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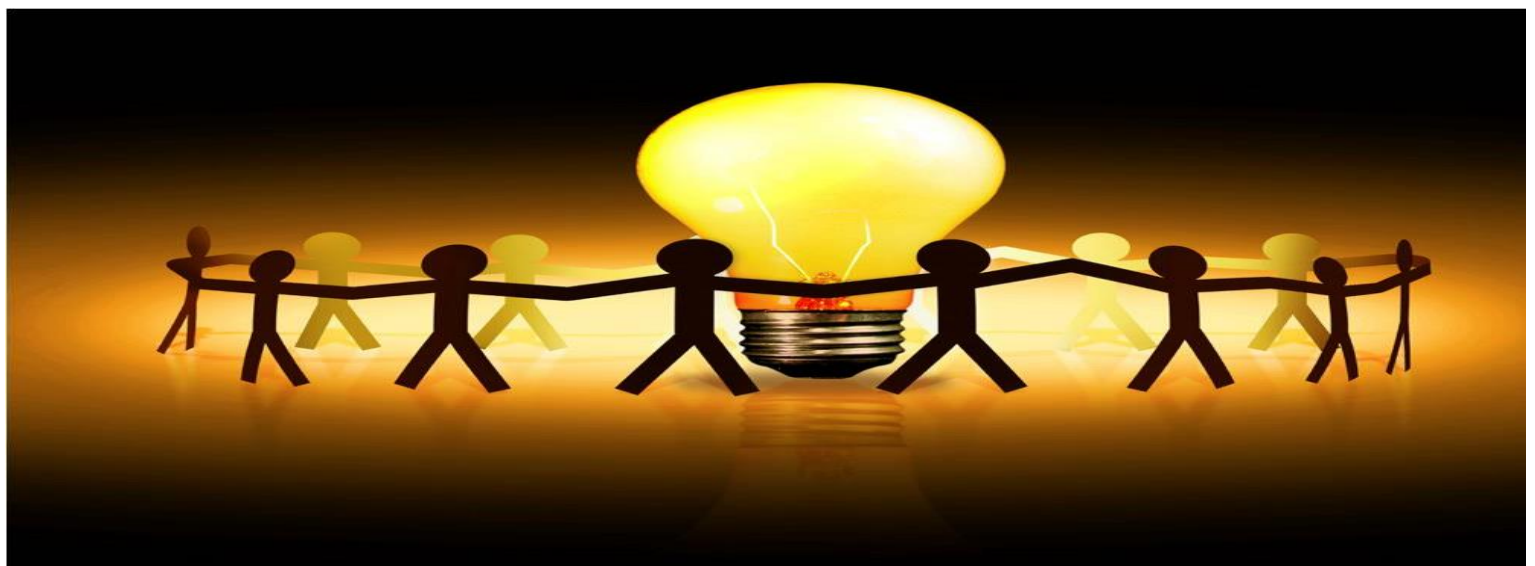
TPTCL'S E-NEWS LETTER



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Tata Power Trading Company Limited (TPTCL)



Power Market News

India's electricity supply improves in cooler pre-monsoon: Kemp

India's electricity transmission network supplied a near-record amount of power in April but the system was much more stable than the year before thanks to lower temperatures and the return of some gas-fired generation. Total electricity supplied was almost 131 billion kilowatt-hours (kWh), the fourth-highest monthly amount on record, based on data from the Grid Controller of India's National Load Despatch Centre.

But the total was down by more than 2.3 billion kWh (-1.8%) compared with the same month a year earlier when much of the country was sweltering in an early heatwave ("Monthly operation report", Grid India, May 24). On the densely populated northern plain, temperatures in New Delhi's Palam suburb averaged 28.2 degrees Celsius (82.8 degrees Fahrenheit) compared with 33.0 Celsius in the same month a year ago, cutting peak electrical loads for refrigeration and air-conditioning.

At the same time, extra generation was provided by solar farms (+1.8 billion kWh, or +23%) and coal-fired generators (+0.3 billion kWh, or +0.2%). These increases helped offset some of the reduced output from hydroelectric generators (-3.0 billion kWh, or -25%) and gas fired units (-0.3 billion kWh, or -10%). The combination of lower temperatures and increased solar generation significantly reduced stress on the transmission system, especially during the afternoon peak.

System frequency fell below the minimum acceptable threshold of 49.9 cycles per second (Hertz) only 11% of the time in April 2023 compared with a record 32% in April 2022. Although gas-fired generation was down slightly compared with the previous year, it rose by more than 0.5 billion kWh compared with March, to the highest level for 12 months, as the cost of imported liquefied natural gas fell.

But despite lower average temperatures, peak demand increased by 4.2% compared with the year before, reflecting underlying load growth from the growing number of appliances connected to the system. Rapid underlying load growth will continue to make the system vulnerable in future heatwaves.

COAL SECURITY

Coal-fired power generators held stocks equivalent to 12.8 days of consumption at the end of April, up from just 8.0 days at the end of the same month in 2022, reducing the risk of generator outages as a result of fuel shortages.

Domestic coal production increased by 35 million tonnes (+10%) in the first four months of 2023 versus the same period in 2022 as the government pressed for more output to avert a repeat of the previous year's blackouts.

The volume despatched to power producers via the railroads was up by a more modest 12 million tonnes (+5%) reflecting congestion on the network. Combined with lower temperatures and lower generation, the increase in coal deliveries was sufficient to rebuild generator inventories to a more comfortable level and avoid previous fuel problems. [Source](#)

Power minister aims to clear legacy dues, criticises politicization of electricity

Criticism of the politicisation of electricity in India, particularly through populist measures such as free power, has been raised by Union Minister for Power and Renewable Energy, RK Singh. Speaking at a conference of the Confederation of Indian Industry (CII), Singh highlighted the government's aim to

eliminate all legacy dues owed by distribution companies (discoms) to generating companies (gencos) within the next 8-9 months.

Singh emphasised that the government has taken steps to ensure the viability of power utilities by implementing reforms related to payment discipline. This includes addressing both current and legacy dues. The minister stated that legacy dues have been reduced to nearly 50% of their previous amount and the government intends to clear them completely within the given timeframe. He also mentioned that current dues have been cleared up to date.

