

## **Stationary Energy Storage India**

## **Defining roadmap and outlook for** stationary energy storage in India

APRIL 8, 2021, CONFERENCE & VIRTUAL EXPO





















## STATIONARY ENERGY STORAGE INDIA – 08 APRIL, 2021 AGENDA

| TIME (IST)      | SESSION   | SPEAKER  |
|-----------------|---|--|
| 09: 30 – 10: 00 | Registration  |  |
| 10: 00 – 10: 10 | Opening remarks & Welcome address   | Ashok Thakur, Chief Editor, ETN, India Energy  |
|                 |   | Storage Alliance (IESA)  |
| 10: 15 – 11: 15 | <ul> <li>SESSION 1: Stationary Energy Storage Policies for India</li> <li>Draft National Wind-Solar Hybrid policy</li> <li>State level policies on wind-solar hybrid with Storage policy</li> <li>Role of CEA, CERC, Load Dispatch Centre for Storage Integration</li> <li>Renewable Energy – Round the Clock dispatch</li> <li>Draft Unified Guidelines on Standalone Energy Storage Systems procurement</li> <li>Policy requirement for Ancillary market</li> </ul> | <ul> <li>Dr. Rahul Walawalkar, MD, Customized Energy Solutions, President, IESA – (Moderator)</li> <li>Shri Ghanshyam Prasad, Joint Secretary, Ministry of Power (MoP)</li> <li>Shri Jatindra Nath Swain, Managing Director, Solar Energy Corporation of India (SECI)</li> <li>Dr. Jyoti Parikh, Executive Director, Integrated Research and Action for Development (IRADe)</li> <li>Stefan Louis, Chief Executive Officer and Chief Technical Officer, Nexcharge</li> </ul> |
| 11: 15 – 11: 30 | India Stationary Storage Market Overview  | Avanthika Satheesh, Industry Research  |
|                 | presentation  | Manager, Customized Energy Solutions (CES)   |
| 11: 30 – 12: 30 | SESSION 2: Grid scale Energy Storage Integration (For Grid Scale Solar PV / Wind Applications and DISCOM Use cases)  Need of Energy Storage for large scale PV / Wind / Hybrids Plants  RE Shifting, RE firming, RE Smoothing and Ramp Control requirement  Analysis using COMETS (NPV, IRR, Payback calculation for the projects)  Energy Storage for Utilities for Peak load management, Grid Stability, Transmission & distribution deferral, and DSM              | <ul> <li>Bindu Madhavi, Manager – Policy &amp; Regulatory, IESA, CES (Moderator)</li> <li>Dr. Bharath Reddy, Additional General Manager, Solar Energy Corporation of India (SECI)</li> <li>Jitendra Nalwaya, Vice President, BSES Yamuna Power Limited</li> <li>Nilesh Kane, Head – Power distribution &amp; battery storage, Tata Power DDL</li> <li>Ilya Chernyakhovskiy, Grid Systems Analyst, NREL</li> </ul>  |
| 12: 30 – 13: 30 | SESSION 3: Energy Storage Financing  Overview of project financing options for energy storage projects  Risk management and role of insurance  Role of aggregators / ESCO companies   | <ul> <li>Debi Prasad Dash, Executive Director,<br/>IESA (Moderator)</li> <li>David Morgado, Senior Energy Policy<br/>Specialist, Asian Infrastructure<br/>Investment Bank (AIIB)</li> </ul>  |

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|                                    | New business models  | <ul> <li>Mani Khurana, Sr. Energy Specialist, The World Bank</li> <li>Kashish Shah, Energy Finance Analyst, Energy Finance Studies, Institute for Energy Economics &amp; Financial Analysis (IEEFA)</li> </ul>  |
| 13: 30 – 13: 45                    | Launch of IESA-NSEFI Taskforce on Solar+ Storage   | <ul> <li>Debi Prasad Dash, Executive Director, IESA</li> <li>Subrahmanyam Pulipaka, CEO, National Solar Energy Federation of India (NSEFI)</li> </ul>   |
| 13: 45 – 14:00                     | BREAK  |   |
| 14: 00 – 15: 00                    | SESSION 4: Energy Storage for Behind the Meter Application (Rooftop Solar & Microgrid, Inverter, UPS Back UP, Telecom Tower)  • Role of Net metering  • C&I application including DG optimization  • Telecom tower, Inverter, UPS Back Up  • Power Quality & reliability for C&I consumers  • Micro-grid scenario in India & opportunities in campus & rural micro-grids | <ul> <li>Netra Walawalkar, Director – India markets, Customized Energy Solutions (Moderator)</li> <li>Ketan Chitnis, Vice President, Stationary BU, Exide Leclanche</li> <li>Naveen Sharma, Sr. Vice President – DCT &amp; ESS Business, Exicom</li> <li>Srinivasa Rao Ganga, Chief Marketing Officer, Amararaja Batteries</li> <li>Kuppuraj Uvaraj, Sr. Manager – Business Development, Sterling &amp; Wilson</li> </ul>   |
| 15: 00 – 15: 10                    | Overview of Nexcharge, Tata Power DDL grid-<br>connected community energy storage Project  | Ketan Chitnis, Vice President, Stationary<br>BU, Exide Leclanche  |
| 15: 10 – 15: 20                    | India Stationary Storage Tender/ Project Update (Special Presentation)   | Shivam Chauhan, Research Analyst, IESA  |
| 15: 20 – 15: 30                    | BREAK  |   |
| 15: 30 – 16: 30                    | SESSION 5: Learning from India & global projects and Insights for National and International Experience  • Global Stationary storage ecosystem and success stories  • Project Monitoring  • Learning and key take-away 's from global projects  • Success stories from Stationary energy storage projects in India   | <ul> <li>Vinayak Walimbe, Vice President –         Emerging technologies, Customized         Energy Solutions (Moderator)</li> <li>Rajendra Shrivastav, President &amp;         Market Business Leader, AES India</li> <li>David Post, Head – Energy Storage         Solutions, Enel X</li> <li>G. K. Ramakrishnan, GM – Business         Development, Energy Business, Wartsila</li> <li>Dr. Avishek Kumar, Co-founder &amp; CEO,         V-Flow Tech</li> </ul> |
| 16: 30 – 17: 30<br>17: 30 – 18: 00 | SESSION 6: Current and Upcoming Technologies for Stationary Energy Storage System  • Technology evaluation and outlook for 2020-25  • Second life batteries for stationary applications  • Beyond batteries (thermal storage, mechanical storage, gravity storage)   | <ul> <li>Dr. Rahul Walawalkar, MD, Customized Energy Solutions, President, IESA (Moderator)</li> <li>Dr. Judith Jeevarajan, Research Director – Electrochemical Safety, Underwriters Laboratories (UL)</li> <li>Michael Willemot, Chief Financial Officer, Oxto Energy</li> <li>Yashwanth Mahadevan, Sales Leader – APAC, EOS Enterprises</li> </ul>  |