# TECA – NEWS CLIPPING

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

**30.04.2016**

## Tamil Nadu second after Maha in using power beyond 15K MW

**Times of India : April 22, 2106**

Tamil Nadu on Wednesday became the second state in the country to use more than 15,000MW of electricity in a day.

Boosted by agriculture and domestic consumers, the state's demand touched 15,191MW on Wednesday evening and this is a new record for Tamil Nadu Generation and Distribution Company (Tangedco) which faced flak for acute shortage a few years ago.

The demand was met as all Tangedco's thermal units and Central units worked to full capacity. Wind and solar power also contributed and consumption increased to 327million units. Maharashtra has a peak demand of 20,100MW, the highest in India. Tangedco is confident of meeting demand of 16,000MW without power cuts

According to the National Load Despatch Centre (NLDC), on April 21, Maharashtra had a peak demand of 20,100MW, Gujarat 14,125MW, and Uttar Pradesh 14,099MW. "The peak demand of UP must be much higher but some villages are without power even now and compared to Tamil Nadu and Maharashtra, UP does not have so much industrialisation," said a former Union power secretary.

"This is the first summer since 2008, when there is no restriction on drawing power from the grid. Generally, demand from farmers will go down in April and May due to non-availability of ground water. But this year, the ground water level is high and agriculture demand is still on. Each day, we are supplying power to agriculture to the extent of 16 to 17 hours continuously," a senior Tangedco official told TOI. Beyond agriculture, domestic demand is also high due to continuous use of air conditioners, especially in Chennai, he said.

## Discom Creates Record with 5.48 pc Transmission, Distribution Losses

**The New Indian Express: April 24, 2016**

For the first time in the history of power utilities in the country, the Andhra Pradesh Eastern Power Distribution Company Limited (APEPDCL) has achieved 5.48 per cent transmission and distribution losses in 2015-16 which was 6.32 per cent in 2014-15. This is the lowest T and D losses among all the 48 discoms in India.

APEPDCL CMD Revu Mutyala Raju said the achievement was the result of collective efforts of every stakeholder of the company right from junior lineman to officers. The achievement makes the Discom to bring down the T and D losses to 4 per cent by 2019, he added.

| NO. OF METERED UNITS SOLD |
|---|
| 2015-16 |
| 13,422 million units |
| 2014-15 |
| 12,022 million units |
| 2005-06 |
| 5,357 million units |

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The APEPDCL has been giving top priority to reduce its T and D losses right from its inception. In 2000-01 the losses were 17.91 per cent and it was 12.95 pc in 2005-06. In 2006-07 it was 12.29 pc and reduced to 9.01 pc in 2007-08. The company has made relentless efforts to bring down the T and D losses to the minimum and in 2008-09 it was 8.83 pc, in 2010-11 7.09 pc, in 2012-13 6.46 pc, in 2013-14 6.33 pc and 6.32 pc in 2014-15.

Sub-stations are augmented by adding 62 more of 33/11kv in 2015-16, interlinking of 33-kv lines to the grid and to the sub-stations, fixing of infra red data acquisition (IRDA) meters to take reading of the electricity consumption and 25.2 lakh meters were changed against 53.1 lakh meters in the Discom, which helped to minimise the T and D losses.

According to engineers, there are several factors behind the achievement. Installation of 11,528 three star and five star rated DTRs is one of them. A total of 1.68 lakhs HVDS (high voltage distribution systems) of 5 star DTRs of agricultural pumpsets were installed as against 2.07 lakhs and introduction of Restructured-Accelerated Power Development and Reforms Programme (R-APDRP) in 29 towns, automatic meter reading on DTRs and feeders, ring fencing of towns and GPS survey and also with centralised call centres and change of electricity lines, pre-monsoon inspections of power network from April to September last, distribution of transformers, 33kv, 11kv and LT lines to avoid interruption in power supply are a few reforms introduced by the company.

## Power demand forecast cut to adjust for energy efficiency

**LiveMint: April 25, 2016**

New estimate sees demand at 239 gigawatt; projections were made after meetings between power ministry, states

The Union power ministry estimates India's electricity demand in the 2017-22 period to be 20% less than what was originally estimated, thanks to new energy efficiency targets and power-saving devices.

A 2011 survey had estimated India's power demand to grow from 140-150 gigawatt (GW) to 298 GW by 2022, while the new estimate sees demand at 239 GW. The new projections were made after several meetings between the Union power ministry and states and analysing the latter's domestic and commercial requirements.

