



Department of Industrial and Management Engineering
Indian Institute of Technology Kanpur



Forum of Regulators

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TARIFF REVISION AND TARIFF ADEQUACY

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CERC

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Distribution Sector Scenario

Average Cost of Supply, Average Revenue Realized and Gap for utilities
selling power directly to consumers

	2006-07	2007-08	2008-09
Average Cost of Supply (ACS)	2.75	2.93	3.41
Average Revenue Realized (ARR) (on subsidy received basis)	2.49	2.65	2.91
Gap on subsidy received basis* (National average)	0.26	0.28	0.50
* Ranges from Rs 1.94 for AVVNL (Rajasthan) to Rs (-) 0.24 in Sikkim (Power Department)			

Gap= ACS- ARR

Source: PFC



Distribution Sector Scenario

Deficit as % of Sales (Excluding subsidies)

Year	No of Utilities	DEFICIT AS % OF SALES (Excluding subsidies)
2005-06	42	22.09
2006-07	34	25.11
2007-08	32	19.26
2008-09	24	32.48

- Tariff increase is only 6.95%, Whereas Cost of Power Purchase rise is 11.90% (From 2005-06 to 2008-09)
- Minimum tariff rise required to breakeven is 19.43% (2008-09 CONDITIONS), after the AT&C losses are brought to 15%.

Source: CAG OBSERVATIONS
(Report - ISSUES IMPACTING FINANCIAL PERFORMANCE OF POWER DISTRIBUTION UTILITIES IN INDIA)



Distribution Sector Scenario

% OF Grant/Subsidy to SALES (Exclusive of subsidy)

Year	No of Utilities	% OF GRANT/SUBSIDY TO SALES (Exclusive of subsidy)
2005-06	42	11.44
2006-07	34	11.50
2007-08	32	12.95
2008-09	24	16.30

Source: CAG OBSERVATIONS
(Report - ISSUES IMPACTING FINANCIAL PERFORMANCE OF POWER DISTRIBUTION UTILITIES IN INDIA)



Tariff Revision and Tariff Adequacy in States

Key Issues

- Increase in Revenue Gap due to
- Absence of tariff revision and
- SERCs try to avoid giving tariff shock to consumers
- Revenue gap is bridged through creation of Regulatory Assets/Subsidies/Tariff hike
- Delay in tariff filing or Non filing of tariff petition by Distribution licensee. A Few SERCs have issued suo-motu Tariff orders.
- Delay in issuance of Tariff orders due to delay in filing or delay in furnishing data by the licensee .
- True-up petitions are not being filed by utilities on account of non finalization of audited accounts for the year.
- Fuel Surcharge Adjustment: Select states have provided for FSA in regulations or in tariff orders. In most of the states the process of approval of such charges takes a long time and adjusted during the true up exercise



FOR- Financial Viability Study

- Objective- To carry out an estimate on the deviation of tariffs vis-à-vis cost of supply based on the various factors attributable to such deviation.
- States selected for the study- Haryana, Madhya Pradesh, Uttar Pradesh, Maharashtra, Punjab, Orissa, Rajasthan, West Bengal, Karnataka, Tamil nadu.

Findings of the study

- Tariffs have not been increasing vis-à-vis the increase witnessed in the cost of supply.
- Requirement of increase in tariff is primarily on account of increase in power purchase cost and certain inflationary impact on other input costs.
- Time lag in tariff change (including true-up exercise) is impacting the finances of the utility leading to higher working capital requirement and accumulation of financial losses that are required to be recovered through tariff increase.



FOR- Financial Viability Study

Findings of Financial Viability

Reason for Revenue Gap in states:

- Non revision of tariff in the states.
- Shortfall and delay in subsidy disbursements by the State Government.
- Regulatory Asset has been created by the SERC in an effort to bridge the gap in tariffs.
- Increase in short term loans.
- The actual loss levels of the DISCOMs are higher than the approved loss levels.
- Absence of True-up mechanism in the state.
- Disallowance of interest cost on short-term borrowings for meeting the revenue deficit of previous year and carrying cost for time lag involved in recovery of FSA and regulatory assets.



