

REFORMING INDIAN POWER SECTOR CHALLENGES AND WAY FORWARD FOR ATTRACTING PRIVATE INVESTORS

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ABSTRACT

The Indian Power Sector is passing through transition for achieving high growth targets in terms of Capacity Addition; AT & C loss reduction, Policy and Regulatory improvements. At the same time it is facing challenges in terms of bottlenecks like constraints in fuel supply, land acquisition, fixing of cost plus tariffs, dealing with political interference in its day to day working, inability of Electricity Regulatory Commissions to address the issues without governmental pressures. This all is there inspite of the liberalization and reform measures which got initiated since 1991 and further liberalized through enactment of Electricity Act 2003. The high AT & C losses have left the Distribution Utilities resource strapped. This in-turn has introduced a vicious circle wherein the Distribution Utilities are neither able to purchase power to meet the demand nor are in a position to invest in network upgradation and expansion. The cumulative losses of Distribution Utilities are mounting Year-on-Year and are now Rs 928,450 mn by 2011-12. This paper has gone into the root-cause of these failures and finds bottlenecks in policies and regulations besides corruption as one of the main issue seriously affecting the sector. All these factors are adversely affecting much desired private investment in this sector.

Keyword: Investment, Power Sector Reforms, Policy, Regulations

I INTRODUCTION

Indian Power Sector has grown from installed capacity of 1362 MW in 1947 to 232164.94 MW by the end of Nov. 2013 (CEA, 2013). The yearly average capacity addition per year comes to meager 3497 MW since independence. The review of capacity addition targets and achievement from the first five year plan to the eleventh five year plans shows repeated failures in achieving the targets due to challenges like fund availability, fuel linkages, land acquisition, environmental clearances, poor management practices of erstwhile State Electricity Boards, delivery schedule for the equipments, inadequately trained manpower. According to industry experts, the total demand for electricity will be above 9,50,000 MW by 2030 (GOI, 2012). An analysis of the current power sector status scenario shows that still the issues remains more or less the same thereby questioning the policies and regulatory framework besides implementation of the same in letter and spirit.

II PLAN WISE GROWTH IN INSTALLED GENERATION CAPACITY

An analysis of different five year plan capacity targets slippages identifies the factors as delay in the placement of orders for main plant equipment, delay and non-sequential supply of material for main plant and Balance of Plant, slow progress of civil works, contractual disputes between project developer and contractor and their sub-vendors / sub-contractors, poor geology, delay in land acquisition, environmental concern, shortage of manpower, law and order problems and difficult climate conditions.

Five Year Plan	Target (MW)	Achievement (MW)
1 st (1951-56)	1300	1100
2 nd (1956-61)	3500	2250
3 rd (1961-66)	1040	4520
4 th (1969-74)	9264	4519
5 th (1974-79)	12499	10202
6 th (1980-85)	19666	14226
7 th (1985-90)	22245	21401
8 th (1992-97)	30533	16423
9 th (1997-02)	40245	19015
10 th (2002-07)	41110	21130
11 th (2007-12)	78000	54964

Fuel availability has emerged as the biggest risk faced by Thermal Power Projects in India. Coal production has not kept pace with Power capacity addition in the current Plan and developers have been forced to import coal at a time when international coal prices have shot up. Lack of clarity on financing this extra cost as well as added transport costs for plants in the interior have led to uncertainty and reduced investments in Power.

Environmental Clearance and Natural Calamities-Environmental and forest clearances are critical statutory permissions to be obtained before implementing coal projects. The other reasons for the shortfall in production in the Eleventh Plan relate to land acquisition and related R&R issues as well as law and order problems. India always remained prone to Natural Disaster. Most of the states suffer from floods and drought every year. This is also one of the reasons for delay. Environmental issues have become a great concern with the Globalization of the Power Sector.