In addition, Singh pointed out that Aggregate Technical & Commercial (AT&C) losses of discoms have decreased from 22 percent to 17 percent and the government aims to further reduce it below 15 percent in the upcoming year. Singh expressed concern about the politicisation of the power sector over the years, stating that there is no such thing as free power. He explained that when power is claimed to be free, it actually translates into increased taxes for taxpayers, as they ultimately bear the cost.

The minister highlighted that such practices have led to increased liabilities and vulnerabilities within power utilities. To address these issues, the government introduced late payment surcharge rules and the revamped distribution sector scheme (RDSS), which enforce timely payment of dues. If the dues are not paid, the electricity supply to the utility is cut off.

Encouraging stakeholders to invest in the power sector, Singh noted the increasing demand and the shift in trends. He mentioned that assets that were previously being sent to the National Company Law Tribunal (NCLT) were now being bought at higher rates due to growing demand.

Singh also highlighted the shift toward selling power in the exchange rather than entering into long-term power purchase agreements (PPAs), indicating a reversal of the previous trend. Overall, the minister's remarks underscore the government's efforts to address the challenges posed by the politicisation of electricity in India, improve payment discipline, reduce dues, and enhance the viability of power utilities.

[Source](#)

Govt crackdown soon on developers of delayed power projects: Minister RK Singh

Power and New & Renewable Energy Minister RK Singh said the government will crack down on developers of power projects, who miss the scheduled commercial date of operation or deadline to complete the project. Addressing a CII conference, Singh said the electricity generation capacity addition is a big challenge, as people are sitting on several projects won under the bidding process.

Singh said that all these projects (power projects) are won under the bidding process and if they miss the SCOD (scheduled commercial date of operation or deadline to complete the project), then the developer will be banned from participating in project bidding for one year.

On the second such incident, the developer will be banned for five years, Singh said, adding that he is going to put this (rule) in (policy). Power project developers are waiting for demand to grow but this will not happen, he said. Singh also said that until battery energy storage becomes viable, India would have to add thermal power capacity to meet the demand. At present, the battery storage is ₹10 per unit and the energy rate is ₹2.30, he explained. He also said that he is pushing the case for another production-linked incentive scheme for grid-scale battery energy storage. [Source](#)

Power tariff remains unchanged in UP for 2023-24

LUCKNOW: In a big relief to electricity consumers, the UP Electricity Regulatory Commission (UPERC) has kept the power tariff unchanged for 2023-24. This would be the fifth year in a row that the power tariff in UP has not been increased – the last revision was done in 2018- 19. The development also assumes much significance in the run-up to the Lok Sabha polls due next year.

The power consumers, essentially in the urban areas, would thus continue to pay their electricity bills as per the earlier slabs. The electricity regulator which held separate public hearings in all distribution companies junked the proposal put forth by the UP Power Corporation Limited (UPPCL) suggesting a hike between 18% to 23%.

Announcing the tariff, UPERC chairman, RP Singh and commission members BK Srivastava and Sanjay Kumar Singh said that the tariff was not increased because the expenditure suggested by the UPPCL was “not prudent”. The UPPCL had proposed a revenue requirement of Rs 92,564 crore for 2023-24. The commission however approved Rs 86,579 crore. A senior official in the UPERC said that there was no justification for increasing the tariff since the UPPCL was not able to justify any rise in expense. [Source](#)

Energy insecurity biggest threat to sustaining India’s elevated growth rates in longer term, says CEA

Chief economic advisor V Anantha Nageswaran said issues around energy security are “the single-biggest worry” for an emerging economy like India for sustaining the elevated growth rates of the past two years over the medium-to-long term. While addressing global warming assumes significance, it’s equally important for developing countries to ensure that there is adequate and affordable energy available for powering economic growth, he said, as he called on global lenders not to abruptly shun fossil-fuel projects in the name of green economy.

The Indian economy grew 9.1% in FY22, aided by a favourable base, and is expected to have expanded 7% or more in the last fiscal year. “If the financial sector completely avoids funding fossil fuel-based power generation projects, then we will be putting in jeopardy economic growth,” he said at the annual session of the Confederation of Indian Industry. “And if we put economic growth in jeopardy, then generations of fiscal and private sector resources will be in jeopardy,” he added.

Private capex

Nageswaran said private investment may unfold “gradually rather than too furiously”. In sectors like steel and cement, it has already picked up, as capacity utilisation has gone past the crucial 75%-mark. “I am optimistic about the private sector capital formation cycle in the country....It’s already unfolding and perhaps it may unfold gradually rather than too furiously,” he said. “It’s unfolding at a steady pace, which is good enough for us,” he added.

In the case of the US, I don't think rate cuts are so imminent. They have given an indication of a pause in June.

Robust financial sector

The Indian financial sector is doing exceedingly well amid global uncertainties with robust profitability and, therefore, it’s the right time to put in place systems that would ensure longterm growth and health of the system, the CEA said.

So elongation of the ongoing, strong financial and economic cycle is critical for a competitive economy, he said.

"Now we (financial sector entities) have great balance sheets, profitability has come back and there is great appetite among lenders and borrowers. It's all good news. But it's important to ensure that this cycle lasts longer and all the lessons learnt from the previous cycle (when indiscriminate lending took place) are not forgotten quickly. We shouldn't do that mistake," he said.

Nageswaran called for boosting investments in technological advancements and skilling by financial sector entities to ensure "credit judgement is done as scrupulously and correctly as possible, and more importantly, as realistically as possible". This would help ensure that "we have a longer financial cycle and a longer macro-economic upswing", he said, adding that such a situation is better than "facing overheating (of the economy) and then retrenchment every three or five years as has happened in the past". [Source](#)

UP electricity consumers can claim compensation for service faults

Electricity consumers in Uttar Pradesh will now be able to legally claim compensation for a default in the delivery of services by the UP Power Corporation Ltd (UPPCL). The UPPCL has implemented the law made in this regard by the UP Electricity Regulatory Commission (UPERC) more than three years ago. "UPPCL chairman M. Devraj has informed the UPERC that the corporation has implemented the compensation law through an online software in the entire state," a UPERC official said.

According to the order issued by Devraj in this regard, consumers can register their complaint about a service default as well as their compensation claim on the corporation's 1912 toll-free number, in case the complaint is not resolved within the specified timeframe.

