“India is on the path to achieve 100% household electrification by 31 March, 2019 and our next goal is 24x7 Power for All households” said Shri RK Singh, Hon’ble Minister of State (IC) for Power and New & Renewable Energy. He congratulated States for electrifying 25 million households under SAUBHAGYA Scheme in a record time of 17 months. Minister Singh addressed the inaugural session of the Conference of Power and Renewable Energy Ministers of States and UTs at Gurugram, Haryana on 26 February 2019 which was organised to review the implementation of various ongoing Schemes/ Programmes and deliberate on a host of issues pertaining to Power and Renewable Energy sectors.

Power Minister also felicitated State Power Departments and Distribution Utilities (DISCOMs) for their achievements under SAUBHAGYA Scheme. Laying the roadmap for achieving 24x7 Power for All, Minister Singh said that this will be done by strengthening the distribution network, improving the DISCOMs health, reducing the transmission & distribution losses, using technology to improve billing and collection efficiency and energy efficiency. Source: http://pib.nic.in/newsite/PrintRelease.aspx?relid=188961

India on Path to Achieve 100% Household Electrification

GoI approved Scheme for Faster Adoption and Manufacturing of Electric Vehicles in India Phase II (FAME India Phase II)

Government of India (GoI) has approved the proposal for implementation of Faster Adoption and Manufacturing of Electric Vehicles in India Phase II (FAME India Phase II) scheme for promotion of Electric Mobility in the country.

The scheme with total outlay of INR 10000 Crores over the period of three years will be implemented with effect from 1st April 2019. This scheme is the expanded version of the present FAME India Phase I, which was launched on 1st April 2015, with total outlay of INR 895 crores.

GoI approved Scheme for Faster Adoption and Manufacturing of Electric Vehicles in India Phase II (FAME India Phase II)
The main objective of the scheme is to encourage Faster Adoption of Electric and Hybrid Vehicle by way of offering upfront incentive on Purchase of Electric Vehicles and also by way of establishing necessary Charging Infrastructure for Electric Vehicles. The scheme will help in addressing the issue of environmental pollution and fuel security. Details of the scheme are as follows:

- Emphasis is on Electrification of the Public Transportation that includes shared transport:
  - Demand incentives on operational expenditure model for Electric Buses will be delivered through State/City Transport Corporations (STUs)
  - In 3W and 4W segment incentives will be applicable mainly to vehicles used for public transport or registered for commercial purposes
  - In the e-2Ws segment, the focus will be on the private vehicle
  - Through the scheme, it is planned to support 10 Lakhs e-2W, 5 Lakhs e-3W, 55000 4Ws and 7000 Electric Buses

- To encourage advance technologies, the benefits of incentives, will be extended to only those vehicles which are fitted with advance batteries like Lithium Ion battery and other new technologies.

- The scheme proposes for establishment of Charging Infrastructure, whereby about 2700 charging stations will be established in metros, other million plus cities, smart cities and cities of hilly states across the country so that there will be availability of at least one Charging Station in a grid of 3 km x 3 km. Establishment of Charging Stations are also proposed on major Highways connecting major City Clusters. On such Highways, Charging Stations will be established on both sides of the road at an interval of about 25 km each.

20 Electric Buses Flagged in Kolkata on 20th February, 2019

As a part of the Faster Adoption and Manufacturing of Electric Vehicles (FAME) India scheme, Government of India allocated a total of 390 electric buses to 10 cities across India. Out of these 390 buses, city of Kolkata was allocated 80 buses, of which 20 buses were flagged off on 20th February, 2019 by Ms. Mamata Banerjee, Honourable Chief Minister of West Bengal state.

India Smart Grid Forum (ISGF) has been providing advisory support to West Bengal Transport Corporation (WBTC) starting from development of implementation roadmap for electric vehicles to establishment of charging infrastructure for these 80 electric buses. Currently ISGF with support from World Bank has been involved in technical review of these 80 electric buses, battery and charging stations, readiness assessment of civil and electrical infrastructure and identification of grid upgradation requirement for the charging station implementation and will continue to provide advisory support to WBTC on operation of these electric buses to ensure smooth transition from diesel based to electric based public transport system.

National Mission on Transformative Mobility and Battery Storage Approved by Government of India

Government of India has approved setting up of a National Mission on Transformative Mobility and Battery Storage, to drive clean, connected, shared, sustainable and holistic mobility initiatives.

