

# POWER MARKET CAPSULE-172<sup>nd</sup> Edition

Issue no: 172<sup>nd</sup>-5<sup>th</sup> May 2021

TPTCL'S E-NEWS LETTER



## CONTENT INSIDE

- 1. Power Market News.....01-07
- 2. PoC Rates.....07-08
- 3. Bilateral Market.....09
- 4. IEX Price Trend.....09-10
- 6. Commodity Pricing .....10
- 7. Weather Estimated.....11

Tata Power Trading Company Limited (TPTCL)



## Power Market News

### Discoms' overdues fall to Rs 74,510 crore in March

In May 2020, the government announced Rs 90,000 crore liquidity infusion for discoms under which these utilities would get loans at economical rates from Power Finance Corporation (PFC) and REC Ltd

The outstanding overdues of power distribution utilities fell by over Rs 15,118 crore to Rs 74,510 crore in March this year, as compared to the preceding month, mainly due to the release of the second tranche of liquidity infusion package, according to PFC Consulting Ltd data. The overdue amount stood at Rs 89,628 crore in February.

The power producers give 45 days to power distribution utilities (discoms) to pay bills for electricity supply. After that, the outstanding dues become overdue and generators charge penal interest on that in most cases. In May 2020, the government announced Rs 90,000 crore liquidity infusion for discoms under which these utilities would get loans at economical rates from Power Finance Corporation (PFC) and REC Ltd. This was a government initiative to help generation companies (gencos) to remain afloat. Later, the liquidity infusion package was increased to Rs 1.2 lakh crore and further to Rs 1.35 lakh crore. Under the liquidity package, the PFC and REC together have disbursed Rs 78,855 crore so far.

Overdues of discoms reduced significantly in March 2021, after PFC and REC began releasing second tranche of disbursements under DISCOM liquidity package in February end this year, showed the data available on PRAAPTI portal. PFC Consulting Ltd is an arm of State-run Power Finance Corporation (PFC), which maintains the PRAAPTI portal (Payment Ratification And Analysis in Power procurement for bringing Transparency in Invoicing of generators).

The PRAAPTI portal was launched in May 2018, to bring in transparency in power purchase transactions between generators and discoms. It captures monthly invoicing data from power generators, which is uploaded from time to time on it by the power generators themselves. The overdue amount as a multiple of average monthly billing also showed a marked improvement - from 5.1 times in February, to 4.6 times in March, 2021. Among individual states Uttar Pradesh, Andhra Pradesh, Telangana, Bihar and Manipur have improved their overdue position in March compared to February, 2021. [Source](#)

### State discoms need to radically improve: Niti aayog CEO

India needs to 'radically' improve the performance of the state electricity distribution companies (discoms) and leverage technology to bring down the high logistics cost, said Niti Aayog chief executive officer Amitabh Kant at "Mint India Investment Summit" on Wednesday. This comes against the backdrop of the proposed Electricity (Amendment) Bill, 2021, that aims to delicense power distribution and increase competition, unleashing next-generation power sector reforms in India.

"My belief is that key reforms have been carried out. We need really good implementation on ground. There are two areas where I think we need to radically improve—one is the performance of our state power distribution companies," said Kant. India has also been grappling with high logistics costs, which make its exports uncompetitive vis-a-vis China, which has lower logistics costs.

"The other area where a lot of technology improvement is needed is logistics sector. Logistics cost is high in India," Kant said. The Centre plans to rationalize electricity tariff categories and simplify tariff slabs. Domestic electricity connections account for around a quarter of India's power demand and contribute towards a bulk of India's average aggregate technical and commercial (AT&C) losses. Also, the gap



between the cost of electricity bought (average cost of supply) and supplied (average revenue realized) for discoms is still substantial in most states.

"Electricity cost for industry for manufacturing is high. We need to make discoms very efficient. That is a huge responsibility for states. If discoms become efficient, electricity costs come down and we need to bring in a lot more technology, smart meters and better grid management," Kant added. Prime Minister Narendra Modi has earlier said that an electricity consumer should be able to choose his supplier like any other retail commodity. The Union budget presented in February proposed to create a framework to allow consumers to choose their electricity suppliers.

