inaugural Session)



**Speakers of the Session:** (L-R) – Reji Kumar Pillai, President, ISGF; Richard Schomberg, IEC; Amarjeet Kumar, Founder and CEO, COMMIMENT; BA Sawale, Director General, Central Power Research Institute (Virtual)

### WORKSHOPS

#### Experiential Workshop on Immersive Technologies – Augmented Reality, Virtual Reality, Mixed Reality, Assisted Reality, Metaverse etc



**Speakers of the Session:** (L-R) – Ojasvi Bhatia, Head - Platform Partnership India, Meta; Keyur Bhalavat, Founder and CEO, Plutomen Technologies; Reji Kumar Pillai, President, ISGF; Chirag Yadav, Vice President, Plutomen Technologies; Prasad Khapde, Group Head Zonal Operations-Urban, Tata Power Company Ltd; Sandeep Singh, Solutions Engineer, RealWare.

#### Panel 1: Emerging Smart Energy Technologies and Standardization Landscape



**Speakers of the Panel 1:** (L-R) - Dinesh Chand Sharma, Director – Standardization, Policy and Regulation, SESEI; Brajnath Dey, DGM & Head of Network Planning, Tata Power-DDL; Asit Kumar Maharana, Head-ETD, BIS; Richard Schomberg, IEC; Manjunath V Rao, Regional Standards Manager – South Asia and Sub-Saharan Africa, UL Standards & Engagement Inc; Amarjeet Kumar, Founder and CEO, COMMIMENT; Abhishek Ranjan, Energy Transition & Utilities Leader, EY Parthenon; BA Sawale, Director General, Central Power Research Institute (Virtual)

#### Panel 2: Future Trends and Challenges



**Speakers of the Panel 2:** (L-R) - Manjunath V Rao, Regional Standards Manager – South Asia and Sub-Saharan Africa, UL Inc; Richard Schomberg, IEC; Gopal Nariya, Head - CES & Automation, BSES Rajdhani Power Ltd; Kishore Narang, Founder, Narnix Technolabs Pvt. Ltd (Virtual); Mauro Dragoni, Research Scientist, Fondazione Bruno Kessler and Adjunct Professor at University of Trento (Virtual); Wael William Diab, Chairman, ISO/IEC JTC 1/SC 42 Artificial Intelligence (Virtual); Masaki Umejima, Convener of Development Plan, ISO/IEC System Committee Smart Energy (Virtual).



**Speakers of the Session:** (L-R) - Rish Ghatikar, OCA Ambassador and Advisor to ISGF; Saket M Anandakrishnan, Co - Founder & Head of Software, BrightBlu; Lonneke Driessens Mutters, Director, Open Charge Alliance (OCA); Anand Kumar Singh, AGM, ISGF

## ISUW 2024: GLIMPSES DAY 2 13TH MARCH 2024 – (WEDNESDAY)

### CONFERENCE SESSIONS

#### Inauguration of ISUW 2024 Conference Session



**Speakers of the Session:** (L-R) - Reji Kumar Pillai, President, ISGF and Chairman, Global Smart Energy Federation (GSEF); Sandeep Zanzaria, MD and CEO, GE T&D India Ltd; Richard Schomberg, IEC Ambassador on Smart Energy; Sudeep Jain, Additional Secretary, MNRE; Hervé Delphin, Ambassador of European Union to India; Ghansham Prasad, Chairman, Central Electricity Authority; Jan Thesleff, Ambassador of Sweden to India, Sri Lanka, Bhutan, Nepal and Maldives; Siva Gundu, Commissioner and Vice Chair, California Energy Commission; N Venu, Managing Director and CEO, India and South Asia Region, Hitachi Energy; Deepak Garg, Founder, Chairman and CEO, Smart Energy Water; Reena Suri, Executive Director, ISGF

## ISUW 2024: CONFERENCE SESSIONS

### Session-1: Digitalization of Utilities, Digitalization Roadmaps; Digital Twins

**Speakers of the Session:** (L-R) - Vijay Panpalia, Vice President-Product Engineering, SEW; Ajith Kumar, Senior Vice President-Grid Automation, Hitachi Energy India Limited; Murali Baggu, Program Manager - Grid Integration, NREL, USA; Sanjay Banga, President-T&D, Tata Power Company Ltd; Richard Schomberg, IEC Ambassador on Smart Energy; Abhishek Harsh, DGM – Engineering, BYPL; Mukesh Wadhwa, Director, Ecosystems and Partners, GE Vernova; Reena Suri, Executive Director, ISGF; Tarun Batra, Head-Digital and IT, Tata Power Company Ltd; Jagdish Chitre, Chairman, KIGG Ltd; Saurabh Kumar, GM, BSES Rajdhani Power Ltd; Anand Vardhan, Director at Hi-Tech Facility Engineers, India partner of Centrica Plc; Sunil Kumar Singh, Head of Business Segment (IASEA), Larsen & Toubro



## Session-2: Emerging Technologies for Utilities (In Collaboration with DST)



**Speakers of the Panel 1:** (L-R) - JBV Reddy, Department of Science and Technology; Nick Birell, Vice President Industry Strategy, Oracle Utilities; SC Srivastava, Director, IIT Kanpur; Jemma Green, Co-founder and CEO, Power Ledger; Om Krishnan Singh, Scientist, Gol; Reji Kumar Pillai, President, ISGF; Suresh Babu Muttana, Scientist E, Department of Science and Technology; Sathyaranayanan Sankaran, CEO, Urban Morph



**Speakers of the Panel 2:** (L-R) - Pradyot Koley, Scientist D, Department of Science and Technology; SK Soonee, Former CEO, Grid Controller of India; NP Padhy, Director, MNIT Jaipur; Sreedhar Venkat, Sr Vice President, BSES Rajdhani Power Ltd; Ganesh Das, Chief - Collaboration & Innovation, Tata Power Company Ltd; Reena Suri, Executive Director, ISGF; Abhijit R Abhyankar, Professor, IIT Delhi; AK Saxena, Senior Fellow and Senior Director, TERI; SC Srivastava, Director, IIT Kanpur; Srinivas Bhaskar Karanki, Associate Professor, IIT Bhubaneswar; Zakir Hussain Rather, Assistant Professor, IIT Bombay

## ISUW 2024: WORKSHOPS

### 13TH EU - INDIA SMART ENERGY WORKSHOP (IN COLLABORATION WITH EUROPEAN UNION)

#### Panel 1: Standards and Regulations for Green Hydrogen



**Speakers of the Panel 1:** (L-R) - Rahul Bagadia, Chairman & Managing Director, pManifold Business Solutions Pvt. Ltd; Mridula Bharadwaj, Capacity Building Specialist, International Solar Alliance; Ranjith Krishnapai, Scientist F, Department of Science and Technology; Reena Suri, Executive Director, ISGF; Prasad Arvind Chaphekar, Deputy Secretary, Ministry of New and Renewable Energy (MNRE); Someshwer Sharma, Vice President, Avaada Group; Paulina Chromik, Diplomat, Economic and Commercial Affairs, Ministry of Foreign Affairs, Netherlands; Rajeev Ralhan, Partner, PricewaterhouseCoopers (PWC) Pvt. Ltd; Alexander Pavlov, General Manager, Atlas Copco-India; Praseeth Prabhakaran, Project Engineer, DVGW-place change; Bartosz Przywara, Counsellor-Energy, Climate Action, Environment, Delegation of the European Union to India

