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Tangedco inks pacts for 450 MW of wind power ; Bidding yields final price of Rs. 3.40 per unit

The Hindu : November 2, 2017

Tangedco has signed power purchase agreements with two companies for procuring 450 MW of wind energy at a final rate of Rs. 3.40 per unit.

In August, the power generation company had called for competitive auction for procuring 500 MW of wind power with a maximum ceiling of Rs. 3.46 per unit. Tamil Nadu has become the first State to procure wind energy through competitive bidding after the Centre.

According to a senior Tangedco official, the power purchase agreements have been signed with two companies – Leap Green Energy (for 250 MW) and Regen Power Tech (for 200 MW) – at Rs. 3.40 per unit.

He also noted the remaining 50 MW was allocated to NLC India Ltd (NLCIL); however, the firm felt the capacity is inadequate and a proposal to buy 250 MW is under consideration.

Post Tangedco's tender, Regen Power Tech had bid at the rate of Rs. 2.80 per unit in auction conducted by Centre's Solar Energy Corp. of India (SECI) for 1,000 MW of wind power last month.

Replying to query on Regen Power quoting a lesser price in SECI's tender, the Tangedco official said that tenders floated by the Centre and the State varied in terms of factors such as the escrow mechanism, State guarantee for payments and deemed generation payment for backing down.

"We cannot give such conditions and so we will not get that rate even if a new tender is called for," he added.

Tamil Nadu trades wind for profit

<https://www.windpowermonthly.com> : November 1, 2017

Taking advantage of the highest recorded generation in August this year, the Tamil Nadu state utility, Tangedco, traded excess wind power through spot sales on the power exchange.

By the end of the month, Tangedco sold 11.94GWh to various takers, earning INR 61.7 million (\$950,000).

"Tangedco sold wind power on 14 days in August during peak hours in the evening. On average, wind power was sold for two to four hours per day, and it works out to around 500MW per day, " a senior utility official said.

"The average cost at which wind power was sold to other states was INR 5.16/kWh (\$0.08/kWh) and the distribution companies purchased wind power at a cost of INR 3-4.15/kWh," the official added.



This is the first time the utility has actually made a profit by trading wind power, making it a significant milestone in a battle of perceptions that has plagued the wind industry.

Tamil Nadu, the state with the highest installed wind power base, has been consistently recording higher wind-power generation in the windy June-September season. In July, the state recorded over 5GW of wind power supply for the first time. In August, it achieved the highest single-day wind power generation, exceeding 100GWh.

The record supply in July and August also prompted the utility to cut down thermal power generation, up to 50% at times.

This is a far cry from last year, when nearly 40% of wind-power generation could not be put on to the grid due to transmission constraints. Enhanced transmission connectivity, better corridor management and generation forecasting have helped the state integrate the maximum possible amount of wind power.

A Tangedco official said the state was keen on maximising such opportunities and earn extra revenues by trading wind power.

In big setback, power utilities losses jump 36 pct to Rs 89,603 cr in FY16

Financial Express : October 21,2017

The aggregate book losses on accrual basis of all the state power utilities increased by nearly 36% to Rs 89,603 crore in FY16 as the utilities in Maharashtra went into a loss of Rs 28,029 crore in the fiscal against a profit of Rs 1,834 crore in FY15.

The aggregate book losses on accrual basis of all the state power utilities increased by nearly 36% to Rs 89,603 crore in FY16 as the utilities in Maharashtra went into a loss of Rs 28,029 crore in the fiscal against a profit of Rs 1,834 crore in FY15. The performance report recently released by the Power Finance Corporation noted that Maharashtra's losses were mainly because the utilities have charged depreciation of Rs 27,588 crore on revalued assets for the period FY06 to FY15. The aggregate revenue from sale of electricity for utilities selling power directly to consumers increased by 5.5% to Rs 3,92,398 crore. The revenue growth in FY15 was 12.6%.

Delhi, Gujarat, West Bengal continued to remain profit making states for two straight years. Tamil Nadu, Rajasthan and Haryana showed considerable improvements in the fiscal, cutting their losses by Rs 6,819 crore, Rs 2,823 crore and Rs 1,394 crore, respectively. Apart from Maharashtra, Uttar Pradesh and Punjab deteriorated their losses in FY16 by Rs 2,043 crore and Rs 1,477 crore, respectively.

The difference between the average revenue realised and the average cost of supply (ACS-ARR gap) for power utilities across the country, on the basis of subsidy received, went up to Rs 0.65/unit in FY16 from Rs 0.58/unit in FY15. Aggregate technical and commercial (AT&C) losses fell to 23.98% from 25.72% in FY15. However, AT&C losses in FY14 was 22.6%.

