TATA POWER



POWER MARKET CAPSULE-191st Edition

Issue no: 191st –20th February 2022



CONTENT INSIDE

1. Power Market News	.01-09
2. Transmission Charges DICs	.09-10
3. Bilateral Market	.10-12
4. IEX Price Trend	12
5. Weather Estimated	13

Tata Power Trading Company Limited (TPTCL)









Power Market News

How ready is India for clean energy technology?

The finance minister's announcement of setting up of four coal gasification plants by Coal India Ltd marks the maturing of the country's coal sector and announces its readiness for a clean energy future.

Gasification allows the value of our coal resources to be unleashed in a non-combustible means, thereby averting emission of toxic gases otherwise embedded in coal at the point of combustion. These projects will produce products like methanol, DME, ammonia and ammonium nitrate that are building blocks for the energy and chemical industries. With a bold energy transition towards renewables already underway in electricity sector, our vast coal resources can now be diverted to non-combustion industrial uses, gasification being a prominent one. The adoption of carbon capture and storage (CCS) technologies with gasification would help deploy India's vast coal resources without causing air pollution. This earns it the terminology of 'clean coal technology'.

Two years back, CIL included gasification as a major component of its diversification agenda, others being solar manufacturing and aluminum. Since then, it has already sought bids under BOO for three gasification projects, while two more are on the anvil, adding up to use of 10 million tonnes of coal per annum. The envisaged gasification products can be used as fuel and feedstock in downstream industries.

The related ministries have already announced standards of blending methanol and DME in petrol and LPG, respectively, which will promote demand for these products. The other two products, ammonia and ammonium nitrate are vital ingredients for urea and explosive manufacture, respectively, and are presently being imported to meet domestic demand.

One question arises. India has been a coal importer for long, and whether there will be sufficient coal available for gasification after meeting the requirements of the domestic power and industrial sectors. It is noteworthy that a large number of captive coal blocks have now come into production, and CIL has also embarked upon a plan to raise production from 600 mt last year to 1 bt by 2024. The captive coal blocks are likely to produce nearly 200 mt every year in the next 2-3 years. Hence, domestic thermal coal availability will exceed demand in the next few years.

In 2020, the government made the coal block regime even more attractive by permitting sale of coal by captive coal block owners, after meeting their own requirement. This has resulted in an enthusiastic response from the mining industry. All put together, from a position of large coal imports, in the next few years there may even be surplus for exports.

Coal gasification brings several benefits. India is highly import dependent for petrochemicals and natural gas. The products envisaged in these new projects will provide feedstock for a new industrial economy and promote 'atmanirbharta'. As of now, petrochemicals and gas-related downstream industries are largely dependent on imported feedstock. The import-based LNG terminals located in western India supply imported gas to projects in Gujarat, Maharashtra and Kerala. The new coal-gasification based industries in eastern and central India could be a game-changer, spurring new plants in these sectors and in different regions. The four projects are planned in close proximity of coalfields in West Bengal, Chhattisgarh, Jharkhand and Maharashtra. These were traditional industrial areas of the country, and with the pivot of manufacturing shifting elsewhere, they have for some decades now lagged for want of investments in large industries.





There will be a challenge of accessing technology for gasification. Many technology providers are not even coal mining companies, and may not be interested in coal mining for supply of coal to these plants. CIL has rightly offered to derisk them by providing coal and also guaranteeing purchase of their output. Each of these projects is expected to consume nearly 1.5 mt of coal per annum, and might lay the foundation for a near \$ 50 billion investment, for gasification of 100 mt of coal annually by 2030. <u>Source</u>

Govt Plans Over 800 GW Installed Power Generation Capacity By 2030 To Meet Future Electricity Demand

The government has planned to increase the installed power generation capacity to 817 gigawatt (GW) by March 2030 to meet the future demand of electricity in the country. In a written reply to a question in Rajya Sabha on 8 February, Union Minister for Power R K Singh said that the 19th Electric Power Survey (EPS) report covers electricity demand projection for the year 2016-17 to 2026-27 as well as perspective electricity demand projection for the year 2031-32 and 2036-37 for each state and union territory.

