TECA – NEWS CLIPPING

Energy Conservation : It Doesn't Cost. It saves)

05.01.2017

TANGEDCO not to go in for short-term power purchase

The Hindu: January 5 2017

Tamil Nadu Generation and Distribution Corporation (TANGEDCO) has decided to drop its earlier plan of procuring 500 MW of short term power for peak demand as the price quoted was higher. Instead, the State's power utility plans to procure higher quantum of round-the-clock power in the range of 632-672 MW at the price of up to ₹4 per unit.

Earlier, the power utility had planned to procure 350 MW of round-the-clock power and 500 MW of peak power from February - May 2017, based on its review of the power situation. The proposal was cleared by the Tamil Nadu Electricity Regulatory Commission (TNERC) and TANGEDCO issued a tender.

In a new petition filed with TNERC, TANGEDCO said the best rates received for 350 MW round-the-clock power was ₹2.92-₹3.15 per unit. For the peak power, the range was ₹3.60 to ₹5.80 per unit for a quantum of 410-500 MW. However, all the bids were received from the North Eastern Region, it said.

The State utility said since there were grid connectivity issues, it would be difficult to procure power from the North Eastern Region. It would use that power when connectivity becomes available.

"Kudankulam Unit II is yet to achieve commercial operation and Kudankulam Unit I is likely to be taken off for annual overhaul for 60 days from the end of January 2017. Hence, the Unit I may not be available during February 2017 and March 2017 also," TANGEDCO said in its petition.

As a result, TANGEDCO said it mulled various options for sourcing power, including offers from the Southern region. Against the peak demand requirement of 500 MW, there were two offers for 125 MW at a price of ₹5.16 and ₹5.80 per kwh. TANGEDCO pointed out the rates were higher, when compared to what other states get from Southern region. It also said short term procurement during October 2015-May 2016 was done at rate of ₹5.05 per kwh from intrastate developers and added that the generation capacity and transfer capability with the region had increased.

For round-the-clock power, TANGEDCO said that it received offers at discount from some private developers in the Southern region. Ramco Cements Ltd., Tamil Nadu Power Company Ltd, the India Cements Lgd, IL&FS and Sempcorp Gayatri and Arkay Energy Ltd. have offered rates less than ₹4.00 per unit, it added. "The total quantum from Southern Region, which quoted up to ₹4 per kwh, comes to 672 / 632 MW," it said.

TANGEDCO now plans to procure 672 MW round-the-clock power each for February and March 2017. About 632 MW each of round-the-clock power would be procured for April 2017 and May 2017. The prices would be up to ₹4 per unit, while it proposed to do away with separate procurement for peak demand.

TNERC approved TANGEDCO's plan and said the procurement rate of ₹4 per unit was found to be reasonable since it was below the average rate of realization of TANGEDCO.

The great States barricade

Business Line: January 3, 2015

The Centre's dream of producing 175 GW of renewable energy faces hurdles from State governments, writes M Ramesh

Last month, the Ministry of New and Renewable Energy put out a year-ender which mentions, among other things, the renewable energy targets for the current year and the next two years. They seem to be out of sync with reality.

The Ministry expects capacity additions for solar and wind in the current year to be 12,000 MW and 4,000 MW respectively, when the achievement till October has been 1,750 MW and 1,502 MW.

The highest ever wind power capacity addition — of 3,423 MW — happened last year. But the Ministry's targets for the next two years are 4,600 MW and 5,200 MW. Ironically, such a high hope rides alongside a move by the government to scrap two helpful incentives – accelerated depreciation and generation-based incentive. Last time these incentives were briefly absent, in 2012-13, wind power capacity dropped to 1,700 MW, from 3,164 MW in the previous year.

If you take renewable energy as a whole, India ended October 2016 with an installed capacity base of 46,327 MW; this number is sought to be raised to 175,000 MW in the next 65 months – it works out to 23,400 MW a year.

As much as industry players feel these targets are very stiff, they believe they are not impossible to achieve, provided a crucial condition is met—getting state governments on board. Today, the states are not.

