

### **Event Background**

The emergence of India as a strong economic power is receiving widespread recognition in the world. On the other hand, although we operate the fourth largest power system in the world, one-third of our population have no access to electricity and our percapita consumption of electricity is one-fourth of the world average! Transmission and Distribution losses in India are also quite high - about 26% in distribution and more than 7% in transmission. Government of India (GoI) and other stakeholders have realized that by implementing incremental improvements in a business as usual scenario we will not be able to provide 24x7 electricity to all households in the country - it requires innovative strategies, breakthrough technologies and bold decisions. In 2013, GoI issued Smart Grid Vision and Roadmap for India; and the newly elected Government in India is committed to provide 24x7 electricity to all households in next 5 years and has recently launched 3 focused programs towards this objective with a total capital outlay of US\$ 14 billion. The new Government has also announced ambitious programs to build 100 Smart Cities on fast track and add 150 GW of renewable energy (100 GW solar and 50 GW wind) generation capacity by 2022! With all these ground breaking initiatives, India has already emerged as the prime destination for Smart Grids and Smart Cities.

**INDIA SMART GRID WEEK (ISGW) 2015** is the first edition of the Conference and an Exhibition that will be organized by **India Smart Grid Forum** (a public private partnership initiative of Ministry of Power, Government of India) with the support of several ministries, government institutions, non-government institutions and multi-lateral agencies from India and overseas.

### **Main Objectives of the Event**

- Position India as an important emerging market for smart grid and smart city products and services to the international technology companies.
- Provide exposure for utilities, regulators and policy makers in Indian power sector on smart grid technologies, matured solutions and emerging technology trends for the near future.
- Bring World's top most thought leaders in energy sector to share their views on development needs and future technology trends that India could leverage to provide clean energy access to over a billion people.
- Provide a platform for networking and knowledge and technology transfer amongst:
  - o Indian utility professionals with their overseas peers who have already implemented smart grid technologies and smart city solutions.
  - o Indian industry professionals with overseas technology companies for collaborations and business partnerships.
  - Researchers, consultants and students in India to meet with experts from the industry, academia and research from overseas.
  - o Indian technology companies to showcase their products and solutions to potential clients from India and overseas to generate new ideas.
  - Technology start-ups to showcase their products and solutions to potential investors and clients.





#### **Structure of ISGW 2015**

(Conference and Exhibition Venue: Bangalore International Exhibition Centre)

- 02 March 2015: (1) SMART GRID TUTORIAL & MASTER CLASSES, (2) USA-India Smart Grid Workshop sponsored by USTDA (by invitation only)
- 03 March 2015: Inauguration of the Conference and Exhibition & ISGAN Annexe#6 Workshop
- 04 March 2015: Conference and Exhibition & a Special Luncheon Round Table on Smart Regulations for Smart Grids and Smart Cities
- 05 March 2015: Conference and Exhibition & Special Luncheon Round Table for Launch of Smart Utilities Group
- 06 March 2015: Site Visits 4 visits are proposed. Delegates, Speakers and Exhibitors may choose according to their preferences:
  - 1. Visit to Smart Grid Pilot Project in Mysore (including historical landmarks in Mysore City)
  - 2. Visit to Southern Regional Load Dispatch Centre (SRLDC) in Bangalore and Control Room of Bangalore Electricity Supply Company (BESCOM) and Central Power Research Institute (CPRI)
  - 3. Tour of India's Silicon Valley visits to campuses of some of India's largest IT companies based in Bangalore
  - 4. Bangalore City Tour (including Nandi Hills)

(Please note that on 06 March 2015, *Holi*, the festival of colours is celebrated in India and touring around Bangalore and Mysore City will be great fun!)

Besides the above program, several side events with international development agencies such as EBTC, NEDO, USTDA, USIBC etc are planned during 02-05 March 2015.

### **Visionary Speakers at ISGW 2015**

Several Nobel Laureates and Great Thinkers / Scientists have been invited as Visionary Speakers in the Special Plenary Sessions at ISGW 2015 and many of them have confirmed their participation.

### **Technical Papers**

ISGW 2015 call for papers has received 133 Technical Papers. All shortlisted papers will be published and selected papers will be presented in the relevant technical sessions/Technical Papers Presentation Tracks.

