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Tangedco likely to import coal to meet power demand next summer

Times of India : December 5, 2017

Left with coal stock for just six days and with the wind season more than five months away, Tamil Nadu is likely to once again import coal for the four thermal plants managed by Tamil Nadu Distribution and Generation Corporation (Tangedco). They include North Chennai, Mettur, Ennore and Tuticorin thermal plants.

Despite strong discouragement from the Centre to stop import of coal, promise of coal linkages from mines such as Singareni has not been kept since September.

In December last year, Tangedco decided to stop import of coal after the discom signed MoU with Singareni Coal Mines to procure high grade coal for its thermal plants. Since then, coal was supplied regularly until September when the problem with supply of fuel for thermal units began across several states due to shortage of rail rakes.

"Since last December we have been getting coal regularly. A few months ago we tried to sign a fresh MoU with Singareni Coal Mines. But, we were told that coal from the mines is only for Andhra Pradesh and Telangana. So, we could not sign an MoU," a senior Tangedco official told TOI.

The MoU that was signed with Singareni mines was to supply one million tonnes of coal each year and it was convenient for Mettur Thermal plant to source coal through the rail route. "In the first year we thought we will get one million tonne. Later, we wanted to increase the evacuation depending on the demand," said the official.

Tangedco started importing coal regularly from 2004-05. "The power utility requires about 26 million tonnes of coal for full capacity generation of power by units of North Chennai, Mettur, Ennore and Tuticorin thermal plants. Of the requirement, 20.445 million tonnes of coal is met by indigenous supply and the balance 5.50 million tonnes was imported," said the official. With Tangedco being unable to import coal, 5.50million tonnes was to be sourced locally.

"Ever since the problem of rail rakes began, we approached the railways as well as coal ministry. Both point fingers at each other and we could not solve the problem of coal shortage. We have no choice other than to import as our demand will start from mid-February onwards," said the official.

Tangedco was importing coal mostly from Indonesia and occasionally from China, Russia and South Africa. "The imported coal is offloaded either at Ennore Port or at Tuticorin port and all thermal units except Ennore thermal plant uses imported coal. The imported coal is of high calorific value and it reduces damage or frequent tripping of our units both with low and high capacity," the official said.

Consumer shouldn't be asked to pay for inefficiencies of discoms: RK Singh, Power & renewable energy minister

The Economic Times : December 7, 2017

Power rates across the country will fall as the Centre plans legal measures to fix bill-collection inefficiencies, put a lid on cross-subsidies and ensure that consumers don't pay for



high distribution losses, minister for power and renewable energy **R K Singh** said. In an interview with **Nishtha Saluja, Sarita Singh** and **Himangshu Watts**, Singh said a slew of policy changes and strict directions to states will be more effective than the present schemes to transform the power sector. The ministry will ask states to stop burdening industrial consumers with more than 20% cross-subsidy surcharges. The ministry also plans steps to prevent states from renegeing power purchase agreements and fix deadlines to penalise distribution utilities for load shedding. Edited excerpts:

There is a view that tariffs must rise if you want power sector to grow, and reform is synonymous with tariff hike. Your views.

I believe the technical and commercial losses of the discoms need to come down to below 15%. A paying consumer should not be asked to pay for inefficiencies of the discoms or for the theft. Allowable losses while fixing the tariff should not be more than 15%. Once you do that, the price of power, which consumers pay, will come down. We will do this by talking to the regulators and laying guidelines in the law. We are anyway giving all support to discoms to strengthen their network.

If they are asking for higher tariff, that is because they have not tried to control their losses. Controlling losses is not so difficult. Manipur brought its losses down from 58% to 26% in just one and a half years. All they did was, install prepaid meters everywhere. The major problem, which we see, is in the metering and the billing, not in recovery after billing, because recovery after billing is 90-95%.

How will you ensure 24x7 power supply to consumers?

I am thinking of fixing a date by which we will begin making power supply a service obligation. Once we have this obligation, if discoms resort to load shedding, they have to pay a penalty. If there is a disruption because of an act of God or a technical glitch, fine. But gratuitous load shedding because you don't want to buy electricity will not be accepted. Once we do that, much of the diesel generators will become useless, and we will be one step closer to cleaner environment. It is in the law, but it's not being enforced. There is no reason to not give 24x7 supply because the power is available.

