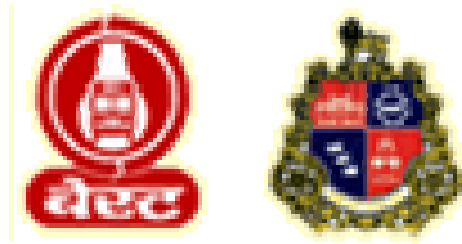


**BRIHANMUMBAI ELECTRIC SUPPLY
and
TRANSPORT UNDERTAKING (BEST)**



**EXECUTIVE SUMMARY
of
Updated Annual Performance Review
for
FY 2007-08 & Revised ARR for FY 2008-09
to**

**Maharashtra Electricity
Regulatory Commission**

Executive Summary

Introduction

BEST has been supplying power to the island city of Mumbai efficiently and reliability for more than a 100 years. The erstwhile Bombay Electric Supply & Tramways Company started supplying electricity to the city in 1905. Until 1926, the Company had been generating its own electricity for distribution to its consumers. Later, the Tata Electric Companies started supplying electricity to BEST. In 1947, the Company was taken over by the Municipal Corporation.

The Undertaking is now well known in India for its service of providing electricity with minimum interruptions and at proper voltage, at reasonable cost. It is also known for the quick restoration of supply in the event of any faults developing in the distribution system. In the span of last sixty years, the number of substations increased from 247 to 1981; the length of underground cables increased from 1,263 kilometres to 9,287 kilometres and the number of street lamps have increased from 2,215 to 40,281. There are about 9.38 lakh consumers.

Background

Overview of BEST

Mumbai city has been designated as the financial capital of the country of which the license area of BEST distribution is designated as the financial district. For effective working of the financial hub, BEST as the distribution licensee has the challenging task of providing high quality and reliable power to all its consumers.

The upkeep of the distribution network has resulted in a very high quality of power supply to its license area, where the power reliability achieved is among the best in the country. The table below depicts the reliability indices for FY 2006-07 of BEST. These indices clearly indicate that BEST has been able to maintain its network at a high level of performance despite the unique challenges of supplying power in the city of Mumbai.

Month	FY 2006-07		
	SAIDI (in min.)	SAIFI	CAIDI (in min.)
April – 06	17.63	0.38	46.40
May – 06	13.85	0.35	38.35
June – 06	21.09	0.51	41.29
July – 06	27.50	0.62	44.17
August – 06	21.74	0.57	38.04
September – 06	17.40	0.45	38.54
October-06	14.84	0.36	40.84

Month	FY 2006-07		
	SAIDI (in min.)	SAIFI	CAIDI (in min.)
November – 06	13.68	0.31	43.64
December-06	13.30	0.32	41.58
January – 07	11.51	0.29	39.48
February – 07	10.04	0.25	39.65
Mar-07	14.66	0.33	44.07

BEST informs the Hon'ble Commission that in keeping with BEST's continuing focus on improving its customer service, the following consumer service measures have been implemented by BEST in the past year:

- BEST has successfully implemented monthly billing of all consumers w.e.f 1st April, 2007, in line with the Hon'ble Commission's directive leading to better financial and operational parameters as well as consumer service.
- To cater to the increased bill collection demand arising out of introduction of monthly billing, BEST has started 42 additional bill collection counters w.e.f. 1st April 2007. Also the timings of existing bill collection centres have been extended from 2.00 p. m. to 6.00 p.m.
- BEST has started automatic cheque acceptance facility at Electric House wherein the consumers can pay their bills round the clock.
- To further improve its reach to consumers and also decrease its commercial losses, BEST has started a separate Operation & Maintenance division to cater to the need of slum area in North Mumbai.
- Due to the stringent measures taken by the Undertaking against theft of electricity, there is an increase in the amount recovered from errant consumers in FY 2007-08. In FY 2005-06, BEST had recovered a total amount of Rs. 486.4 lakhs involving 457 nos. of such cases. In FY 2006-07, BEST had recovered Rs. 967.56 lakhs involving 658 cases. As compared to this, BEST has already recovered Rs.1182.32 lakhs from 1918 cases detected till November 2007 in FY 2007-08.
- BEST has entered into a Power Purchase Agreement with TPC-G for 800 MW of generation capacity to help cater to the increasing energy demand of its consumers and reduce its dependence on expensive power purchase from external sources.

Filings based on Multi Year Tariff (MYT) Principles

Maharashtra Electricity Regulatory Commission (MERC) has made the "MERC (Terms and Conditions of Tariff) Regulation, 2005" which applies to all the Distribution Licensees in the State. As per this regulation, the electricity utilities are required to file petition for Annual Performance Review (APR) for the current year (FY 2007-08) and the revised Aggregate Revenue Requirement (ARR) for the ensuing year (FY 2008-09), which will form the basis for fixation of charges for retail sale of electricity for FY 2008-09.

In the current petition, BEST prays to the Hon'ble Commission for true-up of FY 2004-05 & FY 2005-06 arising out of ATE order dt. 27th August 2007, truing-up of expenses for FY 2006-07, the approval of APR for FY 2007-08 and approval for revised ARR of FY 2008-09.

Demand Forecast

In the MYT petition for the first year of the control period, BEST had forecasted energy sales of 3850.75 MU for FY 2007-08 based on past trend in consumer and sales growth, estimating sales of 1984 MUs for the first half of FY 2007-08. However, the actual sales during the period April-07 to September-07 has been recorded at 2184.98 MUs, indicating a much higher growth (10.15%) in energy demand in the current year than anticipated. Thus, BEST is proposing a revised sales forecast for remaining months of the current year taking into account the uptrend seen in the actual sales in the first six months of the current year.

