# iional Agency

## Maharashtra Power System Transformation Workshop

### Agenda

### 18<sup>th</sup>February 2020

Venue: MSEDCL, Head Office, Prakashgad, Bandra East, Mumbai

#### Partners:









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Concept note and agenda, dated: 18th February 2020

# **IEA Program for Maharashtra Power System Transformation Workshop 2019-2020**

India is the third-largest energy consuming country in the world. Per-capita electricity consumption is still around a third of the world average, but total Indian electricity demand is expected to continue expanding driven by further industrialisation, population growth and increased urbanisation. India faces a triad of challenges: how to i) expand energy access, ii) meet growing electricity demand and iii) integrate renewable energy, all while transitioning to a low-carbon electricity system to achieve ambitious economic, social and climate objectives.

The International Energy Agency (IEA) with the sponsorship of the British High Commission in partnership with NITI Aayog and Prayas Energy organises a **Maharashtra Power System Transformation Workshop** to inform the state government's actions for system integration of solar and wind.

The increasing share of solar and wind energy in Maharashtra (up from 6.5% today) will redefine how the state's power system is organized, planned and operated in the coming years. IEA's global work on power system transformations categorizes six phases of renewable integration which need to be successfully managed. Maharashtra is close to enter Phase 3 of this transformation. Other international regions such as Denmark, UK, Australia, Germany, various Chinese provinces and US States have already faced similar challenges. This workshop will also highlight what the State of Maharashtra may learn from these international experiences and how it fits with its own system transformation.

The workshop will bring together local Maharashtra stakeholders including the SLDC, DISCOMs, the regulator, power producers and battery storage stakeholders. The engagement will be coordinated by IEA, NITI Aayog and Prayas. The state views are complemented with international insights from IEA, RAP, GIZ and India national insights from the Prayas, Centre for Energy regulation, IESA, TERI and more.

The workshop provides a platform for local and international experts to share ideas and identify key recommendations for power system planning, operation and flexibility for a successful increasing integration of variable renewable energy in Maharashtra.



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### **Maharashtra Power System Transformation Workshop 2020**

February 18<sup>th</sup>, 2020, Location: Mumbai, Partners: IEA & NITI Aayog & Prayas

### 9h45 – **Opening and Introduction** 10h45

 International Context and Introduction
 by Mr. Edwin Haesen, Head of Unit System Integration of Renewables, International Energy Agency – 10 mins

National context setting and welcome
 by Mr. Rajnath Ram, NITI Aayog, Adviser Energy – 10 mins

3. State context and overview by Mr. Shantanu Dixit, Group Coordinator, Prayas Energy Group – 10 mins.

4. Keynote address on "Role of Renewable Energy in Maharashtra's Energy Transition"

by Mr. Prashant Badgeri, Deputy Secretary, Department of Energy, Government of Maharashtra - 10 mins

5. Brief remarks on new regulatory framework for Energy Transition in Maharashtra

by Mr. Abhijit Deshpande, Secretary MERC- 10 mins

 UK Government Department for International Trade (BHC) by Mr. Tom Mottershead Deputy Director-Trade (South Asia) - 5 mins

10h45 – *Coffee break* 11h15

#### 11h15 12h30

### A renewed view on system operation and planning

- 1. Characteristics of the Maharahtra system with 50% VRE in 2030 by Mr. Ashwin Gambhir, Fellow, Prayas Energy Group- 20 mins
- Challenges and developments in today's system operation by Mr. Dinesh Wagmare, Chairman and Managing Director, MSETCL – 15 mins
- 3. Role of transmission planning, pricing for high VRE in Maharashtra by Mr. Balawant Joshi, Managing Director, Idam Infrastructure Advisory Pvt Ltd 15 mins
- Maharashtra Power Sector 2030 : Navigating Disruptions
  by Ms. Anvesha Thakker, Executive Director, Power and utilities practice, KPMG 10 mins

Question and answer session – 15 mins Moderated by Mr. Ashwin Gambhir, Prayas Energy Group.

This workshop was supported through the IEA Clean Energy Transitions Programme (CETP), particularly thanks to the contribution of the United Kingdom Foreign and Commonwealth Office.



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13h30	12h30 13h30	- Lunch and Networking		
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### 13h30 15h05

### System flexibility actions for an evolving energy mix

- Key actions for power system transformation phases from international experience in Maharashtra context
  - by Mr. Edwin Haesen, Head of Unit System Integrations of Renewables, International Energy Agency 20 mins
- 2. Role of grids network flexibility in Western region and National context by Mr. Vivek Pandey, Sr. Dy. General Manager, WRLDC-POSOCO—10 mins
- 3. Role of energy storage in Maharashtra context by Dr. Rahul Walawalkar, President, India Energy Storage Alliance 15 mins
- 4. Role of thermal plant flexibility in Maharashtra context by Mr. Chandrakant Thotwe, Director (Operations), MahaGenco 15 mins
- 5. Role of demand flexibility in Maharashtra context by Ms. Rasika Athawale, Advisor, The Regulatory Assistance Project 10 mins
- Reflections on the Role of Demand Response / Demand Side Management in Maharashtra Power Sector Transition by Mr. Raghav Pachouri, Associate Fellow, TERI – 10 mins

Question and answer session – 15 mins Moderated by Mr. Kartik Veerakumar, IEA

15h05	_	Coffee break			
15h30					

### 15h30 17h00

- Policy and Regulation for system transformation (Panel Discussion)

Recommendations identified in session 1 and 2 (15mins)

Panel discussion on presentation on system operation and planning and sytem flexibility actions for an evolving energy mix (75mins)

Panelists: MERC, MSETCL, SLDC, MSEDCL, MahaGenco, NITI Aayog, WRLDC(POSOCO), MEDA, PRAYAS Energy Group, IEA,GIZ, IESA, RAP, CER, Idam Infra.

Moderated by Mr. Ashwin Gambhir and Mr. Kartik Veerakumar

17h00	_	<b>Conclusion</b>	and	Vote	of	thanks
17h30						

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