#### Panel 2: Regional Energy Connectivity in South Asia

**Speakers of the Panel 2:** (L-R) - Nidhin K Davis, Junior Non-Key Expert, EU – India Clean Energy and Climate Partnership; Parul Bakshi, Research Fellow, FSR Global – Energy; SS Barpanda, Director – Market Operations, Grid Controller of India; Reji Kumar Pillai, President, ISGF; Mohammed Rezaul Karim Khan, Director (Power), Bangladesh Energy Regulatory Commission; Monali Zeya Hazra, Regional Energy and Clean Energy Specialist in the Energy Division of Indo-Pacific Office, USAID; Pankaj Batra, Former Chairperson, CEA; Jyoti Parikh, Executive Director, IRADe; Edwin Koekkoek, Team Leader of Green Inclusive Development and Social Protection, EU in Bangladesh; Smita Singh, Sr. Project Manager, Delegation of the European Union to India Union to India



**1ST INDIA - BRAZIL Smart Energy Workshop - THEMES: T&D LOSS REDUCTION AND BIOFUELS (In Collaboration with LATAM Smart Grid Forum and Brazil-India Chamber of Commerce)**

**Inaugural Session**



**Speakers of the Session:** (L-R) - GV Srinivas, Additional Secretary-LAC, Ministry of External Affairs; Ravi Seethapathy, Advisor, ISGF; Felipe Tenorio Vicente, Deputy-Regulation, Light, Rio de Janeiro; Leticia Gomes, Manager, Institutional Relations India-Brazil Chamber of Commerce; Pedro Piacesi de Souza, Head of Energy and Environment Sector, Embassy of Brazil in New Delhi; Cyro Vicente Bocuzzi, Presidente - ECOee & L.A. Smart Grid Forum

**Panel 1: T&D Loss Reduction Experiences in India and Brazil**



**Speakers of the Panel 1:** (L-R) - Subhadip Raychaudhuri, Additional General Manager, TPDDL; Cyro Vicente Bocuzzi, Presidente - ECOee & L.A. Smart Grid Forum; Ravi Seethapathy, Advisor, ISGF; Brajesh Kumar, Sr Executive Vice President and Business Head, BSES Yamuna Power Limited; Felipe Tenorio Vicente, Deputy-Regulation, Light, Rio de Janeiro

**Panel 2: Biofuels**



**Speakers of the Panel 2:** (L-R) - Ankur Naik, Director, Corporate Affairs, PRESPL; Amitabh Malaviya, CEO, Araville Green Energy Ventures Pvt Ltd; Bárbara Teruel, Associate Professor and Coordinator of the Digital Agriculture and Energy Laboratory, State University of Campinas (UNICAMP); Ravi Seethapathy, Advisor, ISGF; Cyro Vicente Bocuzzi, Presidente - ECOee & Latin American Smart Grid Forum

**10th US – India Smart Energy Workshop - Theme: (1) Resource Adequacy Planning Planning for Net Zero Power Systems, (2) Energy Storage Systems (In Collaboration with US DOC, USIBC, USAID and CSIS)**

**Opening Session & Panel 1: Resource Adequacy Planning for Net Zero Power Systems**

**Speakers of the Session:** (L-R) - Shashwat Kumar, Fellow- India Energy Policy, Centre for Strategic International Studies (CSIS); Reji Kumar Pillai, President, ISGF; Monali Zeya Hazra, Regional Energy & Clean Energy Specialist and Mission Environment Officer, Indo Pacific Office, USAID/India; Siva Gunda, Commissioner and Vice Chair, California Energy Commission; Alice Busching Reynolds, President, California Public Utilities Commission; Andrew McAllister, Commissioner, California Energy Commission; Sushanta Chatterjee, Chief (Regulatory Affairs), CERC; Gagan Swain, Director - Finance & Corporate Affairs, GRIDCO, Odisha; Raj Addepalli, Former Member, New York State Public Service Commission; Jayant Kumar, Head - Digital Energy Solutions, L&T PTD Digital Energy Solutions; Sanjay Srivastava, VP, BSES Rajdhani Power Ltd



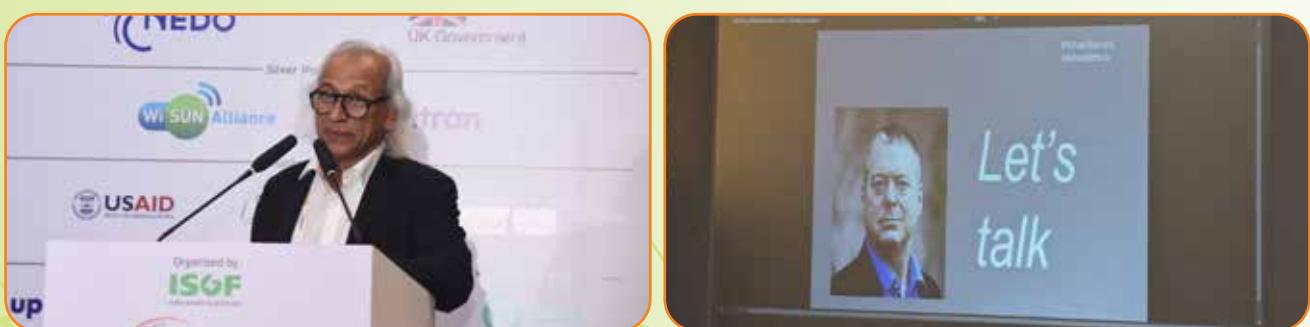
## Panel 2: Energy Storage Systems



**Speakers of the Panel 2:** (L-R) - Arindam Maitra, Vice President, Energy Innovation & Grid Services (EIS), L&T, Digital Energy Solutions (DES); KVS Baba, Former CMD, Grid Controller of India; Naveen Nagpal, AVP- Renewables, BRPL; Yashwant Mahadevan, Vice President, EOS Energy; Rakesh Sarin, President- Corporate Development, Suzlon; Reena Suri, Executive Director, ISGF; HC Sharma, Chief (Technical Services, BD, PSC, PMG & Sustainability), Tata Power Delhi Distribution Ltd; Paul Nelson, Vice President-APAC, Itron; Anisha Shashidharan, Commercial Specialist, US Commercial Service, US Embassy; Raghvendra Upadhyा, Director - Energy, Environment and Infrastructure, USIBC India

## ISUW 2024: SPECIAL PLENARY

**Special Plenary 1: "The short List of Climate Actions that will Work" by Michael Barnard, Founder of "The Future is Electric"**



**Speakers of the Session:** (L-R) - Reji Kumar Pillai, President, ISGF; Michael Barnard, Founder of "The Future is Electric"

## ISUW 2024: GLIMPSES OF WELCOME RECEPTION

**Host Utility: BSES Rajdhani Power Limited**



**Host Utility: BSES Yamuna Power Limited**



**Host Utilities: The Tata Power Company Limited & Tata Power – Delhi Distribution Limited**



**Co-Host Utility: Uttar Pradesh Power Corporation Limited**



**Platinum Partner: GE Vernova**



**Gold Partner: L&T Digital Energy Solutions Power, Transmission & Distribution**



Welcome Reception Partner:  
Hitachi Energy India Limited



Silver Partner: G3  
Alliance



Silver Partner: Oracle Energy and  
Water



Silver Partner: Wi-Sun Alliance



Bronze Partner: Kimbal  
Technologies



Bronze Partner: ITRON



Bronze Partner:  
Cuculus India



Bronze Partner: Auto Grid Part  
of Uplight



Bronze Partner:  
Tekuncorked



Broze Partner:  
Trilectric



Country Partner: European  
Union (EU)



