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TPTCL'S E-NEWS LETTER



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Tata Power Trading Company Limited (TPTCL)







Power Market News

Power demand may ease in short term as monsoon makes headway

Soaring power demand is expected ease for the next few days as the southwest monsoons makes its way forward cooling temperatures across parts of the country. The India Meteorological Department in its weather update on Monday said that a fall of 2-3 degree Celsius is likely over northwest India during next three days and no significant change is expected thereafter.

It noted that the southwest monsoon has advanced into some more parts of Arabian Sea, some parts of Gujarat, entire Konkan, most parts of Maharashtra, and Karnataka. It has also hit some parts of Telangana and Rayalaseema, Tamil Nadu, most parts of Sub-Himalayan West Bengal and some parts of Bihar during the day.

It further said that conditions are favourable for further advance of monsoon into some more parts of north Arabian sea, Gujarat, Madhya Pradesh, Maharashtra, Karnataka and Tamil Nadu during the next 48 hours. IMD, however, said that heat wave conditions in isolated places were likely over South Haryana-Delhi, southeast Uttar Pradesh, southwest Bihar, Jharkhand and north Odisha on Monday.

With rains in parts of the country, the power demand fell on Sunday. According to data from the Power System Operation Corporation Ltd (POSOCO), the maximum power demand met on 12 June, Sunday was 192.922 GW down from 206.798 GW on 11 June, Saturday. The peak shortage on Sunday also fell to 744 MW from 1.002 GW. The demand has significantly eased from the record maximum demand met of 211.856 GW, which was reached on 10 June.

Although, the power demand is expected to calm in the near term, it is expected to shoot up in June-end and the first week of July in the Delhi-NCR region. According to experts, the demand is likely to peak in June-end and July because usually just after the rains, the humidity increases in the national capital. Although, the rains generally lower the power demand, the coal shortage scenario worsens during the monsoons as the transportation of the the mineral is hindered and rains also affect the quality of the fuel. As of 12 June, the coal stock in the 173 power plants tracked by the Central Electricity Authority stood at 24.48 million tonne, which is 37% of the required stock of 66.96 million tonne. A total of 79 plants operational with domestic coal and 8 imported coal based plants have less than 25% of the the required stock. The coal inventory is expected to improve with the state-run Coal India issuing tenders for importing coal on behalf of power generation companies and independent power producers after directions from the Centre. Last week, Coal India issued tenders for import of over 8 million tonne of coal. Source

India's power demand jumps by 45,000 MW in a year: Minister

India's power demand this year has jumped by a record 40,000-45,000 MW per day as an intense heat wave sweeps through northern parts of the country, the economy expands, and electricity reaches millions of unelectrified homes, Power Minister RK Singh has said. A massive addition in the generation capacity, integrating the country into one transmission grid and strengthening of the distribution system during eight years of the Modi government is ensuring the 23 to 23.5 hours of electricity supply, he said in an interview with PTI.

India's electricity demand on June 9 was recorded at an all-time high of 2,10,792 megawatts, and 4,712 million units of electricity were consumed. Power plants are operating at full throttle to meet this demand, and the government has ordered coal import to meet the shortfall in domestic supplies.



"The whole power sector has changed (in last eight years)," Singh said. "Before (2014), we were power deficit, load shedding was endemic". According to a survey by an NGO, the average availability of power in rural areas was about 12.5 hours at the national level. "Today it is 22.5 hours," he said.

Average shortage

A power deficit nation with an average shortage of anywhere between 17 and 20 per cent, India has been transformed into a power surplus country. Detailing the steps, he said in eight years, 1,69,000 MW of capacity was added to take electricity generation capacity to over 4,00,000 MW (or 400 gigawatts). Against this, the peak demand is just 215 GW. Power plants operate at run rates much lower than their capacity. This in the case of renewable energy units, such as solar power, is just one-fifth of the rated capacity.

Also, the whole country was connected into one grid with one frequency after 1.66 lakh circuit kilometres of transmission lines were laid. This was supplemented by strengthening of the distribution system with the replacement of old lines, the addition of high and low tension lines, transformers, substations and feeder lines. "Today, India is the world's largest single frequency electricity grid," he said. "Earlier, we could transfer about 37,000 MW (of electricity) from one corner to the other. Now we can transfer 1,12,000 MW. Our system says in the rural areas, availability is now 23 hours on an average and in urban areas, it is almost about 23.5 hours by and large," the minister added.

Singh said thousands of villages and hamlets that hadn't seen electricity in 70 years were provided connectivity. As many as 28.6 million unelectrified households — which is more than the combined population of Germany and France — were provided electricity. However, domestic production of coal — the feedstock for most of the power generated in the country — has kept pace with the spurt in demand. The minister said power plants have been asked to use 10 per cent imported coal for their power generation requirements.

