

# POWER MARKET CAPSULE-197<sup>th</sup> Edition

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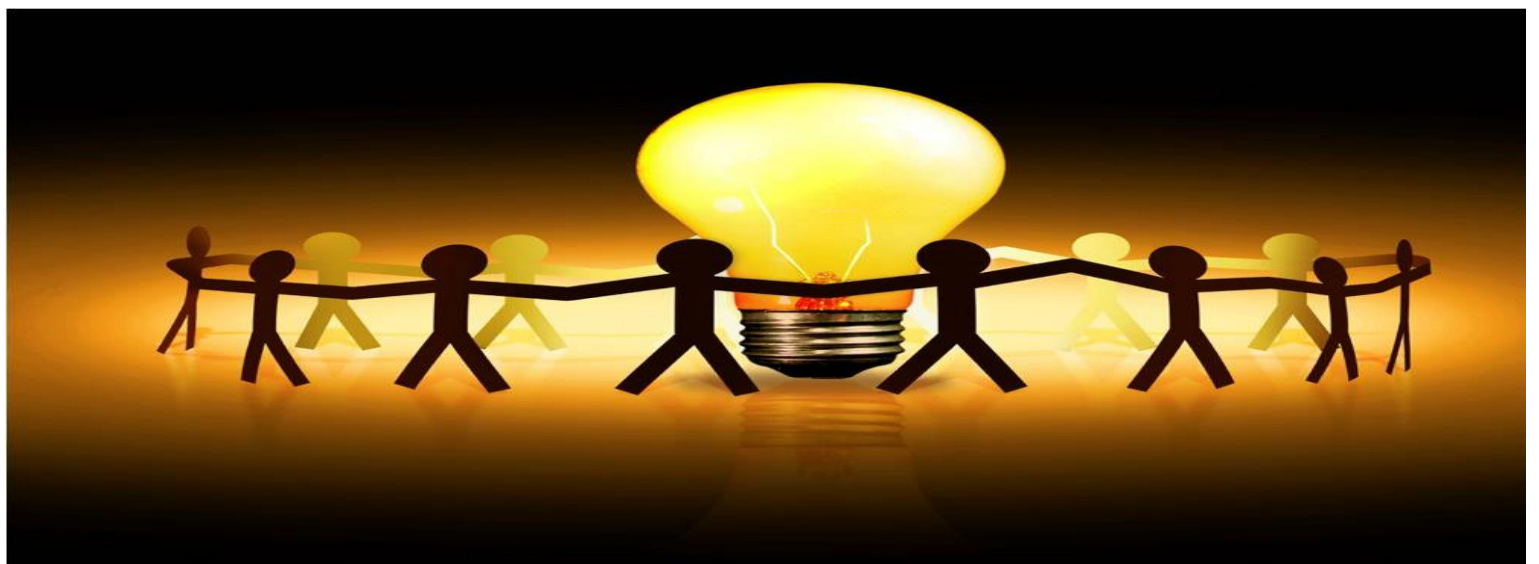
TPTCL'S E-NEWS LETTER



## CONTENT INSIDE

- 1. Power Market News.....01-12
- 2. Transmission Charges DICS.....12-13
- 3. Bilateral Market.....13-15
- 4. IEX Price Trend.....15-16
- 5. Weather Estimated.....16

Tata Power Trading Company Limited (TPTCL)



## Power Market News

### Power Ministry asks PFC, REC to provide short-term loans to imported coal-based plants

The Power Ministry has directed Power Finance Corporation and REC Ltd to provide short term loans to imported coal-based thermal plants that are under stress or facing insolvency suits amid the ongoing coal shortage crippling power generation in the country. The direction assumes significance in view of the power ministry's earlier order that asked all imported coal-based plants to produce electricity at their 100 per cent generation capacity.

"Union Power Ministry has directed Power Finance Corporation (PFC) and REC Ltd to take necessary action to arrange short term loans for a period of six months with adequate safeguards, for ICB (imported coal based power) plants which are under stress or in NCLT (national company law tribunal), at the earliest," a power ministry statement said.

These plants need working capital to buy coal and start generating power in order to restart their operations, the ministry observed. PFC and REC are non-banking financial companies that funds power sector projects.

Union Minister for Power and New and Renewable Energy R K Singh held a meeting on 9th May 2022 on issues related to working capital to imported coal-based plants that are stressed or are in NCLT. In view of increased demand and unprecedented pressure on domestic coal supplies, the power ministry on 5th May 2022 issued directions under Section 11 of the Electricity Act, 2003, to all imported coal-based plants (ICB) to operate and generate power to their full capacity, even for projects that are stressed or under NCLT.

The directions will ensure that additional electricity is produced through imported coal and will be a net addition, the order said. The ministry in the order noted that most of the states have allowed pass-through of the higher cost of imported coal to consumers, which aided to make operational 10,000 MW capacity out of the total 17,600 MW imported coal-based thermal plants in the country.

However, the ministry had said that "some imported coal-based capacity is still not operating". The order is valid up to October 31, 2022, the ministry had said. The power demand has gone up by almost 20 per cent in energy terms and the supply of domestic coal has increased but the rise in the supply is not sufficient to meet the increased demand for power, according to the order.

"This (demand-supply mismatch) is leading to load shedding in different areas. Because of the mismatch between the daily consumption of coal for power generation and the daily receipt of coal at the power plant, the stocks of coal at the power plant have been declining at a worrisome rate," it had noted. The international price of coal has gone up in an unprecedented fashion. It is currently around 140 US Dollars per tonne, it had observed.

As a result of this, the impact of coal blending, which was of the order of 37 million tonnes in 2015-16, has gone down, leading to more pressure on domestic coal, the ministry had said in the order. The imported coal-based generation capacity is around 17,600 MW. The PPAs for imported coal-based plants do not have adequate provision for pass-through of the entire increase in the international coal price, it had stated. At present, the price of imported coal, running of imported coal-based plants and supply of power at the PPA rates will lead to huge losses to the generators and therefore, they were not willing to run those plants, it had observed. [Source](#)



## Stressed power plants to get a helping hand from the govt

The authorities has directed state-run Power Finance Corp. (PFC) and REC Ltd to supply short-term loans to burdened power plants utilizing imported coal to assist them restart manufacturing, as a part of efforts to sort out a power disaster that has triggered widespread blackouts and threatens to harm financial development. "These plants want working capital to purchase coal and begin producing power," the Union power ministry stated.