From delayed payments to renewable energy generators to policies inimical to renewable energy, industry players are facing hurdles from state governments, when they ought to be securing their support. "Each state has its own peculiar problem," says U Ramdas Kamath, Executive Vice President, Infosys, who oversees the software giant's sustainability activities.

Wind and solar power producers are broadly of two kinds—those who sell their power to the state-owned electricity distribution companies (discoms) and those who sell directly (typically large) consumers.

The first category of power generators face problems of highly competitive prices for their power, inordinately delayed payments and discoms refusing to buy the power under some pretext or the other. The second type of generators in business are burdened with a plethora of charges. The charges vary with the states, but common among them is the cross subsidy surcharge (CSS), a levy that state governments impose to pay for the free or cheap power they provide to poor consumers. Often these charges are so high as to make rapid progress in renewable energy project roll-out impractical. For instance, in Tamil Nadu, Karnataka and Punjab, the CSS works out to between Rs. 2 and Rs.2.5, depending upon who they sell the power to. Rajasthan had exempted CSS for wind and solar but has recently brought in an 'additional surcharge' of 87 paise per unit of power. Maharashtra (a State, incidentally, notorious for delaying payments to generators) charges Rs. 3.20.

Many industry sources say that the most unhelpful policy environment exists in the BJP-ruled Maharashtra, while the most helpful State is the Congress-ruled Karnataka.

"Signing of power purchase agreements is a big issue in Maharashtra," said the head of a renewable energy developer, who did not wish to be named. "A consumer can buy power only from one generator and for a minimum period of one year. Consumers are forced to buy from only one developer," he said.

Maharashtra has also brought in an electricity duty on consumers who buy directly from generators, in order to prevent customers of its discom moving away to private generators. Furthermore, consumers in IT Parks and software technology parks cannot buy power from private generators.

Renewable energy producers also face the problem over the method of levying transmission charges, for using the state-owned transmission lines while selling their electricity. In most states, these charges are based on the installed capacity, which is a problem. A coal-fired power plant of 100 MW will produce around 800 million kWhr of electricity in a year; a 100 MW wind

plant will be lucky if it generates 265 million, solar will be around 175 million. If the transmission charge is levied on per-MW of installed capacity, renewable energy plants will be paying far higher per kWhr than conventional.

They have been asking for transmission charges to be based on the generation, rather than installed capacity – but no state is agreeing. The transmission charges could be punishing — in Rajasthan, for instance, it works out to nearly a rupee per unit.

Further, RE generators complain that they are treated on par with conventional energy producers when it comes to keeping up their promise on supply of electricity. If a wind company, for example, promises to supply say *x* units of electricity between 3.45 pm and 4 pm the following day, it is strictly held to the commitment, even though the norms of the Central Electricity Regulatory Commission allow 15 per cent deviation either way to renewable energy plants.

“This is a very serious problem,” says Sunil Jain, CEO & Executive Director, Hero Future Energies, a wind and solar power producer. Renewable energy is intrinsically infirm, they can produce electricity only if wind blows or sun shines, and it is impossible for them to adhere to the schedules the way thermal power generators do. “States should follow CERC norms,” says Jain.

Perhaps the best example of states not being in alignment with the Centre’s ambition is ‘net metering’. Net metering allows rooftop solar power plant owners to put the energy they do not self-consume into the grid and get a credit for it in their electricity bills.

Entities with large roofs, such as colleges and factories, would put solar plants if only they get some credit for any surplus they may generate. In the absence of net metering, a solar plant on the roof of an educational institution will lie unutilised during the summer months, as the institution will be shut for vacation and will have no use of the power.

Most states have unhelpful rules for net metering. Tamil Nadu, for instance, allows net metering only for individual houses, and not for educational institutions or factories. Many other states limit the capacity for net metering, say 1 MW – if a roof has more than 1 MW, too bad. And yet, the government of India intends to see 40,000 MW of rooftop plants set up by 2022; today India has 1,000 MW. Many industry players observe that there is a lack of seriousness on the part of the states in encouraging renewable energy. They note, for instance, that policies are brought in, but it takes inexplicable long time to formalise them by way of gazette notifications. Till the policies are notified, officials down-the-line refuse to implement the policies.

