TATA POWER

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TPTCL'S E-NEWS LETTER

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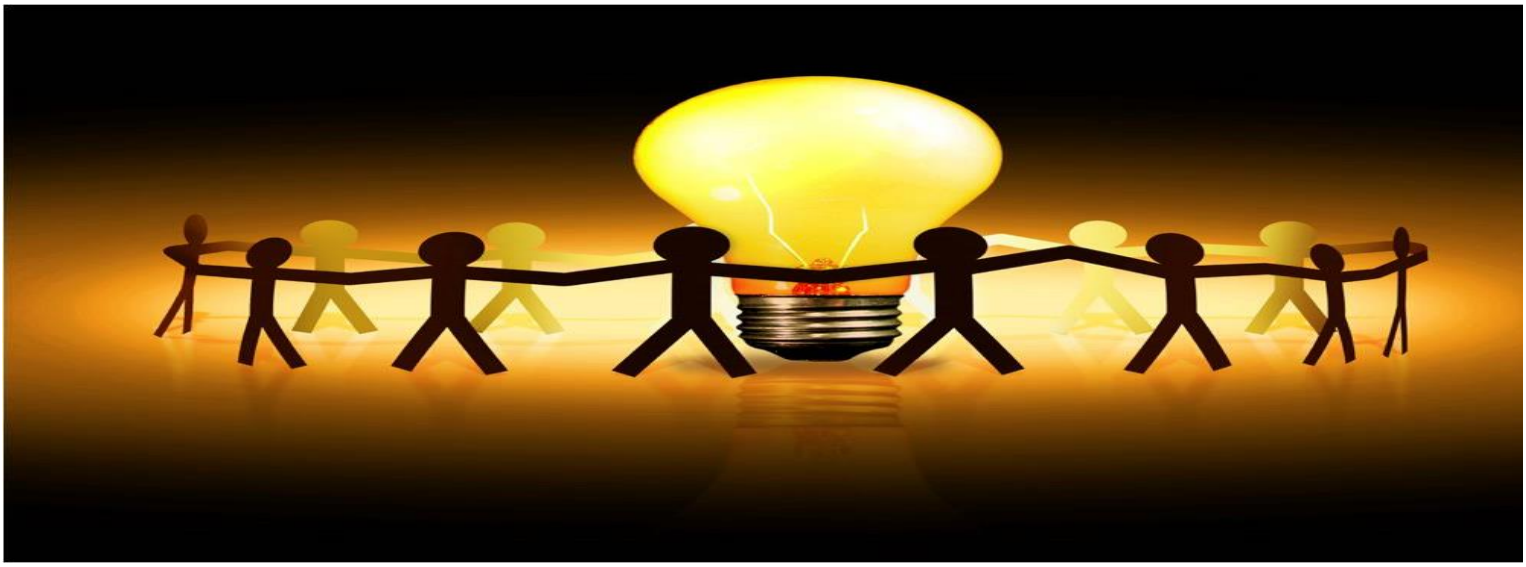
Tata Power Trading Company Limited (TPTCL)



Lighting up Lives!

Power Market News

Recovery in energy demand to continue despite COVID-19 led temporary blip: Ind-Ra

India Ratings and Research (Ind-Ra) on Friday said the recovery in energy demand will continue despite COVID-19 led temporary blip. India Ratings and Research (Ind-Ra) has published the May 2021 edition of its credit news digest on India's power sector. The report highlights the trends in the power sector, with a focus on capacity addition, generation, transmission, merchant power, deficit, regulatory changes and the recent rating actions by Ind-Ra.

Ind-Ra estimates, as per a statement, the all-India energy demand would decline in May 2021 on a month-on-month basis, despite the peak summer season, and to remain below pre-pandemic levels. This is on account of the continuation of COVID 19 led restrictions put out by certain states till May 31, 2021. With COVID cases peaking in May and announcements by certain states to open up from June, Ind-Ra expects energy demand to start recovering from June 2021.

In the first 25 days of May 2021, the all-India energy demand was 88.8 billion units (May 2020: 102.6 billion units; May 2019: 120.7 billion units). In April 2021, the all-India energy demand was higher by 39.3 per cent y-o-y at 118.4 billion units (March 2021: up 22.8 per cent) due to the lower base effect and the early onset of summer contributing to the higher demand.