III ATTRACTING PRIVATE INVESTMENT (GOI, 2013)

As per Planning Commission, the capacity addition of 88,537 MW has been planned from conventional sources for the 12th Five Year Plan on an all India basis. With this capacity addition, the projected demand for the power is likely to be fully met by the terminal year of the 12th Plan (2016-17). This involves an investment of an amount of Rs. 15016660 mn (at current price level) for Electricity Generation from conventional sources. This level of investment is not possible without the active participation of the private investors. There is a need to create an enabling environment for attracting the private investors. Normally privatization is resorted to by different economies for different reasons such as resource mobilisation, introducing efficiency by promoting competition and for achieving commercial orientation (**V.Ranganathan, 1996**). The following are the various factors adversely affecting the private investors:

3.1 Labour Issues

A commonly heard complaint from domestic as well as foreign investors is that labour markets are unduly rigid (**Ahulwalia, 1994**). Indian labour laws provide a high degree of protection to labour with retrenchment of labour and closure of an unviable unit requiring prior permission of the State Government for units employing more than 100 workers. Such permission is not always granted and this leads to the complaint that Indian firms lack the flexibility they need to adapt to changed economic circumstances. Spokesmen of domestic industry, and also foreign investors, make the point that firms must have the ability to retrench labour and to close down unviable units if necessary or else they will not be able to compete effectively with the rest of the world in a more open economy. This flexibility is also relevant if old firms, with a hangover of excess labour, have to compete with new firms without this burden.

3.2 Corruption

Corruption lowers private investment, thereby reducing economic growth, even in subsamples of countries in which bureaucratic regulations are very cumbersome (**Mauro, 1995**). The negative association between corruption and investment, as well as growth is significant both in a statistical and in an economic sense. Countries with low credibility, high corruption and political instability have lower overall investment rates (**Weder, 1999**).

3.3 Public Control

Since 1991, the power sector in India has been undergoing a series of changes which typically consist of three components: (1) unbundling and privatization of state-owned integrated utilities, (2) creation of independent regulatory commissions with wide-ranging powers and (3) move towards bulk competition (**Shantanu Dixit, 2001**). A heated debate is going on about the pros and cons of reforms as well as the extent of feasible or desirable privatisation and competition. Our analysis suggests that the root cause of the power sector crisis is the lack of public control over the three critical governing processes in the sector, viz., policy and decision making, execution of the decisions made and regulation of this execution. This lack of public control arises from inadequacy and breakdown of mechanisms for ensuring transparency, accountability and public participation (TAP). This result in irrational decisions and lax implementation and regulation, leading to grotesque inefficiencies such as large

transmission and distribution losses (including theft of power), unsustainable burden of high-cost independent power producers (IPPs) and highly-skewed tariff structure. Unfortunately, this fundamental malady- lack of public control - underlying the power sector crisis continues to remain neglected. Regulators have to be accountable to public opinion (S.L.Rao, 2004).

3.4 Distribution Losses

A high level panel on Financial Position of Distribution Utilities constituted by the Planning Commission in July 2010 under the chairmanship of Mr. V.K.Shunglu former Auditor General of India has submitted its report in December 2011 and has stated that Electricity Act 2003 was enacted envisaging separation of generation transmission & distribution but it remained only in form and not in substance (GOI, 2013). The ownership, the maintenance, the financial well being and the cash flow in particular are so inherited that it cannot be said that there is separation in any real sense of the word across all states. The inefficiencies of generation and transmission are passed on at cost plus basis to the distribution companies which have no choice but to procure power from state generating companies through transmission line for the purpose of distribution. The open access in the broadest sense remains a dead word. There is a growing recognition that the right end of privatisation in the electricity sector is the distribution side of the industry (Shahi, 2005).

3.5 Lack of FDI Flow

Total FDI inflows from all countries for the period April 2000 to July 2013 is US \$ 200,457 million out of which the share of Power Sector is US \$ 8,043 million i.e. 4 % against 19% for Service Sector, 11% for Real Estate Sector, 6% for Telecommunication,6% for Computer Hardware & Software and 4% for Automobile Industry. This shows less attractiveness of the Power Sector to private investors (GOI 2013).