Out of the 204.9 GW of installed coal-fired power generation capacity in India, around 17.6 GW or 8.6 per cent, is designed specifically to run on imported coal. Other power plants import the fuel for blending with domestic coal. Coal India Ltd has already floated tenders for the import of coal, he said. Slow pace of domestic production

The current coal shortage is a result of domestic production not keeping pace with demand. "The domestic coal production has increased but not to that extent. So, the net result was that on April 1, our reserve stock at power plants was at 24 million tonnes and on April 30, it came down to 19 million tonnes and further to 15 million tonnes on May 15," he said, adding states too have been asked to import coal. Singh said the government was working to move domestic coal to power plants, as well as imported one to prepare for the monsoon season when output from local mines comes down. In addition to fossil fuel-based power generation capacity, renewable capacity addition has soared.

"India pledged that by 2030, 40 per cent of our capacity will be non-fossil fuel-based. We achieved this target 9 years in advance in November 2021," he said. "Today, established renewable capacity is 1,58,000 MW and another 54,000 MW is under construction". Added to that 6,000 MW of nuclear capacity, the total renewable capacity comes to 1,65,000 MW — which is 41 per cent of established capacity, he said. <u>Source</u>

Power exchanges can trade contracts up to 3 months now

Power exchanges will be able to trade contracts up to three months following approval from the Central Electricity Regulatory Commission (CERC). The approval is expected to bring a landmark change in the



power markets as a major chunk of bilateral trade is expected to shift from bilateral contracts to power exchanges. Of the 660 power tenders between January 2020 and April 2022, 396 tenders (60%) were for monthly procurement of power.

"This indicates preference for monthly contracts among stakeholders," CERC said. Increased share of electricity trade on exchanges is desired the world over for a deep, competitive market structure. Experts said the move would enable state power distribution companies to tie-up short-term power supply for up to three months on power exchanges at a better and transparent price.

"The move is very positive. Through exchange, price discovery would be competitive and payment issues will get resolved," said an expert. "Approval is granted for daily contracts, weekly contracts, monthly contracts and any day single sided contracts (based on reverse auction methodology) to be traded at petitioner's exchange," CERC said in an order on a petition filed by the Indian Energy Exchange

The Supreme Court last year settled a decade-long jurisdictional spat between CERC and the Securities & Exchange Board of India, paving way for introduction of longer duration delivery-based contracts in the power exchanges, which has been currently restricted to 11 days. The power ministry had said the order will deepen the power market to a volume of 25% by 2024-25 from the present level of 5.5% of the volume. *Source*

Coal ministry launches PIM module of single window clearance system

The government on Tuesday launched the Project Information and Management (PIM) module of the Single Window Clearance System, a platform to seek various clearances to operationalise coal mines. The development assumes significance in the wake of the government making efforts to secure domestic fuel supplies amid fear of shortage during monsoon. "The Ministry of Coal has launched Project Information & Management Module of Single Window Clearance System (SWCS) here today," according to an official statement.

The PIM module of SWCS will facilitate project proponents as well as ministry and state officials in monitoring and expeditious implementation of coal mines. While launching the new IT-enabled facility, Coal Secretary Anil Kumar Jain said it is an innovative endeavour of the government to create a platform to obtain various clearances for operationalisation of coal mines. He called upon officials to organise interactive sessions in order to make the new facility familiar to all stakeholders. Various statutory provisions like approval of mining plan and mine closure plan, and environment and forest clearances, are the prerequisites for starting a coal mine. These clearances are granted by various central ministries and state government departments. Some of the clearances have their online portals, but most are being given through offline mode.

The project proponents are required to approach different administrative ministries and government departments separately to apply for the requisite clearances, leading to delay in operationalisation of coal mines. As part of the decision to digitise the clearances, the Ministry of Coal has conceptualised a single window clearance system, through which a project proponent can apply for requisite clearances with a single registration interface.

The portal is proposed to map applications and their respective process flows for grant of all the statutory clearances required for starting of a coal mine. "To facilitate ease of doing business, a unified platform of SWCS is designed which includes already operational module for approval of mining plan and mine closure plan in a time bound manner and integration with Parivesh Portal, digital acceptance of objection



under Section 8 (1) of Coal Bearing Areas (Acquisition & Development) Act, 1957, Consent Management System of Telangana & West Bengal," the ministry said. <u>Source</u>

Gujarat removes \$110/T ceiling on imported coal price in PPAs

The Gujarat government has removed the Harga Batubara Acuan index ceiling of free on board (FOB) price of coal of \$110 per tonne for the supplemental power purchase agreement between Gujarat Urja Vikas Nigam (GUVNL) and Adani Power Mundra (APMuL)

The Supplementary PPAs were inked on December 5, 2018 and March 30, 2022.

