Dear Friends:

It gives me immense pleasure to welcome you all to the 4th edition of India Smart Grid Week (ISGW) starting from 05 March 2018 in New Delhi.

As you know, within a short span of 3 years, ISGW has evolved as one among the most popular international events on smart grids and smart cities. This edition of ISGW will have 225+ eminent speakers from 40+ countries. We have already received registrations from 2000+ delegates and visitors from 55 countries. The event will have 4 bilateral workshops (with European Union, USA, Sweden and France) for building collaborations between utilities in India and utilities and technology providers in those countries. Besides there will be full day parallel sessions on Smart Water on 07th March 2018 and on Smart City Gas Distribution on 08th March 2018. The Roundtables on “Blockchain for Utilities” and “Smart Policies and Regulations for 21st Century” scheduled on 08th March 2018 has drawn huge interest amongst various stakeholders.

During the recent past Government of India has taken several ground breaking policy initiatives towards electric grid modernization, building 100 smart cities and rejuvenating 500 old towns, introducing electric vehicles and bullet trains on fast track; and also made firm commitment at Paris Climate Agreement for transition to a low carbon economy with 40% of energy from non-fossil resources by 2030. Some of the key initiatives taken for grid modernization include:

- Smart Grid Vision and Roadmap for India in August 2013
- National Smart Grid Mission approved in 2015
- New RE Program launched in Feb 2015 with a target of 175 GW by 2022 of which 100 GW from Solar
- Net Metering Policies in all 29 States and 7 Union Territories in last 4 years – every electricity customer in India can be a “prosumer” theoretically
- Model Smart Grid Regulations approved by Forum of Regulators in 2015

Please visit www.indiasmartgrid.org for more information or to download a pdf version of the bulletin

For receiving copies of SMART GRID Bulletin, please write to sgbulletin@indiasmartgrid.org
o Standards for Smart Meters (IS 16444 and IS 15959 Part-II) issued by Bureau of Indian Standards

o Ancillary Services Regulations by Central Electricity Regulatory Commission in 2015

o National Mission on Electric Mobility (NMEM) with a target of 6-7 million Electric Vehicles

o Telecom Regulatory Authority of India recommended to release additional 7 MHz license free spectrum for M2M communications in Sept 2017

o National Tariff Policy in 2016 mandated Smart Meters for all customers with monthly consumption above 200kWh by Dec 2019

o Green Corridors for high voltage transmission interconnection between major pooling stations in RE rich states in the western and southern regions; and establishment of Renewable Energy Monitoring Centers (REMCs) with sophisticated tools for weather monitoring and forecasting, RE generation forecasting, demand forecasting and grid balancing

These initiatives have already caught the attention of global investors and technology companies and India is fast emerging as a preferred destination for investments.

With constantly increasing prices of conventional power from the grid and steeply falling prices of PV panels, many consumers are finding it economically viable to have rooftop solar systems. This is going to open up a lot of opportunities in the value chain. There are microgrids where one can sell surplus generation from the rooftop solar to anyone connected to the grid. Peer-to-peer trading on blockchain and payment settlements through crypto-currencies are going to change the entire electricity value chain in the coming days. The evolution of the grid in to large number of grid connected smart microgrids is already taking place and buildings are becoming smart and grid interactive buildings with self-generation, storage, electric vehicles and intelligent systems to control load, generation and storage including car batteries. These buildings will buy and sell electricity in the power market – buy and store when prices are low and sell when prices are high. In the near future, smart appliances will buy electricity to power themselves from the cheapest resource available in the network through smart contracts established on blockchain. Many of these new concepts and technologies will be discussed in ISGW 2018 by eminent experts in the respective fields. These are very important concepts for India and other developing countries where we are still building our cities, campuses, commercial and residential buildings. The new assets can be built with new features and emerging technologies at marginal cost which will help us leapfrog to 21st century.

I am sure you will all enjoy and enrich yourselves being with us for India Smart Grid Week 2018!

Reji Kumar Pillai
President – India Smart Grid Forum
Chairman – Global Smart Grid Federation

ANNOUNCING

India SMART UTILITY Week 2019
12 March - 16 March 2019 | New Delhi, India

Conference and Exhibition Program

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<td>Master Classes</td>
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<td>Technical Tour and Cultural Tour</td>
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KUSUM Scheme for Solar Power

KUSUM (Kisan Urja Suraksha Evam Utthaan Mahaabhiyan) scheme has been devised to promote the use of solar power among farmers and will be placed before the Cabinet in March. It aims to incentivise farmers to run solar farm water pumps and use barren land for generating solar power to have extra income. The total cost of the capacities under this scheme would be Rs 1.4 lakh crore and central govt. will provide Rs 48,000 crore financial assistance under the scheme. Read More: http://bit.ly/2CbXwdu

Subsidy for two-wheeler EVs

Gujarat has provided subsidy to 2000 people for purchasing two-wheeler EVs. Each beneficiary has been provided a subsidy of 10,000 for purchasing an EV two-wheeler. The incentive was part of Gujarat Energy Development Agency (GEDA)’s plan to implement a subsidy program for school students (standards 9 to 12) as well as college students in the cities of Ahmedabad, Vadodara, Rajkot, Surat, and Gandhinagar. Read More: http://bit.ly/2BJ77rd

Transmission charges waiver for Solar and Wind Projects

Power produced from wind and solar projects will become viable, and more attractive for DISCOMs as the government waived off inter-state transmission charges for wind and solar projects commissioned till March 2022, in a bid to encourage the use of power generated through these sources. The move will take away future possibilities of additional cost to DISCOMs, encouraging them to purchase power produced from solar and wind projects. Read More: http://bit.ly/2ohNYF9