For this purpose, the sales projections have been based on the 5-year average of the percentage monthly power purchase vis a vis the total annual power purchase by BEST. The revised forecast projects the year end sales to be at 4152 MUs, which is 9.3% higher than the actuals recorded in FY 2006-07

For projecting sales of FY 2008-09, BEST has taken the overall growth rate in energy sale from the load forecasting study undertaken by it as directed by the Hon'ble Commission. There is also considerable re-development of mill land in the BEST licensee area which is expected to give a further impetus to the demand from FY 2008-09. As per the bulk load requests made to BEST by such developments, it is expected that in FY 2008-09 additional load of about 52 MW shall be added to the network of BEST. As this load is likely to materialise in a phased manner, 20% annual load factor has been considered for FY 2008-09. Based on the above BEST has revised the energy sales estimates for FY 2007-08 & FY 2008-09 as 4152 MU and 4340 MU respectively.

Distribution loss

BEST has achieved low distribution losses by undertaking various measures including prudent network design, network upgradation, quality assurance on equipments vis-à-vis losses, optimum loading of the equipments and replacement of faulty meters and also increased vigilance and theft detection drives. The actual distribution losses for the FY 2006-07 are at 11.48% against approved losses of 11.50%.

In FY 2007-08, BEST has continued to maintain its distribution losses at low levels. A major initiative was undertaken by BEST during the year with an aim to reduce commercial losses even further. Implementation of monthly billing across from April 1st 2007, as directed by the Hon'ble Commission, has also been instrumental in better meter reading and billing activities.

Based on the actuals of H1, 2007-08 and projections of sales for the remainder of the year, the estimated distribution loss for the whole of FY 2007-08 is as shown below. For FY 2008-09, BEST shall work towards attaining the target loss level approved by the Commission at 10.5%

Distribution loss estimate for FY 2007-08 & 2008-09

Year	Energy requirement at T-D interface (MU)	Energy Sales (MU)*	Distribution Losses (%)	Distribution Losses Approved (%)
FY 2007-08	4547	4068	10.54%	11.0%
FY 2008-09	4849	4340	10.5%	10.5%

* Adjusted

In the above calculations, the sales projection for FY 2007-08 have been adjusted by 84.3 MUs. This is so because, on account of the switch from bi monthly to monthly billing for certain categories from 1st April, 2007 certain MUs to be billed in March have been shifted to April and hence that month has shown a very high sales figure (more than the power purchase for that month). BEST has estimated that this additional billing to the tune of 84.3 MUS and has corrected for the same.

The overall Energy Balance for BEST is as given below.

Particulars	FY 2006-07	FY 2007-08	FY 2008-09
Energy Demand (MU)	3800	4068	4340
Distribution loss (in %)	11.48%	10.54%	10.5%
Energy Requirement (MU)	4293*	4547	4849
Transmission Losses (%)	-	4.58%	4.85%
Total Energy Purchased (MUs)	4408*	4765	5097

* For H1 of FY 2006-07, BEST was billed for its energy purchase for the quantum at T-D interface while from H2, 2006-07 the quantum of power purchase has been as per the Energy accounting procedures initiated by SLDC. Thus BEST has taken those figures into account in this table

Power Purchase

BEST procures power primarily from the Tata Power Company Limited (TPCL) to meet its demand. The receiving voltages for BEST are 110 kV and 22/33 kV. BEST has entered into a renewed PPA with TPC-G for 800 MW of generation capacity and the same has been recently approved by the Hon'ble Commission.

a) Power purchase expenses for the period FY 2006-07 to 2008-09

M/s TPCL was billing BEST as per the prevailing practice till H1 of FY 2006-07. Subsequently, as per the tariff order issued by the Hon'ble Commission dated 3rd

October 2006, TPCL has started billing based on the directives specified in the tariff order for H2 FY 2006-07.

The average power purchase rate from TPC-G (excluding Unit-4) was Rs. 2.77 per unit (for H1, 2007) as opposed to 2.71 approved by the Commission (its Corrigendum order dt. 30th November 2007). As for Unit 4 of TPC-G, the average power purchase price in the first half of the current year was Rs. 6.06/ unit as opposed to Rs. 5.28 / unit approved by the Hon'ble Commission. The average power purchase rate from other sources was Rs. 5.61 per unit as against Rs.4.41 per unit considered in the order. Due to the higher rates charged to BEST and also on account of the higher demand from consumers, BEST's power purchase bill is projected to be substantially higher at Rs. 2108.7 crores for FY 2007-08.

For FY 2008-09

Based on its sales forecast and grossing up of the energy requirement based on approved Distribution losses at 10.5% and transmission losses at 4.85%, BEST estimates that its gross energy requirement for FY 2008-09 shall come to 5096.55 MUs.

As the Hon'ble Commission has approved the PPA between BEST and TPC-G for 800 MW which comes into effect from 1st April, 2008, BEST has made all its procurement projections based on the above allocation of generation capacity from TPC-G.

The per unit cost of TPC-G plants is based on the Commission's MYT order of TPC-G where the average variable cost comes to Rs. 2.96 / unit. External purchase has been assumed at Rs. 6.01/ unit for the entire year as per the latest contract being entered into by BEST for external sources of power.

The Commission has directed distribution licensees to procure 5% of its energy requirement from renewable sources. Accordingly, BEST has projected the required quantum of 254.83 MUs from renewable sources. This power has been estimated to cost Rs. 5 / unit based on the current price.

