TECA – NEWS CLIPPING

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

13.01.2016

அனைவருக்கும் இனிய பொங்கல் நல் வாழ்த்துக்கள்

காற்றாலைகளில் கோலோச்சும் தனியார் ; வாய்ப்பை பயன்படுத்தாத மின் வாரியம்

Dinamalar: January 13, 2016

காற்றாலை மின் நிலையம் அமைப்பதில், தனியார் நிறுவனங்கள் கோலோச்சி வரும் நிலையில், தமிழ்நாடு மின் வாரியம் அலட்சியம் காட்டி வருகிறது. தமிழகத்தில், நெல்லை, தூத்துக்குடி உட்பட சில மாவட்டங்களில், 7,499 மெகாவாட் திறன் உடைய, காற்றாலை மின் நிலையங்கள் உள்ளன. இவற்றில், தமிழக மின் வாரியத்திற்கு, தூத்துக்குடி - முல்லக்காடு, கயத்தாறு; மதுரை - புலியங்குளம்; கோவை - சுல்தான்பேட்டை; குமரி - முப்பந்தல்; திருப்பூர் - கேதானூரில், 17 மெகாவாட் மின் உற்பத்தி திறனுடைய மின் நிலையங்கள் உள்ளன.

இந்தக் காற்றாலை மின் நிலையங்கள் எல்லாம், 1986 - 1993க்கு அமைக்கப்பட்டவை. இவற்றில் இருந்து, ஆண்டுக்கு, 1.50 கோடி யூனிட் மின்சாரம் கிடைக்கிறது.மத்திய அரசு, சுற்றுச்சூழலை பாதிக்காத காற்றாலை, சூரிய சக்தி மின் நிலையங்கள் அமைப்பதை ஊக்குவிக்க, கடன், மானியம் என, பல சலுகைகள் வழங்கி வருகிறது. இதனால், இந்த வகை மின் நிலையங்கள் அமைப்பதில், தனியார் நிறுவனங்கள் ஆர்வம் காட்டி வருகின்றன. ஆனால், தமிழ்நாடு மின் வாரியம், அலட்சியமாக உள்ளது.

'நவீனப்படுத்தாததால் செலவு அதிகமாகிறது':

எரிசக்தி துறை அதிகாரி ஒருவர் கூறியதாவது:மின் வாரியத்தின், காற்றாலைமின் நிலையம் உள்ள இடங்களில், தற்போது, 500 மெகாவாட் அளவுக்கு, கூடுதல் காற்றாலை மின் நிலையம் அமைக்கும் இட வசதி; மின்சாரத்தைமின் வழித்தடத்தில் கொண்டு செல்லும் வசதி என, பல வாய்ப்புகள் உள்ளன. ஆனாலும், வாரியம், காற்றாலை மின் நிலையத்தை நவீனப்படுத்தாமல் உள்ளது.