Ujwal Discom Assurance Yojana—a turnaround scheme for debt-ridden state power distributors passed by the Union cabinet on 5 November—sets targets for utilities to cut their transmission losses, while the efficient lighting programme using LEDs is expected to reduce peak electricity demand by 20 GW. The government is also working on popularizing energy-efficient agriculture pumps, fans and air-conditioners through power distributors.

The revised projection still assumes an 8% economic growth rate in the 2017-22 period, during which electricity generation is expected to grow annually at 7.2%, said a power ministry official, who asked not to be identified.

"The revised projections take into account improvements in energy efficiency and corrections for the slight overestimation made in the 18th Electric Power Survey (EPS) conducted by the Central Electricity Authority. Always the initial estimation is a ballpark figure and the final estimate the result of detailed analysis with state authorities," said the official quoted above.

Energy intensity, or the units of energy required to produce one unit of GDP, is presently recorded at 0.91 by the 12th Five Year Plan document. A figure of less than one indicates efficiency.

The 18th EPS made the forecast for the 2017-22 period based on the demand projection for the 12th Five Year Plan period of 2012-17, which is now revised with more inputs from states. The official said capacity expansion in the last five years has satisfied the unmet power demand, and in the absence of pent-up demand, only the actual demand growth needs to be taken care of by further capacity expansion.

At present, the country has 289 GW of power generation capacity, and power plants operate at less than full capacity to cater to a power demand of 140-150 GW. Ongoing efforts to electrify all villages and provide uninterrupted electricity for all by 2019, the expected electrification of more railway lines and the emphasis on usage of electric vehicles for transportation are expected to drive future electricity demand.

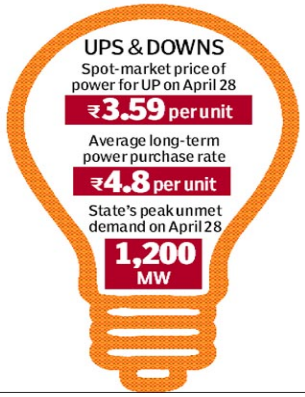
The expected 175 GW of renewable power capacity expected by 2022 in addition to the existing generation capacity of 289 GW will mean that by 2022, the system will have more than adequate generation units to take care of 238 GW requirement, assuming a sustained 8% economic growth. “Even if the economy grows better than this, generation plants will still have some extra room to serve that demand,” said the official.

An industry executive said power consumption by households and the industry needs to go up for achieving a meaningful difference in economic growth and standard of living. “Improving per capita power consumption, which is at present 1,000 units, way below the world average of 3,000 units is important for turning around the power sector as well as for boosting the economy,” said Anil Sardana, chief executive and managing director of Tata Power Co. Ltd.

## Debt laden UP Power Co is not buying cheap power. Here’s what’s happening

**Financial Express: April 30, 2016**

After the debt-laden Uttar Pradesh Power Company (UPPCL) failed to explain to the state electricity regulator the reasons for not buying cheaper power available at power exchanges...




After the debt-laden Uttar Pradesh Power Company (UPPCL) failed to explain to the state electricity regulator the reasons for not buying cheaper power available at power exchanges, the regulator ruled the state-run discom was “trying to subvert the proceedings by adopting dilatory tactics” and would start proceedings early next month against the senior company officials that could lead to imposition of heavy fines.

In August last year, on the basis of a letter written by the Indian Energy Exchange (IEX), a platform for spot power trade, the commission initiated suo motu proceedings asking the UPPCL to explain why it was not buying power from the exchanges when spot-market power

was available at less than the variable cost of certain plants having long-term power purchase agreements (PPAs).

UPPCL, however, could not provide the commission with relevant information and its officials repeatedly failed to appear for the hearing before the commission, sources said. This forced the regulator initiate proceeding against the director (commercial) of the power company and the director of the state load despatch centre (SLDC).

“The commission feels that UPPCL is not paying due attention on this important issue. Due to to the casual approach in complying with the orders of the commission, it hereby initiates proceeding under Section 142 of the Electricity Act, 2003,” the commission said in its order earlier this month.

As per the act, proceeding under Section 142 could lead to imposition of fines on the guilty parties to the extent of Rs 1 lakh for each contravention.

Additionally, in case of a continuing failure, an additional penalty of Rs 6,000 a day could be imposed for the period during which the failure continues after contravention of the first such direction.