#### **Results**

Results of ISGW will be a set of recommendations to key decision makers in Government of India, state governments, regulatory commissions and utilities on way-forward to effectively leverage evolving technologies for developing smart grids and smart cities in India.





### **Event Organizers**











Organizer

**Co-Organizer** 

**Utility Partners** 

**Knowledge Partner** 

### **Supporting Ministries**



सत्यमेव जयते Ministry of Power Government of India



Ministry of New and Renewable Energy Government of India



Ministry of Urban Development Government of India



Department of Telecommunications Ministry of Communications & Information Technology Government of India



Department of Science & Technology Ministry of Science & Technology Government of India

#### **Partners**









(U.S. Commercial Service supports the goals of this event, but does not endorse the specific products, or views of the participating organizations)







































#### **Media Partners**













































### **EVENT DAY 1: 02 March 2015**

- 1. SMART GRID TUTORIAL & MASTER CLASSES from 9.30 am to 5.30pm ( Detailed Agenda on Page #9)
- 2. U.S.-India Smart Grid Workshop sponsored by USTDA from 10am to 5.30 pm followed by cocktails (Please register at: regonline.com/indiasmartgridbangalore)

cockta	cocktails (Please register at: regonline.com/indiasmartgridbangalore)	
EVENT DAY 2	2: 03 March 2015	
Session Time	Se	ssion Details
09:30 - 11:00	Inaugural Session (90 Min)	
	<ul> <li>Welcome Address: BESCOM</li> <li>Special Address: Secretary, Ministry of Power, Govt of India</li> <li>Special Address: Secretary, Ministry of New &amp;Renewable Energy*</li> <li>Special Address: Special Secretary, Ministry of Power</li> <li>Special Address: A.K.Mittal, Senior DDG, Telecom Engineering Center</li> <li>Special Address: H.E. Ambassador of Japan to India *</li> <li>Special Address: Sandy Sheard Counsellor, Energy, Climate and Growth Unit,BHC</li> <li>Keynote Address: Shri. Piyush Goyal, Minister of State (I/C) for Power, Coal and New and Renewable Energy, Govt of India*</li> <li>Presentation of highlights of the Knowledge Paper: Bloomberg New Energy</li> </ul>	
	Finance  - Release of Knowledge Paper by the Chief Guest  - Inaugural Address by the Chief Guest: Shri Narendra Modi, Prime Minister of India*  - Vote of Thanks	
11:00 – 11:15	Inauguration of Exhibition by Chief Guest	
11:00 - 11:30	·	Tea Break
11:30 – 13:00	Emerging Trends Chair: P.K.Sinha, Secretary – Ministry of Pow - USA: Russell Conklin, ISGAN	f Unit - Energy Technologies, DG ENERGY, European r, NEDO latory Commission outh & South East Asia, USTDA
13:00 - 14:00	L	unch Break
14:00 - 15.:30	Track A: Future Electricity Grid Supporting Low Carbon Energy Supply and Energy Security	Track B: Smart Energy – Vision for the Smart Grid Evolving Towards Smart Customers and Smart Cities /Communities