Subsidy for Grid-connected Solar Rooftop Projects

JREDA (Jharkhand Renewable Energy Development Agency) offers subsidy up to 50% for Grid-connected Solar Rooftop Projects till 2nd May 2018. The grid-connected solar inverters convert DC into AC electricity, enabling the user to interconnect the system with his home or office distribution board. If one generates more solar electricity than his consumption during a billing cycle, the excess electricity will be credited to the next bill. Read More: http://bit.ly/2GzeYqu

Lower Benchmark Tariff for New Solar Projects in Karnataka

The Karnataka Electricity Regulatory Commission has proposed a tariff of Rs. 2.79/kWh for New Grid-Connected Solar Photovoltaic Projects developed in the State. The proposed tariff is approx. 36% less than KERC’s previous benchmark tariff of Rs. 4.36/kWh, as per Order dated 12.04.2017. KERC also proposed a tariff of Rs. 3.27/kWh without subsidies for Rooftop Solar PV Projects ranging from 1 KW to 1000 KW which is approx. 41% less than previous benchmark tariff of Rs. 5.20/kWh. Read More: http://bit.ly/2omNo8i

Government to Restructure Apex Bodies on E-Mobility

In order to propel the Centre’s e-mobility initiatives, the government is likely to restructure two apex bodies, the National Council for Electric Mobility and the National Board for Electric Mobility to ensure better inter-ministerial coordination. The restructuring proposal was mooted by government think tank Niti Aayog for providing a leadership and inter-ministerial coordination. Read More: http://bit.ly/2sM7CxQ

Power Ministry Plans to Cap Cross Subsidy

The power ministry’s plan to cap cross-subsidy i.e. additional tariffs paid by industrial and commercial consumers to subsidise households and farmers at 20%, from January 2019. This will reduce the cost of electricity for businesses by up to 14-20%. At a time when raw material costs are high and power pricing is subdued, this could help companies to increase their earnings. Read More: http://bit.ly/2BJCBNZ

JSW signed MoU with Maharashtra for EV and Storage

JSW has signed a pact with Maharashtra for setting up manufacturing unit for electric vehicles (EV) and Energy Storage Systems in the state. The company had planned to roll out its first electric vehicle by 2020. It is looking at states like Maharashtra, Gujarat, Rajasthan, Tamil Nadu and Andhra Pradesh for this venture and intends to have 60% localised manufacturing. Read More: http://bit.ly/2GCoN5v
Japanese Power Firms becoming Digital to match Competition in Liberalized Market

Tokyo Electric Power Company Holdings Inc. started a project to set up a peer-to-peer electricity trading platform together with German power firm Innogy SE. The platform allows participating individuals to directly sell their surplus solar power to local supermarkets and companies via transactions using smartphones. The service will begin in Germany and project aims to attract 10,000 individual and corporate subscribers by 2020. They will use blockchain, the core technology that enables high security cryptocurrency transactions at low costs.

They are also exploring the concept of virtual power plants. The plants connect solar panels and storage batteries at households and electric vehicles using “internet of things” technology to integrate them as a unified power supply system. In addition to these activities, Power utilities are also collaborating with home appliance and housing companies to explore new business opportunities utilizing emerging technologies. Source: http://www.indiasmartgrid.org/viewnews.php?id=3993

Navigant Research White Paper indicates a Powerful Platform for New Value Creation to be delivered by the Neural Grid

A new white paper from Navigant Research explores the concept of the Neural Grid, identifying the critical components expected to transform legacy infrastructure into a platform that will eventually support a fully mature Energy Cloud environment.

Today’s smart grid enhances the traditional transmission and distribution (T&D) network with pockets of automation, connectivity, and centralized IT systems. But the grid of tomorrow, the Neural Grid, represents much more than Smart Grid 2.0. According to the report from Navigant Research, the Neural Grid is a vastly more powerful platform of hard and soft assets leveraging ubiquitous connectivity, the cloud, robotics, artificial intelligence (AI), edge computing, and pervasive sensing to perform a variety of energy and non-energy applications. Source: http://www.indiasmartgrid.org/viewnews.php?id=3992

Landis + Gyr started 46 New Projects for Smart Grid Technology and Services with Power Utilities in North America

Landis + Gyr is expanding its power business in North America at higher pace. They have signed approximately 46 contracts for smart grid technology and services with Power utilities during 2017. It includes a wide variety of market offerings, including more than 350,000 metering endpoints, along with distribution automation and load management devices, software, and smart grid services.

Wyrulec Company in Wyoming and Pioneer Electric in Alabama has signed contracts to replace legacy advanced metering technology with Landis+Gyr’s RF Mesh platform. Along with a new project at Tucson Electric Power, Landis+Gyr participate for expansion of smart grid projects at Ameren and PPL. Moreover, Landis+Gyr has successfully implemented some of the largest advanced metering and grid automation deployments in North America and around the world. Source: http://www.indiasmartgrid.org/viewnews.php?id=3990

Nokia launched Smart City Platform, Services and IoT Management Tools

During Mobile World Congress Nokia launched a set of services and technologies to manage a smart city’s video surveillance, network, Internet of things sensors, parking and environment. The effort by Nokia revolves around creating a framework and platform to knit together various services. Technology vendors such as Cisco, Huawei, Verizon and others are all targeting smart city management. IDC estimates that smart cities will spend $135 billion on technology by 2021.

