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TN power discom reduces loss, on path to break even shortly, says minister

Business Standard : May 31, 2018

State has taken over Tangedco's Rs 228.15 bn loans, subsequent to its joining Centre's UDAY scheme

The Tamil Nadu government, which has been opposing the Centre's Ujwal DISCOM Assurance Yojana (UDAY), is now saying that the scheme is one reason for the state's electricity board turning around in the coming year.

Minister of Electricity, Prohibition and Excise P Thangamani tabled the department's policy note which stated that on the implementation of revenue augmentation and cost control measures, Tamil Nadu Generation and Distribution Corporation (Tangedco)'s loss reduced to Rs 29.75 billion in 2017-18 from Rs 139.85 billion in 2013-14.

"All necessary proactive steps are being taken to break even shortly," Thangamani said, quoting the note.

The gap between Average Rate of Realisation (ARR) and Average Cost of Supply (ACS) has been reduced from Rs 2.16 per unit during 2010-11 to Rs 0.33 per unit in 2017-18, and all efforts are being taken to bridge the gap, it added.

Thangamani said the state has taken over the Tangedco's loans worth Rs 228.15 billion, subsequent to its joining the Centre's UDAY scheme.

This will save interest of Rs 28.82 billion and Rs 22.82 billion a year towards principal repayment, he added.

The government of Tamil Nadu has also provided Government Guarantee for Rs 76.05 billion to Tangedco for mobilisation of funds through issue of bonds for repayment of debts.

Tangedco is also able to avail cheaper power from the power exchange due to synchronisation of the southern grid with north, northeast, east and west.

The AT&C losses, which were 17.11 per cent during 2011-12, have reduced to an estimated 14.04 per cent in 2017-18, resulting in a revenue of Rs 22.50 billion per annum which would have been lost due to technical loss.

Reduction in expenditure to the extent of Rs 5.86 billion was achieved due to efficient coal management, import substitution and procurement of imported coal by e-tender with e-reverse auction for the first time.

This is in spite of an additional expenditure of Rs 8.35 billion due to increase in clean energy cess and increase in railway loading charges and also increase in coal cost to the tune of nine per cent, railway tariff, port charges by the Indian government.

Tamil Nadu taps record wind energy for 2017-18, leads clean energy chart

Times of India : June 1, 2018



Tangedco harnessed 13,000 million units of wind energy and 2,905 million units of solar energy in 2017-18. Tamil Nadu is the only state to have used so much of green energy last year. The state has saved not less than 5,406 million tonnes of carbon on this count.

"In the green energy initiative, Tamil Nadu is a leader among all states. It had installed capacity of 11,113 MW as on March 31, 2018, compared to 10,480 MW at the end of the previous financial year," said state electricity minister P Thangamani in the assembly on Tuesday.

In the coming months too, the government will increase the share of clean energy through various initiatives, he said.

On July 27, 2017, Tangedco harnessed wind energy to the extent of 5,095MW. "In 2017-18, it was proposed to add wind power capacity to the extent of 4,500MW. Work is still going on. Apart from Tangedco floating tenders on its own to increase the wind power capacity, Power Grid Corporation of India will add 800MW of wind power in Tamil Nadu," said a senior Tangedco official. This year, the maximum wind energy harnessed in a day is 4,200MW.

The discom, by using green power, has lowered its purchase expenditure. "Due to lowering of power purchase tariff, the discom's loss for 2017-18 has come down to Rs 2,975 crore. We are working towards a break even by this year end," said the official.

The discom has also increased the number of sub-stations. Old transformers across the state are being changed. "In Chennai alone, 26 sub-stations have been upgraded or set up newly. This will improve power quality in several areas," the official said.

In Sholinganallur and Manali, 400 kV substations have been commissioned and work is under progress for commissioning 400 kV Guindy sub-station and tender is under scrutiny for Korattur 400kV sub-station.

To reduce the time of supply interruption in Chennai and suburban areas, the discom has proposed to replace 17,535 distribution transformers at an estimated cost of Rs 1,750 crore. This will be funded by the Rural Electricity Corporation.