FOR- Financial Viability Study

Tariff increase required in various states for Break even

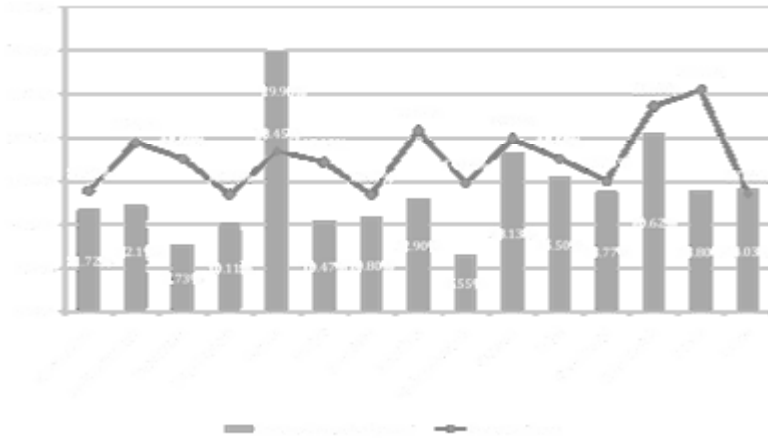
State	% gap in tariff vis-a-vis costs	Year
Haryana	10%	2009-10
Madhya Pradesh	16.44%	2007-08
Uttar Pradesh	29.%	2008-09
Rajasthan	37%	2007-08
Karnataka	22.37%	2008-09
Tamil Nadu	39.44%	2010-11

Source: FOR Study



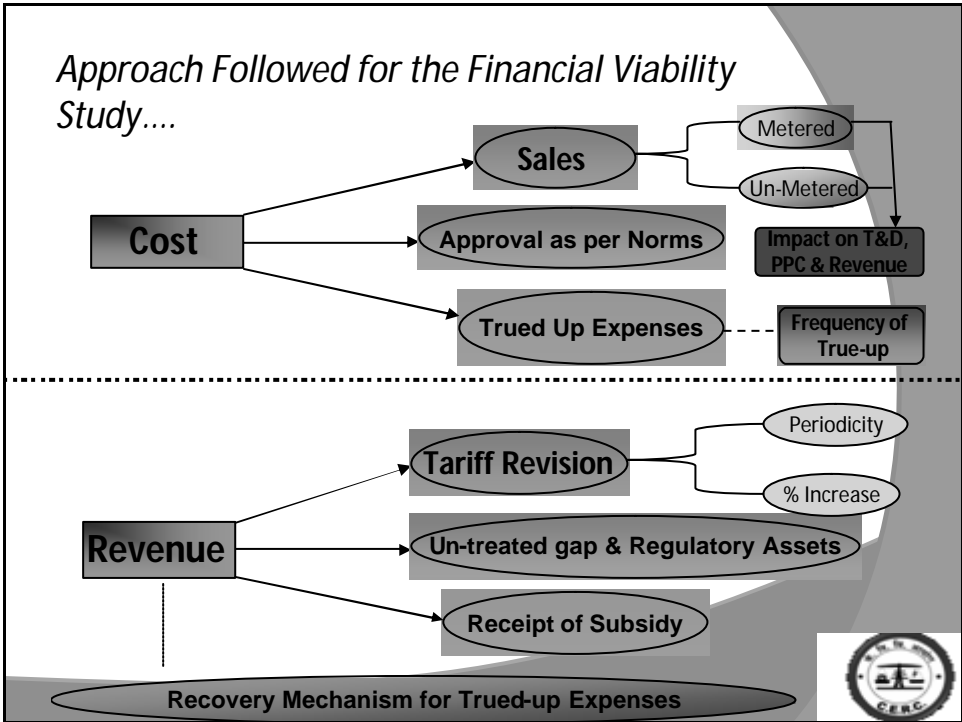
Distribution Sector Scenario

Power purchase cost vs Revenue from Sale of Power (CAGR between FY 2004-05 and FY 2008-09)



THANK YOU
THANK YOU





Tariff non-reflection of costs

Financial loss due to deviation between approved vs. actual

<p>MP</p> <ul style="list-style-type: none"> Reduction in sales impacting power purchase volume T&D losses deviation Non approval of employee costs and interest cost Loss of 1581 crore in 2008-09 	<p>Tamil Nadu</p> <ul style="list-style-type: none"> Based on the approved agriculture tariff, TNEB is receiving subsidy of 275 Cr p.a. as against actual requirement of Rs. 5600 Cr Demand has increased from 39Bn to 68Bn units against generation capacity addition of 230MW
<p>Rajasthan</p> <ul style="list-style-type: none"> Purchase of costlier power for meeting the demand-supply gap Revenue gap left untreated <ul style="list-style-type: none"> No tariff increase Lower recovery from most of the categories) Disallowance of interest on short-term loans No return on equity 	<p>Haryana</p> <ul style="list-style-type: none"> No specific methodology for revenue gap treatment <ul style="list-style-type: none"> Request for additional subsidy Further reduction in T&D loss Creation of regulatory asset Higher power purchase cost Higher O&M expense No return on equity