With the discoms being the weakest link in the electricity value chain, the National Democratic Alliance government wants state power regulators to ensure regular tariff revisions and put an end to creating the so-called regulatory assets, as it seeks to enforce financial discipline on discoms.

As factories are shutting down during the second wave of the coronavirus pandemic, the financial health of the state discoms is expected to worsen as electricity demand load shifts to homes, resulting in lower realizations. "The proliferation of lockdown restrictions across many states in the country, amid the second wave of covid-19 infections, could adversely impact the electricity demand growth prospects in FY22," ICRA said in a statement on Thursday.

"Basis the data available from POSOCO for 1 to 25 April 2021, the electricity demand is higher by 40.4% on a year-on-year (y-o-y) basis, considering the favourable base effect, given the impact of the all-India lockdown on electricity demand in April 2020. However, the average daily demand has slowed from ~4071 MUs (y-o-y growth of ~48%) during the first 10 days of April 2021 to ~3923 MUs (y-o-y growth of ~35%) during the subsequent 15 days, considering the rising covid-19 infections and the consequent restrictions being imposed by various state governments," the statement added.

Of India's total electricity demand load pattern, industrial and agricultural consumption account for 41.16% and 17.69%, respectively. Commercial electricity consumption accounts for 8.24%. "A prolonged second wave of covid-19 infections and its impact on demand, particularly from the commercial & industrial (C&I) segment in key industrialized states, remains a key downside risk for our earlier forecast of 6-7% growth in electricity demand in FY22," Sabyasachi Majumdar, group head and senior vice president, corporate ratings, ICRA said in the statement. [Source](#)

## **Lockdowns spell a downside risk for electricity demand growth in FY2022: ICRA**

The lockdown restrictions across many states in the country amid the second wave of Covid-19 infections, could adversely impact the electricity demand growth prospects in FY2022. As per the Power System Operation Corporation Limited (POSOCO) data for April 1-25, the electricity demand is higher by 40.4% on a Y-o-Y basis, considering the favourable base effect, due to the impact of the all-India lockdown on electricity demand in April 2020.

However, the average daily demand has slowed down from 4,071 million units (MUs) (Y-o-Y growth of 48%) during the first 10 days of April 2021 to 3,923 MUs (Y-o-Y growth of 35%) during the subsequent 15 days, considering the surge in Covid cases and consequent restrictions that were imposed by various state governments. Sabyasachi Majumdar, Group Head & Senior Vice-President, Corporate ratings, ICRA, said: "A prolonged second wave of Covid-19 infections and its impact on demand, particularly from the commercial & industrial segment in key industrialised states, remains a key downside risk for our earlier forecast of 6-7% growth in electricity demand in FY2022."



### **Thermal PLF drops**

The impact of a lower demand growth would be more pronounced on the thermal generation and distribution segments. The all-India thermal PLF declined to 54.5% in FY2021 from 56.0% in FY2020, given the decline in electricity demand. While the PLF was expected to improve to 58.0% in FY2022 on the back of the recovery in demand growth, the PLF levels continue to be subdued. Also, a large portion of the private IPP capacity (20 GW) is exposed to volume and pricing risks in the short-term market.

While the spot power tariffs on the Indian Energy Exchange witnessed a recovery reaching ₹4.1 per unit in March 2021 from less than ₹3.0 per unit in 9M FY2021, the prices have slightly moderated to ₹3.7 per unit in April 2021. The spot power tariffs are likely to remain in the range of ₹.3.0 – 3.5 per unit in the near term. Given the subdued thermal PLFs, lack of visibility in signing of new power purchase agreements (PPAs) for thermal IPPs and modest tariffs in the short-term power market, the credit outlook for the private thermal power segment remains negative.