Subsidy booked by utilities selling directly to consumers increased from Rs 47,965 crore in FY15 to Rs 57,680 crore in FY16. Subsidies constituted 14.7% of the revenue of the utilities in FY17, up from 12.9% in FY15.



Supreme Court order to bring PPA discipline

Financial Express : October 31, 2017

A recent Supreme Court ruling that electricity regulators' "inherent powers" are circumscribed and can't be used "to deal with any matter which is otherwise specifically provided under the Electricity Act 2003," would have implications for many delayed power projects wanting to extend the "tariff periods" under the existing power purchase agreements (PPAs), industry analysts said. The apex court, in an October 25 ruling, set aside the Gujarat Electricity Regulatory Commission's (GERC) order, which allowed a private generator — Solar Semiconductor Power Company (SSPC) — to extend the start of the tariff period from 2010, when the PPA was signed, to 2012, when it actually commenced operations. While the regulatory panel used the power under the Act to extend the tariff period — which would practically raise the tariffs, the court said that such decision, which has the effect of amending the PPA can be done only as per PPA's own provisions, and not by invoking the regulator's inherent power.

While the court said "there cannot be any quarrel with regard to the power conferred on the Commission with regard to fixation of tariff for the electricity procured from the generating companies or amendment thereof in the given circumstance," the regulator's approach ought to be "cautious and guarded" when its decision has a bearing on consumer interest. The projects that are delayed and might require tariff period changes like SSPC include Acme Solar, Omkar PowerTech and Punj Lloyd, among others, sources said. According to Kameswara Rao, partner, PwC, "the SC order may disappoint a few, but investors on the whole are likely to see this in a positive light." He added that this would encourage developers to take their project obligations and PPA timelines more seriously, and adopt a more scientific approach to project management.

Industry experts believe that the SC has raised its objections to arbitrary exercise of powers by regulators. "The question is, how to make regulators accountable to law," Ashok Khurana, director general, association of power producers, told FE. The case in question related to the conflict between the GUVNL—the state power utility—and SSPC, which signed PPAs on April, 2010, where it was agreed that the latter would be paid Rs 15/unit of electricity for the first 12 years and Rs 5/unit in the remaining duration of the 25-year PPA, provided that the solar projects in question are commissioned on or before December 31, 2011.

The PPA stated that if the projects were commissioned after the stipulated date, it would be paid at generic tariffs determined by the regulator i.e, Rs 9.98/unit for first 12 years and Rs 7/unit for subsequent 13 years. After initially rejecting the power generator's plea to extend the control period in January, 2012, the state regulator in April, 2014, allowed the same, stating that the delay in commissioning of the project was partially due to change in government rules regarding land acquisition and the failure of the state power transmission utility in providing transmission line within stipulated period.

India records highest peak power deficit in 16 months

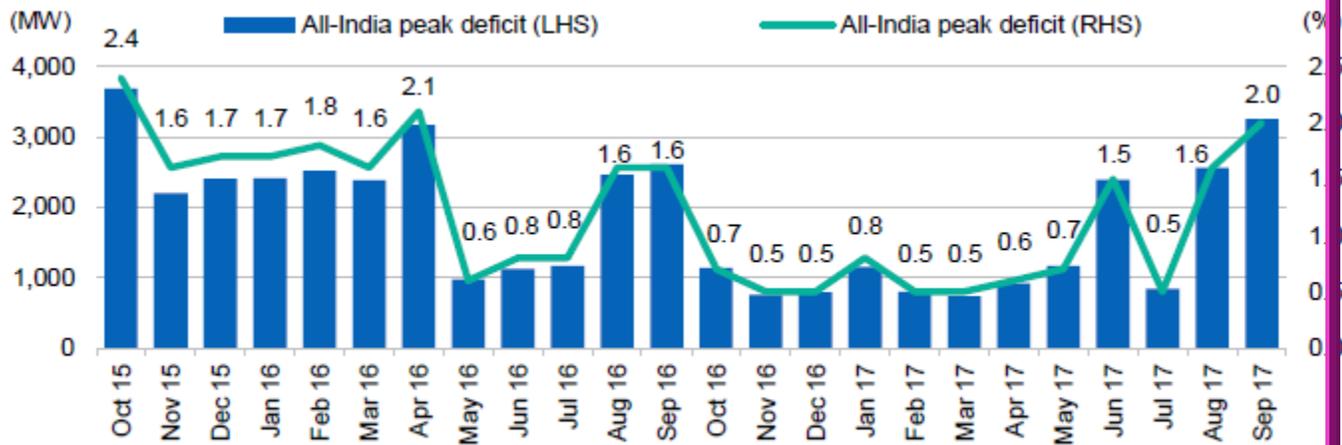
The Economic Times : October 31, 2017

During the month, power generation, excluding from renewable sources, increased 4.5 per cent to 102 Billion Units (BUs). The improved thermal demand was on account of lower generation from other sources, including hydro, nuclear and wind.

