

Solving the vexatious issue through UDAY is critical to fixing the power sector

iyush Goyal, the ever-smiling minister in charge of power, coal and new & renewable energy, is on a roll. His ministry's energy efficiency programme has already distributed over 79.9 million (and counting) LED bulbs nationwide. The world's largest LED lighting programme has helped India save almost 2,079 megawatts (MW) of peak electricity demand. Importantly, he has also managed to do in two years what the UPA government found impossible to do in 10 - get the state-owned monopoly coal miner, Coal India Limited, to ramp up the output of coal by almost 80 million tonnes per annum. A liberalised policy, allowing swapping of coal, has been instituted, which allows firms to rationalise their freight costs by bartering coal with mines that are closer to their power-generating plants. "There's significant improvement

in logistics taking place in coal-rich states to get fuel to the power generating plants," says Kameswara Rao, leader, energy, utilities & mining, PricewaterhouseCoopers India.

For those who lacked access to coal linkage and captive sources of fuel, Goyal has managed to auction coal blocks, giving firms access to the fuel, garnering huge sources of recurring royalties for state governments. Gasbased power plants, which were idling due to unavailability of fuel from Reliance Industries' KG D6 block, have been given a dose of oxygen, by making available pooled gas to run their units at 30 per cent plant load factor and get some revenues to service salaries and bank debt payments.

The upshot: availability of power seems to have improved, with peak power deficit for the ongoing fiscal year projected at just 2.6 per cent or 4,108 MW by the Central Electricity

Authority. If realised, this level of low energy deficits would be the second lowest on record since economic liberalisation began in the country.

However, Goyal has a long way to go in fixing the problem-ridden power sector, which has emerged the biggest contributor to non-performing assets of the banking system. "While the sector accounts for 9.5 per cent of total advances, it accounts for 35 per cent of all stressed assets in the banking system," says Suhas Harinarayan, executive director, JM Financial Services. "We have reached a level today where you have to restructure otherwise you cannot nurse the patient back to good health," adds R. Raghuttama Rao, managing director, ICRA Management Consulting Services (IMaCS). Of course, the banking system, groaning under bad loans given to power generating firms, has been given some measure of respite with the government working with the RBI to come out with a 5:25 flexible restructuring scheme, which allows banks to extend the repayment period of the loans up to 25 years,

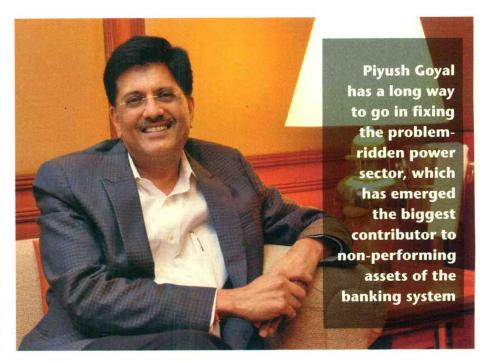
making it easier for the borrower to service the loans in a timely fashion.

A critical component of Goyal's strategy is the Ujwal Discom Assurance Yojna (UDAY) scheme, under which state governments will by March next year take over 75 per cent of the debt (as on 30 September 2015) held by their distribution companies (discoms), the weakest link in the power value chain. The balance 25 per cent of the debt is to be serviced through state governmentguaranteed bonds issued by the discoms. (According to latest reports, the government has decided to delay the timeline of these bonds, fearing a glut as eight states, led by UP, have already issued them.) Concessional funding will be made available to state discoms to upgrade their old and creaking infrastructure and usher them into the digital age. So far, 19 states have joined the UDAY scheme. About 90 per cent of the losses made by the discoms are covered by the states that have joined UDAY.

Archaic distribution system

A lot is riding on the success of this financial turnaround and revival package for discoms, as these companies are broke and struggling with creaking infrastructure, unable to sell power to those who need it, forcing homes, shops, hospitals and malls to invest in diesel generation sets, which cost as much as ₹11-16 per unit for electricity. It's estimated that, at its peak, almost 80,000 MW of power is fired from diesel generation sets in India. "The distribution system we have is so archaic that, even if there are certain customers who are willing to pay marginal prices for power supply, our discoms have the capacity to shut the whole system," says Kaustav Mukherjee, partner & director, Boston Consulting Group India.

A key factor in the flawed working of discoms is that they are state-owned and state-controlled. The state-owned companies have little efficiency and customer focus. "The power sector is in a mess, because discoms are not able to recover money for electricity supplied. Even in states where tariffs have been jacked up, collections are abysmally poor. You



cannot provide cheap power to small consumers and agriculture and then not collect your dues too," argues Saumitra Chaudhuri, former member, Planning Commission.