Removing the ceiling on imported coal will aid both the parties in avoiding disputes on energy payments and will ensure that pass-through of coal cost is done in a prudent and transparent manner. It will also aid imported coal based plants in import fuel, whose prices have been rising in the international markets due to high demand. GUVNL's petition was for determining the base rate of imported coal used in APMuL units as on October 15, 2008 taking into account the consumer interest and all relevant factors in the petition and recommended the Base Rate to the Government of Gujarat.

Removing ceiling

In a petition filed before the Central Electricity Regulatory Commission (CERC), GUVNL said that Gujarat government through a resolution on February 25 issued the order on ceiling on cost. "HBA index ceiling of FOB price of coal of \$110 per tonne as per Government of Gujarat as per the SPPAs dated December 5, 2018 and ceiling of \$90 a tonne as per the Government guideline of June 12, 2020 shall be deleted and the provision related to reset of the aforesaid ceiling from time to time shall also be deleted," the GUVNL petition said.

The order also instructed that existing provisions in SPPAs on computing energy charges and working out the landed cost of fuel shall be modified and a provision shall be incorporated whereby energy charge shall be worked out considering the base rate recommended by CERC and finally approved by the state. Determining the base rate will include parameters such as FOB coal cost in \$ per kWh for quality of coal consumed including other charges. Ocean Freight in US Dollar per kWh and Port Handling Charges in ₹ per kWh as on October 15, 2018 based on normative operating parameters as per provisions of SPPA of December 5, 2018.

CERC order

The CERC in its Monday order said, "We have already laid down the methodology for computation of monthly escalation index, Furthermore, in view of the above, it is left to GUVNL and APMuL to mutually decide whether to adopt the monthly escalation index for the purpose of payment in terms of the SPPA dated March 30, 2022." The commission also ruled on determining the methodology for the base rate of coal as on October 15, 2010 keeping in view the provisions of the Deed of Settlement, SPPA of February 30, 2018 and the actual coal consumed at the Mundra Power Project.

"In course of consultative process for the above order, some stakeholders had suggested to use country specific indices. The Commission after due consideration of the said suggestions decided that country specific indices may not always be available or reliability could be an issue. Moreover, the rationale for using composite index instead of country specific index was to induce efficiency in procurement and diversification of supplies." CERC said.



There have been instances in the past as brought to the notice of the Commission through other petitions where shipments from countries other than Indonesia were received and its possibility in future cannot be overlooked by the Commission while fixing the base, it added.

"Therefore, Base Rate on the basis of CERC composite index would ensure pass through of coal cost in a prudent and transparent manner, avoid any future disputes between the parties in computation of the energy charges as has been stated in the government of Gujarat's GR of February 25, 2022," it added. *Source*

CERC to consider correction factor for escalation rate transition for imported coal in existing PPAs

The Central Electricity Regulatory Commission (CERC) on Monday underlined the need for a correction factor in the transition to a monthly escalation from six-monthly escalation rates for imported coal users in the existing power purchase agreements (PPAs). The commission, in a Suo Motu order on methodology for computing escalation rates for imported coal for payment on a monthly basis, said that it will address the correction factor separately. CERC had floated a staff paper on the same last month for stakeholder comments. As the proposal in the staff paper was limited to the methodology for computing monthly escalation rates, the suggestion of changeover rate or correction factor for transition to monthly escalation rates within PPAs is beyond the scope of the present order, CERC said. "However, at the same time, the Commission recognises that there is a need to specify the changeover rate or correction factor, as without the same, the parties to the PPAs may not be in a position to switch over from six monthly escalation rates to monthly escalation rates. The Commission, therefore, may address the issue separately," it added. The escalation rates for imported coal for payment on a monthly basis will be applicable from April 2022.

Correction factor

Commenting on submissions, CERC said that most of the stakeholders raised issues on implementation of monthly escalation rates, particularly for existing PPAs. Adani Power (Mundra) Ltd (APMuL) and Tata Power Company (TPCL) suggested allowing a one-time escalation for transition to monthly escalation rates. APMuL said that monthly escalation index can be used for existing PPAs also with mutual agreement. Therefore, to take care of such requirements, it is necessary to notify a correction factor for existing PPAs from the present six monthly escalation index to monthly. While, TPCL was of the view that to capture the escalation in imported coal price without any gap period, it is requested to allow one-time escalation for generators opting for monthly escalation rates, when they transition from March 2022 to April 2022. This would address the lag between actual price paid and billing price, which will be beneficial for Discoms as well. On the other hand, Gujarat Urja Vikas Nigam raised concerns on the adoption of monthly escalation rates for the existing PPAs and submitted that any modification in escalation methodology should not be made applicable to the existing PPAs.