The moving parts will include: IoT for Smart Cities, which is a modular integrated framework to unify smart city management consoles and scale up services. Nokia is arguing that its Integrated Operations Center can orchestrate a city’s technology and drive revenue as well as save costs; Sensing as a Service, which offers analytics and data services for IoT networks. Sensing as a Service could spot everything from illegal construction to environmental changes. The effort uses blockchain to enable smart contracts; S-MVNO (secure mobile virtual network operator) for Public Safety enables cities to offer broadband services to public safety agencies. Source: http://www.indiasmartgrid.org/viewnews.php?id=3984

Deloitte Report says China has Highest Number of Smart City Pilot Projects

As per recent news reported by Deloitte, China has about 500 smart city pilot projects which is highest in the world. Over 1,000 smart city pilot projects are ready for or are under construction worldwide, whereas China is doing 500 smart city projects covering big and small cities. China started piloting national smart city development in 2012 to encourage use of the latest technology, such as artificial intelligence and Internet of Things, to help the flow of traffic, improve law enforcement and make public buildings more energy efficient. It aims to nurture 100 new smart cities from 2016 to 2020 to lead the country’s urban planning and development. Source: http://www.indiasmartgrid.org/viewnews.php?id=3985

Sunpreme Partners with Blue Sky Utility and Passco Companies Deployed 1.62MW Bifacial Solar Panels at Hanford : One of the Largest Rooftop Installations on a Shopping Mall in California

Blue Sky Utility, a California based renewable energy developer, and Sunpreme Inc., a US-based solar photovoltaic company and Passco Companies, a national real estate investment firm, have completed of a 1.62Megawatt commercial rooftop solar system located on Hanford Mall in Hanford, CA. The system is the largest commercial rooftop Solar PV installation in Hanford and the largest solar system to be installed, to date, on a shopping mall in the state. The system is estimated to generate almost 3,000,000 kWh of clean, emission free electricity annually – enough energy to serve over 450 homes, while providing a centerpiece to the holistic approach to environmental stewardship. Source: http://www.indiasmartgrid.org/viewnews.php?id=3982

Project on Aerial Mapping of Bengaluru’s Solar Energy Potential Started

Bangalore Electricity Supply Company (BESCOM) commissions initiative to meet the target of generation of 1,000 MW of rooftop solar energy by 2022 from Bengaluru alone. The initiative, based on a 2016 agreement of BESCOM with CSTEP and Karnataka Renewable Energy Development Ltd. (KREDL) started at Jakkur aerodrome. The aircraft will cover an approximate area of 1,100 sq. km, generating high resolution images of rooftops of buildings in the city. The mapping will be carried out by CSTEP and the data generated will be submitted to the Energy Department.
The LiDAR technology (Laser mapping technology — where aerial light pulses are directed at the ground from an aircraft ) will send pulsed laser light on to the rooftop of a building and translate the reflected light into data points. Based on objects such as trees surrounding the rooftop, shadow-free area available for solar power generation will be calculated and an estimate will be arrived at as to the capacity of solar generation of each building in the city, said officials. Source: http://www.indiasmartgrid.org/viewnews.php?id=3974

US - NIST Report Presents Overview of International Cybersecurity Standardisation for IoT

The National Institute of Standards and Technology in the US recently released an interagency report on cybersecurity for the Internet-of-Things (IoT). The Report identifies possible gaps in standards; for example, the application of blockchain in cryptographic techniques, the inability to use software patches to fix flaws in cyber incident management. The Interagency Report on Status of International Cybersecurity Standardization for the Internet of Things (IoT) examines the current state of international cybersecurity standards development by voluntary consensus standards bodies for IoT. The Report is meant to inform and enable policymakers, managers, and standards participants as they seek timely development of and use of cybersecurity standards in IoT components, systems, and services. Source: http://www.indiasmartgrid.org/viewnews.php?id=3969

SBI-UK DFID Invested in SunSource Energy for Developing Solar Projects in India

India’s largest public sector lender State Bank of India (SBI) has invested an undisclosed amount from its Neev Fund in Indian solar player SunSource Energy, for developing solar project assets in states with low levels of capital investment. The Neev Fund, an initiative of SBI and UK’s department for International development (DFID), is an infrastructure private equity fund which aims to invest in low income or developing states in India, with a focus on infrastructure sub-sectors such as renewable energy, agricultural supply chain, among others.

The funding will help SunSource develop projects in Uttar Pradesh, Rajasthan, Madhya Pradesh, Bihar, Orissa, Jharkhand, West Bengal and Chhattisgarh, outside of their operations in other cities. Source: http://www.indiasmartgrid.org/viewnews.php?id=3967

NEA, JICA working on Smart Grid Technology Project Introducing Distribution Network Management System (DNMS) in Batangas

National Electrification Administration (NEA) and the Japan International Cooperation Agency (JICA) have collaborated on a project introducing Distribution Network Management System (DNMS) technology to Batangas province in order to enhance the reliability of electric cooperatives’ distribution system. The smart-grid technology project aims to show the DNMS’ effectiveness, and better understand its configuration and how it operates.

The project falls under JICA’s collaboration program with the private sector for the distribution of Japanese technology to the electricity-distribution system and management in the country. JICA commissioned the Tokyo Electric Power Co. (Tepco) and affiliated firm Takaoka Toko (TOKT) to collaborate with NEA on the project. Source: http://www.indiasmartgrid.org/viewnews.php?id=3923

Google Plans 150 ’Google Station’ WiFi Hotspots in Smart City Boost for Pune

Google in collaboration with L&T expands the provision of its WiFi services to the citizens of Pune. The company, stated that there will be close to 150 Google Station hotspots in as a part of the Pune Smart City Development Corporation Limited’s Smart City project. The initiative would increase the usability of the city’s other smart city services which include public buses, opportunities for digital learning, and participation in digital governance.