“Whether it is open access or rooftop or enforcement of renewable purchase obligations, the intent on the part of the state machineries seems completely missing,” observes Vishal Pandya, Co-founder & Director, REConnect Energy Solutions, a consultancy. Without cooperation from the states, which is absent today, the Central government’s targets have no chance of being met, he says.

Finally, TN gets cleaner coal for power generation

The Hindu: December 25 2016

A long-standing grievance of Tamil Nadu is now getting redressed as the State has been receiving superior coal from Singareni Collieries in Telengana for the last one month.

Since November 23, the Tamil Nadu Generation and Distribution Corporation (TANGEDCO) has received 1.4 lakh tonnes of Singareni coal, which is known for higher calorific value and lower ash content. “More importantly, it does not have silica, whose presence in the fuel would otherwise lead to boilers getting damaged frequently,” explains N.P.C. Jesudian, former Member (Generation) of the now-abolished Tamil Nadu Electricity Board.

Impact on Ennore

Mr. Jesudian recalls that the Central authorities had assured the State of providing the coal linkage from Singareni for the now-closed Ennore Thermal Power Station (ETPS), which started production in March 1970. After supplying the Singareni coal for some years, the Centre had

shifted its stand and began supplying coal from the Mahanadi Coalfields (Talcher and Ib Valley) in Odisha. “This decision of the Central government eventually resulted in the poor performance of the ETPS perpetually as boilers were designed for higher calorific value,” he complains.

A serving TANGEDCO official points out that the fuel from the Mahanadi Coalfields is regarded as one which has lower calorific value with higher ash content. Its ash content is 44 per cent as against 23 per cent to 26 per cent in coal from Singareni or that of Eastern Coalfields (Ranikanj, West Bengal), Central Coalfields (Ranchi, Jharkhand) or Western Coalfields (Nagpur, Maharashtra).

Transit loss

For 2016-2017, the Singareni Collieries will supply one million tonnes of coal to Tamil Nadu and three million tonnes next year. “Unlike in the case of the Mahanadi Coalfields from where coal is being transported from the rail-cum-sea-rail route, it is an all-rail route in respect of Singareni. This will lead to reduction in loss during transit,” Mr. Jesudian says. The TANGEDCO official says in the case of Singareni, the Corporation is directly involved in transportation of coal without assigning the task to contractors, as is often the case.

Power demand up 18%, but no cuts in Tamil Nadu

Times of India: January 4, 2017

The present demand has gone up despite several industries in Chennai and other cities in the state not working to full capacity due to demonetization

Power plants in the state have been cranked up to meet the 13,600MW demand -- 18% more than last year -- in the state. Though the demand is likely to touch an all time high in summer, power managers are confident that they have enough reserves to crank up if needed. Further, wind power will kick in during summer, which would make the summer a smooth sailing, they say.

The present demand has gone up despite several industries in Chennai and other cities in the state not working to full capacity due to demonetisation. The total demand increased this year mostly because of the use of air conditioners due to increasing temperature and humidity.

On the supply side, Tangedco is able to meet the demand without any power cut in any area. “Our thermal units are working to more or less to full capacity. Nearly 4,000MW was generated by Tangedco thermal units and beyond this we are also getting power from private power companies from outside Tamil Nadu,” said the official.

The central thermal units are also generating to full capacity.

Out of the two units with 1,000MW capacity each at Kudankulam Nuclear Plant, Tangedco is getting around 300MW to 400MW from Unit 2. “Unit 2 has reached a generation capacity of 680MW and nearly half of it will be for Tamil Nadu. This unit will reach its full capacity in a few months,” said Kudankulam Nuclear Power site director R S Sundar.