IV STUDY OF THE EXISTING POLICIES

A survey was conducted targeting all types of stackholders of the Indian Power Sector to find out whether the existing policies and regulations governing the power sector inspire investor confidence with the following results:

Table 4.1 Corruption at various stages affects the confidence of Investors adversely

Valid	246
Missing	4
Mean	4.2358
Std. Deviation	.96959

Corruption at various stages of project sanctions, execution and implementation adversely affects confidence of investors. Corruption not only delays the various activities but also disturbs the mindset of the professionals involved in the work.

Table 4.2 Corruption at various stages affects the confidence of Investors adversely

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	6	2.4	2.4	2.4
	Disagree	12	4.8	4.9	7.3
	Can't say	21	8.4	8.5	15.9
	Agree	86	34.4	35.0	50.8
	Strongly Agree	121	48.4	49.2	100.0
	Total	246	98.4	100.0	
Missing	System	4	1.6		
Total		250	100.0		

Corruption at various stages affects the confidence of Investors adversely

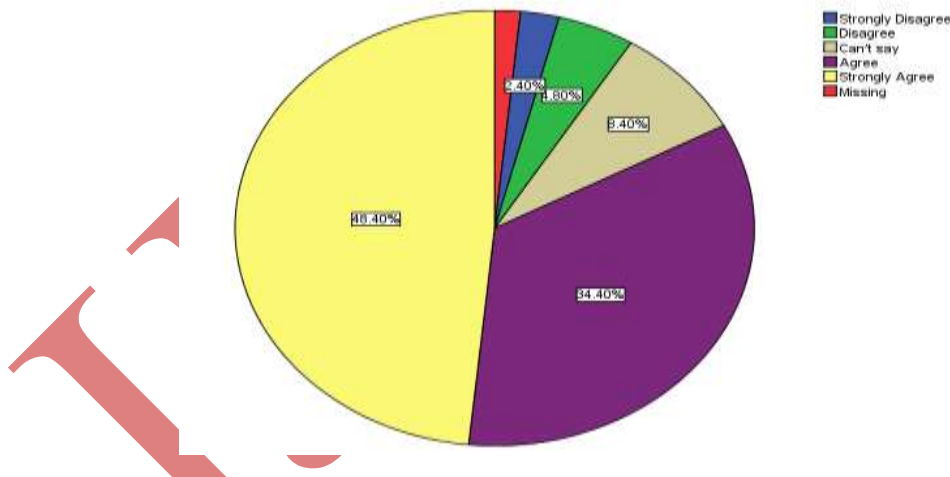


Table 4.3 Statistics

Existing policies for setting up Thermal Power Plant inspire investors' confidence

Valid	249
Missing	1
Mean	2.6747
Std. Deviation	1.07885

Table 4.4 Existing policies for setting up Thermal Power Plant inspire investors' confidence

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	37	14.8	14.9	14.9
Disagree	78	31.2	31.3	46.2
Can't say	72	28.8	28.9	75.1
Agree	53	21.2	21.3	96.4
Strongly Agree	9	3.6	3.6	100.0
Total	249	99.6	100.0	
Missing System	1	.4		
Total	250	100.0		

46% respondents have agreed that existing policies do not inspire investors' confidence against 24.8 % supporting the existing policies. Therefore there is need to update the existing policies governing the electricity sector for 71.6 % respondents have agreed that electricity distribution sector performance is required to be improved for attracting the investors. High Aggregate Technical and Commercial losses causes' revenue loss to the distribution companies resulting in their inabilities to pay their dues to generating companies. This undermines the investors' confidence. Electricity Distribution companies in states owe Rs 2 Trillion to banks and other financial institutions. Financial restructuring is being done now on Govt. initiatives. Distribution losses are still in the range of 27% on all India basis in spite of Govt. efforts from the last 10 years to bring it down to 15%.