The project expands Google Station hotspots from railways to cities. The aim with Google Station is to bring fast WiFi to more users in more places within India. Google Stations are built to be both the highest-quality and easiest WiFi service for users and the easiest for partners to deploy and hence making Station a great connectivity partner for the growing number of Indian smart cities. Source: http://www.indiasmartgrid.org/viewnews.php?id=3921

ISGF Member Tata Power unveils $2.25 million Smart Energy Incubation Hub

Tata Power Delhi Distribution Limited (TPDDL) aims to launch the Tata smart energy incubation hub to encourage renewable energy development in India. The Tata trust will provide INR 150 million ($2.25 million), while the Indian government’s Science & Technology department will pay out an undisclosed sum. The company is also planning the installation of a 10 MW Battery Energy Storage System (BESS).

The purpose of Tata Smart Energy Incubation Hub is to incubate startups and support them both financially, and with other resources, to conduct work in the area of smart energy. Source: http://www.indiasmartgrid.org/viewnews.php?id=3919

T-Hub launches Innovation Platform for Renewable Energy Sector in India

T-Hub, in association with Rural Electrification Corporation, has launched ‘REC Innovation Platform’ to encourage innovation in the renewable energy sector. The platform was by KT Rama Rao, Telangana IT Minister, and PV Ramesh, Chairman and MD, REC Ltd., through its REC Foundation initiative.

It aims to extend support and mentorship to 30 government institutions. About 1,800 students from select institutions will go through the rigorous Conceptual Research Experience Programme in the renewable energy sector, ranging from solar and wind energy to geothermal energy and alternate bio-fuels and climate-change issues to produce 600 projects.

Source: http://www.indiasmartgrid.org/viewnews.php?id=3913

T-Mobile has become First US Wireless Carrier to detail a Plan for 100 Percent Renewable Energy by 2021

T-Mobile joined the ranks of companies that have made that pledge, committing to 100 percent renewable electricity by 2021. The mobile carrier will support this goal through a new wind power farm in Kansas, together with the farm it already has in Oklahoma. Together, the two renewable energy sources will provide about 60 percent of T-Mobile’s power. To reach 100%, T-Mobile aims to buy enough wind power annually to account for every unit of electricity the company consumes. T-Mobile is the first US wireless carrier to join RE100 and commit completely to green energy. Source: http://www.indiasmartgrid.org/viewnews.php?id=3912
ISGW 2018: Event Structure

05 March 2018 | Master Classes
06 March 2018 | Conference & Exhibition
07 March 2018 | Conference & Exhibition
08 March 2018 | Conference & Exhibition
09 March 2018 | Technical Tours

ISGW 2018: Conference Themes

- E-Mobility
- Smart Cities
- Cross Cutting Themes
- Disruptive Innovations & Technology Trends
- Smart Metering
- Grid Modernization
- Renewables & Microgrids

ISGW 2018: Master Classes

5th March 2018 (Monday)

- ISGF SMART UTILITY MASTER CLASS SERIES
  - Theme 1 - Leading Grid Modernization: Smart Metering, IoT, Advanced Applications and the Customer; Big Data, Small Data, Machine Learning, Blockchain, Advanced Analytics and Visualization
  - Theme 2 - Leading transition to a Smart City: A strategic 360-degree and in-depth review of the current state and future direction of Smart City with its key aspects – Introduction and Best Practices; Smart Transportation and E-Mobility, Smart Water, Smart Gas, Smart Street Lighting, Smart Security, Waste2Energy, Digital Architecture and Cyber Security
  - Theme 3 - Leading Transformation to Smart Power system of the future: Topics Covered: The Supply Side Paradigm - Integration of DER’s and Renewables; and Protection, Control and Automation; The Demand Side Paradigm - Flexibility and Demand Response, Energy Storage and Microgrids, Vehicle-Grid Integration, Innovative and Sustainable Business Models
- IEC - IEEE WORLD SMART ENERGY STANDARDATION COORDINATION WORKSHOP
## ISGW 2018 – DETAILED AGENDA

### ISGF MASTER CLASS SERIES

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<td><strong>ASHOKA</strong>&lt;br&gt;<strong>Theme-1 (Part-1): Leading Grid Modernization</strong>&lt;br&gt;Tutors: Anant Venkateswaran, Jonathan Pettit</td>
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<td>10.00 – 11.40</td>
<td><strong>SHAMSHER</strong>&lt;br&gt;<strong>Theme-2 (Part-1): Leading transition to a Smart City – A strategic 360° degree and in-depth review of the current state and future direction of Smart Cities</strong>&lt;br&gt;Tutor: Mani Vadari</td>
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<td><strong>LUNCH in Banquet Dining</strong></td>
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<td>14.00 – 18.00</td>
<td><strong>ASHOKA</strong>&lt;br&gt;<strong>Theme-1 (Part-2): Leading Grid Modernization – Big Data, Analytics &amp; Visualization (Machine Learning, Block Chain, &amp; other innovations)</strong>&lt;br&gt;Tutors: Rahul Tongia, Jonathan Pettit and Oriol Pujoldevall</td>
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<td>16.00 – 18.00</td>
<td><strong>SHAMSHER</strong>&lt;br&gt;<strong>Theme-3 (Part-1): Leading Transformation to Smart Power system of the future – The Supply side Paradigm – Integration of DER’s &amp; Renewables – Protection, Control &amp; Automation</strong>&lt;br&gt;Tutor: Ratan Das</td>
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### IEC-IEEE WORLD SMART ENERGY STANDARDIZATION COORDINATION WORKSHOP

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### ISGW 2018 – DETAILED AGENDA