Methodology

CERC in its order said 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/ price indices and its composition used for computing escalation rates being notified on six monthly-basis shall be used for computing the escalation rates notified on monthly basis," it added. In the existing PPAs, where the generating company and the procurer mutually agree, they may use the monthly escalation rate, CERC order said. *Source*



Gujarat: State to announce three new power policies soon

Gandhinagar: The Gujarat government will soon announce three new policies relating to power generation. These deal with waste-to-energy, wind power and small hydel power generation. It is expected that all three policies will be announced by the end of this month, as the extensions of the existing policies end next month.

While the state government has been forced to buy expensive power due to the coal shortage, it is looking to boost power generation through fresh incentives in these three policies. State finance and energy minister Kanu Desai confirmed that the government is giving final touches to the three policies. "The extended term for our three key policies ends in July, so we want to announce revised policies in the next few weeks. We are having consultations with stakeholders to address concerns and provide the best possible incentives. Our teams are studying nagging issues in the current policies to rectify them," he said.

Key sources said that due to a lack of co-ordination between the energy & petrochemicals, urban development and other departments, the first waste to energy policy failed to produce the desired results. "The existing waste to energy policy envisaged generation of 100 megawatts (MW) of energy from waste but fell grossly short at less than 5MW. In the proposed policy, the government has resolved regulatory issues and offered attractive rates. The new policy is being prepared in the context of Swachh Bharat Mission (SBM 2.0), which aims to create garbage-free cities. In the earlier policy, developers complained of a lack of cooperation from urban bodies, and we are focusing on resolving all such issues," a source said.

"In the wind power policy, developers are facing major problems from the revenue department as it takes a lot of time to get the necessary clearances. The new policy will address these issues. The government is trying to maximize the number of locations for wind power generation and offer single window services. The government has decided to lift all restrictions on maximum wind power generation. Small developers requested removal of the 50% cap on captive generation and 50% compulsory purchase from power utilities. The government is prepared to remove these restrictions," a source said about the proposed wind power policy.

Regarding the small hydel power generation policy, developers complained of lack of support from the irrigation and Narmada departments. "The state government has decided to redefine the roles of all the departments concerned and to offer attractive rates to developers and render technical support for the maximum possible hydel power generation," said a source. *Source*

'Nuclear energy can meet India's energy needs'

If the country has to meet net zero carbon emission by 2070, as declared by Prime Minister Narendra Modi in the COP26 Glasgow Climate Summit, India has to rely on production of clear energy in the form of nuclear energy, asserted renowned nuclear scientist and member of the Atomic Energy Board (AEB) Anil Kakodkar on Wednesday.

Nuclear energy is also imperative to meet the upcoming demand for electricity in the country as it also clean energy, he said, and discussed about the dream of the father of Indian nuclear programme Homi J. Bhabha of supply of nuclear fuel assemblies and nuclear reactors to the global market. Dr. Kakodkar participated in 'Nuclear Fuel Complex (NFC) Day' as part of the Golden Jubilee Year 2021-22 at the Homi Bhabha Convention Centre here as the chief guest. NFC chairman and chief executive Dinesh Srivastava



said that the institute has achieved 80% paperless management and has been supplying nuclear fuel to all the reactors of India.

"It is striving towards supplying nuclear fuel and other reactor components throughout the world. Its quality and cost effectiveness should help to compete globally," he said. The "NFC Highlights" magazine was released on the occasion. Atomic Minerals Division (AMD) director D.K. Sinha, ECIL CMD Rear Admiral Sanjay Chaubey and senior NFC officials D. Pramanik, Komal Kapoor and N. Vijayaragavan were present, according to a press release. <u>Source</u>

Interregional electricity transfer rises 6.1 per cent in FY22

The volume of interregional electricity transfer was 227,920 million kwh (MU) in FY22, up 6.1 per cent from 214,766 MU in FY21. The Northern Region (NR) and the Southern Region (SR) continued to be net importers of electricity while the other three regions – Western (WR), Eastern (ER) and Northeastern (NER) – were net exporters. The rate of growth of interregional transfer appears to have slowed down progressively in FY22. Such growth in the first four months (April to July) of FY22 stood at a much higher 16.6 per cent. This fell gradually to 7 per cent in the first three quarters of FY22, and further to 6.1 per cent at the end of the fiscal year.