Power exchanges, especially IEX, have been urging state-owned, debt-laden power distribution companies to procure much cheaper power from these platforms. As on Thursday, the power rate at the power exchanges available for UP is Rs 3.60 per unit while the peak shortage for the state stood at over 2,000 MW on Wednesday. As per estimates, the state’s newer PPA with private developers in close to Rs 5 per unit.

Due to the pre-eminence of long-term PPAs in the country, only a little over 1% of total electricity generated is traded on the sport market. However, the power rates at the exchanges are often half of long-term PPA rates for many states, especially in the northern states, due to better grid connectivity and low congestion.

In a bid to keep track of state-specific power shortages and availability of power and its rates in different regions on the exchanges, the central government recently launched a portal that shows real-time data along with spot power rates at the exchanges. The VidyutPravaah.in portal shows that all major states have been buying spot power to meet deficits but UP remains an outlier as it has refused to source spot energy despite massive peak shortage and attractive rates.

## UDAY scheme to effect state finances over medium term –RBI

**Meri News: April 29, 2016**

The UDAY scheme launched by central government to affect a turnaround in the financial viability of state owned Discoms and improve operational efficiency is likely to affect the state finances over the medium term, as per Reserve Bank of India report.

Under the Ujwal Discom Assurance Yojana (UDAY) scheme launched by the central government, states that opt for the scheme are mandated to take over 75 per cent of the liabilities of their power distribution companies by converting loans into state guaranteed Discoms bonds. The outstanding loans of all power Discoms in the country were Rs. 4.3 trillion as of September.

RBI's report 'State Finances: A Study of Budgets of 2015-16' states that although the effect may not be instantaneous, state finances might come under stress in the coming years on account of burgeoning liabilities due to takeover of 75 per cent of the existing debt of Discoms. This would considerably reduce the fiscal space of states which might lead to curtailment of capital expenditure with an adverse effect on impact of growth.

As per RBI report the central government promulgated financial restructuring plan in October 2012 and the opting state governments committed to ensuring the Discoms

eliminate the chronic gap between the average cost of supply and average revenue required within the moratorium period. The inability of state governments to implement tariff hikes resulted in growth of average cost of supply outpacing average revenue required imposing a severe constraint on debt servicing ability of Discoms.

Furthermore faulty meters, billing on average consumption, delay in revenue collections and unauthorized usage of power by agriculture and rural consumers also contribute to heavy commercial losses. The overall AT&C losses moderated from 26.4% in 2010-11 to 22.7 % in 2013-14 but they are still at an elevated level.

Another reason for poor financial performance of Discoms is the delay and nonpayment of subsidy by state governments. The subsidy burden for Discoms is increasing due to higher costs and cheaper tariff for farm sector. Discoms suffer from the fundamental problem of under pricing with their selling price set significantly lower than the procurement price of electricity.

Electricity is a concurrent subject and state government's inability to implement commercial decisions has created an impasse for reforming the power sector reforms.

UDAY scheme holds the potential to reduce the vulnerability of banks by strengthening their balance sheet through an improvement in asset quality. With improvement in the financial health of state Discoms, the counter-party risk for banks may also come down.

## A national market for electricity- Vinayak Chatterjee:

**Business Standard: April 26, 2016**

At an energy conclave recently, Power Minister Piyush Goyal said, "... the government's mission is to have one nation, one grid, one price". He could not have put this issue in perspective more succinctly.

Echoing a similar call, Chief Economic Advisor Arvind Subramanian, in a well-argued chapter titled "Powering One India" in the 2015-16 Economic Survey (ES), outlined seven ground realities that suggest prioritising this task.

One, in 2014-15, the addition to generation capacity was 26,500 Mw, much higher than the average annual addition of around 19,000 Mw over the previous five years. However, this ability to produce more power has not been matched with the ability to lift more power. Power plant load factors are at historic lows of around 60 per cent due to the stressed financial situation of discoms.

Two, it is for the first time in the country that transmission grid expansion, grid-linking and grid upgrade are allowing power to be transmitted across the country. The ES makes the point that on December 29, 2015, "no congestion was observed in the electricity grid and a single price (Rs 2.30/kwh) was discovered on the power exchange IEX".

Three, recalcitrant discoms are being pushed and persuaded to significantly reduce AT&C (aggregate technical and commercial losses) from their current embarrassing highs to a relatively more acceptable level of 15 per cent by 2019, under the Ujwal Discom Assurance Yojana (UDAY) scheme.