Country Partner: Deutsche  
Gesellschaft für Internationale  
Zusammenarbeit (GIZ)



**Exhibitor: Ministry of Electronics & Information Technology, Government of India (Meity)**



**Exhibitor: Phoenix Contact**



**Exhibitor: Plutomen**



**ISGF Conference Session Partner: CDAC-Thiruvananthapuram**



**ISGF Conference Session Partner: REC Limited**



**ISGF Conference Session Partner: International Electrotechnical Commission (IEC)**



**ISGF Conference Session Partner: Institute of Electrical and Electronics Engineers (IEEE)**



## ISUW 2024: GLIMPSES DAY 3 14TH MARCH 2024 – (THURSDAY)

### CONFERENCE SESSIONS

**Session - 3: GLOBAL LESSONS ON SMART METERING - SESSION WITH AMISPs AND DISCOMS  
(SESSION PARTNERS - REC, PFC, IntelliSmart and USAID/SAREP)**

#### Panel 1: Smart Metering Experiences from USA and Europe



**Speakers of the Panel 1:** (L-R) - Sourajit Ghosh, Director-IT, UPPCL; Phil Beecher, President and CEO, Wi-SUN Alliance; Anant Venkateswaran, Advisor, ISGF; Reji Kumar Pillai, President, ISGF; Ashish Goel, Chairman, Uttar Pradesh Power Corporation Limited (UPPCL); Marc Delandre, Director - Advanced Network Technologies, ENEDIS, France; Subhadip Raychaudhuri, Additional General Manager, Tata Power-DDL; Glenn Pritchard, Manager-Advanced Grid Operations & Technology, PECO, an Exelon Company, USA

## Panel 2: Challenges Faced by Discoms, AMISPs and OEMs in India and New Services for Smart Meter Customers



**Speakers of the Panel 2:** (L-R) - Swapna Deep Banerjee, System Integration Lead, Trilliant; Vikas Kashyap, Advisor, ISGF; Anil Rawal, MD and CEO, IntelliSmart Infrastructure; Matthew Gleeson, VP-Energy Transition, Oracle Utilities; Yogesh Kumar, Director, Madhyanchal Vidyut Vitan Nigam Limited; Saurav Shah, Executive Director, PFC; Reji Kumar Pillai, President, ISGF; Leon Vergeer, General Secretary, G3 Alliance; Avner Matmor, Co-founder, Yitran; Rene Boeringer, CEO, Cuculus; RP Singh, Senior Vice President-APAC, SEW; Paul Nelsen, Vice President, Sales for CCE, APAC, Itron; Amarjeet Kumar, India Regional Coordinator, Wi-Sun Alliance; Jani Vehkalahti, CTO, Wirepas

## Panel 3: Financing Smart Meters – Constraints and Possible Solutions



**Speakers of the Panel 3:** (L-R) - Mayank Bhardwaj, Lead-E mobility, Procurement and Private Sector, SAREP; Rakesh Goyal, Chief of Party, SAREP; Reena Suri, Executive Director, ISGF; Charu Kaistha, CGM, Power Finance Corporation; Parag Baduni, Partner – NIIF; Sumit Grover, CFO, IntelliSmart Infrastructure

## Session 4: Energy Positive Smart Buildings and Campuses (In Collaboration with USAID/SAREP)

### Panel Discussion - Connecting the Dots for Energy Positive Buildings and Campuses. Experience Sharing by Key Stakeholders



**Speakers of the Session:** (L-R) - Tanmay Tathagat, USAID's SAREP; Apurva Chaturvedi, Senior Clean Energy Specialist, Indo-Pacific Office, USAID India; Reena Suri, Executive Director, ISGF; Mili Majumdar, Managing Director, GBCI; Atul Kumar Bali, Executive Director, and Director, NSGM-PMU; Abhishek Gupta, Head- International, Strategy, Appliances, Rooftop Solar, and PE&A, EESL; Sujay Saha, Head - ESCO & HA, New Business Services, Tata Power Company Ltd; Girish Ghatikar, Advisor, ISGF

### Thematic Discussion - Elements of Energy Positive Buildings and Campuses



**Speakers of the Session:** (L-R) - Manoj Kumar, Electrical Engineer, Nalanda University; Munish Sharma, AVP, BSES Rajdhani Power Ltd; Tarun Garg, Principal, RMI India Foundation; Reena Suri, Executive Director, ISGF; Shivali Dwivedi, Energy Technology Specialist, USAID's SAREP; Saket Sarraf, Founder and Principal, ps Collective; Sumedh Agarwal, Deputy Chief of Party, USAID's SAREP

## Session-5: Virtual Power Plants (VPPS) and Power System Flexibility



**Speakers for the Session:** (L-R) - Reji Kumar Pillai, President, ISGF; Arindam Maitra, Vice President, Energy Innovation & Grid Services (EIS), L&T, Digital Energy Solutions (DES); Ankur Sharma, Founder & CEO, Flock Energy; Abhishek Vashistha, DGM – Engineering, BYPL; Murali Baggu, Program Manager - Grid Integration, NREL; Ghanshyam Prasad, Chairman Central Electricity Authority; SK Soonee, Former CEO, Grid Controller of India; Vishwajeet Singh, Senior Manager (APAC), AutoGrid, part of Uplight; Devanand Pallikuth, Chief - PSCC & Tech Services (T&D, MO), Tata Power Company Ltd; Meenakshi Vashist, Co-founder and CEO, TekUncorked

### Session - 6: Climate Resilience of Future Grids (In Collaboration with CDRI)



**Speakers of the Session:** (L-R) - Amit Tripathi, Advisor-Power Sector, Coalition for Disaster Resilient Infrastructure (CDRI); Ravi Seethapathy, Advisor, ISGF; RR Mehta, Former Mentor and Advisor, Reliance Infrastructure; Vandana Singhal, Chief Engineer – Distribution Planning, Central Electricity Authority; UN Behera, Former Chairman, Odisha Electricity Regulatory Commission; Chintamani Chitnis, Chief Technology, TPCODL; Suvendra Kumar Senapati, Head - Sales & Commercial Services (EMEA & IAPAC REGIONS), L&T; Daniel Karmel Fernando Tampubolon, Vice President, IT Business Partner Corporate, PT PLN (Persero), Indonesia; Vivek Pandey, Sr. GM-Grid India

### Session - 7: Nuclear Renaissance and the Role of SMR in Net Zero Power Systems (In Collaboration with NEI, EDF, BARC/NPCIL and NTPC)



**Speakers of the Session:** (L-R) - Ganpati Myneni, Co-founder, BSCE Systems Inc.; Thomas MIEUSSET, Nuclear Counsellor, Embassy of France in India; Richard Schomberg, IEC Ambassador on Smart Energy; Stephane Salib, India Director-Nuclear Development, EDF; Anand Prasad Samal, GM-Nuclear, NTPC; CP Tiwari, Head Technology & Process Engineering, Tata Power

### Session – 8: Super Grids for Energy Transition and Energy Security - Cross Border Electricity Trade in South Asia and Interconnection of Regional Grids in Asia (Session Partner - GO15, USAID and Hitachi Energy)