Girishkumar Kadam, Co-Group Head & Vice President - Corporate Ratings, ICRA, adds: “The lockdown restrictions could impact the demand and collections for the power distribution segment, mainly from the high tariff-paying customers. This could also delay the issuance of tariff orders and tariff revisions for the state distribution utilities.” On the other hand, the impact is likely to be relatively low for the renewable IPPs, given the must-run status for these plants. [Source](#)

### **National Electricity Policy-21 bats for quality power, private investment**

The draft National Electricity Policy (NEP) which, under the Electricity Act, 2003 is a guiding policy for planning power generation, supply and investment, has emphasised on increasing private participation, especially in power distribution in its latest revision. The NEP has also introduced power quality, micro grids, pump hydro storage, real time power markets in the draft policy statement as key focus areas. Underlining the most pertinent issue of the Indian power sector, the draft NEP has asked for major reforms in the power distribution sector, It says: “This sector is marred with many inefficiencies like high AT&C losses, inadequate system planning, poor upkeep and maintenance of equipment etc which are affecting the financial health of the discoms, and leading poor consumer satisfaction.”

NEP has noted that despite the Central government connecting 100 per cent households in the country with the national power supply grid, quality of power and duration remains an issue. “There is a need to strengthen the distribution system to ensure 24\*7 power supply. Also, evolve a unified scheme for development of adequate distribution infrastructure wherein central assistance is linked to reform milestones of the states,” said the draft NEP.

The Union Budget 2021 announced a revamped reform scheme for discoms, entailing Rs 3.05 trillion expenditure. The scheme would put the onus on the states to formulate their own action plans and funds would be disbursed accordingly. The draft has stated that public private partnership in electricity distribution is one of the effective ways to improve efficiency, enhance consumer satisfaction and reduce financial losses of the discoms. “Franchisee model being one of the PPP models has emerged as a preferred route for introduction of privatisation in the distribution sector. Another variant of the PPP model could be in the form of a sub-licensee power distributor for a particular area.”

The suggestions come months after the Centre amended the existing Electricity Act, 2003 to abolish power “distribution licence” and allowed any company to supply electricity in an area, after necessary regulatory approval. With this, the Centre has ended the monopoly of existing power distribution companies (discoms), which are mostly state-owned entities, and any and every area has been thrown





open to be offered to private discoms. This year's draft NEP like its earlier versions has underlined the importance of coal-based power and why it is still too early to retire it despite growth in renewable power. "While India is committed to add more capacity through non-fossil sources of generation, coal based generation capacity may still be required to be added in country, as it continues to be the cheapest source of generation, though compliance to stricter environment norms remain a challenge, particularly for older stations," said the draft NEP. The draft has been floated in a public forum by the ministry of power on Wednesday for getting comments from stakeholders. The last date to submit the comments is The NEP has introduced several new concepts starting from the need of micro grids in remote areas to having a real time power market and need for investment in pump hydro generation. With the rising capacity of renewable energy generation and lack of balancing sources of energy such as gas and large hydro, the NEP has batted for realising the potential of pump hydro storage. The NEP noted that the country has a potential of 96,524 MW of pump hydro storage and of that barely 4,785 MW has been out up.

For utilising power generation at the source end and reducing power supply wastage, the NEP has suggested that power distribution companies (discoms) should explore the possibility of micro grids, especially in areas prone to natural disasters. The NEP has further said that these micro grids should preferably be powered with renewable sources of energy. [Source](#)

### **Uttarakhand approves hike in power tariff for domestic users who consume over 200 units**

DEHRADUN: The Uttarakhand Electricity Regulatory Commission has approved a proposal by the Uttarakhand Power Corporation Limited (UPCL) to increase the power tariff in the state. According to the proposal, domestic users will now have to shell out 0.25 paise more for every unit of electricity they consume above 200 units. The new tariff will be effective from April 1. Meanwhile, the people living in snow-bound districts and the BPL families using up to 100 units of electricity per month have been exempted from the recent power tariff hike. They can continue to pay their electric bills at the old rate. Similarly, small non-domestic consumers using up to 50 units per month would also not need to pay according to the revised tariff rate.