"The compensation number will be generated online separately to the consumer concerned and the claim too will be processed online. Compensation will be provided to all eligible complainants within a maximum of 60 days from the date of lodging the complaint," the UPPCL chief said in his order.

The Standard of Performance Regulations was notified by the UPERC in December 2019, fixing the maximum time for the delivery of services. It also prescribed fines to be imposed on discoms in case of a default. As part of the Regulation, standards of performance will form the basis to measure performance against the standards for the licensee in providing service and ensuring that distribution companies meet minimum standards which are necessary from the perspective of consumers.

The amount of compensation claimed by consumers will be different for different service defaults. The UP Rajya Vidyut Upbhokta Parishad president, Awadhesh Kumar Verma said that the implementation of the law will help consumers get better and time-bound services. "We had been demanding the execution of the compensation law by discoms for a long time," Verma said. [Source](#)

Power prices feel the heat on high demand; plants have enough coal

Electricity prices on the trading exchanges increased over the last week, indicating higher demand as temperatures spiked in most parts of the country. Power plants reported adequate coal stocks. The month started with ₹2.8 a unit on the IEX in the day-ahead market, increased to ₹6 on May 12, and then to ₹6.7 per unit on May 18, as the mercury rose over the period. The average price in May so far has been ₹4.7 a unit compared, lower than the ₹6.4 per unit in the same period last year. This is despite the 'maximum demand met' touching an all-time high of 221 GW on May 17. Wet spells in the last two days in West

Bengal and some parts of Andhra Pradesh and Telangana, have led to prices lowering to ₹5.6/unit as on May 22.

"There was slight correction in prices because of an expected fall in electricity demand in the coming days, as western disturbances are estimated to bring wet spells in some parts of the country," said Rohit Bajaj, head of business development, regulatory affairs & strategy, at IEX. Lower-than-expected temperatures in early summer and preparedness for projected peak demand of around 231 GW helped in maintaining sufficient capacities for any increase in power demand.

"Many state discoms have started meeting a major portion of their expected demand through e-reverse auction and many other monthly and weekly contracts available on exchanges," said Naveen Singh, head of business development at Hindustan Power Exchange. "These not only give them certainty of power but also keeps the day-ahead market prices under check."

COAL STOCKS

Despite a rise in demand, coal stocks at the power plants did not see much depletion during the period owing to better planning, planned import and increased captive supply, two senior officials said. The stock at power plants as on May 20 was 36.3 million metric tonnes, including import, marginally lower than the 36.5 million metric tonnes on May 1, as per government data.

"The current supply of domestic coal to power plants is around 2.2 million metric tonnes per day, whereas the consumption is around 2.3 million metric tonnes. So, depletion is marginal," a senior government official said. Coal output at captive power plants has also increased, which has reduced the burden on the supply chains, leading to better availability of rakes for other units. [Source](#)

Unleashing change: The new electricity act and India's power sector

In FY23, India witnessed a 9% growth in power demand, surpassing the GDP growth for the second time in three years. Over the past decade, India's energy demand has nearly doubled, reaching 1.6 terawatt hours. This increasing demand, coupled with the potential enactment of The Electricity (Amendment) Bill, 2022 (EA 2022) during the monsoon session, has attracted the attention of numerous investors seeking potential investment opportunities. In this article, we will examine the current state of the power sector, the challenges it faces, and the policy-driven solutions being considered.

In India, the subject of "electricity" falls under the concurrent list of the country's constitution. While the central government holds responsibility for overall development, the individual states are accountable for the provision of electricity to their respective residents. The electricity delivery system in India consists of four significant value chains: coal mining, generation, transmission, and distribution. Before addressing the issue at hand, let us briefly examine each of these value chains.

Coal: India uses c950 million tons (mt) of coal to generate power; Coal India produces around 700mt and India imports c150mt. Coal mining is the only vertical within the power value chain that generates super-normal profits.

Generation: India's power generation capacity stands at 417 gigawatts, with 60% being derived from fossil fuels and the remaining balance comprising hydro, nuclear, and renewable sources. Over the past decade, the generation capacity has nearly doubled, with renewables witnessed a significant increase from around 10% to close to 40% today. In terms of ownership, private companies have 50% of the generating capacity, while the remainder is equally divided between the central and state governments. Electricity can be sold through long-term agreements (PPAs) or in the spot market. The profit distribution

within this sector is diverse, as government-run entities and certain private generators earn fixed returns, while untied capacity is subjected to the uncertainties of the spot market.

Transmission: Involving the transfer of electricity from generating stations to end markets for consumption. This is achieved through interstate routes, traditionally managed by PowerGrid, or intra-state routes, which involve generation and consumption within the same state and are overseen by state Transcos. Entities were allowed to earn fixed returns until a tariff-based competitive bidding (TBCB) route was recently introduced. This sector is reasonably profitable within the value chain.

Distribution: Power is transmitted at high voltages over long distances but is stepped down to lower voltage around consumption clusters. That last-mile delivery is handled by the distribution sector – and is entirely in the jurisdiction of state authorities. Last year, losses in distribution stood at over Rs 900 billion and total outstanding loans to Discoms were close to Rs 6 trillion. This is India's Achilles heel.

In FY21, of 100 units of electricity sold in India, only 84 were billed, and money was collected for only 77. Put differently, the Aggregate Technical and Commercial losses in India stood at 23%. In contrast, they are at 6% in the USA, 5% in China and 4% in Japan. In addition, there is cross-subsidization. Agriculture accounts for 21% of consumption but contributes only 3% to revenues. As a result, commercial and industrial users are overcharged.

These challenges lead to additional complications. The distribution losses result in delayed payments for the power procured, with outstanding dues extending up to six months. Also, banks exhibit reluctance to extend loans, hindering Discoms' ability to purchase power at lower rates through PPAs. Consequently, power generators are compelled to sell electricity on spot markets, even at the expense of heightened market volatility. Ultimately, the entire power system remains in a state of uncertainty. It begs the question as to why a viable solution to this problem has yet to be found.

