

POWER MARKET CAPSULE-173rd Edition

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TPTCL'S E-NEWS LETTER



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Tata Power Trading Company Limited (TPTCL)







Power Market News

Average spot power price up nearly 53 pc to Rs 3.70/unit in April at IEX

The average spot power price rose by nearly 53 per cent to Rs 3.70 per unit in April at the Indian Energy Exchange (IEX) primarily due to increase in demand. In April 2020, The average monthly price stood at Rs 2.42 per unit, an IEX statement said. "The day-ahead market (DAM) traded 5,699 MU (million units) volume in April, 2021 achieving a significant 54 per cent year-on-year (YoY) growth," it noted.

According to the statement, the rise in price was primarily due to increase in demand and low base. There was a sharp slump in electricity prices in April 2020, due to a stringent nationwide lockdown. The day-ahead market saw ample availability of power with sell-bids at 1.48X of the cleared volume during April. As per the market data, the IEX entered the new fiscal year 2021-22, with 7,707 MU volume in April, achieving a 90.2 per cent YoY growth.

The term-ahead market (TAM) comprising intra-day, contingency, daily & weekly contracts traded 349 MU during April.

The real-time market (RTM) saw the highest ever monthly volume of 1,473 MU in April this year achieving 4.2 per cent MoM (month-on-month) growth. It also recorded the highest single day volume of 68.36 MU on April 3, 2021. The growing volume in RTM shows its acceptance by distribution utilities and industrial consumers as the go-to platform for addressing the real-time electricity demand-supply balance in the most competitive and efficient manner with the delivery of power at just 1-hour notice.

The green term-ahead market traded 186 MU volume during April comprising 78 MU in the solar segment and 108 MU in the non-solar segment, achieving a significant 262 per cent MoM growth. A total of 34 participants participated in April with distribution utilities from Haryana, Bihar, Uttar Pradesh, West Bengal, Maharashtra, Karnataka, and Telangana among others as the key participants.

The market has been enabling distribution utilities, industrial consumers, and green generators to trade in renewable energy in the most competitive and viable way. During April, the IEX commenced the Cross Border Electricity Trade (CBET) on its platform marking a significant milestone in its endeavor to build an integrated South Asian regional power market.

As a first-of-its-kind initiative, the new market segment allows the Exchange market to expand its reach beyond India to the South Asia region, thus supporting the growth of the energy ecosystem in the region in an efficient and sustainable manner. Nepal was the first country to trade in the day-ahead market on the Exchange on April 17, 2021. The other South Asian countries like Bhutan and Bangladesh are expected to join the platform soon, and the market is likely to grow at a fast pace in the coming months. *Source*

Three states yet to file tariff orders for FY22

At least three states, including Maharashtra and Kerala, had not filed their tariff orders for FY22, up to April 28, 2021. The power ministry in a recent letter to all state governments has stressed on the importance of timely issuance of tariff orders. In a joint communication dated May 3, 2021, addressed to state governments and state electricity regulatory commissions (SERC), the Union power ministry has observed that while some SERCs are issuing tariff orders regularly, other SERCs are not strictly adhering to provisions of the Electricity Act, 2003, regarding timely issuing of tariff orders.



The communication observed that at least three states – Maharashtra, Kerala and Himachal Pradesh – had not filed their tariff orders for FY22 (2021-22) up to April 28, 2021. SERCs are generally expected to finalize and issue their tariff orders during March, applicable to the fiscal year beginning April 1. Most of the SERCs have issued their tariff orders for FY22 (April 1, 2021 to March 31, 2022) during March 2021.

Policy

Issues relating to tariff regulations, determination of tariff, and the procedure for tariff order, are governed by provisions under Section 61, 62 and 64, respectively of the Electricity Act, 2003. The Appellate Tribunal for Electricity (APTEL), in its order of November 2011, issued directions to SERCs relating to ensuring regular and timely revision of tariffs, and regular truing up of tariffs. It also stressed on non-creation of fresh regulatory assets, allowing carrying cost of past regulatory assets. Besides, the APTEL order stressed on putting in place a mechanism for fuel and power purchase cost adjustment.

