

# TECA - NEWS CLIPPING

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

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## **Cheyhur UMPP electricity to be unaffordable, say analysts**

The Economic Times: August 3, 2016

The 4000 megawatt coal-fired Cheyyur Ultra Mega Power Project is likely to be a non-starter at best, or a financial disaster for consumers, Tamil Nadu Generation and Distribution Company (TANGEDCO) and the state government if it actually gets built, according to a recent report by the Institute for Energy Economics and Financial Analysis (IEEFA).

The report assessed tariff rates and risks associated with the Cheyyur project after the government proposed revised bidding guidelines to make the project more attractive in response to the withdrawal of prospective bidders who said the project was too risky.

"Even with revised guidelines, the risks of the project remained daunting enough to deter investors and lenders," IEEFA said.

"In the unlikely event of the project being awarded by end 2016, the report estimates that electricity from the power plant will have a levelised cost of Rs. 5.93 per unit - far higher than average cost of coal-based electricity. That is bad news for electricity consumers and tax-payers in Tamil Nadu," it said.

S. Gandhi, former TNEB engineer and president of Power Engineers Society of Tamilnadu said in the report: "Seen together with Tamil Nadu's indebtedness, TANGEDCO's hopeless financial situation and the political culture of extending freebies and heavily subsidised electricity, Cheyyur project's expensive electricity will worsen the state's financial situation,"

IEEFA said following last year's Cheyyur bidding fiasco, the ministry of power revised the bidding guidelines to allow promoters to pass on fuel cost and foreign exchange volatility to electricity consumers and own the project after the contract period.

The guidelines also guaranteed that acquisition of "critical" land will be completed by the time of the bidding. However, there is little clarity on what is critical land and what is not critical.

According to IEEFA at Cheyyur, land acquisition for the coal conveyor corridor, road and rail access and the ash pipeline have not even commenced. The potential land-losers, however, have indicated that they will not part with their farms. Regardless of whether or not these lands are seen as critical, the project cannot take off without roads or a means to bring coal from the port to the power plant.

IEEFA's report points out that the revisions help neither the consumers nor the investors. "The fuel-cost pass-through will expose consumers and the state electricity board to tariff volatility. Any future increase in coal cess would add on to this volatility. Moreover, the uncertainty over land acquisition would deter investors" said Jai Sharda, a financial analyst at IEEFA and one of the authors of the report.

"The Cheyyur project is particularly irrelevant considering that Tamil Nadu is set to become power surplus, and has no need for such a massive baseload capacity enhancement," he said.



According to the report, "The real issue with the Tamil Nadu electricity sector is not the availability of power generating capacity, but the high indebtedness and grid transmission and distribution losses. The state's power distribution company, TANGEDCO had accumulated losses of Rs. 650 billion over the decade to March 2015.

One of the key drivers of this indebtedness is the loss incurred in transmission and distribution of electricity in the state. Aggregate Technical and Commercial (AT&C) losses in 2014-15 were at an exceptionally high 24.4% against an global grid average of 6-8% and best practice is Germany at 4-5%. The high debt and losses incurred by TANGEDCO prompted rating agencies to downgrade its rating to 'C+' in the annual integrated ratings of state distribution companies."

### **Spot market power trade highest ever in July**

**The Economic Times: August 2, 2016**

Spot market power trade in India rose 14 per cent in July to 3,581 million units, the highest ever in a month.

Around 3,140 million units (MUs) were traded in June.

On a daily average basis, close to 116 MUs were traded in July, a 10 per cent increase over 105 MUs traded in June, a statement from the India Energy Exchange said.

The market saw average daily purchase bids of 5,360 MW and average daily sell bids of 9,061 MW. The average price in July was Rs 2.16 per unit, 7 per cent less from Rs 2.31 per unit in June.

Increased hydel generation due to good monsoon and easing of inter-state transmission congestion were the key factors that led to price reduction, the statement said.

Due to higher transmission and generation availability in southern states, the market price remained same for eight days.

In the first half of July, there was very little transmission congestion across corridors.

However, in the second half of the month, transmission congestion was witnessed in southern and northern regions.

### **Restriction on electricity injection blowing wind out of wind projects**

**The Economic Times: August 1, 2016**

Restriction on electricity injection into the national power network is blowing the wind out of wind power generation units.

According to India Ratings, a rating firm, electricity networks all over the country have reduced receipt of wind turbine generated power which is starting to threaten credit worthiness of renewable energy projects.

"It has the potential to impede capacity addition," says India Ratings and Research (Ind-Ra). Non-availability of network to push the power generated by wind projects has majorly impaired operational strength of some wind projects, given the sizable installed capacities.