Here are some observations of interregional electricity transfer in FY22 made by T&D India, based on official statistics released by National Load Dispatch Centre:

Imports by WR more than doubled to 47,735 MU in FY22 from 22,317 MU in FY21. However, exports fell by 10.3 per cent to 108,658 MU from 121,142 MU by the same comparison. The net effect was that WR turned net exporter to the tune of 60,923 MU in FY22. In FY21, WR was in a better position with net exports of 98,824 MU.

ER was a net exporter of electricity to the extent of 60,844 MU in FY22, as against 52,569 MU in FY21. Amongst all regions, ER exported the highest (at 33,807 MU) to SR.

NR, a consumption centre and therefore a traditional importer of electricity, apparently saw improvement in its dependence on other regions. NR was a net importer to the tune of 78,634 MU in FY22 as against 92,486 MU in FY21. Imports by NR fell 1.9 per cent year-on-year in FY22, coupled by a 70.6 per cent growth in exports.

SR has been witnessing higher exports in recent times, slowly moving away from its traditional image as an importer of electricity. In FY22, SR exported 15,506 MU of electricity as against 5,082 MU in FY21. Imports also fell by around 9 per cent in FY22. With the result, SR was a subdued net importer in FY22 with a net import volume of 43,610 MU as against 59,839 MU in FY21. The busiest transmission elements in FY22 included the 765kV double-circuit Angul-Srikulam line (ER to SR: 17,002 MU), Champa-Kurukshetra HVDC (WR to NR: 13,807 MU) and Talcher-Kolar HVDC (ER to SR: 13,736 MU). <u>Source</u>

Coal India plans green mining options through new technologies: Chairman

State-owned CIL is aiming at green mining options and increase production from its underground mines, which are favourable for cleaner ecosystem, through installation of technologies, company's Chairman Pramod Agrawal said. The comments come at a time when there have been concerns about global climate change on account of the burning of fossil fuels including coal, resulting into greenhouse gas emission.



For environmentally cleaner transportation of coal, Coal India (CIL) is setting up coal handling plant/silos in 35 projects under the first phase of the first-mile connectivity, and stressed that it is continuing in the second phase as well. "The company is also aiming at green mining options and planning to increase its underground output," he said.

Stating that CIL is committed to preservation of environment and creating a green canopy around its mining areas, the chairman said that the public sector unit planted over 30.4 lakh saplings during FY22, expanding its green cover to 1,468.5 hectares. The chairman said that 27 eco parks and mine tourism projects have been developed as on date.

Satellite surveillance indicates that 76 major open-cast projects have reclaimed 62.5 per cent of excavated area limiting active mining area to 37.5 per cent. For every hectare of land degraded due to mining, CIL created green cover of around 2 hectares of land. Coal India accounts for over 80 per cent of domestic coal output. <u>Source</u>

New Study from AEEE Lays Out a 'Roadmap for Demand Flexibility in India'

Alliance for an Energy-Efficient Economy (AEEE) released a report titled 'Roadmap for Demand Flexibility in India' in collaboration with AutoGrid.

The report highlights the wide range of possibilities that Demand Response (DR) offers that can effectively help electricity distribution companies (DISCOMs) in India handle their increasing future electricity demand while still operating reliably towards a greener grid. It further states that DISCOMs should carve out the ideal consumer centric DR strategy, comprising a portfolio of customizable options.

Speaking during the report launch, Dr. Satish Kumar, President, and Executive Director, AEEE, said, "Given the increasing electricity demand in India, it is imperative that Demand Response is brought to the mainstream by the regulators, system operators and DISCOMs to effectively manage demand. Today, as the power generation is getting greener, yet more intermittent and had to predict, it is absolutely critical to focus on flexible demand as a balancing resource and need to be included in Integrated Resource Planning process and by enabling performance based regulations. For this to happen at scale, consumers should be allowed to participate in the energy and ancillary markets. Time is right to leverage advanced metering infrastructure and other innovative technologies to roll out well-designed DR programmes.

Enriched with AutoGrid's global expertise and pioneering experience, this report will serve as a roadmap and guide for key actors responsible for reliable and cost-effective operation in a low carbon grid."

According to the report,

- Scalable DR programmes can become successful if they are designed to create win-win situations for both consumers and DISCOMs.
- Leveraging the energy data collected by smart meters to segment the consumers and identify
 potential target consumers is a useful tactic.
- Initial interventions can be facilitated by the use of Behavioural DR measures which can be further scaled to include more advanced automation options like Flexible DR.