Well, numerous measures have been attempted to address the persistent challenges, yet the underlying issues persist. In 2002, a bailout package was proposed, with states assuming loans totalling Rs 350 billion and granting a 50% interest waiver. In 2012, a financial restructuring package was announced, with states taking over Rs 569 billion in outstanding loans. The UDAY scheme was launched in 2015, accompanied by the issuance of bonds worth Rs 2.3 trillion. In 2020, a liquidity infusion scheme was introduced, providing Discoms with INR 1.3 trillion in loans from PFC and REC. Moreover, in 2022, a revamped Discom scheme was implemented, with the central government pledging assistance worth INR 1 trillion. Despite these efforts, a permanent solution to the underlying problem remains elusive.

Among the various initiatives undertaken, the UDAY scheme launched in 2015 held the most promise. The scheme's solution comprised four key components: (a) Increasing coal production by Coal India while reducing coal imports, leading to savings of INR 280 billion, (b) Reducing AT&C losses by 10 ppt, resulting in savings of INR 450 billion, (c) Enhancing efficiency in payment processes and enabling states to assume the debt burden, resulting in interest cost savings of INR 175 billion, and (d) Implementing a marginal increase in power costs to generate additional revenues of INR 650 billion.

To reduce AT&C losses, states made commitments to implement several measures. These included the installation of meters for 11kV feeders, as well as distribution transformers in both urban and rural areas by 2019. States also agreed to physically segregate the feeders supplying electricity to the agriculture and non-agriculture sectors. Furthermore, they aimed to introduce smart metering at the consumer level, implement loss-based load shedding, and encourage greater private sector participation in the power distribution sector.

Collectively, the implementation of these measures was projected to generate a substantial sum of over INR 1.5 trillion, providing a potential resolution to the power sector's challenges by 2020. Initially, the situation appeared promising as states signed MOUs with the central government and issued bonds. New capital expenditures were undertaken diligently, resulting in a reduction of Discoms' losses by the fiscal year 2018. However, the progress was derailed by the general elections in 2019 and the subsequent impact of the COVID-19 pandemic in 2020. As a result, the power sector finds itself back at square one.

So, what needs to be done? One potential solution is the privatization of distribution, which has shown positive outcomes in certain regions. For instance, in New Delhi, AT&C losses decreased from 45% in 2002 to 9% in 2019. Similarly, in Haryana, losses reduced from 27% in 2013 to 18% in 2019, in Andhra Pradesh from 18% in 2008 to 11% in 2015, and in Manipur from 52% in 2016 to 30% in 2019. However, the success of such measures ultimately depends on the political will to implement them. In some states like Odisha, Madhya Pradesh, Uttar Pradesh, Rajasthan, and Jharkhand, there have been instances of license cancellations as well, indicating the complexities involved in this process.

Secondly, EA 2003 allowed open access where service (electricity) was separated from infrastructure (wires). Theoretically, customers are free to choose their supplier of electricity. In practice, varying state policies, high charges and procedural hurdles imposed by discoms have led to slow progress.

Thirdly, smart and prepaid meters can be integral to the solution. Currently, only 83% of bills are collected despite electricity theft being a punishable offence. Political will is needed to tackle this issue effectively. The EA 2022 was introduced in the Lok Sabha in August 2022 and subsequently referred to the standing committee for review. The government plans to present the bill during the upcoming monsoon parliament session (in July 2023) per some news reports.

The bill encompasses several ostensibly favourable solutions. However, at the heart of the matter lies a fundamental dilemma: Should electricity be considered an essential public service, necessitating low prices for the welfare of citizens, or should it be treated as a commodity subject to fair market pricing?

Many political parties, believing in the former argument, make poll promises to offer free electricity if voted to power. Providing free power at the consumption stage, instead of a Direct Benefit Transfer into the user account (a) creates a moral hazard, (b) encourages continued pilferage and unauthorised consumption, and (c) prevents investments required to find a sustainable solution.

As an eternal optimist (which I was during the UDAY scheme too), I remain hopeful that the implementation of the EA 2022 will bring about the much-needed transformation. If earnestly executed, this legislation has the potential to unlock significant changes and create ample opportunities for investments throughout the power sector value chain. Conversely, promises could remain on paper only and the modest returns of NTPC (25%) and PowerGrid (47%) observed over the past five years will continue to be the norm. [Source](#)

How the power prices in India remained unaffected by the global crisis - A lesson in resilience

The last year was marked by an intense geopolitical and geo-economic churn, that went on to create several disruptions in the global power markets. Just as the world recovered from the pandemic and economic activities began to gain momentum, the ongoing Russia-Ukraine conflict threw the supply of natural gas and coal in disarray. This led to prices of imported coal and natural gas shooting up, which consequently caused the per-unit cost of power to reach high levels. These increased costs have created

inflationary pressures in global markets, such as in Europe and China, and created a perfect storm for the energy sector globally.

In Europe, EU's post-war sanctions, reduction in imported fossil fuels from Russia and diminished gas flows quickly spiked prices. Natural gas prices in Europe increased by 128% in the six months since the start of the Russia-Ukraine war. The price of March contract coal traded on the API2 Rotterdam Coal Futures Market increased 96% during February to August 2022. As per IEA, high natural gas prices in 2022 led to significant fuel switching to coal in electricity generation in Europe. In the US, Henry Hub prices jumped over 9% to a high of almost \$8.20 per MMBtu, the highest level since September 2008. As gas frequently sets the price at which electricity is sold in Europe, the power prices in the region soared as well.

The impact of the crises was particularly severe for the European power markets that were caught in a cycle of supply shortages and high energy prices. The gas shortages caused by the Russia-Ukraine conflict, coupled with low hydro storage levels across European countries due to drought, low nuclear power availability in France and thermal power plant closures across the continent due to aging, aggravated the European power crisis in 2022, and pushed the European Commission to consider a potential overhaul of European Union (EU)'s electricity market rules, including a proposal to make Contracts for Difference (CfDs) mandatory to encourage setting up of more renewable capacity for getting fixed price long term contracts. The price of shielding consumers from the inflationary impact of electricity price volatility has figured at nearly 800 billion Euros for the continent. EU members agreed on voluntary targets to cut gas and electricity demand through various measures like, efficiency improvement, higher capacity of renewables, etc.

