

Bhiwandi Franchisee Model, research study

By

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Before,

The Planning Commission,

September 29th 2009

Agenda

- Introduction
 - Objectives
 - Study methodology and process
 - Introduction to Bhiwandi circle & Franchisee Scheme
- Consumer Feedback
- Post-Franchisee Performance
- Review:
 - bidding process and contractual agreement
 - Invoice model
- Conclusions and recommendations

Objectives

- ❑ Assessment of the benefits in terms of performance improvement
- ❑ Consumer feedback
- ❑ Review of the contractual arrangement
- ❑ Assessment of the replicability of the model and recommendations, if any, for improvement

Study Methodology and process

- ❑ Methodology
 - ❑ Analysis of secondary data
 - ❑ Rapid field survey
 - ❑ Interactions with key stake-holders
- ❑ Study process
 - ❑ Draft findings shared with Key stake holders
 - ❑ Planning Commission – 13th Jan 2009
 - ❑ Unions – Feb 2009
 - ❑ MSEDCL – 30th March 2009
 - ❑ MERC – 17th April 2009
- ❑ Torrent, the franchisee in Bhiwandi did not participate in the study and did not share any data in spite of repeated requests

Introduction

Bhiwandi circle

- Input energy ~2500 MU
- Very high ATC losses (> 60%)
- Consumer mix: HT:LT ~ 30:70
 - Power loom constitutes more than 50% of LT mix
- Dilapidated n/w
 - Very high transformer failure rate
 - High incidence of accidents, frequent interruptions
 - Parallel, illegal dist n/w e.g. Tarapur line, Padghe line etc
 - Daily 7-8 hrs load shedding since last 8-10 years

Input based Franchisee Model

- Duties & Responsibilities of Licensee
 - Supply power at Input Points
 - Carry out the meter reading jointly with DF on a monthly basis at input point.
 - Carry out capital works as per its “Minimum Investment Plan”
- Duties & Responsibilities of Franchisee
 - Discharge all duties and responsibilities of the distribution licensee, such as:
 - Metering, billing and revenue collection
 - Repair and maintenance
 - Capital expenditure
 - Consumer service
 - Maintain Consumer and billing database, etc
 - Periodic reporting to MSEDCL as per DFA.
 - Timely payment to MSEDCL

Bhiwandi franchisee Process Overview

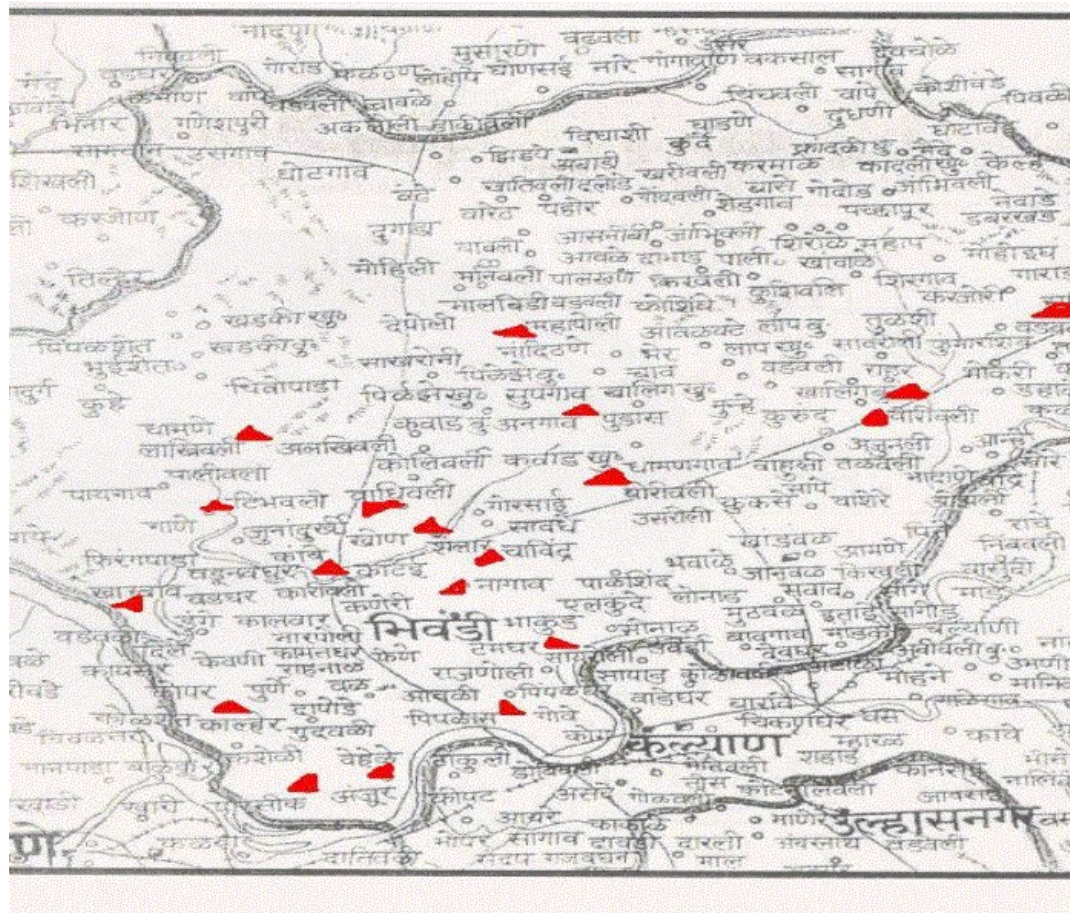
- Single stage bidding process
 - RFP published in March 2006
 - DFA signed in Dec 2006
 - Franchisee hand over to Torrent in Jan 2007
- Bidding based up on input rate
 - NPV of 10 year quoted input rate (@ 6.2 % disc. Rate)
- Quoted input rate expected to factor in loss reduction