For FY 2008-09 the Fixed charges payable to TPC-G, Transmission Charges and standby Charges payable to MSEDCL have been calculated as below:

- The fixed cost payable to TPC-G have been calculated based on the Commission's MYT order of TPC-G where it approved Fixed cost for Thermal Plants at Rs. 509 Crores. BEST has considered a 45% allocation of the same, based on the installed capacity allocated to it for its projections.
- The transmission charges have been calculated as per the Commission's MYT order of MSETCL where it allocated Transmission charges at Rs. 103.47 crores to BEST.
- An escalation of 3.55% has been considered on the standby charges payable in FY 2007-08 at Rs 114.63 crores as per the CERC notified escalation rates for indexed capacity charges dated 24th September, 2007. Thus, the standby charges payable to MSEDCL as projected by BEST comes to Rs. 118.05 Crores.

The revised estimates of power purchase expenses for FY 2007-08 & FY 2008-09 is as given below:

Power Purchase expenses for the period FY 2006-07, 2007-08 & 2008-09

Particulars	FY 2006-07 (Actual)	FY 2007-08 (Revised estimate)	FY 2008-09 (Revised estimate)
Fixed Charges payable to TPC -G	237.11	182.20	229.01
Energy charges payable to TPC -G	922.27	1232.52	1282.82
External purchases	183.85	338.15	300.83
Incentive charges (Hydro + thermal) payable to TPC-G	10.98	10.72	0.00
RPS			127.41
FAC	9.41	123.70	
Under recovery of FAC for previous years		8.00	
SLDC charges		0.80	
(less) rebate due to Hydro peaking tariff	(21.31)	(26.60)	
Stand-by charges payable to MSEDCL	60.75	114.63	118.05
Intrastate Transmission charges payable to MSETCL	51.17	97.61	103.47
True-up due to Corrigendum order		27.00	
Total (in Rs. Crore)	1454.23	2108.71	2161.58

The power purchase expenses accounts for more than 80% of BEST's ARR and hence any major deviation will adversely affect the organization. We therefore humbly request that the impact of approval of APR petition of TPC-G be considered for the power purchase expense of BEST.

The Hon'ble Commission is requested to approve the power purchase expenses for FY 2006-07, 2007-08 & 2008-09.

Operation & Maintenance (O&M) Expenses

The O&M expenses comprise of the Employee expenses, Administrative and General (A & G) expenses and Repairs and Maintenance (R & M) expenses as given below:

O&M expenses for the period FY 2006-07, 2007-08 & 2008-09 (in Rs. crore)

Particulars	FY 2006-07		FY 2007-08		FY 2008-09	
	Approved	Actual	Approved	Revised estimates	Approved	Revised estimates
Employee expenses	114.62	138.38	92.42	130.95	95.75	129.73
Administration & General expenses	82.00	91.79	86.4	98.48	91.04	104.1
Repair & Maintenance expenses	20.00	24.56	5.73	14.41	7.25	16.32
Total O & M Expenses	216.62	254.73	184.55	243.84	194.04	250.15

The increase in O&M expenses is on account following reasons:

- BEST humbly informs the Hon'ble Commission that, employee expenses for all the three years has increased on account of wage settlement agreement, the BEST Committee vide BCR No. 347 dated 10.10.2007 and Agreement dated 7.11.2007 entered into the Agreement with the Bombay Electric Workers' Union for the employees engaged in the Electric Supply Industry for the period from 1.4.2006 to 31st March 2009.
- The Hon'ble Commission in its order dt. 26th September 2006 had directed BEST to commence monthly reading of meters, as BEST had substantial number of consumers in the residential category who were read on bi-monthly basis, BEST had to increase its strengths in the meter reading and bill collectors along with simultaneous increase in bill collecting and processing facilities
- The increase in R&M expenses is on account of R.I. charges payable to MCGM,

BEST humbly submits to approve the O & M expenses for period FY 2006-07, 207-08 & 2008-09.

Capital and related expenditure

BEST is undertaking major works for augmentation of its distribution network. The investment is a part of the efforts of BEST to provide efficient and reliable electricity to its consumers.

The Capital expenditure for the period FY 2006-07 to FY 2008-09 is as given below:

Capital expenditure for the period FY 2006-07, 2007-08 & 2008-09 (in Rs. crore)

Sr. No.	Project scheme	FY 2006-07 (order)	FY 2006-07 (actual)	FY 2007-08 (Revised estimate)	FY 2008-09 (Revised estimate)
1	New receiving station (110kV SBM and 33-22 / 11 kV)	42.09	28.97	38.00	27.90
2	Augmentation and replacement at existing RSS	16.75	11.06	14.65	15.15
3	New Distribution substation and augmentation & alteration to existing DSS	29.51	28.22	56.37	61.92
4	Extension of Distribution network (Laying of HV & LV cable)	32.13	21.09	55.84	53.48
5	SCADA, Digitisation & Communication	12.33	3.22	5.83	5.75
6	Energy Meters	29.10	10.73	119.51	81.34
7	Street lighting (lamps & cables)	3.1	1.41	2.69	2.77
8	Generating Plant	0.15		15.00	5.00
9	Furniture, office equipment, Tools, Civil engineering works, Motor works, Share of G.A. expenses	5.91	4.48	15.58	13.33
	Grand Total	171.07	109.18	323.48	266.64

BEST humbly informs that it has made a budgetary provision for Generation plant to comply with the RPS obligation wherein it is exploring the option of setting up a Wind based power project.

BEST funds its capital expenditure primarily from its internal funds and partially from external borrowings. BEST has taken public loans, MMRDA loans for the Mega-city Project, District Planning Development Council loan and Accelerated Power Development and Reforms Programme Loan.

Depreciation

Depreciation is charged on the basis of straight-line method, on the fixed assets in use at the beginning of the year. The financing structure of BEST does not fall in the conventions as followed by Companies, therefore, BEST has not claimed any advance against depreciation in the ARR for the control period.