As per IEA, Europe witnessed the most substantial impact on wholesale electricity prices, which were on average, more than twice as high as in 2021. In many European countries, the wholesale electricity prices in H2 2022 exceeded the second-half average prices between 2019 and 2021. In H2 2022, the price shot four-fold in France to cross EUR 320/MWh, while it reached almost EUR 330/MWh in Germany. On the Nord Pool power exchange, average wholesale electricity prices remained at unprecedented high levels in H2 2022, exceeding EUR 150/MWh.

In the UK, the energy price cap rose by 80% from £1,971 in April 2022 to £3,549 in October 2022, due to surging gas prices, which quintupled in 2021. The household energy bills were later capped at £2,500 per year for two years amid the crisis by the UK government.

In the United States, the average wholesale electricity price in H2 2022 stood at about USD 91/MWh, 65% higher than the price in H2 2021. In 2022, the Australian wholesale prices averaged AUD 170/MWh, more than twice the H2 2021 levels.

The Indian Energy Sector - Standing its ground

The story, however, played out differently for the Indian power sector despite being plagued with some inherent shortcomings like, financially ailing discoms, and part dependency on imported fuel. Despite all these hurdles, and the continuing volatility in the global energy markets, the Indian power sector has been able to maintain the affordability, accessibility and reliability of supplies throughout the country. As per the IEA report, the average wholesale price in India reached INR 5000/MWh (EUR 55/MWh) in H2 2022, rising by a controllable 10% over the H2 2021 level.

This resilience has been possible due to the fact that more than 70% of the country's electricity generation capacity is currently in the form of coal-fired power plants, predominantly using domestic coal, while gas-

fired plants account for about 6%. Thus, a much lower dependence on gas, coupled with increased coal production leading to improved domestic availability of coal to keep its power stations going, allowed India to stand strong in the face of this global energy crisis. Further, a decisive shift to renewable energy sources, with the overarching goal to achieve Net Zero by 2070, also helped the Indian power sector diversify its fuel sources and reduce dependence on domestic and imported fuel. 15 GW of new renewable capacity was added in 2022-23, which is substantially higher than the previous financial year. The generation from renewable energy sources in 2022-23 was 19% higher than the previous year. This has primarily shielded India from the adverse impacts of the global energy crisis.

Favourable Government Policies

The remarkable fortitude of the Indian power sector can also be attributed to a slew of policies announced by the Government of India for the power sector. The decisive shift to renewable energy sources, such as targeting to increase renewable capacity to 500 GW by 2030, has helped the Indian power sector diversify its fuel sources and reduce dependence on conventional and imported fuel. This has primarily shielded India from the adverse impacts of the energy crisis happening globally. The country is now witnessing a gradual improvement in the coal situation after various initiatives were taken to increase the coal supply to the power sector.

The Government of India ensured increased coal production and prioritised supply of coal to Gencos with long term PPAs. The Mines and Minerals (Development and Regulation) Act, 1957, which was amended in March 2021, allows captive mines to sell up to 50% of their annual production after meeting the requirement of the end use plants. The Government allowed 100% FDI for commercial mining and permitted Single Window Clearance to increase domestic production of coal. Coal allocation for the power sector was increased and its transportation prioritised through the Railways. Further, the Power Ministry issued an advisory to states and generation companies directing them to import at least 10 per cent (later revised to 6 per cent) of their coal needs to blend with domestic coal. Similarly, invocation of Section 11 to operationalize imported coal-based power plants to their full capacity and endowing them with the option of selling their unsold power to buyers on the power exchanges; and strict monitoring of plant maintenance and down time; are some of the note-worthy initiatives of the Government to ease supply constraints.

To ensure availability of power during the upcoming peak-demand months, NVVN (NTPC Vidyut Vyapar Nigam) recently issued a Request for Supply to procure 1500 MW power from imported coal-based plants, which will be sold through power exchange. NVVN has also floated a tender to procure 4GW electricity from gas-based power plants on a competitive bidding basis, which will be sold on the power exchanges. The recently approved National Green Hydrogen Mission as well the identification of 'Green Growth' as one of the development pillars in the Union Budget FY '24, will help India's vision to attain energy self-sufficiency.

The continued global power crises put the spotlight back on India's power markets. Markets with products for the special category of renewable energy sources like Green Day Ahead Market, Green Term Ahead Market, can serve as the catalyst for accelerating renewable generation capacity addition in the country, reducing the dependence on imported coal. International experience shows that in the well-developed power markets such as European Union, UK, US, power exchanges have played a crucial role in reducing the cost of RE integration, through creation of a balancing market and Contract for Differences (CFD) market.

Efficiency of Power Trading Platforms

In India, power markets have led to improved competitiveness and efficiency of the power sector. The markets have also played an important part in cushioning the impact of the global crisis, by ensuring an alternative avenue for trading of power where the participants can transact amongst themselves based on their different requirements and fulfil their needs. The wide range of markets, including the day-ahead markets, term-ahead markets, and real-time markets, allow the electricity trade to happen anywhere between a period of 15 minutes up to 3 months. This high degree of flexibility allows real-time balancing of portfolios for both the buyers and the sellers. Further, the exchange-led electricity and renewable energy market provides a diverse spectrum of market-based products and contracts - real-time market (RTM), green term-ahead market (GTAM), and the green day-ahead market (GDAM). Through these markets, Discoms can access real-time exchange-discovered prices to make optimal buy-sell decisions. Also, renewable energy-surplus state Discoms, renewable energy generators without PPAs/with expired PPAs, generators who commissioned prior to their scheduled dates, etc., can monetize their surplus energy and help their counterparts in meeting their renewable purchase obligations (RPOs).

It is noteworthy, that while supply side constraints led to the average day ahead market prices on the Power Exchanges reaching Rs 5.90/unit in the Fiscal '23, about 35% YoY increase, the traded volumes remained resilient. Despite the global headwinds, the fiscal '23 traded volumes registered a modest 5% de-growth over the previous year, at the Indian Energy Exchange, the country's largest Electricity Exchange platform. It went on to report a 7% QoQ growth in volumes in the concluding quarter of FY23. This is a testament to the effectiveness of a robust and efficient power market in India.