Higher electricity demand coupled with supply constraints led to India recording a peak time power deficit of 2 per cent in September – highest since April 2016 when the gap between demand and supply stood at 2.1 per cent – according to research and ratings agency India Ratings.

During the month, power generation, excluding from renewable sources, increased 4.5 per cent to 102 Billion Units (BUs). The improved thermal demand was on account of lower generation from other sources, including hydro, nuclear and wind.

“Peak demand deficit increased in the Northern region due to a shortage of supply in Uttar Pradesh,” India Ratings said in a report today. The higher demand and lower supply witnessed in the non-thermal segment also pushed up short-term power prices at the power exchanges.



Source: CEA, Ind-Ra

“Short-term power prices exceeded Rs 4 per unit. In September 2017, the difference in the total buy and sell bids at Indian Energy Exchange (IEX) turned positive, indicating a higher demand for short-term power,” the report said. However, the spike in spot power prices at the exchanges are not likely to sustain in the medium term in light of a significant amount of spare capacity and the inability of generators to tie-up long-term power purchase agreements.

India Ratings also said coal inventory levels at power plants declined in September due to a sudden rise in electricity generation from thermal plants amid limited coal output and supply. “The overall level stood at 8.5 million tonnes in September 2017 from 11.9 MT in August and 16.7 MT in July. The number of plants with critical and supercritical levels also increased to 21 in September from 12 in August and 2 in July.

Coal India’s production in September rose 10 per cent year-on-year. However, the increase was lower on a month-on-month basis at 3 per cent. Coal India has increased its supplies to improve the coal situation at power plants. During the month, the growth in coal supply to power plants was 21 per cent at 35.1 MT compared with 29.1 MT in September 2016.

There is no such thing as free electricity: RK Singh

Live mint : October 27, 2017

R.K. Singh, minister of power, new and renewable energy, pitches for direct benefit transfer for better targeting of electricity subsidies

Unveiling the road map for structural reforms in the power sector, power and new and renewable energy minister Raj Kumar Singh on Thursday pitched for leveraging the direct benefits transfer (DBT) scheme in the electricity sector for better targeting of subsidies. He asked the states to bear the subsidy component.



Singh's pitch comes in the backdrop of India running the world's largest direct benefits transfer programme resulting in savings to the government exchequer. Some of the schemes where DBT has been implemented for cash transfers include; domestic cooking gas subsidy, scholarships, Mahatma Gandhi National Rural Employment Guarantee Scheme and pensions.

At a conference organized by the lobby group Associated Chambers of Commerce and Industry of India (Assocham), Singh also spoke about holding a meeting of state energy ministers on 10 and 11 November to help expedite the legal provisions to boost electricity demand, promote retail competition and rationalize tariff slabs to drive manufacturing.

"You want to meet subsidies for these sectors, you do it through the direct benefit transfer. As far as electricity is concerned, it needs to be metered and bills need to be raised and bills need to be paid. And whatever subsidy you want to give to any category of consumer, you give it through the direct benefit transfer, so that the efficiencies or inefficiencies of discoms are clear," said Singh while inaugurating Assocham Global Investors' India Forum.

In November 2015, the NDA government approved Ujjwal Discom Assurance Yojana (UDAY), a turnaround scheme to improve operational and bill collection efficiency of power distribution companies (discoms).

"There is no such thing as free electricity. You want electricity, you have to pay for it. You want to subsidise the farmer? Fine, subsidise the farmer. So instead of farmer, you have to pay. And that is something which I have been pressing and that's a major requirement," Singh added.

The government's policy think-tank NITI Aayog has also pitched for DBT in the electricity sector in its draft national energy policy.

"Because if we won't do that, if we don't recover the price of electricity we distribute, then five years down the line, discoms will be dead again...So that is something which is occupying us and I tend to carry the states along with this. So, that is again something that I will be discussing on the 10th and 11th with the states," Singh said.

The legal route planned for power sector reforms includes enforcement of signed power purchase agreements (PPAs), making it mandatory for a discom to have PPAs to cover 100% of the annual average demand, penalties in the event of electricity generators' dues not being cleared in time and statutory renewable purchase obligations.