Most states deter large electricity consumers from choosing their source of supply as provided in the Act by levying high cross-subsidy surcharges.

The tariff policy says cross-subsidy surcharge should not be more than 20% of the tariff. We will make sure that it is implemented and we will make the legal procedure stronger.

By when do you see all this actually happening on the ground?

Amendments are proposed in the tariff policy and Electricity Act. Once I see the amendments, it will go to the law ministry and then we will circulate it with state governments. It will be presented, hopefully, in the budget session of parliament. This will ensure Make in India becomes feasible. Right now, Make in India has one problem — the input power costs are high.

Will these measures improve the health of discoms ?

That's sine qua non. I am writing to all the chief ministers saying high technical and commercial losses are unacceptable. I am asking them to change the way things work. With whatever money the Centre is giving through the schemes, don't buy ordinary meters, do away with the human interface. I see a bill, I pay through my mobile. The human interface is gone, the cost of billing and cost of collection is gone, so it saves a lot of money and the realisation goes up.

Will this be more effective than schemes that have been tried?



All these schemes are ongoing. We are spending crores of rupees on rural electrification, strengthening distribution and sub-transmission system, feeders and all are still ongoing. So money is not an issue. What we are saying is do away with the human interface: no meter reader, no printed bills. Rather implement pre-paid meters rechargeable through mobile. This is pro-poor and a poor man will never get disconnected.

So then across country power rates will fall?

Across country power rates will fall. Once tariff policy is amended, people will have to become efficient.

Many states are not honouring PPAs.

We have told all states there is no question of not honouring the PPAs. If you have bid out, you have to sign the PPA. You can't have the doubt after you have given the LoA, unless the results are against the market.

How do you plan to address the stressed assets in power sector?

I took one meeting to review the stressed assets and we are working out ways and means of getting those stressed assets on line. Some of the projects will come on line as soon as the auction for coal linkages – Shakti- becomes effective. There are some others which are in the NCLT route already. Where people are not getting PPAs, we have thought of a methodology, whereby PTC will aggregate about 4,000 MW demand and call bids.

What is the update on the proposed hydro policy?

Hydro is essential because it will give balancing power to the grid. With this high quantity of solar and wind, which we are putting into our system, we need hydro. The hydro policy is not something which necessarily means higher subsidy.

The way we calculate the term for which the loans are given must change. The depreciation should be extended. Hydro plant has a life of 100 years. You cannot depreciate asset in 12 years rather spread it to at least 30 years. Hydro tariffs in initial years are very high and 30th year onwards, they drop to 80 paise. If the depreciation period is extended, tariff will be a flat, reasonable amount. The loan tenure should be extended to 25 years. Then another thing which we want to do is that the irrigation portion should be funded separately by the irrigation department and the power portion by power ministry.

Industry is concerned about wind auctions. What is your view?

Because the rates have gone down, they were feeling that they were putting pressure on their margins. Now, the thing is, I have announced the roadmap for 60 GW wind capacity target. I'm providing enough orders for the established industry, so there is no reason for the industry to be under pressure.

India's Largest Floating Solar Power Plant Is Now Live!

Kerala has become the state to have India's largest floating solar power plant, wherein solar panels floating on the river will generate energy.

Kerala State power minister MM Mani inaugurated this unique floating solar power plant in Banasura Sagar dam in Wayanad yesterday.

The official release issued by Kerala State Electricity Board said,

This unique solar plant has been made using ferrocement technology and consists of 1,938 solar panels with a capacity of 260 watts, a 500 kilo volt ampere (KVA) transformer and 17 inverters.



Thiruvananthapuram-based Ad tech Systems has constructed this plant at a cost of Rs 9.25 crore, and the unique thing about this project is the anchoring mechanism, which makes sure that solar panels maintain their position, despite alterations in the water level and flow.

This is certainly one huge step towards renewable energy in India.

Government may allow power plants to pass on gear expenses to consumers

The Economic Times : December 2, 2017

The government may allow power plants to pass on their investments in equipment to meet stringent environmental norms to consumers, and such costs will not be included during preparation of dispatch order to ensure these plants remain competitive.