For the period FY 2006-07 to 2008-09 the depreciation amounts are:

Depreciation for the period FY 2006-07, 2007-08 & 2008-09 (in Rs. crore)

Particulars	FY 2006-07 (Approved)	FY 2006-07 (Actual)	FY 2007-08 (Revised estimate)	FY 2008- 09(Revised estimate)
Projected depreciation (in Rs. crore)	41.44	39.92	54.45	50.46

Interest on Working capital

BEST humbly informs the Hon'ble Commission that the order for FY 2006-07 and the MYT order for 3-year period of FY 2007-08 to FY 2009-10 has not provided for any Interest on Working capital as the working capital needs of the Undertaking are met through internal resources. However, for FY 2007-08 & FY 2008-09, BEST has revised the Interest on working capital and the details are as given below:

Interest on Working capital for the period FY 2007-08 & 2008-09 (in Rs. crore)

Sr. No.	Particulars	FY 2007-08		FY 2008-09	
		Order	Revised Estimate	Order	Revised Estimate
1	Total Working Capital		35.95		68.33
2	Interest on Working Capital (at 11.25% p.a.)	0.00	4.04	0.00	7.69

BEST humbly requests the Hon'ble Commission to approved the revised estimate of Interest on Working Capital of Rs. 4.04 crore for FY 2007-08 and Rs. 7.69 crore for FY 2008-09

Interest on consumer security deposit

The Hon'ble commission vide its Order dt. November 8, 2006 in regard to case no. 32 of 2006 has allowed Interest at the rate of 6% on consumer deposits. In this order, the Hon'ble commission has approved Rs. 15.68 crore for FY 2004-05 and Rs. 11.70 crore for FY 2005-06.

For FY 2006-07, the Hon'ble Commission had approved Interest on consumer deposit of of Rs. 11.70 crores based at the opening level of consumer deposits of Rs. 194.92 crores for FY 2006-07 as permitted under the Tariff regulations. However, BEST informs the Hon'ble Commission that the consumer security deposits at the end of FY 2006-07 has risen to Rs. 207.71 crore, hence the Interest on Consumer deposit is now revised to Rs. 12.46 crore for FY 2006-07.

For FY 2007-08 & FY 2008-09, the Hon'ble Commission has approved Interest on consumer deposit of Rs. 11.70 crore for each year. The Hon'ble Commission has revised the Tariff of BEST from 1st April-2007, BEST informs the Hon'ble Commission that on implementation of new Tariff, BEST has initiated the process of estimation of consumer deposit for all its consumers and shall inform all its consumers regarding maintenance of the revised security deposit. However, for FY 2007-08 & FY 2008-09 BEST has revised the Interest on Consumer deposit to Rs. 12.46 crore.

Returns claimed in the ARR

BEST humbly informs the Hon'ble Commission, that the Appellate Tribunal on Electricity vide its order dt. 27th August 2007, has approved Return on Equity as provided under MERC (Terms and Conditions of Tariff Regulation, 2005) from FY 2004-05 onwards. The Hon'ble Commission vide its order dt. 8th November, 2006 in regard to Case no. 32 of 2006 has allowed Interest at the rate of 6% in lieu of Return on Equity. BEST now proposes to charge the following returns as applicable under the MERC (Terms and conditions Regulation, 2005):

- Prescribed Return on Equity on 100% of the opening Regulatory Equity in the financial year
- Additional Return on Equity, as per prescribed rate, on 50% of the incremental Regulatory Equity deployed in that year in the electricity distribution business (based on the approved capital cost)
- Additional Interest on Internal funds (at the rate of 6%) deployed in that year in the electricity distribution business (based on approved capital cost)
 - Return on equity

The Hon'ble Commission in its order dt. 9th March 2006, in matter of Case 4 of 2006 had approved returns of Rs. 92.99 crore for FY 2004-05 and Rs. 95.85 crore for FY 2005-06, wherein opening equity for FY 2004-05 was identified as Rs. 570.72 crore and closing equity of Rs. 591.61 crore. BEST has claimed the following return on equity for the period FY 2004-05 to FY 2008-09:

Return on Equity from FY 2004-05 to 2008-09 (in Rs. crore)

Particulars	FY 2004-05	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09
RoE for the year	92.99	95.85	98.06	101.30	106.00

- Interest on Internal funds

The ATE order dt. 27th August 2007, has provided Interest on Internal funds on additional funds deployed by BEST in the distribution network, comprising of the following components:

- Normative debt component of the allowable capital cost
- Grants received by BEST for capital expansion

Based on the above the Interest on Internal funds, at the rate of 6% for the period FY 2004-05 to FY 2008-09 is as given below:

Interest on Internal funds from FY 2004-05 to 2008-09 (in Rs. crore)

Particulars	FY 2004-05	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09
Allowable Capital cost	69.64	49.78	42.16	92.88	103.00
Cumulative Grants at the end of the year	45.63	56.51	81.51	81.63	
Interest on Internal funds (at 6%)					
<i>Normative debt component</i>	2.92	2.09	1.77	3.90	4.33
<i>On Government assistance at the start of the year</i>	1.65	2.74	3.39	4.89	4.90
Returns as Interest on Internal funds	4.57	4.83	5.16	8.79	9.23

Based on the above the following Returns shall be claimed by BEST from FY 2004-05 till FY 2006-07:

Returns for FY 2004-05, 2005-06 & 2006-07 (in Rs. Crores)

