



2-Day National Workshop on Future-Ready Power Systems in India: RE Integration, Storage, EVs & Grid Modernization

Date: 20th & 21st Jan. 2026

Venue: IIT Bombay

Background

The Indian power sector is undergoing a major transformation driven by the rapid expansion of renewable energy sources such as solar photovoltaic, wind and biomass, along with increasing electrification of end use sectors. The Government of India has set ambitious targets of achieving 500 GW of non-fossil fuel based installed capacity by 2030 and net zero emissions by 2070, highlighting the need for robust grid planning, operation and regulatory frameworks. While renewable energy is becoming a central pillar of India's generation mix, large scale integration of variable resources presents several challenges, including grid stability, resource adequacy, congestion management and infrastructure readiness. These challenges are further intensified by the growing deployment of electric vehicles and charging infrastructure. Uncoordinated EV charging can increase peak demand and stress distribution networks, whereas smart charging and vehicle to grid capable assets offer significant potential to provide flexibility and support renewable integration.

Distribution Companies are at the core of this transition. DISCOMs are increasingly required to evolve from conventional energy suppliers to active system operators capable of managing distributed generation, flexible demand, digital platforms and emerging market mechanisms. Energy storage is also expected to play a critical role in India's 2030 power system by providing flexibility across multiple timescales. Unlocking this potential requires appropriate planning approaches, regulatory clarity and viable business models.

Against this backdrop, the **2-Day National Workshop on Future-Ready Power Systems in India: RE Integration, Storage, EVs & Grid Modernization** will bring together policymakers, regulators, utilities, DISCOMs, renewable and EV ecosystem players, energy storage providers, market institutions and academic experts. The workshop aims to facilitate experience sharing and identify practical pathways for integrating renewable energy, electric mobility and energy storage into a reliable, resilient and future ready Indian power system.



Schedule

Day 1: 20 th January 2026				
Session Name		Time	Session Details	Speakers
Session 1 9:00 – 10:30	Registration & Inaugural Session	09:00 – 09:30	Registration	
		09:30 – 10:30	Inaugural Address	• Opening Remarks: ○ Prof. Zakir Rather (Associate Professor, Department of Energy Science and Engineering, IIT Bombay) • Welcome Address: ○ Prof. Manasvita Bose (Head of Department, Department of Energy Science and Engineering, IIT Bombay) ○ Prof. Ravindra Gudi (Deputy Director, IIT Bombay) • Keynote Address ○ Dr. Kuldeep Rana (Scientist E, Ministry of New and Renewable Energy Resources) ○ Shri Alok Tandon (Chairman, Joint Electricity Regulatory Commission for Goa and Union Territories)
		10:30 – 11:00	Networking High Tea	
Session 2 11:00 – 01:30	RE Integration and Evolving Indian Grid	11:00 – 11:30	RE Integration Experience: Global and Indian perspective	Prof. Zakir Rather
		11:30 – 11:55	Planning of Indian Grid for 2030 and Beyond	Shri R V M M Rao (Chief General Manager - Central Transmission Utility of India Ltd.)
		11:55 – 12:15	OEM Perspective on Renewable Energy Integration Challenges and Way Forward	Dr. Pukhraj Singh (Head of Section - Electrical Systems, Suzlon Energy Ltd.)
		12:15 – 01:30	Panel Discussion on “Readiness of Indian Grid for Future Converter Dominated System”	Panellists: • Shri R V M M Rao • Dr. Pukhraj Singh • Shri Kanti Bhuva • Prof. Zakir Rather Moderator: Shri Sushil Kumar Soonee (Former and Founder CEO POSOCO - Now Grid India)
		01:30 – 02:30	Networking Lunch	
		02:30 – 03:15	StoREin Project R&D Forum Launch	



Session 3 3:15 – 6:00	Powering India's Renewable Energy Future: Role of Grid-Scale Storage	03:15 – 03:35	Energy Storage towards DISCOM's Grid Flexibility, Reliability and Stability	Dr. Subir Sen (Director (Operation), Tripura State Electricity Corporation Ltd.)
		03:35 – 03:50	Developer View on Storage	Shri Piyush Pandya (Head of Engineering and Operational Excellence, Indigrid)
		03:50 – 04:10	Energy Storage emerging technologies	Dr. Ganesh Das (Chief - Collaboration & Innovation, Tata Power)
		04:10 – 04:40	Networking High Tea	
		04:40 – 06:00	Panel Discussion on “Storage for a 500 GW Target: Optimal Mix, Markets & Operational Readiness”	Panellists: - Dr. Subir Sen - Shri Piyush Pandya - Dr. Ganesh Das - Shri Kanti Bhuvra - Dr. Kuldeep Rana Moderator: Prof. Zakir Rather