"As on 31.12.2021, the Installed Generation Capacity of the country was around 393 GW. Further, to meet the future demand of electricity as projected in 19th EPS, by 31.03.2030, the installed generation capacity is planned to be around 817 GW," the minister said. He further said that India has robust transmission grid capacity and power from one state to another can be transmitted through electricity grids. "The cumulative inter regional transmission capacity of the National Grid as on 31.01.2022 was 1,12,250 MW, which has ensured seamless transfer of power in the Electricity Grid," he said. <u>Source</u>

Power Minister Outlines Steps to Improve Financial Health of DISCOMs

In a written reply in Rajya Sabha, Union Power Minister RK Singh outlined the various steps taken by the government to help improve the financial health of the distribution companies (DISCOMs) in the country. The statement said that the total outstanding dues owed by distribution companies (DISCOMs) at the end of December 2021 stood at ₹951.67 billion (~\$12.73 billion). The minister added that as of December 31, 2021, loans to the extent of ₹1.35 trillion (~\$18.06 billion) had been approved. REC Limited and the Power Finance Corporation (PFC) had disbursed loans to the tune of ₹1.03 trillion (~\$13.78 billion) to power generators, independent power producers, and renewable generators. Under the long-term transition loans, the disbursement has been linked with DISCOMs undertaking specified reform measures.

Last December, the Ministry of Power said that 39 out of 55 electricity DISCOMs had submitted draft proposals under the ₹3.03 trillion (~\$40.82 billion) reforms-based resultlinked power distribution program. The Ministry of Power had launched the reforms-based and results-linked, revamped distribution sector program to improve the operational efficiencies and financial sustainability of DISCOMs by providing financial assistance for modernization and strengthening of distribution infrastructure. The minister added that to alleviate the financial stress on DISCOMs due to higher late payment charges; the government had advised generating companies and transmission companies to charge the late payment surcharge at a rate not exceeding 1% per month for all payments made under the 'Liquidity Infusion Program' from REC and PFC with a long repayment period up to 10 years. The minister said that payment security mechanisms through the letter of credit and other modes were an integral part of most of the power purchase agreements (PPAs) between the generating companies and DISCOMs. Speaking on the status regarding the letter of credit and the late payment surcharge, the minister said that the requirement of either making prepayment or giving the letter of credit with the entire cost of the power was relaxed to 50% during the period from March 24, 2020, to June 30, 2020.



The DISCOMs were required to either pay in advance or give the letter of credit for 50% of the cost of power they wanted to be scheduled; the remaining 50% was to be paid within the period given in the PPA, failing which the delayed payment surcharge would apply. This was not applicable for state power generators. The minister, in his reply, said that as per the regulations, the late payment surcharge dues had been linked to the marginal cost of fundsbased lending rates for one year of the State Bank of India. DISCOMs owed renewable generators ₹141.42 billion (~\$1.89 billion) in overdue payments (excluding disputed amounts) at the end of January 2022, according to the data released by the Ministry of Power.

Last month, PFC and REC reduced their lending rates by 40 basis points for all types of loans. The companies revised lending rates to 8.25% for loans of renewable energy projects to give the sector a boost, where long-term funding is required. The rates were reduced due to both companies' lower cost of borrowings in the past year. <u>Source</u>

Power requirement estimated to be 1,650.59 billion units in FY23

Power requirement in the country is estimated to be 1,650.59 billion units in 2022-23 while it was 1,141.94 billion units till January of the ongoing fiscal year, Parliament was informed. In financial year 2020-21, power requirement was 1,275.53 billion units (BU), Power Minister R K Singh said in a written reply to the Rajya Sabha. The minister also informed the House that the peak power demand was 2,03,014 MW till January 2021-22 and it is estimated to touch 2,38,899 MW in the next financial year. The minister provided the information as per estimates of the 19th Electric Power Survey (EPS).

Singh also said, "as on December 31, 2021, the installed generation capacity of the country was around 393 GW. Further, to meet the future demand of electricity as projected in 19th EPS, by March 31, 2030, the installed generation capacity is planned to be around 817 GW." India has robust transmission grid capacity. Power from one state to another state can be transmitted through Electricity Grids. The cumulative inter regional transmission capacity of the National Grid as on January 31, 2022 was 1,12,250 MW, which has ensured seamless transfer of power in Electricity Grids, he stated.