Particulars	FY 2004-05		FY 2005-06		FY 2006-07	
	Approved	Revised Claim	Approved	Revised claim	Approved	Revised claim
Returns as Interest on Internal funds	63.15	4.57	62.47	4.83	51.96	5.16
Return as Return on equity		92.99		95.85		98.06

Similarly, for FY 2007-08 & FY 2008-09, BEST proposes the following Returns as the revised estimates

Revised estimates of Returns for FY 2007-08 & 2008-09 (in Rs. Crores)

Sr. No.	Particulars	FY 2007-08		FY 2008-09	
		Approved	Revised Estimate	Approved	Revised Estimate
1	Returns as Interest on Internal funds	49.97	8.79	47.52	9.22
2	Return as Return on equity		101.30		106.00

BEST humbly requests the Hon'ble Commission to approve the revised claims for FY 2004-05 to FY 2006-07 and the revised estimates for FY 2007-08 & FY 2008-09

Bad-debts write-off

For FY 2006-07 has not written-off any amount under bad-debt, however, for FY 2007-08 & 2008-09 BEST has made the following provision:

Projected bad debt write-offs for FY 2007-08 & 2008-09 (in Rs. Crores)

Particulars	F.Y. 2006-07 (approved)	F.Y. 2006-07 (Actual)	FY 2007-08 (Revised estimate)	FY 2008-09 (Revised estimate)
Bad-debts write off projected (in Rs. crore)	0.04	0.00	0.06	0.08

BEST humbly requests the Hon'ble Commission to approve the bad-debts write-off amount for each of the years of the control period as indicated above.

Other expenses

The Hon'ble commission vide its Order dt. April 3, 2007 has directed BEST to initiate DSM measures. BEST humbly informs the Hon'ble Commission that it made a budget provision of Rs. 0.97 crore for FY 2007-08 and Rs. 3.72 crore for FY 2008-09.

Non-tariff Income

The Hon'ble Commission has approved non tariff income at Rs. 82.70 crore for FY 2006-07, Rs. 73.48 crore for FY 2007-08 and Rs. 73.48 for FY 2008-09. However, for F.Y. 2006-07, the actual non tariff income is Rs. 42.89 crore. The Hon'ble Commission is requested to approve the same as part of truing-up exercise. For FY 2007-08 & FY 2008-09, the revised estimates for non tariff income is Rs. 46.18 crore and Rs. 47.31 crore, respectively.

Annual Revenue Requirement (ARR) Synopsis

A synopsis of the revised ARR for FY 2007-08 & 2008-09 is given below:

Summarised ARR for FY 2007-08 & 2008-09 (in Rs. Crores)

Particulars	FY 2007-08		FY 2008-09	
	Order	Revised Estimate	Order	Revised Estimate
Power Purchase Expenses	1522.35	1737.25		1940.06
Operation & Maintenance Expenses	184.55	243.84	194.04	250.15
Employee Expenses	92.42	130.95	95.75	129.73
Administration & General Expenses	86.40	98.48	91.04	104.10
Repair & Maintenance Expenses	5.73	14.41	7.25	16.32
Depreciation, including advance against depreciation*	44.73	54.45	50.01	50.46
Interest on Long-term Loan Capital	19.31	14.69	26.12	20.72
Interest on Consumer security deposits and working capital	11.70	16.51	11.70	20.15
Bad Debts Written off	0.06	0.06	0.08	0.08
Other Expenses (expenditure on DSM activities)		0.97		3.72
Income Tax				
Stand-by charges payable to MSEDCL	146.10	114.63		118.05
Transmission Charges payable to MSETCL + SLDC charges	98.44	98.41		103.47
Contribution to contingency reserves				
Adjustment for profit/loss on account controllable/uncontrollable factors				
Under recovered FAC of TPC	123.7	123.70		
Under recovered FAC of BEST	8.00	8.00		
True-up due to corrigendum order		27.00		
Total Revenue Expenditure	2158.94	2439.50	281.95	2506.87
Return on Equity Capital	-	101.30	-	106.00
Return as Interest on Internal funds	49.97	8.79	47.52	9.22
Aggregate Revenue Requirement	2208.91	2549.59	329.47	2622.09
Less: Non Tariff Income	73.48	46.18	73.48	47.31
Less: Income from wheeling charges				
Less: Income from Other Business				
Less: Receipt on account of Cross Subsidy Surcharge				
Less: Receipt on account of additional surcharge on charge of wheeling				
Aggregate Revenue Requirement from Retail Tariff	2135.43	2503.41	255.99	2574.78

Revenue from Sale of Energy and Revenue gap

The gap/surplus is estimated based on the proposed ARR for FY 2008-09 and the revenue at existing tariff for FY 2007-08.

BEST has computed the estimated Revenue from sale of power for the 'entire year' based on the existing tariff. The projected revenue for F.Y. 2008-09 is Rs. 2601.04 crores.

BEST humbly requests the Hon'ble Commission that the ARR for FY 2008-09 should be adjusted with the revised claim for FY 2004-05, FY 2005-06, FY 2006-07 under the process of truing-up for the respective years as well as the revised ARR for FY 2007-08. The related computation is shown below:

a) Truing-up for FY 2004-05 & FY 2005-06

The Hon'ble Commission has approved Returns of Rs. 63.13 crore for FY 2004-05 and Rs. 62.47 crore for FY 2005-06 as Interest on Internal funds in its order dt. 8th November 2006 in the matter of Case no. 32 of 2006. Further, the Hon'ble Commission in its order dt. 9th March 2006 in the matter of Case no. 4 of 2004 had also approved a return on equity for FY 2004-05 and FY 2005-06 based on the identified notional equity base for FY 2004-05 as permitted under the MERC tariff regulations. The same amount of return on equity has been claimed by BEST to be added to the ARR of FY 2008-09.