	Session A1:Smart Generation and	Session B1: Smart Energy Market Design &
	Integration	Regulatory Support
	Chair: Tarun Kapoor, Joint Secretary, MNRE	Chair: U.K.Panjiar, Chairman, Bihar Electricity
		Regulatory Commission
	A1.1 Large-Capacity Renewable Energy	B1.1 Introduction: Requirements for a market design
	Generation and Integration Challenges,	supporting Smart Energy: Suedeen G Kelly,
	Photovoltaic Tariff Design and Way-	Former Commissioner, FERC, USA
	forward : <b>Owen R. Zinaman</b> (NREL,	B1.2 Integration of distributed generation into an
	USA)	unbundled market: Christopher Villareal,
	A1.2 Distributed Generation: Nandakumar	California PUC
	Pai, Managing Director, Wartsila India	B1.3 Demand Response market (NegaWatt) potential
	A1.3 Protection and Control of Integrated	in India: <i>Chris Hickman, Innovari Inc</i>
	Smart Generation: <i>Sivakumaran</i>	B1.4 Model Smart Grid Regulations in India: <i>Vijay</i>
	Govindarajan Koorsar (Hindle Power)	Sonavane, Advisor, MERC
	A1.4 Large Scale EU demonstration for	B1.5 Envisioning a smarter grid policy, regulatory and
	Integration of Renewable and Smart	technical framework: <i>Ujjwal Deep Dahal</i>
	(or grid) automation: <i>Rémy GARAUDE</i>	(Bhutan Power Corporation)
	VERDIER (GRID4EU Coordinator) and	(
	Christophe ARNOULT (NICE GRID	
	Coordinator).	
	A1.5 Beyond AMI: From Smart meters to	
	Advanced Distribution Automation:	
	Aitor Arzuaga, Laura Marrón, Jon	
	García de Salazar (CG Automation)	
15:30 – 16:00		Tea Break
16:00-16:30	Presentation on IESS2047 by Mr. Anil Jain, Ad	dvisor Energy ,Niti Ayog, Gol
16:30 - 18:30	Plenary Session – 2: MODI ERA – India's Big	Leap to Modernity?
	Chair: Arvind Panagariya, Vice Chairman, NIT	TI Ayog
	- · · · · · · · · · · · · · · · · · · ·	itute, Columbia University (on Live Video)
	2. Elon Musk, Founder, SpaceX, Tesla a	• • • • • • • • • • • • • • • • • • • •
		nool of Economics and Author of Capital in The 21 <sup>st</sup>
	Century*	
	4. Robert Lanza, Scientist & Author of B	
18:30 - 20:30	Netwo	orking Cocktails

# **EVENT DAY 3: 04 March 2015**

Session Time	Session Details
09:30 - 11:00	Plenary Session – 3: Smart Grid to Smart Cities and Smart Communities
	Chair: Dr. Sameer Sharma, Joint Secretary, Ministry of Urban Development, Govt of India*
	- Jesse Berst, Chairman, Smart Cities Council*
	- Richard Schomberg, EDF
	- Neil Jacobstein, Co-Chair of Artificial Intelligence & Robotics, Singularity University, USA*
	(on live video)





	<ul> <li>Anil Chaudhary, M.D., Schneider Electric India*</li> <li>Erfan Ibrahim, Founder &amp; CEO, The Bit Bazar LLC</li> <li>Chandan Chaudhary, M.D., Dassault Systemes India</li> <li>Prashant Pradhan, IBM</li> <li>Case Study of Kitakyushu City, Japan – by Alok Chandna, Fuji Electric</li> </ul>	
11:00 - 11:30		ea Break
11:30 – 13:00	Track A: Future Electricity Grid Supporting Low Carbon Energy Supply and Energy Security	Track B: Smart Energy – Vision for the Smart Grid Evolving Towards Smart Customers and Smart Cities /Communities
	Session A2: Evolving Integrated Grid with Distributed Generation	Session B2: Smart Cities & Smart Homes and other emerging technology trends
	Chair: <b>Dr. Upendra Tripathi</b> , Secretary,MNRE*	Chair: <b>Tom Rowlandsree</b> , Bloomberg New Energy Finance
	A2.1 Introduction: Tools for Forecasting, Scheduling and Dispatch of distributed generation; Renewable Energy Monitoring Centres etc.: Christophe ARNOULT (NICE GRID Coordinator) A2.2 Energy Storage solutions for grid stability: Rahul Walawalkar, IESA A2.3 Renewable Energy Sources & Distributed Generation Resources: Ravi Seethapathy, Smart Grid Canada - Challenges to Transmission System Operators - Challenges to Distribution System Operators A2.4 Characterization and Effectiveness of Technologies for India's Electric Grid Reliability and Energy Security: Girish (Rish) Ghatikar, Ranjit Deshmukh, Rongxin Yin, G. Ganesh Das (LBNL) A2.5 Green Corridor project in India/ PGCIL	B2.1 Challenges and Opportunities in 100 Smart Cities program in India: MoUD Presentation B2.2 Smart Grids as Anchor Infrastructure to build Smart Cities at marginal cost: ISGF Presentation B2.3 Evolution of the Smart Customer in Smart Cities: Rupendra Bhatnagar, SAP B2.4 New Technology Trends: Girish Ghatikar, LBNL B2.5 Case Studies: Barcelona Smart City - Sandeep Pathak, Schneider Electric India & ISGF BoG Member
13.00 - 14.00	Lu	nch Break
14.00 - 15.30	Track A: Future Electricity Grid Supporting Low Carbon Energy Supply and Energy Security	Track B: Smart Energy – Vision for the Smart Grid Evolving Towards Smart Customers and Smart Cities /Communities
	Session A3: Smart Distribution - Evolution	Session B3: Smart Customer
	of the Distribution Grid	Chair: B.N.Sharma, Joint Secretary, Ministry of
	Chair: <b>Jean Francois Faugeras</b> , VP-EDF	Power, India