Unit 1 has been shutdown for maintenance. “We are working to restart the reactor in Unit 1 as early as possible. e think by early next week, Unit 1 will restart power generation,” said Sundar.

Power capacity additions: Plan target met in advance

Business Line: January 3, 2015

October 2016 must count as a significant month for the Indian power sector. It was when the conventional power capacity additions met the targets set for the 12th Plan Period (2012-17). For the first time in history, the plan targets were met five months ahead of schedule.

The Centre aimed to get installed 88,537 MW of thermal, hydro and nuclear power capacity during the plan period; as at end October, the capacity additions were 88,928.22 MW, or 100.44 per cent of the target.

By the end of November, the number increased to 90,463.22 MW, or 102.18 per cent of the target, according to data provided by the Central Electricity Authority (CEA).

However, beneath the broad numbers, the story is not as rosy. While thermal exceeded its targets, hydro and nuclear fell short.

Within thermal, State government and private sector projects exceeded their targets, while those of the Centre stayed below the finish line. As at the end of November, India's electricity generation capacity from conventional sources, stood at 262,917.28 MW.

Adding the 45,916.95 MW of renewable energy capacity (wind, solar, biomass and small hydro), the total power capacity in the country stood at 308,834.28 MW. Coal power accounted for 187,802.88 MW of this.

CEA's data also shows that power deficit has been almost eliminated. In November 2016, peak time and non-peak time power deficit were down to 0.6 per cent and 0.7 per cent of the demand.

A number of completed thermal plants — notably, around 10,000 MW of gas-fired plants — are lying shut. For example, only one of the two 600 MW units of IL&FS in Cuddalore, Tamil Nadu, is operational, though the other unit is also ready for generation.

Industry experts say that when these plants begin to produce energy, India will become surplus on power.

How did Power sector perform in the past year and what to expect in 2017

Energy World: December 30, 2016

2016 has been a good year for the Indian power sector. If 2015 is known as the 'Turnaround Year', 2016 could very well be called as the 'Result Year'. All the policy initiatives taken by the present government in the year 2014 and 2015 have started showing results in 2016. Here is an account of how the power sector has performed on different fronts in the past year:

Record installed generation capacity addition

Between January 2016 and November 2016, 24,500 Megawatt (Mw) of generation capacity has been added in the country and the total installed capacity has crossed the 300,000 Mw mark in 2016. We expect approximately 25,000 Mw of generation capacity to be added this year which is by far the highest capacity additions in a year. While coal accounts for 60 per cent of this capacity addition, renewables (largely solar and wind) accounts for 35 per cent of the same which is highest for any calendar year. Approximately 8,500 Mw of renewable generation capacity has been added in the country between January 2016 and November 2016 which is highest for any calendar year and accounts for around 19 per cent of the total renewable power installed in the country. This indicates the focus that renewable energy, primarily solar, has received from the present government and it is showing results on ground.

One of the highest transmission capacity additions

Around 68,000 MVA of substation capacity has been added between January 2016 and November 2016 which is highest for any calendar year. It was 61,701 MVA for 2015 and 39,464 MVA for 2014. This indicates the pace at which transmission network strengthening activity is happening in the country. On the transmission line front, capacity addition has slightly dipped in 2016. Capacity addition was 25,700 Circuit Kilometer in the last eleven months while it was 29,466 CKm in 2015 and 22,282 CKm in 2014.

Distribution reforms underway – Lowest peak power deficit ever

For the first time in the Indian power sector's history, energy deficit has fallen below the 1 per cent mark which is a significant achievement. The deficit was 1.9 per cent in January 2016 and has reduced to 0.6 per cent in October 2016. Between January 2016 and October 2016, energy requirement was 962.1 Billion Units while availability was 952.5 BU – a deficit of around 1 per

cent which is the lowest ever energy deficit in the country. On the peak deficit front, for 2016, peak demand recorded at 159,500 Mw during September 2016 and peak deficit in that month was 1.6 per cent which is also the lowest for any calendar year. Consistent generation capacity addition and almost a flat growth in power demand has helped this cause.