Consumer Feedback



Survey Methodology

- Rapid Field Survey- knocking on the door



Consumer mix and Survey Environment

- Sample size – 204

	Circle (%)	Survey (%)
Residential	52	57
Power loom	30	24
Commercial	14	17
Others	4	1

Challenging and Difficult environment

- Highly politically sensitive and communal atmosphere
- High reluctance to talk on the subject and/or share bills

Issues covered

- ❑ New Connection
- ❑ Metering and billing
- ❑ Quality of supply and safety
- ❑ Quality of service
- ❑ Other issues

New Connection

	Yes	No	Don't know	NA
Getting new connection has become simpler?	46%	5%	34%	16%
New Connection for Disconnected Consumers?	23%	4%	55%	18%
Copies of regulations to New Consumers?	1%	46%	13%	40%

- Getting new connections has become simpler
- But even previously disconnected consumers are getting new connections (which is not allowed as per DFA unless arrears are recovered)

Metering and billing

Question Asked	Yes	No	NA
Is Meter working ?	88%	3%	9%
Is your meter being read regularly ?	75%	11%	14%
Do you receive Bill regularly ?	60%	30%	9%
Any complaint about meter	38%	52%	9%
Is there improvement in metering and billing ?	46%	37%	17%

- ➔ Major improvement in metering & billing, but large number of consumer complaints about
 - ➔ high bill
 - ➔ fast meter
 - ➔ Not receiving bills regularly

Quality of Supply and Safety

	Improved	Declined	No change	Don't know	NR
Voltage Quality	78%	16%	0%	1%	4%
Transformer Failure rate	90%	0%	5%	1%	3%
Technical Faults (line breakdown etc.)	87%	1%	8%	0%	3%
Electric Accidents	80%	4%	5%	10%	1%
Quality of Supply	76%	11%	0%	6%	7%

- ❑ Significant improvement in the supply network and supply quality
- ❑ Significant reduction in use of illegal connections and alternative electric equipments (change over switches, 110V bulbs, out of market!)

Other observations

- ❑ Atmosphere very charged and sensitive on electricity issues
- ❑ Around 80% consumers felt that paying tendency has increased (due to privatization, fear of disconnection and service improvement)
- ❑ 99 % respondents unaware about the Regulatory institutions, CGRF systems and regulations
- ❑ Inclination towards conserving electricity
 - Increase in CFL Penetration