Separately, the coal ministry might regulate gasoline provide to states whose discoms proceed to purchase cheaper electrical energy from home coal-fuelled plants regardless of agreeing to purchase power from imported coal-fired plants. Rising international gasoline costs have made electrical energy from plants that depend on imported coal costlier, crimping demand from the nation's struggling power distribution firms.

Scorching temperatures throughout India have led to hovering electrical energy demand to run air-conditioners at the same time as power plants face extreme coal shortages. Many states have been resorting to blackouts for a number of hours a day, unable to deal with rising power demand. The power scenario might deteriorate additional over the subsequent few days as a number of components of India stare at heatwave circumstances.

India reported a report peak power demand met of 207.111GW and a peak power scarcity of 10.77GW on 29 April. The peak demand was 194.78GW, in accordance to knowledge from state-run Power System Operation Corp. Ltd (Posoco), which oversees the nation's crucial electrical energy load administration capabilities.

The power ministry's directive to PFC and REC to help imported financially burdened coalfired plants comes after the authorities invoked Section 11 of the Electricity Act to make it obligatory for all such plants to generate power at their full capability to avert an power disaster. While 10 gigawatts (GW) of imported coal-fired capability has began era, round 7.6GW remains to be idle, totally on account of excessive imported coal gasoline costs and the monetary incapacity to purchase gasoline due to pending funds from state-owned electrical energy distribution firms (discoms). All home coal-based plants have additionally been directed to import coal to meet at the least 10% of their necessities.

Queries emailed to the spokespeople for PFC and REC remained unanswered. "While electrical energy from imported coal-based initiatives is coming to discoms at over ₹7 per unit, that from plants utilizing home coal is round ₹3-3.5 per unit. If states having power-purchase agreements fail to purchase power from imported coal-based initiatives and schedule electrical energy largely from home coal initiatives for assembly demand, it will add additional stress on such initiatives," a authorities official stated, requesting anonymity.

Indian power plants witnessed a sharp depletion of gasoline shares final September as 14 imported coal-fuelled power initiatives diminished output due to a spike in coal costs. As a end result, electrical energy demand from home coal-fuelled power initiatives surged.

The authorities additionally needs home coal-based plants to replenish on coal earlier than the monsoon season when mining is affected due to rain. India's power plants burn round 2 million tonnes of coal a day.

"The contracted capability for import-based thermal power stations is 20.27GW, which at 80% plant load issue (PLF) needs to be producing 390 million models of electrical energy. But due to the decrease

capability utilization of those plants, the current each day era is nearly 160 million models. The authorities official cited above stated that that is additionally impacting home coal demand by 152,000 tonnes a day, or 4.7 million tonnes (mt) per 30 days,” the authorities official cited above stated.

ICRA stated that imported coal is anticipated to enhance the power provide price by up to 5% this fiscal 12 months, leading to greater electrical energy tariffs. According to knowledge from the Central Electricity Authority (CEA), the 173 power plants that it tracks have coal inventory of 20.93 mt, shut to solely round a third of the required inventory of 66.49 mt. A complete of 85 power plants fuelled by home coal had lower than a fourth of their prescribed gasoline inventory and have been at a crucial stage. Also, 11 plants operating on imported coal had crucial coal stock as of 10 May. [Source](#)

## Virtual PPAs in India - Are there any regulatory challenges?

Virtual Power Purchase Agreements are one of the most preferred modes for most of the large electricity consumers looking to meet net zero targets across the globe. This arrangement essentially allows the bulk consumers to support renewable energy capacity for the consumption beyond physical purchase of electricity.

India is proven lowest cost producer of renewable electricity (much lower than marginal cost of coal production) in the world. With a vibrant and liquid electricity market, the country has all the essential ingredients for becoming a hub for VPPAs.

However, the sad reality is that India is yet to see any VPPA driven project off the ground although the the regulatory tussle between regulators (CERC and SEBI) which was the primary reason affecting VPPAs has already been resolved. There are no regulatory hurdles in entering into VPPAs in India anymore and global sustainability off-takers may seriously pursue India as market to meet sustainability requirements with no cost. To explain this, lets dig deeper into the structure of VPPAs:

A virtual PPA essentially enables an Independent Power Producer (IPP) to set up a Solar/Wind/Hybrid project for sale of electricity in the open market. Since, IPPs require long-term assured revenues to raise cheapest cost of debt, IPPs enter into a Contract for Difference arrangement (CfD) with Sustainability Offtakers. Under the terms of CfD, any upside (over and above strike price in CfD contract) realized from sale of electricity in open market is transferred to Sustainability offtaker. Further, if market price is lower than the strike price, the Sustainability offtaker supports for such difference.

While the arrangement looks quite simple, since the value of the contract is derived from sale of electricity from an underlying asset, VPPAs are quintessentially a “Derivate Contract”. Therefore, the fundamental question is that being a “Derivative”, do VPPAs fall under jurisdiction of either CERC or SEBI? The answer is “No”. Since VPPAs do not involve physical delivery of electricity neither there these are tradeable contracts, VPPAs are out of regulatory oversight of either of the agencies.

To understand this let us dig deeper into the settlement arrived at between SEBI and CERC.

1. All ready Delivery Contracts and Non-Transferable Specific Delivery Contracts as defined in Securities Contracts (Regulations) Act 1956 in electricity, entered into by the members of the power exchanges, registered under CERC Power Market Regulations 2010 shall be regulated by CERC subject to conditions.

Further, 2. Commodity Derivatives in the electricity other than Non Transferable Specific Delivery Contracts as defined in SCRA shall fall under the purview of SEBI As per Clause 18A of the SCRA 1956,



