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## **TN Discom rejig: Power Ministry says can't relax FRBM norms for borrowing**

Business Line: November 3, 2016

The Centre has told the Tamil Nadu government that it cannot give any relaxations for borrowings beyond the mandated norms for the Discoms financial restructuring package.

At a recent meeting the Union Power Ministry expressed its inability to go beyond the FRBM (fiscal responsibility and budget management) norms. The Power Ministry, however, agreed to tweaking some other norms to enable the State join the Centre's scheme to revive financially stressed electricity distribution utilities – the Ujwal DISCOM Assurance Yojana or UDAY.

"We cannot change the basic structure of the scheme as it has been approved by the Union Cabinet, but concessions can be worked out within the norms. States are coming out with their own specifications and we have facilitated wherever we can," an official said.

Chief Minister J Jayalithaa had in June in a memorandum given to Prime Minister Narendra Modi spelt out certain modifications stating that if not considered then it would be difficult for the State to implement UDAY.

Though Tamil Nadu has in-principle agreed to join the Centre's scheme, the Power Ministry is being cautious. A source involved with the negotiations said, "we have to wait for the MoU draft, which the State will send once its Cabinet approves."

Under UDAY, States take over 75 per cent of the Discom debt and pay it back by issuing bonds. Jayalithaa had put forth a condition that Tamil Nadu will takeover ₹17,500 crore of loans of Tangedco, if additional borrowing towards principal repayment and interest servicing on account of Discom debt take over is provided over and above the normal borrowing limit by relaxing FRBM norms for 15 years.

"This is something which falls under the domain of the Finance Ministry and we have communicated it to the State government," another official said.

For implementing UDAY, Jayalithaa had also sought that the State government be allowed to float 15-year bonds with five-year moratorium and floating interest rate of not more than 20 basis points. "Tenure of the bonds can be flexible. Some States have preferred 10-year bonds," a member of the negotiating team told *BusinessLine*.

The Tamil Nadu Chief Minister had also asked the Centre to provide 25 per cent of the taken over debt as grant similar to the assistance provided in the Financial Restructuring Programme of 2012 and a provision for quarterly revision of electricity tariffs to offset fuel price change.

Officials concerned said, the Centre had accommodated a lot, if not all, of the conditions of Tamil Nadu government. Regarding relaxation of the FRBM norms, the Power Ministry said it will convey the issue to the Finance Ministry, but did not make any commitments on that score.

If Tamil Nadu, which has Discom debt of Rs. 80,000 crore, joins the scheme then the total number of States coming on board will be 18.

The combined Discom debt, including Central PSU dues that would be restructured in respect of these 17 States that have already joined the scheme is around ₹2.57 lakh crore, which is around 68 per cent of the total outstanding Discom debt as on September 30, 2015.

## Government steps up power grid expansion

Business Standard: November 3, 2016

To open and expedite market opportunity of Rs 1 lakh crore

The central government has accelerated development of power transmission networks to meet the rising electricity demand from various parts of the country. Along with states that would offer transmission projects, the Centre is looking to unleash investment opportunity of nearly Rs 1 lakh crore for the sector.

To surpass the target of 23,000 circuit kilometre (ckm) during 2016-17, the Union power ministry has expedited work on the long-term '20-year Perspective Plan' for power transmission.

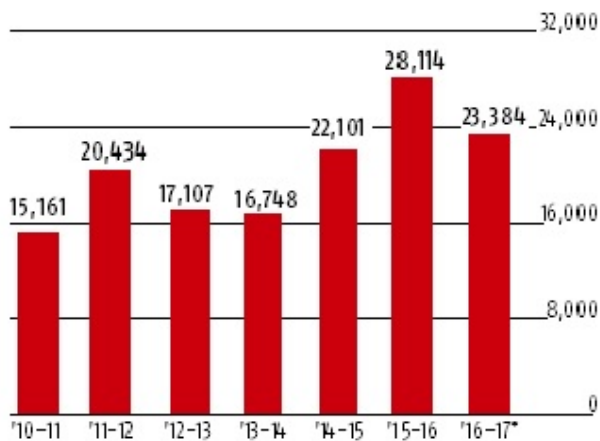
Tamil Nadu, Karnataka, Rajasthan, Madhya Pradesh and Haryana would offer power transmission projects through the bidding route, which forms the part of their '24x7 Power for All' plans.