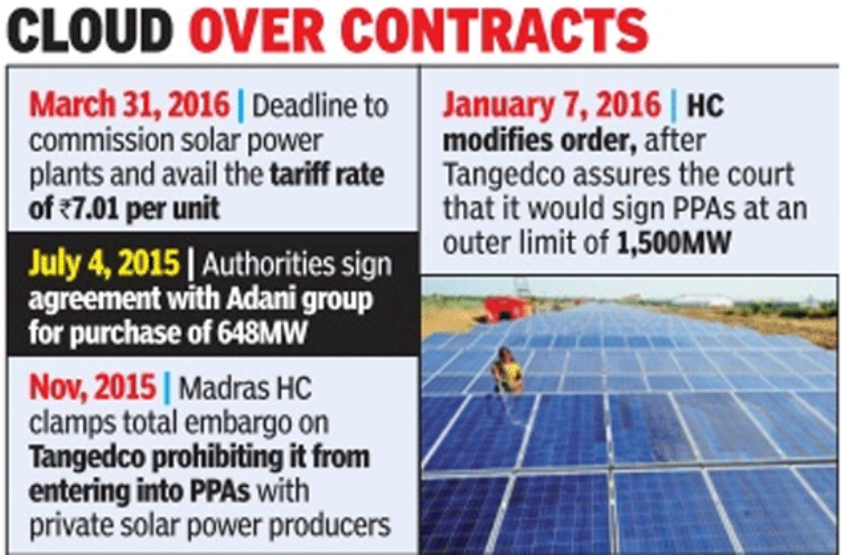
இதனால், அந்த காற்றாலை மின்சாரத்தை விற்பனை செய்வதன் மூலம் கிடைக்கும் வருவாயை விட, செலவு தான் அதிகம் உள்ளது. அனல் மின் நிலையம் அமைப்பதில் காட்டும் அக்கறையை, காற்றாலைகள் அமைப்பதிலும் மின் வாரியம் செலுத்தினால், காற்றாலை உட்பட, எந்த மின்சாரத்தையும் தனியாரிடம் இருந்து வாங்க வேண்டியதில்லை. இவ்வாறு அவர் கூறினார்.

HC ruling puts state's solar power policy under scanner

Times of India: January 8, 2016

A series of Madras high court rulings has once again put the state government's solar power policy under the scanner. As Tangedco signed power purchase agreements for some 1,200 MW including the Adani deal for 648MW at `7.01 per unit, other companies had rushed to the court alleging that proper procedure was not being followed.They said that authorities had not followed seniority norms, allowed big companies to jump the queue, and signed PPAs with them.

When these petitions came up for hearing for the first time last month, Justice T S Sivagnanam clamped a blanket ban, prohibiting Tangedco from entering into PPAs till the issue of seniority-based PPAs was settled. On Thursday , however, acceding to the request of Tamil Nadu advocate-general A L Somayaji, who represented Tangedco, the judge modified the order and permitted Tangedco to sign PPAs up to maximum of 1,500 MW - the limit fixed by the Tamil Nadu Electricity Regulatory Commission. This clears the way for signing o PPAs of another 300MW.



The solar companies who approached the court said tha they were eligible and ready to sign PPAs of nearly 2,000MW but the government had by passed them. Some of the com panies with whom PPAs were signed did not fulfil the three fundamental requirements such as eligibility , seniority and infrastructure including land bank, argued P Wilson, senior advocate for Raasi Green Earth Energy Private Limited.To produce 1MW solar power, it would require at least five acres of land, he said, adding that the petitioner-companies had demonstrated the mandatory load flow study and paid deposits as well. To avail themselves of `7.01-per unit of solar power, these signatories must start producing power on or before March 31, 2016. Justice Sivagnanam, noting that total embar go on signing PPAs would not be of interest of power generators as well as Tangedco -and ultimately to the public -said it could be modified up to an outer limit of 1,500MW . He added: "The other issues pertaining to seniority of the applicant, readiness of the unit and parameters they have to fulfill are to be decided by Tangedco...All other issues will be considered on next hearing date." He then adjourned the case to January 28 for further hearing.

Earlier, Raasi Green Earth had said in its writ petition that to become eligible for the tariff of `7.01 per unit of solar power, plants must be commissioned before March 31, 2016, and added that there was inordinate delay in signing the PPA. "There is no reason for the 8month delay when the petitioner-company is running against time to commission the unit before the deadline of March 2016. Persons who have entered the scene late have been preferred over the petitioner and PPAs signed. It is evident that Tangedco, despite being a state body, are resorting to a pick and choose formula," the company argued. Noting that without PPA the petitioner-company was unable to achieve financial closure, Raasi wanted the court not to permit authorities to execute PPAs with any entity or power generator without following seniority.

Solar power firms racing against time

The Hindu: January 9, 2016

With the deadline for the expiry of the control period fast approaching, solar power companies that have signed power purchase agreements with the Tamil Nadu government are racing against time to finish their projects.