The resilience and market confidence displayed by the Indian power markets, in comparison to the turmoil that the other global energy markets are currently in, serve as testament to the reforms of the Government of India, and validate the fact that they have pushed the sector in the right direction. The role of the market mechanism will expand significantly, as India moves ahead towards its targets of reducing emissions intensity of its GDP by 45 percent by 2030, and achieving net zero targets. Power Markets will play an increasingly key role in attaining these targets, by helping manage the intermittencies of renewables through various market products, notably the real-time market, resulting in their effective integration with the grid. The time is right for India to unlock the potential of power markets to optimally utilise resource endowments across regions, fast-track the transition to green energy and move the country closer to energy security. [Source](#)

Discoms' dues down by a third to Rs 93,000 crore in less than a year of enforcing Late Payment Surcharge Rule

The total outstanding dues of electricity distribution utilities (discoms) has reduced by a third to around Rs 93,000 crore in May, less than a year after implementing the Late Payment Surcharge (LPS) Rules in June 2022. The burgeoning dues of discoms toward power generation (gencos) mainly and transmission (trancos) firms have been affecting the entire value chain of the sector till last year.

According to industry data, in June last year, discoms' dues were at Rs 1.39 lakh crore at the time of the launch of the Late Payment Surcharge (LPS) scheme. The total outstanding dues now stand at around Rs 93,000 crore as per the portal PRAAPTI (Payment Ratification And Analysis in Power Procurement for Bringing Transparency in Invoicing of Generators).

The PRAAPTI portal was launched in May 2018, to bring transparency in power purchase transactions between generators and discoms. Experts believe the strict implementation of the Late Payment

Surcharge (LPS) Rules can make the power sector more viable. The Rule ensures that the outstanding discom dues are paid well in time. Besides, it has also ensured the payment of current dues ON time.

The scheme has played a key role to bring financial discipline among discoms. The non payment of current dues by discoms, one month after the due date of payment or two and half months after the presentation of the power bill, whichever is later, shall attract regulation (power supply cut) of power under the Late Payment Surcharge Rules, 2022.

Apart from this the power ministry had also provided for strong payment security management and made it mandatory for discoms to open credit letters or make payment of power supply well in time to ensure financial discipline. During the first wave of the pandemic, in May 2020, the government announced a Rs 90,000 crore liquidity infusion for discoms under which government-owned Power Finance Corporation (PFC) and REC Ltd were to give loans at economical rates in order to enable gencos afloat from the impact of the outbreak. Later, the infusion package was raised to Rs 1.2 lakh crore and further to Rs 1.35 lakh crore. [Source](#)

Power outages: Is India fated to sweat it out this summer?

With temperatures soaring, demand for electricity is set to peak in the next few weeks. Things should be under control as India has added significant capacity to its power production. But outages are common in many parts of the country. Where is the disconnect? Mint explains.

How much electricity does India consume?

In 2022-23, India consumed 1,503.65 billion units, a 9.4% rise over 2021-22. Consumption has grown at a steady clip each year since 2009-10 when it was 747 bn units. The annual daily peak or the day when electricity demand is at its highest (generally in the peak summer month of June), has also grown over the years. In 2022-23, demand for power peaked at 215.89 Gigawatts. But it has already been surpassed in the current financial year when an early onset of heatwave saw demand hit 226.9 GW on 18 April, 2023. And at some point in the next 30 days, it is expected to hit a new peak — of 230 GW.

How much does it produce?

India has an installed power generation capacity of over 416 GW, nearly half of which comes from coal-based power plants. But it's not a true indicator of how much it really produces: average capacity utilization fell from 84% in 2009-10 to 53.6% in 2021-22 before recovering to 66% in April 2023. Availability of coal is erratic. As a result, there is always a mismatch between demand and supply. Against the peak demand of 2022-23 for example, the most that plants could produce was 207.23 GW. Last month, the highest was 215.88 GW. However, the shortfall has narrowed from 12.7% in 2009-10 to 0.5% today.

How bad are power cuts today?

With the onset of summer, large parts of the country are facing power outages between 2-8 hours daily. According to a survey by Local Circles in 272 districts, 85% of households face daily power cuts with 57% going without power for up to 2 hours. Another 37% cope with power cuts of 2-8 hours. More than 63% households face up to two power cuts a day.

Where's all the electricity going?

Power distribution companies—the middlemen between power producers and consumers — suffer from a legacy of high transmission losses and inability to hike tariffs. So, discoms cut losses by prioritizing supplies to industrial consumers. Factories can handle high voltage power which costs less for discoms

to supply. And they can pay more. This comes at the cost of households, where tariff is low-governments rarely allow discoms to hike electricity bills. This attempt at striking a balance leads to outages.

How can outages be controlled?

With a projected increase in power demand from 1,513 billion units in 2022-23 to 1,908 billion units by 2026-27, the government is investing ₹14.5 trillion for additional power generation capacity of 210 GW. The national grid is being upgraded with more transmission lines. The missing piece that needs to be fixed is the financial health of discoms. State governments have to find the political will to privatize discoms while allowing them to hike tariffs in line with rising cost of production. [Source](#)

Himachal to frame new energy policy: Chief Minister

While presiding over a meeting of the Energy Department here late last evening, Chief Minister Thakur Sukhvinder Singh Sukhu said that the State Government mulls to frame a new Energy Policy, aiming at providing more share to Himachal Pradesh in various hydropower projects.

The Chief Minister said that under the new policy, the provision of deferment of free power royalty will be completely abolished in future and consider abolishing the relaxation given earlier. He said that there would be a provision to give 15 per cent share to the state government for the first 12 years, 20 per cent for the next 18 years and 30 per cent for the next 10 years. So far, there is a provision of 12 percent for the first 12 years, 18 percent for the next 18 years and 30 percent for the next 10 years, he added.

"Efforts would be made to increase the State's share in those projects which have recovered its cost, for which correspondence would be initiated with the Central Government and other PSUs," said Sh. Sukhu and adding that for all upcoming hydel power projects, the land would be given for forty years lease as per the policy of the government.

The Chief Minister took a serious note of central PSUs for not signing pre-implementation and implementation agreements to set up hydro power projects and directed the Energy department to issue notices. Apart from this, he also directed to simplify the process of providing NOCs for the construction of hydro power projects.

Sh. Sukhu said that 172 hydropower projects of 11149.50 MW capacity have been commissioned in the State, while 58 projects of 2454 MW capacity were under construction. He said that there should not be unnecessary delay in the hydro power projects being constructed through various Undertakings of the State Government and the Energy Department should develop a mechanism to monitor them. He said that delay in construction of projects causes financial loss to the State coffers. The Directorate of Energy would be strengthened and artificial intelligence would also be used to improve the functioning of the department, he added.

