

Effect of Reforms in Distribution Sector in Indian Power Scenario

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ABSTRACT

India, one of the largest Power producer in the world with an installed capacity of 237 GW is facing a lot of issues in the Transmission and Distribution sectors. If we look across the distribution scenario of the country, about 95% of the power is distributed through state owned Electricity Boards (SEB's). With the reforms of privatization in 1991, the entry to private partners in the sector is encouraged. Even though the Electricity Act 2003 gave a provision to the competition in the market, the sector lacks the competition due to the poor performance of DISCOMS in the form of high ATC losses and thereby they are in huge debts. In order to energise the health position of the DISCOMS, govt has come up with the reforms "Debt Restructuring" and "Separation of distribution and retail supply business".

Due to these reforms the distribution utilities in the country will have a greater relief but they need to find out paths for the enhancement of the revenue generation in their area by adopting latest technologies of smart metering so that same situation won't arise again. The objective of this paper is to analyse the financial situation of many DISCOMS in the country and the effect of the above reforms on their financial health in the upcoming years and their expected growth and suggest a solution that the utilities can adopt from the reforms from the Govt of India.

1. INTRODUCTION

Power is a basic infrastructure and backbone for the country's economic growth and the per capita consumption of electricity in any country justifies it. India being the 5th largest producers of electricity in the world is unable to generate revenues that support and boost the generation sector to get the investments. We have many acts and policies supporting to the sector especially "The Electricity Act 2003" which is crucial in promoting the competition in the sector. After liberalization in the 1991 many private players have contributed to the industry but the growth is being low due to many reasons and the primary reason being the problems in the Distribution system.

This paper deals with the need for the distribution reforms and also the effects of the same on the power sector in the nearby future.

2. INDIAN POWER SCENARIO

India having a generation capacity of 2,37,742.94 MW and a transmission capacity of 1,05,343 ckt kms as on February 2014. The Power and demand deficit recently was only 3.3% which is the lowest recorded in this financial year. Even though the situation seems quite satisfactory as the Demand Supply mismatch being low to just 3% rather than 8-9% last year, the generating companies are unable to get their return on Investment back due to the lack of revenue collection from the state DISCOMS who are the primary procurers of the electricity.

As per recent reports the per capita consumption of electricity in India reached 917.18 KWh and the coal consumption is 454.5 Million Tons per annum which are still to be improved in the due course of time for the overall development of the country. The average debts of the distribution companies in the present scenario is around 2,46,000 crore.

3. NEED FOR REFORMS

In the Indian context the revenue from the distribution is badly effected due to the high ATC (Aggregate Technical and Commercial Losses) which constitute around about 25-27 % at National Level. The Transmission and Distribution losses (Technical losses) are the losses which occur due to the line losses in the power transfer have come down to around 20-22% in the country. There is a huge need to reduce these losses as the numbers are quite high. The commercial losses include the theft of electricity and non-metered electrical connections in any areas in the country. Because of these high losses in the country the Distribution companies are unable to generate the revenue for the actual energy they supplied. The other reason which influenced the revenue generation of the Distribution companies is the tariff that is being set by the Regulatory commissions which is quite low when compared with the generating cost.

Year	Unit Cost	Average Tariff	Gap between Cost and Tariff	Gap as % 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

The above table represents the costs of generation and the actual cost realized from the consumers along with the % gap between both.

Govt of India have come up with many reforms in the country to counteract the situations by introducing the following schemes:

- APDRP (Accelerated Power Development and Reform Program) Feb 2001
- RAPDRP (Restructured Accelerated Power Development and Reform Program) July 2008
- Debt Restructuring Plan for the Distribution Utilities Dec 2013
- Separation of Supply and Wire business – Proposal

The above schemes in the distribution sector will help the utilities in improving their health position and thereby improving their overall performance on a long run.

4. REFORMS ON THE INDIAN POWER SECTOR

The two recent themes are the hot topics at the moment for the distribution utilities which are described hereunder:

5. DEBT RESTRUCTURING PLAN

Under this scheme the state DISCOMS are given an opportunity to improve their financial health as they are involved in the accumulated debts of around 2.4 lakh crore. The Plan also threw light on the increase in the tariff rates by decreasing the gap between the actual generation cost of power and the revenue realized per unit. With rising fuel charges and stagnant rates, the gap rose to Rs 1.45 a unit (kilowatt per hour) in 2009-10 from 76 paisa in 1998-99.

This plan is structured in such a way that 50% of the short term liabilities are taken up by State government. This shall be first converted into bonds to be issued by Discoms to participating lenders, backed by a state government guarantee. State governments will take over the liability during the next two to five years by issuing special securities in favour of participating lenders in a phased manner; keeping in view the fiscal space available till the entire loan (50% of STL) is taken over by state governments. The balance 50% of STL will be rescheduled by lenders and serviced by Discoms with a principal moratorium of three years. Repayment of principal and interest would be fully secured by a state government guarantee.

The following table represents the allocation of funds to six states under this scheme by the government:

Phasing plan for state government securities for 50% STIs of Discoms (INR Crore)						
State	50% of STIs	FY'13	FY'14	FY'15	FY'16	FY'17
Andhra Pradesh	3,151	2,211	940			
Haryana	7,859	2,518	2,469	2,845		
Madhya Pradesh	585	72	513			
Punjab	5,823	881	1,004	1,145	1,305	1,488
Rajasthan	19,855	2,649	3,496	3,986	4,544	5,180
Tamil Nadu	9,573	884	2,526	2,880	3,283	
Uttar Pradesh	12,967	1,919	2,245	2,559	2,918	3,326
Total	59,813	11,134	13,220	12,415	12,050	9,994

Out of these proposals by the GOI four states Jharkhand, Bihar and Andhra Pradesh and Tamilnadu were offered with this package for restructuring.

6. EFFECTS OF THE REFORM

- The utility will get a temporary relief of the huge debts and will improve the financial health of the DISCOMS.
- It will help in reducing the DISCOMS overall losses in the form of interests to be paid
- It would help them to make more PPA's with the generation companies and thereby improve the supply profile to the customer resulting in increase in their revenues.
- Overall with this govt initiative will help DISCOMS to get back their previous state of financial status and can supply electricity to consumers with increased reliability

7. SEPARATION OF WIRE AND SUPPLY BUSINESS:

This is a new proposal that recently came into picture from GOI for the distribution companies to improve the competition among them and invite private participation. In this context, multiple licensees are issued for distribution of electricity in an area and thereby increasing the competition which leads to the reduction in the tariff of the electricity to the end consumers. In order to implement this several amendments are to be made to the electricity act 2003, and National Tariff Policy

In this concept the Wire i.e. the distribution line will be maintained by one entity basically the state electricity board in the respective states and the licensees are issued to use carry the content through the carriage so that the licensees will pay substantial charges to the SEB.

8. EFFECTS OF THE REFORM

- With the introduction of the multiple licensees in a particular area there will be heavy competition among the suppliers of the electricity there by the tariff of electricity decreases.
- The customers can chose the supply of their choice depending upon the reliability of the supplier
- The state DISCOMS can receive income from the suppliers in the form of charges for the usage of their supply lines
- The losses can be reduced as the licensees will try to maintain low losses to earn profits from their end and there by the target of reduction of ATC losses is achieved

So in view of these two reforms let's hope the Distribution Utilities in India will have a bright future ahead and the Power sector is going to cherish in future with endeavours.

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