Four, the Open Access (OA) policy introduced under the Electricity Act, 2003, allows consumers with electricity load above 1 Mw to procure electricity directly from electricity markets. The ES observes that "... at its core, OA provides an aggregation of the countrywide supply and demand on the same platform. Therefore, this constitutes a first step towards discovery of a single market price for power around the country". It goes on then to ruefully observe that "some states, however, have imposed significant barriers to OA".

Five, already, limited moves are underway to shape a national market for power. Indian Railways, the country's largest single customer of electricity, has been allowed to shift its purchases to an OA regime.

Six, according to the ES, the complexity of tariff schedules prevents economic actors from responding sufficiently to price signals. (In fact, the ES points out with barely restrained humour, that tariff segmentation has reached hilarious levels in some states - specific tariffs for poultry farms, pisciculture, wetland farms, mushroom cultivation and rabbit farms to name a few segments off a much longer list).

Seven, the growth rate of captive power generation between 2006-07 and 2014-15 is 9.3 per cent compared to 4.6 per cent for electricity procured from utilities. This trend could be exacerbated in the coming years, as the decline in oil prices and the cost of renewable energy alternatives may prompt a further shift to captive power.

Most important, the ES underlines the political challenge noting that "... it must be borne in mind that reforms in this sector are more challenging than in many others due to the clear demarcation in the roles and responsibilities of the states and Centre under the Constitution".

So, the message from both the power minister and the chief economic advisor is the same. If there was a right time for some bold political moves to fashion a national market for power, it is now.

And this is not just necessary for a neater power sector architecture, but crucial if the three powerful ambitions of the National Democratic Alliance government are to see fruition through the following: power for all by 2021; Make In India, enabled by competitive and reliable power supply; employment generation, where the availability of quality and affordable power creates opportunities for self-employment and growth of small and medium enterprises.

Indeed, it is clear now that having 29 separate markets for power, as in each state, is a hugely debilitating and dysfunctional system. Contrast this with petrol and diesel where there is a national price, tampered with by local taxes only. Also, if there is unanimity that India needs to be yanked to a common national market by a goods and services tax regime, surely there is an even more compelling case for the power market.

It also needs to be borne in mind that the structure of the distribution market itself will be changing with "carriage and content" geared for a split. A recent report by the Forum of Regulators has laid out a three-stage implementation plan, which is likely to take five to seven years to roll out.

Indian industry, a long sufferer, has been over the years calling for a national power market. Members of the Confederation of Indian Industry have submitted several representations to various governments at the Centre urging the following:

i) A new legal architecture for making independent regulators truly independent (including the Central Electricity Regulatory Commission).

ii) Examining the concept of state regulators being replaced by a smaller number of effective regional regulators.

iii) Setting up of a National Power Distribution Company (NPDC) that begins to effectively challenge the hegemony of state-owned discoms. The NPDC can equally well fulfil other pressing objectives of picking up stranded capacities, price-pooling across diversified sources of supply (for energy security, plus encouragement to renewables), providing a national pricing benchmark as well as facilitating a rapid move towards effective OA.

We wish Piyush Goyal well in taking up this challenge in mission mode.

## Aptel order leaves power producers reeling

**Business Standard: April 28,2016**

While its order on tariff has shielded consumers from frequent increases in electricity costs, it has plunged power companies back into darkness

There's ample evidence to suggest that power producers for projects awarded through tariff-based bidding have erred in not recognising the unpredictability of fuel costs. In its April 7 order, the Appellate Tribunal for Electricity(Aptel), however, shut the doors on compensatory tariff as a way out for developers to address the increase in fuel costs.

For companies like Tata Power, Adani Power and a host of others that were hoping for a compensatory tariff mechanism, the order has added to uncertainty on power rates. The order says the Central Electricity Regulatory Commission (CERC) has no powers under Section 79(1) (b) of the Electricity Act to vary or modify the tariff or otherwise grant compensatory tariff to generating companies in case the tariff has been determined through a competitive bidding process in accordance with Section 63 of the Act. "This would be contrary to the entire scheme of the competitive bidding process," the Aptel order says.

Sudip Sural, senior director, Crisil Ratings, says the order will have a direct impact on generation companies for which variable costs are not a pass-through, as it restricts CERC from changing tariffs by going beyond the scope of PPAs. What the order has done is to establish the sanctity of PPAs in no uncertain terms. "The flexibility for revision in fuel component of tariff depends on the specific provisions of the relevant PPA with respect to pass-through of fuel costs," says Sural.