The national power network carries electricity from generators and supplies it to utilities who then on supplies it to consumers. This network, referred to as grid is severely short of requisite capacity to hand power generated from wind projects.

"The failure to address grid issues can gradually destabilise the solar projects in the ensuing years. Restriction of power injection by the grid is unpredictable, thus the ill-equipped developers have been grappling to manage their finances, barring the large ones," the India Ratings report said.



Wind power generation depends on the speed of wind at the project locations and it is uncertain, while curtailment of power receipt by the grid is controlled by the authorities that manage the grid is, this practise of not accepting wind power by the grid is slowly shaking the fledgling renewable energy sector.

"Tamil Nadu, with the largest number of wind power project has been widely curtailing grid availability for power projects in the last three years; the phenomenon appears to have spread to Rajasthan in FY17 and FY16," it said.

Ind-Ra believes that inadequate forecasting systems have compelled the utilities to curtail the grid. In Ind-Ra's view, due to the relative source certainty in solar projects, generation in solar is more predictable than in wind projects.

Anecdotal evidence suggests that solar capacities in Tamil Nadu have also encountered grid issues in FY17.

The average annual grid availability for wind assets in Tamil nadu from FY14 - FY16 stood at less than 80%, while the average annual grid availability from FY11 - FY13 was around 95 per cent.

Drastic reduction in availability from FY14 onwards didn't coincide with any major capacity addition, since total capacity of merely 604MW was added in the period FY14 to FY16 compared to total installed capacity of around 7600MW.

Grid availability and increased wind supply in 1QFY17 has significantly improved the wind energy generation (94 per cent increase over 1QFY16, source: Southern Region Load Despatch Centre). Providing certainty in grid availability can make Tamil nadu attractive for repowering of old wind turbines (1900 MW installed till 2003).

There is large solar capacity additions envisaged to come on track in Rajasthan in 2016; however the lack of assurance on the evacuation infrastructure and the grid availability can affect the credit profile of the upcoming projects.

Forecasting and scheduling regulations have been notified, wherein the generator will be penalised in case of inaccurate forecasts.

On the other hand, there is no mandate on the transmission and distribution utilities to manage the grid to ensure the 'must run' status which is conferred on renewable energy projects is adhered to.

Ind-Ra notes that there is no provision for compensation in case a renewable energy project is unable to supply power in the event of grid curtailment. The lack of this provision, leaves the renewable energy project stranded whenever there is curtailment and they appeal to the regulators over the non-compliance of the must run status.

Technical and commercial challenges are emerging for the distribution utilities because of changes in the energy mix. Efforts to address these challenges are trailing behind the envisaged pace of capacity addition.

The monopoly in distribution infrastructure and lack of technology aids - to predict the source risk, tests the endurance of renewable projects and consequently renewable energy remains hostage to state utilities. There is also a need to address the costs of integration of renewable energy in the grid in an equitable manner.

### **5,200 MW solar capacity to be added in 2016-17: CARE**

**The Economic Times: August 3, 2016**

The country is set to add 5,200 MW solar capacity this fiscal with various states coming out with policies for the sector, CARE Ratings said.



According to a study conducted by the ratings agency, out of total installed renewable energy capacity of 42,750 MW as on March 31, the share of solar energy increased to 15.82 per cent, as against 13.8 per cent in 2014-15.

Various states such as Andhra Pradesh, Chhattisgarh, Gujarat, Jharkhand, Karnataka, Madhya Pradesh, Odisha, Punjab, Rajasthan, Tamil Nadu, Telangana and Uttar Pradesh have come out with policies for awarding solar power projects.

Also, government entities like NTPC and SECI have come out with tenders of large capacities in GW size, including those in solar parks.

"After witnessing record capacity addition of around 3 GW in FY16, 1,000 MW in the first quarter of this fiscal, and bids of around 6,000 MW awarded over the last six months or so, the solar sector is on a strong growth path.

"Nearly 5,200 MW is likely to be added this fiscal and 8,000 MW in FY2016-17," it said.

Further, the Modi government's ambitious target of 100,000 MW solar capacity by 2022 has attracted serious interest from various players, domestic as well as overseas.

The sector is witnessing increased participation from large overseas investors and developers, such as ADIA, CLP, EDF, ENEL, Engie, Fortum, First Solar and Goldman Sachs, while large domestic business houses have also laid down ambitious plans for solar capacity addition.

"According to various estimates, India is set to become the fourth largest solar market globally in 2016 behind only to China, USA and Japan, primarily on account of government's thrust on significantly enhancing the installed solar capacity to 100,000 MW by 2022," the report said, adding that the recent M&A activity is also reflective of the growing confidence of bigger players in the sector.