**Speakers of the Session:** (L-R) - Monali Zeya Hazra, Regional Energy & Clean Energy Specialist and Mission Environment Officer, Indo Pacific Office, USAID/India; Rajesh Kumar, Senior General Manager, CTU India; Prihasty Wiratama, Project Manager, ASEAN Centre for Energy; Akilur Rahman, Chief Technology Officer, Hitachi Energy India Limited; R K Porwal, Director-System Operation, Grid Controller of India; Bruno Meyer, Secretary General, GO15; Vinod Kumar Agrawal, Senior Advisor, USAID's SAREP; Mukesh Wadhwa, Director-Sales for GEV Electrification Software Business-South Asia, GE Vernova; Eddie Widiono, Former President, PT. PLN; Edwin Koekkoek, Team Leader, Green Inclusive Development and Social Protection, EU Delegation to Bangladesh

# ISUW 2024: WORKSHOPS

3rd India - Germany Smart Energy Workshop - Theme: Demand Response (In Collaboration with GIZ)



**Speakers of the Session:** (L-R) - Avinash Kumar, AVP, BSES Rajdhani Power Ltd; Mukesh Dadhich, Head Sustainability & Clean Technology, BSES Yamuna Power Limited; Amit Kumar Singh Parihar, Director-Clean Power, Shakti Sustainable Energy Foundation; G Ganesh Das, Chief-Collaboration and Innovation, Tata Power Company Ltd; Ashok Kumar Rajput, Member- Power Systems, Central Electricity Authority of India; SC Saxena, Executive Director, Grid Controller of India Limited; Rajesh Dangi, Secretary, Delhi Electricity Regulatory Commission; Kulbhushan Kumar, Partner, Grant Thornton Bharat LLP; Sunil Kumar Sharma, Project Manager (AV), Indo-German Energy Programme – Energy Transition with DISCOMs, GIZ

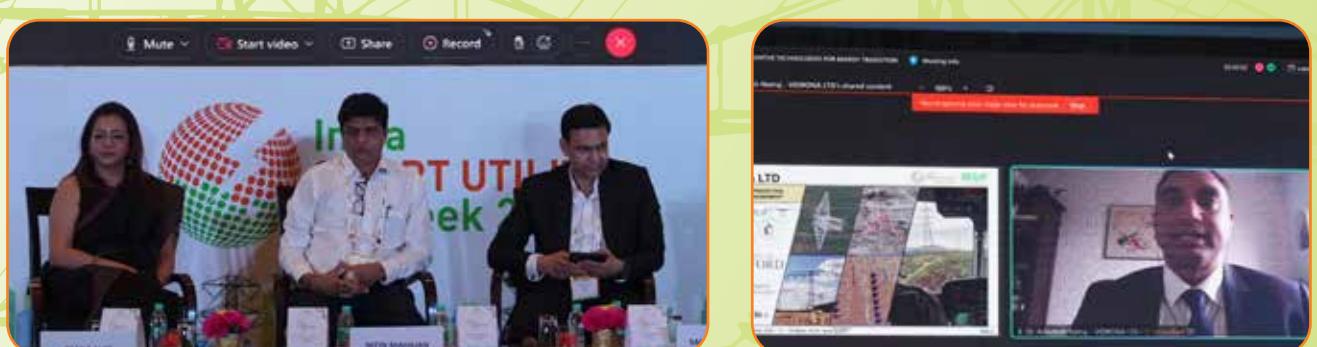
## Workshop on Innovative Technologies for Energy Transition (In Collaboration with The UK Government)

### Inaugural Session



**Speakers of the Session:** (L-R) - Reena Suri, Executive Director, India Smart Grid Forum; Vikas Gaba, Partner and National Head - Power and Utilities, KPMG and Program Lead, ASPIRE; Narendra Nath Veluri, Chief Executive Officer, Agency for New and Renewable Energy Research and Technology (ANERT); Green, Head of Climate and Energy, British High Commission in India; Saurav Kumar Shah, Executive Director, Power Finance Corporation, Government of India; Subhadip Raychaudhuri, Additional General Manager, Tata Power-DDL; Abhishek Gupta, Head International & Strategy, GM EESL; Archana Chauhan, Head-Energy Programme, British High Commission, New Delhi; Sanyukta Dasgupta, Senior Advisor, British High Commission, India

### Panel 1: Technologies for Decarbonization of Distribution Utilities



**Speakers of the Panel 1:** (L-R) – Reena Suri, Executive Director, India Smart Grid Forum; Nitin Mahajan, Business Development, India and GCC, Synaptec Ltd; Saurabh Gupta, Partner, KPMG; Ashutosh Natraj, CEO, Vidrona Ltd (Virtual)

## Panel 2: Technologies for Decarbonization of Demand Sectors



**Speakers of the Panel 2:** (L-R) - Jyotirmoy Roy, Founder & CEO, GreenEnco, UK; Suri, Executive Director, India Smart Grid Forum; Archana Chauhan, Head-Energy Programme, British High Commission, New Delhi; Matt Reizenstein, Co-Founder & COO, Flock Energy, Flock Energy; Eshita Gupta, Senior Economist, KPMG

### The Cooling Challenge – Cooling as a Service against Monthly Fee through District Cooling Systems (DCS) (In Collaboration with BEE) Inaugural Session



**Speakers of the Session:** (L-R) - Piyush Sharma, Energy Advisor, GIZ; Arijit Sengupta, Director, BEE, Introduction of EE-Cool Project; Reji Kumar Pillai, President, ISGF

### Panel 1: Facilitating DCS Adoption in India & Panel 2: Charrette on Development of DCS Roadmap for India



**Speakers of the Panel 1 & Panel 2:** (L-R) - Bhaskar Natrajan, Senior Fellow, AEEE; Aseem Goyal, Senior Manager, Tabreed; Pramod Kumar Singh, Senior Director, AEEE; Reena Suri, Executive Director, ISGF; Gurpreet Chugh, Managing Director, ICF India; Sandeep Kachhwaha, Expert - Cooling and Refrigeration, AEEE

# ISUW 2024: TECHNICAL PAPERS PRESENTATION

## Presentation of Select Technical Papers



**Speakers of the Session:** Sameer Chowdhuri, Former CIO, Power Grid Corporation of India; Saroj Chelluri, GarudaUAV Soft Solutions; Kuldip Raj Suri, INDIGRID, MUMBAI, INDIA; Aditya Kumar Pati, TPWODL; Meera PS, Vellore Institute of Technology; Amit R. Kulkarni, Mahatransco; Rajiv Ranjan, Tata Power-DDL; V Lavanya, Vellore Institute of Technology; Gurujith A, Hitachi Energy; Swapnil Rao, Tata Power Company Limited



**Speakers of the Session:** N Murugesan, Former Director General - CPRI and Advisor – ISGF; Manan Pathak, Silver Oak University; Pankaj Prabhat, GE Digital; Rakesh Kadu, Tata Power Company Limited; Moreshwar Salpekar, Sevya Multimedia Pvt. Ltd; Gufran Basit, Siemens Technology Private Limited; Ankit Jain, Hitachi Energy; Aarthi V, Hitachi Energy; Chunendra Kumar Singh Chaudhary, IIT Roorkee; Raghuvir Singh, Tata Power-DDL; Abhinav Mogha, Tata Power-DDL; Surekha Deshmukh, IEEE