Now, let us examine the performances of various policy initiatives from the present government

UDAY – yet to see the full impact of it on Distribution Utilities

The Ujwal Discom Assurance Yojana (UDAY) has been one of the most talked about schemes related to the Indian power sector. The scheme has been designed in such a way so as to strike at the heart of the issues bugging the whole sector – the inefficient operation of the power distribution companies. As per the report from the ministry, of the 16 states which are part of the scheme, at least eight have a lower gap between their average cost of electricity supply and average cost of realisation and about 12 states have reduced their Aggregate Technocal & Commercial (AT&C) loss levels. If successfully implemented, this policy can permanently solve the long-standing issues of the distribution sector and revive energy demand of the country.

'Power For All' and 100 per cent Rural Electrification – going on full throttle and may achieve targets sooner

Under Deen Dayal Upadhyay Gram Jyoti Yojana's (DDUGJY) rural electrification package, measures were taken up in mission mode starting August 2015 with a target to electrify un-electrified villages of the country by May 2018, to fit into the grander plans of providing '24×7 Power for All' by 2019. As per GARV dashboard, of the 18,452 villages to be electrified, electrification has already been done for 11,434 villages. Electrification needs to be carried out in 6,320 villages and the remaining 698 villages are uninhabited.Other than the above mentioned mega policies, few other policies like New Tariff Policy, Wind Re-powering policy, Wind Solar Hybrid Policy etc. were announced in 2016 which is going to help the sector in coming years.

Never seen before Transparency in the Power Sector

Every aspect of the power sector performance is now mostly available on a tap on a mobile phone through various apps being developed by the Ministry. This is a far improved scenario in a sector which was known for its bureaucratic and opaque functioning. Various apps have been developed to bring in transparency and instant information dissemination. Some of these apps include Garv, Vidyut Pravah, DEEP, Tarang, Ujjala etc

Energy efficiency in the forefront and creation of a Major PSU 'Ratna' in the making in double quick time

Energy efficiency has been in the forefront since the last 2.5-3 years and a separate PSU named EESL (Energy Efficiency Service Ltd) was formed with the task of creating the market for Energy Efficiency through a business plan and not be dependent on Government subsidies. This has taken a huge turn and we have nearly 180 million LED Bulbs and 1.5 million LED Street Lights having been distributed already and many other energy efficiency products are on the way to create self- sustaining and low cost energy efficiency market in India.

Areas of concern

While there have been several steps forward, there is also a resultant back-force which is also impacting the sector in a not-so-desired manner. That is in terms of the lack of Power demand – which is bound to impact most of the positives of the sector in the next 2-3 years, if it is not addressed immediately. Huge generation and transmission capacities have made sure power supply is ramped up, while energy efficiency measures have made consumption smarter and reduced. With the lack of industrial growth, the overall demand has not caught up with the supply side and this is resulting is record low deficits and low Plant Load Factors for most power plants.

Demonetisation, in most aspects has largely been a positive for the sector with 2 key immediate impacts – most utilities having recovered at least some part of their customer payments which

were stuck over long periods. The increased liquidity in banks is likely to ease the funding available to the sector (renewables specifically). However, cash disbursements to daily wage labourers and transporters have also been impacted and solar developers have already indicated 3 – 4 months delay in commissioning of the projects.Other than that, there are some unintended effects as well – the reduced cash flow has impacted most SMEs in their factory outputs and the service sector is also stagnating. These two sectors will further push down power consumption, further adding to the overall lack of power demand.

Overall, the year paves way for some major expectations during the coming years.