CARE Ratings further noted that solar PV project costs have witnessed a sharp decline over the years which has led to shift from preferential feed-in-tariffs to competitive bidding.

"Apart from decline in solar PV project costs, entry of various players has led to significant increase in competition which has led to significant decline in solar tariffs as visible from the trends in the completed bids over the last 9-12 months," it said.

The ability to manage cost efficiently, secure longer tenure and cheaper debt are the key factors which will have bearing on the bids, returns and viability of the projects, CARE said.

It further noted that the capital cost for setting up a solar PV project has been coming down over the years.

CERC's benchmark project solar PV cost has come down from Rs 6.1 crore per MW for 2015-16 to Rs 5.3 crore per MW for this fiscal, with cost of modules declining marginally while civil and other costs have witnessed a steeper fall.

## **India's Total Power Generation Capacity Crosses 300 GW Mark**

**NDTV: August 1, 2016**

India's total installed power generation capacity has crossed the 300-GW mark, which includes 42 GW of renewable energy sources, including solar and wind.

India's total power generation capacity was 3,03,118.21 MW as on June 30, 2016, which includes 42,848.43 MW, stated Power Minister Piyush Goyal in a written reply to the Rajya Sabha today.

According to the statement, private sector's cumulative installed power generation capacity was 1,24,995.51 MW as on June 30, 2016 while central plants account for 76,296.76 MW and state capacities 101,825,94 MW.



The minister also stated that the country has generated 12.01 billion units of electricity from renewable energy sources till June-end this fiscal while the output was 65.78 billion units in 2015-16 and 61.78 billion units in 2014-15.

The target from clean sources in 2015-16 was 70 billion units.

The minister also told the House that 1,107.82 billion units of electricity were generated last fiscal.

Thermal power constituted 85.19 per cent of the total generation in 2015-16 while hydro contributed 10.96 per cent and nuclear power's share was 3.38 per cent.

India imported 5.24 billion units of electricity from Bhutan last fiscal, which was 0.47 per cent of the total output.

Goyal also said that to meet the rising demand of power, as per 18th Electric Power Survey (EPS), the capacity addition target of 88,537 MW from conventional sources has been planned during 12th Five-Year Plan.

Against this target, 86,565.72 MW has been achieved till June 30, 2016, he added.

### **How will GST impact India's energy sector?**

Energy World.com

***Currently, while the centre is constrained from levying taxes on goods beyond the point of manufacturing, state governments cannot levy taxes on services. Hence, the need for a constitutional amendment.***

India has finally taken the giant step towards a unified Goods and Services Tax (GST) regime with the Rajya Sabha granting approval for the implementation of the much-awaited tax reform measure that was first proposed three decades ago.

The GST law seeks to subsume all central and state levies and was debated in the upper house of Parliament Wednesday. The GST implementation will be one of the "most significant reforms" affecting all factors of production and economics, according to Morgan Stanley.

#### **RENEWABLES**

One of the main energy sub-sectors to be impacted post the implementation of GST is renewables. The sector currently enjoys various fiscal incentives like 100 per cent tax holiday on earnings for 10 years, concessional excise and custom duties and so on. These incentives will come to an end in the new GST regime. The indirect tax reform through the GST could, therefore, hike renewable energy costs and pricing and hit investors.

The Ministry of New and Renewable Energy (MNRE) has already worked out a possible scenario of these impacts. The GST's effect on cost of setting up of renewable projects would vary across segments, MNRE said in a recent report.

The impact includes a 16-20 per cent rise in Solar Off Grid costs; 12-16 per cent rise in Solar PV Grid installations and a 11-15 per cent jump in the cost of setting up wind energy projects. Also, biomass projects could see their costs rising by 11-14 per cent while setting up small hydro projects could become costlier by upto 11 per cent.

#### **OIL & GAS**

Analysts expect the impact of the new taxation regime on the oil and gas sector to be largely negative. This is because five petroleum products -- crude, natural gas, Aviation Turbine Fuel, diesel and petrol -- are excluded from the coverage of GST for the initial years



while the remaining petroleum products -- kerosene, naphtha and Liquefied Petroleum Gas -  
- are covered within the coverage of GST.

"Because of this peculiarity, this industry would be pained to comply with both the current tax regime as well as the GST regime," said Abhishek Jain, tax partner at accounting and consultancy firm E&Y. He added the new regime would also result in non-creditable tax costs which would have an inflationary impact on the overall economy. For example, a refinery producing diesel and petrol will pay GST on the procurement of plant, machinery and services. This tax would not be creditable against the excise duty and VAT which would be levied on petrol and diesel.

