



Indian Energy Exchange Procurement

For Prelims: Indian Energy Exchange Procurement, Electricity Act 2003, Central Electricity Regulatory Commission

For Mains: Regulation of Discoms & Significance of Power Sector of India

Why in News?

Recently, the managements of power utilities of Telangana ([Discoms](#)) were banned from participating in the **day ahead market** with the [Indian Energy Exchange \(IEX\)](#) for procuring energy.

- They were banned on the grounds of **non-payment of dues to Gencos despite making payments.**
- However, **the ban has now been lifted** following reconciliation of accounts pertaining to payments made.

Why do we need to know about the Ban?

- **The National Load Dispatch Centre (NLDC)** imposed a ban on bidding of Telangana (Discoms) in **energy procurement** without even reconciling the accounts with the Gencos concerned.
 - Telangana (Discoms) have cleared ₹1,360 crore out of ₹1,381 crore dues mentioned by the agency before the imposing of the ban.
- As per the Discoms, the agency was acting beyond its mandate as per the [Electricity Act, 2003](#), which is in force now.
 - As per the 2003 Act, the agency **has to monitor and maintain only the grid discipline** and it is not supposed to be involved in any commercial activity such as its present unilateral decision.
- The **ban was lifted officially on 19th August 2022** allowing the Discoms to go for procuring energy.

What is the Indian Energy Exchange?

- **About:**
 - It is the **first and largest energy exchange in India** providing a nationwide, **automated trading platform** for **physical delivery of electricity**, [Renewable Energy Certificates](#) and [Energy Saving Certificates](#).
 - The exchange platform enables **efficient price discovery** and increases the **accessibility and transparency of the power market** in India while also enhancing the speed and efficiency of trade execution.
 - It is a publicly listed company with [National Stock Exchange \(NSE\)](#) and [Bombay Stock Exchange \(BSE\)](#).
 - It is approved and regulated by [Central Electricity Regulatory Commission \(CERC\)](#) and has been operating since 2008.
- **Mission:**

- To leverage **technology and innovation** to establish **transparent and efficient energy marketplaces** for delivering affordable, reliable energy to consumers.
- **Trading Platform for:**
 - **Electricity Market:**
 - **Day-Ahead Market (DAM):**
 - It is a **physical electricity trading market** for deliveries for any/some/all 15-minute time blocks in 24 hours of the next day starting from midnight.
 - **Term-Ahead Market (TAM):**
 - The contracts under TAM cover a **range for buying/selling electricity for duration up to 11 days.**
 - It enables participants to **purchase electricity for the same day** through intra-day contracts, for the next day through day-ahead contingency, on a daily basis for rolling seven days through daily contracts.
 - **Real Time Market:**
 - The market features a new auction session **every 30 minutes with power to be delivered after 4 time blocks or an hour** after gate closure of the auction.
 - The price and quantum of electricity trading is determined through a **double-sided closed auction bidding process.**
 - **Cross Border Electricity Trade:**
 - The Cross border in electricity is an **endeavour to expand the Indian power market towards building an integrated South Asian Power Market.**
 - The grid connected south Asian countries such as Nepal, Bhutan and Bangladesh will be able to participate in Day ahead Market and Term ahead Market on the Exchange.
 - **Green Market:**
 - **Green Term Ahead Market:**
 - **The Green-Term Ahead Market (G-TAM)** is a new market segment for trading in renewable energy following the CERC approval.
 - **The new market segment features contracts such as:**
 - Green-Intraday
 - Green-Day-ahead Contingency (DAC)
 - Green-Daily and Green-Weekly.
 - The matching mechanism is **continuous/spot trading for Green-Intraday, Green-DAC and Green-Daily contracts** whereas **double sided open auction process to be implemented for Green-Weekly.**
 - **Green Day-Ahead Market:**
 - The Green Day ahead Market allows **anonymous & double-sided closed collective auction in renewable energy on the day-ahead.**
 - The Exchange invites bids for **conventional and renewable products** in an integrated way through separate bidding windows.
 - **The clearing takes place in a sequential manner** – first in the renewable segment having the must-run status, considering the availability of the transmission corridor, followed by conventional segment.
 - **Certificate Market:**
 - **Renewable Energy Certificates (REC):**
 - Under the REC mechanism, **a generator can generate electricity through [renewable resources](#) in any part of the country.**
 - For the electricity part, the generator receives the cost equivalent to that from any conventional source while the environment attribute is sold through the exchanges at the market determined price.
 - The **obligated entity from any part of the country** can purchase these RECs to meet its **RPO (Renewable Purchase Obligation)** compliance.
 - Obligated entities may either purchase renewable energy or can purchase RECs to meet their RPO set under the RPO of their respective States.
 - **Energy Saving Certificates (ESCerts):**
 - These are the **tradable certificates under the [Perform, Achieve, Trade](#)**

- [\(PAT\) Scheme](#) of the [Bureau of Energy Efficiency \(BEE\)](#).
- It is a market-based mechanism to incentivise energy efficiency in large energy-intensive industries.

What is the Electricity Act 2003 & Central Electricity Regulatory Commission?

- **Electricity Act 2003:**
 - [The Electricity Act, 2003](#) is the **central law regulating the electricity sector**.
 - The Act provides for **Electricity Regulatory Commissions** at both the central and state levels (**CERC and SERCs**).
 - **Functions of these Commissions include:**
 - Regulating and determining tariff
 - Issuing licenses for transmission
 - Distribution, and electricity trading
 - Adjudicating upon disputes, within their respective jurisdiction.
- **Central Electricity Regulatory Commission:**
 - CERC is a **regulator of the power sector in India**.
 - It intends to **promote competition, efficiency and economy in bulk power markets, improve the quality of supply, promote investments and advise the government on the removal of institutional barriers to bridge the demand supply gap**.
 - It is a **statutory body functioning with quasi-judicial status under the Electricity Act 2003**.

UPSC Civil Services Examination, Previous Year Questions (PYQs)

Q. Which one of the following is a purpose of 'UDAY', a scheme of the Government? (2016)

- (a) Providing technical and financial assistance to start-up entrepreneurs in the field of renewable sources of energy
- (b) Providing electricity to every household in the country by 2018
- (c) Replacing the coal-based power plants with natural gas, nuclear, solar, wind and tidal power plants over a period of time
- (d) Providing for financial turnaround and revival of power distribution companies

Ans: (d)

Explanation:

- Ujwal DISCOM Assurance Yojana (UDAY) was launched by the Ministry of Power. It aimed to help to make state electricity distribution companies (DISCOMS) financially and operationally healthy so that they can supply adequate power at affordable rates.
- It envisages financial turnaround, operational improvement, reduction of the cost of generation of power, development of renewable energy, energy efficiency and conservation.
- The scheme seeks to impact financially and operationally sound DISCOMs, increased demand for power, improvement in Plant Load Factor (PLF) of generating plants, reduction in stressed assets, availability of cheaper funds, increased capital investment, development of renewable energy sector.
- Therefore, option (d) is the correct answer.

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