The rains in November and December across the State either slowed down or completely halted operations at the construction sites, the companies claim. But the Tamil Nadu Electricity Regulatory Commission (TNERC) has put its foot down and declined any extension of the control period which expires on March 31.

Under the current agreement, companies setting up solar power projects before March 31, 2016 get a price of Rs. 7.01 per kWhr for a period of 25 years.

Representatives of at least two companies – Adani and SunEdison – who are setting up solar plants of a total capacity of nearly 800 MW in the State say the floods have delayed work on their projects.

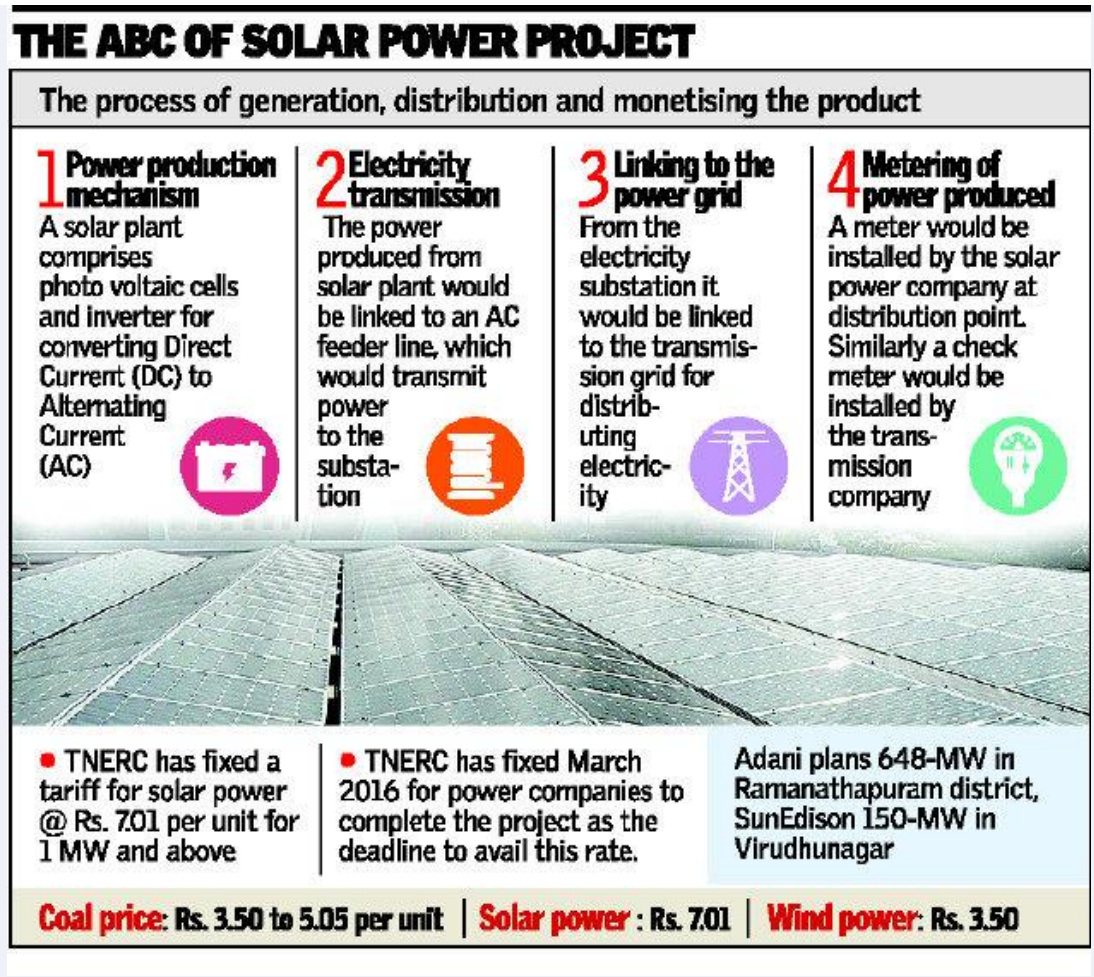
Adani's 648-MW plant is coming up at Kamudhi in Ramanathapuram, while SunEdison is setting up 3 plants of 50 MW at Virudhunagar.

