PRAYAS

Presentation to MERC on BSES ARR 03-04 & 04-05

Girish Sant
Prayas, Energy Group

PRAYAS

Interaction Plan

1. Introduction
2. Major components of BSES ARR
3. Profit and Income Tax
4. Amount of Capital Investments
5. Sourcing of Capital & Normative Capital Structure
6. Fuel
7. Reserves & Appropriations
8. T&D loss
9. TPC/ BSES/ MSEB Arrangement & Supply Reliability
10. Other Issues
11. Prayers

1. Introduction

We welcome this first tariff hearing by MERC for private utility (since its inception in 1999).

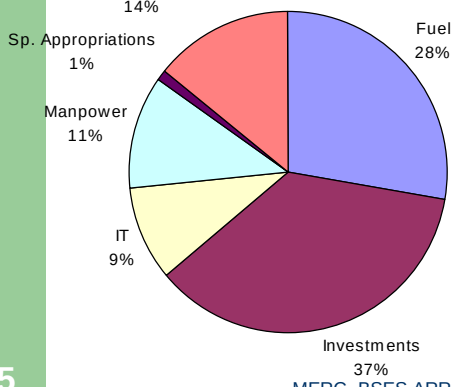
1. Till utilities are regulated – the unregulated business should not be subsidized at the cost of regulated customers
2. When cost reduction for a utility increases cost of another utility – RC's mandate is to minimize overall system cost

1. Introduction

3. If government decisions in the past are against the public interest or of doubtful legal validity – it is MERC's **duty** to take appropriate decision on such matters
4. Responsibility of giving proof of 'prudence' and 'usefulness' is squarely on the utility

PRAYAS

2. Major components of BSES ARR



Profit, Income Tax, Depreciation, Interest = 46%

➔ Investments need to be carefully scrutinized

- BSES costs (excluding Power Purchase)
- Investments include Return Depreciation & Interest

PRAYAS

3. Profit and Income Tax

- **BSES (Profit + IT)**
  - FY 01-02 – 47 Paisa/ Unit
  - FY 04-05 – **75** paisa/ Unit
- **MSEB (Profit + net cost of excessive T&D loss)**
  - FY 03-04 – **35** Paisa/ Unit *(MERC 1 Dec 2003)*

BSES profits (investments, capital structure) need a careful scrutiny

PRAYAS

4. Capital Investment: Utilities under "Cost+" Regulation - International Experience

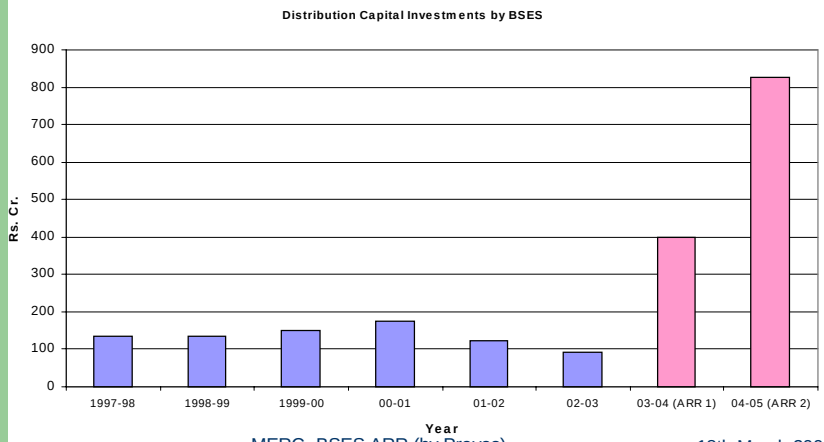
- Averch; Johnson (1962)

Utilities invest more capital than needed for cost minimization. They increase profit by replacing other inputs by capital.