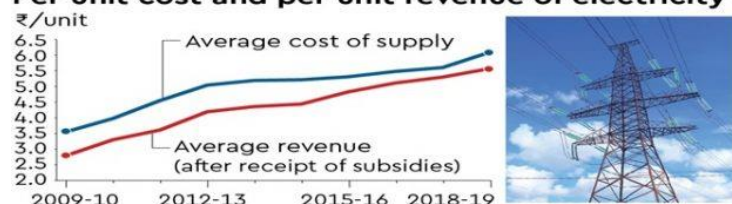
the Act covers only for contracts which are traded on a recognized stock exchange and settled in a clearing house. 18A. Notwithstanding anything contained in any other law for the time being in force, contracts in derivative shall be legal and valid if such contracts are (a) traded on a recognised stock exchange; (b) settled on the clearing house of the recognised stock exchange, in accordance with the rules and bye-laws of such stock exchange. Since VPPAs are not traded instrument but only a bilateral arrangement between Generator and Sustainability Offtaker, these are out of purview of the SEBI also. To further, understand regulatory clarity, lets review CERC Power Market Regulations 2010 and CERC Power Market Regulations 2021 Clause 8 of CERC Power Market Regulations 2010 provides that: Notwithstanding anything contrary contained in these Regulations, no person shall enter into or transact in any of the following types of contracts unless the same has been permitted to be so launched or introduced by the Commission in terms of notification issued in this behalf - (i) Derivatives Contracts; (ii) Ancillary Services Contracts (iii) Capacity Contracts. There was a blanket prohibition on any kind of Derivate Contracts in India. However, CERC Power Market Regulations 2020 which supercedes to previous regulation is completely silent on 'Derivate Contracts". In fact, recognizing the settlement, CERC has made Power Market Regulations 2020 only for physical delivery of the electricity (Clause 4 of the Regulations). Accordingly, there is no regulatory ambiguity for entering into VPPAs in India. With global interest in meeting net zero target at its peak, VPPAs may essentially play an instrumental role in tiding the ongoing power crisis and add substantial RE capacity in India. [Source](#)

## RBI report calls for complete deregulation of power tariffs

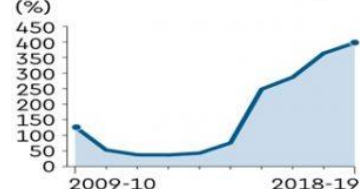
Flagging higher electricity tariffs for businesses in India than in export competitors, a Reserve Bank of India (RBI) report has called for a slew of measures, such as deregulation of electricity pricing, greater role of the private sector in transmission and distribution, more focus on renewable energy, and reducing 'deadweight loss' to bring down the cost of power.

"Based on the experience gained so far from rationalisation of petroleum product subsidies, electricity pricing may also be completely deregulated. Levy of additional taxes/cess after deregulation must be eschewed as it could dilute the intended benefits of reforms," the RBI said in its Report on Currency and Finance 2021-22.

### Per unit cost and per unit revenue of electricity



### Ratio of power subsidy to petroleum subsidy (%)



### Price of electricity for businesses - 2020 (US cents/kWh)



Electricity tariffs for businesses are higher in India than in Bangladesh, ASEAN economies, and China (see chart). "In this context, renewable energy can play a vital role and depress overall tariffs," the RBI report said.

The government has taken several steps over the last two decades starting from the accelerated power development and reforms programme (APDRP) unveiled in 2001 to reform the electricity sector and move it towards market determined pricing, but the progress on this front has been tardy and uneven. In one of the later instances, the Ujwal Discom Assurance Yojana (UDAY) 2015 failed to achieve its target to bring down the discoms' aggregate technical and commercial (AT&C) losses to 15% by FY19-end. Though there was some progress in the initial UDAY period, the AT&C losses have risen again post the scheme. These losses now stand at around 25%, compared with 6-7% in advanced economies.

India's electricity sector is hamstrung by a complex cross-subsidisation scheme, under which high energy-consuming customers from industry and commercial sectors subsidise consumption in the agriculture and domestic sectors. Inadequate tariff revisions for households and agriculture, and delayed and inadequate release of subsidies by the state governments have also inflated the losses of discoms over the years, pushing them into a debt trap.

Rahul Raizada, executive director of PwC India, said, "In India, for those consumer categories where the cost to serve electricity is maximum, like agriculture, the tariffs are the lowest and vice versa. The industry is bearing the brunt, denting the competitiveness of the economy." He, however, added that the situation can now be reversed as renewable energy, which has now become extremely competitive, can be utilised to power farm requirements. The KUSUM scheme serves this purpose, he said, adding that large uptake in KUSUM can help not only to serve electricity to farms during the daytime, but also reduce government subsidy and help correct the skewed tariff structure.

India has a high degree of reliance on imported energy. With renewable energy emerging as an economical alternative to conventional energy resources and the evolution of newer technologies in the transport sector, India's imported energy dependence could shift to domestic sources in the long run, according to the RBI report. This, it said, could be promoted by rationalising investment in the energy infrastructure. Rupesh Sankhe, vice-president and power analyst at Elara Securities, said successful implementation of open access policy, more favourable solar rooftop policy, lower taxes on electricity at the state level, and a lower GST régime for electricity can be some of the steps to reduce the power cost for industrial and commercial consumers, in addition to rationalisation of cross-subsidy surcharges.

Historically, the emphasis has been more towards generation capacity visa-vis transmission and distribution. "The focus however needs to gradually shift towards transmission and distribution, with higher participation by the private entities," the RBI report said. Between FY16 and FY20, public sector investment in power generation was a whopping Rs 2.5 trillion, whereas investment in transmission was Rs 1.64 trillion and Rs 71,829 crore in distribution.

With no amount of government largesse or financial re-engineering salvaging the electricity discoms, the government, in Budget FY22, announced a Rs 3.1-trillion grant to them through sector-specific lenders PFC-REC. Under the scheme, 60% grant component would be converted to loans on the discoms' books if they fail to meet various reform targets. Also, the Centre has linked a part of the additional borrowing windows for states in recent years to power sector reforms and has turned stricter in asking gencos to snap supplies to defaulting discoms. [Source](#)

## **Power minister reviews status of coal imports for blending in thermal plants**

Power minister R.K. Singh has reviewed with states the status of import of coal for blending in the thermal power plants. The ministry had earlier asked generating companies to import 10% of their fuel requirement for blending. States were advised to place orders for import of coal for blending purpose so that the additional coal reaches power plants from the month of May 2022 itself.

The minister highlighted the need for importing coal for blending in the thermal power plants, in view of the constraints in domestic coal supply. Singh stated that the domestic coal would be supplied to all gencos in proportion to the coal received from coal companies. He further advised the states to increase the output from the captive mines to meet their coal requirements which will help in reducing the burden on the linkage coal.

The minister emphasized that states need to take actions to ensure coal supply to their power plants by ensuring off-take in the rail-cum-road (RCR) mode to meet the shortfall in coal requirement at their power plants. He stated that in the event of states not lifting the RCR coal it would be de-allocated and offered to other states and the concerned states would be responsible for any shortages and consequent power-shortages in their States. Power secretary Alok Kumar, senior officials of state governments, and gencos were present in the meeting held virtually earlier this week.