"We have lost about a month of work due to the rains. After the rains stopped, the soil condition was bad and it became soft, which led to the machinery being unable to move," Pashupathy Gopalan, President, Asia-Pacific, SunEdison, told *The Hindu* . The company is working hard to finish the work before the deadline, he said.

The rains caused flooding in the area and led to stoppage of work. "We have already started work on the plant again and are confident we will complete the project ahead of time," a source at Adani Group told *The Hindu* . The source added that they would now work extra hours to make up for the lost time," the source said.

Industry sources said they expected the government to provide some relief by way of extension of the control period – the timeframe within which a project has to be commissioned to avail a specific price.

But a senior official at TNERC denied there was any proposal to extend the deadline. Any extension of the deadline will only hurt the Tamil Nadu Generation and Distribution Corporation (Tangedco) financially, especially when the price of solar power is coming down, the official said.



Under the Solar Policy of 2012, the government had envisaged an addition of 3,000 MW of solar power by the end of 2015. As per data available on the Tangedco website, the State has an evacuation capacity of 1.1 GW of solar power. A senior official of the Tamil Nadu Transmission Corporation (Tantransco) said work on the transmission facilities were progressing well and these areas were hardly affected by the North-East monsoon.

Spot electricity prices at record lows

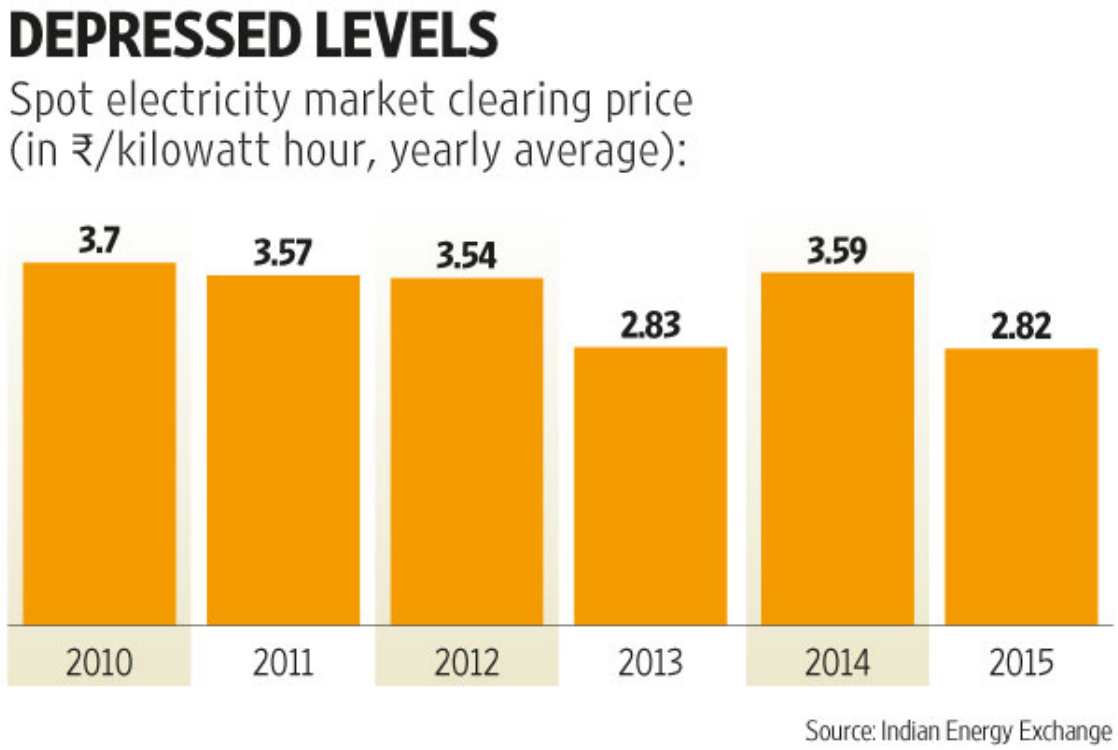
Live mint: January 13, 2016

Last month the market clearing price on the Indian Energy Exchange averaged at Rs2.56 per unit (kilowatt hour), down from Rs2.67 in November and Rs3.03 in October

Electricity prices in the spot power market fell to record lows in 2015. Last month the market clearing price on the Indian Energy Exchange Ltd (IEX) averaged at Rs.2.56 per unit (kilowatt hour), down from Rs.2.67 in November and Rs.3.03 in October.

For the full year, the prices averaged at Rs.2.82 per unit. In 2014, they were at Rs.3.59. The last time the yearly average prices fell to such low levels was in 2013, when they were at Rs.2.83 per unit.

Prices were depressed for most of 2015. Only two months of the last year saw prices averaging above Rs.3 per unit. In 2013, though, per-unit prices remained above Rs.3 for five months of the year.



Three factors are driving prices lower. One is the falling coal cost, which is allowing producers to offer electricity at lower prices. The second is easing congestion between the south and the rest of India. Increased generation in the region (some gas power plants have restarted) and better availability of the transmission corridor led to a sharp drop in peak power tariff in December, IEX pointed out.