Besides, people paying their electricity bills digitally will be given a rebate of 1.25% of their monthly bill. Those paying electricity dues through cheques, demand drafts, and other bank instruments will be given a rebate of 0.75% of their monthly bills. UPCL officials have claimed that the hike was necessary to meet its power purchase cost and other expenses. UPCL had projected a revenue gap of Rs 952 crore during the FY 2019-20. The hike in power tariffs is believed to cover a major portion of the revenue gaps. [Source](#)

### **India's power consumption grows nearly 45 pc in first half of April**

Power consumption in the country grew nearly 45 per cent in the first half of April to 60.62 billion units (BU) over the corresponding period a year ago, showing robust recovery in industrial and commercial demand of electricity, according to power ministry data. Power consumption in the first half of April last year (from April 1 to 15, 2020) was recorded at 41.91 BU. On the other hand, the peak power demand met, which is the highest supply in a day, during the first half of this month remained well above the highest record of 132.20 GW in the same period in April 2020. During the first half this month, peak power demand touched the highest level of 182.55 GW on April 8, 2021, and recorded a growth of 38 per cent over 132.20 GW recorded in the entire month of April last year.

Power consumption in April last year had dropped to 84.55 BU from 110.11 BU in the same month in 2019. This happened mainly because of fewer economic activities following imposition of lockdown by the government in the last week of March 2020 to contain the spread of deadly COVID-19. Similarly,



peak power demand met also slumped to 132.20 GW in April last year from 176.81 GW in the same month in 2019, showing the impact of lockdown on economic activities.

Experts are of the view that high growth in power consumption as well as demand in the first half this month is mainly because of base effect. They said, "The power consumption remained low in April last year due to lockdown. Now the the high growth rate of power consumption clearly indicates healthy recovery in commercial and industrial demand."

However, they cautioned that local lockdowns across the country to curb the surge of COVID-19 positive cases may impact commercial and industrial power consumption adversely in coming days. After a gap of six months, power consumption had recorded a 4.6 per cent year-on-year growth in September and 11.6 per cent in October. In November 2020, the power consumption growth slowed to 3.12 per cent, mainly due to the early onset of winters. In December, power consumption grew by 4.5 per cent while it was 4.4 per cent in January 2021.

Power consumption in February this year recorded higher at 104.11 BU compared to 103.81 BU last year despite the fact that 2020 was a leap year. In March this year, the power consumption grew nearly 23 per cent to 121.51 BU compared to 98.95 BU in the same month of 2020. During the entire fiscal of 2020-21, power consumption dipped by one per cent to 1,271.54 BU from 1,284.44 BU in 2019-20. [Source](#)

### **India may build new coal plants due to low cost despite climate change**

India may build new coal-fired power plants as they generate the cheapest power, according to a draft electricity policy document seen by Reuters, despite growing calls from environmentalists to deter use of coal. Coal's contribution to electricity generation in India fell for the second straight year in 2020, marking a departure from decades of growth in coal-fired power. Still, the fuel accounts for nearly three-fourths of India's annual power output. read more Environmental activists have long rallied against India adding new coal-fired capacity. Solar and wind energy prices are falling to record lows, which would help the world's third-largest greenhouse gas emitter cut emissions.

U.S. Special Presidential Envoy for Climate John Kerry this month said India was "getting the job done on climate, pushing the curve," as he began talks with government leaders aimed at cutting carbon emissions faster to slow global warming. But a 28-page February draft of the National Electricity Policy (NEP) 2021 - which has not been made public - showed India may add new coal-fired capacity, though it recommended tighter technology standards to reduce pollution.

"While India is committed to add more capacity through non-fossil sources of generation, coal-based generation capacity may still be required to be added in the country as it continues to be the cheapest source of generation," the NEP draft read. All future coal-based plants should only deploy so-called "ultra super critical" less polluting technologies "or other more efficient technology", it added.

State-run NTPC Ltd (NTPC.NS), India's top electricity producer, said in September it will not acquire land for new coal-fired projects. Private firms and many run by states across the country have not invested in new coal-fired plants for years saying they were not economically viable. A source with direct knowledge said a government panel of various power sector experts and officials will discuss the draft and could make changes before seeking cabinet approval. India's power ministry did not immediately respond to a request for comment on Sunday. The draft document also proposed trade of renewable energy in day-ahead markets, creating separate tariffs for electric vehicle charging stations and privatizing electricity distribution companies.