Similarly 38,844 pillar boxes in Chennai city will be replaced by high rupturing capacity 6-way pillar boxes. The work is expected to be over in 2019-20.

Also, overhead lines will be replaced with underground cables in all parts of Chennai Corporation at a cost of Rs 2,549 crore. A total of 33,307.81km of low tension overhead lines and 2004,89 km of high tension overhead lines will be taken out.

Discoms may be fined for unscheduled load-shedding

Deccan Herald : May 31, 2018

The Union Ministry of Power has unveiled a draft amendment to the National Tariff Policy, 2016, which proposes to introduce penalty against electricity distribution companies for unscheduled load-shedding without valid reasons. "It shall be mandatory for the distribution company to show to the respective Electricity Regulatory Commission that they have tied up long term/medium term power purchase agreements to meet the annual average power requirement in their area of supply, failing which their licence shall be liable to be suspended. 24-hour supply of adequate and uninterrupted power may be ensured to all categories of consumers by March, 2019 or earlier", says the draft amendment.

"In case of power cuts other than in force majeure conditions or technical faults an appropriate penalty, as determined by the state electricity regulator commission (SERC) shall be levied on the distribution company and credited to the account of the respective consumers. The quantum of penalty shall be laid down by the respective SERC through regulations," says the draft.



The draft also emphasised on introducing pre-paid smart meter system where the power will be automatically cut off when the amount credited is exhausted. It also proposes to reduce the cost of electricity units and increase the fixed monthly rentals in line with the two part tariff (fixed and variable) mechanism through which discoms pay power generators. "In order to reflect the actual share of fixed cost in the revenue requirement of distribution licencees, there is need to enhance recovery through fixed charges", it said. The amendment also proposes that if the state government wanted to give subsidy to certain sections of consumers it should be done through direct benefit transfer (DBT) mechanism. It also proposed for capping cross subsidies at 20% of the power supply cost and compute tariffs assuming aggregate technical and commercial losses of 15%. The stakeholders will have time till June 20 to submit their comments for the proposed amendment. The Ministry officials hoping to introduce the bill in the monsoon session of Parliament.

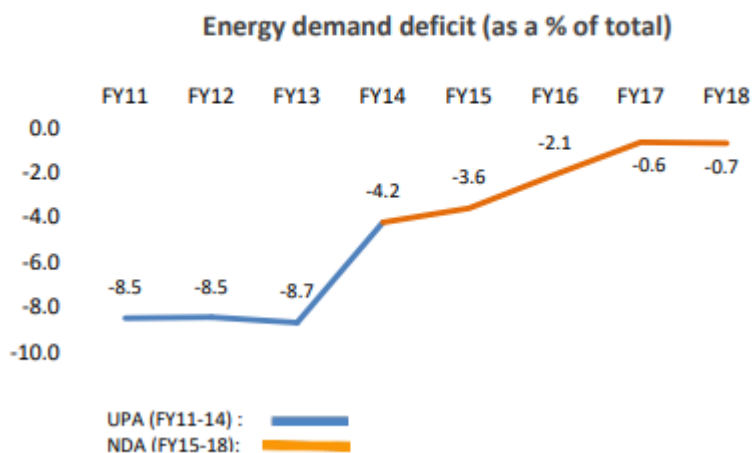
India's power sector showed massive improvement in NDA-era;

Financial Express : May 30, 2018

The energy deficit in India's power sector showed significant improvement in last four years, a report has shown. India's energy deficit, which remained rangebound between 8% and 10% between during 2011-13, improved in FY14 to 4-4.5%, and subsequently contracted to 0.7%, a Care Ratings report has said.

"The improvement could be attributed to rapid addition in thermal capacity in the private sector, which led to increase in electricity production," the report on four years of economic performance of the Narendra Modi government said. "This indicates improvement in electricity evacuation and power distribution infrastructure," it added.