“In the South, the highest average price was Rs.3.10 per unit, 20% lower than Rs.3.87 per unit in the previous month,” IEX said in a statement.

The third and most important factor is demand—it reflects the deceleration in electricity generation growth and sub-optimal utilization of power plants. Production growth slowed to 4% in the nine months to December 2015. During the same period, generation grew 10% in 2014 and 5.5% in 2013.

Indications are that spot electricity prices will remain depressed for some time. The government’s efforts to revive the troubled state electricity boards—the biggest buyers of electricity in India—will take time to show results. Even if it succeeds, the power sector will need a demand pull from the economy, which at present shows few signs of revival.

Renewable energy sector to get Rs 1 lakh-crore boost from state-run lenders like Power Finance Corporation

The Economic Times:January 11, 2016

State-run lenders to Power Finance Corporation and Rural Electrification Corporation are set to provide a boost of over Rs 1 lakh crore to the renewable energy sector as the two companies are looking to offer cheaper finance to low-risk commissioned renewable energy firms to help them replace costlier loans.

The move is aimed at utilising the cash that the two financiers will receive in lieu of loans lent to state-run power distribution companies. Shares of REC and PFC had taken a beating a day after the government announced the debt recast scheme Ujjawal Discom Assurance Yojana (UDAY) on November 5 for distribution companies as it is likely to hit the interest income of these companies.

At present, renewable energy projects constitute nearly 10 per cent of the loan portfolio of REC and PFC. The lack of new conventional coal and gas projects by private companies has also prompted the two companies to shift focus to renewable sector.

Under UDAY, the two companies will recover their debt exposure to state distribution companies in cash. PFC and REC have an exposure of over $20 billion to these companies The non-banking finance companies plan to utilise the cash to finance energy projects, mainly green energy plants such as solar, wind and biomass power plants, a senior government official said.

"REC and PFC are looking at various options to utilise the cash. They will look at bigger role in renewable energy sector," said the official, who did not wish to be named. While other state-run banks with exposure to debt owned by distribution companies will be issued bonds backed with sovereign guarantee at 8-8.5 per cent yield, REC and PFC will receive cash in lieu of their loans. The decision was taken to protect the balance sheets of the two financiers that borrow at less than 8 per cent, he said.

