# The Discom Dilemma in India

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With the state discoms' mounting debts, how will the power industry solve this issue? The government intervention and new directives to states, alternative energy and a host of solutions are being suggested by the Planning Commission committee reports and other private reports.

magine a scenario where you keep facing power cuts for hours and days together. This has been the case for most states of India. With the power distribution companies (discoms) under heavy debt and losses, the Indian power industry is facing severe crisis, the brunt of which is borne by the commoners. The sector is already in deep trouble with severe coal scarcity. To add to the woes, the mounting debts are an added problem.

Delhi's two discoms, BSES Rajdhani and BSES Yamuna had to pay around Rs 335 crore. UP discom had dues of about Rs 400 crore whereas dues from Rajasthan discom were Rs 100 crore. The debts of Bihar reached to Rs 50 crore. Data as of June 2012.

The debts forced the power producers to control the supply at an already difficult situation when the state had electricity issues. Some of the discoms with severe problem included Delhi, Rajasthan and Uttar Pradesh. Some of the states even considered hiking the electricity charges to pay off their debt.

## What could have led to the debt spiral is the crucial question to be addressed?

Some claim that lower tariff realization and increasing aggregate technical and commercial losses are largely responsible for poor financial health of discoms.

According to estimates, the combined outstanding debt for discoms is Rs 2 lakh crore. To identify the problem and to offer appropriate solutions, the Planning Commission set up a committee called Shunglu panel.

The Planning Commission report stated that the cost of supplying electricity increased at a rate of 7.4 percent annually between 1998-99 and 2009-10. Also, in the same time, the average tariff also increased at an annual rate of 7.1 percent. However, the report shows that the average tariff per unit of electricity has consistently been much lower than average cost of supply per unit. Between 2007-08 and 2011-12, the gap between average cost and average tariff per unit of electricity was between 20 and 30 percent of costs.

At present there is a combined consumer base of 200 million people in the country distribution segment altogether, with 400 GW of load approximately, 73 distribution utilities, 17 private companies, 40 corporate discoms, and 3 state electricity boards (SEBs).

State discoms have been losing money due to higher costs than revenues, as well as high transmission and distribution (T&D) losses. The commercial losses for discoms in India (after including subsidies) increased from Rs 16,666 crore in 2007-08 to Rs 37,836 crore in 2011-12.

## **Problems and Solutions**

There has been a clear lack of credible information. Lack of proper consumer database is the biggest obstacle for the

discoms with respect to proper billing and collection of revenues. There is a need for implementation of comprehensive IT interface system with this issue. Also, lack of proper information turned out to be a hindrance to estimating losses.

To mitigate this problem, the government took up RAPDRP (Restructured Accelerated Power Distribution reform Program) to assess actual performance of discoms in terms of loss reduction.

According to reports, a debt restructuring plan was made for discoms in Uttar Pradesh, Punjab, Rajasthan, Haryana, Andhra Pradesh, Tamil Nadu and Madhya Pradesh. Half of the proposed amount would be issued as bonds by the discoms and backed by a state government as a guarantee. Reports say that banks and financial institutions would reschedule the remaining Rs 60,000 crore of debt, with a moratorium of three years on payment of the principal amount.

The major cause of the problem was a mismatch between tariff and cost of generating power.

Also reports stated that discoms of key states need to hike power tariffs at a CAGR (Compound Annual Growth Rate) of 13 to 58 percent in financial year 2013-2014.

The Shunglu Committee came up with the report to the Planning Commission. Some features of these policies are as follows:

• For the year 2009-10 alone, the finan-

Year	Unit Cost	Average Tariff per Unit	Gap between Cost and Tariff	Gap as % of Unit Cost
2007-08	4.04	3.06	0.98	24%
2008-09	4.6	3.26	1.34	29%
2009-10	4.76	3.33	1.43	30%
2010-11	4.84	3.57	1.27	26%
2011-12	4.87	3.8	1.07	22%

Source: "Annual Report 2011-12 on the Working of State Power Utilities and Electricity Departments", Planning Commission.