The Chief Minister said that many hydro power projects have not started construction work despite taking one time amnesty, in such a situation, the allotment of these projects should be cancelled immediately and a fresh advertisement should be published. He emphasized that power generation was the main source of income for the State Government and would not be compromised by any loss to the State exchequer.

The Chief Minister also reviewed the construction of solar projects being set-up in the State and directed to speed up the construction work. He said that the State Government has set a target of starting 500 MW solar power projects this year and the department should work earnestly in this direction.

Industries Minister, Harshwardhan Chauhan, Principal Advisor to the Chief Minister, Ram Subhag Singh, Chief Secretary, Prabodh Saxena, Principal Secretary to Chief Minister, Bharat Khera, Secretary MPP & Power, Rajeev Sharma, OSD to the Chief Minister, Gopal Sharma, Director Energy Department, Harikesh Meena and other senior officers were present in the meeting amongst others. [Source](#)

Transmission charges payable by DICs for the billing month of June 2023

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.

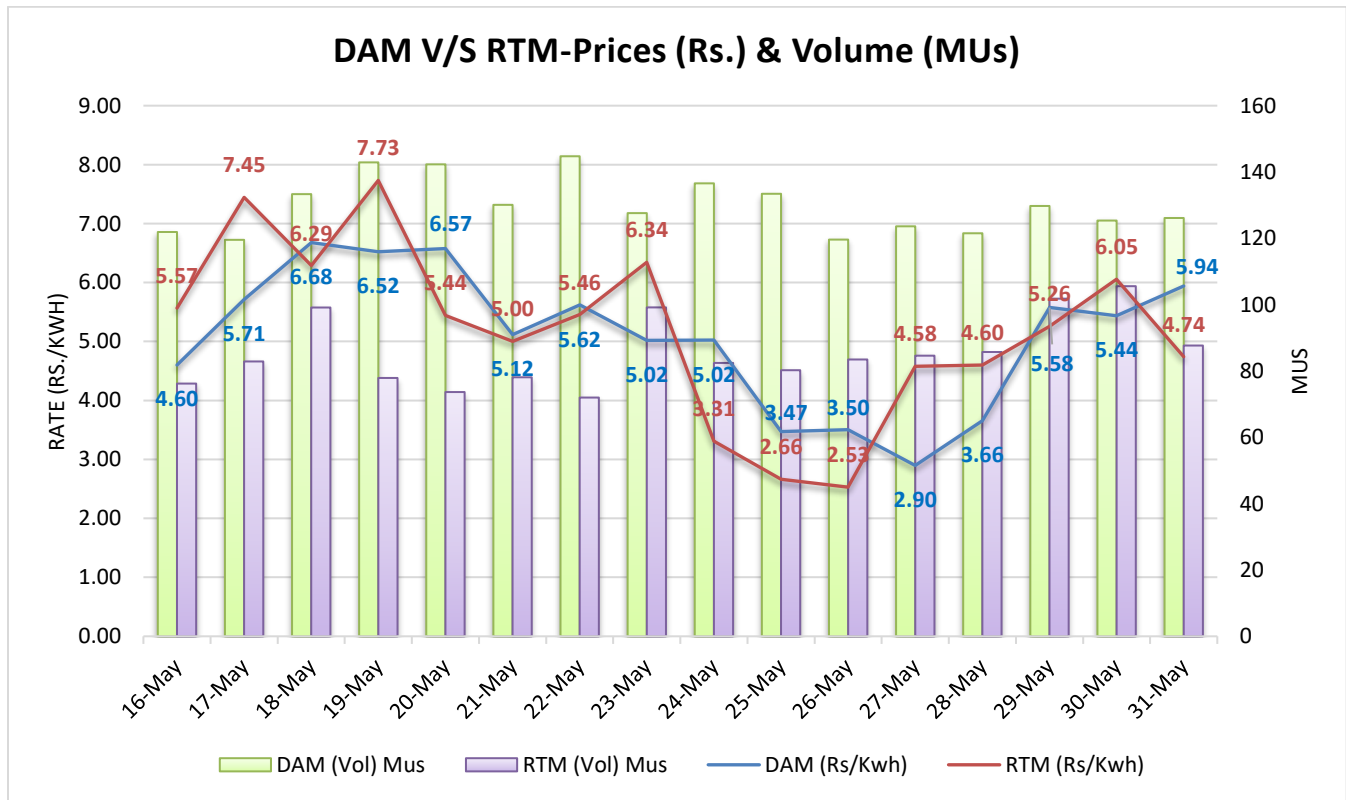
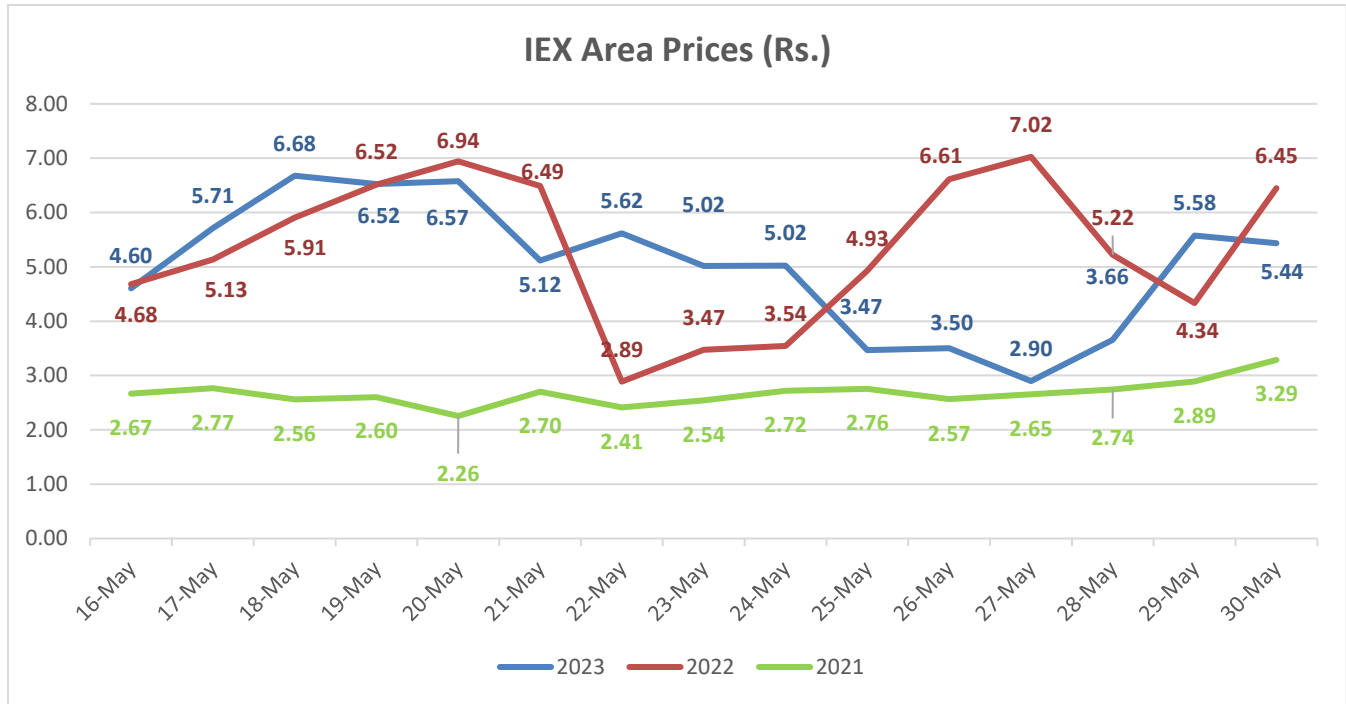
Transmission Charges for Short Term Open Access (STOA)			
Sl. No.	State	Region	STOA rate (paise/kWh)
1	Delhi	NR	46.68
2	UP	NR	50.79
3	Punjab	NR	46.35
4	Haryana	NR	56.54
5	Chandigarh	NR	42.42
6	Rajasthan	NR	50.38
7	HP	NR	41.76
8	J&K	NR	44.66
9	Uttarakhand	NR	49.55
10	Gujarat	WR	40.71
11	Madhya Pradesh	WR	46.52
12	Maharashtra	WR	54.36
13	Chhattisgarh	WR	38.99
14	Goa	WR	52.59
15	Daman Diu	WR	47.69
16	Dadra Nagar Haveli	WR	47.69
17	Andhra Pradesh	SR	62.24
18	Telangana	SR	54.20
19	Tamil Nadu	SR	57.70
20	Kerala	SR	62.06
21	Karnataka	SR	58.83
22	Pondicherry	SR	50.10
23	Goa-SR	SR	47.64
24	West Bengal	ER	54.15
25	Odisha	ER	50.75
26	Bihar	ER	44.41
27	Jharkhand	ER	47.56
28	Sikkim	ER	41.49
29	DVC	ER	46.29
30	Bangladesh	ER	36.81
31	Arunachal Pradesh	NER	41.83