This comes at a time when states are reneging on their off-take commitments for projects. Also, with states unwilling to buy electricity, no new PPAs are being inked, contributing to the uncertain outlook for the Indian power sector.

The other radical changes are to separate the so-called carriage and content operations of existing discoms, which was earlier proposed by the United Progressive Alliance government. The separation will allow consumers in India to buy electricity from a power company of their choice.

"We are going to change the law," Singh said.

These steps will require amendments in the Electricity Act of 2003. The government plans to move the legislative changes in the next session of the Parliament.

"We are going to make certain that the payments of bills are on time by going for smart metering and prepaid metering. And we are also going to push for wherever feasible, privatisation. We are going to separate carriage and content. That is again something, which is going to happen," Singh said.



The government's strategy is aimed at improving India's per capita power consumption of 1100 kilowatt hour (kWh) which is among the lowest in the world. In comparison, China has a per capita consumption of around 4,000 kWh, with developed nations averaging around 15,000kWh per capita.

"Next amendment will see that happen. And we will bring more competition in distribution, which will bring more efficiency. So, this is the trajectory which I have in mind," Singh added.

This comes at a time when the centre and states are working for electricity tariff slab rationalization to make them uniform across the country. This will help in reduction of cross-subsidies borne by the industry, and make tariffs more competitive for businesses thereby pushing the government's Make in India drive.

"So, it cannot be that the lowest tariff is, let's say, Rs1.5 per unit and the highest tariff is Rs7 per unit. It can't be. We will agree on a band, may be 20%-25% but that's it. Because until and unless you make the tariff for industry also competitive, our industry can't grow," Singh said.

Singh also questioned the intentions of non-governmental organizations opposing hydropower projects. He also said that the new hydropower policy will be taken up for the cabinet's approval to address the problems faced by India's hydropower sector

Clean coal, not solar, is the silver bullet for India's carbon emission reduction ; Vrishab Prakash and Sajal Ghosh

Hindustan Times : November 2, 2017

Indian coal-fired power plants are some of the most inefficient and polluting ones in the world. This is because around 80% of these plants are still using obsolete subcritical technology. But the environmental harm caused by burning coal can be minimised by adopting high efficiency low emission (HELE) technologies such as supercritical and ultra-supercritical combustion technologies.

The power sector across the globe is going through a transition to reduce its carbon footprint. Environmentalists have targeted coal as one of the chief villains of global warming. It is true that coal is the dirtiest fuel with the highest carbon emission coefficient, but it presently plays a vital role in electricity generation worldwide. Coal-fired power plants currently produce 41% of global electricity and are responsible for 46% of the world's carbon emissions.

India is the third largest carbon emitter in the world after US and China. The government of India has an ambitious plan to add 175 GW of power from renewable energy sources out of which 100 GW is expected to come from solar by 2022.

However, a new possibility emerges when one considers the fact that Indian coal-fired power plants are some of the most inefficient and polluting ones in the world. This is because around 80% of these plants are still using obsolete subcritical technology. Experts and policy-makers have suggested that the environmental harm caused by burning coal can be minimised by adopting high efficiency low emission (HELE) technologies such as supercritical and ultra-supercritical combustion technologies.

To address this issue in a scientific manner, we have attempted to calculate the "CO2 avoidance cost" (CAC) of ultra-supercritical and solar photovoltaic (SPV) power plants. The cost of CO2 avoided reflects the cost of reducing CO2 emissions while producing the same amount of power from a reference plant. The cost of CO2 avoided is expressed as Rs/tonne of CO2 not emitted (avoided) with respect to the reference process.



Analysis shows that it costs Rs. 875 to reduce a tonne of CO2 emission when power is generated by ultra-supercritical power plants instead of subcritical plants while it costs Rs. 2,624 to reduce a tonne of CO2 emission when power is generated by SPV plants instead of subcritical plants. Thus, an ultra supercritical power plant has a CO2 avoidance cost which is almost Rs. 1,748 per tonne of CO2 cheaper than an SPV plant. The divergence would have been even greater had we incorporated the mammoth hidden costs for SPV of land acquisition, keeping coal-based power plants idle during sunny days, construction of green corridors for evacuation of solar power, grid instability and e-waste disposal.

According to the data released by the Central Electricity Authority (CEA), in the year 2014 – 2015, total CO2 emission by power plants was 805.4 million tones and it is increasing by approx 7% on year to year basis. To reduce CO2 emissions substantially, 50% of existing subcritical plants can be replaced by highly efficient ultra- supercritical plants. By doing this, the government can save up to Rs. 25,000 crores as compared to the equivalent reduction of CO2 emission by SPV power plants.