Distribution sector

The communication by the power ministry emphasized that the power distribution sector was a crucial element of the entire electricity value chain, and that the sustainability of the entire power sector was critically dependent on the sustainability and growth of the distribution sector. <u>Source</u>

India's power consumption grows nearly 25% in first week of May

Power consumption in the country grew 25 per cent in the first week of May to 26.24 billion units (BU) over the same period last year, showing consistent recovery in industrial and commercial demand of electricity, according to power ministry data. Power consumption in the first week of May 2020 was 21.05 BU. The power consumption in the entire month of May last year was 102.08 BU. On the other hand, peak power demand met, which is the highest supply in a day, during the first week of this month remained well above the highest record of 166.22 GW in May 2020 except on May 2, when it was 161.14 GW.

During the first week of May this year, peak power demand met or the highest supply in a day touched the highest level of 168.78 GW (on May 6, 2021) and recorded a growth of nearly 22 per cent over 138.6 GW (peak met) recorded in the same period in 2020 (on May 7, 2020). The power consumption in April grew 41 per cent to 119.27 BU.

Power consumption in April 2020 had dropped to 84.55 BU from 110.11 BU in the same month in 2019, mainly because of fewer economic activities following the imposition of lockdown by the government in the last week of March 2020 to contain the spread of deadly Covid-19. The power consumption also fell in May 2020 to 102.08 BU from 120.02 BU in May 2019.

Similarly, peak power demand met or the highest power supply in a day also slumped to 132.73 GW in April last year from 176.81 GW in the same month in 2019, showing the impact of lockdown on economic activities. The fewer economic activities also resulted in a fall of peak power demand met in May 2020 to 166.22 GW from 182.53 GW in May 2019.

Experts are of the view that high growth in power consumption, as well as demand in May this year, is mainly due to base effect but the data shows recovery so far even as the second strong wave of Covid-19 forced authorities to impose local lockdowns to contain deadly virus across the country. They have cautioned that local lockdowns may derail the recovery in commercial and industrial power consumption and demand.



After a gap of six months, power consumption had recorded a 4.6 per cent year-on-year growth in September 2020 and 11.6 per cent in October 2020. In November 2020, the power consumption growth slowed to 3.12 per cent, mainly due to the early onset of winters. In December 2020, power consumption grew by 4.5 per cent while it was up 4.4 per cent in January 2021. Power consumption in February this year recorded at 103.25 BU compared to 103.81 BU last year. But 2020 was a leap year. In March this year, the power consumption grew nearly 22 per cent to 120.63 BU compared to 98.95 BU in the same month of 2020. Source

Speed up electricity tariff orders: Centre to States

The power ministry has written to 18 states and union territories, asking them to issue electricity tariff orders for the current year in line with provisions under the Electricity Act immediately. The Centre had asked state regulatory commissions to issue tariff orders of all distribution licensees before April 1 of the tariff year and report compliance to the union power ministry by May 31 every year. Nearly 14 states have issued tariff orders in March while some others are in the process, sources said.

Sources said Union power secretary Alok Kumar has written to additional chief secretaries and electricity regulators of states like Uttar Pradesh, Tamil Nadu, Jharkhand, Uttarakhand, Delhi, Rajasthan and Punjab. The states also include West Bengal, Tripura, Madhya Pradesh, Karnataka, Chhattisgarh, Arunachal Pradesh and UTs of Jammu & Kashmir and Ladakh.

The move is aimed at correcting the financial position of power distribution utilities in the country. Kumar has sought immediate issuance of tariff orders for 2021-22 by these eighteen states. Nearly 14 states have issued tariff orders in March this year, while some are in the process. The Central government has recently asked regulatory commissions to issue tariff orders of all distribution licensees before April 1 of the tariff year and report compliance to the Union power ministry by May 31 every year. In a communication to chairpersons of central and all state power regulatory bodies, the power ministry has sought compliance of legal provisions in the Electricity Act 2003 and the Tariff Policy 2016, which mandate timely determination of the adequate power tariffs by the electricity commissions.

