

Thomas Alva Edison Memorial Lecture (25th in the series)

It was organized jointly by IEEE PES-IAS and PELS-IES Delhi Chapters as per following details:

Speaker: Dr. Tapan Manna, Associate Technical Consultant at Burns & McDonnell – Transmission & Distribution, USA.

Topic: " Offshore AC Wind Topology and Design Considerations "

Date and Time: 11-Dec-2021, 7.30pm-8.30pm (IST).

Google meet link: <https://meet.google.com/kcu-unyx-wat>

The speaker, Dr. Tapan Manna is an Associate Technical Consultant at Burns & McDonnell – Transmission & Distribution, USA. He has a total of 30+ years of experience in the power industry and academia. Dr. Manna's interests include power systems, power system protection, HV/EHV power apparatus, HVDC and FACTS, grounding impulse, lightning transients, geomagnetic disturbances (GMD), and electromagnetic pulse (EMP). He has delivered over 45 presentations (at Burns & McDonnell, IEEE PES/IAS/PLS/CED Chapters, PES-JTCM, Universities, and Institutions) on various technical topics related to T&D applications.

The screenshot displays a Google Meet window with a presentation slide titled "Introduction". The slide content is as follows:

- Wind energy is the fastest-growing power generation resource.
- Offshore wind farms are integrated into bulk power grids at the onshore PCC through the AC submarine cable.
- Stability of system network operation with a large penetration of wind energy has been one of the most important concerns.
- Reactive power is generally produced or absorbed by major reactive components of wind power plant (WPP).
- To keep the grid operating voltage within acceptable margins, an optimal cost-effective reactive power compensation is necessary.

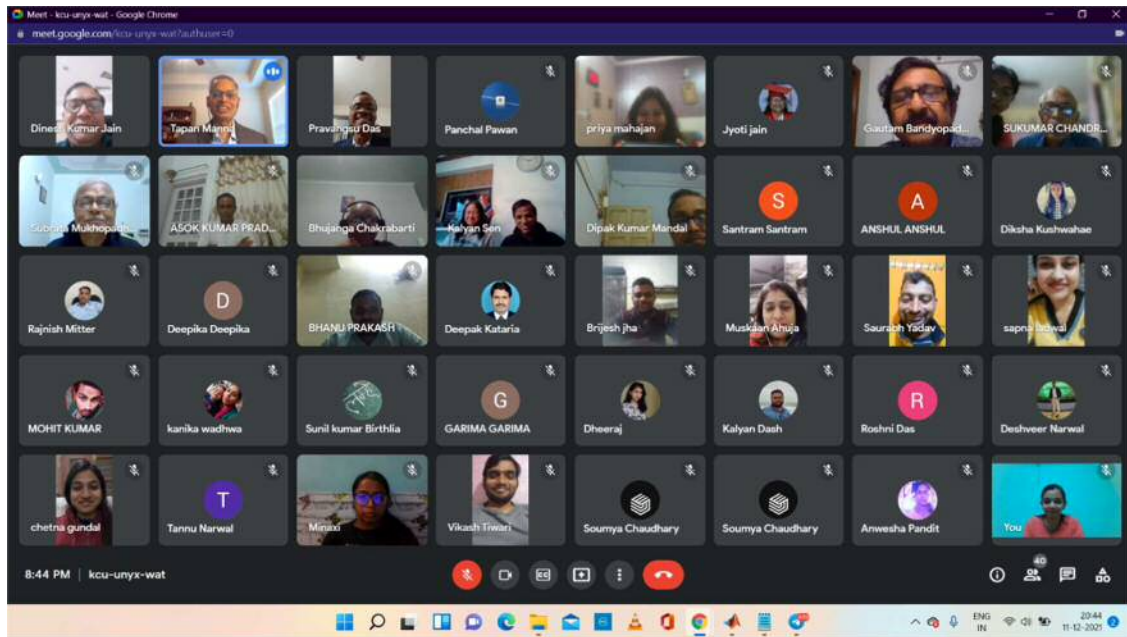
The slide also features logos for IEEE PES (Power & Energy Society) and IEEE. The meeting interface shows a grid of participants including Bhujanga Chakrabarti, Tapan Manna, priya mahajan, Kalyan Sen, Dipak Kumar Mandal, Subrata Mukhopadhyay, Panchal Pawan, Pravangsu Das, and 45 others. The time is 7:47 PM on 11-12-2021.

Presentation online

With growing concerns over climate change and fossil fuel depletion, the exploitation of renewable energy has become paramount in electricity generation. Currently, wind energy is the fastest-growing power generation resource. The stability of system network operation

with a large penetration of wind energy has been one of the most important issues. The speaker explained in details the global installed wind capacity, 2025 market outlooks, wind farms topology, turbine configurations, and VAR control including the reactive power contribution by AC submarine cable and Q-compensation impacts on AC submarine cable.

The lecture was very well attended by more than 50 participants and their feedback was overwhelmingly positive.



Attendees online