In another reply to a supplementary question of BJP leader Kirodi Lal Meena about investigation into incidents of embezzlement in the works under Integrated Power Development Scheme (IPDS) in Rajasthan, Singh said,"We will send a team, not all schemes, but verify about randomly selected schemes that whether work is done as it was sanctioned. We will conduct an inspection of this."

Meena had raised the issue saying that Centre provides 60 per cent of the funds under the scheme for various works. <u>Source</u>

APERC notifies regulation for power procurement, sale

Visakhapatnam: For the first time for any state in the country, the Andhra Pradesh Electricity Regulatory Commission notified the APERC (terms and conditions for short-term procurement/sale of power) Regulation, 2022. The major objectives of the move are to streamline the short-term power procurement process, provide a clear-cut framework and guidelines, and optimise power purchase costs.

As per the officials, this Regulation mandates the publication of the monthly-, weekly- and day-ahead power requirement communicated by the state load despatch centre to the Discoms on latter's websites. It also stipulates the procedures for reserve shutdowns, demand estimation based on the latest artificial intelligence tools, and when to resort to purchase/sale of energy from/to the market by the Discoms.

The Regulation enforces full despatch of cheaper power from the approved thermal power plants, which reduces the overall power purchase costs. It also provides for the constitution of a common round-theclock dedicated cell by the Discoms. These will monitor the energy prices in the power exchanges continuously and purchase/sell energy at the right time to save power purchase costs.

At present, the short-term power procurements by the Discoms for a period up to one year are being regulated by the specific directions issued by the Commission in the retail supply tariff orders. The guidelines and directions issued by the erstwhile APERC of the undivided Andhra Pradesh are also being followed for the same. The increased share of renewable energy (RE) capacity (about 50 percent of the total installed capacity), which is intermittent and unpredictable in nature, has been forcing the Discoms to procure energy from the market on a short-term basis. <u>Source</u>

Projects Worth ₹308.02 Billion Approved to Strengthen Power Distribution Network

Projects worth ₹308.02 billion (~\$4.12 billion) have been approved to date under the Integrated Power Development Program (IPDS), Minister of, R.K. Singh, said in the Rajya Sabha. The central government launched the IPDS Program in 2014 to strengthen subtransmission and distribution networks in urban areas of the country. The program also helped achieve the metering of transformers, feeders, and consumers in the urban areas. The government also intended to execute information technology enablement works, enterprise resource planning, smart metering, gas-insulated substations, and real-time data acquisition systems with this program. The Government of India provided a total grant of ₹193.22 billion (~\$2.58 billion) for these projects. Of this, it has already released ₹167.17 billion (~\$2.23 billion) to states and union territories.

Under the program, the central government will provide a 60% grant for projects to states and 85% for special category states. It will also provide additional funding of 15% for states and 5% for special category states for the achievement of milestones. The central government funding under the Integrated Power Development Program is intended to reduce technical and commercial losses. It also allocated funds for underground cabling and aerial bunched cables and metering, which helped distribution companies balance their costs. In August 2021, the power minister replying to a question in the Rajya Sabha had said that the Aggregate Technical & Commercial (AT&C) losses at the all India level had reduced from 23.70% in financial year (FY) 2015-16 to 21.83% in FY 2019-20, a 2% reduction in five years. Singh informed the Rajya Sabha that the system strengthening and distribution projects covering 547 circles in 33 states and union territories were taken up under the program. Out of these 547 circles, the distribution system strengthening works in 544 circles have been completed. In July 2021, the Ministry of Power Issued, detailed guidelines for a reform-based result-linked power distribution program over the next five years. The program aims to improve the quality and reliability of power supply to consumers through a financially sustainable and operationally efficient distribution sector. The plan is to reduce aggregate technical and commercial losses across India to 12-15% and eliminate the gap between the average supply cost and the aggregate revenue requirement by 2024-25. Thereafter, the informed that 39 out of 55 power distribution companies submitted their draft proposal under the ₹3.03 trillion (~\$40.82 billion) reforms-based result-linked power distribution program. The Ministry said Meghalaya and Assam were the frontrunners in planning operational and financial reforms. Source