## **ALTERNATE POWER SOURCES**

The NEP 2021 is India's first attempt at revising its electricity policy enacted in 2005, when the country produced negligible renewable energy. Experts say phasing in renewable energy sources and phasing out conventional sources such as coal and natural gas rapidly could lead to instability in the electricity grid, potentially causing blackouts.

While suggesting flexible use of coal-fired and natural gas-fired power to ensure grid stability in the coming years, the draft policy lists promoting clean power as its primary objective. The policy draft suggested expediting adoption of "cost effective" pumped hydro storage to support the electricity grid, adding that only 4.8 gigawatts (GW) of a potential 96.5 GW of pumped storage capacity has been developed so far. The policy also recommends compensating natural gas-fired plants for operating at reduced efficiency to ensure grid stability, and for suffering higher wear and tear due to fluctuations in generation. [Source](#)

## **Power sector revival requires structural changes: Brickwork ratings**

The revival of the country's power sector requires meaningful structural changes, targeting an improvement in the operational efficiency, a reduction in cross-subsidies and cost-reflective tariffs. According to Vipula Sharma, Director, Brickworks Ratings, in their sectoral report, "The power sector has been one of the major contributors to banks' increasing NPA issue, with nearly 60 GW of thermal capacity currently being under stress."

### ***Meeting peak demand***

Given the lack of storage facilities for renewable energy in the country, it is still not in a position to meet peak demand. Although SECI has been experimenting with hybrid and round-the-clock projects, their track record in meeting peak demand is yet to be seen.

Under this situation, the said stressed thermal capacity can play a major role in bridging the gap, and the sector exposure caps of banks would be freed for providing assistance to new projects in the power sector.

### ***Discoms revival scheme***

The sector received a substantial boost from the government in the Budget. From monetising operational transmission assets to a ₹3.06-lakh crore scheme for the revival of discoms, the government announced a slew of reforms for the ailing sector. While the terms of the discoms' revival scheme are yet to be declared by the government, it was mentioned that these funds would be utilised for the upgradation of the distribution infrastructure, and the infusion would be performance-linked.

In the past as well, multiple attempts have been made to improve the viability of power distribution companies, which are one of the main sources of stress in the sector, but none of the reforms in the past have been able to produce desired results. It remains to be seen how this scheme would be different from all the measures implemented in the past. In addition, the government has announced the creation of a specialised institution for the takeover and resolution of stressed debt in banks. [Source](#)



## Coal India incorporates two wholly-owned arms

State-owned CIL announced incorporation of two wholly-owned arms. The two subsidiaries are CIL Solar PV Ltd and CIL Navikarniya Urja Ltd, Coal India Ltd (CIL) said in a filing to BSE. CIL Solar PV Limited has been incorporated for manufacturing in solar value chain (Ingot-wafer-Cell Module) and CIL Navikarniya Urja Limited for renewable energy, the filing said. Coal India accounts for over 80 per cent of domestic coal output. The PSU is eyeing 1 billion tonnes of output by 2023-24. [Source](#)

## EDF installs 1 lakh smart meters under EESL contract

French electric utility firm EDF has successfully installed 100,000 smart meters in India under its contract with Energy Efficiency Services Ltd (EESL) in what is the first large-scale deployment of smart meters in India, EDF said on Thursday. “The milestone marks the completion of the first stage of the contract and the beginning of the commercial roll-out of 5 million smart meters installation across India, nearly half of which will be installed in the state of Bihar,” EDF said in a statement.

EESL buys modern electrical appliances such as LED lights and smart meters in bulk to drive down deployment costs. It awarded the contract in 2019 jointly to EDF and Accenture Solutions Private Ltd. The project covers the design of an advanced metering infrastructure (AMI), the proper installation of 5 million smart meters across India, integration of the smart meters with existing billing systems of electricity distribution companies as well as operation and maintenance for a period of six and half years.

### Indian market

“India has always been a key market for our growth and presents immense potential in the smart meter space,” Harmanjit Nagi, Director and Country Head, EDF India, said in the statement. “Our ongoing contract with EESL opens a new chapter in the development of the EDF business in India, a country that is key in our international strategy.” [Source](#)

## Transmission charges payable by DICs for the billing month of May’21

The Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses), Regulations 2020 came into force with effect from 1.11.2020. In these New Regulations, STOA charges will be determined based on monthly state transmission charges and there shall not be any separate injection and drawl PoC charges, for STOA. Further, DISCOMs having long term Access are not required to make any payment against POC charges for STOA transaction.