The short-term power price at Indian Energy Exchange remained high at Rs 3.70/kWh in April 2021 (March 2021: Rs 4.07/unit; April 2020: Rs 2.41/kWh) on account of a high demand from the short-term power market. The electricity generation increased 42.5 pe cent y-o-y to 115.5 billion units in April 2021 (March 2021: up 23.5 per cent), supported by 55.4 per cent y-o-y growth in thermal generation (up 29.2 per cent y-o-y), although hydro generation fell 18.4 per cent y-o-y (down 7.8 per cent y-o-y). Electricity generation from renewable sources increased 17.9 per cent y-o-y to 11.7 billion units in April 2021, with solar generation increasing 41.5 per cent y-o-y.

The improvement in energy demand and the reduced generation from hydro generation have helped the thermal plant load factor (PLF) increase to 66.7 per cent in April 2021 (April 2020: 42.2 per cent; March 2021: 66.5 per cent). In April 2021, the thermal sector's PLFs rose on a y-o-y basis across the central, state and private sectors, increasing to 78.4 per cent (April 2020: 52.0 per cent), 60.3 per cent (33.5 per cent) and 62.0 per cent (41.6 per cent), respectively, it added. *Source*

Fixed costs for power a huge burden on states: Report

Power distribution companies (discoms) in 12 states are cumulatively paying a hefty Rs 17,500 crore a year for the power they don't use, according to a report by Forum of Regulators (FoR). The amount is paid as fixed costs to recover the cost of building power plants that lie underutilised due to less than anticipated growth of electricity demand. Among the discoms tracked in the study, the highest annual fixed cost paid for surplus power are by Uttar Pradesh (Rs 4,394 crore) Madhya Pradesh (Rs 4,325 crore), Punjab (Rs 1,880 crore), Haryana (Rs 1,719 crore) and Gujarat (Rs 1,528 crore). The figures pertain to FY21 for 10 states and FY20 for Madhya Pradesh and Punjab.

The amount spent on unused power is equal to 13% of the annual revenue of Madhya Pradesh's discoms. For Punjab, it is 6% of the revenue and for Uttar Pradesh it is 7%. Cost of unused power is 5% of Haryana discoms' revenue and 3% of Gujarat discoms' annual income. Under contractual requirements, discoms have to continue paying fixed cost to thermal power plants to recover the projects' capital expenditure and cover debt obligations even when they do not procure electricity during periods of low demand.

The FoR has suggested that the Centre and states should split the burden of the stranded generation assets in a 60:40 ratio, “in line with central plan funding”. The FoR, constituted in 2005 under the Electricity Act, 2003, consists of the chairperson of the Central Electricity Regulatory Commission and the heads of all state power regulators.

The study analysed data for 12 states to measure the impact of power purchase cost on retail electricity tariffs. The report said the Centre can utilise the Rs 400 per tonne clean energy cess on coal to share the cost of stranded assets. The clean energy cess was introduced in 2010 at Rs 50 per tonne of coal, later rising to the current rate in 2016. In 2017, the cess was abolished and the same charges were levied as the GST compensation cess.

If the imposition of this cess is to be continued, “then it is recommended that the proceeds from this cess be ploughed back to the electricity sector to mitigate the incremental cost on account of new environmental norms as per contribution made by each state”, FoR said. Clean energy cess constitutes about 11% of the power purchase cost, and if it is cut by Rs 100 per tonne, it would lead to savings of 3% of the average cost of electricity supply, the report said.

Power purchase cost accounts for about 67% to 78% of the overall revenue requirement for discoms. Apart from the clean energy cess, coal price constitutes 25%, rail freight 41%, and road transportation charges 11% of the total power purchase cost. The report has also recommended regulating railway freight rates and coal prices to limit their impact of power tariffs, adding that the Centre may consider subsidising railway freight for a distance beyond 750 km. *Source*

Electricity Regulators Suggest Measures to Reduce Retail Power Tariff

In a recent meeting, the Forum of Regulators discussed factors affecting the cost of power and stressed the need to analyze and evolve measures to reduce or contain the retail tariff. The working group made certain recommendations, highlighting the need for a coordinated effort by the central and the state governments to address high retail tariffs.