India seeks AI solutions from IT firms, startups to reduce power loss

The government plans to rope in artificial intelligence (AI) through established IT players and startups to resolve high distribution losses, the biggest problem of the power sector in India. India's AT&C losses are one of the highest in the world, worse than even Bangladesh, posing a major challenge to the financial viability of the entire power sector. The technology service providers will use artificial intelligence,





machine learning, blockchain and Internet of Things in the power distribution sector to analyse data to be available via implementation of metering of consumers, transformers and feeders in distribution areas.

With the use of advanced technologies, discoms will be well-equipped to make decisions across loss reduction, demand forecasting, differential tariff in a day and renewable energy integration. "Increased technology interventions will aid in facilitating operational and financial sustainability of the distribution companies," a senior government official said.

About 14 discoms of nine states, including Tamil Nadu and Madhya Pradesh, have evinced interest in Al solutions. For each problem area in the identified discoms, 4-5 technology service providers, 2-3 established players and 1- 2 startups will be shortlisted based on their proposals. Startup TSPs would be provided with a grant of up to Rs 40 lakh, while no financial assistance will be provided to non-startups.

REC Ltd, the designated agency for the programme, has signed a MoU with SINE under IIT Bombay as incubator-cum-technology partner. SINE Mumbai is soon expected to announce the challenge for identifying technology service providers. The plan is part of the Rs 3.03 lakh crore reform-based and result-linked scheme, and the power ministry has approved a corpus of Rs 4 crore for the first year.

"Huge data will be thrown up when we implement smart meters in a time-bound manner. We are conscious that this data should be analysed intelligently in a way that it leads to good actionable points for the utility managers and for the policy makers," Power Secretary Alok Kumar said. He said once the Al models mature, they will be replicated across the country.

Kumar said that India's average distribution losses are 20%, but for many utilities it is in the range of 40-45%, while a few utilities lose more than 50%. As per data available, in 2018-19 distribution losses in neighbouring Bangladesh, which started power reforms much later, were at 11.96%. "Leave apart the other developed countries where the T&D losses are 4-6%. So, India has a big lesson to learn and a big challenge to beat," he said. <u>Source</u>

ABB India unveils new range of smart metering solutions

ABB India has launched a new series of electrical measuring and power monitoring meters for the electrical market.

In a release, ABB India noted that energy management is one of the biggest challenges in business applications and has a huge impact on the cost of operations. To ensure optimal energy efficiency, ABB India has launched a new series of electrical measuring and power monitoring meters for the electrical market which is growing at a CAGR of 6 per cent for the period between 2017 to 2023. With this introduction, ABB India offers a comprehensive portfolio in addition to the existing range of single, multifunction meters and network analysers, catering to the Panel Meter market across industries such as healthcare, hospitality, infrastructure, and F&B to name a few.

Complete analysis

These smart solutions in metering and energy monitoring enable users to make better choices to monitor their power consumption. The meters guarantee basic to complete power quality analysis and accurately monitor the energy assets for residential, industrial, and commercial building segments. The newly introduced M1M11, M1M DS, M1M20B and M1M30B cover the main submetering easily and cost-effectively by powering quality monitoring requirements inside power factor correction boards, motor control centres or sub-distribution switchboards of commercial and industrial buildings.



Page 5



Managing energy performance

Kiran Dutt, President-Electrification at ABB India said, "The emerging Panel meter market and our introduction of new range of meters offers a huge potential for customers to better manage energy performance across industries. Thanks to their connectivity capabilities, M1M can now leverage on the integration in ABB's Ability[™] Energy and Asset Manager cloudcomputing platform to monitor, optimize, and control the complete electrical system.