The Mission Envisages:

I. Phased Manufacturing Programme (PMP) valid for 5 years till 2024 to support setting up of a few large-scale, export-competitive integrated batteries and cell-manufacturing Giga plants in India.

II. Creation of a PMP valid for 5 years till 2024 to localize production across the entire Electric Vehicles value chain.

Composition of Mission:

- The multi-disciplinary “National Mission on Transformative Mobility and Battery Storage” with an Inter- Ministerial Steering Committee will be chaired by CEO NITI Aayog.
- The Steering Committee will be comprised of Secretaries from Ministry of Road Transport and Highways, Ministry of Power, Ministry of New and Renewable Energy, Department of Science and Technology, Department of Heavy Industry, Department for Promotion of Industry and Internal Trade, and Director General, Bureau of Industrial Standards.

To read more, please visit link: http://www.indiasmartgrid.org/viewnews.php?id=5346
India SMART UTILITY Week 2019
International Conference & Exhibition on Smart Utilities for Smart Cities
12 - 16 March 2019
Manekshaw Center, New Delhi, India

Supporting Ministries

ISUW 2019 Participating Utilities and Government Organisation

Electricity Utilities
1. Adani Electricity Mumbai Limited
2. Andhra Pradesh Southern Power Distribution Company Limited
3. Assam Power Distribution Company Ltd
4. Bangalore Electricity Supply Company Ltd.
5. BSES Rajdhani Power Ltd.
6. BSES Yamuna Power Ltd.
7. CESC Kolkata
8. Chamudeshvari Electricity Supply Company Ltd.
9. Chandigarh Electricity department
10. Chhattisgarh State Power Distribution Company Ltd.
11. Dakshin Gujarat Vij Company Ltd.
12. Dakshin Haryana Bijnor Vitran Nigam
13. Department of Power - Arunachal Pradesh
14. Gujarat Urja Vikas Nigam
15. Himachal Pradesh State Electricity Board
16. Hubli Electricity Supply Co. Ltd
17. India Power Corporation Limited
18. Jodhpur Vidyut Vitran Nigam Ltd.
19. Karnataka Power Corporation Limited
20. Kerala State Electricity Board Ltd.
22. Madhya Gujarat Vij Co. Ltd.
23. Madhya Pradesh Vidyut Vitran Nigam Ltd.
24. Maharashtra State Electricity Distribution Company Ltd.
25. Maharashtra State Electricity Transmission Company
26. Maharashtra State Power Generation Company
27. Mangalore Electricity Supply Co. Ltd
28. MP Paschim Khetra Vitrans Co. Ltd
29. MP Power Management Company Ltd.
30. New Delhi Municipal Council
31. Noida Power Company Ltd.
32. North Eastern Electricity Supply Company of Orissa Ltd.
33. NTPC Ltd.
34. Paschim Gujarat Vijn Co. Ltd
35. Power System Operation Corporation Ltd.
36. Punjab State Power Corporation Ltd.
37. Tata Power Delhi Distribution Ltd.
38. Telangana State Southern Power Distribution Company Limited
39. The Tata Power Company Ltd.
40. Tripura State Power Corporation Ltd.
41. Uttar Haryana Bijnor Vitrans Nigam
42. Uttarakhand Power Corporation Ltd.
43. West Bengal State Electricity Distribution Company Ltd.

Regulatory
1. Central Electricity Regulatory Commission
2. Andhra Pradesh Electricity Regulatory Commission
3. Bihar Electricity Regulatory Commission
4. Haryana Electricity Regulatory Commission
5. Kerala State Electricity Regulatory Commission
6. Punjab State Electricity Regulatory Commission
7. Uttar Pradesh Electricity Regulatory Commission
8. West Bengal Electricity Regulatory Commission
9. Joint Electricity Regulatory Commission

Gas Utilities
1. Gas Authority of India (GAIL)
2. Indraprastha Gas Limited (IGL)
3. Think Gas Distribution Pvt Ltd
4. Green Gas Limited
5. Maharashtra Natural Gas Limited
6. Atlantic Gulf and Pacific AG&P
7. Rajasthan State Gas Limited
8. Assam Gas Company Ltd
9. Central UP Gas Ltd

and many more Indian and foreign utilities...
ISGF INNOVATION AWARDS 2019
15 March 2019 | Le-Meridien Hotel, New Delhi