Estimate of revised claims for FY 2004-05 & 2005-06(in Rs. Crores)

Sr. No.	Particulars	FY 2004-05		FY 2005-06	
		Approved	Revised Claim	Approved	Revised claim
1	Returns as Interest on Internal funds	63.15	4.57	62.47	4.83
2	Return as Return on equity		92.99		95.85
3	Total Returns for the year	63.15	97.56	62.47	100.68
4	Difference to be claimed for the year (Approved – Revised claim)		34.41		38.21

Accumulated returns to be claimed in ARR for FY 2008-09 = Rs. (34.41+ 38.21) crore
= Rs. 72.62 Crores.

b) Truing-up for FY 2006-07

Truing-up of FY 2006-07 is based on the ATE order dated 27th August-2007, wherein Returns as Return on Equity have been approved to BEST and approval of all expenses at actuals, the details of which are as enumerated below:

Actual expense for FY 2006-07(in Rs. Crores)

Sr. No.	Particulars	FY 2006-07	
		Order	Actual
1	Power Purchase Expenses	1310.36	1342.31
2	Operation & Maintenance Expenses		
a	Employee Expenses	114.62	138.38
b	Administration & General Expenses	82.00	91.79
c	Repair & Maintenance Expenses	20.00	24.56
3	Depreciation, including advance against depreciation	41.44	39.92
4	Interest on Long-term Loan Capital	6.01	7.61
5	Interest on Working Capital and on consumer security deposits	11.7	12.46
6	Bad Debts Written off	0.04	0.00
7	Income Tax		
8	Transmission Charges paid to MSETCL	51.17	51.17
9	Stand-by charges	60.75	60.75
10	Contribution to contingency reserves		
11	Interest on Internal funds	51.96	5.16
12	Returns as Return on Equity	0.00	98.06
	Total Revenue requirement	1750.05	1872.18
	(less) Non-tariff income	82.70	42.89
	Annual Revenue requirement	1667.35	1829.29

In FY 2006-07, as per its audited accounts, BEST earned revenues of Rs. 1536.96 Crores. Thus the Revenue gap for FY 2006-07 would be

$$= \text{Rs. } (1536.96 - 1829.29) \text{ crore} = \text{Rs. } (292.33) \text{ Crores.}$$

c) Projected Revenue Gap for FY 2007-08

Revised returns for FY 2007-08 and FY 2008-09 have been calculated as per the ATE order dated 27th August-2007, wherein Returns as Return on Equity have been approved to BEST, the details of which are as enumerated below:

Estimate of returns claim for FY 2007-08 & 2008-09(in Rs. Crores)

Sr. No.	Particulars	FY 2007-08		FY 2008-09	
		Approved	Revised estimates	Approved	Revised estimates
1	Returns as Interest on Internal funds	49.97	8.79	47.52	9.22
2	Return as Return on equity		101.30		106.00
3	Total Returns for the year	49.97	110.09	47.52	115.22
4	Difference to be claimed for the year (Revised claim – Approved)		60.12		67.70

BEST has revised its revenue projections for FY 2007-08 since its sales will be higher. It is estimated that for FY 2007-08, the revenue shall be Rs. 2383.07 crore. Further, as indicated at Table 14 (Aggregate Revenue Requirement), the revised ARR for FY 2007-08 is Rs. 2503.41 crore.

Thus the revenue gap for FY 2007-08 would be

= Rs. (2503.41 – 2383.07) crore = Rs. (120.34) crores.

d) Projected Revenue Gap for FY 2008-09

Cumulative deficit for FY 2004-05, FY 2005-06, FY 2006-07 & FY 2007-08 would be as below.

Cumulative gap till FY 2008-09(in Rs. Crores)

Particulars	Amount (in Rs. crore)
Truing-up for FY 2004-05 & FY 2005-06	72.62
Truing-up for FY 2006-07	292.33
Projected Revenue gap for FY 2007-08	120.34
Cumulative gap to be bridged	485.29

Thus, the Total ARR of FY 2008-09

= Rs. (2574.78 + 485.29) Crores = Rs. 3060.07 Crores

The estimated revenue for FY 2008-09 at the existing tariff as indicated earlier is = Rs. 2601.04 Crore.

Thus, the resulting overall Gap for FY 2008-09 comes to

= Rs. 2601.04 Crores – Rs. 3060.07

= (Rs. 459.03 Crores)

Proposal for Revision of Tariff Structure

As indicated in the petition on APR of FY 2007-08 submitted to the Hon'ble Commission on 14th December 2007, BEST shall face a Revenue Gap of Rs.459.03 crores for FY 2008-09 based on existing tariff. Clearly, bridging this Gap is essential for the financial stability of the Undertaking.

Thus, BEST proposes a revised tariff plan detailed below for the Hon'ble Commission's approval.

TARIFF PHILOSOPHY

The estimated total revenue gap for FY 2008-09 is Rs. 459.03 crores. This revenue gap is mainly due to the increase in Power Purchase Cost in FY 2007-08, FY 2008-09 and the recovery due to incorporation of RoE for FY 2004-05, FY 2005-06 and FY 2006-07.

The Commission has introduced the concept of expensive power charges for recovering the cost of expensive power and separate recovery of standby charges. In the proposed tariff, the same principle is incorporated.

The estimated additional expenditure in the expensive power for FY 2007-08 is worked and also the total estimated expensive power cost for FY 2008-09 worked out for working the expensive power charges.

