



Market Based Economic Despatch (MBED) Phase 1

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Why in News

Recently, the **Ministry of Power** released Framework for Implementation of **Market Based Economic Despatch (MBED) Phase 1** to **reduce consumers' power purchase costs** by 5%.

- It is an important step in reforming electricity market operations and in moving towards the **"One Nation, One Grid, One Frequency, One Price"** framework. Its implementation is planned to start **with effect from 1st April 2022**.
- Earlier, the government **released cybersecurity guidelines for the power sector**.

Key Points

- **About:**
 - The **power demand by all states is proposed to be met through a central pool** allocating power at the optimal price.
Currently, power distribution companies (discoms) have been sourcing power from available sources within the states, invariably ending with a higher energy cost.
 - MBED will ensure that the **cheapest generating resources** across the country are dispatched to meet the overall system demand.
 - It will thus be a **win-win for both the distribution companies (discoms) and the generators** and ultimately result in significant annual savings for the electricity consumers.
 - MBED **aims to establish a uniform pricing framework** that prioritizes the least cost and most efficient generators while backing down more expensive ones, thereby creating a national merit order.
 - This is **in line with the draft National Electricity Policy (NEP) 2021**, which aims to more than double the penetration of short-term power markets by 2023–2024.

- **One Nation, One Grid, One Frequency:**

- India has a **significant inter-regional power transmission capacity** through its complex interconnected power grid that requires close coordination between grid operators and power project generators across coal, gas, hydro, nuclear and green energy sources run by the Centre, states, and the private sector.
- With **significant investments** over the last decade, the Indian power system has **achieved larger inter-regional transfers of electricity** and eliminated most constraints to realise its status as “One Nation, One Grid, One Frequency”.
- It is the **state-owned Power System Operation Corp. Ltd (Posoco)**, which manages these complex functions through the National Load Despatch Centre (NLDC), Regional Load Despatch Centres (RLDCs) and State Load Despatch Centres (SLDCs).

The country has 33 SLDCs, five RLDCs (for the five regional grids that form the national grid) and one NLDC.

- Despite this enablement, the **existing electricity scheduling and despatch mechanisms in the country are siloed** and the day-ahead procedures result in **sub-optimal utilization of the country’s generating resources**.

The **day-ahead market** is a financial market where market participants purchase and sell electric energy at financially binding day-ahead prices for the following day.

Source: PIB