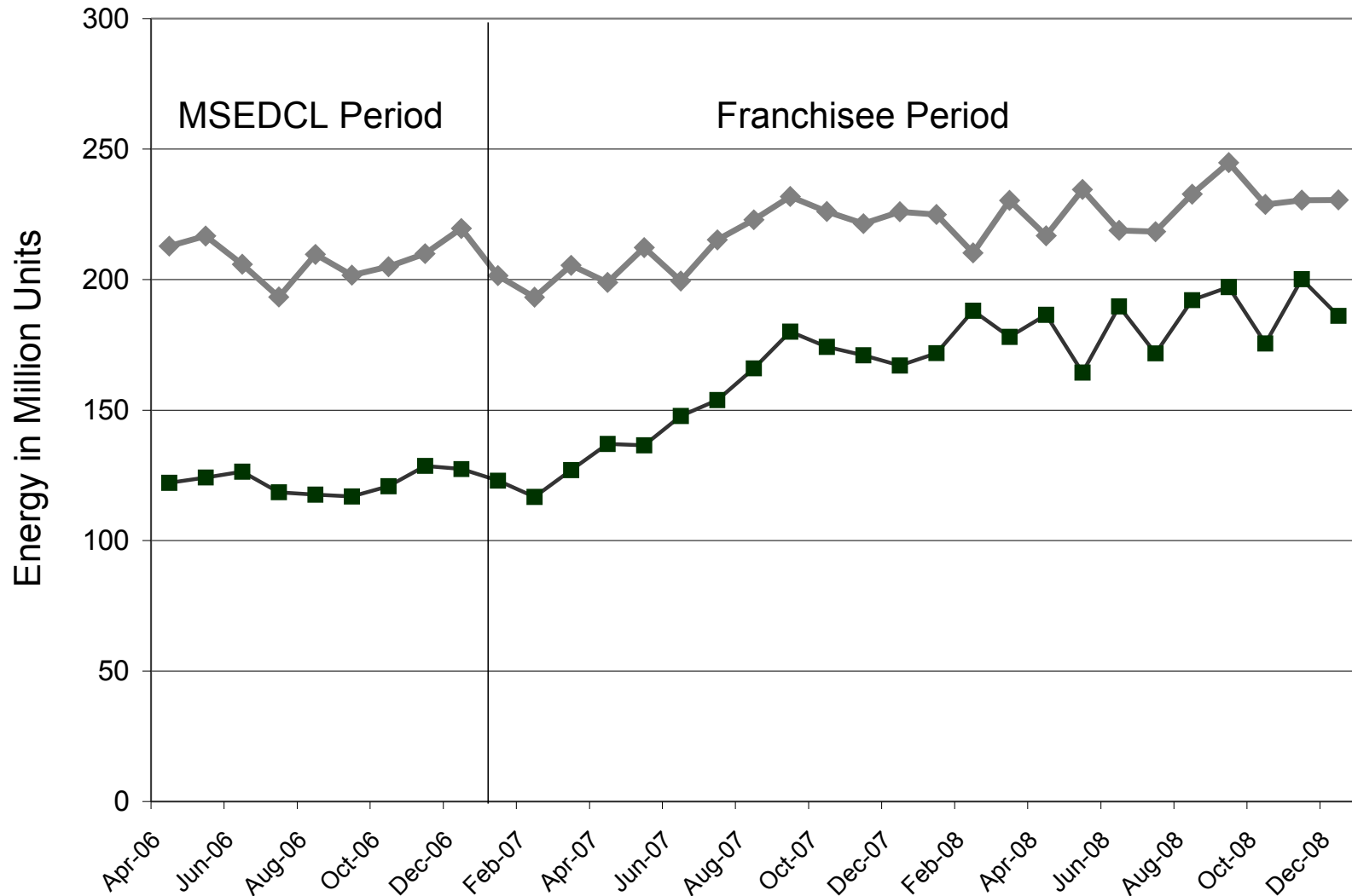
Overall Survey feedback

- ✓ Improvement in supply and service quality
- ✓ Reduction in theft and corruption
- ✓ Reduction in load shedding hours and interruptions
- ✓ Improvement in safety of public and network
- ❖ Lack of consumer confidence in the utility's metering and billing practices
- ❖ strong perception of high bills and fast running meters
- ❖ Majority consumers are very poor – electricity bill amount is significant for large population
- ❖ cost of good quality supply might not be affordable for many consumers