- **Power Sector – increase in supply and demand**



Courtesy: Care Ratings

The energy deficit could be contained within 1% due to a massive push for infrastructure by the NDA government. The FY13-17 plan period saw private players commissioning 53,660 MW of thermal capacity, which was 23% more than the target, Financial Express reported on Monday. Overall capacity addition of 99,210 MW in the period was 12% ahead of the target.

With a rapid roll-out of coal generation, India is all set to overtake Japan and to have Asia's second-largest power capacity, data showed. Fueled by a rapid rollout of coal-fired power generation, India will have a power capacity of 363.32 gigawatts in 2018, Bloomberg reported quoting a BMI Research report.



"India's power sector will remain dominated by coal over the coming decade despite significant growth in cleaner sources – notably nuclear, non-hydro renewables and natural gas," an analysis by BMI research said last year

Power plants woes: Private producers feel the pinch

Financial Express : May 28, 2018

The fall in PLF of private plants to 55.2% even as state-owned producers saw theirs rise to 77% reveals the sector's woes

The gap between the capacity utilisation levels of India's state-owned and private power plants continues to widen, with the plant load factor (PLF) of state-owned thermal plants rising by three percentage points to 77% in April (y-o-y) even as the PLF of private producers slipped nearly seven percentage points to 55.2%. For a sector plagued by Rs 1.74 lakh crore of stressed assets, this is bad news.

In plain words, the improving performance of state-owned plants has been accompanied by a fall in the debt-repayment capacity of around 40,000 MW of private plants, which face being relegated to the category of non-performing assets (NPAs). Stressed assets funded by the Power Finance Corporation (PFC) — the leading state-owned lender for power projects — tot up to more than Rs 30,000 crore, of which 27% are NPAs, all in the private sector. Significantly, PFC has not received any funding requests for coal-based private projects since 2012.

Though the private players blame the 'statutory benevolence' enjoyed by state-owned National Thermal Power Corporation (NTPC) for the low PLFs and poor asset quality, experts say the problem is more complex in origin. Rampant power capacity addition in recent years coupled with less-than-expected growth in demand too has contributed to the situation, they say. The FY13-17 plan period saw private players commissioning 53,660 MW of thermal capacity, which was 23% more than the target. Overall capacity addition of 99,210 MW in the period was 12% ahead of the target. Meanwhile, electricity demand grew at a CAGR of 4.93%. It is not a surprise then that pan-India PLF decreased from 78.9% in FY08 to 60.5% in FY18.

Long-term power purchase agreements (PPAs) which ensure power offtake from plants and assured supply of coal are the two factors which determine the financial health of a power producer. Thus, private power producers have regularly held NTPC's legacy of old PPAs responsible for the pass the sector is in — NTPC signed PPAs with states for more than 40,000 MW capacity in just three months before January, 2011, when competitive bidding for tariffs became mandatory. Incidentally, this figure of 40,000 MW matches the private capacity currently under stress.

Coal shortage owing to inadequate transportation infrastructure has also affected private PLFs. And rising global prices have served as a deterrent to coal imports. "Higher global coal prices has seen independent power producers with regulated tariff and cost under-recovery going for a voluntary shutdown. As a result, a fleet of private IPPs are under-utilised," says Kameswara Rao, leader, PwC India.

The Parliamentary Committee on Energy has observed that the power sector had developed in an unbalanced manner, lacking a coordinated approach. "Social/ political issues, renegeing of parties on contractual obligations and non-fulfillment of enshrined promises make the situation worse," it felt.

In its FY19 outlook on energy infrastructure, India Ratings has said, "about 51,000 MW of pipeline thermal capacity and soaring renewable capacity compound the stress on waning thermal PLFs". The rating agency does not expect such plants, without PPAs and exposed to



the vagaries of spot market prices, to show a consistent PLF of above 40% in the next few years.

Of the 47,855-MW of thermal capacity under construction, only 6,445 MW would be required in the FY17-22 period, the Central Electricity Authority has said. The forecast is based on an estimated demand growth of 6.2% (CAGR), capacity addition for other sources, and the possible phase-out of 22,716 MW capacity. A successful implementation of the plan to attain 1,75,000 MW of renewable capacity by FY22 would keep PLFs of coal plants from rising above 57% in FY22 and 61% in FY27.