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<td><strong>Announcements and Signing of MOUs</strong>&lt;br&gt;Chair: AK Bhalla, Secretary, Ministry of Power</td>
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<td><strong>Inauguration of ISGW 2018 Exhibition</strong></td>
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<td>12.15 – 13.00</td>
<td><strong>Special Plenary -1: “Digitalization of Utilities” by Andres Carvallo, Author, Founder &amp; CEO of CMG</strong>&lt;br&gt;Chair: AK Bhalla, Secretary – Ministry of Power*&lt;br&gt;Moderator: Richard Schomburg, EDF, IEC and Advisor-ISGF</td>
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<td>13.00 – 14.00</td>
<td><strong>Networking Lunch (Banquet Dining) Hosted by GBCI/ USGBC</strong></td>
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<td>14.00 – 16.00</td>
<td><strong>Theme-1: Grid Modernization PART-1</strong>&lt;br&gt;Chair: RK Verma, Chairman, CEA&lt;br&gt;Moderator: Richard Schomburg, EDF, IEC and Advisor-ISGF&lt;br&gt;Speakers:&lt;br&gt;1. Salfur Rahman, President, IEEE PES and Professor, Virginia Institute of Technology, USA&lt;br&gt;2. Maria Sandqvist, Executive Director, Swedish Smart Grid Forum&lt;br&gt;3. N Venu, Senior Group Vice President, Power Grids Division for South Asia, Middle East and Africa, ABB&lt;br&gt;4. Matt Wakefield, Director, Electric Power Research Institute, USA&lt;br&gt;5. Christopher Villarreal, Plugged In Strategies, USA&lt;br&gt;6. Susumu Yoneoka, Energy Specialist, Asian Development Bank&lt;br&gt;7. Magnus Andersson, CEO, Metrum, Sweden</td>
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<td>16.00 – 18.00</td>
<td><strong>Theme-2: Smart Metering PART-1</strong>&lt;br&gt;Chair: Praveer Sinha, Managing Director, TPDDL&lt;br&gt;Moderator: Rahul Tongia, Brookings India and ISGF&lt;br&gt;Speakers:&lt;br&gt;1. Jonathan Pettit, Manager AMS Program, Oncor, USA&lt;br&gt;2. John Cronin, Executive Chairman, CyanConnode, UK&lt;br&gt;3. Stefan Engelhardt, Vice President-Utilities, SAP, Germany&lt;br&gt;4. Eric Dresselhuys, President, Smart Energy Water, USA&lt;br&gt;5. Glory You, Regional Director, Friendcom, China&lt;br&gt;6. Saifur Rahman, Professor, Virginia Institute of Technology, USA&lt;br&gt;7. Marc Delandre, Director – Metering Division, ENEDIS, France&lt;br&gt;8. Magnus Andersson, CEO, Metrum, Sweden&lt;br&gt;9. Ajoy Rajani, Sr Executive Vice President, Reliance Infrastructure</td>
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<td>18.00 – 18.45</td>
<td><strong>Special Plenary -2: “CLEANTECH 2.0: Great Mashup of RE, Storage and EVs” by Ron Pernick, Founder and Managing Director of Clean Edge Inc and Co-Author of best seller Cleantech Nation</strong>&lt;br&gt;Chair: AK Verma, Joint Secretary, Ministry of Power&lt;br&gt;Moderator: Girish Ghatikar, EPIR and ISGF</td>
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<td>19.30 – 21.30</td>
<td><strong>Welcome Dinner</strong>&lt;br&gt;(Open to ALL Speakers, Delegates and ISGF Guests) <strong>BANQUET ASSEMBLY &amp; BANQUET DINING</strong>, Manekshaw Center&lt;br&gt;Live Performances</td>
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6 MARCH 2018 (TUESDAY): PARALLEL EVENTS

14:30 – 18.00

5th India – EU Smart Grid Workshop
Welcome and Opening Remarks (15 minutes)

Co-Chairs:
- Praveen Kumar, Additional Secretary, MNRE*
- Matthieu Craye, International Relations Officer, Directorate-General for Energy, European Commission

16:15~16:30 TEA BREAK

16:45 – 16:15

Session 1: Smart Integration of Distributed Variable Renewable Energy (VRE) - Policy Framework and Demonstrated Solutions

Co-Moderators:
- Christophe Arnout, Senior Consultant to European Commission
- Vijayan SR, Digitalization Lead, Power Grids Division, ABB India

Speakers:
- India’s Policies for Rolling out Rooftop PV - Challenges for Network Management: Ghanshyam Prasad, Chief Engineer, Ministry of Power
- The Interflex project - Solutions for PV Integration with focus on Storage and Grid Integration of Electric Vehicles (EV): – Pokorná Zdeňka, Technical Director Interflex Project, Head of Processes Supervision Department, ČEZ Distribuce
- The CityZen project - a Virtual Power Plant (VPP), enabling Local Trade and Use of Electricity and Residential Demand Response for PV Integration: Willem van den Reek, Director-General for Energy, European Commission
- Potential in India for different Flexibility Options: Demand Response (Industrial and Residential Sectors), Batteries and other Local Storage, Local Trade and Use of Electricity: EV Integration: Ganesh Das, Head Strategy, Tata Power Delhi Distribution Ltd
- Innovgrid – Smart Grid solutions for the Integration of Large Share of Distributed Generation Pedro Godinho Matos, EDP

7 MARCH 2018 (WEDNESDAY): CONFERENCE DAY 2

10.00 – 12.00

Theme-3: E-Mobility PART-1
Special Address by Hon’ble Minister of Transport Shri Nitin Gadkari*
Chair: Anil Srivastava, Advisor - Infrastructure Connectivity and Director General – Development Monitoring and Evaluation Office, Niti Aayog
Moderator: Sajid Mudassir, Scientist – G, DST