The government is expected to soon issue an advisory in consultation with the Central Electricity Regulatory Commission towards this, a government official said. "The power ministry is likely to hold consultations in this regard with the power regulator," the official said.

Power producers had sought a clarification from the ministry and the regulator to incur the costs for meeting the environment norms. The projects would require an estimated Rs 70 lakh to Rs 1 crore per megawatt capital expenditure to meet the norms and the clarification was required to comfort lenders, the producers had told the ministry. The capital expenditure is estimated to raise the tariff by about 20-30 paise per unit.

The ministry of environment, forest and climate change had in December 2015 notified revised standards for coal-based power plants in the country to curb emissions. Power plants were given two years to comply with the notification. The power ministry has advocated an extension of the deadline.

A power ministry official said that implementing the norms within two years was not possible.

The ministry has sought plant-wise deadline extension to meet the norms, he said. The schedule has been made after extensive discussions with regional and state load dispatch centres to avoid grid disturbances, he added.

"It will take a minimum of three years for required changes to be made in one power plant during which the plant has to be shut down," the official said. "It's not possible to shut the entire capacity and it has to be done in a phased manner to avoid supply disruptions."

He also said technology and equipment manufacturers are not in a position to meet the requirements for 200 GW projects. The country's top power generator NTPC has ordered equipment for 30,000-40,000 MW plants, the person said.

An industry official said the exercise to finalise technology and costs for implementation of the new environment norms and clarification on cost pass through will take time.

"Banks and financial institution would be willing to finance the new equipment for environmental norms only with an assurance that the costs can be recovered through tariffs," the person said.

India to start building ultra supercritical thermal plant in 2019

The Times of India : December 2, 2017

India will begin construction of an 800MW advanced ultra supercritical thermal power plant in 2019, which will run on an indigenous technology that is developed to reduce carbon emissions, said AK Bhaduri, director of Indira Gandhi Centre for Atomic Research, Kalpakkam, on Friday.



Speaking on the sidelines of a press meet to announce the 5th International Congress of International Institute of Welding and 12th edition of Weld India 2017 exhibition to be held at Chennai Trade Centre from December 7 to 9, the senior scientist said the plant is expected to save 25% of coal reserve and cut down carbon by close to 15%, as it will function at a better efficiency compared to other plants in the country.

"This plant is 100% indigenous, including its design. The plant will generate 800MW run at an operating temperature of 710 deg C and at a 310 steam pressure bar. No other power plants in the world run with such numbers," he said. "The plant will come up in one of the NTPC power plants and is expected to be in place by 2024."

The project is being executed by a consortium of three government entities, Bharat Heavy Electrical Limited, Indira Gandhi Centre of Atomic Research and National Thermal Power Corporation. It will involve Indian industries in the design, manufacture and commissioning of the plant. "The entire gamut of power plants will not take off if we do not have the skill set of welding," he said.

The IGCAR director said the prototype fast breeder reactor, which is built in Kalpakkam, will achieve criticality in another two months and is expected to generate full power of 500 MW by next year.

Govt sets up panel to address NPAs in the power sector

Live mint : December 6, 2017

The committee set up to tackle NPAs in the power sector has already held its first meeting under the leadership of NITI Aayog CEO Amitabh Kant

The government has set up a high-level committee headed by NITI Aayog chief executive Amitabh Kant to address the problem of stressed assets in India's power sector, said two people aware of the matter.

Non-performing assets (NPAs) in power generation accounted for around 5.9% of the banking sector's total outstanding advances of Rs4.73 trillion, according to the second volume of the Economic Survey 2016-17 released in August. Tackling the issues that afflict the so-called stranded power assets will provide much-needed relief for Indian banks weighed down by bad loans.

"The committee has held its first meeting and comprises secretaries in the ministries of power, coal and department of financial services," one of the two people cited above said on condition of anonymity. A second person, who also didn't want to be identified, confirmed the development.

Mint reported on 24 November about the government separately planning to investigate whether private developers inflated project costs to increase the debt component, thereby reducing their equity contribution.

Queries emailed to the spokespersons for NITI Aayog, and the ministries of power, coal and finance remained unanswered. Kant didn't answer an email seeking comments.