Revenue gap due to un-recovered Return on Equity and other expenses is proposed to be recovered by increasing the energy charges appropriately for all categories except BPL and the three existing HT categories (HT-2, 3 & 4) which are amalgamated into one HT tariff (HT-II) tariff category. The rationale details of working reliability charges including standby charges and general increase in energy charges are explained below:

1. **Expensive Power charges:** The revised Expensive Power charges have been worked out by taking into account the increase in expensive power purchase expenses in FY 2007-08 and expensive power purchase during peak hours (beyond 800MW) in FY 2008-09 applicable for units above 300 consumption in LT-I, LT-II, LT-V and LT-XI categories and for all units in other LT categories such as LT-III, LT-IV, LT-VI, LT-VII, LT-IX and LT-X and HT-II categories. For HT-1 category reduced standby charges is allocated considering the residential category application with the proposed tariff. The Expensive Power charge works out to be Rs. 2.48 per unit for all categories except HT-1. For HT-1 Expensive Power charge of Rs. 1.00 is made applicable. Expensive Power charges will be completely exempted for BPL & LT-VIII. The above working out and applicability of this charge is as per principle adopted by the Commission while determining tariff for FY 2007-08 in its order dated 3rd April 2007 on our MYT petition.
2. **Standby charges:** The standby charge per unit will be the standby charges considered by the Commission in its MYT Order for year FY 2008-09 divided by all units except BPL categories which works out to 27 paise per unit and will be applicable to all consumers except BPL consumers. This is also in accordance with the Commission's tariff order while determining tariff for FY 2007-08 in our MYT order.
3. **Increase on account of un-recovered Return on Equity (RoE) & other expenses (Increase in all the energy sold except BPL category):** This increase is mainly on account of incorporation of un-recovered RoE for FY 2004-05 to date and increase in other expenses, which is applicable for all units except

BPL. This works out to 40 paise per unit which will be added to the existing tariffs of all slabs of all categories.

4. Expensive Power Charges:

Power purchase expense regarding purchase of external power and purchase from Unit-4 of TPC-G shall be levied on specified category of consumers as per the MERC's order. Expensive power purchase to be claimed through Reliability charges comprises of two components, namely external purchase in FY 2008-09 and the increase in external power purchase cost in FY 2007-08 when compared to the cost approved in the MYT order of BEST. BEST proposes to recover these external power purchase cost for the two years combined as indicated below.

Expensive Power Charges for FY 2008-09(in Rs. Crores)

Particulars	Value
Total Expensive power purchase in FY 2008-09 (in Rs. Crore)	444.07
Share of apportioning costly power	98%
Total charges likely to be collected (in Rs. crore)	435.19
Additional Expensive power purchase in FY 2007-08 (in Rs. Crore)	226.44
Total Expensive Power Charge Collection (in Rs. Crore)	661.63
Energy sale to identified category (MU)	2702.02
Expensive Power charge for all categories (Rs. / unit)	2.48*

* Expensive Power charge is proposed at Rs. 1 per unit for HT1 category. For the remaining categories, the charge shall amount to Rs. 2.48 per unit.

5. Standby Charges:

Stand-by charges, as projected by BEST of Rs. 118.05 crore payable to MSEDCL, shall be levied on all consumers except to those coming under BPL category

Stand-by Charges for FY 2008-09 (in Rs. Crores)

Particulars	Quantity
Stand-by charge for FY 2008-09 (in Rs. Crore)	118.05
Energy sale except BPL category (unit)	4340.18
Stand-by charge for all categories (Rs. / unit)	0.27

6 Increase on account of un-recovered Return on Equity (RoE) & other expenses (Increase in all the energy sold except BPL category):

The Expensive Power charge and the stand-by charge help in recovering Rs. 779.68 crore. The balance amount to be recovered from various category of consumers by proposing change in the Fixed and variable charge is = Rs. (3060.07 – 779.68) crores.

= Rs. 2280.39 Crores.

This amount is proposed to be collected from consumers by a flat increase in the energy charge across all tariff categories and sub slabs as indicated in table

below except for the BPL category where no tariff change has been proposed. In effect, the net increase in energy charge to balance the revenue from sale of power and the revenue requirement excluding towards expensive power comes to about Rs. 0.40 per unit.

Proposal for tariff rationalization - Rationale

1. L. T. Category Tariff Rationalization

At present there are 19 tariff categories. Due to the application details given against some tariff categories, some times there is difference of opinion regarding interpretation of the applicability of consumer category. In order to overcome this difficulty and make the interpretation simple and easy to understand, it is proposed to re-classify some of the tariff categories in LT. The details are given below:

1.1 Broadening the consumer category for LT-1

The consumer premises such as Telephone Booths used by Handicapped persons, Public Trust or Religious Institutions for their normal activities, supply used for residential purpose where a part of premises was used by Lawyers, Advocates, Doctors etc., Charitable Institutions and Societies registered with Charitable Commissioner were covered under ` Single 'tariff category earlier. Subsequently, they were covered under LF I – Residential Tariff category, in the Tariff which was effected from 1st October, 2006.

The LF-1 Tariff category was renamed as LT-I Tariff category with the modifications in applicability and therefore the consumers explained above who were in LF-1 category were excluded from LT-I Tariff category and were charged under LT II – Commercial category as per the tariff effective from 01/04/2007.

Consumers registered with Charity Commissioner and running institutions "not for profit" only are eligible to be charged at LT I – Residential tariff category. This involves scrutiny of the documents submitted by consumer for verification of "not for profit" and also resulted in argument with consumers. Hence, it is proposed to remove the word "not for profit" from LT-1 applicability.

The re-classification will reduce the work of scrutiny of documents and reduce the anomaly explained in para above and enable us to charge the deserving low consumption at concessional rate upto first 300 units, recover the BEST's purchase cost from the consumption category between 300 to 500 units and recover cost to serve beyond 500 units.