Speakers:
- Ashok Jhunjhunwala, Advisor to Minister of Railways and Professor, IIT-Chennai
- OP Agarwal, CEO, World Resources Institute, India
- Girish Ghatikar, EPRI and ISGF
- PS Ananda Rao, Executive Director, Association of State Road Transport Undertakings
- Doron Freinkel, CEO, ORIV, Israel
- Prasanna Patwardhan, President, Bus Operators Confederation of India
- Abhilash Ablash ET Nair, Senior Marketing Manager, ABB India
- Abhishek Ranjan, AVP – System Operation and Head-Renewables, BSES Rajdhani Power Limited

12.00 – 13.00

Chair: Narendra Taneja, Renowned Energy Expert

13.00 – 14.00

Networking Lunch (Banquet Dining)

14.00 – 16.00

Theme-4: Smart Cities
Special Address by Babul Supriyo, Minister of State for Heavy Industries*
Chair: Pratap Padode, Founder and Director; Smart Cities Council India
Moderator: Mani Vadari, Modern Grid Solutions, USA

Speakers:
- James Caton, Head-Smart Cities, Larsen & Tubro
- Rajendra Jagtap, CEO, Pune Smart City*
- Swayandipta Pal Chaudhuri, CEO, Pamoja Cleantech, AB, Sweden
- Peik Stenlund, Co-Founder/Director, Pamoja Cleantech, AB, Sweden
- Ashok Jhunjhunwala, Advisor to Minister of Railways and Professor, IIT-Chennai
- OP Agarwal, CEO, World Resources Institute, India
- Girish Ghatikar, EPRI and ISGF
- PS Ananda Rao, Executive Director, Association of State Road Transport Undertakings
- Doron Freinkel, CEO, ORIV, Israel
- Prasanna Patwardhan, President, Bus Operators Confederation of India
- Abhilash Ablash ET Nair, Senior Marketing Manager, ABB India
- Abhishek Ranjan, AVP – System Operation and Head-Renewables, BSES Rajdhani Power Limited

Theme-2: Smart Metering PART-2
Chair: PR Kumar, CEO, BSES Yamuna Power Ltd
Moderator: Vikas Kashyap, Founder & Director, Lead Ventures Ltd, UK

Speakers:
- Pankaj Batra, Member, Central Electricity Authority, India
- EU Regulatory Experiences and Perspectives to Enable the Integration of Large Quantities of Distributed RE – Gianni Celli, Assistant Professor of Power Systems, University of Cagliari
- Smart Integration of Distributed Variable RE: Andreas Molin, CEO, PPAM
7 MARCH 2018 (WEDNESDAY): PARALLEL EVENTS

**Theme-1: Grid Modernization PART-2**
**Chair:** Ashok Sethi, Chief Operating Officer and Executive Director, Tata Power Mumbai

**Moderator:** Mani Vadari, Modern Grid Solutions, USA

**Speakers:**
1. Elad Shaviv, CEO, Israel Smart Energy Association
2. Lawrence Jones, Vice President, Edison Electric Institute, USA
3. Subir Sen, Executive Director, PGCL
4. Romain Douib, CEO, FMT Power, Sweden
5. Ahmad Khan, Vice President, Power Generation & Water, ABB India
6. Bhartendu Sinha, Vice President and Managing Director, Autogrid India
7. Ashvini Kumar, Senior Fellow and Senior Director, TERI

**Session Details & Speakers**

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<td>16.00 – 18.00 ZORAWAR</td>
<td>Theme-1: Grid Modernization PART-2</td>
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**Panel One: Business Case for Advanced Metering Infrastructure (75 minutes)**
**Moderator:** Rahul Tongia, Brooking India and ISGF

**Speakers:**
1. Saurabh Kumar, Managing Director, Energy Efficiency Services Limited
2. Jonathan Peritt, Manager, Advanced Metering Systems, Oncor Electric Delivery
3. Sanjoy Mukherjee, Vice President Distribution – Technical, CESC Ltd, Kolkata
4. Daniel Noll, Senior Manager of International Programs, Edison Electric Institute

**Panel Two: Business Case for Energy Storage (75 minutes)**
**Moderator:** Rahul Walawalker, India Energy Storage Alliance

**Speakers:**
- Atul Agarwal, Director, BSES Yamuna, Delhi
- Mani Vadari, Modern Grid Solutions, USA
- Richard McLean, Head – IT, BSES Rajdhani, BSES Yamuna, Delhi
- Anil Arora, Head – IT, BSES Rajdhani, BSES Yamuna, Delhi
- Subir Sen, Executive Director, PGCL
- Sanjay Kumar Banga, Chief - Contracts & Business Development, TPDDL
- Anil D’Souza, Managing Director, ThinkSmartGrids, France
- Girish Ghatikar, ERPI, USA
- Pranjal Barua, Senior Advisor, Swiet Energy, India
- Karan Sethi, Director, BSES Rajdhani, BSES Yamuna, Delhi

**Session Details & Speakers**

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<td>10.00 – 13.15 TABER</td>
<td>4th US-India Smart Grid Workshop</td>
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**Welcome and Opening Remarks (15 minutes)**
**Co-Chairs:**
- Shalini Prasad, Additional Secretary, Ministry of Power
- Patrick Santillo, Minister-Counselor for Commercial Affairs, US Embassy

**Panel One: Business Case for Advanced Metering Infrastructure (75 minutes)**
**Moderator:** Rahul Tongia, Brooking India and ISGF