As per the data presented in the meeting, Tamil Nadu and Maharashtra have placed orders for the import of coal, while Punjab and Gujarat are in the advanced stage of finalisation of the tenders; and the other States need to put extra efforts to import the coal for blending at their power plants in time. Rajasthan, Madhya Pradesh are in the process of issuing the tenders. Haryana, Uttar Pradesh, West Bengal, Odisha and Jharkhand have not yet issued tender or taken any significant actions for the import of coal and were advised to take necessary actions to ensure coal supply to their power plants.

The status of RCR was also deliberated upon and it was seen that the progress of Andhra Pradesh, Karnataka, Madhya Pradesh, West Bengal, Haryana and Uttar Pradesh on lifting the allotted coal was not satisfactory. These states were advised to expedite lifting this coal, failing which this RCR coal would be allocated to other gencos which need it. [Source](#)

### **Emergency clause invoked on power plants in national interest: Power Secy**

Invocation of legislation to mandate all imported coal-based power plants to operate is a step taken in national interest to increase availability of electricity, union power secretary Alok Kumar told ET. The project developers, however, are worried about the uncertainties regarding implementation. At a meeting in the power ministry, most lenders agreed to offer funding support to restart operations of the stressed assets, but developers of these plants are worried about uncertainties in sourcing imported coal and not getting full recoveries at the power exchanges.

Non-compliance of the order that will be in force till October 31 attracts a penalty under the Electricity Act 2003, sources said. The Centre invoked Section 11 of the Electricity Act, which mandates all imported coal-based power projects to generate electricity at full capacity, with the aim of bringing on stream at least 7 GW of power plants of Essar Power, Coastal Energen in the states of Gujarat, Andhra Pradesh and Tamil Nadu amid a projection that power demand will touch 220 GW in the coming months.

"States have to decide whether to buy or else it will go to the power exchange. We can arrange power; states have to decide whether to pay or do load shedding. To ensure liquidity, payment is mandated on a weekly basis," Kumar said. Sources in the power ministry said the indecisiveness of states is holding up these projects from becoming operational. "Imported coal plants were not operating due to lack of adequate compensation or other commercial issues. This order is a win-win for everyone," a senior government official said.

One of the developers said, "It is a good opportunity for every project that is either not operating, with bank debts gone up or becoming NPA, because they can demonstrate they are competent to operate."



However, operators of imported coal-based plants have concerns. They are worried whether they will get working capital from banks to restart projects and import coal, and also about having to import coal at higher prices and then getting lower rates on the power exchanges if electricity demand fizzles out. Prices in various market segments of power exchanges vary for different time blocks. "We are happy the plant gets to operate but there are many implementation challenges. It would have been easier for us if the government ensured offtake at steady prices," another company said. [Source](#)

### **Clean Energy: Govt takes initiative for 100 mn ton coal gasification by 2030**

The Central government is organising an investor meet in Mumbai to develop the PPP model to achieve 100 million ton coal gasification, which is considered a cleaner option compared to burning of coal, and focus on attracting private sector participation and investment in the sector.

Coal and Mines Minister Pralhad Joshi will be launching the high-level investors' meet and will be chairing the session with a view to understand the expectation of the private sector to join the efforts of the government in achieving 100 million ton coal gasification by 2030. India has a reserve of 307 billion tons of thermal coal and about 80 per cent of it produced is used in thermal power plants.

With environmental concerns, the government has prepared a mission document for coal gasification of 100 MT by 203. Syngas produced from coal can be used to produce gaseous fuels such as hydrogen (blue coupled with CCUS), Substitute Natural Gas (SNG or methane), Di-Methyl Ether (DME), liquid fuels such as methanol, ethanol, synthetic diesel and chemical like methanol derivatives, olefins, propylene, mono-ethylene glycol (MEG), nitrogenous fertilisers including ammonia, DRI, industrial chemicals along with power generation. [Source](#)

### **CERC seeks stakeholder comments on calculating escalation rate of imported coal**

The Central Electricity Regulatory Commission (CERC) has floated a paper on calculating the escalation rate for imported coal for payment on a monthly basis, which will be used by Discoms to make payments to Gencos for purchasing electricity. The Government wants to make use of the monthly escalation index for imported coal as part of future power purchase agreements (PPAs).

The central regulator has floated a staff paper - Methodology for Computing the Escalation Rates for Imported Coal for Payment on a Monthly Basis. It has asked stakeholders to submit their comments and suggestions on the same by May 20, 2022. "Ministry of Power (MoP), vide its letter dated April 13, 2022, has communicated its decision on the requirement of notification of escalation rate for imported coal for payment on a monthly basis. In this regard, the CERC is required to notify the escalation rate for imported coal for payment on a monthly basis," it said.

The Ministry communicated to the regulator that it has decided that the escalation index for imported coal may be notified on a monthly basis by CERC, in addition to the present six-monthly escalation index. "In existing PPAs where the generating company and the procurer agree, they can use the monthly index. For future PPAs, the Government proposes to make provisions in the bidding guidelines and bidding document for use of the monthly Escalation index for imported coal. The present practice of notifying escalation rates every six months, in addition to notification on monthly basis, should also be continued, to be used by sellers and procurers, in the context of concluded PPAs," the ministry added.

The development assumes importance as on May 6, the Ministry invoked Section 11 of the Electricity Act, which allows the Government to order a Genco, in extraordinary circumstances, to operate and





maintain any generating station in accordance with the directions of that government. This has been done to direct all imported coal based (ICB) power plants to start operations.

Under the Ministry's directions, the high price will be allowed to pass through. This will be done through a Committee that will fix the rate of power based on the prices of the imported commodity. Discoms have to make payments to Gencos on a weekly basis. With prices of imported coal fluctuating, the process will aid in making the payments at the latest rates.

### **Proposed methodology**

CERC has proposed that the escalation rates for different escalable sub-components for computing energy charge for plants based on imported coal shall be notified on a monthly basis. These sub-components are escalation rates for imported coal, its transportation and its inland handling. The data on price and price indices presently used for computing escalation rates for imported coal on six-monthly basis can be used for monthly basis. It includes the Price/ Price Index of Australian Coal (Global Coal), South African Coal (API4 of Argus) and Indonesian Coal (ICI3 of Argus and Platts Index).