According to the Union ministry of power, the accumulated losses of state-owned discoms stand at ₹3.8 lakh crore. Put another way, that's more than enough to fund the finance ministry's 2015-16 allocation of ₹34,699 crore to the flagship rural employment guarantee scheme MGNREGA, for the next 10 years and still have money left over! "The operational performance of discoms shows a tremendous leakage between the energy supplied and the cash actually collected," notes Vinayak Chatterjee of Feedback Infra.

If the losses being incurred by discoms have to be curtailed, they must be allowed to bill accurately and collect all their bills in a timely fashion, with the full support rather than discouragement of the state government and its law and order machinery. In tune with the objectives of Electricity Act 2003, they must also be allowed to raise tariffs for subsidised consumers, so that they can cover the cost of supplying electricity. But there is a vast gap between theory and practice.

"Discoms, as it stands, have neither the cash flow nor the fund raising ability to come out with mediumto-long-term power purchase agreements," comments Sushil Maroo, managing director, Essar Power. Tariffs in many states have not been revised for years even to the limited extent of compensating utilities for inflation and higher fuel costs. In most countries worldwide, fuel-led generation costs increases are regularly passed on in retail tariffs. Pramod Deo, former chairman, Central Electricity Regulatory Commission (CERC), has a radical idea - wherever losses are high, either the tariffs charged should be higher to cover the costs or, the power cuts should be for longer periods of time, compared to areas where losses are lower. This will force people to act responsibly, helping the discom cover some of its costs. But are there any takers?

Not only do discoms pile up accumulated losses, they still continue to lose money because they sell power below what it costs them to buy it. Rating agency CRISIL estimates that, the country's eight top loss-making discoms lose around ₹1.40 for every unit they supply to their consumers. Take Maharashtra, considered a progressive state, as an example. It's estimated that it costs the government-owned utility just over ₹6 to purchase a single unit of electricity. But it sells this at an average price of almost half its cost – at ₹3.11 per unit.

Since no one can continue in

business by selling something for less than what it costs them to make or buy it, it's no surprise that the corporations are dead broke. That they have survived so long is merely because, under two previous Central governments, they had received bailout packages that shaved off a good portion of their losses. But they failed to correct their habit of continuing to sell something below cost. "Tariffs charged by discoms have to be increased, if costs have to be recovered. Otherwise, we are only deferring the actual problem for another 2-3 years," says V.K. Dhanuka, former CEO, IL&FS Energy Development Co.

"The key issue with discom bailouts is: how do you ensure that it doesn't create a sense of entitlement and set the stage for a recurrence of such episodes?" asks IMaCS's Rao. The fact of the matter is that taxpayer's money is being doled out regularly by governments without any clear idea as to when these bail-outs will cease.

Ujwal future?

It is against this backdrop that Goyal is promising that UDAY will achieve what the Electricity Act and several regulations thereafter failed to do get discoms into profit and make them self-sufficient. This, he claims, will be possible because states will take over 75 per cent of the outstanding debt of these corporations, eliminating their need to pay interest and repay principal on loans worth ₹3.22 lakh crore. "We have had a financial restructuring package in 2002 and 2012 as well," says Goyal. "UDAY cannot fail because it has been formulated after 8-9 months of serious introspection, extensive consultations with bankers, tax experts, investment bankers, state chief ministers, state finance ministers and state finance secretaries. We have a broad acceptance of this scheme as we have looked at what is politically feasible".

But Chaudhuri points out that, in 2011, a similar decision was taken to transfer the liabilities of discoms to states, but this couldn't materialise, because banks couldn't afford to take such a large hit on yields on their loans for such a large quantum

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of lending. One way out could be for the states to issue fresh loans, which are subscribed by insurance and pension funds and, then, use those funds to repay banks, saving the latter from a hit on interest yields. Of course, that would also mean that banks are flush with large amounts of cash and nowhere attractive to lend.

"UDAY takes away the pile of debt and gives discoms a new lease of life to make a fresh beginning; reduce losses and make a positive return on the power sold," says Ravi Uppal, CEO, Jindal Steel & Power. Interest costs for some discoms have zoomed to almost 60 per cent of their annual loss, making it amply clear that debt levels are unsustainably high, he adds.

By making available concessional funding (a mix of grants and loans) under Central government schemes such as Deendayal Upadhyaya Gram Jyoti Yojana, Integrated Power Development Scheme and Power Sector Development Fund, Goval hopes the under-equipped discoms will be able to install smart meters and upgrade their transformers resulting in lower technical losses and better quality of power supplied to consumers. "We will have compulsory metering at the distribution transformer level in states which, when seen in the background of consumer indexing and use of geographic information systems, will allow mapping of losses right up to the feeder and transformer level," he says and expects the aggregate technical and commercial losses of discoms on power supplied to drop to 15 per cent of the total by 2018-19.