This calculation also supports the views of Arvind Subramanian, Chief Economic Adviser to the government, who has categorically asserted that the social cost of renewables is far greater than that of thermal power for India – he has even called for a global alliance to promote clean coal. Minister Piyush Goyal at the FICCI summit on climate change also agreed that it makes more sense to invest in supercritical and ultra-supercritical technology and replace old coal-based subcritical thermal plants in India's pursuit of its Paris commitments on climate change.

Further, India's solar programme is heavily dependent on imports. In 2015-16, India imported \$2.34 billion worth of solar cells, out of which 83.61% were from China. India also lacks a robust manufacturing base for solar cells and associated components. Moreover, India does not have any infrastructure for raw material production and the bulk of the SPV industry is dependent on the import of critical raw materials. Domestic solar cells are 10-15% costlier than their Chinese counterparts as solar manufacturers in China enjoy cheap capital, subsidised power, land and other export incentives to keep prices artificially low.

Due to the price differentials, Indian solar manufacturers have less than 10% market share and are struggling to survive. It is important to note that increased reliance on thin film solar technologies has augmented the dependence on specific metals mined in only a few geographic locations. Since China controls approximately 97% of the world's 'rare earth' market, it has market power to manipulate the price of thin film solar cells. Solar power, apart from failing to provide the least cost option for carbon emission reduction, also enhances import dependence and, thereby, jeopardises India's energy security.

We suggest that coal-based ultra-supercritical technology and not SPV is the preferable option to reduce carbon emissions. The government needs to review its capacity addition target based on large scale solar plants; and emphasis should be given to roof-top solar power and decentralised applications of renewable energy resources, which can complement coal-based power generation.

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The views expressed are personal***



Maharashtra: Amnesty scheme to recover power dues from farm sector

The Indian Express : November 1, 2017

As per the scheme — Chief Minister Krishi Sanjivani Yojana — agricultural users who have defaulted on electricity bills can pay arrears in equal installments by December 2018. Upon signing up for the scheme, MSEDCL will continue to provide electricity.

ENERGY MINISTER Chandrashekhar Bawankule has announced an amnesty scheme for electricity bill defaulters from the farm sector, in a bid to recover arrears amounting to over Rs 19,000 crore. The scheme aims at recovering 100 per cent of the principal amount owed by defaulters to the Maharashtra State Electricity Distribution Company Limited (MSEDCL), within a year. They have the option of paying in equal installments.

As per the scheme — Chief Minister Krishi Sanjivani Yojana — agricultural users who have defaulted on electricity bills can pay arrears in equal installments by December 2018. Upon signing up for the scheme, MSEDCL will continue to provide electricity. If defaulters fail to register for the scheme or fail to pay arrears, the MSEDCL will disconnect power.

Defaulters have been categorised into two — those with arrears below Rs 30,000 and those above Rs 30,000. "We categorised them into two brackets. The scheme gives defaulters of both categories time to pay arrears," said an official from the state energy department. Those with arrears below 30,000, can pay equal quarterly installments beginning December 2017. For those owing above Rs 30,000, the frequency is higher — 10 equal installments to be paid in an interval of 45 days. To register, consumers will have to clear their running bills by the end of November.

Depending on the response, the state government will decide whether to waive the fine and the interest. The scheme is a desperate, yet tough, attempt at recovering farm sector arrears, which amounts to Rs 19,272 crore including interest and fine. In the running bill for the April to June quarter, bills amounting to Rs 1,057 crore were generated. Consumers paid only Rs 195 crore, with the rest adding to the arrears. There are 41 lakh farm consumers in the state of whom 37.65 lakh are defaulters.

To take a stricter stand, the state has for the first time in at least five years allowed the MSEDCL to cut off power of defaulters if arrears are unpaid. "The state's tough stand will help recover large amounts of arrears from the farm sector, which the MSEDCL has been struggling with. The recovered amount can be used for infrastructural development of the areas," said a senior MSEDCL official.

Earlier, the state had announced amnesty schemes for permanently disconnected (PD) consumers. In November last year, the distributor had launched an amnesty scheme 'Navprakash Yojana' wherein if a PD consumer agreed to pay the principal amount, a part of the interest will be waived. The scheme rewarded early birds by waiving the entire interest component. An additional five percent waiver was granted on principal amounts for those who availed of the scheme within a month of the launch. Farmers originally not included in the scheme were introduced into the scheme in January this year. However, response to the scheme remained lukewarm.

Save Energy. Save Money. Save the Planet