The complete M1M range offers the following benefits in submetering:

- Complete offer: Thanks to integrated functionalities and communication protocols, the same product version fits an increased number of projects and wide applications range
- Simple and intuitive: Makes configuration and operations simple and fast, from easy installation and wiring
- Energy Efficiency: Complete set of measurement functionalities, from multi-function meters to intermediate power meters improving energy efficiency of the electrical system

The M1M11 is a digital kWH meter for energy measurement, providing the measurement of the singlephase or three-phase energy consumption. M1M DS is a Dual Source multifunction meter for complete electrical system monitoring, providing the measurement of active energy, active power, apparent power, power factor, voltage, current, frequency, enabled by a communication device for remote monitoring. Additionally, the two new different intermediate M1M product families, M1M 20B and M1M30B, have been commonly designed to perfectly fit in a scalable way for monitoring needs, with a high focus on intuitiveness, quality, and common user experience. <u>Source</u>

RK Singh launches Powerthon-2022 for tech-driven solutions for quality power supply

Union Power Minister R K Singh launched a hackathon, named Powerthon-2022, to find tech-driven solutions for quality power supply. He also encouraged technologists to come forward not only with solutions to existing problems but also with other problem statements and ideas for reliable power supply. "Union Minister for Power and New Renewable Energy R K Singh virtually launched today Powerthon-2022, a hackathon competition under RDSS (Revamped Distribution Sector Scheme) to find technology driven solutions to solve the complex problems in power distribution and to ensure quality and reliable power supply," a power ministry statement said.

In his keynote address, Singh said this program is much needed in the power sector. "We will have a standing body and this innovation will be open and an ongoing scheme," he stated. The minister added that ideas and concepts will be rewarded with licence and development of prototypes will also be fostered. REC Limited, in collaboration with SINE, IIT Bombay, has announced the launch of the Powerthon-2022.

In this hackathon, Technology Solution Providers (TSPs), start-ups, educational institutions, research institutes, equipment manufacturers, state power utilities and other state and central power sector entities, shall be briefed on the current challenges/ problem statements faced across the power distribution sector and invited to showcase their technology driven solutions to solve the complex problems.

The hackathon will task participants to find innovative solutions based on advanced emerging technologies like artificial intelligence, machine learning, blockchain and Internet of Things on nine themes that have been identified after various discussions with 14 discoms across nine states. These are -- demand/load forecasting, AT&C (aggregate technical and commercial) loss reduction, energy theft



Page 6



detection, prediction of DT (distribution transformer) failure, asset inspection, vegetation management, consumer experience enhancement, renewable energy integration and power purchase optimisation.

Under the competition, an Expert Group and a Technical Committee are being constituted for overall evaluation of the Proof of concept (POC) and selection of TSP. The TSPs will then be actively mentored and a pilot run shall be conducted by the selected TSP for the thematic area. On the success of the pilot run, scale-up avenues will be pursued under the RDSS scheme, the statement added. Powerthon-2022 is being launched in line with the aim of Revamped Distribution Sector Scheme (RDSS) introduced by the Ministry of Power.

The RDSS is a reform-based and result-linked scheme introduced by the ministry. The key objectives of RDSS are reducing AT&C losses to 12-15 per cent, eliminating the ACOS-ARR (actual cost of supply and actual revenue realised) gap by 2024-25 and improving the quality and reliability of the power supply. REC has signed an MoU with the Society for Innovation and Entrepreneurship (SINE) under IIT Bombay as 'Incubator cum Technology Partner' for organising Powerthon-2022. <u>Source</u>

Connecting the dots: nuclear energy for 'just transition' in India

In the transition from conventional fossil fuel-based power generation to an alternative resource-based energy portfolio, nuclear energy plays a significant role to help economies achieving zero carbon footprint targets while reducing socio-economic poverty including offering alternatives to existing jobs.

India has been actively pursuing an ambitious growth trajectory in alternative source-based energy generation with the aim to significantly reduce its total carbon emissions. At the recently held 26th meeting of the Conference of Parties on climate change in Glasgow, the Prime Minister of India made a set of five declarations - 'Panchamrit' towards realising this goal. One of these was to increase production of nuclear power three times more than the current levels by 2031, thus reducing our reliance on carbon-emitting thermal power.

Challenges and Concerns

Among the first challenge of nuclear power generation is accidents leading to harm to humans and the ecology. Nuclear power is often projected as a cheap and environmentally benign source of energy generation. But the chances of accidents in nuclear power plants leading to radiation harm in absence of adequate precautionary measures and redressal mechanisms are moderately high. Thus, we need to ensure higher standards of safety by drawing lessons from nuclear disasters like Fukushima, Chernobyl, Three Mile Island etc.