# TOP 25-ISUW 2024 TECHNICAL PAPER SELECTED FOR PRESENTATION

Sl. No	Title of Technical Paper	Technical Paper Author	Organization
<b>Theme: INDIA @ 100 in 2047: Vision for the Indian Power System</b>			
1	Towards Carbon-Neutrality for High-Voltage Switchgear Installed Base	Francesco Agostini	Hitachi Energy
2	Field data evaluation of line protection for lines connected with renewable resources: Problems and solutions	Aarthi V	Hitachi Energy
3	An overview of the challenges in reaching the 2030 solar PV target in India	Chunendra Kumar Singh Chaudhary	IIT Roorkee
4	Revolutionizing Last-Mile Delivery: The Power of Automation for Enhanced Reliability and Customer Satisfaction	Raghuvir Singh	Tata Power Delhi distribution limited.
5	Efficiency Improvement in Power Forecasting through ABT Meter Installation	Abhinav Mogha	Tata Power Delhi Distribution Limited
6	Developing Data driven tool based on Life Cycle Assessment for computing Carbon Footprint across Electricity Value Chain	Surekha Deshmukh	IEEE Pune Section
<b>Theme: Smart Grids for Smart Cities</b>			
7	MANAGING VAR IN DISTRIBUTION GRID STATIONS " Ways to Vitalize with Technical Advancements for reliable Smart Grids for Smart Cities.	Kuldip Raj Suri	INDIGRID, MUMBAI, INDIA
8	Evaluating the Performance of Maximum Power Point Tracking Methods for Photovoltaic Systems: Perturb & Observe, Incremental Conductance, and Fuzzy Logic-Based Approaches	Mansoori Nasreenbanu Nazirbhai	Silver Oak University
9	Unlocking the Value of Street Lights for Multiple Smart Cities Applications	Sairam Kumar Gufran Basit	Accenture Siemens Technology and Services Private Limited
10	Supply-Demand-Based Optimization technology for frequency regulation of a virtual inertia control based microgrid.	Aditya Kumar Pati	TPWODL

Sl. No	Title of Technical Paper	Technical Paper Author	Organization
<b>Theme: Smart Grids for Smart Cities</b>			
11	Common GIS Map for all Domains in a Smart City and A Case Study of Dehradun Smart City, Uttarakhand, India	Rakesh Kadu	The Tata Power Company
12	Smart buildings and Electric Vehicles Acting as Microgrids in Context of India	Moreshwar Salpekar	Sevya Multimedia Pvt Ltd
<b>Theme: Foundational Blocks for Smart Grids</b>			
13	Modern Techniques for Managing the Voltage Profile at Customer Side	Swapnil Rao	The TATA Power Co.Ltd
14	Optimized Design and Development of Cost Effective Transmission Line Inspection Robot	Manan Pathak	Silver Oak University
15	Automatic Generation Control of BESS Alongside Conventional Generators with Market Interface	Pankaj Prabhat	GE Digital
16	Bandwidth adequacy, data compression and evolving WAMS applications for Indian grid	Amit R. Kulkarni	MAHATRANSCO
17	Virtual DT Metering Dashboard: Enhancing Smart Grid Development through Advanced Network Capacity Planning and Asset Utilization	Akash Kumar	Tata Power Delhi Distribution Ltd.
18	Towards net zero through smart metering	V. Lavanya	Vellore Institute of Technology, Chennai
19	Fault Location Challenges in Traction Power Delivery System with Autotransformer	Gurujith A	Hitachi Energy
<b>Theme: Electric Mobility</b>			
20	EV CHARGING INFRASTRUCTURE: IMPACTS, CHALLENGES AND SOLUTIONS	S. Hemamalini	Vellore Institute of Technology, Chennai
<b>Theme: Disruptive Innovations for Utilities</b>			
21	Grid Guardians from the Sky: Aerial Technologies and AI for Transmission Systems Asset Management	Saroj Chelluri	GarudaUAV Soft Solutions
22	Web 3.0 and Metaverse for Utilities	M.L. Sachdeva	-
		N.S. Sodha	-
23	Transforming Power Utility O&M Through Advanced Analytics	Devesh Verma	BSES Rajdhani Power Ltd.
<b>Theme: New and Emerging Technologies and Trends</b>			
24	Green Credits	RN Sen	-
25	Indian Carbon Market Proposal	Purnima Gupta Purnima Gupta	-

# ISUW 2024: GLIMPSES DAY 4: 15TH MARCH 2024 – (FRIDAY)

## CONFERENCE SESSIONS

### Session - 9: Long Duration Energy Storage Systems (LDES)



**Speakers of the Session:** (L-R) - Murali Baggu, Program Manager-Distribution Edge Group, NREL; Sudhir Pathak, Head of Engineering, Hero Future Energies; Arindam Maitra, Vice President, Energy Innovation & Grid Services (EIS), L&T, Digital Energy Solutions (DES); Arun Kumar, Professor, IIT Roorkee; Alexander Hogeveen Rutter, Manager-Research and Diligence and Electricity Sector Lead, Third Derivative; Mridula Bhardwaj, Capacity Building Specialist, International Solar Alliance; Reena Suri, Executive Director, ISGF; Saurav Mitra, Director-Market Development, Sumitomo SHI FW; Lakhpati Shibprasad B, Head - Engineering, GC, BESS and Wind, Tata Power Company Ltd

### Session - 10: Policy and Regulatory Support for Fast Tracking The Transition to Net Zero Power System



**Speakers of the Session:** (L-R) - Rahul Tongia, Advisor-ISGF, Senior Fellow-CSEP; Satyendra R Pandey, Member, Gujarat Electricity Regulatory Commission; PK Pujari, Former Chairperson, Central Electricity Regulatory Commission; RP Singh, Former Chairperson, Uttar Pradesh Electricity Regulatory Commission; Reena Suri, Executive Director, ISGF; Vidyesh Raje, Head, BD (Utility Scale Projects), Tata Power Company Ltd

## Session - 11: Evolving Trends in Electric Mobility: MW-scale Charging Systems, Electric Trucks, School Bus Electrification, V2X Systems, Electric Mobility and Air Quality

### Panel 1: Evolving Trends in Electric Mobility and MW-scale Charging Systems



**Speakers of the Panel 1:** (L-R) - Narayankumar Sreekumar, Associate Director - Electric Mobility Program, Shakti Sustainable Energy Foundation; RK Singh, Head-Business Operations - EV Charging, Tata Power Company Ltd; Girish Ghatikar, Advisor, ISGF; Piyush Awadhesh, Chief Product Officer, Smartemobility; Kulwant Singh, Former Advisor, Bus World Foundation; Anamika Bhargava, Global Head – Marketing, Strategy & Policy, L&T Semi-Conductor Technology; Neha Gupta, Lead - Centre for Clean Mobility, OMI Foundation

### Panel 2: Inter-City Operations of Electric Buses/Trucks, Vehicle to Grid (V2G), Electric Highways



**Speakers of the Panel 2:** (L-R) - Vijay Shankar, ED, BOCI; Neha Jain, Head – Electric Vehicle and Innovation, MG Motors India; Pramod Kumar Mishra, Head- Distribution Planning, BSES Rajdhani Power Ltd; Sridhar Chari, Ambassador, Bus World Foundation; Reji Kumar Pillai, President, ISGF; Sujith Nair, CEO & Co-founder, FIDE and Genesis; Co-author & Steward - Beckn Protocol; Biju PT, Head - Idea & Incubation Office (EMEA & IAPAC REGIONS), L&T; Anand Singh, Assistant General Manager, ISGF