The Centre and states offer transmission projects through various modes — via cost-plus regime to state-owned Power Grid Corporation of India (PGCIL); through tariff-based competitive bidding (TBCB) route to private players; and engineering, procurement & construction (EPC) contracts to private firms.

This comes at a time when the share of renewable energy is increasing in the grid along with the demand-supply mismatch. At the same time, private investment in power transmission is still tepid due to the slow pace of project approval and award.

### PLUGGING INTO POWER NEEDS

Growth of transmission networks annually (in circuit km)



\*Envisaged target

### Upcoming projects announced (₹ crore)

TBCB projects at RfQ stage (from Aug 2016)	2,900
TBCB projects at RfP stage	6,735
Upcoming projects under TBCB	4,697
Recently approved projects*	3,044

### BEING A POWER HITTER

Southern region power transfer capacity to be raised by 18,400 Mw by 2019-20, from current 5,900 Mw

Power transfer capacity from West to North to be increased to 20,000 Mw by 2019-20

Power Grid to increase its capex for FY17 above ₹ 22,000 crore

₹1 lakh crore to include investment opportunity for TBCB, engineering, procurement & construction, state level & sub-contract projects for private firms and states

\*includes both TBCB & regulated projects, built by the Centre; TBCB: Tariff-based competitive bidding; RfQ: Request for quotation; RfP: Request for proposal Source: Ministry of power

"Be it EPC contracts, TBCB, sub-contracts for government projects... all are aimed at speeding infrastructure development and inviting investment. There is no demarcation over whether the project is built through private investment or by a public-sector enterprise — it all boils down to creating business opportunities for the whole supply chain," said a senior power ministry official. The official added that major growth would come from intra-state and last-mile projects. "We are in discussion with all the states to promote TBCB to invite more competition and investment."

Major projects that are in the pipeline include those for boosting inter-regional capacities and strengthening last-mile connections. The Southern region's power transfer capacity would be increased by 625 megawatt (Mw) by this December and 18,400 Mw by 2019-20. Its current capacity is 5,900 Mw. For West to North, the power transfer capacity would be increased to 20,000 Mw by 2019-20. This would correspond to the wind power projects that would be auctioned in this region.



These projects would be built under different modes, including TBCB. In FY16, the country added a record 28,000 ckm of transmission lines. The total investment envisaged in the 20-year Perspective Plan is Rs 2.6 lakh crore during the 13th Plan period. According to the current draft of the Plan, Rs 1.6 lakh crore investment in transmission would come from states and Rs 1 lakh crore from PGCIL. The government is planning to increase the size of projects and scope of work in transmission to prevent congestion in the network. Inter-state lines with 56,000 Mw capacity will be built by the end of the 13th Plan period.

## **Plan to hike short-term open access charges: Short-circuiting industrial consumers**

**Indian Express: November 2, 2016**

Hike in the levy may add to the increasing tendency among states to raise protectionist barriers against open access.

A proposal that is under active consideration in the central power regulator to hike the short-term open access charges for buying electricity from the open market could add to the woes of industrial consumers.

Across states, industrial consumers are already saddled with high open access or OA charges, which effectively deter them from sourcing electricity from the cheapest source. Fixed overheads, especially prohibitively high electricity tariffs, are a big drain on the efficiency of Indian industry and any proposal that could add on to these costs further could compound the lack of competitiveness of Indian industry at a time when the domestic industry is struggling to fend off competition from cheaper imports, especially from China.

The proposal being considered in the Central Electricity Regulatory Commission (CERC) to hike the short-term open access (STOA) charges to levels higher than the long-term open access (LTOA) charges has been prompted by a plan sent to the regulator by state-owned transmission major Power Grid Corporation of India (PGCIL), officials involved in the exercise said. The hike in the levy could be in addition to the increasing tendency among states to raise protectionist barriers against open access — a key reform measure ushered in by the Electricity Act, 2003, that effectively enabled consumers to migrate to electricity suppliers of their choice as a means of infusing competition in the power sector and bringing in efficiency in the distribution sector.