The Forum considered the data from 12 states-Andhra Pradesh, Assam, Bihar, Gujarat, Haryana, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Odisha, Uttar Pradesh, and Uttarakhand. Cumulatively, these states account for 50% of the total energy consumed in the country. The working group observed that the power purchase cost was the largest contributor to the average cost of supply, with an average of more than 70% share in the cost for a distribution company (DISCOM). Following the power purchase cost, transmission charges and operation and maintenance expenses contributed a major share.

External Factors

Coal

The panel observed that coal cost was a major contributor to the power purchase cost. The increase in coal price was 28% higher compared to the estimated price increase based on the weighted average of the wholesale price index and consumer price index. The group recommended that the coal sector be brought under an independent regulator at the earliest.

Also, there was a need for the electricity regulators to monitor and suitably regulate the station heat rate and gross calorific value of coal-based power projects. Coal pricing also needed to be regulated as in other sectors since it is currently a monopoly. *Source*

India to set up national mission on using biomass in coal-based thermal power plants

To address the issue of air pollution due to farm stubble-burning and to reduce carbon footprints of thermal power generation, the Ministry of Power on Tuesday decided to set up a National Mission on the use of biomass in coal-based thermal power plants. Biomass refers to renewable organic material that comes from plants and animals, such as wood, energy crops, waste from forests or farms. The ministry said this would further support the energy transition in the country and our targets to move towards cleaner energy sources.

According to the Ministry of Power, the objective of the "National Mission on use of biomass in thermal power plants" will be to increase the level of co-firing from the present 5 per cent to higher levels to have a larger share of carbon-neutral power generation from the thermal power plants, to take up R&D activity in boiler design to handle the higher amount of silica, alkalis in the biomass pellets, to facilitate overcoming the constraints in the supply chain of biomass pellets and agro-residue and its transport up to the power plants and to consider regulatory issues in biomass co-firing.

"The modalities of operation and structure of the Nation Mission are under finalization. It is being envisaged that the Mission would have a Steering Committee headed by Secretary (Power) comprising of all stakeholders including representatives from Ministry of Petroleum & Natural Gas (MoPNG), Ministry of New & Renewable Energy (MNRE), etc.," it said. It further said the Executive Committee would be headed by Member (Thermal), CEA. NTPC will play a larger role in providing logistic and infrastructure support in the proposed National Mission. "The Mission would have full-time officers from CEA, NTPC, DVC and NLC or other participating organizations. The duration of the proposed National Mission would be a minimum of 5 years," it added.

The ministry has also formed five Sub-Groups under the Mission. Sub-Group 1 will be responsible to research properties/ characteristics of biomass, Sub-Group 2 will carry out technical specification and safety aspects including research in boiler design, etc. to handle the pilot project for the higher amount of co-firing of biomass with coal in pulverized coal (PC) fired boilers.

Furthermore, Sub-Group 3 is for resolving the issues of the supply chain during the mission period and sensitization programme, Sub-Group 4 to select designated labs and certification bodies for the testing of agro-based biomass pellets and Municipal Solid Waste (MSW) pellets and Sub-Group 5 will be formed on regulatory framework and economics of biomass co-firing in coal-based thermal power plants. The proposed National Mission on biomass will also contribute to the National Clean Air Programme. *Source*

CERC Approves Registration of India's Third Power Exchange

The Central Electricity Regulatory Commission (CERC) has granted Pranurja Solution Limited (PSL) registration right to establish and operate a power exchange. It would make PSL the third power exchange in India after India Energy Exchange (IEX) and Power Exchange India (PXIL). PSL was incorporated in 2018 as a consortium of PTC India (PTC), BSE Investments, and ICICI Bank. In 2018, The Bombay Stock Exchange (BSE), ICICI Bank, and PTC filed a petition with the CERC for a license grant to set up a new power exchange.

In February this year, the Commission proposed granting registration to PSL to establish and operate a power exchange. The Commission said that it would invite suggestions and comments on its proposal. PSL had earlier filed a petition for a grant of registration to establish and operate a power exchange under Regulation 16 of the CERC (Power Market) Regulations 2010. In the interim period, it had requested the

Commission to grant provisional registration to align its structure, management, and activities per CERC Regulations, 2010.