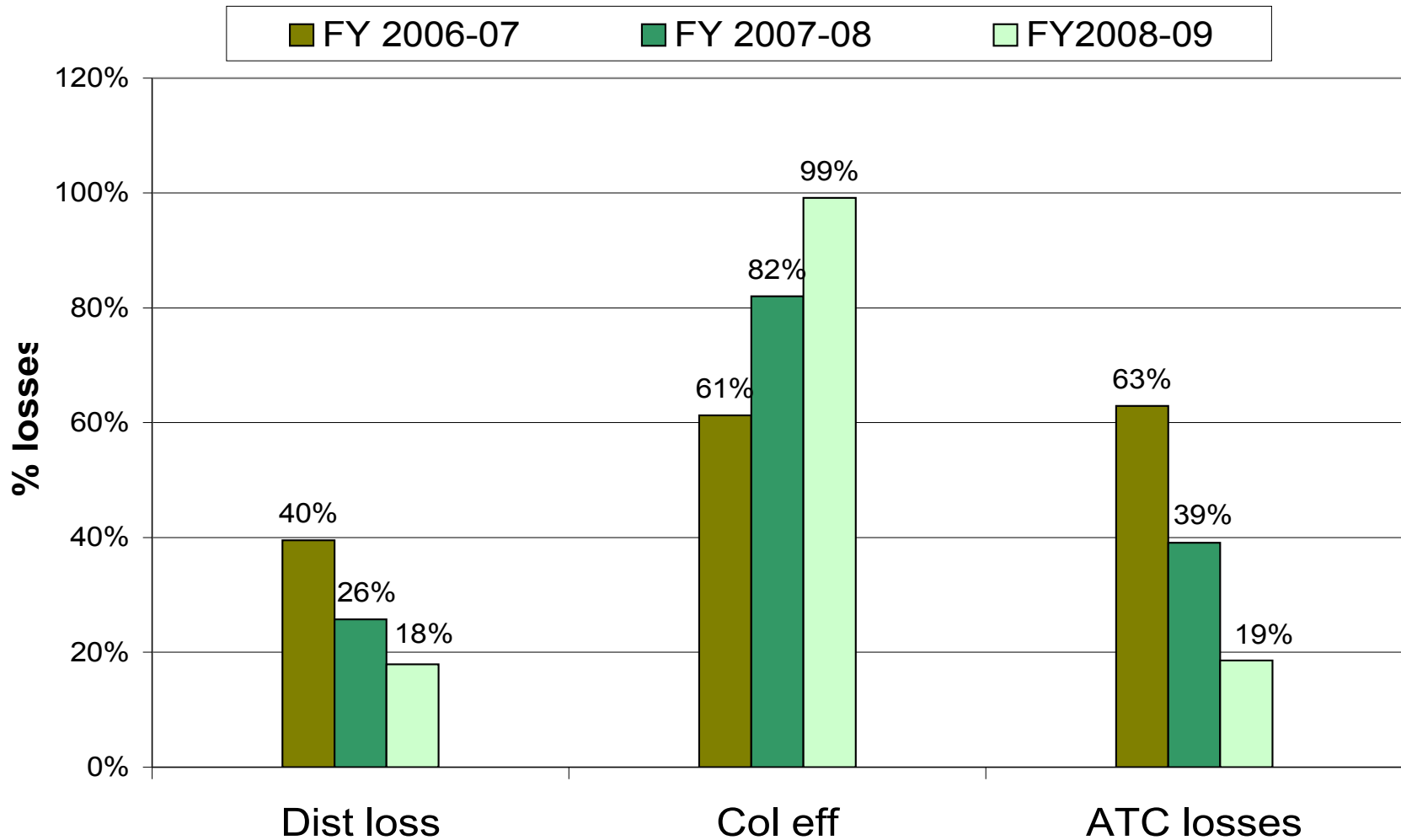
Post-Franchisee Performance



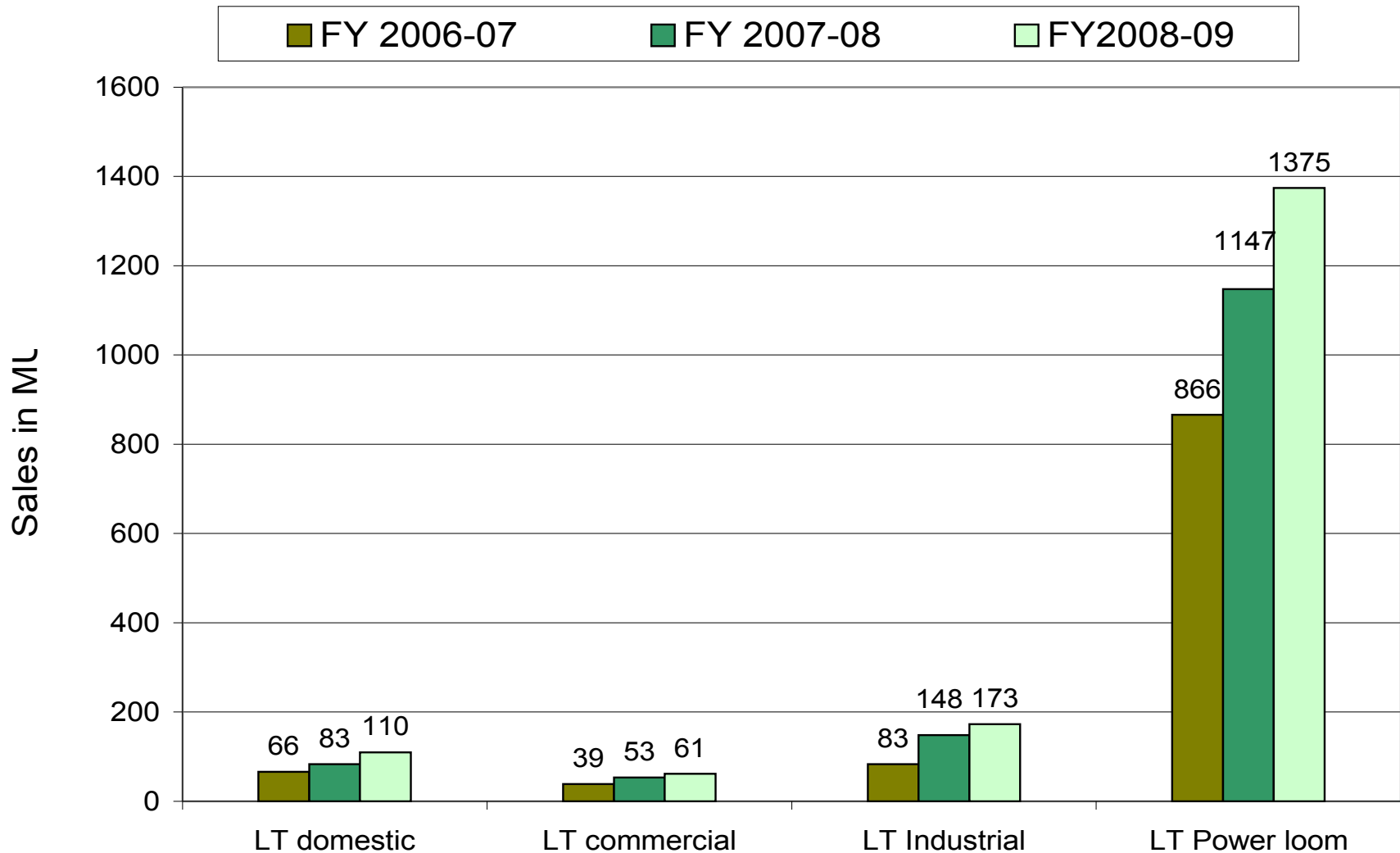
Changes in sales from April 06 to Dec 08



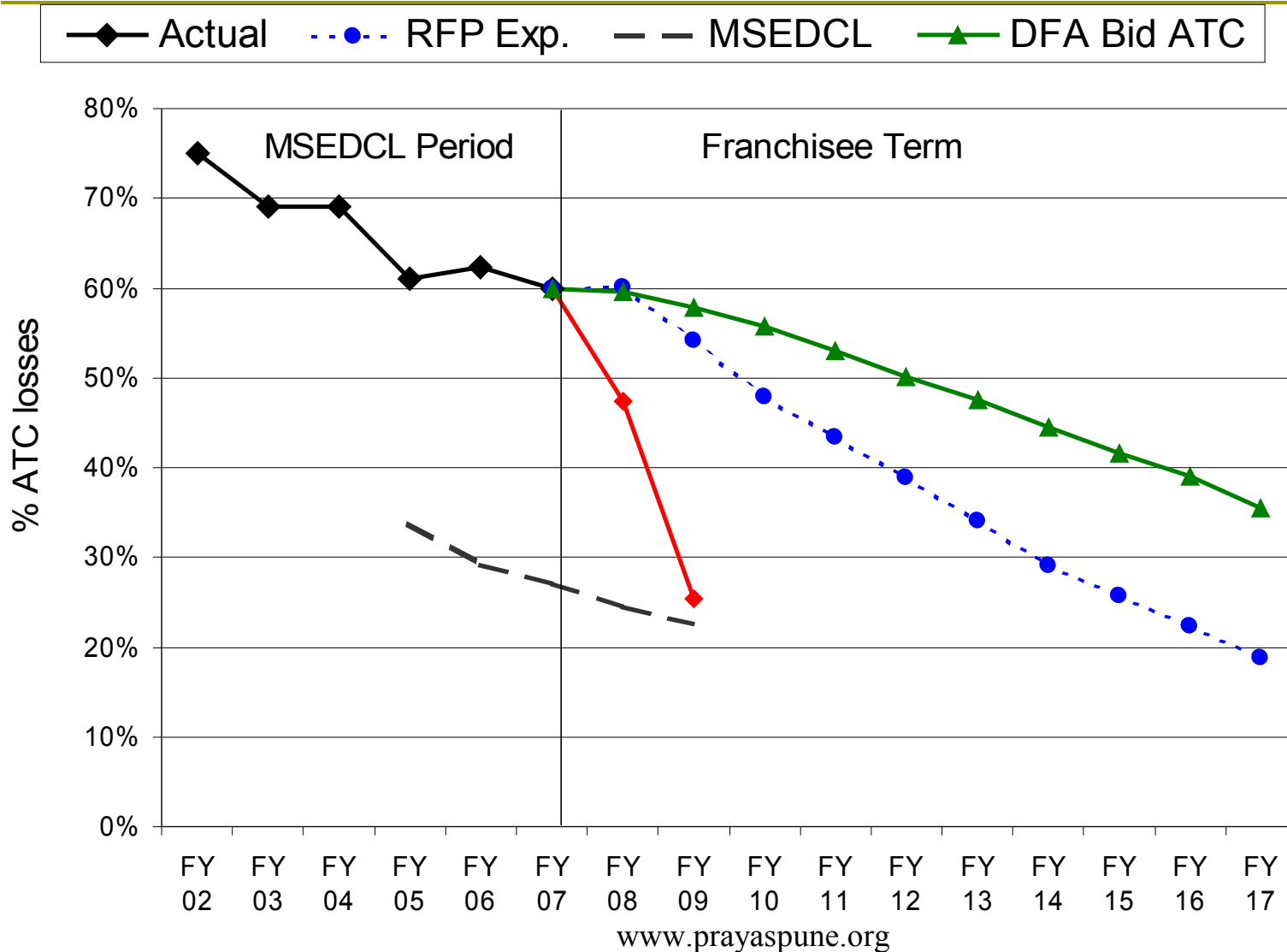
Dist loss, collection efficiency from FY 07, FY 08 and FY 09