Award ceremony starts from 19:30 on 15th 2019

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Award Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Best Smart Grid Project in India by Utility</td>
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<tr>
<td>02</td>
<td>Best Smart Grid Project in India by Industry</td>
</tr>
<tr>
<td>03</td>
<td>Best Project for Household Electrification</td>
</tr>
<tr>
<td>04</td>
<td>Smart Technology of the Year</td>
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<tr>
<td>05</td>
<td>Innovative EV of the Year</td>
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<tr>
<td>06</td>
<td>Smart Start-up of the Year</td>
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<tr>
<td>07</td>
<td>Smart Incubator of the Year</td>
</tr>
<tr>
<td>08</td>
<td>Most Progressive Water Utility in India</td>
</tr>
<tr>
<td>09</td>
<td>Most Progressive Gas Utility in India</td>
</tr>
<tr>
<td>10</td>
<td>ISGF President’s Award for the best contribution towards growth of Smart Grids in India</td>
</tr>
</tbody>
</table>

Join us for the Awards Night and Gala Dinner by registering on www.isuw.in

White Paper on “Behavioural Energy Efficiency Potential for India” by AEEE and Oracle Utilities

AEEE and Oracle Utilities co-authored white paper on Behavioural Energy Efficiency Potential in India highlights the largely untapped potential for realizing grid-wide energy efficiency gains in India that utility-led demand-side management (DSM) programmes represent, focusing on behavioural energy efficiency in particular. Behavioural energy efficiency programmes use a mix of data analytics and behavioural science to help utility customers understand their energy usage better, and empower them to take steps to adopt more efficient behaviours where it makes sense for them to do so. These programmes not only help individual customers to save energy—and save money on their monthly energy bills—their impact on consumption patterns on an aggregate level are significant enough so as to flatten the load curve at a grid-wide scale.

The paper finds (based on international precedent) that India can claim up to 5400 GWh annually in cost-effective, quickly scalable, immediately achievable energy savings by creating an environment that makes these programmes easily implementable for any distribution utility (DISCOM). To learn more, please follow this link: http://www.aeee.in/wp-content/uploads/2019/02/Behavioral-Energy-Efficiency-Potential.pdf

Share your Feedback and Queries with:
- Sabyasachi Pattanaik | Oracle Utilities sabyasachi.pattanaik@oracle.com
- Shyamasis Das | AEEE shyamasis@aeee.in
### 12 March 2019 (Tuesday)

**Theme-1: Cyber Secure Energy Transition and Utility Transformation**
- AMI Related Utility Transformation
- Resiliency and Future Readiness
- Digitalization and the Asset Health
- Cloud Strategies and Roadmap for Digital Utilities

*Tutors: Anant Venkateswaran, Jonathan Petit, Randall Schmidt, Rama Rao Bandreddi, Ajoy Rajani, Suhas Dhapre, Marcus Bonner, Nitin Kumar*

**Theme-2: Next Gen Technologies for Utility Transformation**
- Blockchain for Utilities
- Artificial Intelligence and Machine Learning
- BOTs for Utilities

*Tutors: Chris Peoples, Shrirang K Karandikar, Lorien Gamaroff, Reena Suri, Jonathan Petit, Kartik Poddar*

**Theme-3: Energy Storage Technologies, Energy Storage Roadmap for India; and EV Rollout Challenges**
- Battery Technologies for Grid Storage and E-Mobility
- Vehicles Grid Integration
- Energy Storage for Microgrids
- Cyber Security

*Tutors: Arumugam Manthiram, Ravi Seethapathy, Girish Ghatikar, Massimiliano Claps, Arindam Maitra, Faruk Kazi, Anant Venkateswaran*

IEC-IEEE World Smart Energy Standardization Coordination Workshop

### 13 March 2019 (Wednesday)

#### THEMATIC SESSIONS

**INAUGURATION OF ISUW 2019 CONFERENCE**
Release of Reports and Signing of Contracts/MOUs

**INAUGURATION OF ISUW 2019 EXHIBITION**

*Cyber Secure Energy Transition and Utility Transformation: Digitalization and the Digital Customer*
- Virtualised Utilities
- AMI and AMI related Utility Transformation
- Advanced Analytics; Artificial Intelligence and Machine Learning
- New Utility Business Models