	A2.1 Increasing the intelligence of the	D2 1 Unlocking the value of Cmart Motors with
	A3.1 Increasing the intelligence of the	B3.1 Unlocking the value of Smart Meters with
	Distribution Grid to integrate	Behavioural Science: <i>Alex Lasky, Founder &amp;</i>
	distributed generation: <i>Jean Francois</i>	Chairman – OPOWER
	Faugeras, VP-EDF	B3.2 Effective Customer Engagement for Smart Grid
	A3.2 Data Analytics for increased	Project Success: <b>Eco Grid EU and Nice Grid</b>
	intelligence of Distribution Grid: <b>Jim</b>	project examples: Rémy GARAUDE VERDIER
	Connaughton, C3 Energy	(GRID4EU Coordinator) and Christophe
	A3.3 Consequences of distributed	ARNOULT (NICE GRID Coordinator).
	generation for distribution networks:	B3.3 E-mobility and EV infrastructure solutions for
	Laurent Schmitt, Alstom Grid	India: <b>Prof. Rajit Gadh</b> , SMERC, UCLA
	A3.4 Smart Micro Grids – Why so relevant	B3.4 National Electric Mobility Mission in India:
	for India?: Terry Mohn, General	Representative of MoHI
	Microgrids, USA	B3.5 Leveraging Social Media for Consumer
	A3.5 Nanogrids : <b>Dr Ashok Das</b> , Sun Moksha	Engagement: ISGF Study Paper
	Power	
	- Select Technical Papers	
15:30 – 16:00		Tea Break
16:00 – 18:00		oration, Joint Research, Development and
10.00 10.00	Deployment Projects to bring down costs	the control of the co
	Chair: Agnese Cecchini, Editorial Director	
		, Groupo italieriergia, italy
	- GSGF: Paddy Turnbull, Chairman	8. 650
	- IEC: Frans Vreeswijk, General Secreta	ary & CEO
	- ISGAN: Russel L.Conklin	D' /
	- NEDO – Hiroshi Kuniyoshi, Executive	
	- Senior Representative of World Bank	(**
	- Senior Representative of CIGRE	
18:00 –18:45	Special Dinner Plenary : Myth and Mytha -	Devdutt Pattnaik, Author and Motivational Speaker*
18:45 – 22.00	Cocktails, Cult	tural Program & Dinner

Event DAY 4: 05 March 2015	
Session Time	Session Details
09.30 - 11.00	Plenary Session – 5: Emerging Technologies that New India should embrace for the Big Leap!  Chair: R.Chidambaram, Principal Scientific Advisor to Govt of India  1. Amory Lovins, Rocky Mountain Institute – on Live Video  2. Janine M.Benyus, President, Biomimicry Institute – on Live Video  3. Arun Manjumdar, Stanford University*  4. Chris Hickman, Innovari, Inc.
11:00 – 11:30	Tea Break