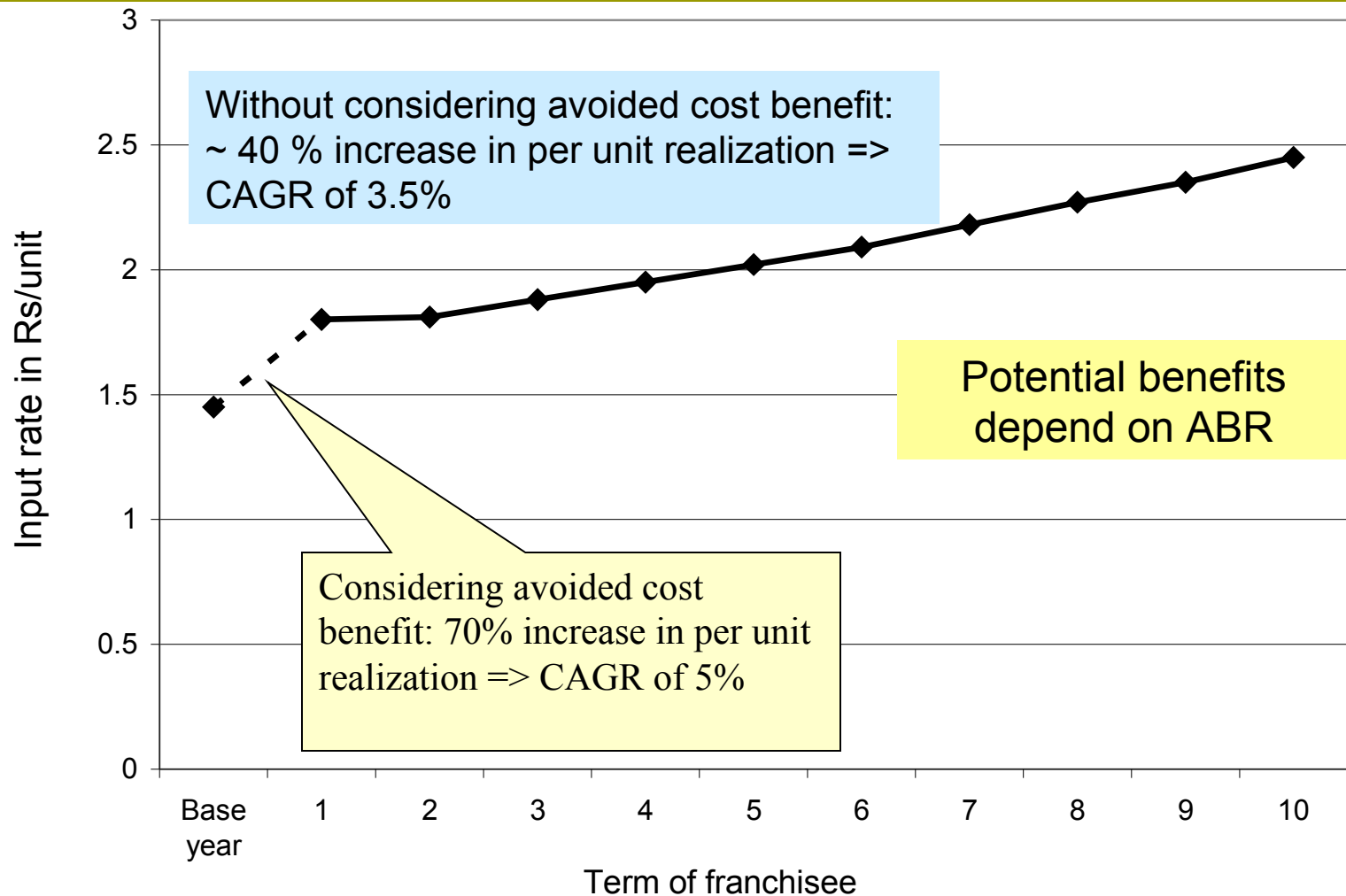
Category wise LT sales for FY 07, FY 08 and FY 09



ATC losses as bidding criteria and claimed performance by DF and MSEDCL (state level)



Potential MSEDCL Benefit considering avoided cost



Post franchisee performance

Revenue collection and sharing

Year	Subsidy	Collection	MSEDCL revenue	DF revenue
FY 06-07	233	272	505	NA
FY 07-08	236	414	490	160
FY 08-09	263	626	537	344