At present, on an average, the inter-state Open Access charges (injection plus drawal) is around Rs 0.50/unit. If the CERC proposal, which is currently being discussed and may effectively double the STOA charges to around Rs 1/unit (injection plus drawal), will reduce the viability for open access, thereby defeating the spirit of the Electricity Act, 2003 which was aimed at promoting open access and competition.

Among states where open access is allowed, including Punjab, Rajasthan, Haryana, Andhra Pradesh, Telangana, Gujarat, Karnataka and Madhya Pradesh, industrial units that qualify (those with a load of over 1 MW) have managed to record savings on power purchase cost by procuring power through the short term market in a bid to shore up their bottom line. Though the provision of Open Access is not fully implemented in the true spirit by most states, even with the limited and partial implementation of the reform measure, industrial units — especially small and medium ones — have been able to procure reliable power with adequate flexibility at relatively competitive prices from electricity distribution utilities other than those operating in their own states.

Incidentally, in states where consumers are permitted to opt for Open Access, the discoms are also safeguarded and compensated with cross subsidy surcharge (CSS), additional surcharge and wheeling charge. In the past, a number of states have resorted to hikes in CSS, making Open Access prohibitively expensive. According to industry estimates, across most states, industries stand to save by purchase of power from market only if the market price is in the range of Rs 2.5/unit- Rs 3/unit. As a result of all these prohibitive measures across a number of states, the



number of potential short-term access consumers far out number the active open access consumers.

While the new proposal is focussed on sharply hiking the STOA charges, interestingly the transmission system is designed on the basis of LTOA users, who get preference in transmission capacity allocation. STOA is only allocated transmission capacity if at all there is surplus capacity available in the system after utilisation by long-term open access users. "The STOA charges should actually reflect the existing scenario and treatment of STOA in the current system. It means that STOA charges should be in fact lower than the LTOA charges as it is practiced worldwide. Currently STOA charges are at par with LTOA and increasing it further will actually be against the spirit of EA, 2003," an executive with a company utilising the short-term window to source cheaper power from the spot market, said.

Maharashtra Electricity Regulatory Commission's former member Jayant Deo admitted that some states were effectively hindering Open Access and some were applying prohibitive charges and conditions. "The lack of intended competition in power sector in India is on account of missing definition of Retail sale. The (Electricity) Act provides in Section 62 (1) (d) to determine the tariff for retail sale of electricity and recognises that electricity market will have wholesale, bulk and retail sale in Section 86 (1) (a). There is a proviso to this section which says that the SERCs (State electricity regulatory commissions) will only determine wheeling charges and surcharge thereon, if any, for categories of consumers who have been permitted Open Access under Section 42... The competitive markets as required to be developed under Section 66 of the Act, cannot be developed so long there is regulated tariff. Hence insertion of this definition (of retail consumers) will pave the way for market development and competition — the soul of the Electricity Act, 2003," he added.

User industries across states have already started vocally protesting attempts to thwart the open access provision. In Tamil Nadu, for instance, Open Access power consumers have approached the Tamil Nadu Electricity Regulatory Commission last month seeking relief from the high cross-subsidy surcharge levied by the utility. While the latest National Tariff Policy notified in January 2016 allows discoms to levy CSS on all segments of open access consumers subject to a ceiling of 20 per cent of the electricity tariff set for that segment, the CSS levied by the Tamil Nadu Generation and Distribution Corporation (Tangedco) is not capped at the ceiling prescribed in new Tariff Policy, 2016. Open access consumers, the large power users, are shelling out double or more as CSS.

The Open Access Users Association, a registered, national body representing the open access consumers had petitioned the Commission, which issued notice to Tangedco in September. CSS compensates the public sector utility for the loss of revenue and also provides for the use of the transmission and distribution infrastructure. But it cannot constrain open access. The latest policy caps CSS to 20 per cent of tariff on various segments.