## Session - 12: Digital Tools for DER Management



**Speakers of the Session:** (L-R) - Seva Panda, Head Software Innovation, Ador Powertron; Abel Tella, DG, APUA; Balwant Joshi, MD, Idam Infrastructure; Harneet Kanwar, Regional Sales Manager, GE Vernova; Arshi Chadha, Co-founder, Trilectric; Reena Suri, Executive Director, ISGF; Astha Gupta, Lead India Analyst, IEA; Ravindra Kadam, Advisor-Renewable Energy, Central Electricity Regulatory Commission; BB Mehta, Director, GRIDCO, Odisha; Sujith Nair, CEO & Co-founder, FIDE and Genesis; Co-author & Steward - Beckn Protocol; Frano D'Silva, Auroville Consulting; Anand Singh, Assistant General Manager, ISGF

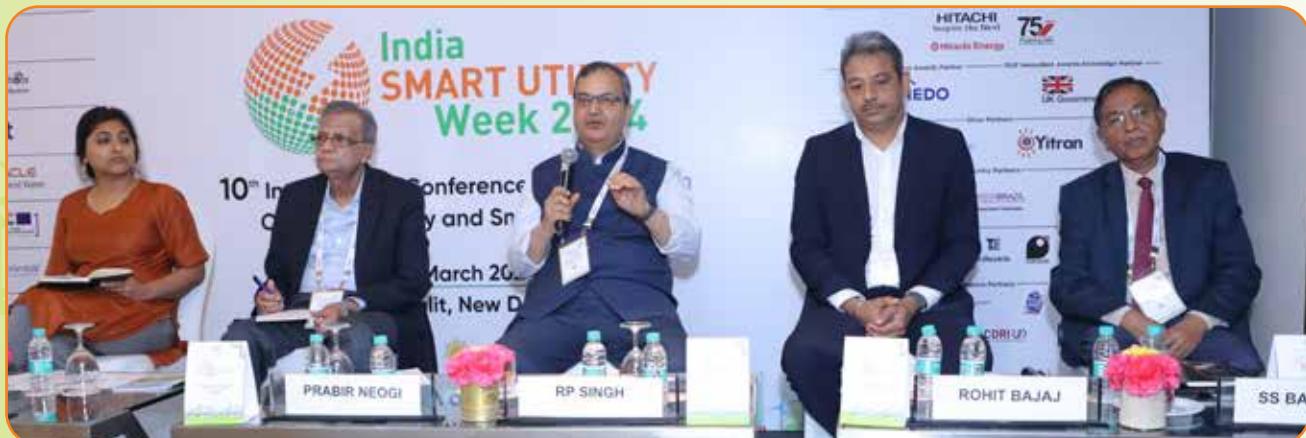
## Session -13: Power Markets and Carbon Markets (Session Partner - BEE and IEX)

### Panel 1: Driving De-Carbonization through Carbon Markets



**Speakers of the Panel 1:** (L-R) - Rahul Tongia, Senior Fellow, CSEP; Nithyanandam Yuvaraj Dinesh Babu, Executive Director, Climate Action Data Trust; Manpreet Singh, Partner, ESG Strategy and Transformation, PWC; Snigdha Verma, Head-Carbon Credit, Convergence Energy Services Limited; Indranil Chatterjee, SVP – International Carbon Exchange; Ashok Kumar, Regional Representative for Central and South Asia, Verra; Rohit Kumar, Secretary General, Carbon Markets Association of India; Rambabu Paravastu, Chief Sustainability Officer, Greenko

### Panel 2: Deepening of Power Markets



**Speakers of the Panel 2:** (L-R) - Ann Josey, Fellow, Prayas (Energy Group); Prabir Neogi, Chair- FICCI Power Committee, Advisor-GMR Energy; RP Singh, Former Chairman, UPERC; Rohit Bajaj, Executive Director, IEX; SS Barpanda, Director – Market Operations, Grid Controller of India

## Session -14: Evolving Trends in Utility Automation (Session Partner - C-DAC)



**Speakers of the Session:** (L-R) - Faruk Kazi, ISGF WG Chair and Dean Studies, VJTI; Tripta Thakur, Director General, NPTI; Gurunath Gurala, Associate Professor, IISc Bangalore; Renji V Chacko, Sr. Director & Chief Investigator NaMPET C-DAC; Reena Suri, Executive Director, ISGF; Om Krishan Singh, Deputy Director, Ministry of Electronics and Information Technology; Vishwajeet Singh, Senior Manager (APAC), AutoGrid; Ritesh Kesary, CDAC-Wireless Charging; Aby Joseph, Scientist-G and Sr Director C-DAC, Thiruvananthapuram

# ISUW 2024: WORKSHOPS

Smart Utilities Integration - Electricity + City Gas + Water (In Collaboration with NGS & India CGD Forum) Opening Session



**Speakers of the Session:** (L-R) - Reji Kumar Pillai, President, ISGF; Raman Srivastava, Sr. Vice President (F&S and RCA & RM); Ganesh Das, Chief-Collaboration and Innovation, Tata Power Company Ltd; ES Ranganathan, Former Managing Director, IGL; Shreedhar Venkat, Sr Vice President, BSES Rajdhani Power, Ltd

## Panel 1: Sharing of Digital Assets amongst electricity, water and City Gas Distribution Companies



## Panel 2: Utilities of Tomorrow: Water + Gas + Electricity: Case Studies/ Success Stories on Adoption of New Technologies in Utilities



**Speakers of the Panel 1:** (L-R) - DD Verma, Former Chairman, Uttar Pradesh Electricity Regulatory Commission and Former Secretary General-Rajya Sabha; Ajay Pradhan, Chairman and CEO, C2S2; Satyendra R Pandey, Member, Gujarat Electricity Regulatory Commission; Kamal Verma, CEO, Water Business Group, Triveni Engineering & Industries Ltd; Anshumali Bhushan, CEO, IGL Genesis Technologies Ltd. (JV of Indraprastha Gas Ltd. and Genesis Gas Solutions Pvt Ltd.); Tania Sole, President, Blue Desal; Kunal Gupta, Chairman, Rozgar

**Speakers of the Panel 2:** (L-R) - Sourav Daspatnaik, Managing Director, Swach Environment Private Limited; Sreedhar Venkat, Sr Vice President, BSES Rajdhani Power; Raman Srivastava, Sr. Vice President (F&S and R, CA & RM); Reji Kumar Pillai, President, ISGF; Sumit Gupta, CEO, Asset Plus; Dharmendra Tomar, Associate Director - IoT BU, Tata Communications; Presenjit Mukherjee, Chief Information Officer, Jindal Water Infra; Davinder Singh, Senior Manager Zonal Incharge (Noida)

# ISGF INNOVATION AWARDS CEREMONY 2024

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



**GE Vernova**  
Implementation of Smart Transmission and Asset Management System for Rajasthan Rajya Vidyut Prasaran Nigam Limited  
**DIAMOND AWARD**

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



**REConnect Energy Solutions Limited**  
Addressing Variability in RE with Real Time Tracking of Generation with Web Based Scheduling  
**PLATINUM AWARD**

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



**Uron Energy**  
Largest Floating Foundation Rooftop Solar Project in India for Worlds Largest Office Building - Surat Diamond Bourse  
**GOLD AWARD**

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



**Probus Smart Things Pvt. Ltd.**  
Wireless Solar String Monitoring  
**GOLD AWARD**

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



**NeXHS Renewables Pvt Ltd**  
Optimization of Structural Systems for Wind Turbine Generator (Foundation and Tower)  
**GOLD AWARD**

## Smart Technology - Electricity Generation



**Grid Controller of India Limited (GRID-INDIA)**  
Implementation of Market Based Tertiary Reserve Ancillary Services (TRAS) in the Indian Power System  
**DIAMOND AWARD**