- ❑ MSEDCL revenue growth has been quiet moderate (1st yr 3% drop and 2nd yr. 7% rise)
- ❑ DF revenue doubled in two years
- ❑ Drop in avg. billing rate by 0.6 Rs./ unit, and avg. subsidy claim

Review of bidding process and contractual agreement



Bidding process Desirable features:

- ✓ Eligibility criteria – ensures organized, large operators
 - ▣ Stock exchange listed company
 - ▣ 500 employees / 2 lakh retail customers
- ✓ Clear bidding parameter (input rate)
- ✓ Aggressive ATC reduction trajectory as base line
- ✓ ATC reduction trajectory
 - Expected - 40 % points reduction in 10 Yrs.(60% – 20%)
 - Highest / accepted bid offered a range of 26 % to 34% point reduction in 10 years
- ▣ Requirement of audit by ‘big four’

Lacunae in bidding process ..1 - Bhiwandi

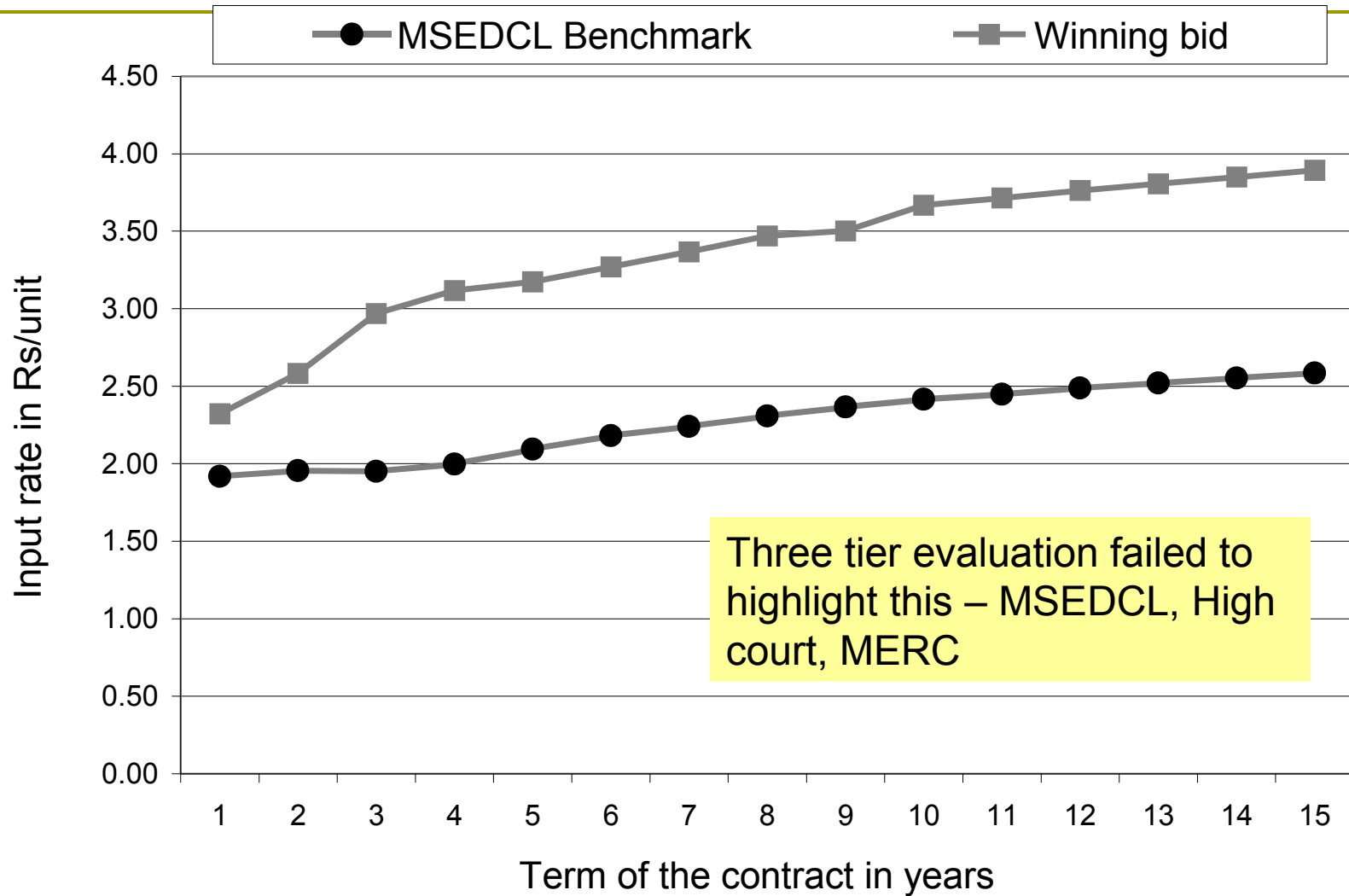
Non-transparent bidding process for Bhiwandi

- RFP published -March 2006,
- Letter of intent issued to TPL – June 2006 and
- DFA signed – December 2006

DFA Negotiated after selection of franchisee

- Some key provisions diluted without knowledge of all stake holders: examples
 - Profit / revenue sharing
 - Arrears recovery obligation

Lacunae in bidding process ..2 - Nagpur



Invoice model



DFA Payment structure

- DF payment to Licensee based on input energy
- Payment indexed to:
 - Fixed input rate as decided in the DFA
 - Tariff Indexing ratio = ABR_n / ABR_{base}
(ABR = Average billing rate)

Year	Annualized Input Rate (Rs per KWh)
1	1.8
2	1.81
3	1.88
4	1.95
5	2.02
6	2.09
7	2.18
8	2.27
9	2.35
10	2.45