Discom overdue outstanding to generation companies are at Rs 82,996 crore, data available with the Praapti portal showed. The average revenue gap of distribution utilities is in the range of 72 paise per unit and the regulatory assets are at Rs 78,000 crore.

Section 64 of the Electricity Act 2003 provides for determination of cost reflective tariff by appropriate commission within 120 days from receipt of tariff petition. Similarly, Tariff Policy 2016 states that the commissions should initiate tariff determination on a suo-moto basis in case the tariff petitions are not filed in time. It mandates commissions to ensure the tariff changes are brought into effect from the beginning of each financial year and under business as usual no regulatory assets --- deferred tariff hikes -- are created. The same has also been provided in an order of the Appellate Tribunal for Electricity passed in November 2011.

Besides, the liquidity infusion scheme of total Rs 1,30,000 crore special loans to distribution companies, the centre is soon likely to bring out a Rs 3 lakh crore reforms-linked distribution reforms scheme which will disburse amount only when the discoms achieve set milestones. The government is also working on amendments in the Electricity Act, 2003 for delicencing power distribution segment to introduce competition. *Source*



Power Generation Sector: Highlights of FY21

Central Electricity Authority recently released statistics of the power sector, relating to March 2021, thereby completing the picture for FY21. Here are some highlights relating to the power generation segment.

- India could add 5,436 mw of new generation capacity from conventional sources (thermal and hydro) in FY21, as against 7,065 mw in FY20. Central PSU NTPC was responsible for most of the capacity addition in FY21. There was no new nuclear power generation capacity added in FY21, as was the case with FY20.
- Electricity generation, through conventional sources (including large hydropower), was 1,251 billion kwh (BU) in FY21, down 1.3 per cent from 1,234 BU in FY20.
- Import of electricity from Bhutan grew 52 per cent from 5.794 BU in FY20 to 8.791 BU in FY21.
- Power generation from nuclear power plants recorded a rather sharp year-on-year decline of 7.6 per cent to touch 42.949 BU in FY21.
- Electricity generation from renewable energy sources (excluding large hydropower) is estimated to have risen by 5 per cent to reach 155 BU in FY21 from 147 BU in FY20.
- The share of renewable energy (excluding large hydropower) in India's total electricity generation in FY21 is estimated to be 11 per cent, unchanged from FY20.
- Based on data for the first eleven months (April to February), wind power generation fell by 7.5 per cent in FY21 while solar power generation rose significantly by nearly 21 per cent.
- Wind and solar together accounted for over 80 per cent of the total electricity generated from renewable energy sources in FY21 (April to February).
- India's total power generation capacity stood at 3,82,151 mw, as of March 31, 2021, according to provisional estimates.
- Renewable energy sources (excluding large hydropower) had a share of around 25 per cent in India's total power generation capacity, as of March 31, 2021. [This is a provisional estimate.]
- A little over half of India's total installed power generation capacity, as of March 31, 2021, came from coal-fired power plants.
- The private sector represented the largest ownership group of India's overall installed power generation capacity (including conventional and renewables). As of March 31, 2021, the private sector had a share of 47 per cent. This dominance comes from renewable energy capacity where the private sector has almost solo ownership. *Source*

India's electricity generation falls 2.9 per cent in second half of April

CHENNAI: India's electricity generation was 2.9% lower in the last fifteen days of April than the first half of the month, government data showed, as curbs on movement to restrict the spread of the coronavirus stifled demand for power. Power supplied to Maharashtra, Tamil Nadu and Gujarat - India's richest and most industrial states which together account for nearly a third of the total electricity consumption - fell by over 2.1% during the second half of April, the data showed. Electricity supply to Karnataka - home to



India's tech hub Bengaluru - fell over 15% in the second half of April, an analysis of load despatch data from federal grid operator POSOCO showed, as the state imposed a total shutdown on April 26.