India to beat Japan this year; to have Asia's second-largest power capacity

Financial Express : May 26, 2018

Fueled by a rapid rollout of coal-fired power generation, India will have a power capacity of 363.32 gigawatts in 2018, overtaking Japan.

With a rapid roll-out of coal generation, India is all set to overtake Japan and to have Asia's second-largest power capacity, data show. Fueled by a rapid rollout of coal-fired power generation, India will have a power capacity of 363.32 gigawatts in 2018, Bloomberg reported quoting a BMI Research report. India's capacity will increase by a whopping 69% through 2027 and coal will remain the mainstay, making up about 75% of the mix, the report said.

By 2020, India is expected to surpass even the United States, which is the second largest producer in the world. The government recently achieved the historic target of 100% village electrification. Under Prime Minister Narendra Modi's flagship Saubhagya scheme, the government aims to provide electricity to all households. This means an uptick in domestic demand for power in coming years, which is expected to be met by coal-fired power generation and by tapping abundant renewable resources.

"India's power sector will remain dominated by coal over the coming decade despite significant growth in cleaner sources – notably nuclear, non-hydro renewables and natural gas," an analysis by BMI research said last year. India's power sector will remain dominated by coal over our 10-year forecast period, with coal making up a share of just less than 70 per cent to the total power generation mix by 2026.

"Despite the prevalence of coal-fired power generation, we expect significant growth in alternative, cleaner power sources over the next 10 years – albeit from a lower base – notably in the natural gas, nuclear and non-hydropower renewables sectors," BMI research notes.

"This is in line with government efforts to reduce pollution across the country and international pressure to boost environmental policy," it added.

World saw largest rise in renewable energy capacity in 2017: Report
Renewable power accounted for 70 per cent of net additions to global power generating capacity in 2017, the largest such increase in modern history, a report said on Monday.

But the heating, cooling and transport sectors, which together account for about four-fifths of global final energy demand, continue to lag far behind the power sector.

According to the REN21's Renewables 2018 Global Status Report, solar photovoltaic (PV) capacity reached record levels.

Solar PV additions were up 29 per cent relative to 2016, to 98 GW. More solar PV generating capacity was added to the electricity system than net capacity additions of coal, natural gas and nuclear power combined, said the report.



Wind power also drove the uptake of renewables with 52 GW added globally.

Investment in new renewable power capacity was more than twice that of net, new fossil fuel and nuclear power capacity combined, despite large, ongoing subsidies for fossil fuel generation.

More than two-thirds of investments in power generation were in renewables in 2017 owing to increasing cost-competitiveness and the share of renewables in the power sector is expected to only continue to rise.

China, Europe and the US accounted for nearly 75 per cent of global investment in renewables in 2017.

However, when measured per unit of gross domestic product (GDP), the Marshall Islands, Rwanda, the Solomon Islands, Guinea-Bissau, and many other developing countries are investing as much as or more in renewables than developed and emerging economies.

Both energy demand and energy-related carbon dioxide emissions rose substantially for the first time in four years.

In the power sector, the transition to renewables is under way but is progressing more slowly than is possible or desirable.

A commitment made under the 2015 Paris climate agreement to limit global temperature rise to "well below" 2 degrees Celsius above pre-industrial levels makes the nature of the challenge much clearer.

If the world is to achieve the target set in the Paris agreement, then heating, cooling and transport will need to follow the same path as the power sector and fast, the report warned.

Small changes are underway. In India, for example, installations of solar thermal collectors rose approximately 25 per cent in 2017 as compared to 2016.

Depreciated power assets must result in tariff reduction, proposes new tariff policy

The Economic times : June 4, 2018

Power companies may not be able to avail themselves of benefits on assets which have completed their useful life. Draft amendment to the National Tariff Policy 2016 proposes electricity generation, distribution and transmission firms mandatorily pass on benefits of low cost of depreciated assets to consumers with tariff reduction.