The Commission observed that the company had fulfilled the net-worth requirement of ₹250 million (~$3.4 million) and that its net worth was ₹500 million (~$6.86 million). The promoter companies, i.e., PTC, BSE Investments, and ICICI Bank, were 25%, 25%, and 9.99% of shares. Also, there were 11 other shareholders, each of whom had a shareholding of 5% or less.

The Commission is satisfied that PSL, as an applicant, has complied with the shareholding pattern under Regulation 19 of the PMR 2010. Meanwhile, in a hearing on April 4, 2021, IEX had raised PSL's compliance issues with the provisions of Power Market Regulations 2021. IEX argued that PSL's registration as a power exchange should be considered under the Power Market Regulations 2021 and not 2010. Similarly, PXIL submitted that the software of PSL's proposed power exchange should allow seamless integration regarding market coupling as envisaged in the Power Market Regulations 2021.

However, the Commission noted that since the Power Market Regulations 2021 is still not in force, the argument put forth by IEX and PXIL has no merit. Under Regulation 21(i) and Regulation 16(vii) of the Power Market Regulations 2010, the Commission granted registration to PSL to establish and operate a power exchange subject to complying with the conditions within three months from the issuance of this order. PSL's power exchange will operate for 25 years from the date of commencement of operation. Meanwhile, the IEX traded a record 78 MU of solar power in April, a 272% surge from the 21 MU traded in March 2021. The exchange's real-time power market registered a trading volume of 7,707 MU in April 2021, achieving a 90.2% year-over-year (YoY) growth. *Source*

Blow to administration, Punjab and Haryana high court stays power department privatisation

CHANDIGARH: The Punjab and Haryana high court on Friday stayed the tender process of the power privatisation project of the UT administration. The decision came on the application filed by Gopal Dutt Joshi, general secretary, UT Powermen Union. Joshi had sought directions to the central government and the administration to immediately stop further proceedings related to privatisation of the electricity department, including opening and finalisation of the tender bids, till the final adjudication of the main petition fixed for hearing on August18.

Recently, the administration had opened technical bids of all seven companies and submitted the case to the technical bids evaluation committee. The administration was planning to open the financial bids in the first week of June. The engineering department had issued notice on November 9, 2020, inviting bids for distribution licence in the city. The bids closed on February 8.

On March 8, the UT had issued an amendment to the bid document and extended the bidding date to March 18. The amendment also provided an opportunity to new bidders to submit their bids and allowed the existing bidders to modify theirs. In total, seven firms had submitted their bids. During an inter-ministerial meeting held in Delhi on February 26, it was decided that the UTs, where the privatisation process was in the last phase, would continue with the procedure.

Petitioner's objections: In profit, why sell The UT administration, in its tender, had proposed to give licence to a distribution company, to be finalised after the bidding process, for 25 years under the project. The petitioner had contended they were aggrieved by the decision to privatise the electricity wing by selling 100% stake of the government in the absence of any provision under Section 131 of the Electricity Act, 2003.

It had said the process of privatisation of the power department could not be initiated at all, especially when the department was already running in profit. The sale of 100 per cent stake was unjust and illegal as the wing was revenue surplus for the past three years. It was economically efficient, having transmission and distribution losses less than the target of 15 per cent fixed by the ministry of power at the Centre, the petitioner had said earlier. *Source*

Dept of atomic energy to build India's 1st reactor on PPP model

The department of atomic energy (DAE) on Tuesday announced that it will be constructing the country's first research reactor on public-private partnership (PPP) model. DAE is shortlisting the private enterprises for a partnership in the project. The research reactor, which will be designed by Bhabha Atomic Research Centre (BARC), will produce radioisotopes, and is expected to bring down the costs of nuclear medicine that is used in cancer treatment in India. DAE will provide the upfront capital and build the plant through its subsidiary – Nuclear Power Corporation of India Ltd – the department said in a statement.

On April 15, the department had held an informal consultation with 17 companies from around the world, who are interested in joining hands for the project. "The participants represented businesses across the nuclear medicine value chain such as nuclear medicine, pharmaceutical, healthcare, medical devices and nuclear reactor equipment suppliers from USA, Canada, Argentina, Russia, France, UK and two-three Indian suppliers," read the statement.