Industries and offices account for half the country's annual electricity consumption. Power generation in India generally starts rising from April and peaks in May due to a higher air-conditioning load. Senior government officials have cited the recovery in demand for power in late 2020 as a sign the economy was beginning to recover from its worst slump in decades.

Power supply to the city state of Delhi - among the worst affected by the pandemic - fell over 10% during the second half of April, while the southern state of Telangana saw the steepest drop of over 23%. India's total power supply fell 3.3%. India's fresh infections soared to a new global record of over 400,000 on Saturday, and industry officials are concerned the rampant second wave of COVID-19 will dent economic growth. Power generation for the month of April rose marginally compared to March, but was up 40.1% year-over-year as India was under a complete lockdown during the same period last year. *Source*

Coal Is Still Power-full

Despite its focus on reducing carbon emissions, India relies heavily on coal for power production. Here's how some of the country's biggest power producers are preparing for the fossil fuel-free power generation era

In 2015, Tata Power Company had a gross generation capacity of 8,726 megawatt (MW), mainly 7,607 MW of thermal power. Its green energy portfolio was barely 1,119 MW comprising 573 MW of hydro, 487 MW of wind and just 59 MW of solar. It had plans to add another 9,105 MW, of which thermal was 8,270 MW and just 835 MW of hydro and renewable power.

Six years later it's a different story. Tata Power has 12,772 MW of installed capacity, but thermal capacity has been increased to just 8,860 MW. Instead, it now has 3,913 MW of clean power, including 1735 MW of solar and 932 MW wind, 871 MW hydro and 375 MW of waste heat recovery. The increase in thermal capacity was due to an acquisition of Prayagraj Power in 2019. "However, this is likely to be amongst the last investments in coal-based power plants as we turn our sights completely towards cleaner energy," Prayeer Sinha, CEO and Managing Director, Tata Power, told shareholders last year.

Fresh investment in new distribution solutions like micro-grid, solar rooftop and solar water pumps in both urban and rural areas are aimed at taking its share of clean and green energy from 30 per cent in 2020 to around 50-60 per cent in 2025. It has a large pipeline of over 1,240-MW solar capacity under implementation in more than a dozen projects.

Tata Power's archrival Adani Power has an even more transformative story. In 2015, Adani had green power capacity of just 300 MW. It was predominantly a thermal power firm with a capacity of 10,440 MW of thermal assets, thanks to aggressive acquisitions and huge greenfield coal-fired plants built over the years. Six years down the line, Adani has added just 2,000 MW to its operational thermal capacity of 12,450 MW. Another 1,600 MW is under construction. But, in the meantime, Adani Group shifted focus dramatically to renewables and incubated separate renewable companies. Currently, it is the world's largest green energy developer with 14,800 MW of renewable energy projects (3000 MW are operational and 11,845 MW under implementation). In the last four years, when the solar power industry in India was growing at over 25 per cent, Adani grew 161 per cent. Chairman Gautam Adani has set an ambitious target to be the world's largest renewable company by 2025 with just green energy capacity of 25,000 MW.



Peak-load demand and energy requirements in India are likely to rise from over 1,70,000 MW in FY20 to over 4,30,000 MW by 2037, at a compounded annual growth rate (CAGR) of over 4 per cent due to economic recovery and rising population. India's energy sector, meanwhile, is going through a major transition, from highly polluting coal-based power generation to green energy resources such as solar and wind. If India added 82,000 MW of coal projects during 2010-15, solar generation capacity addition during the same period was 3,000 MW from almost zero. In the next five years, when the country added another 58,000 MW of coal capacity, solar addition grew by 34,000 MW. During 2020-2025, India is expected to add another 32,000 MW of coal capacity, with solar contributing 62,000 MW. In the next five years from 2025 to 2030, while coal capacity addition will dwindle to 1,000 MW, solar will increase to 1,18,000 MW, according to the estimates of the International Energy Agency (IEA).