"We are excited to partner with AEEE to lay out a clear roadmap to manage the growing peak demand related problems and dependence on coal or other fossil based sources", says Vish Ganti, VP & General Manager of AutoGrid. "Tapping into the power of collective human action, DISCOMS can create a strong



customer value proposition for smart metering investments, Virtual Power Plants and incentivize good behavioral actions" he added. Over the past 5 years, a 50% increase in households with ACs has added significant new cooling load to already increasing peak demand. This growth however can be turned into an effective resource by DISCOMs though intelligent load control with built in DR and Wi-Fi enabled plugins as part of a Virtual Power Plant program. <u>Source</u>

Why does India face a recurring power shortage despite enough coal stock?

India has the world's fourth-largest coal reserve. It is the second-biggest producer of fossil fuel behind China and is home to the world's biggest coal miner, Coal India, which accounts for 80% of the country's domestic output. The minable capacity of already allocated coal blocks is around 15% to 20% higher than the expected demand in 2030.

So why, year after year, India's power plants face coal shortages that lead to widespread power outages leaving parts of the country in the dark and industries in a limbo. There are several factors. India has had a long-standing policy to minimise imports of coal. In February 2020, Coal Minister Pralhad Joshi had said that the country would stop importing thermal coal from 2023-24.

Joshi had said the Coal Ministry would coordinate with Railways and Shipping Ministry and enable Coal India, captive and commercial miners to evacuate more coal by 2030. But despite efforts to increase the supply of domestic coal, there was a gap between the demand of coal and its supply. And the coal stocks at the generating stations are depleting at a worrisome rate. Now, Power Ministry is blaming declining coal imports for the current crisis. In 2018-19, 21.4 million tonnes of coal was imported for blending, 23.8 million tonnes in 2019-20 and in 2021-22, it fell to 8.3 million tonnes.

Coal inventories at power plants have declined by about 13% since April to the lowest pre-summer levels in years. And for the first time since 2015, Coal India will import the fuel for use by state and private power generating companies. The power ministry said the decision was taken after nearly all states suggested that multiple coal import tenders by states would lead to confusion and sought centralised procurement through Coal India.

The Centre faced pushback from states as imported coal is five times costlier than the one mined domestically. Recently, the government also stepped up pressure on utilities to increase imports to blend with local coal. It has even warned of cuts to the supply of domestically mined coal if power plants did not build up coal inventories through imports. But the power ministry on Saturday asked states to suspend tenders that are "under process"

Despite record production, Coal India's supply has not been able to meet the demand. In April 2022, the company registered a growth of 27.64% by producing 53.47 million tonnes. Former coal secretary Anil Swarup told Washington Post that Coal India's production stagnated in the last few years because of a failure by the government to appoint senior management and fund mining expansions.

Shreya Jai of Business Standard points a mismatch between coal, power and railway ministries. ower units did not stock up when Coal India had surplus coal. Imported coal-based power units not functioning for several years. Pressure of mining and supplying coal lies solely on Coal India.

Coal India's output has grown slower than the captive mines, awarded over the last six years. During 2020-22, production from the captive mines jumped by 38.5% while CIL saw a tepid growth of 3.4%, according to government data. These captive mines were awarded to private companies and state-owned



utilities over the last five years after the Supreme Court in 2014 scrapped all coal block allocations made over the past two decades.

Last year, three tranches of coal auctions were held after a hiatus of two years and nine blocks were successfully awarded In September 2021, the Union ministry of coal issued a stern warning to captive coal block owners, saying their mines should ramp up production or face regulation in coal supply from CIL. The ministry observed that production from these mines was below target.

Of the 43 operational coal mines awarded to private companies in the power, steel and metals sectors, not a single one is meeting its targeted annual production. On May 6, Coal India said it will offer its 20 closed and discontinued underground coal mines to the private sector to reopen and bring into production on a revenue-sharing model.

Shreya Jai says current power supply chain seems unprepared to handle high growth period, state discoms are unable to pay gencos, but electricity supply chain needs to be fixed starting with state discoms, she said. Meanwhile, the Railways is grappling to balance demands from the thermal power industry for faster coal supplies with the demands of other industries. It has to keep rakes ready to meet the rising demand for just about every other bulk commodity, from cement and steel to sand and food grains.

The strained balance sheets of discoms have consistently triggered delayed payments to power producers, often affecting cash flows and disincentivising further investment in the electricity generation sector. For the second time in two years, the Union Power Ministry notified a scheme for discoms to defer their dues towards the power generating companies. With the dues of the discoms touching a record high of Rs 1 trillion, the ministry has proposed a scheme to liquidate the discoms' dues in 48 monthly instalments. Strengthening the value chain of the power sector will ensure that coal supply-demand mismatch is resolved in the long term. <u>Source</u>

India expects lower rainfall in coal-producing areas, potentially easing power crisis

India expects rainfall in the biggest coal-producing areas of its east-central region to be below the long-term average this year, potentially easing utilities' coal shortages as there could be fewer disruptions to mining activity due to flooding. East-central India includes the states of Odisha, Jharkhand, Chhattisgarh and West Bengal, which together account for nearly half of the country's annual coal output. Coal accounts for nearly 75% of India's power generation.