The design, regulatory clearances and other preparatory work is going at a good pace, the DAE statement further read. In India, all major radioisotopes are produced by BARC, which houses research reactors in its Trombay campus and an accelerator in Kolkata. Some radioisotopes are imported from Europe, Australia and other Asian countries. Radioisotopes are radioactive isotopes that have an unstable atomic nucleus. They emit energy and particles when they change to a more stable form.

Radioisotopes are widely used in nuclear medicine for diagnostics purposes as well as to treat diseases like cancer. The industrial uses of radioisotopes include identifications of flow malfunctions, measurement of flow parameters, evaluation of design of chemical reactors, monitoring of product quality and process efficacy.

Private entities that are willing to invest in the construction of the reactor and its processing units will get exclusive rights to process and market the radioisotopes produced in the reactor. Radioisotopes in India can be procured and handled only by the users duly authorised by Radiological Safety Division (RSD), Atomic Energy Regulatory Board (AERB). The demand for radioisotopes for nuclear medicine is on the rise. Between 2018 and 2020, the nuclear medicine departments in hospitals in India has grown from 293 to 349, as per AERB. *Source*

CIL's coal allocation to power sector under e-auction drops 28% in April

State-owned CIL's coal allocation under special forward e-auction for the power sector dropped 27.9 per cent to 2.19 million tonnes (MT) last month. Coal India Ltd (CIL) had allocated 3.04 MT of coal in April last year, according to the latest monthly summary by the coal ministry for the Cabinet. However, the coal allocation by the PSU under the scheme had increased to 39.33 MT in FY'21 from 27.12 MT in FY'20. Coal distribution through forward e-auction is aimed at providing access to coal for such consumers who wish to have an assured supply over a long period, say one year, through e-auction mode so as to plan their operation.

The purpose of the scheme is to provide equal opportunities to all intending coal consumers to purchase the fuel for own consumption through single window services and at a price determined by themselves through the process of online bidding. Forward e-auction is aimed at facilitating all the consumers of coal across the country with wide-ranging choice for booking coal online, enabling them to buy the dry fuel through a simple, transparent and consumer-friendly system of marketing of fossil fuel.

The Maharatna firm is one of the major suppliers of coal to the power sector. Coal India, which accounts for over 80 per cent of domestic coal output, is eyeing one billion tonnes production by 2023-24. The company will pump in over Rs 1.22 lakh crore in projects related to coal evacuation, exploration and clean coal technologies by 2023-24, to achieve 1 billion tonnes of fuel output target, Coal Minister Pralhad Joshi had earlier said. *Source*

Coal India retains production and offtake momentum in May

Despite COVID-19 restrictions in several states, Coal India maintained its output and despatch momentum in May, the second month of the current fiscal, an official said. The mining major is likely to report dry fuel production of around 41.7 million tonnes and offtake of nearly 55 million tonnes this month as against production of 41.43 million tonnes and sales of 40 million tonnes in the corresponding period last year, the official said.

In April, coal production stood at 41.9 million tonnes compared to 40.4 million tonnes in the year-ago period, recording a growth of 3.7 per cent. Offtake stood at 54.1 million tonnes during the reporting month compared to 39.1 million tonnes in the corresponding period last year, registering a growth of 38.4 per cent. Coal India had recently said that the pandemic had impacted production on account of a large number of the company's employees across subsidiaries and contractors testing positive for coronavirus. The Kolkata-based company commenced FY22 with a pithead stock of nearly 99 million tonnes. However, electricity demand had risen in recent months and the contribution of thermal power had improved, boosting demand for coal. Thermal power meets 78 per cent of the country's power demand. However, there is apprehension that lockdowns may impact subsequent electricity demand from industry. *Source*

Transmission charges payable by DICs for the billing month of June'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	40.97
2	UP	NR	47.11
3	Punjab	NR	46.21
4	Haryana	NR	55.99