The Transition

While efforts are on to reduce India's carbon footprint, experts say despite the ambitious targets, the country's reliance on coal will still have to continue for at least two-three decades to ensure energy supply to its growing population.

India is the world's third-largest energy consuming country. Consumption has doubled since 2000, with 80 per cent of demand still being met through fossil sources such as coal, oil and solid biomass. If the country's total energy demand in 2000 was 441 Mtoe (millions of tonnes of oil equivalent, a unit of energy used to describe the energy content of all fuels), it increased to 880 Mtoe by 2020. In 2000, coal (33 per cent), oil (25 per cent), natural gas (6 per cent), traditional biomass (26 per cent), renewables (1 per cent) and other sources (9 per cent) accounted for primary energy demand. With rising population, income and urbanisation, demand for energy increased, which drove investments in thermal-fired plants. By 2020, the energy mix included coal (44 per cent), oil (25 per cent), natural gas (6 per cent), traditional biomass (13 per cent), modern renewables (3 per cent) and other resources (9 per cent), IEA estimates.

The government decided not to promote coal-fired power plants and launched an ambitious plan since 2015, with a target of 4,50,000 MW of renewable capacity by 2030, according to the goals set out under the Paris Climate Agreement. The Indian pledge is to improve the share of non-fossil fuels in electricity generation capacity to almost 60 per cent, well above the targeted 40 per cent. Coal-fired power plants in India account for 1,104 million tonnes (MT) of CO2 emissions, iron and steel industry 304 MT, cement 211 MT and other industries 247 MT, according to IEA estimates.

Coal vs Renewables

Experts, however, are skeptical about the targets and fear missing the renewable deadlines. "High dependence on fossil fuels (above 60 per cent of the generation mix) and growing demand will keep coal relevant in Asia-Pacific markets such as China and India for the next one-three decades. While "China may under-promise and over-deliver on its renewables targets, India may over-promise and under-deliver," says a S&P Global Ratings report published in March on 'Energy Transition In Asia-Pacific'.

According to the study, though renewable addition is likely to be more than two times for coal in India, new plants will continue to be built until 2030, and will contribute more than 50 per cent of energy needs (down from 70 per cent in 2020). S&P predicts that Indian coal-fired power plants will produce more than two times of their 2020 level of electricity by 2050, thanks to increase in generation with a young coal-fleet (65 per cent capacity is less than 10 years old) and higher utilisation.

Experts say economics, rather than emissions, will drive energy transition for India, though the country will fall short of its targeted 1,75,000-MW renewable capacity by 2022 and reach only half the target by



2050. Over \$500 billion worth of investments are likely to happen in renewables over the next 10 years in the country, with a decline in cost per megawatt for solar investments. An International Renewable Energy Agency (IRENA) report estimates that cost of setting up solar projects in India dropped by 80 per cent between 2010 and 2019. While the cost of setting up a new power plant of 1 MW (gas/coal) is about Rs 4-5 crore, that of solar has come down to less than Rs 4 crore due to intense competition and aggressive bidding. Aversion to coal and a rush for green finance may help renewable projects, but developers are likely to face financial burden as well. Higher import duties on Chinese panels could delay rollout and affect costs, while storage will be key to success of new and round-the-clock power technology, says S&P.

By 2040, India will have 1,40,000 MW of battery capacity, the largest for any country, and close to 2,00,000 MW in the 'Sustainable Development Scenario', says IEA. Opportunities for huge renewable additions are also opening up a big market. If Indias market share for batteries was less than 2 per cent and worth \$100 million in 2019, it is expected to grow as a \$22-billion industry with nearly 12 per cent global market share by 2040. If the wind energy technology market was less than \$2 billion in 2019, it is poised to grow over \$11 billion by 2040. Solar PV industry is also set to grow from just over \$2 billion to nearly \$10 billion.