On escalation rate for transportation of imported coal, the price of VLSFO at Singapore of Clarksons will be used. For calculating the escalation rate for inland handling, the use of Wholesale Price Index (WPI) and Consumer Price Index for Industrial Workers (CPI-IW) will be utilised. [Source](#)

## **A 46-Degree Heat Wave Is Making India's Power Crisis Worse**

A power crisis in India that's delivering hours-long blackouts, halting manufacturing lines and triggering street protests is forecast to continue for months, adding pressure on the nation's economic rebound. Electricity outages and curbs have spread across more than half of all states and the nation's coal-dominated energy system is expected to come under further strain as power demand tops a recent record high in the coming weeks.

Even with a temporary reprieve from a blistering heat wave that's delivered temperatures as high as 46 degrees Celsius, households and businesses face ongoing disruptions as coal stockpiles shrink at power plants and fuel imports falter on prices that've surged since the war in Ukraine.

"It's becoming a difficult situation," Sumant Sinha, chairman of ReNew Energy Global Plc, a supplier of wind and solar power in India, said in an interview. "The whole summer will be a test."

High coal and oil prices threaten to add to inflationary pressures that prompted India's central bank to make a surprise move to lift its key policy rate. Power curbs will also hit India's already faltering rebound in industrial production.

Production of coal, the fossil fuel that accounts for more than 70% of India's electricity generation, has failed to keep pace with unprecedented energy demand from the heat wave and the country's post-pandemic industrial revival. Logistics snarls, including a lack of railway carriages to transport the fuel from mines to power plants, are exacerbating the shortages.

"If power supply is curtailed to the industrial sector, it could delay the recovery in the manufacturing sector by at least one more quarter," said Aditi Nayar, an economist with ICRA Ltd. Stockpiles at coal-fired power stations have tumbled more than 14% since the start of April, leaving about 100 plants with critical supply levels, according to the Institute for Energy Economics and Financial Analysis. Reserves are forecast to shrink further on high demand, and that'll be followed by a monsoon season from July.

Monsoon rains triggered a previous power crisis last year - which also caused widespread electricity curbs - when coal mines and roads were flooded, hampering production and shipments.



"If coal stockpiles continue to deplete at this rate, we're going to see a full-blown power crisis across the country," said Shailendra Dubey, chairman at the All India Power Engineers Federation, an advocacy body that produces energy policy suggestions.

Electricity demand hit a record 207.1 gigawatts and is expected to rise to 220 gigawatts within the next two months, according to India's power ministry. Average spot power prices at Indian Energy Exchange have jumped to about ₹ 10 a kilowatt hour, almost triple the average in January, and have been capped by the industry regulator.

At least 16 of India's 28 states have been grappling with power outages of between two and 10 hours a day, Ashok Gehlot, chief minister of Rajasthan, said in a Twitter message, before conditions eased in some areas.

The western desert state, a hub for metal smelters to textile factories, last week ordered power supplies to some industries cut by as much as half. Citizens should limit their use of appliances like air conditioners and coolers in homes and workplaces, Gehlot said.

Maharashtra, home to the nation's financial capital Mumbai, is battling worsening blackouts, said S Maheshkumar, general secretary at Maharashtra Industrial and Economic Development Association. "Industries are worried that they may have to cut production and turn down export and domestic orders," he said by phone.

Anger over patchy electricity supplies prompted protests across the northern state of Punjab - India's top grains producer - over the weekend, with farmers blockading roads as they appeal for a minimum of eight hours of power a day for agricultural use. Already there are concerns about electricity supply during a paddy sowing season from mid-June, Kamaljeet Singh Hayer, a farmer in the state's Ferozepur district, said by phone.

In the coal mining states of Jharkhand and Chhattisgarh, many industries are cutting output or running back-up generators with expensive diesel. "If we have to operate like this, we'll all soon be in the red," said Philip Mathew, president of Jharkhand Small Industries Association.

Opposition party members marched through streets in Jammu, protesting against six-hour daily outages. Blackouts have struck key population centers including Uttar Pradesh, and even where supplies are slowly improving like in Karnataka and Kerala connections still aren't guaranteed around-the-clock. While Prime Minister Narendra Modi's government isn't yet facing major new dissent, India's economy is under pressure from high energy prices, rising inflation and the impacts of the Covid pandemic, including low employment, said Shumita Deveshwar, senior director of India research at TS Lombard.

"These have the potential to become bigger political issues in the longer-term," Deveshwar said. "If the coal crisis continues for an extended period, it will add to the pressure." [Source](#)

## **Rising power demand & 'load shedding': State power regulators must act**

Power demand is galloping as the economy recovers from the lows of the pandemic and summer temperatures rise. A lot is being discussed in our media about the demand-supply mismatch and planned measures to augment supplies. Several states are experiencing power-cuts, for which we have a euphemism: 'load shedding'.



We, therefore, plan to discuss how to manage this shortage equitably and with minimal economic impact. We came across an order dated April 11, 2022, passed by the Andhra Pradesh Electricity Regulatory Commission (APERC), imposing 'Restriction & Control (R&C) measures' for two weeks based on a representation made by AP distribution companies (discoms) that has sought permission to impose certain restrictions on power supply under section 23 of the Electricity Act, 2003 (EA 03).

APERC has imposed a 50% cut in contracted demand for continuous process industries; one additional weekly power holiday for non-continuous process industries; advertisement hoardings/signboards to be switched off from 6 PM to 6 AM; 30-minutes and one-hour power-cuts for urban and rural residential consumers, respectively; and continuous day-time supply of power for seven hours instead of nine hours for agriculture.

Although this load shedding order does not give any reason or analysis for the prescribed protocol, it is heartening to note that it invokes the powers vested in the state commission under Section 23. In 2008, as the chairman of the Central Electricity Regulatory Commission and the ex-officio chair of the Forum of Regulators (a body comprising all the Chairmen of state commissions to harmonise regulations), one of us had proposed that state commissions should invoke their power under Section 23 to manage power shortage in their states. Their overwhelming response was negative—the management of power shortage, being a highly political matter, should be left to the state governments to handle. My argument that these powers under the law now vest in the state commissions, and that state governments have no locus standi, did not cut ice.

In 2004-05, Maharashtra faced a massive power shortage due to the collapse of the Enron deal, and there was no spare transmission capacity available to wheel in electricity from outside the state. There used to be a special Act brought by the state that empowered it to deal with such shortages. But with the enactment of EA 03, all state laws relating to electricity were subsumed by this law.