- Returns above cost of capital can be seen as subsidy for use of capital – which leads to inefficient use of capital

PRAYAS

4. Capital Investments by BSES



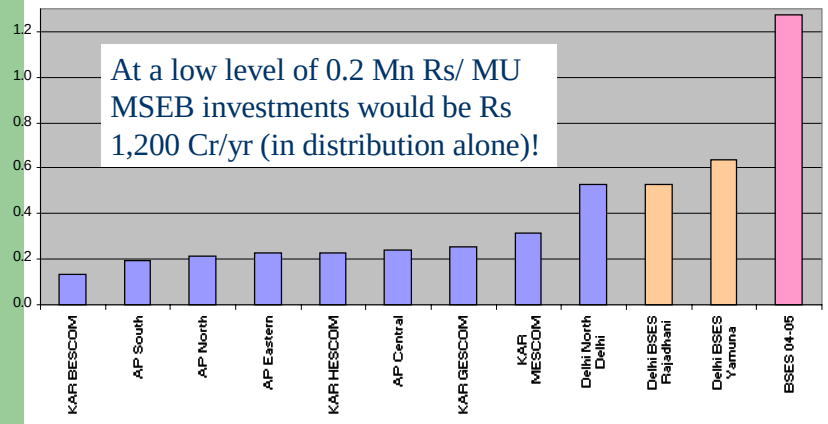
PRAYAS

4. Capital Investments by BSES Component-wise examination (Rs Cr/Yr)

	Pre- ARR 5 Yr	ARR (03-04, 04-05)
Receiving station	12	46
Capacitors	1	10
11 KV underground mains	14	46
Services	13	26
DTs	5	32
11 KV Switchgear	7	17
Land and building	18	30

PRAYAS

4. Capital Investments by BSES (Mumbai) Comparison with other utilities (Mn.Rs/MU)



PRAYAS

4. Capital Investments by BSES: Some Examples

- Addition of Transformers ahead of need (T&D loss reduction?)
  - Many receiving stations would be ok even in 07-08
- New Office, Quarters etc. (Rs 86.5 Cr)
- Metering (160 Cr)

  Meter check every 2 Yrs, 99% recovery, concentrated population
- Special Services (for > 500 U/month)
- Cost of Back-up DG sets (Request to disallow)

PRAYAS

4. Capital Investments by BSES: Some Examples

- SCADA & Distribution Automation **(Rs. 220 Cr +)**
  - 70% DTs will not be automated even at given budget
  - SCADA cost 2.5 Cr / receiving station, Rs 27 lakh / DT seem very high
  - Benefits have not been quantified
- Tie-up with Reliance info-tech? (REL has not given requested details)

PRAYAS

4. Capital Investments by BSES: Options for MERC

1. MERC should commission analysis to decide what is the need for investment - comparison with other utilities and account for ground realities in Mumbai
2. Approve investments for 03-04 & 04-05 based on DPR for all schemes & abovementioned study
3. Pending this study – use past bench-mark of BSES (Rs 135 Cr / yr).

PRAYAS

5. Sourcing of Capital: *Impact of D:E Ratio*

Example of Investment of Rs 400 Cr

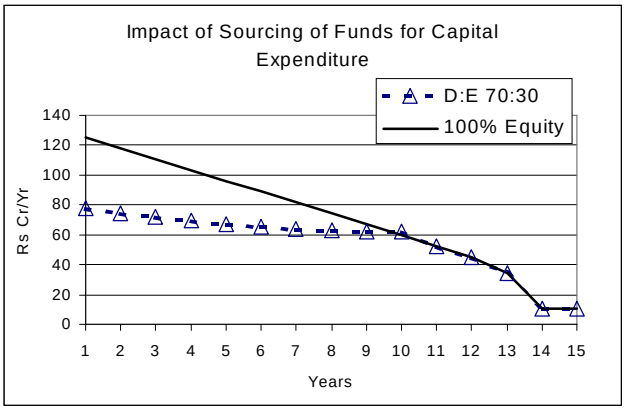
Option 1 – 100% Equity

Option 2 – Debt:Equity ratio of 70:30

Question – Considering payments for depreciation, interest, Return on utility, and Income Tax - which option is cheaper?