In the near term, India's large grid and coal-fired power fleet will meet the bulk of flexibility needs, supported by hydropower and gas-fired capacity. "Keeping up the momentum behind investments in renewables also means tackling risks relating to delayed payments to generators, land acquisition, and regulatory and contract uncertainty," according to IEA.

Rooftop and on-ground solar projects are also gaining in India, as corporates and industrial hubs invest in reducing carbon footprint and securing dedicated and cheap power supplies, says Sanjeev Aggarwal, Managing Director and CEO, Petronas-owned Amplus Solar. "We already have 200-plus commercial and industrial customers. We own and manage a portfolio of 800-plus MW of operational and underconstructed solar assets across India with 400-plus projects spread over more than 275 locations," he adds, citing that CO2 abatement over the lifetime of these projects amounts to 12.19 million metric tonnes.

Despite the increase in generation of green power, one concern is how to meet peak load demand and bring stability to the grid, as investments in distribution and last-mile connectivity are still an issue in India. "India has been adding 10,000 MW over the last two-three years, and needs to add three-four times of that to reach the target. The rise in penetration of renewables will mean more demand for storage and better-quality power," says N. Venu, Managing Director, Hitachi ABB Power Grids India, adding, power distribution companies have to invest in technologies across the spectrum - supporting interconnections, building a backbone for transmission, renewable energy integration, building next-generation HVDC (high voltage direct current) and other technologies to improve quality and delivery of electricity.

Some such projects are already underway. Hitachi ABB Power Grids constructed the North east to Agra HVDC line, or the power super highway, which can carry close to 6,000 MW of power over 1,800 km. Siemens recently commissioned India's first HVDC link featuring voltage-sourced converter (VSC) technology, a 2,000-MW electricity transmission system, consisting of two links between Pugalur in Tamil Nadu and Thrissur in Kerala. "This project can ensure reliable power supply, improve the grid's stability and facilitate efficient use of renewable energy, driving the energy transition to more sustainable, reliable and innovative systems," says Gerd Deusser, Executive Vice president and Head, Energy, Siemens.

Covid-19 affected capacity additions and clean energy plans across the globe, and reduced India's power consumption by 15 per cent in the last one year. Experts say India will grow once the pangs of the



pandemic are over, but dependence on coal for power production will continue for another one or two decades. The momentum in solar capacity additions, shift to cooking gas and 100 per cent electrification in rural areas, electric vehicles, green buildings and renewed focus on clean fuels, including natural gas, augur well for India, in its pursuit to become a carbon neutral country, they add. <u>Source</u>

Market coupling is beneficial for the market not 1-2 players: PXIL MD

Q&A with PXIL MD & CEO Prabhajit Kumar Sarkar

Monopoly in any market implies there is something wrong with the structure of the market, not with the capabilities of the competitors, Power Exchange of India managing director and chief executive officer Prabhajit Kumar Sarkar said in an interview to ET's Sarita C Singh. Sarkar said market coupling is for the benefit of the market and not one or two players and hence should be implemented at the earliest. Edited excerpts:-

Q: PXIL has been advocating for market coupling. What benefits does it hold for market participants and the exchange?

A: For markets, any monopoly intended or unintended is not a healthy sign. Particularly when a segment is 100% dominated by an entity, while other segments have 40:60 kind of share. It implies there is something wrong with the structure of the market, not with the capabilities of the competitors. The regulators have already identified that the collective segment has to undergo market coupling. By virtue of the regulatory framework, the day-ahead and RTM spots are created in such a manner that there can be no innovation, in terms of auction, processes or information.

With two exchanges operating in the same geography for the same period of delivery with two independent order-books, there is bound to be different prices. So, for the same delivery period, if there is a price difference of 20-30 paise, obviously there are questions raised within the organisation of the participants which they find difficult to answer.

The fundamental point has been recognised by the policy makers and they allowed market coupling as a concept has been introduced through regulations, where all order books are opened up would be combined together and are operated by a market coupling operator would discover the market price, based on which the order books would be finally settled via the exchanges.