That summer, the Maharashtra Electricity Regulatory Commission (MERC) initiated, in consultation with the then Maharashtra State Electricity Board (MSEB), an exercise of holding public hearings at divisional headquarters on how to balance the demand and supply by factoring in consumer-category-wise hours of power-cuts. The commission had already, in its previous tariff order, linked power tariff to Aggregate Technical and Commercial (AT&C) losses. Divisions that had the highest losses were to pay the highest rate for a specific consumer category. Now, the hours of power-cut became the proxy for rates. Urban and rural areas that had the highest losses were to bear the maximum burden of power-cuts. In short, MERC made load shedding based on AT&C losses part of Maharashtra State Electricity Distribution Company Limited's (MSEDCL's) annual tariff order: Higher losses meant more hours of load shedding, while keeping the urban and rural area differential in mind.

The Supreme Court confirmed this role of the commission vide order dated May 13, 2005, in MSEB Vs. Anil & Others, directing that MSEB would carry out load shedding in consultation with the MERC. Subsequently, MSEDCL changed its stance and went to the Appellate Tribunal on Electricity (APTEL), in Appeal No. 173 of 2008. The Tribunal, gathering on July 31, 2009, held that Section 23 of the Act gives adequate powers to the state commissions to pass necessary orders for securing equitable distribution of electricity. Further, the preamble of the Act contains a specific reference to the protection of consumer interest and measures conducive to the development of the electricity industry. Directions by the state commissions to adhere to load shedding protocol can also be treated as being in the nature of 'standard', with respect to continuity and reliability of service, by the appellant.

To sum up, all the states have had electricity regulators for more than two decades, and it is for them to regulate load shedding in consultation with the distribution companies and electricity consumers. As

stated above, the Supreme Court has confirmed this position. If the regulators do not act, the consumer will suffer. [Source](#)

## Power Minister RK Singh meets companies, banks to restart 5 GW units

Union power minister RK Singh held meetings with lenders, state government officials and power project developers that could help restart nearly 5 GW of non-operational plants within a month. "Barring one or two plants which are not feasible to run as they have been shut down for 5-6 years and will take about one year time to revive, a clear roadmap for all other plants has been decided," a senior official said. "The plants are targeted to become operational within a month." Executives from Essar Power, Tata Power, Reliance Power, RattanIndia, and Coastal Energen, besides officials of Gujarat and Haryana, were among those who attended the meetings to discuss a resolution for 7Gw of commissioned but non-operational plants.

Senior officials from NTPC, State Bank of India, Power Finance Corp, REC Ltd, Axis Bank, SBI Caps and Punjab and National Bank were also present. Power minister discussed individually all commissioned power plants not operational with concerned states, lenders and generating companies to thrash out solutions, the official said.

Industry sources also confirmed the progress saying many stressed power plants could become operational soon. "The meeting has set the ball rolling for some of the projects. Lenders and state government officials have been asked to support the projects, while the project developers have been urged to arrange their contribution," another government official said.

The projects discussed included Essar Power's Salaya plant in Gujarat, Reliance Power's Butibori and RattanIndia's Nashik plants in Maharashtra, Coastal Energen and IL&FS Cuddalore plants in Tamil Nadu as well as projects of Meenakshi Energy and Simhapuri Thermal Power plant in Andhra Pradesh. Separately, home minister Amit Shah also met with Singh, coal minister Pralhad Joshi and Railways minister Ashwini Vaishnav to take stock of the power situation and coal stocks in the country.

Marginal relief

A slight drop in temperature over the weekend eased peak power demand to 191 Gw from a high of 204-Gw a day ago. Better than expected pick up in wind-based electricity generation over the last 2-3 days also reduced pressure on thermal power plants. Data showed wind generation of 310 million units and 608 million units of total renewable energy generation on May 1, a three-fold jump over the same day a year ago. Spot power prices in all segments on power exchanges however remained high and the availability on the day-ahead market that was capped a month ago was low.

Power plants had 22 million tonnes of coal stocks, enough to last for nine days at the current consumption rate. Coal India Ltd (CIL) said it supplied 15.6% more coal to the power sector in April 2022 compared to the same month last year. Supplies to power plants were at 49.7 million tonnes in April 2022 while despatch added up to 43 MT.

## Pooled bids

The central government is also considering aggregating electricity demand from states and inviting power supply bids to help stressed power plants become operational while increasing electricity availability. The bids are targeted to ease the power supply position in the country as many commissioned projects are languishing for want of contracts with power distribution companies, sources told ET. The power ministry had earlier in 2018 and 2019 facilitated similar aggregation schemes to help plants that became stressed due to a lack of bids from states. [Source](#)

## India's power consumption spiked to all-time high of 132.98 billion units in April due to heatwave

Amid the rise in mercury level in the country, the power consumption grew 13.6% year-on-year to 132.98 billion units (BU) in April, according to power ministry data. Power consumption in April last year was recorded at 117.08 BU, which was higher than 84.55 BU in the same month of 2020. On the other hand, the peak power demand met, which is the highest supply in a day, during April this year remained at an all-time high of 207.11 GW. The peak power supply stood at 182.37 GW in April 2021 and 132.73 GW in April 2020.

The unprecedented electricity use resulted in widespread power cuts in April, as utilities scrambled to manage demand as coal supplies dwindled. Power supply fell short of demand by 2.41 billion units, or 1.8%, the worst since October 2015.

The demand for power in Delhi rose 42% in April, 36% in Punjab, and 28% in Rajasthan, respectively, government data showed. Soaring temperatures lead to a 74.7% rise in electricity use in the hilly state, Sikkim. Himachal Pradesh and Uttarakhand, two other mountainous states thronged by tourists seeking a retreat from the heat of the plains, saw power demand surge by more than a sixth because of the higher temperatures. Other northern states such as Haryana and Uttar Pradesh, and Jharkhand in the east saw demand for electricity rise more than 25%, the data showed. Andhra Pradesh state suffered its worst power cuts in more than six years because of the heatwave, according to the data

As per the experts, India is likely to face more power cuts as utilities' inventories of coal, which were at the lowest pre-summer levels in at least nine years, declined 13%, despite state-run Coal India, which makes up 80% of India's coal output, ramping up production by more than 27%. Besides, electricity use is expected to grow as India's weather office has forecast above normal maximum temperatures over most parts of the west-central, northwest, north, and northeast. [Source](#)

## Transmission charges payable by DICs for the billing month of May'22

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	45.57
2	UP	NR	55.05
3	Punjab	NR	43.68
4	Haryana	NR	53.03
5	Chandigarh	NR	40.78
6	Rajasthan	NR	57.68
7	HP	NR	40.64
8	J&K	NR	42.01