5. Sourcing of Capital: *Impact of D:E Ratio*

Rs 400 Cr invested from equity → consumers payment increases by Rs247 Cr over a decade



5. Capital Structure of BSES

- BSES has virtually no debt for its Mumbai operation. This is extremely expensive for consumers. In our estimate, Mumbai customers are paying **Rs 207 Cr/ yr more than required** due to bad leveraging
- BSES has not challenged this. In its reply, BSES only says that there is no norm for D:E ratio. Not having a norm / legal requirement is does not prove “Prudence” of any decision.

5. Capital Structure of BSES

We wish to point out that

- News (in Hindu Business Line, March 1 2004) indicated that BSES has sought GoM permission to use land allotted by GoM as Forex Loan security
- It is MERC's duty to (1) protect public interest and (2) ensure that regulated utility does not use its captive consumers to directly or indirectly subsidize its un-regulated operations.
- **Hence,** MERC should adopt a normative D:E ratio of 70:30 for calculating Capital Base – and **save Rs.207 Cr / yr of BSES consumers**

6. Fuel

BSES has to blend Indian coal with Imported coal to reduce calorific value & increase ash content of Imported coal

For this purpose raw coal is cheaper than washed coal (in Rs / 1000 Kcal delivered)

MERC should direct BSES to use raw coal and disallow fuel cost of Rs 36 Cr / yr (including past years)

7. Reserves & Appropriations ...1

- Contingency Reserve (Rs 102 Cr)
  - Consumer financed insurance for utility. Cost to consumers ~ Rs 20 Cr /yr (in terms of profits to utility on this amount)!
  - No need due to various insurance (paid trough tariff)
  - Reduce it to half and deduct it from Capital Base
- Special Appropriation allowed by GoM (Rs 100 Cr)
  - Depreciation is charged on assets created using this consumer contribution. This is illogical. Full amount (or the depreciation charged) should be refunded with interest – & utility should not be allowed to charge depreciation on assets created using this fund.

7. Reserves & Appropriations ...2

- Development Reserve (Rs 163 Cr):
  - No depreciation should be allowed, should not be allowed in Capital Base
- MERC can deviate from Schedule VI by giving reasons. These are appropriate cases for deviating from SC VI – necessary for protecting consumer interest

8. T&D loss

1. For a well built system as of BSES, a Distribution loss of 13% (33/22kV & below) is high
2. MERC should decide Distribution loss norm appropriate for Mumbai situation while calculating the ARR
3. CEA norm for T&D loss is for SEB and not for urban utilities

9. TPC/ BSES/ MSEB Arrangement & Supply Reliability

1. After rationalization of TPC tariff, BSES may be asked to sign a PPA with TPC
2. Settle issues regarding inter-utility power exchange (2 part tariff, norms for backing down, merit order dispatch, tariff for reactive power exchange)
3. MERC should give serious considerations before changing the present arrangement of stand-by arrangement of TPC/BSES with MSEB
4. If MSEB is not paid for service of stand-by charges then put in place a system to ensure that MSEB does not give stand-by at the cost of load shedding

10. Other Issues

1. Manpower Costs: There is a sharp increase in manpower cost of BSES in the last few years. This constitutes 11% of expenses (excluding power purchase). MERC should take a close look at this.
2. MERC should:
   1. Correct demand and generation forecasts
   2. Scrutinize increase in cost under non-specific heads

11. Prayers ...1

1. MERC should:
   1. Allow CapEx of only Rs 135 Cr / yr (and not Rs.1,220 Cr in two years)
   2. Apply prudence norm (D:E ratio of 70:30) – and reduce consume payments by Rs 207 Cr / year
   3. Set T&D loss target suitable to BSES system
   4. Various issues concerning BSES - TPC arrangement

11. Prayers ...2

2. **MERC should**
   1. Disallow cost of back-up arrangements such as DG sets
   2. Disallow excess fuel cost (due to high cost of washed coal) equal to Rs 36 Cr / yr, since MERC order on Case 16/2002
   3. Return the Special Appropriations to consumers,
   4. Remove Contingency Reserve from Capital Base, reduce it to half
   5. Prevent charging depreciation on assets created using advances from consumers (under different heads)

Thank You

Prayas Energy Group

energy@prayaspune.org