Day 2: 21 st January 2026				
Session Name		Time	Session Details	Speakers
Session 4 9:00 – 11:00	Grid Integration of Electric Vehicles	09:00 - 09:15	EV Charging Load: Implications for Distribution Planning & Operations	Shri Ram Krishna Singh (Head of Business Operations- EV Charging, Tata Power)
		09:15 - 09:30	EV Growth in India: Transportation Trends and Challenges for DISCOMs	Shri Sunil Sharma (General Manager - Sustainability & Cleantech, BSES Yamuna Power Limited)
		09:30 - 09:45	Smart Charging and V2G Services: Pathways to Grid Stability & Renewable Integration	Prof. Zakir Rather
		09:45 - 10:00	EVs: Cleaner or Complicated? The Emission Paradox	Shri Angshu Plavan Nath, Shri Akhilesh Panwar (Senior Research Associate, Grid Integration Lab, IIT Bombay)
		10:00 – 11:00	Panel Discussion on “Electrification of Transport Sector: Can India Charge Smarter?”	Panellists: - Smt. Asha P A (Chief Engineer (REES & PED), KSEBL) - Shri Prafulla Varhade (Executive Director, MERC) - Shri Ram Krishna Singh - Shri Sunil Sharma Moderator: Prof. Zakir Rather
		11:00 – 11:30	Networking High Tea	



Session 5 11:30 – 1:00	Grid Modernization	11:30 - 11:45	Unlocking DISCOM Efficiency Through Better Network Visibility	Shri Sachin Laxmikant Talewar (Director (Projects, Operations), Maharashtra State Electricity Distribution Co. Ltd.)
		11:45- 12:00	Cyber Security in the Modern Grid	Shri Saurabh Kumar Srivastava (Head of Utilities DTO, Cisco)
		12:00 - 12:15	Modernization of Power Procurement for DISCOMs	Shri Chandra M. Verma (Vice President, PTC India Limited)
		12:15 – 01:00	Panel Discussion on “Modernizing India’s Distribution Utilities: Visibility, Security & Power Procurement Pathways”	Panellists: - Shri Sachin Laxmikant Talewar - Shri Saurabh Kumar Srivastava - Shri Chandra M. Verma Moderator: Dr. Amit Kumar Singh Parihar (Director - Clean Power Program, Shakti Sustainable Energy Foundation)
		01:00 – 02:00	Networking Lunch	
Session 6 2:00 – 4:15	Grid Operational Challenges & Emerging Grid Elements	02:00 – 02:15	Operational Insights from Maharashtra SLDC under Increasing RE Share	Shri Shashank Jewalikar (Executive Director, Maharashtra State Load Despatch Center)
		02:15 – 02:30	RE Developer Perspective on Renewable Energy Integration Challenges and Way Forward	Shri Ketan Dave (Head Engineering and Quality, Evren)
		02:30 – 02:45	Planning & Operating Hydrogen Electrolysers: Grid Integration & Flexibility	Dr. Dadasaheb J. Shendage (Associate Director – Technology, h2e Power Systems Private Limited)
		02:45 – 03:00	Grid Forming Converter Technology and its Role in IBR Dominated Power System	Prof. Zakir Rather
		03:00 – 03:15	Data Centres and the Grid: Status and Grid Integration Challenges	Shri Ganesh Pawar (Director- IBX Data Center Operations, Equinix India)
		03:15 – 04:15	Panel Discussion on “Emerging Grid Realities: Balancing Flexibility, Large Loads & Forecasting”	Panellists: - Dr. Dadasaheb J. Shendage - Shri Shashank Jewalikar - Shri Ketan Dave - Shri Ganesh Pawar Moderator: Prof. Zakir Rather
		04:15 – 04:30	Closing Remarks and Acknowledgements	
		04:30 – 05:00	Special Closing Refreshments and Networking	