Transmission Charges for Short Term Open Access (STOA)			
Sl. No.	State	Region	STOA rate (paise/kWh)
1	Delhi	NR	41.74
2	UP	NR	48.40
3	Punjab	NR	45.65
4	Haryana	NR	53.80
5	Chandigarh	NR	41.57





6	Rajasthan	NR	54.09
7	HP	NR	41.75
8	J&K	NR	42.16
9	Uttarakhand	NR	51.52
10	Gujarat	WR	48.44
11	Madhya Pradesh	WR	44.24
12	Maharastra	WR	50.18
13	Chattisgarh	WR	39.36
14	Goa	WR	47.67
15	Daman Diu	WR	45.44
16	Dadra Nagar Haveli	WR	47.66
17	Andhra Pradesh	SR	52.27
18	Telangana	SR	42.49
19	Tamil Nadu	SR	47.07
20	Kerala	SR	45.86
21	Karnataka	SR	47.53
22	Pondicherry	SR	38.72
23	Goa-SR	SR	35.81
24	West Bengal	ER	46.56
25	Odisha	ER	55.46
26	Bihar	ER	46.78
27	Jharkhand	ER	48.46
28	Sikkim	ER	38.63
29	DVC	ER	48.52
30	Bangladesh	ER	36.34
31	Arunachal Pradesh	NER	42.34
32	Assam	NER	42.03
33	Manipur	NER	41.03
34	Meghalaya	NER	39.16
35	Mizoram	NER	42.13
36	Nagaland	NER	59.79
37	Tripura	NER	47.30

[Click source for other region POC charges. \(Source- CERC\)](#)



## Bilateral Power Market

Result of various tenders:-

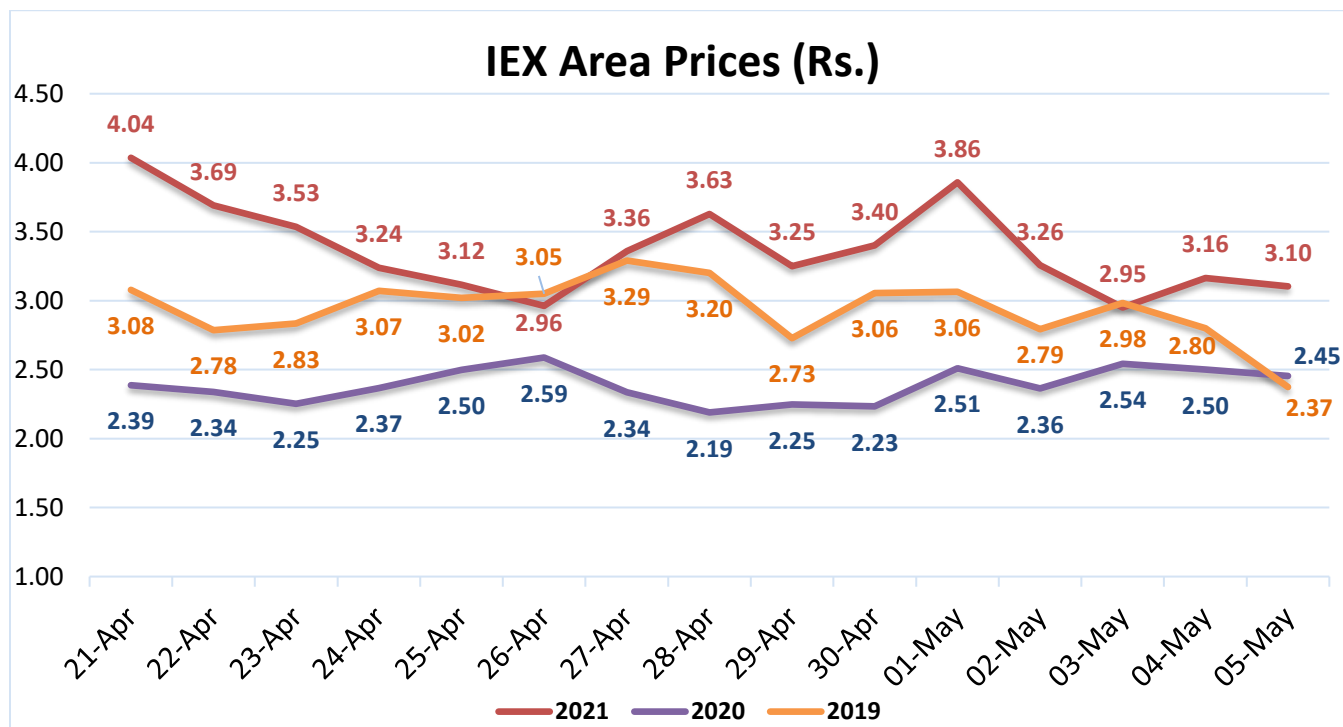
PSPCL/Short/21-22/RA/7				
Sl. No.	Quantity(MW)	Period	Time Block (Hrs.)	Price (Rs./KWh)
1	600	01.06.2021 to 09.06.2021	00:00 to 24:00	3.52
2	1800	10.06.2021 to 15.06.2021	00:00 to 24:00	3.64 - 4.7
3	600	16.06.2021 to 30.06.2021	00:00 to 24:00	3.61 - 4.39
4	600	01.07.2021 to 15.07.2021	00:00 to 24:00	3.87 - 3.88
5	600	16.07.2021 to 31.07.2021	00:00 to 24:00	3.57 - 3.66
6	600	01.08.2021 to 15.08.2021	00:00 to 24:00	3.89
7	600	16.08.2021 to 31.08.2021	00:00 to 24:00	3.31 - 3.39
8	600	01.09.2021 to 15.09.2021	00:00 to 24:00	3.2 - 3.39
9	600	16.09.2021 to 30.09.2021	00:00 to 24:00	3.2 - 3.39