The second challenge is raw materials such as uranium etc. The discovery of a uranium mine in Andhra Pradesh along with the country's economically extractable thorium base could partly address India's raw material crisis for generating nuclear energy. Other than that we have also tied up with uranium producers like Australia to supply in compliance with the norms of Nuclear Suppliers Group. Nevertheless, supply and procurement of other components should not be ignored while championing nuclear energy.

Another area of growing concern is nuclear waste produced at different stages of energy generation. However, not all nuclear wastes are hazardous or difficult to treat. Concerted efforts to prepare a structured plan for effective management of these radioactive wastes should involve characterisation, segregation, handling, treatment, conditioning and monitoring.



Assessment of Costs and Benefits

Costs and benefits of nuclear power generation are at times assessed without incorporating the social, economic and environmental concerns of local people and ecology. Local communities often do not get an opportunity to let their views known to the authorities. This is in spite of the positive impact of the investment in the local economy by creating jobs. In the absence of a definite community engagement plan and cross-sectional dialogue coupled with chronic resource limitations, it becomes difficult to accept nuclear energy as a significant contributor to the overall energy portfolio of India.

The movement against the nuclear power plant in Kudankulam in Tamil Nadu and protests against the Jaitapur nuclear power plant in Maharashtra have been two significant people's resistance movements. Similarly, another nuclear proposal in Haripur, West Bengal faced severe backlash from local residents, environmentalists and the opposition political parties. However, whether the driving force behind such outcomes was local, political or vested interests, should be carefully examined.

Nuclear Energy and a Just Transition

However, it is well established that nuclear energy, regarded as the second largest source of low carbon intensive electricity production, offers multiple advantages facilitating the muchenvisaged energy transition. Nuclear power has an inbuilt flexibility to address fluctuations in energy demand and supply matrix at an affordable cost, which is crucial to maintain grid stability especially in areas with a huge reliance on intermittent renewable energy generation. Further, with operational upgradations, nuclear plants can produce hydrogen and help decarbonising other sectors of the economy. However, to facilitate a 'Just' energy transition, it is equally important look beyond techno-economic parameters and consider the stake of local people before designing such projects.

A Possible Roadmap

While nuclear energy continues to be a tangible expression of a nation's prestige and power, it can certainly help negating socio-economic poverty, especially in this pandemic-induced world. Following points are important to note in this regard:

- Safety, cost and efficiency are to be kept in mind while drafting action plans for nuclear energy promotion, with the local community and environment occupying a central position in the process.
- Emphasis should be on building societal awareness and decoding the negative connotations around nuclear power generation with scientific know-how.
- Securely deploying and maintaining an ecosystem to take care of nuclear waste without causing any damage to environment or human habitat is of immense importance. A monitoring system to assess the safety requirements and compliances should be in place.
- There should be an optimal regulatory regime to ensure safety standards are not flouted by anyone.
- The incentives offered to different sections of stakeholder should not be conflicting in nature.
- Nuclear energy is neither an endless nor a renewable resource as uranium reserves will start dwindling after a certain time. Therefore, phase-wise utilisation as well as maintaining a scientific energy consumption pattern are crucial for this resource to be sustained over a significant timeframe.





 Building a nuclear power plant is an expensive affair. People's first public-private partnership should be promoted with necessary policy support, free flow of authentic information and careful impact assessment on diverse stakeholders. <u>Source</u>