Existing policies for setting up Thermal Power Plant inspire investors' confidence

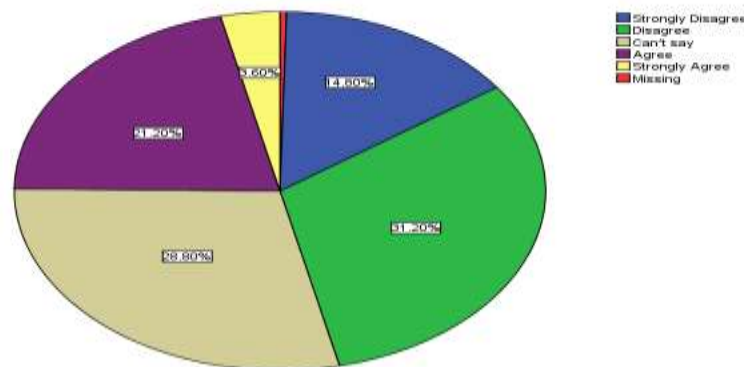


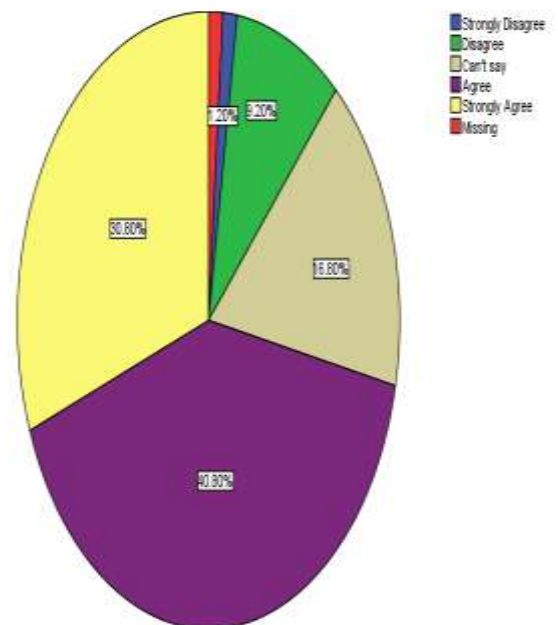
Table 4.5 Statistics Commercial viability of Indian Electricity Distribution sector is deterrent to private investors due to high AT& C losses

N	Valid	247
	Missing	3
	Mean	3.9190
	Std. Deviation	.98025

Table 4.6 Commercial viability of Indian Electricity Distribution sector is deterrent to private investors due to high AT& C losses

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	3	1.2	1.2	1.2
Disagree	23	9.2	9.3	10.5
Can't say	42	16.8	17.0	27.5
Agree	102	40.8	41.3	68.8
Strongly Agree	77	30.8	31.2	100.0
Total	247	98.8	100.0	
Missing System	3	1.2		
Total	250	100.0		

Commercial viability of Indian Electricity Distribution sector is deterrent to private investors due to high AT& C losses



V CONCLUSIONS AND RECOMMENDATIONS

There is a need to update and revise existing policies and regulations governing the power sector so as to create enabling environment for attracting private investment in this sector. The policy bottlenecks have resulted in standstill position for many new thermal power projects in terms of land acquisition issues, delay in environment and forest clearances, developing allocated coal blocks to private utilities; Discoms payment securitization; tackling law and order issues in remote areas; poor transportation infrastructure;

assuring fuel supply linkages; revising Power Purchase Agreements in the event of unforeseen developments; pricing of coal, oil and gas; implementation of open access in letter and spirit.

Further Power Sector reforms in any country depend upon the political will. In the era of coalition govt. at centre there is always an issue of political consensus among different political parties over the issue of policies regarding FDI, Allocation of coal blocks, Issues regarding concession in taxes and incentives. It is imperative that holistic review of the ongoing reform process is undertaken to make it effective and put the same on fast track by inducing soul into this.

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