We believe that true competition can only come in once the conversation shifts from pricing to true discovery of prices, better services, access to markets, cheaper finances and areas that participants need to focus on. This unfortunately is not happening currently because they are tied up in issues related to pricing.

Q: Why do you think market coupling is required to foster competition in the day-ahead spot?

A: Among the different types of contracts which exchanges can provide, there is one particular segment which is unique to the power sector that is the day-ahead spot. If you look at any other commodity exchange there are multiple spots, all of these work on the principle of continuous matching. For the same contract, you will have multiple buyers and sellers placing their orders open and visible to everybody. If the prices match, transactions take place. The prices of a stock on NSE and BSE would be hardly different. And the reason for that are a set of market participants called the arbitrageurs who make sure prices converge quickly. Same continuous matching is used in commodity exchanges and in the term-ahead market on the two power exchanges.



The day-ahead spot is where we are dealing with buyers and sellers placing orders without visibility of any other participant during an auction period for the next-day's delivery. The price discovery for each of these 96 Time Blocks of 15 minutes each, takes place after the auction window closes. The price that comes out is therefore an after -effect of the transaction. Since it is an after- effect, at no point of time for two market places would the order book be exactly the same. There is bound to be price difference for the same time block leading to comparisons by participants. Because of this nature of price discovery in the day-ahead spot on power exchanges, worldwide it is treated as a special case. Different order books and differences in prices for the same delivery period demonstrate that the final outcome is not optimised. Market coupling is the only way of ensuring that transactions in the collective segment are optimal for the country.

Q: Have there been any successful market coupling models in the world?

A: Most markets in the world work with one power exchange, other than some countries like Germany, where the multiple exchange model failed, and UK. In India, we have two power exchanges and the third one is in the wings – making it unique in the world. In Europe, market coupling has been done successfully and due to that, now competition has thrived and it has allowed multiple exchanges in the same geography and same delivery period to compete properly.

Q: According to you, when should coupling be implemented in India?

A: It needed to be implemented ab initio. This should have been done a few years back. The moment we started integrating other neighbouring countries, we are tying up prices in day-head with DSM, talking about launch of financial derivatives, isn't it time for market coupling? We need to create a nationwide reference price which will be used for multiple associated markets.

Deepening of markets will happen only when all market participants get a surety that the reference price of the market is robust and they are not with only one market platform.

Q: A third exchange is in the offing. Do you think there is place for more in the Indian power market?

A: Frankly any competition is good. We want people to come in and compete. However, for competition to thrive, the rules of the marketplace need to be fair for everyone. Market coupling, which is for the benefit of the market and not for one or two players, is an example of such rule based development of the market.

Q: What would be PXIL's focus areas for growth?

A: Starting 2018 onwards PXIL has been a profitable enterprise. We have maintained our profitability over the last four years and met all regulatory capital requirements as well. Even with the huge amount of surprises last fiscal, PXIL has had a profitable year. In the segments of the power market where competition can thrive, primarily the term-ahead market and RECs, we have made our presence felt completely. In the term-ahead market we have about 60% market share and we have grown it over the last three years. We doubled it from what it was last year, and last year was double of previous year. That is one area where we have been able to demonstrate the benefit of competition to market participants.



PXIL's focus is to continuously engage with market participants, continuously demonstrating capabilities. We had opened up our day-ahead spot on PXIL last year. We have seen participation from many utilities.

We believe that the customer has a choice and we need to be the first choice. We need to innovate and provide them products which suit them. The market has also improved on the back of less congestion in transmission. There is more awareness that term-ahead contracts fulfil requirements of the participants offering visibility and certainty and it needs to be nurtured and participants have to be given more bouquets of contracts in this space. We also look forward to launch contracts of longer tenure and duration once the SEBI-CERC issue settles down. This will allow participants to efficiently manage their portfolio. Source

India's fuel allocation through spot e-auction rises 43% in FY 21

New Delhi: State-owned CIL allocated 42.51 million tonne of coal in 2020-21 under spot e-auction scheme, registering a year-on-year increase of 42.5 per cent. Coal India Ltd (CIL) had allocated 29.83 MT of the dry fuel in 2019-20, according to government data. Fuel allocation by CIL under the scheme also increased to 5.30 MT in March, from over 2.53 2 MT in the corresponding month of 2019-20, it said. Coal distribution through e-auction was introduced with a view to providing access to coal for such buyers who are not able to source the dry fuel through the available institutional mechanism, according to CIL website.