While there has been tremendous progress in generation and transmission capacity addition in the country, energy and power demand have largely remained stagnant. The primary reason for the same can be attributed to the poor financial health of the DISCOMs. While UDAY has been considered a landmark policy for distribution sector reform, its effect has to be felt very soon. Utilization of the generation assets (popularly known as PLF) is on decline which is a worrying factor for the developers. So, the power demand rejuvenation is the key for the sector going forward. This is a new challenge for the policy makers and the utilities as they have never confronted this situation before and will, therefore, need some out-of-the-box ideas. The industrial sector, which is one of the largest power consumers, may not be able to ramp up fully immediately. Therefore, policy makers should focus on the commercial and residential sectors and make sure that the last mile pipes are not choked for power and carry out various initiatives to drive power consumption in these large user base. Further, driving the increase in the usage of Power for agricultural use will also act as a key driver for power demand and also impact our agriculture sector in a positive way.

While almost all the sectors have received adequate attention from the government, hydro is one sector which was never in the limelight. The sector has tremendous potential and we expect a comprehensive growth policy and road map for the hydro sector in 2017.

While the government has taken initiative to install 100,000 Mw of solar power by 2022, our domestic solar panel manufacturing industry is not competitive and the sector does not have adequate capacity to meet the demand of the sector. As a result, majority of the solar panels are imported from countries like China which is against 'Make in India' policy of the government. While the government is working to boost the solar panel manufacturing sector, we expect more actions on this front in 2017 so that Indian companies get benefited from the growth of the solar sector.

Also, it has long been discussed that smart electricity infrastructure or smart grid is the future and this will drastically help to reduce AT&C loss of the DISCOMs. However, smart grid pilots, which were conceptualized in 2012, are yet to see the light of the day and the development of a low-cost smart meter which can be distributed to the masses is yet to become a reality. We understand that Smart Meter is at the heart of a Smart Grid and it is important that we start mass roll-out of these smart meters at the earliest. We expect to see a major development in this front, too, in 2017.

Finally, solar and wind power are intermittent in nature and not available throughout the day and year. Hence, higher injection of these intermittent powers in the grid can cause grid instability. Battery storage is one of the possible solutions to this problem. However, all the grid-level solar projects awarded till date are without a storage facility or infrastructure. We have to examine the grid parity of a solar project with battery storage. We expect the government to come up with a storage policy in coming days, develop economical storage solutions and make storage an integral part of the grid level solar projects.

Power sector year-ender: Distribution reforms, coal supply, green energy expansion to fire growth in 2017

Energy World: December 29, 2016

The power ministry says it has prioritised its plans on village electrification, energy efficiency and expanding the coverage of the UDAY scheme during the next year

Government to look intoelectrification of each household after remaining 4 per cent villages are electrified

* All are states likely to come under the ambit of distribution reform, UDAY and focus on loss reduction

* Government to extend its energy efficiency plans to fans and tubelights

* India likely to save 140 billion units of electricity through energy efficiency measures

* Over 20,000 MW renewable capacity likely to be added in 2017-18. No new thermal capacity to be added

India's power sector is set to enter the next phase of growth in 2017 with the government promising to continue focus on distribution reforms, coal supply improvement and further expansion of the green energy generation capacity. Experts, however, flag subdued domestic demand and absence of long-term power purchase agreements as areas of concern.

The power ministry says it has prioritised its plans on village electrification, energy efficiency and expanding the coverage of the Ujjwal Discom Assurance Yojna (UDAY) scheme during the next year. So far, 17 states have signed agreements under UDAY including of Jharkhand, Chhattisgarh, Rajasthan, Uttar Pradesh, Gujarat, Bihar, Punjab, Jammu & Kashmir, Haryana, Uttarakhand, Goa, Karnataka, Andhra Pradesh, Manipur, Madhya Pradesh, Maharashtra, Himachal Pradesh and Puducherry.

"Slow progress in signing of long-term PPAs by discoms has led to sizeable thermal capacity (estimated at around 25,000 Mw) without long term pacts. This, in turn, remains exposed to both price and volume risks in the short-term power market," Girish Kumar Kadam, Vice President ICRA Ratings said. "Significant rise in coal price level internationally in last six months is a credit negative for the merchant thermal capacity given the depressed short term tariff levels," he added.