*Cyber Secure Energy Transition and Utility Transformation: Resiliency and Future Readiness*
- Flexibility in Power Systems
- Grid Interactive Buildings and Campuses
- Extreme Events and Grid Stability
- Cyber Security for the Digital Utilities
- Autonomous “X”
- Cloud Strategies and Roadmap for Digital Utilities
### 13 March 2019 (Wednesday)

**Parallel Sessions**

<table>
<thead>
<tr>
<th>Session</th>
<th>Collaborators</th>
</tr>
</thead>
<tbody>
<tr>
<td>7th EU-INDIA Smart Grid Workshop – In collaboration with European Commission</td>
<td></td>
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<tr>
<td>Smart Grid Pilot Projects: Presentation of Results of Successful Projects</td>
<td>In collaboration with NEDO, Japan and NSGM</td>
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<tr>
<td>Workshop on Blockchain for Utilities</td>
<td>In collaboration with Energy Blockchain Consortium, USA and Energy Web Foundation</td>
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<tr>
<td>Future Skills 2030 - Skilling for the Jobs in 2030</td>
<td>In collaboration with Indian School of Business, Skill Council for Green Jobs and CII</td>
</tr>
</tbody>
</table>

**Welcome Dinner**

(Open to All Speakers, Delegates and ISGF Guests)

**Banquet Assembly & Dining**

### 14 March 2019 (Thursday)

**Thematic Sessions**

<table>
<thead>
<tr>
<th>Session</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inaugural Plenary: Mainstreaming Renewables &amp; Smart Water Distribution</td>
<td>Mainstreaming Renewables</td>
</tr>
<tr>
<td>Cyber Secure Energy Transition and Utility Transformation: Mainstreaming Renewables</td>
<td>• Policy and Regulatory Support for Mainstreaming Renewables</td>
</tr>
<tr>
<td></td>
<td>• Proliferation of Prosumers and DER Impact on Distribution Grids</td>
</tr>
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<td></td>
<td>• Community Energy</td>
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<td></td>
<td>• REMCs and RE Forecasting in India</td>
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<tr>
<td>Cyber Secure Energy Transition and Utility Transformation: Energy Storage and Energy Storage Roadmap for India</td>
<td>• Technologies and Applications: Grid Balancing; RE Integration; E-Mobility</td>
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<td></td>
<td>• Storage Projects: International Best Practices and Lessons for India</td>
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<td></td>
<td>• Pilots Projects in India and Results</td>
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<td>• Local manufacturing of Energy Storage Systems in India</td>
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<td></td>
<td>• Business Models for Energy Storage Systems in the Indian context and Regulatory support</td>
</tr>
<tr>
<td></td>
<td>• Energy Storage Roadmap for India</td>
</tr>
<tr>
<td>Cyber Secure Energy Transition and Utility Transformation: AMI, Communications and Advanced Analytics</td>
<td>• AMI 2.0 : Latest Trends</td>
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<tr>
<td></td>
<td>• Communication Technology Choices for AMI and Grid Automation</td>
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<tr>
<td></td>
<td>• IoT Standards and Architecture</td>
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<tr>
<td></td>
<td>• Advanced Analytics and Machine Learning</td>
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**Parallel Sessions**

<table>
<thead>
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<th>Session</th>
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<tbody>
<tr>
<td>Workshop on Power Markets Design – in collaboration with European Union, Florence School of Regulations</td>
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<tr>
<td>Smart Water Distribution in collaboration with CEEW</td>
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<tr>
<td>5th US-INDIA Smart Grid Workshop - in collaboration with US Department of Commerce, USAID and USTDA</td>
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<tr>
<td>Workshop on Advanced Microgrids – in collaboration with US DOE</td>
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<tr>
<td>2nd France – India Smart Grid Workshop – In collaboration with Think SmartGrids, France</td>
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15 MARCH 2019 (FRIDAY)

THEMATIC SESSIONS

INAGURAL PLENERY: Theme - Energy and Mobility Transition

Cyber Secure Energy Transition and Utility Transformation: Mobility Transition in Smart Cities - Lead by Rocky Mountain Institute (RMI)

- Why are Smart Cities keen to adopt e-mobility solutions?
- Initiatives being undertaken by Smart Cities to implement e-mobility projects
- Key challenges faced by Smart Cities in implementing e-mobility projects
- Way forward for Smart Cities in championing e-mobility