11:30 – 13:00	Technical Session-C: Cross Cutting Themes	Track B: Smart Energy – Vision for the Smart Grid Evolving Towards Smart Customers and Smart Cities /Communities
	Session C1: Standards and Inter-operability	Session B4: Smart Grid Communications and
	Chair: <b>Richard Schomberg</b> , IEC Smart Energy	Cyber Security
	Chairman & Vice President, EDF	Chair: <b>Paul de Martini,</b> Managing Director, New Port Consulting Group, USA
	C1.1Smart Grids Standardization Roadmap by	B4.1 Communication Solutions and the Digital
	EU: European Commission – Laurent	Architecture for Smart Grids: Simon Pontyn,
	Schmitt, Alstom Grid & Smart Grid	Itron*
	Coordination Group, CEN/CENELEC-ETSI/	B4.2 Communication Standards for
	SGCG	Interoperability: Phil Beecher, Wi-SUN
	C1.2 Smart Grid Architecture supporting	Alliance
	Interoperability: Ronald Ambrosio, IBM	B4.3 Last Mile Connectivity Solutions for Smart
	and Gridwise Architectural Council*	Grids and challenges in India: Ajoy Rajani,
	C1.3 Smart Grid Standardization Efforts in	ISGF
	India: BIS/CEA, India	B4.4 Cyber Security for Smart Grids : Sachin
	C4.4 World Smart Energy Harmonization:	Burman, Director, NCIIPC, India
	IEC Presentation	B4.5 M2M: Convergence of communications,
		home automations, entertainment and
		energy: DoT/TEC/ Select Technical Papers
13:00 – 14:00	Lun	ch Break
14:00 – 16:00	Track A:Future Electricity Grid Supporting	Track C: Cross-cutting Themes
	Low Carbon Energy Supply and Energy	
	Security	
	Session A4: Smart Metering	Session C2: Training and Capacity Building
	Chair: <b>Colin McKerracher</b> , Bloomberg New	Chair: <b>Sunil Arora</b> , Secretary, Skill Development
	Energy Finance	Ministry, Govt of India*
	A4.1. Rollout challenges - worldwide	
	_	C2.1 Skill Development - the biggest challenge in
	experiences and lessons: BNEF	India: Ministry of Skill Development
	experiences and lessons: BNEF Presentation	
	experiences and lessons: BNEF Presentation A4.2 Global Technology Trends: Eric	India: Ministry of Skill Development Presentation
	experiences and lessons: BNEF Presentation A4.2 Global Technology Trends: Eric Dresselhuys, Silver Spring Networks	India: Ministry of Skill Development Presentation  C2.2 Capacity Building for Smart Grids and Smart
	experiences and lessons: BNEF Presentation A4.2 Global Technology Trends: Eric Dresselhuys, Silver Spring Networks A4.3 India's Smart Metering Market: Rahul	India: Ministry of Skill Development Presentation  C2.2 Capacity Building for Smart Grids and Smart Cities: ISGF Presentation
	experiences and lessons: BNEF Presentation A4.2 Global Technology Trends: Eric Dresselhuys, Silver Spring Networks A4.3 India's Smart Metering Market: Rahul Tongia, ISGF	India: Ministry of Skill Development Presentation  C2.2 Capacity Building for Smart Grids and Smart Cities: ISGF Presentation  C2.3 Regulatory Capacity Building: CERC/FOR
	experiences and lessons: BNEF Presentation A4.2 Global Technology Trends: Eric Dresselhuys, Silver Spring Networks A4.3 India's Smart Metering Market: Rahul Tongia, ISGF A4.4 Smart Metering Case Study: Francesco	India: Ministry of Skill Development Presentation  C2.2 Capacity Building for Smart Grids and Smart Cities: ISGF Presentation  C2.3 Regulatory Capacity Building: CERC/FOR  C2.4 NSDCL and Skill Development Centres -
	experiences and lessons: BNEF Presentation A4.2 Global Technology Trends: Eric Dresselhuys, Silver Spring Networks A4.3 India's Smart Metering Market: Rahul Tongia, ISGF A4.4 Smart Metering Case Study: Francesco Marini, Enel, Italy	India: Ministry of Skill Development Presentation  C2.2 Capacity Building for Smart Grids and Smart Cities: ISGF Presentation  C2.3 Regulatory Capacity Building: CERC/FOR  C2.4 NSDCL and Skill Development Centres - NSDCL
	experiences and lessons: BNEF Presentation A4.2 Global Technology Trends: Eric Dresselhuys, Silver Spring Networks A4.3 India's Smart Metering Market: Rahul Tongia, ISGF A4.4 Smart Metering Case Study: Francesco Marini, Enel, Italy A4.5 Smart metering and challenges in India	India: Ministry of Skill Development Presentation  C2.2 Capacity Building for Smart Grids and Smart Cities: ISGF Presentation  C2.3 Regulatory Capacity Building: CERC/FOR  C2.4 NSDCL and Skill Development Centres - NSDCL  C2.5: International Examples: USAID/ DoE; MKE/
	experiences and lessons: BNEF Presentation A4.2 Global Technology Trends: Eric Dresselhuys, Silver Spring Networks A4.3 India's Smart Metering Market: Rahul Tongia, ISGF A4.4 Smart Metering Case Study: Francesco Marini, Enel, Italy A4.5 Smart metering and challenges in India and options/Roadmap: Sponsoring	India: Ministry of Skill Development Presentation  C2.2 Capacity Building for Smart Grids and Smart Cities: ISGF Presentation  C2.3 Regulatory Capacity Building: CERC/FOR  C2.4 NSDCL and Skill Development Centres - NSDCL
	experiences and lessons: BNEF Presentation  A4.2 Global Technology Trends: Eric Dresselhuys, Silver Spring Networks  A4.3 India's Smart Metering Market: Rahul Tongia, ISGF  A4.4 Smart Metering Case Study: Francesco Marini, Enel, Italy  A4.5 Smart metering and challenges in India and options/Roadmap: Sponsoring Organizations/Select Technical Papers	India: Ministry of Skill Development Presentation  C2.2 Capacity Building for Smart Grids and Smart Cities: ISGF Presentation  C2.3 Regulatory Capacity Building: CERC/FOR  C2.4 NSDCL and Skill Development Centres - NSDCL  C2.5: International Examples: USAID/ DoE; MKE/
	experiences and lessons: BNEF Presentation  A4.2 Global Technology Trends: Eric Dresselhuys, Silver Spring Networks  A4.3 India's Smart Metering Market: Rahul Tongia, ISGF  A4.4 Smart Metering Case Study: Francesco Marini, Enel, Italy  A4.5 Smart metering and challenges in India and options/Roadmap: Sponsoring Organizations/Select Technical Papers  A4.6 Beyond AMI: From smart meters to	India: Ministry of Skill Development Presentation  C2.2 Capacity Building for Smart Grids and Smart Cities: ISGF Presentation  C2.3 Regulatory Capacity Building: CERC/FOR  C2.4 NSDCL and Skill Development Centres - NSDCL  C2.5: International Examples: USAID/ DoE; MKE/
	experiences and lessons: BNEF Presentation  A4.2 Global Technology Trends: Eric Dresselhuys, Silver Spring Networks  A4.3 India's Smart Metering Market: Rahul Tongia, ISGF  A4.4 Smart Metering Case Study: Francesco Marini, Enel, Italy  A4.5 Smart metering and challenges in India and options/Roadmap: Sponsoring Organizations/Select Technical Papers	India: Ministry of Skill Development Presentation  C2.2 Capacity Building for Smart Grids and Smart Cities: ISGF Presentation  C2.3 Regulatory Capacity Building: CERC/FOR  C2.4 NSDCL and Skill Development Centres - NSDCL  C2.5: International Examples: USAID/ DoE; MKE/