Increased coal production is expected to provide relief to domestic customers in the new year as the government is working on a plan to ramp up Coal India's production to 1 billion tonne by 2020. "Adequate supply of the domestic coal to power plants has been ensured. The growth of domestic coal supply to power plants has been around 6.2 per cent during 2015-16," the minsitry said in a statement.

The power ministry also plans to further expand the ongoing rural electrification programme in 2017. The government had completed electrification works in 116,680 (96 per cent) un-electrified villages and intensive electrification in 399,829 (67 per cent) villages at the end of November 2016.

The ministry also plans to expand its underground power cabling programme across multiple states in the new year. Power minister Piyush Goyal had earlier this year laid the foundation stone for underground cabling work under the Integrated Power Development Scheme (IPDS) in Varanasi. Next year, the government's energy efficiency drive will also progress from LED bulbs to efficient fans and tubelights.

Experts said they were upbeat about the power sector's outlook going forward. "Our outlook on the Indian Power sector is stable reflecting the policy initiatives taken by the government, sustained improvement in domestic coal availability and likely improvement in the financial position of state owned electricity distribution companies in the next 2-3 years," Kadam said.

The power ministry said it plans to provide cleaner and more efficient electricity in the new year by replacing power plants of NTPC, India's largest generator, which are more than 25 years old.

India is likely to commission a total of 13,440 Megawatt. Of this, nine power projects with capacity of 3,608 Mw have been commissioned by October end.

CERC access rate hike plan clouds power market

Financial Express: January 3, 2017

The Central Electricity Regulatory Commission (CERC) has proposed to increase the short—and medium-term transmission corridor charges (STOAs and MTOAs) for open access by 35% and 25%, respectively, from the current levels. While the regulator says this would compel participants to move towards long-term access (LTA), which is critical for efficient planning of transmission networks, many stakeholders including power exchanges, private transmission companies and generators contend that the move could deal a blow to the thriving short-term electricity market. LTAs, they say, are not happening because states' power demand hasn't grown as anticipated.

The CERC invited public comments on the draft regulations and is believed to be working on the final version. Transmission planning in the country is done by the central transmission utility (CTU), Power Grid Corporation. Network planning relies heavily on the generators' requests for LTA. These applications provide the CTU with critical input on the upcoming generation and demand for the same.

However, in the last few years, the demand for short-term and medium-term power has spiked. The volume of short-term transactions has increased from 24.69 billion units (BUs) in 2008-09 to 63.96 BUs in 2014-15. However, the price of electricity in short-term transactions has come down from about R7.29 per unit to R4.28 per unit over the same period; in May this year, the price was even lower at R2.50 per unit.

"(The volume of short-term transaction could rise further in future). In this scenario, it is likely that generators may not apply for LTA and evacuate power under STOA/MTOA or it

is likely that there is less long-term PPAs (power purchase agreements) leading to lack of LTAs, thereby inefficient transmission planning," the draft regulations said, explaining the rationale behind jacking up charges for STOA and MTOA connections.

Currently, the charges for all types of connection are the same. While the duration for LTA is from 7 to 25 years, MTOA is given for 1-7 years. The STOA is for any duration less than a year but no specific capacity is built to cater to STOA, instead margins available in LTA are used for the same.

While officials from Power Grid and its subsidiary Posoco, which manages the national and regional grids, defended the CERC's proposal, electricity exchanges, private transmission players and generating companies are critical of the move.

"With more power being contracted on short- and medium-term basis, any increase in charges for open access would be a regressive step. Instead, the CERC should be looking forward to considering access on the basis of general network access (GNA) — with long, medium and short term rolled into one system — from point of injection to point of any drawal, in the true sense of a unified grid," Ashok Khurana, director general of Association of Power Producers, told FE. GNA is a transmission network planning process whereby the operator doesn't necessarily need the information about actual generation and demand but can design and build a system through forecasting while ensuring enough redundancy in the system to avoid any congestion.