The companies are, however, not likely to pick equity stakes in power projects and are likely to identify only commissioned power plants that are low on risk.

Asenior REC official said the company had at its board meeting in the last week of December okayed refinancing and takeout financing of large renewable projects. Under take-out financing, the company will completely replace the lenders of a power project, while under refinancing scheme REC will offer loans to projects to help them retire 25-50 per centof their debt.

The government official said PFC also plans to implement similar schemes to utilise its cash.

"In a scenario that most states accept this package, we believe PFC-REC's loan book will shrink over the next one-two years, as SEBs (state electricity boards) repay short-term/transitional finance loans," Kotak Institutional equities said in a note.

ICRA Research said the extent of credit of PFC and REC which could eligible under this programme is estimated at 11-14 per cent of their combined credit, thereby reducing their portfolio vulnerability

Story of Indian solar sector - matter of time & not whether; by Ratul Puri

The Economic Times: January 13, 2016

The Prime Minister of India, Narendra Modi, has sharpened the focus on renewables when he said recently, "As fossil fuels put the planet in peril, hopes for future prosperity in the

developing world now rest on bold initiatives." He added, "Solar technology is evolving, costs are coming down and grid connectivity is improving. The dream of universal access to clean energy is becoming more real. This will be the foundation of the new economy of the new century." By saying this, Modi opened the paradigm in the renewable adoption in India.

Adoption of Renewable energy as expected has continued to grow with the increasing global energy consumption, particularly in developing countries, and a decline in the oil prices. Despite the increase in energy consumption, interestingly for the first time in the last few decades, global carbon emissions associated with energy consumption remained stable in 2014 while the global economy grew. This may well have been possible due to increased penetration of renewable energy and energy efficiency particularly in solar.

The rapid price decline seen by the solar sector, an upward revision of the Indian solar mission, the launch of an international solar alliance of over 120 countries by Modi with the French president, Francois Hollande at the Paris COP21 climate summit and other factors have opened up solar not just in India but to an enormous number of countries around the world. As a result, several new business models emerged in the post-FiT world, which would enable the Country to achieve its 160 MW by 2022 target, making the same backbone to India's pledge to the Paris summit to draw 40% of its electricity from renewables by 2030.

Hence, the story of "solarizing India' is all about great promises and efforts to realize the potential. In my mind, there is no doubt about the fact that policy and development agenda play a critical role and the current Indian Government has shown the right will to do both. While the move to upward revise the target from 20 GW to 100 GW raised eyebrows, but making it a key ingredient in the Government's bid to provide 24X7 power to all, connected the dots. The journey thereafter is filled with greater coordination between the centre and States and more importantly buoyed by the central government's political will and willingness to listen to and support the State governments and private sector, investors suddenly found the Indian solar sector lucrative. Today, Solar is seen as an integral part of the India's energy build-out through creating new economic opportunities, providing energy access to the millions of people still living without modern energy services and addressing climate change.

By analyzing the recent thermal and solar bids in India, it is safe to conclude that grid parity has been achieved which was the 'holy grail' and a key milestone towards large scale adoption of solar in India. The country, where the average solar tariffs were between Rs. 10.95/kWh and Rs.12.76/kWh in December 2006 has dropped to Rs 5.00 - Rs 5.50 in 2015 whereas the thermal bids during the last 6 months has landed in the range of Rs 4.00 to Rs 5.00. Thereby, safe to say India has indeed achieved grid parity and this could result in higher investor stickiness to the sector. On the same note, the Rs 4.63 tariff bid should be seen as placeholder and not debated too much till the time there are sustained ROI from the project.

India for once is going beyond all political persuasions with the States in sync with the Country's vision. Thereby, the States are developing policies to boost solar capacity in their respective areas as per their requirements. Hence, it was not just the states that were already leaders in solar power, such as Madhya Pradesh, Rajasthan and Gujarat but relatively new ones such as Andhra Pradesh, Telengana, Karnataka, Odisha who are the game changers. While States such as West Bengal, Uttar Pradesh and Jammu & Kashmir, are working and developing policies to attract investments with an aim to build solar capacity.