A total of 34 coal-fuelled power projects, with an estimated debt of Rs1.77 trillion, have been reviewed by the government after being identified by the department of financial services. Issues faced by these projects include paucity of funds, lack of power-purchase agreements (PPAs), and absence of fuel security.

Experts say that PPAs hold the key to solving the problem of 60 gigawatts (GW) of stressed assets across fuel sources.

"The weak financial health of the state-owned distribution utilities has led to slow progress in signing of long-term PPAs through competitive bidding, with only 1.4GW capacity tied up



through long-term PPAs over the past three years," rating agency Icra Ltd said in a 23 November report.

"Out of the 26GW capacity affected by lack of PPAs, about 60% of the capacity is operational and is exposed to volume and tariff risks in the short-term market. In addition, the thermal power capacity of 22GW is affected by tariff viability issues, including the imported coal-based capacity of 9GW and domestic coal-based capacity of 13GW," the report added.

Of India's installed power generation capacity of 331,118 megawatts (MW), 58%, or around 193,426MW, is fuelled by coal. Gas-based and hydropower projects account for 25,150MW and 44,765MW, respectively.

"Further, another 12GW gas-based capacity is affected by uncertainty over availability of domestic gas and lack of offtake for power generated using imported R-LNG (regasified liquefied natural gas)," the Icra report added.

Power minister Raj Kumar Singh has said there will be a rise in electricity demand. His rationale is that the recently launched Saubhagya programme, which aims to provide electricity connections to more than 40 million families by December 2018, will boost underutilized power plants.

Some are sceptical about its immediate impact on the revival of stranded power plants.

"Crisil Research believes a large proportion of coal-based power generation capacities in the private sector, stressed due to multiple factors, will remain in duress for a long time despite a raft of alleviation measures from the government," the rating agency cautioned in September.

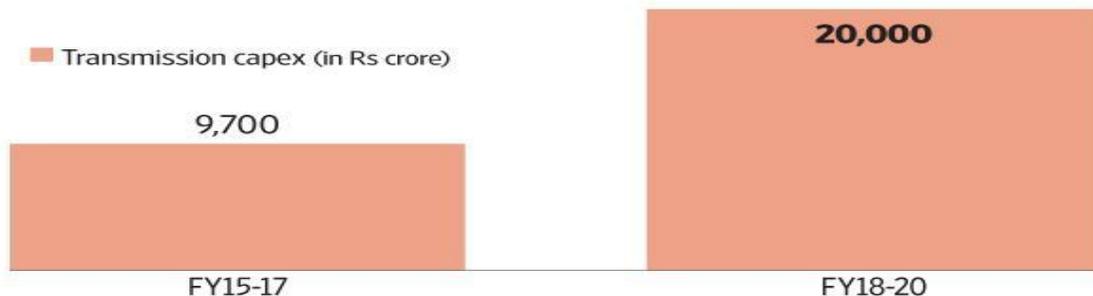
Electricity reforms get a leg-up in Uttar Pradesh, follow-up actions key

Live mint : December 6, 2017

The electricity reforms will embolden the early bets on Yogi Adityanath-led Uttar Pradesh govt to revive the fractured power situation in the state

QUANTUM JUMP

The Uttar Pradesh electricity regulator has approved transmission capex of Rs20,000 crore for FY18-20, a jump of 107% over FY15-17.



FY18-20 transmission capex as approved for Uttar Pradesh Power Transmission Corporation

Graphic by Subrata Jana/Mint

Source: Elara Capital

The power sector regulator in Uttar Pradesh, the Uttar Pradesh Electricity Regulatory Commission, has approved several steps that can not just strengthen the financial position of state utilities but also increase opportunities for companies in the transmission and distribution (T&D) EPC business. EPC is engineering, procurement and construction.

Last week, the regulator allowed an average tariff hike of around 13%. Importantly it nudged consumers who pay a flat charge per month, to move to metering and left industry



tariffs unchanged. "Unmetered rural customers currently pay a flat fixed rental charge of Rs180/month. This has been hiked to Rs300/month and they have been asked to put up meters by March 18. If they fail to meter by March 18, the fixed charge will be Rs400/month," Dolat Capital Market Pvt. Ltd said in a note.