But the CSS now ranges from Rs 2.36 to Rs 3.50 a kWh based on the older policy which does not set a ceiling on CSS. The petition urged the Regulator to re-determine the CSS in line with the new policy. In 2014, the Haryana electricity regulator had effectively stayed a move by the state government to deny short-term open access to industrial consumers in the state. The stand taken by the regulator was seen as significant in the wake of an increasing tendency among states to raise protectionist barriers against open access. There had been similar moves last year by other states such as Gujarat to disallow electricity transactions under open access for industrial consumers, a move that industry chamber CII said could "negatively impact operations" industrial consumers.

All this comes at a time when there are increasing question marks over the competitiveness of the Indian manufacturing sector. According to data from the Department of Commerce, Chinese imports accounted for over 15 per cent of India's total import basket in 2015-16. While China is India's biggest source last fiscal, the amount spent on buying the Chinese goods was higher than



the combined amount India spent on importing goods from its other big trading partners, including the United States, Saudi Arabia and the UAE last financial year.

## **Lower demand may pull down power sector growth**

**Business Standard: October 31, 2016**

The growth of the power sector during the July-September quarter might be muted due to poor demand from distribution companies

The growth of the power sector during the July-September quarter might be muted due to poor demand from distribution companies (discoms). This has resulted in decline in plant load factor (PLF) of coal-based power plants to 54.7 per cent in the second quarter (Q2) while it stood at 59 per cent, year-to-date.

The demand for discoms is likely to be pushed back further with Ujwal Discom Assurance Yojana likely facing implementation delays.

Analysts at the Religare expect NTPC to report flattish growth in thermal output and lower PLF. With a 27 per cent fall in thermal power generation in Q2, JSW is likely to be hit by rising cost of imported coal and rupee depreciation.

JM Financial says NTPC's earnings growth is expected to be in line with its regulated equity growth, but core return on equity would be impacted by lower PLF.

JSW will be impacted by low PLF at its most profitable merchant plants. However, hydro-plant earnings will cushion this impact partially.

Ashok Khurana, director-general of Association of Power Producers, told Business Standard: "The progressive decrease in average PLF, from 69.93 per cent in 2013-14 to 65.67 per cent in 2014-15 and currently at 64 per cent, along with lack of fresh long-term power purchase agreement (PPA) opportunities, is a matter of great concern for generating companies. The problem is compounded further by the inordinate delay in announcing the coal allocation and usage framework as the earlier framework ended in March 2015. Looking at the surplus position of coal, the new coal allocation and usage policy framework should remove the restrictions imposed on coal usage, facilitate medium-term PPAs and allocate coal linkages for all PPA holders co-terminus with their PPAs. The easing of coal usage restrictions will alleviate the stress to some extent."

As far as the transmission sector is concerned, Religare expects PowerGrid Corporation to report revenue growth of 26 per cent and profit after tax growth of 27 per cent, year-on-year, led by strong commissioning in FY16.

## **India to get electricity from offshore wind energy in 5 years**

**DNA : November 1, 2016**

India will get electricity generated by wind-propelled plants installed in Gujarat and Tamil Nadu in about five years as a part of the country's green energy development programmes, an energy expert has said.

"We are preparing India for offshore wind (and) providing MNRE, a roadmap for offshore wind for Gujarat and Tamil Nadu," said Mathias Steck, Executive Vice President and Regional Manager at DNV GL, an international renewable energy group.

"It would take three to five years to see commercial offshore winds projects in India," said Steck who is an expert in renewable energy at DNV GL, which has a 30-consultant team in India and made its entry into the Indian market in 1989. A 100-megawatt pilot project will likely be installed in the ocean off Gujarat in about three years, he said on the sidelines of the Singapore International Energy Week held last week.

It is to kick start a new power generating sector under the Facilitating Offshore Wind in Industry (FOWIND) programme funded by the European Union.



An FOWIND consortium has done a series of report on wind conditions for wind-generated electricity and its integration into a grid along the coastlines of Gujarat and Tamil Nadu. FOWIND is supported by Euro four million grant from the Indo-European Cooperation on Renewable Energy programme and Euro 500,000 contribution through the Gujarat Power Corp Ltd (GPCL). The consortium, Global Wind Energy Council (GWEC), comprises GPCL, DNV GL, the Centre for Study of Science, Technology and Policy (CSTEP), and the World Institute of Sustainable Energy (WISE).