**Speakers:**
1. Saurabh Kumar, Managing Director, Energy Efficiency Services Limited
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**Speakers:**
- Atul Agarwal, Director, BSES Yamuna, Delhi
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- Richard McLean, Head – IT, BSES Rajdhani, BSES Yamuna, Delhi
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<td>10.00 – 13.15 TABER</td>
<td>3rd India – Sweden Smart Grid Workshop</td>
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**Welcome and Opening Remarks (15 minutes)**
**Co-Chairs:**
- Praveen Sinha, MD, TPDDL
- Maria Sandqvist, Executive Director, Swedish Smart Grid Forum

**Session 1: Developing an Action Plan with India – Pillars of Engagement (90 minutes)**
**Co-Moderators:**
- Arati Davis, Sweden India Business Council
- Rahul Tongia, Brooking India and ISGF

**Speakers:**
1. Maria Sandqvist, Executive Director, Swedish Smart Grid Forum
2. Ludvig Lindström, Senior Advisor, Swedish Energy Agency
3. Carsten Grönbлад, Trade Commissioner, Business Sweden
4. Albin Carlen, International Program Manager, Swedish Smart Grid Forum
5. Vivek Goel, Chief Engineer, CEA
6. Raphael Leyrens, Royal Institute of Technology (KTH), Sweden
7. Prafulla Pathak, Resident Executive Director, MSEB Holding Company
8. Pranjal Baru, AGM (IT), Data Centre and R-APDRP, Assam Power Distribution Company Ltd
9. Rebecka Andreasson, Metrum, Sweden

**Session 2: Business Models Driving Partnerships (90 minutes)**

**Speakers:**
- MS Puri, Member, Hariana ERC
- Rajesh Bansal, Senior Vice President, BSES Rajdhani Power Ltd
- Andreas Molin, CEO, PFPAM, Sweden
- Sandeep Kapoor, CTO, Uttar Haryana Bijli Vitran Nigam*
- Peik Stenlund, Co-founder/Director, Pamoja Cleantech AB, Sweden
- Michael Soderstrom, Founder, All Innovation Scandinavia AB, Sweden
- Yogendra Patwardhan, Vice President, Grid Automation, Power Grids Division,ABB India
- CK Sreenath, DGM-Smart Grid and EV, BESCOM
- Gautam Kumar, CynanConnode
- Anil Arora, Clean Motion
## 8 March 2018 (Thursday): Conference Day 3

### Time & Venue

**9:30 – 11:30**
**ZORAWAR**

**Session Details & Speakers**

**Theme-5: Renewables & Microgrids (Powered by Sweden)**

*Plans for RE and Microgrids Rollout in India, DER and Active Demand Integration, REMICs and RE Forecasting, New Technologies in RE, Community Energy*

Chair: KVS Baba, CMD, POSOCO
Moderator: Rahul Walawalkar, IESA

Speakers:
1. Philippe Monloubou, CEO, ENEDIS, France
2. Jacques Pujoldeval, Energy Web Foundation, Germany
3. Gideon Friedmann, Ministry of Energy, Israel
4. Gerhard Gampert, Verbund AG, Austria
5. Vijayan SRI, Digitalization Lead, Grid Automation, Power Grids Division, ABB India
6. Ashutosh Nataraj and Ashish Srivastava, Vidyut, UK
7. Audun Abelsnes, Managing Director, WiSun Alliance
8. Christopher Villareal, Managing Director, EDS
9. Praveen Saxena, CEO, Skkie, Green Jobs
10. Ajeet Bajpai, DG, NCIPPC
11. AK Mishra, Director, National Smart Grid Mission
12. Kishor Narang, Founder and CEO, Narnix
13. Chandan Chowdhury, ED, ISGF
14. Romain Doub, CEO, FMTP Power

**Q&A**

**10:00 – 12:30**
**TABER**

**Round Table on Smart Policies and Regulations for 21st Century**

Chair: RK Verma, Chairman, CEA
Moderator: Rahul Tongia, Brooking India and ISGF

**Theme Presentations**

1. "Regulatory Support for Grid Modernization": Christopher Villareal, Plugged In Strategies
2. "Market Design for the Evolving Grid of 21st Century": Larisa Dobriansky, General Microgrids, USA

**Participants**

1. RN Sen, Chairman, West Bengal ERC*
2. Jaijeet Singh, Chairman, Haryana ERC
3. Subhash Kumar, Chairman, Uttarakhand ERC*
4. UN Behera, Chairman, Odisha ERC
5. IA Khan, Chairman, Telangana ERC
6. Anand Kulkarni, Chairman, MER*
7. RP Singh, Chairman, Arunachal Pradesh ERC
8. BP Singh, Member, Delhi ERC*
9. Durgadas Goswami, Member, West Bengal ERC
10. PJ Thakkar, Member, Gujarat ERC
11. Debashish Majumdar, Member, Haryana ERC
12. Anjali Chandra, Member, Punjab ERC
13. Rajesh Pandey, MD, WBSEDC*
14. Hemant Sharma, Principal Secretary, Energy, Odisha*
15. G Raghu Reddy, CMD, Southern Power Distribution Company of Telangana Ltd*
16. Akash Tripathy, MD, MPPKVL, Indore
17. P Rajendra Cholan, MD, BESC
18. MM Nayak, MD, APSPDCL*
19. Praveer Sinha, MD, TPDDL
20. RR Mehta, Reliance Infrastructure
21. PR Kumar, CEO, BSES Yamuna Power Ltd