Transmission charges payable by DICs for the billing month of Feb'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)						
SI. No.	State	Region STOA rate (paise/kWh)				
1	Delhi	NR	41.96			
2	UP	NR	49.06			
3	Punjab	NR	47.39			
4	Haryana	NR	55.07			
5	Chandigarh	NR	39.13			
6	Rajasthan	NR	61.70			
7	HP	NR	40.61			
8	J&K	NR	46.34			
9	Uttarakhand	NR	54.26			
10	Gujarat	WR	46.91			
11	Madhya Pradesh	WR	48.80			
12	Maharashtra	WR	48.74			
13	Chhattisgarh	WR	36.73			
14	Goa	WR	44.17			
15	Daman Diu	WR	42.49			
16	Dadra Nagar Haveli	WR	47.00			
17	Andhra Pradesh	SR	56.44			
18	Telangana	SR	41.00			
19	Tamil Nadu	SR	44.11			
20	Kerala	SR	42.34			
21	Karnataka	SR	44.47			
22	Pondicherry	SR	36.85			
23	Goa-SR	SR	30.01			
24	West Bengal	ER	37.98			
25	Odisha	ER	48.20			
26	Bihar	ER	43.19			
27	Jharkhand	ER	43.66			



28	Sikkim	ER	36.96
29	DVC	ER	42.45
30	Bangladesh	ER	32.80
31	Arunachal Pradesh	NER	39.60
32	Assam	NER	37.87
33	Manipur	NER	41.81
34	Meghalaya	NER	37.41
35	Mizoram	NER	41.93
36	Nagaland	NER	56.86
37	Tripura	NER	42.92

Bilateral Tender Results: -

SI. No.	Tender Quantum (MW)	Supply Period	Time Blocks (Hrs.)	Price (Rs./kWh)	LOI Status		
		UPCL/Short/2	21-22/RA/106				
1	200	04.02.2022 to 14.02.2022	00:00 to 24:00	4.62-7.00			
2	100	15.02.2022 to 28.02.2022	00:00 to 24:00	4.62-5.60	Awaited		
3	200	01.03.2022 to 28.02.2022	00:00 to 24:00	5.03-6.00	Awalleu		
		BSES/Short/2					
1	100	01.04.2022 to 30.04.2022	00:00 to 24:00	-			
2	150	01.05.2022 to 31.05.2022	00:00 to 24:00	4.76			
3	200	01.06.2022 to 30.06.2022	00:00 to 24:00	4.76			
4	200	01.07.2022 to 31.07.2022	00:00 to 24:00	4.76			
5	100	01.08.2022 to 31.08.2022	00:00 to 24:00	4.76			
6	50	01.09.2022 to 30.09.2022	00:00 to 24:00	4.76	Awaited		
7	Up to 550	01.04.2022 to 30.09.2022	00:00 to 03:00 12:00 to 15:00 15:00 to 18:00 18:00 to 21:00 21:00 to 24:00	No Bids			
	EON KHARADI INFRASTRUCTURE PVT LTD/Short/21-22/RA/105						
1	4	01.03.2022 to 30.06.2022	00:00 to 24:00	5.4	Awaited		
	HPSEBL/Short/21-22/RA/100						
1	350	01.04.2022 to 07.04.2022	00:00 to 24:00	4.9-4.94			