Depreciation is a major component of cost-plus tariff, besides return on equity (RoE) and interest cost. It becomes a cash flow to the investor by enabling recovery of capital investment.

As per regulatory accounting, initial 70% portion of depreciation is intended for repayment of principal amount of loan. Hence, according to industry experts, payment of depreciation beyond 70% implies repayment of equity to the investor. Many regulators currently allow RoE on original equity to power companies. This encourages power companies not to retire old assets. If return on equity is continued on old assets and new are continuously added, tariff increases more, experts said.

"Benefit of reduced tariff after the assets have been fully depreciated shall remain available to the consumer," the draft read. The amendment aims at enforcing the provision in a strict manner.

"The government has given justice to the consumers by making it mandatory to pass on the benefit of depreciation as reduced tariff," said Ravinder, former chairman, Central Electricity Act.



"Now, the CERC (Central Electricity Regulatory Commission) and SERCs (State Electricity Regulatory Commissions) must amend and align their tariff with new policy."

Industry experts termed the tariff policy draft consumer-friendly, except for the proposal to exempt power plants of all central public sector units from mandatory tariff-based competitive bidding.

"The proposed revisions are encouraging, for they are designed to improve quality of supply and avoid loading consumers with systemic inefficiencies," said Kameswara Rao, partner, GRID, PwC.

"The requirement that discoms must contract firm PPAs (power purchase agreements) means consumers, especially outside the main urban centres, can look forward to a more reliable power supply. It also gives hope to distressed generating assets that are awaiting utilities to sign the PPAs," he said.

Ravinder said the draft proposes that all state electricity regulators adopt the renewable purchase obligations trajectory issued by the central government. "This will boost the demand of renewable energy in line with the trend worldwide to save the climate," he said

Ministry of Power Addresses Pass Through, Open Access in Amendments to Tariff Policy

Mericom : June 1, 2018

The Ministry of Power has issued draft amendments to Tariff Policy 2016. The amendments have been proposed keeping in view the changes and dynamic nature of the power sector.

These amendments will help carry out power reforms. The draft is open for comments, and suggestions until June 20, 2018.

Key Amendments

- After the award of bids, if there is any change in domestic duties, levies, charges, surcharges, cess and taxes which lead to changes in the cost, such a scenario will be treated as "Change in Law" and will be allowed as pass through subject to approval by the appropriate commission.
- The appropriate commission will lay down the principle and procedure for the same. The commission will also allow and establish a mechanism for the reimbursement of carrying cost for the period from the date of occurrence of Change in Law up to the approval of Change in Law by the commission.
- All state electricity regulatory commissions (SERCs) must adopt the renewable purchase obligation (RPO) trajectory issued by the central g (But there is no mention of consequence if RPO targets are not met).
- Applicable base consumption for assessment of the RPO requirement and its compliance will be worked out from the total consumption by deducting the consumption from hydro power.
- In case the obligated entity is an industry with captive generation, the consumption from captive generation from waste heat gases as a byproduct of the industrial process will also be deducted from the total consumption.
- In order to ensure that the burden of the inefficiencies of the distribution companies (DISCOMs) are not passed on to the consumers, the SERCs will not consider AT&C losses exceeding 15 percent for the determination of the tariff after March 31, 2019.
- AT&C loss level for tariff determination may be aligned with targets mentioned in the MoU for UDAY, in case of UDAY signatories. The AT&C losses will be brought down to



a level of 10 percent within three years of the date on which AT&C loss level of 15 percent is to be achieved.