MSEDCL Revenue broadly calculated as:

$$= (\text{I/p energy} * \text{Input rate (DFA)} * \text{ABR}_n / \text{ABR}_{base}) - \text{Subsidy}$$

Revenue Sensitive to:

- ABR_n
 - Subsidy
- } Analysis of metering & billing data

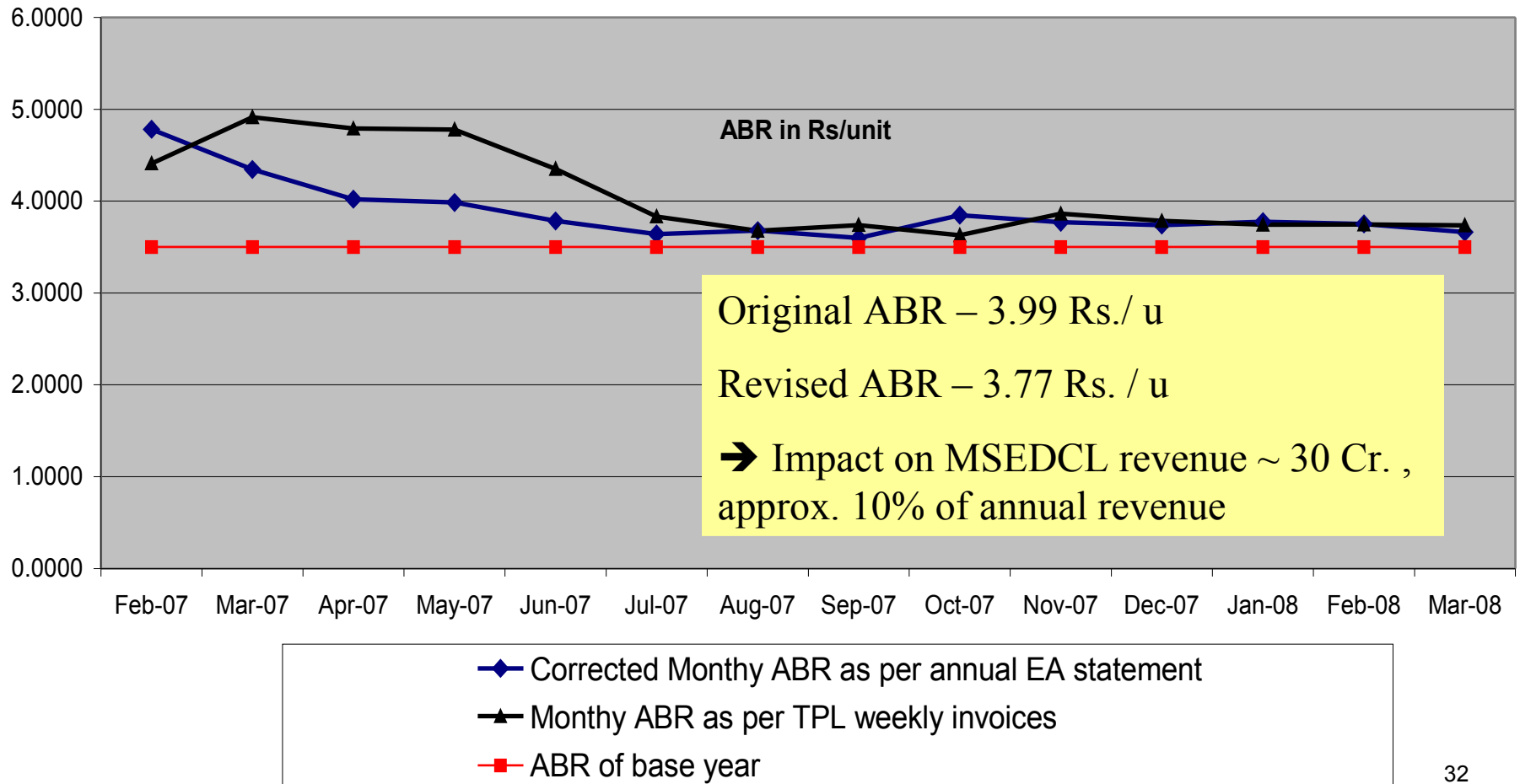
Impact of ABR on Revenue of DF and Licensee

Input Energy	Input Rate	ABR _n	ABR _{base}	Subsidy	Licensee's Revenue
100	1.8	3.95	3.5	40	163
100	1.8	3.75	3.5	40	153