9	Uttarakhand	NR	52.74
10	Gujarat	WR	46.86
11	Madhya Pradesh	WR	48.44
12	Maharashtra	WR	51.69
13	Chhattisgarh	WR	40.88
14	Goa	WR	51.47
15	Daman Diu	WR	47.19
16	Dadra Nagar Haveli	WR	49.02
17	Andhra Pradesh	SR	52.91
18	Telangana	SR	39.77
19	Tamil Nadu	SR	47.32
20	Kerala	SR	46.47
21	Karnataka	SR	45.45
22	Pondicherry	SR	40.98
23	Goa-SR	SR	32.85
24	West Bengal	ER	44.62
25	Odisha	ER	48.47
26	Bihar	ER	45.97
27	Jharkhand	ER	46.29
28	Sikkim	ER	38.77
29	DVC	ER	45.56
30	Bangladesh	ER	36.67
31	Arunachal Pradesh	NER	42.51
32	Assam	NER	41.85
33	Manipur	NER	41.98
34	Meghalaya	NER	40.60
35	Mizoram	NER	41.38
36	Nagaland	NER	56.70
37	Tripura	NER	46.18

### Bilateral Tender Results: -

Sl. No.	Tender Quantum (MW)	Supply Period	Time Blocks (Hrs.)	Price (Rs./kWh)	LOI Status
<b>JBVNL/Short/22-23/RA/64</b>					
1	300	09.05.2022 to 31.10.2022	00:00 to 24:00	13.75	Awaited
<b>PSPCL/Short/22-23/RA/32</b>					
1	400	01.06.2022 to 08.06.2022	00:00 to 24:00	14.55	Awaited
2	400	01.06.2022 to 08.06.2022	07:00 to 17:00	14.55	



3	400	01.06.2022 to 08.06.2022	22:00 to 06:00	14.55	
4	400	09.06.2022 to 15.06.2022	00:00 to 24:00	14.55	
5	400	09.06.2022 to 15.06.2022	07:00 to 17:00	14.55	
6	400	09.06.2022 to 15.06.2022	22:00 to 06:00	14.55	
7	400	16.06.2022 to 23.06.2022	00:00 to 24:00	14.55	
8	400	16.06.2022 to 23.06.2022	07:00 to 17:00	14.55	
9	400	16.06.2022 to 23.06.2022	22:00 to 06:00	14.55	
10	400	24.06.2022 to 30.06.2022	00:00 to 24:00	14.55	
11	400	24.06.2022 to 30.06.2022	07:00 to 17:00	14.55	
12	400	24.06.2022 to 30.06.2022	22:00 to 06:00	14.55	
13	400	01.07.2022 to 08.07.2022	00:00 to 24:00	14.55	
14	400	01.07.2022 to 08.07.2022	07:00 to 17:00	14.55	
15	400	01.07.2022 to 08.07.2022	22:00 to 06:00	14.55	
16	400	09.07.2022 to 15.07.2022	00:00 to 24:00	14.55	
17	400	09.07.2022 to 15.07.2022	07:00 to 17:00	14.55	
18	400	09.07.2022 to 15.07.2022	22:00 to 06:00	14.55	
19	400	16.07.2022 to 23.07.2022	00:00 to 24:00	14.55	
20	400	16.07.2022 to 23.07.2022	07:00 to 17:00	14.55	
21	400	16.07.2022 to 23.07.2022	22:00 to 06:00	14.55	
22	400	24.07.2022 to 31.07.2022	00:00 to 24:00	14.55	
23	400	24.07.2022 to 31.07.2022	07:00 to 17:00	14.55	
24	400	24.07.2022 to 31.07.2022	22:00 to 06:00	14.55	
<b>RUVNL/Short/22-23/RA/65</b>					
1	500	15.05.2022 to 14.06.2022	00:00 to 24:00	9.6	Awaited
<b>Torrent Power Limited/Short/22-23/RA/68</b>					
1	300	01.06.2022 to 15.06.2022	09:00 to 24:00	11.99-12.00	Awaited
2	125	16.06.2022 to 30.06.2022	09:00 to 24:00	12	
<b>BSES/Short/22-23/RA/55</b>					
1	400	01.05.2022 to 15.05.2022	00:00 to 24:00	15.6	Awaited
2	100	01.05.2022 to 15.05.2022	00:00 to 03:00	-	
3	100	01.05.2022 to 15.05.2022	15:00 to 20:00	-	
4	200	01.05.2022 to 15.05.2022	20:00 to 24:00	-	
5	400	16.05.2022 to 31.05.2022	00:00 to 24:00	7.89-7.9	
6	200	16.05.2022 to 31.05.2022	00:00 to 03:00	-	
7	200	16.05.2022 to 31.05.2022	15:00 to 20:00	11.9	
8	200	16.05.2022 to 31.05.2022	20:00 to 24:00	-	
9	300	01.06.2022 to 15.06.2022	00:00 to 24:00	7.89-7.9	
10	50	01.06.2022 to 15.06.2022	00:00 to 03:00	-	
11	50	01.06.2022 to 15.06.2022	15:00 to 20:00	11.9	