There'll be a far more focus on healthy living, healthy eating, avoiding co-morbidities, said Saugata Gupta, managing director and CEO, Marico.

The purpose of e-auction is to provide equal opportunity to all intending buyers for purchasing coal through single window service. CIL, which accounts for over 80 per cent of domestic coal output, is eyeing one billion tonne of production by 2023-24. The state-owned firm will pump over ₹1.22 lakh crore in projects related to coal evacuation, exploration and clean coal technologies by 2023-24 to achieve the target. <u>Source</u>

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)			
SI. 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

Lighting up Lives!



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

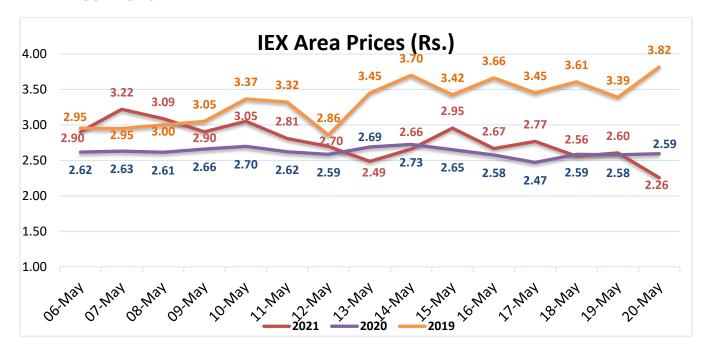
Result of various tenders:-

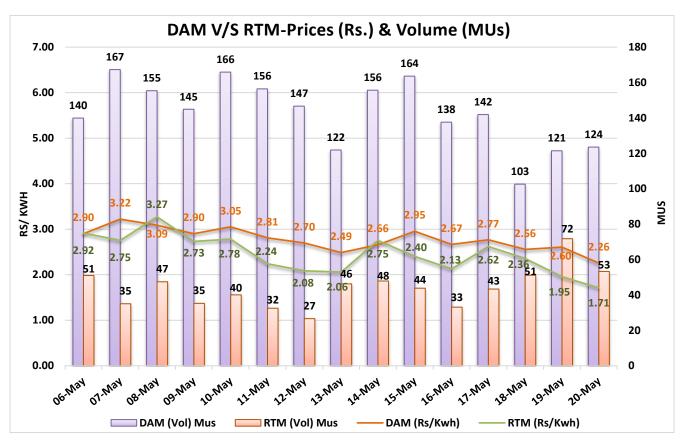
PSPCL/Short/21-22/RA/7					
SI. No.	Quantity(MW)	Period	Time Block (Hrs.)	Price (Rs./KWh)	
1	600	01.06.2021 to 09.06.2021	00:00 to 24:00	3.52	
2	1800	10.06.2021 to 15.06.2021	00:00 to 24:00	3.64 - 4.7	
3	600	16.06.2021 to 30.06.2021	00:00 to 24:00	3.61 - 4.39	
4	600	01.07.2021 to 15.07.2021	00:00 to 24:00	387 - 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				
SI. 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				
SI. 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	al, 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		2.906
Jet Fuel	Jet Fuel U.S. Gulf Coast Kerosene-Type Jet Fuel Spot Price FOB		1.78

(Source: ICMW METI Bloomberg Index Mundi)

Weather (Estimated for next fortnight)

City	Max Temp	Min Temp	Precipitation (Probability)	
DELHI	38	27	3%	
MUMBAI	32	28	51%	
KOLKATA	33	28	59%	
CHENNAI	37	27	22%	

(Source - Accuweather)

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