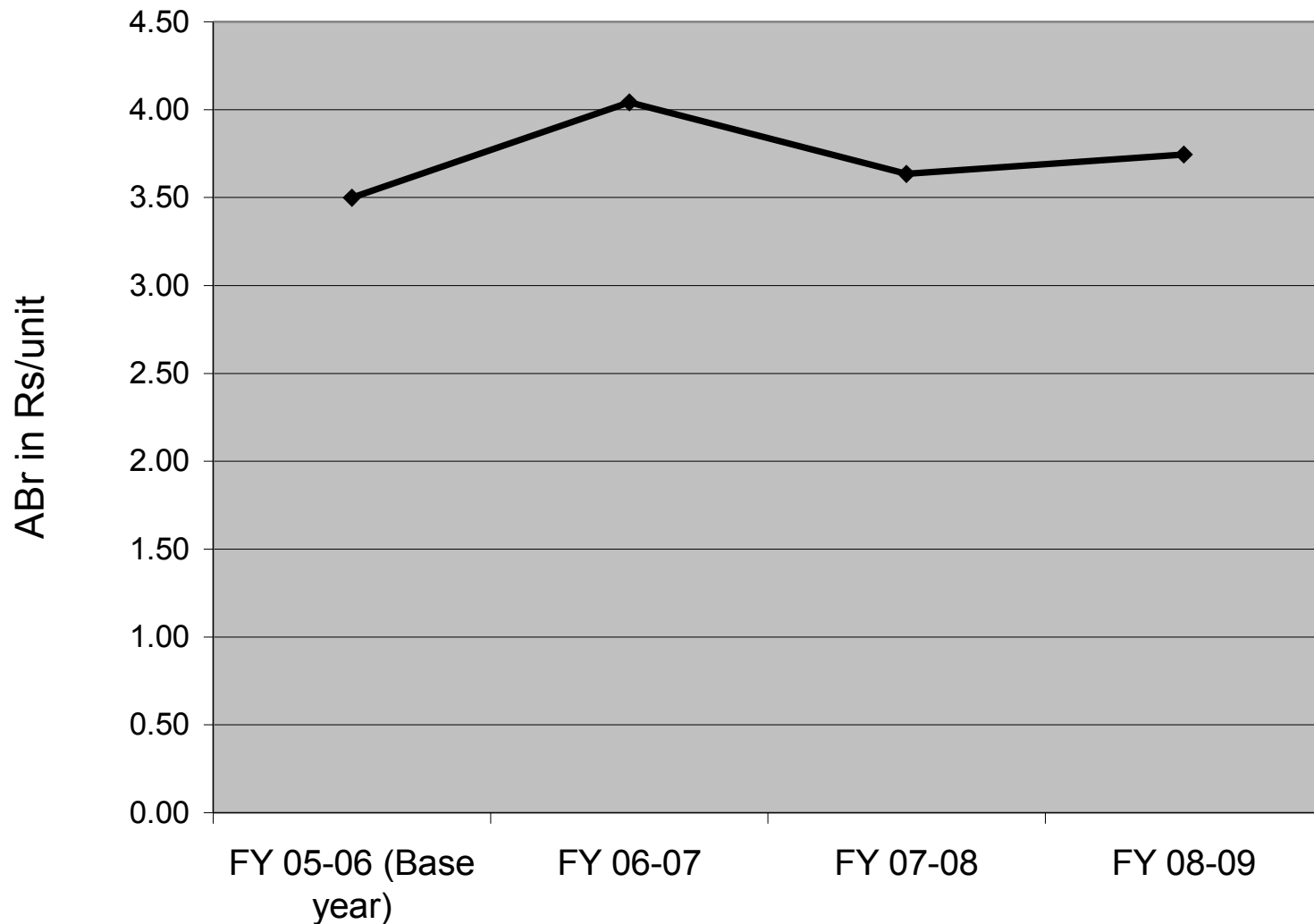
Impact of subsidy on Revenue of DF and Licensee

Parameter		Case 1	Case 2	Case 3
I/P energy in units		10	10	10
Billed units		8	8	8.5
Col Eff		0.78	0.78	0.78
MERC Tariff in Rs/unit		4	4	4
Con. Pay tariff in Rs/unit		2.5	2	2
Average Tariff Rs/unit		4	4	4
Avg Tariff for the base year Rs/unit		4	4	4
Tariff indexing Ration (TIR)		1	1	1
Annualized input rate		1.80	1.80	1.80
Subsidy claimed by Franchisee in Rs		12	16	17
MSEDCL revenue	From TPL	6	2	1
	From Govt	12	16	17
Total MSEDCL Rev		18	18	18
DF Revenue		9.6	10.48	12.26

Claimed changes in ABR – FY 2007 –08



Changes in Avg. Billing Rates



Status of various audit requirements as per DFA

Audit/Report title	Through	Frequency	Status
Base year ABR	Independent Auditor	Once	Not Complete
Audit of statement of subsidy claims	Independent Auditor	Quarterly	Even 1 st quarter audit is pending
Audit of the billing data including the system and database	MSEDCL/ Independent auditor	Annual	Not initiated
Annual ABR audit	Independent Auditor	Annual	Not initiated

Confidentiality about metering and billing data

- Metering and billing data
 - Transparency *"The Distribution Franchisee shall provide consumer-wise information in the format specified by MSEDCL detailing the billing, collection and all related information on a monthly basis every month by a mutually agreed date. Such information shall be **kept confidential** by MSEDCL and shall be used only under conditions of default by Distribution Franchisee under the Distribution Franchisee Agreement"*

Conclusions

- Model has significant potential for
 - Reduction in ATC losses and
 - Improvement in consumer service and safety
- DF effectively gets a clean slate, 1000 cr. arrears write-off
- DF has more operational and administrative freedom
- Licensee benefits might be limited as they are subject to:
 - Input rate, decided based on competitive bidding and
 - Cost avoided

Governance issues

- ❑ Role of licensee in this model changes to that of a regulator/monitoring agency of franchisee

- ❑ Limitations of licensee's capacity and autonomy to perform such a role
 - Lack of quality baseline data
 - Lacunae in bidding process
 - Weak post franchisee monitoring

Recommendations

- Need for regulatory oversight
 - To enhance transparency, public oversight and accountability of franchisee
 - Approval of Bidding documents
 - Review of post-franchisee obligations of licensee
- Term of the franchisee should be maximum 10 years
- Capital investments after 5 years should be regulated
- Need for third party monitoring of:
 - Base line data
 - Metering and billing data

Overall scenario

- Applicability of the model
 - High loss areas
 - Utility has given up hopes
 - Possibility of cost reduction
- Potential benefits of the model
 - ATC loss reduction
 - Service quality improvement
 - Financial benefits to licensee (hence all consumers)
- Subject to
 - Quality baseline data
 - Rational and transparent bidding process
 - Improvements in DFA
 - Post-DFA monitoring
 - ABR, Subsidy, Metering and billing data
 - Regulatory oversight
 - Bidding process, post franchisee monitoring
 - Maximum Franchisee term 10 Yrs.

Thank you!