The proposal, according to industry sources, also contradicts the CERC's own observations on transmission planning and the Electricity Act, which calls for non-discriminatory open access to be provided to all the consumers. "The CERC has also said that transmission planning was possible without prior knowledge of points of injection and drawal using the GNA especially after 2016-17, once a strong all-India network had emerged but the proposal contradicts the earlier stand," Purnendu Kumar Chaubey, vice-president, Kalpataru Power Transmission, told FE.

On condition of anonymity, an official from the electricity exchange said that charging a premium for STOA and MTOA was unjustified as there are no separate capacity created for these

connections. While transmission corridors are made according to LTA requirements, other connections only use the underutilised capacity, thus generating revenue for the operator. The official added that STOA and MTOA were dominating the connections as most states do not require long-term PPAs. The thriving market for STOA and MTOA is a result of tepid electricity demand. While the Central Electricity Authority had estimated that the power demand would be around 200 GW by 2017, the same has been hovering around 150 GW.

The Central Electricity Regulatory Commission (CERC) has proposed to increase the short—and medium-term transmission corridor charges (STOAs and MTOAs) for open access by 35% and 25%, respectively, from the current levels.

Power demand in spot market remains subdued

Business Line: January 4, 2017

The demand for power in the spot market fell by 275 million units (MU) to 3,684 MUs in December 2016 against November 2016, according to data released by the Indian Energy Exchange (IEX).

This resulted in the exchange trading 300 MU lesser power, bring the total cleared volumes to 3,101 MUs. The western and north – eastern States emerged as the net sellers, while the northern, eastern and southern States were net buyers for the month of December. IEX is the India's largest spot market for power and oversees 97 per cent of all spot power trade in the country.

The average Market Clearing Price for December was ☐2.32 per unit, same as the previous month and about 10 per cent less over prices of ☐2.56 per unit in December, 2015.

According to an IEX statement, "With the average daily purchase bid of 119 MUs, and average daily sell bids of 229 MUs, the market remained highly liquid and thus the prices were buyer friendly."

IEX noted that the unavailability of transmission corridor continued to be a deterrent and led to market splitting and price variations.

As a result of congestion 4.4 MUs were lost on a daily average basis. On an average, 100 MUs were traded in December, lower than the 113 MUs in November and 116 MUs in October last year.

India traded 251,000 Renewable Energy Certificates in December, says IEX

Energy World – December 30, 2016

Power distribution companies as well as open access and captive consumers are under obligation to buy RECs from renewable energy producers under RPO mandated by central/state regulatory commissions.

A total of 2.51 lakh renewable energy certificates (RECs) were traded in December, power exchangeIEX said.

"A total of 2.51 lakh RECs were traded in the REC trading session held on 28th December, 2016 at IEX," it said in a statement.

Power distribution companies as well as open access and captive consumers are under obligation to buy RECs from renewable energy producers under RPO mandated by central/state regulatory commissions.

RECs are aimed at providing an easier avenue for various entities, including power distribution companies, to meet their green energy obligations.

Two power exchanges -- Indian Energy Exchange (IEX) and Power Exchange India Limited (PXIL), approved by the Central Electricity Regulatory Commission -- hold auction of RECs on the last Wednesday of every month.

"Since the beginning of this fiscal (April-December), IEX has traded 17.85 lakh RECs," the statement said.

"On 28th December, 2016 a total of 2.51 lakh RECs were traded an increase of over 43 per cent over 17.50 lakh RECs traded in the previous month of the same fiscal," the statement added.

The purchase this month has been on account of few utilities such as BSES Rajdhani,DVC and BEST Undertaking. Further, obligated captive power and open access consumers also contributed in this trading session, it said.

A total of 1,291 participants traded at IEX with 802 participants in non-solar segment and 489 participants in the solar segment.

Overall, a total of 3,386 participants are registered in the REC segment at IEX. Of this, 851 are Eligible Entities (RE Generators) 2,516 are Obligated Entities (Discoms, Open Access Consumers and Captive Generators) and 19 are registered as voluntary entities.

Save Energy, Save Money, Save the Planet

Please see the website at *www.tecaonline.in* ***for previous issues of TECA News letter***