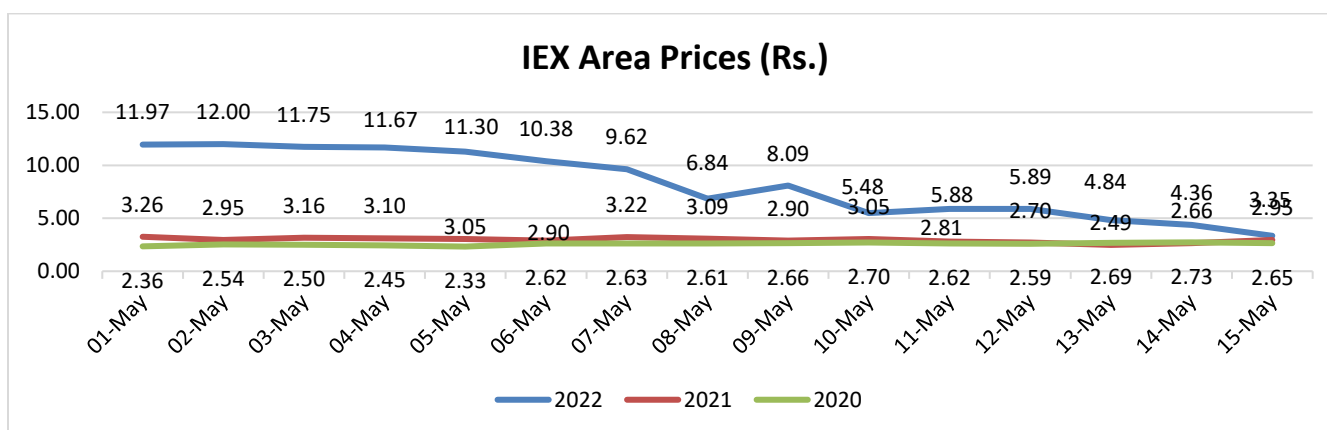
12	200	01.06.2022 to 15.06.2022	20:00 to 24:00	-
13	300	16.06.2022 to 30.06.2022	00:00 to 24:00	7.89-7.9
14	100	16.06.2022 to 30.06.2022	15:00 to 20:00	11.9
15	150	16.06.2022 to 30.06.2022	20:00 to 24:00	-
16	100	01.07.2022 to 15.07.2022	00:00 to 24:00	7.9
17	150	01.07.2022 to 15.07.2022	15:00 to 20:00	11.9
18	300	01.07.2022 to 15.07.2022	20:00 to 24:00	-
19	100	01.08.2022 to 15.08.2022	20:00 to 24:00	-
20	100	16.08.2022 to 31.08.2022	20:00 to 24:00	-
21	200	01.09.2022 to 15.09.2022	20:00 to 24:00	-
22	100	16.09.2022 to 30.09.2022	20:00 to 24:00	-

**UPCL/Short/22-23/RA/58**

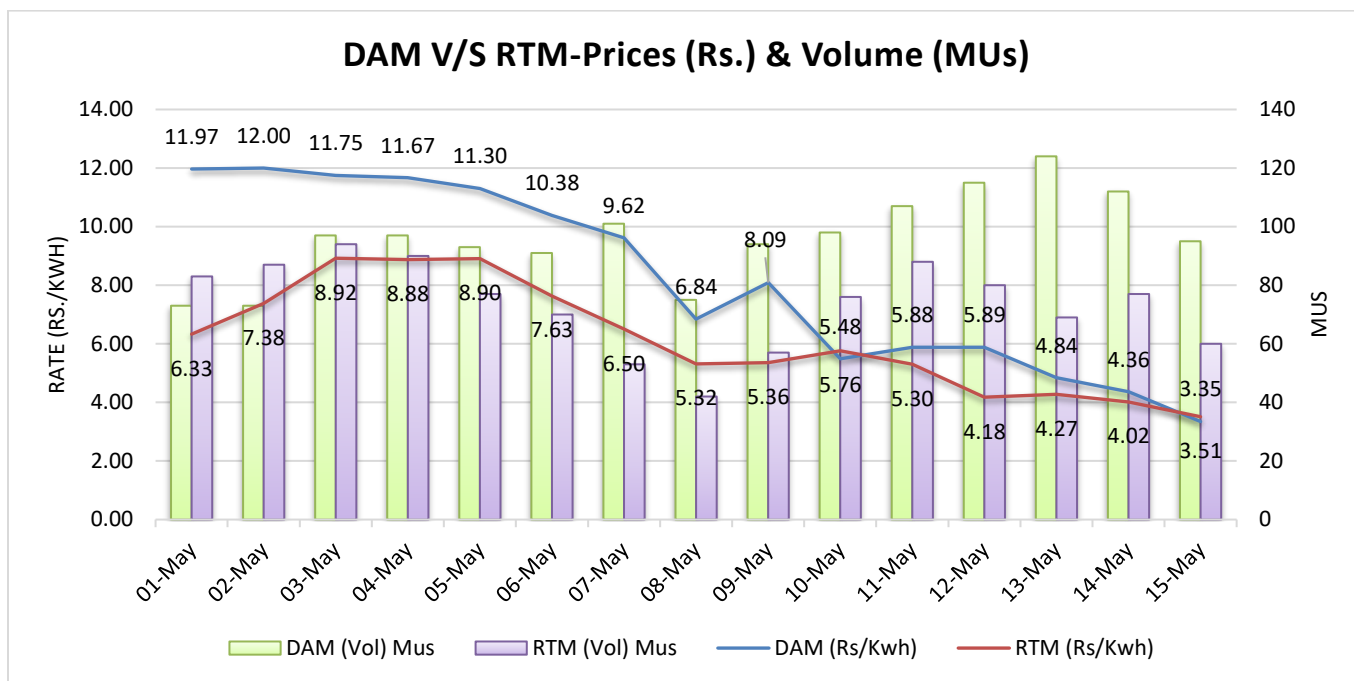
1	400	01.05.2022 to 31.05.2022	00:00 to 24:00	7.8
2	200	01.05.2022 to 31.05.2022	00:00 to 05:00	-
3	200	01.05.2022 to 31.05.2022	22:00 to 24:00	-
4	150	01.06.2022 to 30.06.2022	00:00 to 24:00	7.8
5	100	01.06.2022 to 30.06.2022	00:00 to 05:00	-
6	100	01.06.2022 to 30.06.2022	22:00 to 24:00	-
7	100	01.07.2022 to 31.07.2022	00:00 to 24:00	6.97
8	150	01.08.2022 to 31.08.2022	00:00 to 24:00	7.6
9	100	01.09.2022 to 30.09.2022	00:00 to 24:00	8.2
10	250	01.10.2022 to 31.10.2022	00:00 to 24:00	8.69
11	300	01.11.2022 to 30.11.2022	00:00 to 24:00	7.49-8.42
12	600	01.12.2022 to 31.12.2022	00:00 to 24:00	6.99-10
13	600	01.01.2023 to 31.01.2023	00:00 to 24:00	7.00-10.00
14	400	01.02.2023 to 28.02.2023	00:00 to 24:00	7.00-9.00
15	400	01.03.2023 to 31.03.2023	00:00 to 24:00	7.50-9.00

Awaited

**IEX Price Trends**







## Weather (Estimated for next fortnight)

City	Max Temp	Min Temp	Precipitation (Probability)
DELHI	40	28	8%
MUMBAI	33	29	22%
KOLKATA	36	28	21%
CHENNAI	36	28	15%

*(Source - Accuweather)*

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**Editorial team: Biswajit Mondal (Specialist-Short Term, Utility Marketing) Mob No-9717533211**