5	Chandigarh	NR	39.28
6	Rajasthan	NR	49.52
7	HP	NR	40.59
8	J&K	NR	43.00
9	Uttarakhand	NR	52.88
10	Gujarat	WR	42.72
11	Madhya Pradesh	WR	43.19
12	Maharastra	WR	47.22
13	Chattisgarh	WR	36.96
14	Goa	WR	45.21
15	Daman Diu	WR	42.95
16	Dadra Nagar Haveli	WR	45.36
17	Andhra Pradesh	SR	55.64
18	Telangana	SR	40.91
19	Tamil Nadu	SR	45.79
20	Kerala	SR	44.61
21	Karnataka	SR	42.88
22	Pondicherry	SR	38.45
23	Goa-SR	SR	34.06
24	West Bengal	ER	47.67
25	Odisha	ER	46.32
26	Bihar	ER	45.91
27	Jharkhand	ER	48.39
28	Sikkim	ER	39.88
29	DVC	ER	45.44
30	Bangladesh	ER	34.93
31	Arunachal Pradesh	NER	41.53
32	Assam	NER	41.91
33	Manipur	NER	42.82
34	Meghalaya	NER	36.28
35	Mizoram	NER	50.57
36	Nagaland	NER	61.54
37	Tripura	NER	54.58

Click source for other region POC charges. (Source- CERC)