32	Assam	NER	45.17
33	Manipur	NER	44.39
34	Meghalaya	NER	40.56
35	Mizoram	NER	43.29
36	Nagaland	NER	57.20
37	Tripura	NER	47.87

Bilateral Tender Results: -

Sl. No.	Tender Quantum (MW)	Supply Period	Time Blocks (Hrs.)	Price (Rs./kWh)	LOI Status
HPSEBL/Short/23-24/RA/37					
1	27	16.10.2023 to 22.10.2023	00:00 to 24:00	6.24 - 6.25	Awaited
2	27	23.10.2023 to 31.10.2023	00:00 to 24:00	6.24 - 6.25	
3	67	01.11.2023 to 07.11.2023	00:00 to 24:00	6.48	
4	128	08.11.2023 to 15.11.2023	00:00 to 24:00	6.48 - 6.50	
5	101	16.11.2023 to 22.11.2023	00:00 to 24:00	6.48 - 6.50	
6	134	23.11.2023 to 30.11.2023	00:00 to 24:00	6.46 - 5.00	
7	168	01.12.2023 to 07.12.2023	00:00 to 24:00	6.48 - 6.50	
8	174	08.12.2023 to 15.12.2023	00:00 to 24:00	5.99 - 6.00	
9	174	16.12.2023 to 22.12.2023	00:00 to 24:00	6.48 - 6.52	
10	201	23.12.2023 to 31.12.2023	00:00 to 24:00	5.99 - 6.50	
11	208	01.01.2024 to 07.01.2024	00:00 to 24:00	6.69 - 8.00	
12	208	08.01.2024 to 15.01.2024	00:00 to 24:00	6.74 - 8.00	
13	208	16.01.2024 to 2.01.2024	00:00 to 24:00	6.75 - 8.00	
14	208	23.01.2024 to 31.01.2024	00:00 to 24:00	6.50 - 8.00	
15	208	01.02.2024 to 07.02.2024	00:00 to 24:00	6.75 - 8.00	
16	208	08.02.2024 to 15.02.2024	00:00 to 24:00	6.75 - 8.00	
17	174	16.02.2024 to 22.02.2024	00:00 to 24:00	6.95 - 8.00	
18	174	23.02.2024 to 29.02.2024	00:00 to 24:00	6.85 - 8.00	
19	134	01.03.2024 to 07.03.2024	00:00 to 24:00	7.00 - 8.00	
20	134	08.03.2024 to 15.03.2024	00:00 to 24:00	7.14 - 8.00	
21	108	16.03.2024 to 22.03.2024	00:00 to 24:00	6.85 - 8.00	
22	40	23.03.2024 to 31.03.2024	00:00 to 24:00	6.83 - 7.00	
PFC Consulting Limited/Short/23-24/RA/48 (UPPCL)					
1	900	01.06.2023 to 30.06.2023	00:00 to 06:00	8.00 - 14.00	LOI Issued
2	900	01.06.2023 to 30.06.2023	19:00 to 24:00	8.00 - 14.00	

IEX Price Trends



Weather (Estimated for next fortnight)

City	Max Temp	Min Temp	Precipitation (Probability)
DELHI	39	29	9%
MUMBAI	34	28	54%
KOLKATA	38	29	40%
CHENNAI	36	29	41%

(Source - Accuweather)

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