### **ELECTRICAL EQUIPMENT**

The new GST regime is likely to benefit the lighting and electrical sector significantly through an overall reduction in tax rates. Under the new tax structure, the overall incidence of effective indirect taxes on the companies in the sector will be lowered to around 18 per cent from the current 29-30 per cent, according to equity brokerage firm Motilal Oswal.

"We believe GST will be more positive for the Light Electricals segment where companies may benefit from volume growth and margin expansion," the firm said in a report. It added the benefits of this lower tax incidence will be passed on to customers, for the industrial capital goods, owing to the current weak demand scenario.

### **Punjab power tariff: Cut for industries, none for domestic consumers**

**The Indian Express: July 28, 2016**

Subsidy to be paid by Punjab now Rs 6,364 cr, up from Rs 5,600 cr in last fiscal; lion's share of subsidy for agri sector

WITH ASSEMBLY polls only a few months away, the Punjab State Electricity Regulatory Commission (PSERC) has kept the tariff unchanged for domestic and non-residential supply consumers, and slashed it for industrial consumers in the new tariff order announced Wednesday.

This is for the second consecutive year that there has been no hike in power tariff in Punjab. The rates for industrial consumers have been slashed from 36 paise to 11 paise for "ease of doing business". A study by the Indian Institute of Management, Ahmedabad had pointed out that growth in industrial sector has slowed down and is below national growth rate.

At 61 lakh, domestic supply consumers account for the majority out of total 85 lakh consumers of electricity in the state.

The three categories in industrial sector, namely small power (SP), medium supply (MS) and large supply (LS) account for 1.3 lakh consumers, and the rates for the said categories have been slashed to 38 paise, 36 paise and 11 paise, respectively.

The new tariff will be effective from August 1.

The total amount of power subsidy to be paid by Punjab government has increased to Rs 6,364 crore, up from nearly Rs 5,600 crore in last fiscal. The lion's share for power subsidy is again reserved for agriculture sector where Punjab government will bear expenses to the tune of Rs 5,197 crore for providing free power to agriculture pumpset consumers. A system of sending power schedule through SMS to the farmers would also be developed to enable them to make labour and other arrangements in advance. There are 13 lakh agriculture pumpsets consumers in the state. As part of energy conservation measure, under a pilot project 100 existing agriculture pumpsets would be replaced by 5-star pumpsets. PSPCL will replicate the project to replace 1 lakh more pumpsets in future.

The state government will pay subsidy bill amounting to Rs 1,167 crore for free supply of 200 units per month to domestic consumers belonging to Scheduled Caste category and non-SC below poverty line domestic consumers with a connected load of 1000 watts or less. Another 70 lakh would be paid by government for subsidised power to dairy, fish, goat and pig farming.

The Commission also decided to do away with Peak Load Hours Restriction regime with effect from August 1. Consumers will, on the other hand, get a rebate of Rupee 1 per unit during night hours (10 pm to 6 am) from October 1, 2016 to March 31, 2017. For large supply industrial consumers, a surcharge of Rs 2 per unit over and above the normal tariff for August and September 2016 (6 pm to 10 pm) has been approved. Addressing a press conference, PSERC Chairman D S Bains said power tariff was not hiked due to a combination of factors, including "surplus power", and had nothing to do with politics in the poll-bound state. He said the Commission had determined PSPCL's consolidated revenue surplus for 2016-17 as Rs 166 crore. Besides the projected revenue surplus, Bains said another Rs 270 crore were available to be passed to consumers in terms of relief in tariff and other measures. Giving the break-up, he said under the Uday scheme, Rs 70 crore would be saved due to reduction in interest rate on working capital and Rs 50 crore would be saved due to reduction in interest rate on long term loans. The Transmission and Distribution losses for the current fiscal have been projected at 14.50 per cent, resulting in saving of Rs 150 crore.

Bains said the Commission deliberated upon how to optimise the use of surplus power. He said following a study by IIM Ahmedabad where it emerged that growth in the industrial sector had slowed down and was below the national average, the consultant had recommended that industrial sector needed to be promoted in the state. Citing the "power surplus" scenario in the state, Bains said Commission was working on an array of consumer friendly measures which include quicker release of connections, early restoration of supply, faster replacement of defective meters and simplifying the procedure for release of new connections and extension in load.

As per the new tariff order, the marriage palaces would have to give annual minimum charges instead of monthly minimum charges. Bains said the new arrangement would ensure that marriage palaces do not go in for costly power from power generators.

# Save Energy. Save Money. Save the Planet

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