India expects overall rainfall during the annual monsoon to be 103% of the long-term average. Higher rainfall in other parts of the country could increase hydro power generation and irrigation-driven electricity demand could be lower, easing pressure on thermal power. India has reversed a policy to cut coal imports to zero, invoked an emergency law to operate imported coal-based utilities and plans to reopen closed mines to address surging power demand, which is seen growing at the fastest pace in at least 38 years.

Domestic coal output typically dips during the annual monsoon period between June and September every year due to mining disruptions, and state-run Indian Railways also faces delays due to water-clogged tracks and route closures. State-run Coal India, which produces 80% of India's coal, reported the first fall in production in two decades in 2019/20, due to the heaviest rainfall in 25 years.

The India Meteorological Department (IMD) expects rainfall in the coal-producing regions of Maharashtra and Madhya Pradesh, which together make up a quarter of India's output, to be above average, it said on Tuesday. The intensity of rainfall would be more critical than overall rainfall during a season.



Relentless rains over short periods of time could cause mine flooding, even when overall rainfall during the monsoon is deficient.

Erratic rainfall patterns, which India has attributed to climate change, have impeded output in the recent past. Sudden floods in 2019 in the Dipka mine, India's third largest, halted operations for days, and it took over a month for resume production at full capacity. <u>Source</u>

Coal production to be hiked significantly on high power demand: RK Singh

Union Power Minister RK Singh on Tuesday said the coal production will be hiked significantly to cope up with increased demand. "On a day-to-day basis, our power demand is 40,000-45,000 MW more than the corresponding day the last year. Energy consumption has gone up from 3,500 million units to 4,500 million units," he said.

The reserve stocks of coal came down from 24 million tonnes to 19 million tonnes in power plants on 30 April, they were further down to 18.5 million tonnes on 31 May, Singh said, adding that imports have started coming in. India faced its worst power crisis in over six years in April due to higher electricity demand, despite record production by Coal India during the year ended March 2022.

Coal India has previously blamed lower output from import-based coal plants, adding that fewer imports put more pressure on domestic mining. Indian officials are rushing to make more coal available for utilities as shortages in the July-September quarter are expected to be 15% wider than intitially estimated due to expectations of higher power demand.

The government has rolled back a policy to cut thermal coal imports and plans to reopen closed mines to address rising power demand. Coal accounts for nearly 75% of India's power output and Coal India produces 80% of domestic coal. "We were power deficit in 2014, but now we have surplus power. At that time, there was a shortage of 13-15% in power supply. We connected the entire country into one grid. Today, we can transfer 1.12 lakh MW of power from one corner of country to another," Singh said.

"We constructed 2,900 new substations, upgraded 3,800 substations and added 7.5 lakh new transformers. We achieved the target of having 40% of our established power generation capacity from non-fossil fuels in November 2021." In order to further accelerate India's ambitious renewable energy programmes, the government has notified Green Open Access Rules today. <u>Source</u>

Discoms can now settle dues through EMIs within four years

The government on Friday allowed electricity distribution companies to settle their dues to power generating companies and transmission companies in equated monthly instalments (EMIs). As per the Electricity (Late Payment Surcharge and Related Matters) Rules, 2022 notified on Friday, total dues including late payment surcharge up to the date of the notification of these rules shall be rescheduled and the due dates redetermined for payment by a distribution licensee in equated monthly instalments.

Late payment surcharges are payable by a discom to a genco on account of delay in payment of monthly charges beyond the due date. While discoms with over ₹10,000 crore of dues can clear them in 48 EMIs, the ones in the range of ₹4,001-10,000 crore can pay them in 40 months. Discoms with dues of ₹2,001-4,000 crore and ₹1,001-2,000 crore will have 34 and 28 months, respectively. Entities that owe up to ₹500 crore, will have 12 monthly instalments to settle dues while those with dues in the range of ₹501-1,000 crore get 20 EMIs.



The rules are applicable to discoms' outstanding dues to gencos, inter-state transmission licensees, and electricity trading licensees. "Late payment surcharge shall be payable on the payment outstanding after the due date at the base rate applicable for the period for the first month of default," the notification stated. The rate of late payment surcharge will increase by 0.5% for every successive month of delay, provided that the surcharge not exceed an amount 3% higher than base rate any time, the notification specified.