cial loss of all distribution companies was Rs.57,000 crore before subsidy and about Rs.27,000 crore after subsidy

- These losses were attributed to poor managerial and operational practices of distribution companies compounded by irrational tariffs fixed by regulators
- The Panel has recommended that the State Electricity Regulatory Commissions should be made independent financially and in their functioning. The report further suggested that the selection of Chairman and Members of Electricity Regulatory Commissions should be fine tuned and their functioning should be scrutinized by an expert group
- The Panel also suggested that in areas where losses are high, a loss surcharge should be imposed over and above the basic tariff
- Losses of discoms have been financed by commercial banks, for which the larger share of backing via guarantees have been provided by the state government. In such scenarios loans could be rescheduled subject to the agreeing of utilities and the state government.

On failure of meeting the rescheduled obligations, assets should be taken away by the bank and a Special Purpose Vehicle (SPV) should be set up for the purpose. The SPV should be owned by the Reserve Bank of India and shall have the powers to deal with the defaulting utilities/state governments.

Some other recommendations included introducing input based franchise models in about 255 more towns, the names of which are listed in the report. Further, there should be a cautious use of Section 108 of the Electricity Act, 2003 relating to issue of policy directions and proper energy accounting of all consumers.

Reports suggest that there is a strong need to stop political interference in working of discoms and the regulator. All the discoms should be equipped with energy efficient technology. Also, the government should finance in this than giving subsidy funds. Better infrastructure, equipments, automation, and services will also lead to huge reduction in losses.

According the Shunglu report, the unbundling and restructuring of the SEBs was done across the country after Electricity act 2003, but it was majorly done on



papers, but not in real. There is a need for proper segregation of generation, transmission and distribution sectors for proper energy accounting and loss calculation. Apart from that, this will be the base for implementation on IT interface for moving the smart grids in the future ahead.

Apart from unbundling, the discoms need the focus on segregation in agriculture and rural feeders. Data reveals that estimated agricultural connected load in country is more than 66000MW, contributing to 19% of country connected load. This data can be used to estimate accurate agricultural and rural consumption in states and study the impact of losses. It will also help in understanding the consumption in the agricultural sector and help in devising subsidies for the respective state discoms.

The panel also recommended that the government should make way for attracting the private players in the distribution sector in different forms like multi licensing model, outsourcing, privatization and introducing franchisee models.

The best example of implementation of privatization model was in Orissa and New Delhi. This can be replicated in other states of the country.

Other than privatization model, franchisee model of PPP has seen huge success in Bhiwandi. These are being replicated in cities of Agra, Kanpur, Nagpur and Aurangabad.

Distribution franchisee model at present seem to be the way forward in PPP model and government must encourage more players to be involved.

Several schemes such as RAPDRP, on proper implementations will definitely help in solving the problem.

The PPP model is yet to be tested. However, the government is planning to push this model as an option. Under the PPP model, though the ownership of assets will remain with discoms, private players may get responsibilities like collection of bills, operation and network maintenance.

To mitigate the problem now, some states including Uttar Pradesh, Rajasthan, Tamil Nadu, and Madhya Pradesh have approached the centre for a bailout packages. The Centre has directed the states to prepare action plans to eliminate the gap between the average cost of electricity supply and average tariff realization. The states were also asked to implement mandatory open access for consumers with more than 1 MW load.

#### Can Wind be the Solution?

With this problem becoming rampant, Rajasthan looked at wind power as an alternative to deal with the situation. For instance, the Jodhpur discom used wind power when the Northern and Eastern power grid failure happened.

It provided almost 800-900 MW power. Wind power was used to resume power supply at hospitals, water pumps, railways, high court and administrative offices. This leaves us with a question. Will alternative energy help in the discom failure scenario? What steps need to be taken for promoting backup energy plan with discoms not functioning efficiently and till they are not back in track?

A report states that "Crisis in the power sector is reaching a tipping point with distribution companies' losses, as a percentage of the nominal GDP, likely to reach 1.2 percent by March 2014, if reforms are not implemented".

This calls for immediate action and solutions.

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