### Smart Technology - Electricity Generation



**CESC Limited., Applying Unit: Budge Budge Generating Station**  
Automation of Unit #3 Cooling Tower Blowdown Valve  
**PLATINUM AWARD**

### Smart Technology - Electricity Generation



**Prof. Dr. Om Prakash G. Kulkarni**  
Hydro Power Generation By Smart Utilization of the Water  
Wastage Through Spillway Overflow at Dams.  
**GOLD AWARD**

### Smart Technology - Electricity Transmission



**Power Grid Corporation of India Limited**  
Application of Geographic Information System, Remote Sensing  
and Image Processing in Power Transmission  
**DIAMOND AWARD**

### Smart Technology - Electricity Transmission



**The Tata Power Company Limited**  
Online Sheath Current Monitoring of EHV Cables  
**PLATINUM AWARD**

### Smart Technology - Electricity Distribution



**BSES Yamuna Power Limited**  
Intelligent Earth Resistance Monitoring System- Earth's Pulse at  
Your Fingertips (First Implementation in India)  
**DIAMOND AWARD**

### Smart Technology - Electricity Distribution



**Tata Power Northern Odisha Distribution Limited**  
Elexxa - Secure Tech - Integrated Safety Harness & Helmet with  
Voltage Detector  
**DIAMOND AWARD**

## Smart Technology - Electricity Distribution



**Tata Power Northern Odisha Distribution Limited**  
Aerial Meter Reading for Lift Irrigation Consumers by Using Fixed  
Wing Drone and BLE Meters  
**PLATINUM AWARD**

## Smart Technology - Electricity Distribution



**Tata Power Delhi Distribution Limited**  
A Big Sustainability Swin  
**PLATINUM AWARD**

## Smart Technology - Electricity Distribution



**Tata Power Western Odisha Distribution Ltd**  
Innovative Approach Towards Distribution Automation  
**GOLD AWARD**

## Smart Technology - Energy Storage Systems (ESS)



**The Tata Power Company Limited**  
DG Set Replacement with BESS  
**PLATINUM AWARD**

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



**Sand Bird**  
Smart Electric Power Tiller with 10x Lower Opex for Low Income Farmers  
**DIAMOND AWARD**

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



**Switch Mobility Automotive Limited**  
SWITCH EiV 22 Leads the Sustainable Mobility Revolution  
**PLATINUM AWARD**

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



**Magenta Mobility (Magenta EV Solutions Private Limited)**  
Intelligent DMS (Driver Monitoring System) & AI-based Video Telematics  
**GOLD AWARD**

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



**Kerala State Electricity Board Limited**  
KE-Mapp: Revolutionizing EV Charging Infrastructure in Kerala with a First-of-its-Kind Unified Solution  
**DIAMOND AWARD**

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



**BSES Rajdhani Power Limited**  
Smart Innovations in Smart Charging Infrastructure (including Smart Business Models)  
**GOLD AWARD**

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



**Tata Power EV Charging Solutions Limited**  
Smart Home Charging Infrastructure Installation Management Platform  
**GOLD AWARD**

## Adoption of Artificial Intelligence, Machine Learning and Robotic Solutions - Utility (including Smart Business Models)



**Power Grid Corporation of India Limited**  
AI-ML Based Reliability Centred Maintenance Framework for Power Transformers and Reactors in Power Grid  
**DIAMOND AWARD**

## Adoption of Artificial Intelligence, Machine Learning and Robotic Solutions - Utility (including Smart Business Models)



**The Tata Power Company Limited**  
Bot based power management  
**DIAMOND AWARD**

### Adoption of Artificial Intelligence, Machine Learning and Robotic Solutions - Utility (including Smart Business Models)



**The Tata Power Company Limited**  
AI Based Robotic Monitoring of Receiving Station  
**PLATINUM AWARD**

### Adoption of Artificial Intelligence, Machine Learning and Robotic Solutions - Utility (including Smart Business Models)



**Husk Power Systems**  
Transforming India's Rural Electrification with AI  
**GOLD AWARD**

### Adoption of Artificial Intelligence, Machine Learning and Robotic Solutions - Utility (including Smart Business Models)



**Power Grid Corporation of India Limited**  
Autonomous Robotic Solution for Inspection of High Voltage  
Electrical Substations  
**GOLD AWARD**

### Adoption of Artificial Intelligence, Machine Learning and Robotic Solutions - Industry (including Smart Business Models)



**The Tata Power Company Limited**  
Artificial Intelligence Based Cable Identification  
**DIAMOND AWARD**

### Adoption of Artificial Intelligence, Machine Learning and Robotic Solutions - Industry (including Smart Business Models)



**Atzug Plus Consulting (Opc) Private Limited**  
CNG Gas Station "Dry Out" Prevention Through AI Driven  
Automation of LCV Scheduling and Optimization  
**PLATINUM AWARD**

### Adoption of Artificial Intelligence, Machine Learning and Robotic Solutions - Industry (including Smart Business Models)



**IntelliSmart Infrastructure Private Limited**  
AI/ML-Powered Enterprise Analytics for State Discoms  
**PLATINUM AWARD**

### Smart Start-up of the Year



**EMA Solutions Pvt. Ltd.**  
P-STAT India's First and Only Power Market Analytics Platform  
**DIAMOND AWARD**

### Smart Incubator of the Year



**Social Alpha**  
The Clean Energy International Incubation Centre (CEIIC), Supporting Innovative Solutions Across the Entire Energy Value-Chain  
**DIAMOND AWARD**

### Smart Incubator of the Year



**VJTI Technology Business Incubator**  
Vjti-Tbi: An Incubator Nurturing A Credible Cluster of Sustainable Technology Based Startups That Will Create A Social and Economic Impact on The Region and The Nation as a Whole  
**PLATINUM AWARD**

### Waste-to-Energy Projects (W2E)



**GPS Renewables Private Ltd**  
A Technology Led Full Stack Biofuels Firm  
**PLATINUM AWARD**

## WOMAN IN POWER



**Ms. Tripta Thakur, Director General, National Power Training Institute (NPTI)**



**Dr. Rashi Gupta, MD, Vision Mechatronics Pvt. Ltd.**



**Ms. Vineeta Agarwal, Chief General Manager (CGM), Powergrid Energy Services Limited (PESL)**



**Ms. Snigdha Verma, Head, Carbon Credits, Convergence Energy Services Limited (CESL)**

**ISGF President's Award for the Best Contribution towards growth of Smart Grids and Energy Transition in India**



PK Pujari, Former Chairperson of CERC

**ISGF President's Award for the Best Contribution towards growth of Smart Grids and Energy Transition in India**



Raj Pratap Singh, Former Chairperson of UPERC

**ISGF President's Award for the Best Contribution towards growth of Smart Grids and Energy Transition in India**



V Subramanian, Former Secretary, MNRE

**ISGF President's Award for the Best Contribution towards growth of Smart Grids and Energy Transition in India**



Girish Ghatikar, ISGF Working Group Chair

## ISUW 2024: CERTIFICATE OF MERIT

### CERTIFICATE OF MERIT

Most Innovative Renewable Energy Programs/Projects in India - Solar (Utility Scale)	Tata Power Western Odisha Distribution Limited	Solarization of Grid Connected Agricultural Pump
Smart Technology - Electricity Transmission	The Tata Power Company Limited	Innovative Selective Auto Reclosure for Hybrid Transmission Lines (Overhead+ Underground)
Smart Technology - Electricity Transmission	The Tata Power Company Limited	Realtime Fiber Monitoring System for Optical Fiber Network in Transmission
Smart Technology - Electricity Transmission	Karnataka Power Transmission Corporation And Atipug Plus Consulting OPC Private Limited	SCADA Analytical Modelling Platform for KPTCL 11KV to 400KV Network
Smart Technology - Electricity Distribution	REConnect Energy Solutions Limited	Advance RAMR System for DVC Consumers
Smart Technology - Electricity Distribution	Tata Power Western Odisha Distribution Limited	Reduction of Carbon Footprint Through Digitalization of Exchange Meters
Smart Technology - Electricity Distribution	Tata Power Delhi Distribution Limited	Cyber Hygiene for Advance Protection System and its Mitigation Approach