Rao acknowledges that discoms have high technical losses due to the poor state of their cables, bad transformers and unmetered connections resulting in theft. Given their financial plight, many have stopped recruiting staff for years together. "There's a major challenge of institutional capability at state utilities as staff profile is ageing and fresh recruitment is curtailed. Combine that with limited investment in technology, delays in network refurbishment due to cash constraints and you have a system where oversight is weakened allowing leakages to take place," says Rao. There are reasons for morale of the staff to be low, as they are mostly with obsolete equipment that can't be replaced because there's no money to do so. "We will fix circle level responsibility to reduce losses with support and a team from the government," assures Goyal, asserting that, for his ministry, outcomes are critical.

The rule of thumb dictates that, for every rupee invested in generation, a similar investment is required in transmission & distribution too. However, with India's discoms engaged in a daily battle for survival, they have no money to invest in anything. Reducing technical losses will require infusing fresh blood and new thinking. Training will have to be provided on how to source power efficiently and many a corrupt staffer will have to be shown the door.

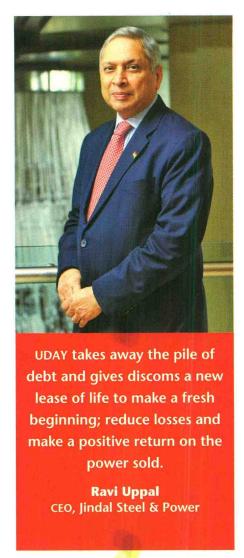
Goyal hopes UDAY will usher in better quality and perhaps quantity of supply to encourage consumers to pay their electricity bills and reduce commercial losses for discoms. Nobody takes issue with the fact that aggregate technical and commercial losses of 30 per cent need to at least be halved.

But, is tackling technical losses alone and ignoring commercial losses a wise decision? After all, if the state utilities can't pass on cost increases beyond their control, then the entire reform exercise becomes a sham. "You are losing money on current operations so adjusting debt on past losses will not solve any problem. You have to take the difficult decision and raise subsidised tariffs," says Chaudhuri.

UDAY envisages that discoms should at least come to a 'no-profit, no-loss' situation in terms of each unit of power supplied by 2018-19. "UDAY takes into account what we have inherited and a permanent resolution for the future," claims Goyal. He forecasts that 20 discoms in the country will be making a profit in 2018 itself.

"Under the World Bank-funded and Power Finance Corporation-operated plan, formulated during the UPA 2 regime, state utilities had to prepare an operating & financial plan, which would show a minimum 3 per cent return to be earned by them. The plans were prepared but compliance was absolutely another matter. Compliance with the targets under UDAY too will similarly be the challenge," admits Mukherjee of Boston Consulting Group India. Chaudhuri too believes that reducing AT&C losses is 'a pie in the sky'. "It won't happen and hence your profit projections may not materialise. Reform can succeed if we can get utilities to report cash break even without assuming AT&C loss reduction," he adds.

How will the Central government ensure that discoms under state control will toe the line, especially when several states such as Uttar Pradesh will go to the hustings soon? It is something that isn't clear to anyone yet. There is scepticism in the private sector that Goyal's dreams of



reducing the gap between the cost of power purchased and price of power billed will get to zero. Goyal does seem open to the idea of quarterly tariff adjustments to account for inflationary pass-throughs but cautions that no government will allow tariffs to be increased by even ₹1.5-2 per unit a year. "If you provide better service levels, then moderate tariff increases could happen," says Goyal.

Show me the money

Years of tinkering with tariffs have already led to a backlog of unbilled increases, which have to be paid to discoms. Plus, there is a huge gap between current costs and revenues; but, the courage to face the issue and fix the mess, does seem to be lagging.

To understand why we need to be ready to pay more for power, consider

this. Agriculture and residential consumers in India tend to pay lower subsided tariffs for the power supplied to them. This loss in supplying the agriculture sector is made up by charging other bulk consumers such as shops, malls, cinemas, hospitals and industries higher rates for the power they consume. Deo illustrates how this pans out in India's most industrialised state, Maharashtra. "While 180,000 industrial and commercial customers bring in 62 per cent of the annual revenues, some 2 crore other customers bring in the balance," he explains. "The cross subsidy levels in many places have reached unsustainably high levels," rues Rao of IMaCS.

Thanks to the slowdown in the manufacturing sector, industrial demand for power has been growing below its ideal long-term average or not growing at all. As a result, experts estimate that subsidised agri and residential group of consumers now account for as much as 42 per cent of the total consumption, putting a heavy cross subsidy burden on the bulk consumers. "Tariffs have to sustainably move to the extent that agriculture and households, which are massively subsidised right now, can't be so heavily subsidised anymore," says Sumant Sinha, chairman & CEO. ReNew Power Ventures.

