



“Impact of Inverter-based Resources on Power Systems”

A workshop organized under the aegis of

IOE and NCPRE

IIT Bombay

4th and 5th November 2024

About the Workshop

India has also embarked on large-scale renewable integration with the power grid. With the increasing penetration of Inverter-Based Resources (IBRs) in power systems, new stability challenges are emerging that involve adverse control interactions between the IBRs themselves and between IBRs and other power system components. Several incidents of adverse control interactions among IBRs have been reported by various utilities around the world, including in India. Several new challenges are also likely to emerge in the future when “grid-forming” capabilities are introduced in inverter control. The analysis and mitigation of these problems is therefore of great practical interest.

In this context, IIT Bombay is arranging a workshop on “Impact of Inverter-based Resources on Power Systems” on 4th and 5th November 2024. The workshop will focus on

1. IBR controls and grid interactions.
2. Generic modeling of inverter based resources for positive-sequence stability studies and EMT studies, guidelines for their modeling and the verification of generic models with measurements.
3. Present and future scenario in India for grid-integration of renewable energy. Practical challenges faced.

The workshop is being organized as a part of the outreach activities of IOE (Institute of Eminence) implementation cell and the National Centre for Photovoltaic Education and Research (NCPRE) IIT Bombay.

Speakers

1. Prof Vijay Vittal, Ira A. Fulton Chair Professor (2005) and ASU Foundation Professor in Electric Power Systems at Arizona State University. Prof Vittal will be visiting IIT Bombay in November 2024 as a D. J. Gandhi Distinguished Visiting Professor.
2. Faculty members from IIT Bombay.
3. Guest speakers from industry/academia.

Target Audience

Professionals working in industry/utilities/research organizations, Faculty Members in Educational Institutions and Post Graduate Students working on issues related to grid integration of IBRs.

Schedule

Workshop will commence on 4th November 10:00 am and conclude on 5th November 4:00 pm (tentative). The detailed schedule will be published in due course.

Venue

Victor Menezes Convention Centre, IIT Bombay

Registration

1. All persons wishing to attend should register. The registration form is available at: <https://forms.gle/MxQJhd9utfMhYJQeA>
2. Registration is free. Working Lunch and Tea will be provided to the participants.
3. It may be necessary to restrict the number of participants depending on the response.
4. Confirmation will be given on 20th October 2024 for those who have registered in advance.

Accommodation

On-campus accommodation availability is limited; a few rooms are available in the guest house on twin-sharing and payment basis on 3rd, 4th and 5th November 2024. Those wishing to avail of this accommodation (subject to availability) should send their request by email to ashwini24@ee.iitb.ac.in

Contact for further details:

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