	Salazar (CG Automation)	
16:00 – 16:30	Те	a Break
16:30 – 17:30	Closing Ceremony of Conference and Exhibition	

<sup>\*</sup> Invited and confirmation awaited

	PARALLEL EVENTS	
Session Time	Session Details	
9.30-17:30	Event DAY 1: 02 March 2015;	
	US-India Smart Grid Workshop sponsored by USTDA (Agenda under Finalization)	
18.00 - 21.00	Cocktails	
	Smart Grid Tutorial and Master Classes	
9:30 -11:00	1. Introduction to Smart Grids: Rahul Tongia & Pradeep Kumar Yemula	
11:30 -13:00	<ol> <li>Communication Technologies for Smart Grids and Smart Cities – Ajoy Rajani &amp; Kishore Narang</li> </ol>	
14:00 -18:00	MASTER CLASSES (Parallel Tracks)	
	<ul> <li>a. IEC 61850 by Christoph Brunner, Chair of IEC Working Group on 61850 in TC-57</li> <li>b. Cyber Security by Sachin Burman, NCIIPC &amp; Shailendra Fuloria, Eaton/ISGF</li> <li>c. Energy Storage Technologies by Rahul Walawalkar &amp; Ravi Seethapathy, Smart Grids Canada</li> <li>d. Smart Microgrids by Terry Mohn, General Microgrids Inc &amp; Erfan Ibrahim, The Bit Bazar LLC</li> </ul>	