**11:30 – 13:30**
**ZORAWAR**

**Theme-6: Disruptive Technologies**

(Artificial Intelligence, Machine Learning, Blockchain, P2P Trading, Robotics Process Automation, Uberization – Everything as a Service, Drones, Wearable Devices, Virtual, Augmented and Mixed Realities)

Chair: Pankaj Batra, Member, CEA
Moderator: Ron Pernick, Founder and Managing Director, Clean Edge Inc, USA

Speakers:
1. Oriol Pujoldeval, Energy Web Foundation, Germany
2. Gideon Friedmann, Ministry of Energy, Israel
3. Gerhard Gampert, Verbund AG, Austria
4. Vijayan SR, Digitalization Lead, Grid Automation, Power Grids Division, ABB India
5. Ashutosh Nataraj and Ashish Srivastava, Vidyut, UK
6. Audun Abelsnes, Managing Director, WiSun Alliance
7. Energy, Norway
8. Abhilasha Chaturved, Regional Manager, Directorate of Energy, India
9. Dharmandra Tomar, Tata Communications Ltd
10. Ajit J Tawde, IBM India
11. Lauren KARSENFI, Technical Director - EDF International Networks and Head of Technical Expertise Department, ENEDIS

**Q&A**

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### 8 March 2018 (Thursday): Parallel Events

**Time & Venue**

**12.30 – 14.00**
**ZORAWAR**

**Session Details & Speakers**

**Theme-7: Cross Cutting Themes**


Chair: RP Gupta, Additional Secretary, NIT Aayog
Moderator: Richard Schomberg, EDF, IEC and ISGF

Speakers:
1. Christopher Villareal, Plugged In Strategies
2. Phil Beecher, WiSun Alliance
3. Praveen Saxena, CEO, Skkie, Green Jobs
4. Ajeet Bajpai, DG, NCIPPC
5. AK Mishra, Director, National Smart Grid Mission
6. Kishor Narang, Founder and CEO, Narnix
7. Chandan Chowdhury, ED, ISGF
8. Romain Doub, CEO, FMTP Power

**Q&A**

**14.00 – 16.30**
**ZORAWAR**

**Theme-3: E-Mobility PART-2**

(New EV Models for India, Electric Bus Models for India, EVSE Technologies, EVSE Management Systems, Battery Technologies for India, EV Challenges to Utilities)

Chair: Varsha Joshi, Secretary – Transport and Power, Govt of NCT
Moderator: Said Mubashir, Scientist-G, DST

Speakers:
1. Mahesh Babu, CEO, Mahindra Electric
2. Vinit Bansal, Founder and MD, EV Motors
3. Hiren P Shah, Senior Director, Delta
4. Ilan Ben-David, CEO, Chакicarec Ltd, Israel
5. Vineet Jain, Nomura Research Institute India
6. Rajesh Bansal, Senior Vice President, BSES Rajadhan Power Limited
7. Nishant Arya, Executive Director, JBM Group

**16.30 – 17.30**
**ZORAWAR**

**VALIDICTORY SESSION**

• Brief Presentation by Moderators of All Sessions
• Award of Plaques to All Partners and Exhibitors

**ISGF INNOVATION AWARDS AND GALA DINNER**

(Open to all Speakers, Delegates and Guests)

Ballroom, Le Meridien, New Delhi

**GALA DINNER HOSTED BY GOLDSTONE**

Live Performances

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**8 March 2018 (Thursday): Parallel Events**

**Time & Venue**

**9:30 – 16.30**
**ASHOKA**

**Session Details & Speakers**

Roundtable on Blockchain for Utilities
Chair: Ravi Jagannathan, Managing Director & CEO, Kypc Technologies
Moderator: Reena Suri, General Manager, ISGF

Speakers:
1. Andres Carvallo, CMG Consulting LLC
2. Gerhard Gampert, Verbund AG, Austria
3. Oriol Pujoldeval, Energy Web Foundation
4. Richard Schomberg, EDF, IEC & ISGF
5. Anamika Bhargava, APAC Business Head, SEW
6. Christopher Villareal, Plugged In Strategies
7. Ashish Mathur, MD, JUSCO
8. Yashraj Khaitan, Gram Power
9. Ajoy Rajani, Senior Executive Vice President, Reliance Infrastructure
ISGF INNOVATION AWARDS 2018
8 March 2018 | Hotel Le Meridian, New Delhi

- Best Smart Grid Pilot Project in India by Utility
- Best Smart Grid Pilot Project in India by Industry
- Best Rural Electrification Projects- Utility
- Best Rural Electrification Projects by Industry
- Most Progressive Smart City in India
- Innovative Policies and Regulations Promoting Renewables and Smart Grids in India
- Best Energy Efficiency Programs/ Projects of the Year 2017
- Smart Technology of the Year 2017
- Innovative EV of the Year
- Smart Startup of the Year
- Smart Startup by Woman Entrepreneur
- Smart Startup by Young Entrepreneur (below 30 years of age)
- Smart Incubator of the Year 2017
- Most Progressive Water Utility in India
- Most Progressive Gas Utility in India
- ISGF President’s Award for the best contribution towards growth of Smart Grids in India

9th March 2018 - Technical Tours

- Smart Grid Pilot Project* - Panipat (Organise with Support from NEDO, Japan and UHBVN, Haryana)
- Tata Power DDL Smart Grid Lab* - Delhi
- National Load Dispatch Center* - Delhi

For more details, please visit: www.isgw.in For queries email us at logistics@isgw.in
Please Note: Registration as a delegate for 3 days ISGW 2018 will be required. Any one tour can only be attended by a delegate.
*Programs under finalisation

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Bronze Partner

Lanyard Partner

Refreshments Partner

ISGW 2018: Exhibitors

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