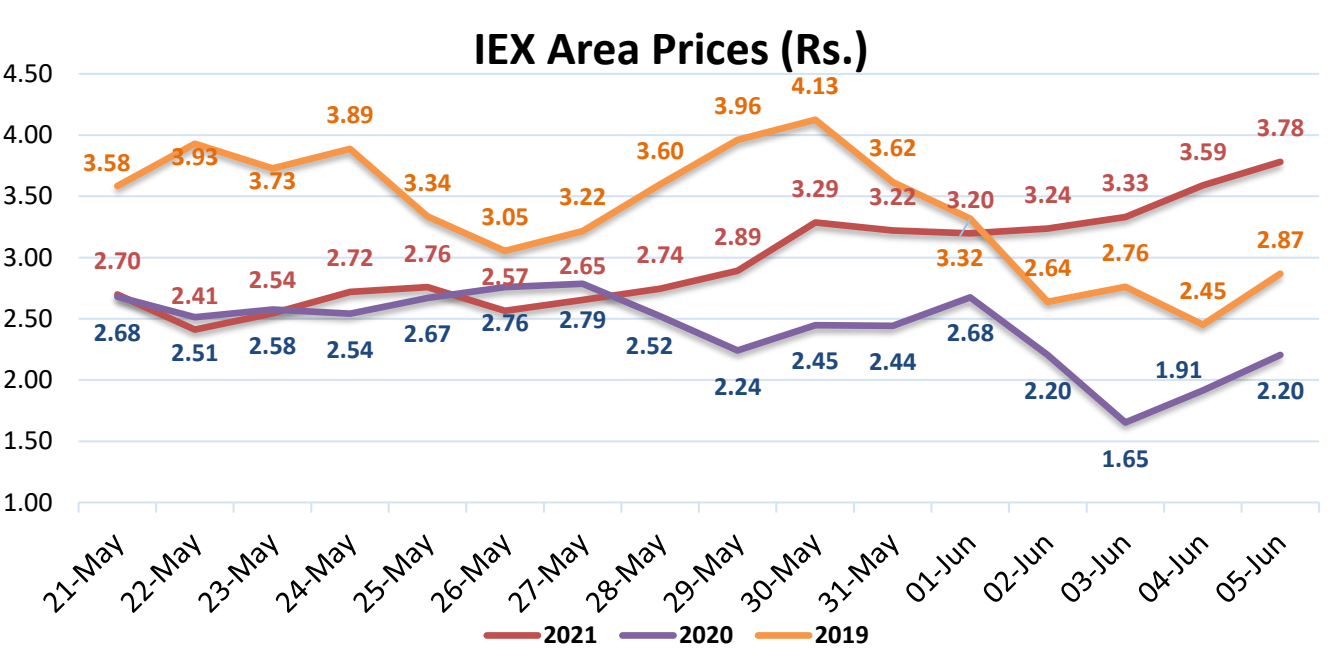
Bilateral Power Market

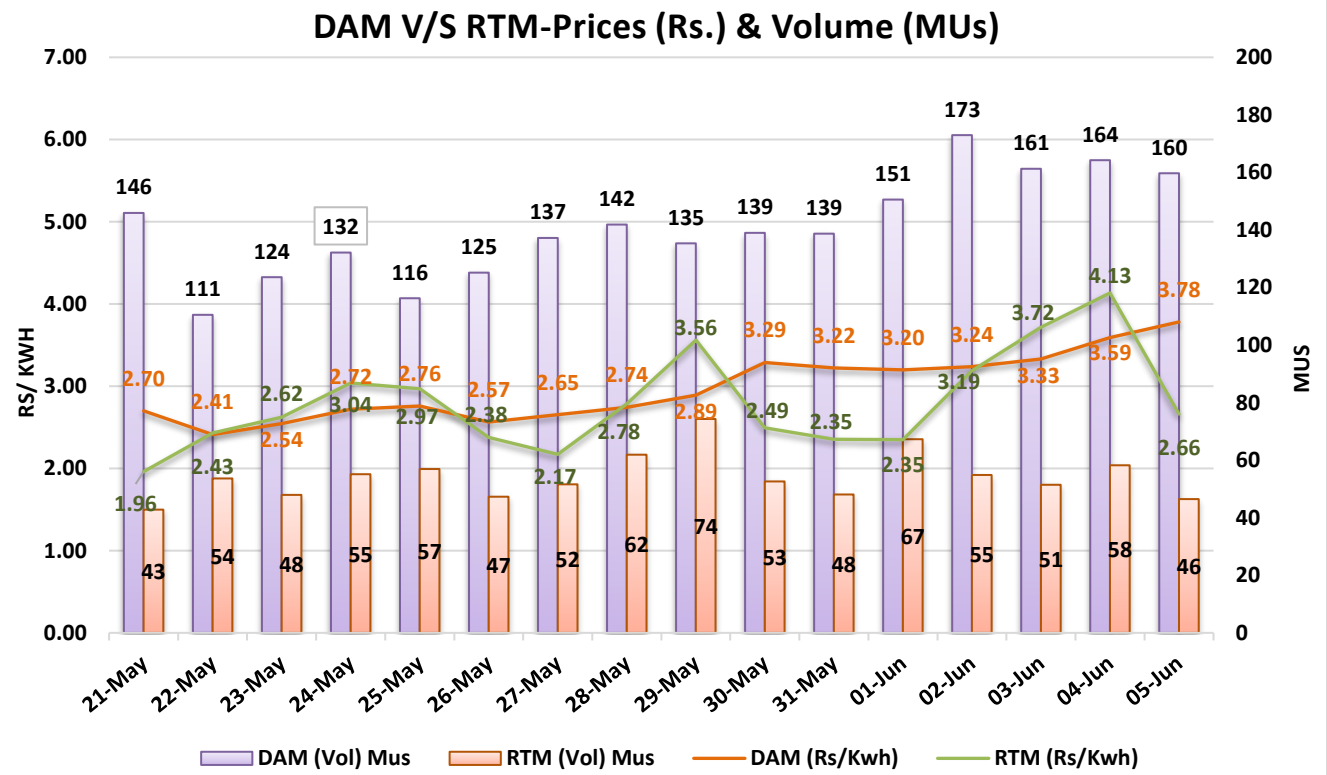
Result of various tenders:-

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
PFC Consulting Limited/Short/21-22/RA/8				
Sl. No.	**Quantity(MW)**	**Period**	**Time Block (Hrs.)**	**Price (Rs./KWh)**
1	14	01.07.2021 to 30.06.2022	00:00 to 24:00	3.18

Source

IEX Price Trend





Commodity Price Indices

Name	Description	Unit	Price
Australian Thermal Coal	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
Coal, Indonesia	Coal Indonesia	USD/ MT	92.41
Coal, Colombia	Colombian Coal	USD/ MT	83.44
Crude Oil (Petroleum)	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
Diesel	New York Harbor Ultra-Low Sulphur No 2 Diesel Spot Price	USD/Gallon	2.07
Heating Oil	New York Harbor Conventional Gasoline Regular Spot Price FOB	USD/Gallon	1.88
Natural Gas	Natural Gas, Natural Gas spot price at the Henry Hub terminal in Louisiana, US Dollars per Million Metric British Thermal Unit	USD/MMBTU	3.149
Jet Fuel	U.S. Gulf Coast Kerosene-Type Jet Fuel Spot Price FOB	USD/Gallon	1.82

(Source: ICMW METI Bloomberg Index Mundi)

Weather (Estimated for next fortnight)

City	Max Temp	Min Temp	Precipitation (Probability)
DELHI	31	27	74%
MUMBAI	30	27	69%
KOLKATA	32	26	57%
CHENNAI	36	26	41%

(Source - Accuweather)

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