Smart Technology - Electricity Distribution	CESC Limited	Democratization of Green Energy through P2P Trading on Blockchain Platform
Smart Technology - Electricity Distribution	The Tata Power Company Limited	Smart Application for Meter Reading & Bill Distribution for Effective Results & Control Deviations.
Smart Technology - Electricity Distribution	GIZ-INDIA	Data-Driven Transformation: Evolving the Power Distribution Sector with Data Hubs
Smart Technology - Electricity Distribution	Indian Institute of Technology Kanpur (IIT Kanpur)	Interconnected Smart Microgrid System for Rural Electrification
Smart Technology - Electricity Distribution	Noida Power Company Limited	Mobile Application Based Real Time Disconnection using Cyclo
Smart Technology - Electricity Distribution	The Tata Power Company Limited	Introduction of Absolutely Dust Free, Moisture Controlled, Positive Pressure System for Indoor Switchgears
Smart Technology - Electricity Distribution	CESC Limited	On-Line Remote Monitoring for Critical Parameters of a Gas Insulated Switchgear (GIS), Using IoT Sensors on a Vendor Agnostic Platform
Smart Technology - Electricity Distribution	Tata Power Delhi Distribution Limited	Tata Power Delhi Distribution Limited
Smart Technology - Electricity Distribution	The Tata Power Company Limited	Monitoring the Distributed Energy Resources (DER) and its Impact on Distribution Network.
Smart Technology - Electricity Distribution	AutoGrid	Behavioural Demand Response Program at Tata Power Mumbai
Smart Technology - Electricity Distribution	TekUncorked AlloT Pvt Limited	Making Electricity Distribution Smart, Connected and Predictive with an Objective of Reliable, Outage-Free Electricity for All
Smart Technology - Electricity Distribution	The Tata Power Company Limited	Installation of EKL8000 FPI in Schneider RMU for Faster System Restoration
Smart Technology - Smart Water Distribution	Aumsat Technologies LLP	Water Leaks Detection, Tracking, Estimation, and Remediation by Novel Non-Invasive Techniques for Smart Water Management.
Emerging Innovation in Electric Mobility Domain - Electric Vehicle (2/3/4 Wheelers and Public Transportation)	Sugrah Mobility Pvt Limited	Solar Powered Pedal Assisted Electric 3 Wheeler
Emerging Innovation in Electric Mobility Domain - EV and Charging Technology/Solution Providers	The Tata Power Company Limited	Multi-tier Cable Laying Arrangement for EV Bus - Elevated Cable Tray Depots
Adoption of Artificial Intelligence, Machine Learning and Robotic Solutions - Industry (including Smart Business Models)	Tata Consultancy Services Limited	Data-Driven Control and Management of Power Networks
Smart Incubator of the Year	AIC-DSU Innovation Foundation	AIC-DSU Innovation Foundation - Innovation Potential Unleashed
Waste-to-Energy Projects (W2E)	Directorate of Higher Education, Haryana	Stabilization of Municipal Solid Waste (MSW) to Achieve Zero Waste Sustainable Future

## ISUW 2024: GLIMPSES OF THE EXHIBITION BOOTHS

Exhibition Inaugural



Cuculus



European Union (EU)



G3 Alliance



GE Vernova



L&T Energy Solutions, Power Transmission



Ministry of Electronics & Information Technology,  
Government of India & C-DAC



Oracle



Plutomen



Smart Energy Water



Tata Power Company Limited &  
Tata Power-DDL



Taurus



TekUncorked



Trilectric



Wi-Sun Alliance



Yitran



Phoenix Contact



## ISUW 2024: GLIMPSES OF GALA DINNER AND PROGRAMME

Band



Glimpses of Audience



# ISUW 2024: GLIMPSES DAY 5

## 16TH MARCH 2024 – (SATURDAY)

### TECHNICAL TOURS AND DEMONSTRATIONS

Tour -1 NRLDC + REMC and TPDDL SMART GRID LAB + 10 MW BESS

NRLDC + REMC



TPDDL Smart Grid Lab + 10 MW BESS



Tour -2: 800 kV HVDC STATION IN AGRA + TAJ MAHAL

Powergird 800 kV HVDC Station in Agra



Taj Mahal



ISGF TEAM



## JOIN ISGF ONLINE TRAINING PROGRAMS



India Smart Grid Forum

### Join ISGF Online Training Programs

SELF PACED LEARNING PROGRAMS

+91-11 - 4103 0398

Team@indiasmartgrid.org

www.indiasmartgrid.org

Supported By	Sponsored By	Knowledge Partner	Knowledge Partner	Jurisdiction Owner
ADVANCED METERING INFRASTRUCTURE	ARTIFICIAL INTELLIGENCE AND ROBOTICS FOR UTILITIES AND SMART CITIES	CYBER SECURITY FOR POWER SYSTEMS	TRANSFORMER MODELS AND GENERATIVE AI TOOLS	
ELECTRIC MOBILITY AND CHARGING INFRASTRUCTURE	BLOCKCHAIN FOR ENERGY AND UTILITIES	OCPP TECHNICAL TRAINING	SMART GRID FOUNDATION COURSE	

Register at - <http://bit.ly/3odxqjG>

Announcing Distribution Utility Meet (DUM) 2024 in Lucknow, Uttar Pradesh from 14 - 15 November 2024

ORGANIZER **ISGF**  
India Smart Grid Forum

HOST UTILITY

SUPPORTED BY

**DISTRIBUTION UTILITY MEET DUM 2024**  
8th Annual Conference of Power Distribution Utilities for Collaborative Growth

14 - 15 November 2024  
Lucknow, Uttar Pradesh, India

[www.dumindia.in](http://www.dumindia.in) [dum@indiasmartgrid.org](mailto:dum@indiasmartgrid.org)

@DistributionUtilityMeet2024

Announcing India Smart Utility Week (ISUW 2024) in New Delhi from 04 – 08 February 2025

**India SMART UTILITY Week 2025**

**04 - 08 February 2025**  
**New Delhi**

ORGANIZER **ISGF**  
India Smart Grid Forum

**ISUW 2025**  
11th Edition of India Smart Utility Week, An International Conference and Exhibition on Smart Energy and Smart Mobility

[isuw@isuw.in](mailto:isuw@isuw.in) [www.isuw.in](http://www.isuw.in)

04 February 2025 Tuesday	05 February 2025 Wednesday	06 February 2025 Thursday	07 February 2025 Friday	08 February 2025 Saturday
Special Workshops & Master Classes	Conference and Exhibition	Conference and Exhibition	Conference and Exhibition	Technical Tours and Cultural Tours

**9th ISGF INNOVATION AWARDS : 07 FEBRUARY 2025**

Follow us at #ISUW25