

# IEEE PES Global Workshops

Virtual Sessions

Two Day Workshop

## Electric Vehicle - Grid Integration

Opportunities, Challenges & Remedial Measures

Organised by

PES India Chapters Council (PICC)

Co-host

IEEE India Council

PES-IAS Chapter, Pune



22<sup>nd</sup> July 2021

23<sup>rd</sup> July 2021

### Theme of the Workshop

Low carbon emission, environmental benefits, advancement in technology and proactive government policies have resulted in increased adoption of Electric Vehicles (EV) as the future of transportation. Mass adoption of EVs have a direct impact on the electric grid of future and brings in new challenges for power sector in terms of maintaining grid reliability standards. The extent of impact on electric grid, depends on country specific EV road map, policies to adopt EV and commitment towards green energy.

Large penetration of EVs will require upgradation of grid infrastructure (both transmission and distribution), modifications in grid planning & grid operating standards. With V2X initiatives, adoption of EVs also open up new opportunities for ancillary services. These aspects will have significant economic implications and impact the tariff structure, which may call for regulatory interventions.

The challenges faced across the globe are not unique and it is better to learn from the experiences of utilities to further strengthen the confidence level of all stakeholders. In this context, the workshop is being arranged to deliberate and enlist the best practices being followed by various utilities to overcome the challenges being faced currently.

### Who Should Attend

The workshop invites the participation of stakeholders from the power and energy field viz., utilities, financial institutions, entrepreneurs, bureaucrats, technocrats, regulators, policy makers, researchers and academia.

[Click Here to Register](#)

Registration is free, but mandatory

Ravindra Desai

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# Workshop Schedule

Workshop will comprise of 4 technical sessions, as detailed below. Each session will comprise of a keynote talk of 30 minutes and panel discussion of 90 minutes, with experts from North America, Europe, Asia, ASEAN countries, Australia, New Zealand and Pacific Islands.

## Inaugural Function

22<sup>nd</sup> July 2021

9:00 AM to 9:30 AM (IST)

### 9:00 AM to 9:30 AM : Inaugural Function

Welcome	Dr. Surekha Deshmukh Chair, PES India Chapters Council (PICC)
Opening Remarks	Dr. K. R. Suresh Nair Chair, IEEE India Council
Inaugural Address By	Dr. Ramakrishna Kappagantu IEEE PES Governing Board MaL & Member, IEEE Smart Cities Steering Committee (2018-19) & IEEE R10 Director (2015-16)
	Prof. Saifur Rahman Past President, IEEE Power and Energy Society
Vote of thanks	Mr. Ravindra Desai GIEEE, India

## Session - 1

22<sup>nd</sup> July 2021

9:30 AM to 11:30 AM (IST)

### Eco System for EV – Grid Integration : Oceania Experience

#### 9:30 AM to 10:00 AM : Keynote Address

Speaker	Dr. Shay Bahramirad IEEE PES VP of New Initiative and Outreach Vice President-Climate and Resilience, Quanta Technology, USA
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#### 10:00 AM to 11:30 AM : Panel Discussion

Moderator	Prof. Nirmal Nair IEEE PES DLP Coordinator Associate Professor, Department of Electrical, Computer and Software Engineering, The University of Auckland.
Speaker	Mr. Moonis Vegdani General Manager Technology and Digital, <b>Counties Power</b> , New Zealand
Speaker	Dr.-Ing Tobias Massier Department Head ESTL, TUMCREATE Ltd., Singapore
Speaker	Mr. Anand Nanjangud General Manager, Special Projects, Energy Fiji Limited, Fiji



## Session - 2

22<sup>nd</sup> July 2021  
5:00 PM to 7:00 PM (IST)

### Eco System for EV – Grid Integration : Europe Experience

#### 5:00 PM to 5:30 PM : Keynote Address

Speaker	Prof. Lina Bertling Professor, KTH Stockholm, Sweden
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#### 5:30 PM to 7:00 PM : Panel Discussion

Moderator	Prof. Bikash Pal Professor, Imperial College London
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Speaker	Dr. Simon Tindemans Assistant Professor , TU Delft, Netherlands
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Speaker	Dr. Vladimiro Miranda Professor , INESC TEC – INESC Technology and Science, Portugal
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Speaker	Dr.-Ing. Bernhard Wille-Hausmann Head of Group Power Grids and Energy Management, Intersectoral Energy Systems and Grid Integration Fraunhofer Institute for Solar Energy Systems ISE
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## Session - 3