According to reports, the total pipeline of yet to be commissioned project that have been allocated or are in the process of being allocated now exceeds 14 GW, thereby giving the stakeholders world over a confidence about the potential of the sector. Although discussion

is limited to date, renewables form an important element of climate change adaptation, improving the resilience of existing energy systems and ensuring delivery of energy services under changing climatic conditions for India. This is timely as the country is projected to be the world's most populous with 1.45 billion people by 2030.

The core of the debate whether the recent tariff fall, grid parity, the policy changes etc enthuse the investors enough to help India build out its infrastructure has been answered without any doubt. It is now just matter of time before India reaches its objective, but at this moment, the country should enjoy the 'sunshine' !

(Ratul Puri is Chairman, Hindustan Power.)

Dark future ahead? 11,000mw thermal power capacity lying idle, largest outage is in the north

The Economic Times: January 13, 2016

Some 11,000 MW of thermal power capacity in the country is lying idle because electricity distribution companies are not drawing the quantum agreed, preferring to source it from the spot market, where power is cheaper.

Separately, 14,000 MW of gas based power station capacity has been shut due to lack of the fuel

According to data provided by regional load despatch centres, the largest outage is in the north, where some 8400MW of thermal power capacity is unutilised because demand has dried up. All these plants have power purchase agreements with state distribution companies, which prefer not to buy their electricity. In the south, there is some 1,800 MW of idled capacity, while in the east, the unused level is about 900 MW.

The generation companies affected are a mix of central public sector utilities such as NTPC and Damodar Valley Corporation and utilities owned by state governments. The reduced offtake has led to the shutdown of 840 MW of capacity at Guru Gobind Singh Thermal Power Station in Punjab, 750 MW at Suratgarh in Rajasthan, and 660 MW at Jhajjar Thermal Power Station in Haryana. According to a senior power official, prices at power-trading exchanges have declined about 25 per cent over the past three quarters and have fallen further because of lack of demand. In December, of some 5 billion units of power offered for sale, only about 3 billion units were sold.

Utilities now find it cheaper to buy power from the exchanges, even after paying generators the fixed component of their power purchase agreements, the official said. Such long-term supply contracts have a variable cost that is paid only when power is bought and a fixed part that is paid irrespective of whether electricity is consumed. Cheap power is supplied mostly by independent power producers, primarily those that have not signed supply agreements with state distribution companies. They produce power when demand spikes and idle their plants when demand falls.

Reduced demand for power seems to suggest a broader problem of lack of demand, now that there is reportedly much better fuel supply. The way ahead is to tackle problems in the real economy like high gearing ratio, and to improve the ease of doing business nationally. However, it is also possible that state power utilities are simply preferring to back down, given their high revenue leakage in distribution. The latter state of affairs calls for sustained distribution reforms and for an end to reckless giveaways and open-ended subsidies in power. It would rev up power demand going forward

Good news for power consumers as discoms pass on benefit of cheap sourcing

The Economic Times: January 10, 2016

Demand for electricity hasn't increased as expected, resulting in a surplus and prices falling so much that state distribution companies find it cheaper to buy power from the spot market than from generators with which they have long-term contracts.

This was exactly why the entire power offered at the India Energy Exchange on December 29 got sold, as claimed by power minister Piyush Goyal. The government's aggressive power capacity addition plan and Coal

India's sustained efforts to supply adequate coal to all plants have added to the worry of generation companies with longterm power purchase agreements, such as NTPC, the country's largest, and other central sector companies.

"Power prices at exchanges have declined about 25% over past three quarters and have been falling further primarily due to lack of demand," a senior power sector official said. "During December last year, around 5 billion units were offered for sale. However, only about 3 billion units of power were sold - a gross oversupply of some 2 billion units."

