

2ND EDITION OF ANNUAL POWER CONFERENCE  
**NEW POWER DYNAMICS:  
GREENING THE GRID AND RTM**



1:30 PM (IST) ONWARDS - 8<sup>TH</sup> OCTOBER, 2020



The Bengal Chamber of Commerce and Industry, one of India's oldest Institutions of its kind dating back to 1833, is organizing the 2<sup>nd</sup> Edition of the Annual Power Conference on 'New Power Dynamics: Greening the Grid and RTM'.

**RTM or Real Time Market introducing power exchange functions on the lines of a commodity trading platform, allowing the purchase and sales of electricity, is the latest milestone in the power dynamics of India being introduced on 1<sup>st</sup> June 2020.**

The aim is to have a regional power grid that includes Myanmar, Bhutan, Bangladesh, Nepal and Sri Lanka. The plan has gained traction with India moving ahead for an ambitious global electricity grid and calling for bids to roll-out the "One Sun One World One Grid" (OSOWOG) plan. The global grid plan has been spread across three phases:

- the Middle East-South Asia-South-East Asia (MESASEA) interconnection for sharing green energy sources such as solar for meeting electricity needs including peak demand;
- the MESASEA grid getting interconnected with the African power pools and
- the third and final phase is about global interconnection

Cross-border energy trade is a key part of the Hon'ble Prime Minister's South Asia-focused neighbourhood-first policy.

India, in its energy journey, has made striking achievements to ensure full access to electricity, bringing power to more than 700 million people since 2000. Power deficit situation has also improved from 3.6% to 0.6% and the peak deficit (shortfall in supply during highest consumption period in a day) reduced from 4.7% to 0.8% as at April 2019.

India is the highest producer of energy in world after China and USA generating 1,561,100 GW. It is estimated that India's share of total global primary energy demand is set to increase from 6% to 11% by 2040 due to increase in population and also economic development.

As per INDC, set under the Paris Climate Change Agreement, India is making swift and major strides to generate 40% of its electricity from RES by 2030.

International Energy Agency (IEA) has stated in 'India 2020- Energy Policy Review': India's electricity security has improved markedly through the creation of a single national power system and major investments in thermal and renewable capacity. India's power system is currently experiencing a major shift to higher shares of variable renewable energy, which is making system integration and flexibility priority issues. The Government of India has supported greater interconnections across the country and now requires the existing coal fleet to operate more flexibly. It is also promoting affordable battery storage.

It is also stated that India's coal supply has increased rapidly since the early 2000s and coal continues to be the largest domestic source of energy supply and electricity generation. Amid more stringent air pollution regulations, new coal power plants that are more efficient, flexible and relatively lower in emissions will be better positioned for their economic viability.

The report also states that both the energy and emission intensities of India's gross domestic product (GDP) have decreased by more than 20% over the past decade. It shows that the country is making strides towards SDG 2030 especially Goal 7 on delivering energy access.

**The energy mix in the Indian scenario comprises largely thermal power, which includes coal, lignite, gas and diesel, while the spectrum of renewable energy includes hydro, biomass, urban & industrial waste power, solar and wind energy. Power generated from thermal resources accounts for about 63.2% at 227,644 MW, comprising coal at 195,810 MW (54.3%), lignite at 6,260 MW (1.7%), gas at 24,937 MW (6.9%) and diesel at 638 MW (0.2%). Power generation from hydro resources accounts for 45,399 MW (12.6%), nuclear utilities 6,780 MW (1.9%), and other combined at 80,633 MW (22%).**

**The Chamber believes that it is an opportune time to discuss, share information and engage in dialogues on RTM in the backdrop of the energy mix of the country.**