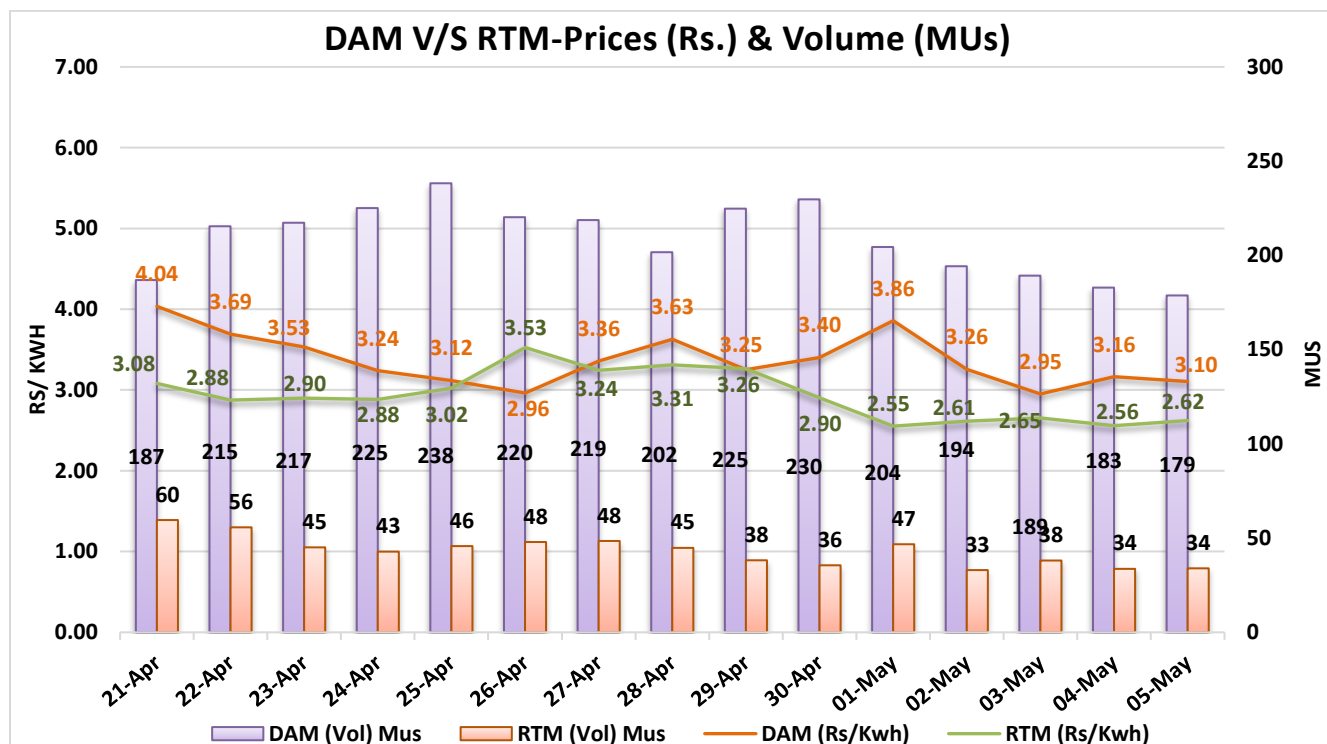
  

PSPCL/Short/21-22/RA/9				
Sl. No.	Quantity(MW)	Period	Time Block (Hrs.)	Price (Rs./KWh)
1	600	13.05.2021 to 31.05.2021	00:00 to 24:00	3.4

[Source](#)

## IEX Price Trend





## Commodity Price Indices

Name	Description	Unit	Price
<b>Australian Thermal Coal</b>	Calorific Value- 6,300 kcal/kg (11,340 btu/lb), less than 0.8%, sulphur 13% ash; previously 6,667 kcal/kg (12,000 btu/lb), less than 1.0% sulphur, 14% ash	USD/ MT	92.22
<b>Coal, Indonesia</b>	Coal Indonesia	USD/ MT	92.41
<b>Coal, Colombia</b>	Colombian Coal	USD/ MT	83.44
<b>Crude Oil (Petroleum)</b>	Crude Oil (petroleum), simple average of three spot prices; Dated Brent, West Texas Intermediate, and the Dubai Fateh, US Dollars per Barrel	USD/Barrel	63
<b>Diesel</b>	New York Harbor Ultra-Low Sulphur No 2 Diesel Spot Price	USD/Gallon	2.02
<b>Heating Oil</b>	New York Harbor Conventional Gasoline Regular Spot Price FOB	USD/Gallon	1.84
<b>Natural Gas</b>	Natural Gas, Natural Gas spot price at the Henry Hub terminal in Louisiana, US Dollars per Million Metric British Thermal Unit	USD/MMBTU	2.973
<b>Jet Fuel</b>	U.S. Gulf Coast Kerosene-Type Jet Fuel Spot Price FOB	USD/Gallon	1.75

(Source: ICMW METI Bloomberg Index Mundi)



## Weather (Estimated for next fortnight)

City	Max Temp	Min Temp	Precipitation (Probability)
DELHI	34	26	29%
MUMBAI	32	29	17%
KOLKATA	35	27	21%
CHENNAI	36	28	10%

*(Source - Accuweather)*

TPTCL offers comprehensive consultancy for Connectivity Long term Medium Term & short term Open Access- For details please contact [px@tatapower.com](mailto:px@tatapower.com); For any suggestions and feedback Please write to us on [pmc@tatapower.com](mailto:pmc@tatapower.com)

**Disclaimer:** Tata Power Trading Company Limited has taken due care and caution in compilation and reporting of data as it has been obtained from various sources including which it considers reliable and first hand. However Tata Power Trading Company Limited does not guarantee the accuracy adequacy or completeness of any information and it not responsible for errors or omissions or for the results obtained from the use of such information and especially states that it has no financial liability whatsoever to the users of this report. This research and information does not constitute recommendation or advice for trading or investment purposes and therefore Tata Power Trading Company Limited will not be liable for any loss accrued as a result of a trading/investment activity of information contained in this report.

**Editorial team:** Biswajit Mondal (Specialist-Short Term, Utility Marketing) Mob No-9717533211  
Chandan Kumar (Specialist- Renewables Marketing) Mobile No-971740021