# **Event DAY 2: 03 March 2015**

Session Time	Session Details
13:00-16:30	ISGAN Annexe-6 (POWER T&D SYSTEMS) Workshop (detailed agenda under finalization)
	Workshop Chair: <b>Bo Normark</b> , ISGAN - Chair Annex 6
	Expert Panel:
	1. Terry Mohn, General Microgrids Inc & Microgrid Alliance UN
	2. <b>Ken Hales</b> , Eskom, South Africa
	3. Nick Singh, Eskom, South Africa
	4. Anders Lindskog, SP Technical Research Institute of Sweden
	5. Rahul Walawalkar, India Energy Storage Alliance
	(Participation by invitation only. Please write to: <a href="mailto:c.amritha@indiasmartgrid.org">c.amritha@indiasmartgrid.org</a> )





14:00 -15:30	Track D: Technical Paper Presentation
	Session D1:
	<ol> <li>A draft specification for demand response ready appliances in India: Nihar Shah, Girish Ghatikar, Nikit Abhyankar, Amol Phadke (LBNL)</li> <li>Analysis of adaptive over current protection schemes for active distribution network: Harikrishna M, Sai Sasank K, Dr. Premalata Jena (IIT Roorkee)</li> <li>Optimal Energy Scheduling for a Smart Home Integrated with Solar PV and Battery Energy Storage: Batchu Rajasekhar, Naran Pindoriya (IIT Gandhinagar)</li> <li>Customer Engagement through Gamification: Anindya Pradhan, Anindya Kundu, Krishna V Prasad, Sumit Kumar Ray, Narayanan Rajagopal (TCS)</li> <li>Get smart with Smart Grids: Debasis Mohapatra (PwC)</li> <li>Communication Backbone for the Smart Grid Infrastructure: Narang N. Kishor (NARNIX)</li> </ol>
Event DAY 3	: 04 March 2015
Session Time	Session Details
11:30-15:30	Luncheon session - "Smart Regulations for Smart Grids" for Regulators and Policy Makers
11.50 15.50	Speakers:
	Sudeen G.Kelly, Former Commissioner, FERC
	2. <b>Chris Hickman,</b> President & CEO, Innovari Inc; and Advisor to Secretary of Commerce, USA on
	Renewable Energy
	3. <b>Vijay Sonavane</b> , Advisor, MERC
	4. Paul Feldman, Director (and past Chairman), MISO
	5. <b>Balawant Joshi</b> , Partner, Edam Infra
	Key topics:
	<ol> <li>Model Smart Grid Frameworks to support positive regulatory change to new technologies.</li> </ol>
	<ol><li>Regulatory Examples from around the world to enable the Demand side. A discussion of many different countries and regulations and to see what has worked and what has not worked.</li></ol>
	3. Market Structures – How are the different markets working? From fully unbundled to vertically integrated, where have electricity grids been able to provide higher levels of reliability while maintaining affordable cost?
	<ul><li>4. Regulatory implications of amendments proposed in the Electricity Act 2003</li><li>5. Regulations for Separation of Carriage and Content - Experiences and Recommendations</li></ul>
11:30-13:00	Track D: Technical Paper Presentation
	Session D2:
	1. Considerations in Standardization for Demand Response Ready Air Conditioners in India:
	Nihar Shah,Girish Ghatikar, Nikit Abhyankar, Amol Phadke (LBNL)
	2. Smart Metering and Demand Response: <i>Sujay Kumar Saha, Vikas Arora</i> (TPDDL)
	3. Smart Metering Technology: The Evolving Economy of Smart Distribution: <i>Priyamvada</i>
	<ul> <li>Chandel, Tripta Thakur, B.A. Sawale (CPRI Bhobal)</li> <li>Spotlight on Smart and Strong Electric Power Infrastructure: Susanne Ackeby, Bo</li> </ul>
	Normark (ISGAN Annex 6)
	5. The Grid+ project: connecting smart grid initiatives in the future European electricity grid:



	<ul> <li>Pieter Vingerhoets, Kristof May, Ronnie Belmans, Patrick Turnbull (Energyville, GSGF)</li> <li>6. Monitoring and analysis of Oscillations in Southern Regional grid: Sudeep M, T</li> <li>Muthukumar &amp; S. P. Kumar (POSOCO)</li> </ul>
14:00 -15:30	Track D: Technical Paper Presentation
	Session D3:
	1. Practical Approach to Predictive Analytics using IoT/Big Data – Asset Fitness Center: <b>VSSN</b>
	Srinivasa Murthy, B Sivarama Krishnan(Bahwan CyberTek)
	2. Application of PHEVs for smart grid in Indian power sector: Eshwar Pisalkar, Parita Bhojani,
	Abhijeet Pathade (UPES)
	3. Best Practices in Smart Metering Policy and Implementation: Apoorv Nagpal, Vivek
	Dhariwal(EVI)
	4. Carefully designed Smart Grid / Metering programs can resolve developing world's unique
	challenges: Sudhanshu Gupta, Mohit Bhatia(E & Y LLP)
	5. Dynamic Energy Management on Smart Micro Grid: <i>Prasanna Vadana D, Sasi K</i>
	Kottayil(Amrita University)
	6. Leveraging AMI for Enhanced and Improved OMS: Sandeep Pathak(Schneider)
vent DAY 4	: 05 March 2015

Coorion Time -	Cassian Dataila
Session Time	Session Details
11:30-15:30	Special Luncheon session and launch of ISGF's Smart Utilities Group (SUG)
	SUG is a voluntary forum for utilities to share their experiences and learn from each other on smarter initiatives and implementation of new technologies. For details write to: (c.amritha@indiasmartgrid.org)
	Agenda:
	Introduction and launch of SUG
	1. Election of a Chair for SUG
	2. Finalization of framework for SUG functioning
	<ol> <li>Presentation: Electricity Act 2003 Amendment (proposed) – Challenges to Regulators and Utilities</li> </ol>
	4. Presentation: Changes in Business Processes and IT Systems of Discoms with
	separation of Carriage and Content as envisaged in the Electricity Act 2003
	Amendments: Presentation by SAP
11:30-13:00	Track D: Technical Paper Presentation
	Session D4:
	1. Distribution System - Automation Technologies and its Cyber Security: <i>Vijayan</i>
	S.R.(ABB)
	2. Energy Access in South Asia: Incubating Innovation in Rural Electrification through
	Off-grid Solutions: Abhijith Jayanthi(Sonnergie UG, Munich)
	3. Fast Identification of Fault Location with Fault Passage Indicators under Network
	Reconfiguration: Pradeep Kumar Yemula, Viplav Chaitanya(IIT Hydrabad)
	4. Open Automated Demand Response: Industry Value to Indian Utilities and Knowledge
	from the Deployment: Rajesh V. Poojary, Girish Ghatikar(LBNL & Honeywell)



	5. Oracle Utilities Analytics: Balu Ramasamy, Steven Windsor(Oracle Corporation)
	6. Power Management of a Hybrid Microgrid: Md. Umar Hashmi, Jayesh G. Priolkar(IIT
	Bombay, Goa College)
14:00-15:30	Track D: Technical Paper Presentation
	Session D5:
	1. High availability automation network in Digital Substation using PRP and HSR
	redundancy protocol: Suraj Kumar Pardeshi(CG Global R&D Center)
	2. An Assessment of a Cost-effective Demand Response Scenario A case study for
	Jordan: Eg. Mazen alnabulsi, Ibrahim Hasasn(NEPCO)
	3. Intelligent Connectivity as a Fabric of Smart Cities: Lalitha Suryanarayana, Ashok
	Tipirneni(Qualcomm Technologies)
	4. Real-Time Control Of Power Distribution using LT and HT Smart Grid Switches:
	G.V.Sukumara, Ashwin K. Gonibeed(PRAPATI Chennai & New York)
	5. Role of Microgrids in India's Smart Grid Framework: Larisa Dobriansky(General
	MicroGrids (GMI))
	6. Simulating a Connected Micro-Smart Grid: Himank Shanker, Prof. Amit Garg,
	Mayank Tibrewala, Shreya Chandra Shekar, Jyoti Maheshwari(IIM Ahmedabad)

ISGF - TiE - IAN Smart Innovation Hub: 03-04-05 March 2015

ISGF in collaboration with The Indus Entrepreneurs (TiE) and Indian Angel Network (IAN) is organizing Smart Innovation Hub at ISGW 2015 where start-ups and entrepreneurs can exhibit their technologies/solutions to potential, clients, technology partners, investors and business associates. Smart Innovation Hub will be at the exhibition floor and will be open on 03-04-05 March 2015.

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