- The appropriate commission will determine the tariff without taking into account any subsidy components. Any subsidy to be given to any category of consumers will be given by way of direct benefit transfer directly into their accounts.
- In keeping with the principle that the tariff reflects the cost of supply of electricity the appropriate commission will, with effect from April 1, 2019, determine the tariff in such manner that the slabs are brought within +/- 20 percent of the cost of supply.
- In order to promote electric mobility and for enhancing energy security, SERCs will lay down the appropriate tariff framework for electricity supply from the DISCOM to the charging stations in a manner that the tariff will be less than or equal to the average cost of supply. This will be determined based on an AT&C loss level of 15 percent or actual.
- There will be a single part tariff for supply to charging stations in the initial three years.
- The open access customer will be liable to pay a cross subsidy surcharge for a maximum period of one year from the date of opting for open access.
- Standby charges will be applicable only for the open access customers who have not retained contracted demand with the distribution licensee (DISCOM). In the event open access customer retains contracted demand partly or fully, no standby charges will be levied.
- Standby charges will be designed to reflect the actual fixed cost and variable cost liability incurred by the DISCOMs to supply back up power to Open Access consumers. Standby charges shall be determined annually by SERCs to reflect the variation in costs over time.

When contacted an official with the ministry of Power said, "These amendments will help the Tariff Policy shed its complexity and loopholes. This is another step towards smart governance and is necessary for providing access to affordable electricity for all households in the next five years."

The official further added, "We have provided ample time for stakeholders to respond, and the final policy will pave the way for power reforms. We have electrified almost every village in India, which means power demand is now going to multiply. A tariff policy that is in tandem with these changing needs was required, and we have provided that."

CERC proposes payment based on supply to gencos

Business Standard : May 29, 2018

In a bid to assist loss-making power distribution companies (discoms), the Central Electricity Regulatory Commission (CERC) has proposed that payment which they make to power generators would be according to the energy supply to discoms, rather than just plant availability.

The move comes at a time when the plant load factor (PLF) or operating ratio of thermal plants is declining owing to less demand and increasing share of renewable energy, which operates at 20 per cent PLF.

CERC has proposed a new formula for payment to the generating companies (gencos) in its draft tariff regulations for 2019-24.



The regulator has suggested that the plants would declare availability of 80 per cent for the year. This would entail payment of 80 per cent of the annual fixed cost to them. Any slippage would lead to reduction in a proportionate manner. For the balance 20 per cent, payment would be based on 95 per cent plant availability during peak demand.

In its earlier tariff policy, the CERC had proposed shifting incentives based on actual purchase of power. This was opposed by NTPC since it amounted to a situation that if power procurers do not purchase power from NTPC and it does not run its plants at 85 per cent capacity, it would not be entitled to incentives. The regulated returns were linked to availability of NTPC's plants.

The power tariff paid by discom is divided into two parts — fixed cost which is the capital cost of the plant and energy tariff which is the cost of fuel.

Discoms have to pay the fixed cost to the gencos with which they have signed long-term power purchase agreement, even when there is no supply.

“In the emerging scenario of slackness in demand, growing penetration of RE, the overall utilisation of generation assets (PLF) has been decreasing. However, in the current circumstances, once the generator declares plant availability at the normative level of 85%, the distribution utilities are required to pay the annual fixed cost in full irrespective of scheduling of energy. The changing circumstances have highlighted the need for a re-think on the approach of fixed cost recovery, based on uniform availability throughout the year,” said the draft regulations.

According to the tariff regulations 2012-17, a generating station has to declare availability on a daily basis. Failure to achieve the target plant availability factor leads to dis-incentive in terms of reduction of the fixed charges on proportionate basis and incentive for actual generation above the target availability factor. The target PAF is 85 per cent.

State-owned discoms have been reeling under debt and the reform scheme is yet to improve their loss status.

To compensate the gencos for coal quality, CERC has also proposed a new remedy. Losses arising out of difference in the quality of coal between ‘as billed’ by the supplier and ‘as received’ at the plant’s end would be borne by the coal supplier or the Railways.

This would come as a huge relief for state-owned NTPC and several state gencos which have filed several cases over coal quality with state-owned Coal India Limited. The ministry of coal had proposed third party sampling and quality check but the billing is still contested by many as the difference in quality is borne by the power plant.

THE PLAN

- New tariff regulations (2019-2024) propose to compensate gencos for lack of stipulated coal quality
- Coal supplier or Railways to pay for any losses to slippage in coal quality
- Cheer for discoms as the payment to gencos likely to be based as per supply
- NTPC had contested the plant availability-based payment when it was proposed in earlier tariff regulations

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