Increase in surplus generation capacity results in higher volumes offered in the spot market and lower prices, which benefit household and industrial consumers as state distribution companies pass on the benefit of cheap sourcing.

"It makes sense to buy cheap power from exchanges than pay for power that has been committed to us through agreements. Cheaper power enables us to supply larger volumes and yet be profitable," a senior state distribution company official said.

Long-term contracts for supplying power consist of two parts - fixed and variable cost. The variable cost is paid when power is purchased, while the fixed component is paid irrespective of whether power is consumed as long as the plant is in a position of generate and supply 80% of its installed capacity.

"Even after paying fixed costs to thermal generators with long-term PPAs, utilities are finding it cheaper to buy power from exchanges. Cheap power is supplied mostly by independent power producers, primarily ones that do not have any power purchase agreement with state utilities. They produce power when demand spikes and idle plants in case demand falls. There are states that produce surplus power - the east and west and northeast. For them, selling it at exchanges is more profitable than idling their plants," the official said

With state electricity boards buying less from them, large generators such as NTPC and Damodar Valley Corporation are cutting capacity utilization, which will lead to reduced income.

The average market clearing price on the Indian Energy Exchange was Rs 2.56 per unit in December, a drop of 4% over the previous month. The spot market was cleared at a single price of Rs 2.3 per unit across India on December 29, after several years, the exchange said in a statement on January 6.

High-tech system for power transmission soon

Business Standard: January 13, 2016

In around three years, India will see some 34,000 megawatt (Mw) of power being transported over long distances, primarily to the northern and the southern regions. This will be made possible through setting up of large trunk transmission lines, which are technologically the most advanced in the world.

Transmission of power over large distances is not very common across the world, except in China and Europe. Currently, only 5,900 Mw of power travels to the southern grid from the northern, eastern and western grids, but the volume will jump to 17,000 Mw by 2019-20.

This increase of 11,100 Mw will be made possible by the coming up of five new transmission lines at Rs 42,950 crore.

“We have built more corridors in northern and southern regions and their capacity has been increased. Close to 18,000 Mw of transmission capacity would be ramped up for both the northern and southern regions,” I S Jha, chairman, Power Grid Corporation, told Business Standard.

Similarly, the northern region which currently gets 8,050 Mw from the western region, will see the number rising to 17,000 Mw by 2018-19 through the coming up of three additional lines.

“States are now replacing costly power and wheeling cheap power from other regions. By paying 25-30 paise in transmission, they are saving Rs 1-2 per unit of power generation,” Jha said.

Not only in terms of capacity, the sector has also seen technological enhancement. The high voltage direct current (HVDC) technology made its debut in India, with Adani Power setting up the first such line from Mundra in Gujarat to Haryana. The 1,000-km-long 500-kv bi-pole HVDC line connects the western grid to the northern grid and was commissioned in 2012, transmitting power from Adani’s Mundra power plant.

India’s first HVDC corridor, however, was built by the state-owned PowerGrid. The 800-kv, 6,000-Mw line was built with an investment of Rs 12,000 crore. The corridor connects Bishwanath Chariali in Assam to Agra in Uttar Pradesh through Alipurduar in West Bengal.

The HVDC corridor would facilitate transfer of 24,000 Mw from future power generation projects in the northeastern region and Bhutan. The corridor, PowerGrid said, would help resolve the issue of congestion in the north and northeast regions.

According to government regulations, all transmission corridors to be awarded through tariff-based competitive bidding from 2014-15 onwards would be based on HVDC technology.

The “Perspective Transmission Plan for 20 Years” also emphasises on new technology such as HVDC and better load forecast. The plan is in sync with the general network access (GNA) for power transmission that is under discussion.

GNA is a form of transmission network planning which aims at developing a transmission system in a manner that available power can be smoothly transmitted.

It would not be necessary to know in advance the destination of supply for a power generation plant.