Ashok Sreenivas, coordinator at Prayas (Energy Group), an energy policy research organisation, said, "Through this, the government is trying to find a solution to make sure there is some cash flow going to generators even if they are not getting their dues at one go. At the same time, it is also an attempt to give discoms some breathing room to clear dues, while instilling some kind of a payment discipline." *Source*

Transmission charges payable by DICs for the billing month of Jun'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)			
SI. No.	State	Region	STOA rate (paise/kWh)
1	Delhi	NR	43.14
2	UP	NR	49.38
3	Punjab	NR	44.64
4	Haryana	NR	49.21
5	Chandigarh	NR	41.91
6	Rajasthan	NR	45.44
7	HP	NR	39.91
8	J&K	NR	41.46
9	Uttarakhand	NR	51.71
10	Gujarat	WR	43.25
11	Madhya Pradesh	WR	44.09
12	Maharashtra	WR	54.16
13	Chhattisgarh	WR	40.70
14	Goa	WR	45.21
15	Daman Diu	WR	45.19
16	Dadra Nagar Haveli	WR	47.24
17	Andhra Pradesh	SR	60.79



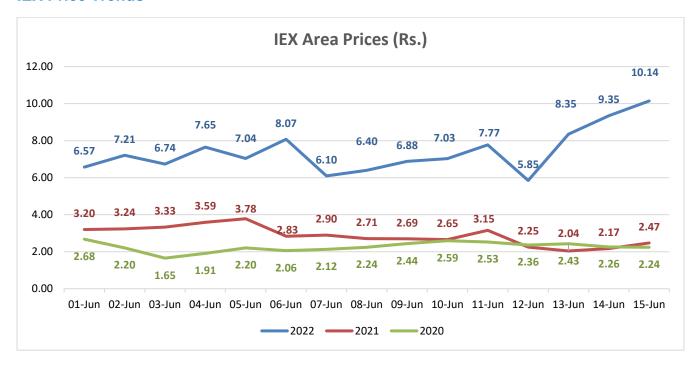
18	Telangana	SR	42.57
19	Tamil Nadu	SR	45.31
20	Kerala	SR	44.08
21	Karnataka	SR	44.91
22	Pondicherry	SR	37.61
23	Goa-SR	SR	31.84
24	West Bengal	ER	55.16
25	Odisha	ER	49.08
26	Bihar	ER	43.46
27	Jharkhand	ER	50.86
28	Sikkim	ER	40.50
29	DVC	ER	43.88
30	Bangladesh	ER	38.17
31	Arunachal Pradesh	NER	42.70
32	Assam	NER	41.05
33	Manipur	NER	41.86
34	Meghalaya	NER	38.33
35	Mizoram	NER	41.77
36	Nagaland	NER	59.22
37	Tripura	NER	46.19

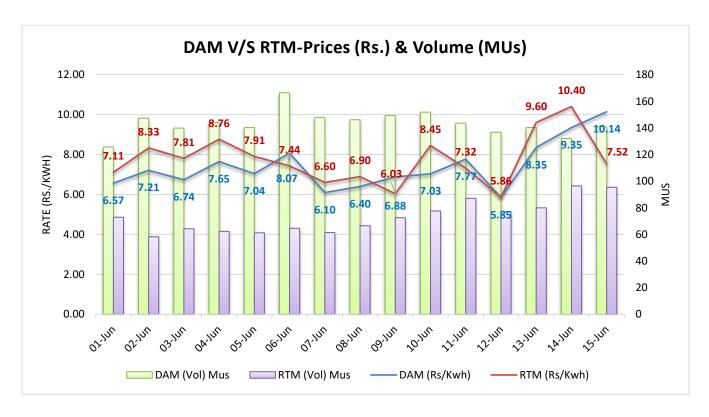
Bilateral Tender Results: -

SI. No.	Tender Quantum (MW)	Supply Period	Time Blocks (Hrs.)	Price (Rs./kWh)	LOI Status
Tata Power Delhi Distribution Limited/Short/22-23/RA/69					
1	250	01.06.2022 to 15.06.2022	00:00 to 24:00	6.49-7.15	
2	100	16.06.2022 to 30.06.2022	00:00 to 24:00	7.14	LOI Issued
3	150	01.07.2022 to 15.07.2022	00:00 to 24:00	6.03-6.13	



IEX Price Trends







Weather (Estimated for next fortnight)

City	Max Temp	Min Temp	Precipitation (Probability)
DELHI	37	27	34%
MUMBAI	33	26	70%
KOLKATA	34	26	40%
CHENNAI	36	26	50%

(Source - Accuweather)

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