### TARIFF TUSSLE

- Tata Power's 4,000-Mw ultra mega power project's first unit commissioned in 2012
- The tariff in PPAs with distribution companies in Gujarat, Rajasthan, Maharashtra, Punjab and Haryana was set at Rs 2.26 a unit
- Adani Power commissioned its 1,980-Mw project in Mundra in 2008
- The tariff in PPAs with Gujarat and Haryana was set at Rs 2.35 per unit
- Adani Power has been importing coal since 2011 and Tata Power since 2012
- Both Tata and Adani Power filed a petition with CERC in 2012, stating increase in coal price should be pass-through under "change of law" and "*force majeure*"
- In February 2014, CERC fixed the

compensatory tariff to 54 paise per unit for Tata and 41 paise for Adani

- The power procurers moved Aptel contesting the decision
- Aptel upheld the decision in July 2014 in an interim order
- Supreme Court rejects the interim order in August 2014
- Aptel's final order on April 7 rejects compensatory tariff but rules in favour of *force majeure*

Yet, the Aptel order has not been completely oblivious to the issue of fuel cost increase. By stating that the change in Indonesian coal laws, which affected the cost of fuel for many Indian power companies, be treated as *force majeure*, and by directing CERC to determine the extent of its impact on power companies within the next three months, Aptel has provided some relief to Tata Power and its subsidiary Coastal Gujarat Power.

**No immediate boost**

While in the near-term, it may not be of much help for the company, over the long-term, as Moody's Investors Service says, the order is going to be credit-positive for Tata Power as any compensation as a result of the Aptel order is expected to help the company trim its losses and in turn improve the ratings of the holding company.

Coastal Gujarat Power has been a drag on Tata power's revenues for a while now. According to a Moody's report, it accounted for 37 per cent of Tata Power's consolidated debt as of December 31, 2015. A large part of this debt is from Coastal Gujarat Power's 4,000-Mw ultra mega power project at Mundra in Gujarat. While the Mundra project made up for 44 per cent of Tata Power's total installed generation capacity of 9,156 Mw as of March this year, it also reported a net loss of Rs 8,900 crore in 2014-15.

"If the tariff revision based on Aptel's order were to fully compensate that (the increase in overseas coal prices), it should lead to 7-9 per cent increase in 2016-17 estimated EBIDTA (earnings before income, depreciation, taxes and amortisation) and its funds from operations/debt metrics improving to 9-10 per cent," says the report.

There is a lot riding for Tata Power on the Aptel order. Coastal Gujarat Power is in breach of its covenants relating to its maximum debt-to-equity ratio and minimum debt- service-coverage ratio, given the impairment booked on its assets and the reduced cash flows. It is in discussion with its lenders for waiver of these covenants, says the Moody's report. "Coastal Gujarat Power's performance, however, has been improving over the last few quarters with the decline in international coal prices and the company reversed 88 per cent of the impairment booked earlier in the quarterly results reported in December 2015."

The positive impact of the Aptel order might also be more visible on Tata Power than Adani Power. Unlike Adani, Tata Power did not take into its balance sheet revenues accruing from

the compensatory tariff published by CERC based on the recommendations of a committee in November last year which has now been revoked by Aptel.

For Adani Power, which reported a loss of around Rs 380 crore from Mundra plant during April-December 2015, the benefit of increased tariff will now have to be discounted. The company reportedly took Rs 600-crore benefit on its books on the basis of the now-cancelled CERC order.

**The consumer story**

Consumers, though, have reasons to rejoice. By rejecting the power of CERC in fixing compensatory tariffs for PPAs under the tariff-based bidding process, Aptel has insulated them from frequent increase in electricity prices.

According to Kameswara Rao, partner, PricewaterhouseCoopers, consumers will face higher tariffs only for electricity from projects which have not been bid under the tariff-based model and where a provision has been made in the agreement for a pass through of fuel cost.

"The order makes a distinction between normal fuel price variation where contract terms permit pass-through, and unanticipated events for which a prior position could not have been taken," he says. "So, bidders who failed to take advantage of available provisions, would find it hard to make a case now," adds Rao.

Aptel's order can be appealed in the Supreme Court. Many believe there is a strong case for tariff revision for power companies. As Rao says, "It is important to recognise that profitable power companies are in consumer interest, as it helps attract capital at competitive rates." Clearly, the last word on the matter hasn't been heard yet.

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