Since the non-subsidised consumers are already paying a high tariff for the power they consume, there is only limited scope in raising their rates further. At the same time, raising rates for what middle class city dwellers pay for their homes and what farmers are charged for their pumps and homes is a political hot potato. As a result, state governments have adopted the easy way out - put pressure on regulators not to allow increase in tariff of subsidised consumers. This has meant that discoms have been forced to borrow money to fund these losses. Interest costs on these loans push the electricity distributors further into continuing losses. Even where states have agreed to fund the losses by way of grants/ budgetary allocation, the funds come with delay of several quarters, forcing discoms to borrow from banks, which worsen their already precarious financial plight.

"The most important issue to be tackled in the power sector is reform of the discom's financial health. All states need to adopt UDAY and meet the operating targets set for discoms - such as reducing the high average technical and commercial losses," says Sinha. "If the discom becomes defunct, other stakeholders in the system are bound to. Discoms are today collecting as little as 35 per cent of their bill (excluding the subsidies receivable from the state). It's no surprise they can't pay their suppliers and we are creating a sector that is unviable," adds Sardana.

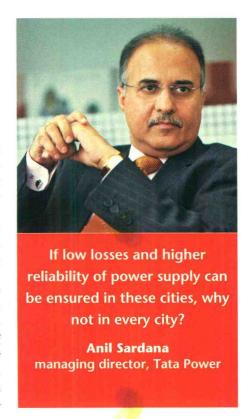
UDAY asks states to take over only 5 per cent of these losses of discoms from 2016-17 and increase this liability to a maximum of 50 per cent of losses in 2020-21. No wonder, many experts believe that what UDAY does, is merely kick the can of worms down the road for the next federal government to deal with, rather than putting discoms out of their misery once and for all. "UDAY fundamentally attacks financial problems at the lenders' level," says Chatterjee. "It also has good intentions for the operational improvement of the discoms."

So far, few federal governments have managed to see those intentions implemented in letter and spirit, because all these moves would be seen as unpopular and no one wants to give the Opposition a stick to beat them with at the hustings. "Good economics in some cases doesn't translate into good politics," says IMaCS's Rao.

PPPs ahead?

One way out of this mess is to privatise the distribution sector. "The regulator cannot regulate the government itself. But, if there is a private sector it can ensure customers get better services and tariffs," said Sardana. In effect, the state-owned discoms aren't held to account by anyone as they know that if they make a loss it will be backstopped by taxpayer money.

In addition to outright privatisation, there is the go-between franchisee model, where the state discom appoints a private enterprise to run



the business in a certain area for it and achieve efficiencies. Some experts suggest the government can earmark 10-15 cities/zones initially for private sector participation as franchisees/otherwise and once the awardees have successfully achieved results, they can expand their ambit of operations by another 50-100 km area contiguous to the city allotted to them.

Whatever be the model, one thing is clear; cities where private distributors are in charge of supplying power for e.g. Ahmedabad, Surat, Kolkata, Mumbai, Jamshedpur, etc, all have uninterrupted 24x7 power of a quality that is significantly better than the state average. "If low losses and higher reliability of power supply can be ensured in these cities, why not in every city?" asks Anil Sardana, managing director, Tata Power. "As a start, the government should look at privatising distribution in every city in India with a million plus population. Open up these 115 cities and allow people the freedom not to have to rely on DG sets."

Sardana points out that in Delhi, its arm North Delhi Power managed to reduce loses from 53 per cent of electricity supplied to 9 per cent in one decade. "The government of Delhi has saved ₹30,000 crore in savings on electricity losses since 2002. This is money that can be spent on providing social and physical infrastructure," says Sardana. Indeed, even in franchisee models like Bhiwandi in Maharashtra or Agra, the high level of AT&C, losses, as they are called, have come down and quality of power supply increased under private sector management. "It has taken 70 years for us to solve the discom issues and we are still waiting for sustainable solutions," adds Sardana.

Today, if the private sector has any hesitation in stepping into distribution, it's because there are doubts whether governments have the conviction to take tough decisions. "Transmission & distribution sector is more risky; so, the entrepreneur would have to ensure that the state doesn't interfere in the process of the regulatory tariff fixation," says Mukherjee.

"If distribution is in the hands of private enterprise, governments can whip firms lagging in areas into shape but if they are in the business then, the government can't whip itself," says Sardana. He advocates that, once the experiment with cities is successful, the government should even look at parcelling out distribution in rural areas with provision of viability gap funding to ensure Prime Minister Narendra Modi's vision of affordable and accessible 24x7 power for all is realised.

UDAY thus needs vigorous monitoring as well as infusion of fresh ideas that can be simultaneously implemented to boost its goals. Given their commitments to fiscal goals and the Central Pay Commission-inspired domino effect of enhanced salary bills in the future, this is probably the last time that a massive clean-up of discom liabilities can be borne by the states. If discoms continue to be in the business of *not* making money, then there is going to be a huge intractable problem a couple of years down the line.