The project is being implemented in close cooperation with Ministry of New and Renewable Energy (MNRE) and National Institute of Wind Energy. "Over the time DNV GL has been in India, we have looked over 50-gigawatt of onshore wind projects," he said, adding "this is a market leading position" as DNV GL works for a large number of clients in renewable energy projects. DNV GL is also looking at prospects in solar and tidal wave energies in India, Steck added. P

## **Here comes the sun!**

**Business Line: November 4, 2016**

India's ratification of the Paris Climate Change Agreement commits it to sweeping cuts in greenhouse gas emissions, and one of the pivotal channels for achieving those punishing targets is the instrument of solar power plants. India's experience in this space illustrates how even vexing problems can be fixed with innovative thinking backed by political will.

India has a good track record in solar power installations – 8 GW in six years, with a promise of another 8 GW in a year – but its record of rooftop solar plant installations is relatively poor. Against the target of 40 GW of rooftop installations by 2022 (which is part of the overall target of 100 GW fixed by the Central Government) India today has just 1 GW of rooftop plants.

This is a serious failing. Since rooftop plants generate electricity right at the point of consumption, they do away with the need for transmission, which in turn cuts down on energy loss. Further, they give plant owners independence from utility companies and insulate them from tariff hikes.

India's potential in this space is huge. Installing rooftop solar plants at educational institutions and factory buildings alone would help generate 40 GW. India's Ministry of New and Renewable Energy estimates the 'market potential' at 124 GW, though it says the 'technical potential' is much higher, at 352 GW.

Electricity from rooftop plants will be cheaper than the power that educational institutions and factories procure from utility companies – and from the diesel-fired generators that come on during the frequent power outages. So why has rooftop solar not gained sufficient traction? The reason is the poor financial health of the utility companies.

In India, most electricity utility companies are owned by provincial (State) governments. Political and social imperatives have led governments to provide power cheap, or even free, to the poor and to farmers. These losses are cross-subsidised by higher tariffs on commercial and industrial establishments. Even so, most of the utilities are broke. To hold on to their paying customers, the utility companies effectively disincentivise these establishments from installing rooftop solar plants – by refusing to buy any surplus power from them.

In the southern State of Tamil Nadu, for instance, the distribution company ('discom') does not buy from rooftop solar plants of industries and educational institutions. Other States buy surplus power only up to a capacity cap, say, 1 MW.

Being stuck with unsellable surplus power skews the economics of rooftop solar plants for these colleges and factories.

"Discoms see rooftop solar plants as 'competition'," observes Ketan Mehta, CEO of Rays Power Infra, which owns solar power plants and builds plants for others.

'Storage' is an obvious answer, but it is still a costly proposition.

## **Solutions in sight**

The Central Government acknowledges that without 40 GW from rooftops, it would be impossible to meet the target of 100 GW of solar power by 2022. India has committed at the Paris Climate Change Conference to ensuring that by 2030, 40 per cent of energy consumed in the country will come from non-fossil fuel sources. This would require some 320 GW of renewable energy capacity, so rooftop solar has a key role, even beyond 2022.

Upendra Tripathy, Secretary in the Ministry of New and Renewable Energy, says the government has promised to compensate discoms for any revenue loss. The bureaucrat did not specify this, but the funds for such compensations could come from the National Clean Energy Fund, which has been formed by collecting a tax on every tonne of coal mined or imported. There are also suggestions from the industry that rooftop plant owners could be asked to pay the utilities a fee.

Alongside all this, the federal government is also looking to provide funds to State governments and cheaper loans for discoms.

Given the manifest seriousness in the government's intentions, hopes run high that the rooftop solar programme will see more dramatic growth. The cloud cover over the industry, and over India's contribution to climate change mitigation, is lifting, and a sliver of sunlight is streaming through.

**Save Energy. Save Money. Save the Planet**

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