Cyber Secure Energy Transition and Utility Transformation: Electric Vehicles Rollout Challenges in India

- Policy Issues: National and State Level Policies
- Technology Challenges and Local Manufacturing
- Wireless Charging Technology
- Charging Infrastructure and Standards
- Electricity Tariff for EV Charging

Valedictory Session

Address by Chief Guest (s)

- Distribution of Mementos to Partners and Exhibitors
- Lucky Draw for Visitors to the Exhibition
- Vote of Thanks and Announcement of ISUW 2020

PARALLEL SESSIONS

Roundtable on Interconnection of Regional Grids in Asia: ASEAN Grid – SAARC Grid – GCC Grid

Smart Gas Distribution in collaboration with IGL and GAIL

Roundtable on Women in Energy – in collaboration with the International Energy Agency in support of C3E

Presentation of Select Technical Papers (Top 24 Papers)

ISGF INNOVATION AWARDS AND GALA DINNER

Hotel Le Meridien, New Delhi
From 19:30 ~ 23:30

Hosted by GAIL India Limited
(Open to all Speakers, VIPs, ISGF Guests, Winners and Pass Holders)

Live Performances
ISUW 2019: Technical Tours 16th March 2019

1. Tata Power DDL Smart Grid Lab - Delhi
2. 10 MWh Battery Energy Storage System (BESS) at TPDDL - Delhi

AGENDA OF TECHNICAL TOURS

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:45 AM</td>
<td>Report at Manekshaw Centre, DhaulaKuan, New Delhi</td>
</tr>
<tr>
<td>09:30 AM</td>
<td>Departure from Manekshaw Center, DhaulaKuan, New Delhi</td>
</tr>
<tr>
<td>11:00</td>
<td>Arrival at TPDDL Smart Grid Lab at Sector-15, Rohini, Delhi</td>
</tr>
<tr>
<td>11:00 - 12:30</td>
<td>TPDDL Smart Grid Lab Tour: Demo of various Smart Grid Technologies</td>
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<tr>
<td>12:30 - 13:30</td>
<td>Lunch</td>
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<tr>
<td>13:30</td>
<td>Departure for 10 MWh Battery Energy Storage System (BESS) at TPDDL</td>
</tr>
<tr>
<td>14:00</td>
<td>Arrival at 10 MWh Battery Energy Storage System (BESS) at TPDDL in Rohini</td>
</tr>
<tr>
<td>14:00 - 15:30</td>
<td>Tour of BESS Plant</td>
</tr>
<tr>
<td>15:45</td>
<td>Departure for Manekshaw Centre</td>
</tr>
</tbody>
</table>

NOTE: All Foreign nationals are required to carry their passports to the technical tour for entry at Tata Power Delhi Distribution Limited Smart Grid Lab.

Terms & Conditions:
- To attend Technical Tour, ISGW Delegate Registration (3 days Pass) is mandatory
- Last minute requests are subject to seat availability

ANNOUNCING

India SMART UTILITY Week 2020

03 - 07 March 2020 | New Delhi, India

Conference and Exhibition Program

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<tbody>
<tr>
<td>Master Classes (optional) Cultural Tours</td>
<td>Conference &amp; Exhibition Welcome Reception</td>
<td>Conference &amp; Exhibition</td>
<td>Conference &amp; Exhibition ISGF Innovation Awards 2020 Gala Dinner</td>
<td>Technical Tours (Optional) Cultural Tours</td>
</tr>
</tbody>
</table>
ISUW 2019: Key Partners

Host Utilities

TATA POWER-DDL

TATA POWER

Co-Host Utilities

adani Electricity

CESC LIMITED

BESCOM

CIL

INDRAPRASTHA GAS LIMITED

Published on 5th February 2019

Posted on 8th & 9th of following month

Partner Utilities

MPPKVVCL

BSES

BSES Ridhima Power Limited

APSBCL

Platinum Partner

ABB

Gold Partners

SEW SMART ENERGY WATER

ORACLE Utilities

ISGF Innovation Awards Partner

Technology Partners

G3-PLC Alliance

TATA COMMUNICATIONS

Welcome Reception Partners

SAP

Eurigami

Delegation

Delegate Bag Partner

Knowledge Partner

Session Partner

Bronze Partners

Accenture

NEDO

WebNMS

LoRa Alliance

knowledgeindia Business Council

Technical Tour Partner

13th March Lunch Partner

M&D