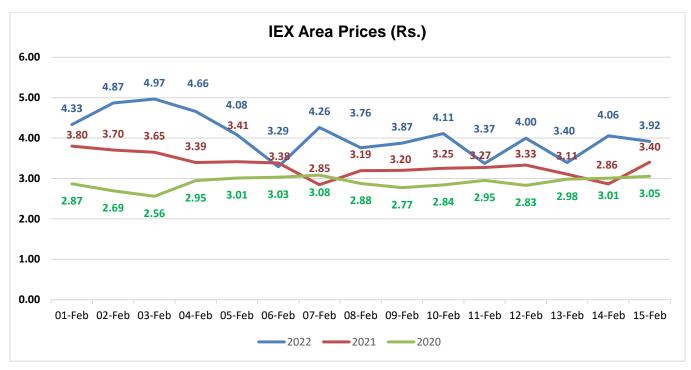
	4.9-4.94	00:00 to 24:00	08.04.2022 to 15.04.2022	200	2
	4.42	00:00 to 24:00	16.04.2022 to 22.04.2022	100	3
	4.46	00:00 to 24:00	23.04.2022 to 30.04.2022	100	4
	4.75	00:00 to 24:00	01.11.2022 to 07.11.2022	65	5
	4.75	00:00 to 24:00	08.11.2022 to 15.11.2022	85	6
	4.08-4.09	00:00 to 24:00	16.11.2022 to 22.11.2022	110	7
	4.41-4.6	00:00 to 24:00	23.11.2022 to 30.11.2022	165	8
	4.37-4.38	00:00 to 24:00	01.12.2022 to 07.12.2022	195	9
	4.42-4.6	00:00 to 24:00	08.12.2022 to 15.12.2022	240	10
	4.54-4.75	00:00 to 24:00	16.12.2022 to 22.12.2022	260	11
	4.56-4.75	00:00 to 24:00	23.12.2022 to 31.12.2022	300	12
Awaited	4.2-4.94	00:00 to 24:00	01.01.2023 to 07.01.2023	325	13
	4.2-4.94	00:00 to 24:00	08.01.2023 to 15.01.2023	325	14
	4.2-4.94	00:00 to 24:00	16.01.2023 to 22.01.2023	310	15
	4.2-4.94	00:00 to 24:00	23.01.2023 to 31.01.2023	310	16
	4.21-4.94	00:00 to 24:00	01.02.2023 to 07.02.2023	310	17
	4.37-4.75	00:00 to 24:00	08.02.2023 to 15.02.2023	250	18
	4.37-4.75	00:00 to 24:00	16.02.2023 to 22.02.2023	220	19
	4.37-4.94	00:00 to 24:00	23.02.2023 to 28.02.2023	275	20
	4.35-4.75	00:00 to 24:00	01.03.2023 to 07.03.2023	200	21
	4.37-4.94	00:00 to 24:00	08.03.2023 to 15.03.2023	215	22
	4.65-4.75	00:00 to 24:00	16.03.2023 to 22.03.2023	165	23
	4.75	00:00 to 24:00	23.03.2023 to 31.03.2023	65	24
	2	I/Short/21-22/RA/11	Torrent Power Limited		
	6.5	09:00 to 24:00	01.10.2022 to 31.12.2022	350	1
Awaited	5.26-5.34	00:00 to 24:00	01.10.2022 to 31.12.2022	350	2
Awallet	6.5	07:00 to 22:00	01.01.2023 to 31.03.2023	350	3
	4.9	00:00 to 24:00	01.01.2023 to 31.03.2023	400	4
HARYANA POWER PURCHASE CENTRE (A JOINT FORUM OF UHBVN&DHBVN)/Short/21-22/RA/114					
	5.07-6.75	00:00 to 24:00	01.05.2022 to 31.05.2022	750	1
	5.07-5.45	00:00 to 24:00	01.06.2022 to 30.06.2022	750	2
	4.81-5.45	00:00 to 24:00	01.07.2022 to 31.07.2022	750	3
Awaited	4.89-4.93	00:00 to 24:00	01.08.2022 to 31.08.2022	750	4
	5.03-5.25	00:00 to 24:00	01.09.2022 to 30.09.2022	750	5
	7.5	00:00 to 24:00	01.10.2022 to 15.12.2022	750	6

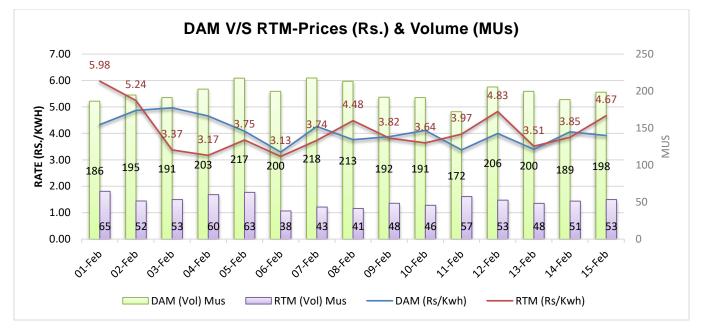
Lighting up Lives!



	Torrent Power Limited/Short/21-22/RA/113						
1	70	01.10.2022 to 31.03.2023	00:00 to 24:00	4.75	LOI issued		

IEX Price Trends





Max Temp	Min Temp	Precipitation (Probability)
30	16	2%
33	25	0%
34	20	2%
33	25	23%
	30 33 34	30 16 33 25 34 20

Weather (Estimated for next fortnight)

(Source - Accuweather)

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