Further as Elara Capital (India) Pvt. Ltd points out, the regulator approved capital expenditure of Rs20,000 crore for fiscal years 2018 and 2020 (FY18-20) in the transmission sector, more than double the amount invested in FY15-17. Of this 81% or Rs16,200 crore is for new projects, said Elara Capital.

The approvals come on the back of at least two orders where the regulator refused to approve high-priced power purchase agreements (PPAs). According to Emkay Global Financial Services Ltd, state utility Uttar Pradesh Power Corporation Ltd constituted a task force to assess existing and forthcoming PPAs and cancel unviable ones.

The tariff renegotiations can upset power generators. But the steps and the regulatory approvals show that corrective measures are well under way in India's second largest power market (in consumption terms as computed by Elara Capital).

Thanks to the improvement in power supplies, Uttar Pradesh is already seeing the fastest growth in electricity consumption (fiscal year till October). If the above-mentioned measures are implemented, then realizations can rise, improving revenue collections.

"This (hike in tariffs and metering of rural consumers) will also help reduce revenue gap and boost capex, particularly on the transmission side," added Dolat Capital.

According to Elara Capital, EPC firms such as KEC International Ltd, and T&D product companies like ABB India Ltd, Siemens Ltd, and CG Power and Industrial Solutions Ltd can benefit from higher capex in power transmission.

The measures will embolden the early bets on the Yogi Adityanath-led government to revive the fractured power sector situation in the state.

But much of the success hereon will be in follow-up actions. It has to be seen how well the rural consumers will take to the steep hike in fixed monthly rates and transition to metering. The second issue is the reduction in aggregate technical and commercial losses (AT&C), progress on which was slow till now (FY17 AT&C losses stood at around 28%). While reduction of these losses is crucial for the long-term revival of the state utility, sustained investments in the transmission segment and policy support will be needed to reduce losses.

Bank recapitalisation can help revive stressed power plants, but who'd want them?

Live mint : December 1, 2017

Bank recapitalisation does start the bad loan resolution process, but govt should follow it up with dedicated PPAs and force financial and ownership restructuring

Bank recapitalisation and the government's thrust on bad loan resolution may give a fresh lease of life to stressed power plants. The question, however, is who would want to buy or run them?

One reason large capacities of stressed power plants have remained stuck for so long is the unwillingness of promoters and stakeholders to take large write-offs on project values even as they were stranded. This hampered ownership change pushing up the project costs, making them uncompetitive.

ICRA Ltd estimates peg the total stressed thermal power projects including gas-based capacities at around 60,000 megawatts (MW). Of these, JM Financial Institutional Securities



Ltd pegs 14,300MW as high risk, which lack fuel linkages and power purchase agreements (PPAs) for more than half of the project capacities.

The government's bank recapitalisation plan can alter the scenario. JM Financial says banks' ability to take haircuts on loans to stressed projects improves post the capital infusion. The write-downs can lower project costs, making the plants competitive.

But this alone may not be sufficient to turn around the projects. A competitive power plant without a PPA is no better than a stranded asset—the project will continue to make losses. Write-downs and financial restructuring will reduce losses but that can provide only limited relief as excess capacities in the sector and subdued power demand can prolong the current situation, leaving stakeholders with troubled assets. Nor can they pass on the problems to new owners. "Additionally, buyers may await PPA signing for target plants before going ahead with an acquisition," JM Financial said in a note.

Then there is the question of the potential suitors themselves. There are few companies with strong balance sheets in the sector. According to India Ratings and Research Pvt. Ltd, financial flexibility of large regulated thermal power generators is under stress due to large capital expenditure programmes.

Of course NTPC Ltd is looking to buy stressed assets. But it reportedly has set quite a few conditions such as low project costs, domestic equipment, fuel linkages and compatibility with local coal, fulfilment of which can be a tall order. Further, despite all the talk, NTPC has largely kept to government assets (such as state utilities) in recent years.

In short, the bad loan problem in the power sector may not be easy to resolve. While bank recapitalisation sets the process in motion, the government or the regulator should follow it up with dedicated PPAs (at least for partial capacities), and force financial and ownership restructuring. That will help resolve the current impasse.

Save Energy. Save Money. Save the Planet