23<sup>rd</sup> July 2021  
9:30 AM to 11:30 AM (IST)

### Eco System for EV – Grid Integration : India and Asian Experience

#### 9:30 AM to 10:00 AM : Keynote Address

Speaker	Dr. Subir Sen COO, CTU Planning, Power Grid, India
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#### 10:00 AM to 11:30 AM : Panel Discussion

Moderator	Mr. Ravikiran Annaswamy CEO and Managing Director, Numocity
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Speaker	Mr. Balqees Al Daghar ABB, UAE
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Speaker	Dr. Chandrasekhar Atla Deputy General Manager, PRDC
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Speaker	Mr. Sandeep Bangia Business Head of EV Charging Ecosystem, Tata Power
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## Session - 4

23<sup>rd</sup> July 2021  
5:00 PM to 7:00 PM (IST)

### Eco System for EV - Grid Integration : North America Experience

#### 5:00 PM to 5:30 PM : Keynote Address

Speaker	Dr. Robby Simpson System Architect, Grid Solution, GE Renewable Energy, USA
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#### 5:30 PM to 7:00 PM : Panel Discussion

Moderator	Mr. Sri Chandra Sr. Director - Standards and Technology, IEEE SA, India
Speaker	Ms. Hilary Brown Engineer III-Policy Studies, MISO Energy, USA
Speaker	Mr. Sanjeev Singh Founder and CEO, Elocity, Canada
Speaker	Dr. Edvina Uzunovic Assistant Teaching Professor, Worcester Polytechnic Institute, USA
Speaker	Dr. Elli Ntakou Advisor, Quanta Technology, LLC, USA
Speaker	Prof. David Slutzky Founder and CEO, Fermata Energy, Virginia

## Closing Ceremony

23<sup>rd</sup> July 2021  
7:00 PM to 7:30 PM (IST)

#### 7:00 PM to 7:30 PM : Closing Ceremony

Address by	Mr. Harish Mysore Director – India Operations, IEEE, India
President Elect Address	Dr. Jessica Bean President Elect, IEEE Power and Energy Society, USA
Closing Remarks	Dr. Nagaraja Ramappa Managing Director, PRDC, India
Feedback	From Audience
Vote of Thanks	Dr. Mandar Bhawalkar Chair, PES-IAS Chapter, Pune



# Workshop Committees

## Workshop General Chair

- Dr. Surekha Deshmukh, Chair, PES India Chapters Council
- Dr. K. R. Suresh Nair, Chair, IEEE India Council

## Organising Committee

- Mr. Nitesh Kumar D, Secretary, PES India Chapters Council
- Dr. Rajashree Jain, Secretary, IEEE India Council
- Mr. Ravindra Desai, IEEE Standards Association, IEEE India Office
- Dr. Mandar Bhawalkar, Chair, PES-IAS Chapter, Pune

## IEEE PES India Workshop Committee

### Chair

- Dr. Ramakrishna Kappagantu, IEEE PES Governing Board MaL & Member, IEEE Smart Cities Steering Committee (2018-19) & IEEE R10 Director (2015-16)

### Members

- Prof. Sri Niwas Singh, Department of Electrical Engineering, Indian Institute of Technology, Kanpur
- Dr. Nirmal Nair, Associate Prof, Department of Electrical, Computer and Software Engineering, University of Auckland, New Zealand & IEEE PES DLP Coordinator
- Dr. V. S. K. Murthy Baliyepalli (Krish), Future Resilient Systems (FRS), Singapore ETH Center
- Prof. S. A. Fattah, Department of EEE and Director, INPE, Bangladesh University of Engineering and Technology (BUET) and PES Large Range Planning Committee Member
- Mr. C. N. Raghupati, Senior Vice President and Head, India Business, Infosys Systems Pvt. Ltd.
- Dr. Mehdi Ganji, Chair, Ex R&D Committee, IEEE Smart Cities & Vice President, Smart Cities, WILLDAN, U.S.A
- Prof. Omer Usta, Faculty of Electrical and Electronics Engineering, Istanbul Technical University, Istanbul, Turkey
- Dr. R. Nagaraja, Past Chair, PES India Chapters Council, Managing Director, PRDC, India
- Mr. Ravindra Barlingay, Vice President, R&D, Endurance Technologies Ltd., India

## Important Links

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About IEEE PES: <https://www.ieee-pes.org/>

About IEEE India Council: <https://site.ieee.org/indiacouncil/about-ieee/>

About IEEE Standards Association: <http://standards.ieee.org>