1.2 Electric Supply for Crematorium

Presently, the electric supply for electric crematorium is covered under Tariff LT-VIII, which is concessional tariff, whereas the conventional crematoriums are not covered under this tariff. Burial ground / crematorium / cemeteries being an essential community service provided by Government / local Government / Trust, etc., it is felt that all burial ground / crematorium should have the benefit of lower tariff. Hence, all burial ground / crematorium / cemeteries are also brought under the tariff of crematoriums.

1.3. Temporary supply for Religious activities

Presently the consumers using supply for religious purposes are given concessional tariff i.e. LT-XI Tariff which is of a single slab for the entire units consumed. It is observed that, for many of the festivals, electricity is used for decorations and commercial purpose resulting in very high consumption which are presently charged at concessional rate as per above tariff. In order to amend

this discrepancy, it is proposed to charge these consumers in slabs similar to LT I – Residential category. This will enable us to charge deserving consumers (low consumption) at concessional rate (upto first 300 units), recover the BEST's purchase cost from the consumption category between 300 to 500 units and recover cost to serve beyond 500 units.

2.0 **Rationalization of HT tariff categories:**

At present there are 5 categories of HT tariff in BEST where as for neighbouring licensee it is only two. Now BEST have also proposed to reduce HT categories amalgamating some of the HT categories. Details of rationalization of HT categories are given below:

- 2.1 There are 5 HT tariff categories in our existing tariff. HT-I is HV supply for Educational Institutions and Hospitals run and aided by Govt. / MCGM. HT-V category is for bulk residential purpose including defence installations. It is proposed to combine HT-V tariff category with HT-I tariff category which will effect into 1 HT tariff category.
- 2.2 HT-II tariff category is HV supply for Hospitals run and controlled by private / charitable / religious institutions, HT-III tariff category is HV supply for commercial purpose and HT IV tariff category is for industrial purpose.

As per the Government policy most of the Industries have moved out of Mumbai and therefore there are negligible number consumers under Industrial category whereas there are more consumers in commercial category. It is therefore proposed to combine HT-II, HT-III, HT-IV categories under one tariff category i.e. HT-II resulting in reduction of 2 HT categories. Thus there will be overall reduction from 5 HT tariff categories to 2 categories.

After rationalization of tariff categories there will be total two HT categories and there will be reduction by 3 tariff categories.

Tariff Proposal for FY 2008-09

Tariff Category	Slab	Component of Tariff			Energy charge (Rs. / kWh)	Reliability Charge (Rs. / kWh)		
		Single phase meter (Rs./ connection / month)	Three phase meter (Rs./ connection / month)	Demand charge (Rs./ kVA / month)		Stand-by	Expensive power	Total
LT Category								
BPL	0 - 30	3			0.40			0.00
LT-1	0 - 100	10	100		0.90	0.27		0.27
	101 - 300	30	100		2.20	0.27		0.27
	301 - 500	60	100		3.90	0.27	2.48	2.75
	> 501	100	100		6.05	0.27	2.48	2.75
Sub Total								0.00
LT2	0 - 300	60	150		4.15	0.27		0.27
	301 - 500	120	200		6.40	0.27	2.48	2.75
	501- 1000	180	250		7.65	0.27	2.48	2.75
	> 1000	300	300		8.80	0.27	2.48	2.75
Sub Total								0.00
LT-3	all units			300	7.15	0.27	2.48	2.75
LT-4	all units		400		13.40	0.27	2.48	2.75
LT-5	0 - 300		300		3.60	0.27		0.27
	301 - 500		350		4.90	0.27	2.48	2.75
	501- 1000		400		5.90	0.27	2.48	2.75
	> 1000		400		7.25	0.27	2.48	2.75
Sub Total								0.00
LT-6A	all units		400		6.90	0.27	2.48	2.75
LT-6B	all units			300	5.90	0.27	2.48	2.75
LT-7A	all units			300	5.40	0.27	2.48	2.75
LT-7B	all units	150	200		5.40	0.27	2.48	2.75
LT-8	all units		100		1.90	0.27		0.27
LT-9	all units		300		10.40	0.27	2.48	2.75
LT-10	all units			150	6.00	0.27	2.48	2.75
LT-11	0 - 100	150	200		0.90	0.27		0.27
	101 - 300	150	200		2.20	0.27		0.27
	301 - 500	150	200		3.90	0.27	2.48	2.75
	> 501	150	200		6.05	0.27	2.48	2.75
HT Category								
HT - 1	all units			300	2.90	0.27	1.00	1.27
HT - 2	all units			300	4.75	0.27	2.48	2.75

The projected revenue from the above tariff structure for FY 2008-09 depicted in the next table.

Revenues from proposed tariff for FY 2008-09

Tariff Category	Slab	Revenue total fixed charges	Revenue from variable charges (Rs. Crore)	Revenue from Reliability			Total Revenue (Rs. Crore)	Power factor incentive / charge	Full year revenue (including incentive)
				Stand-by	Reliability charge	Total (SB+Ex power)			
LT Category									
BPL	0 - 30	0.01	0.01	0.0000	0.0000	0.00	0.01		0.01
LT-1	0 - 100	4.09	56.12	16.8374	0.0000	16.84	77.06		77.06
	101 - 300	13.35	127.34	15.6285	0.0000	15.63	156.32		156.32
	301 - 500	5.50	75.64	5.2367	48.1004	53.34	134.48		134.48
	> 501	5.78	261.02	11.6486	106.9948	118.64	385.44		385.44
Sub total		28.73	520.13	49.3513	155.0952	204.45	753.30		753.30
LT2	0 - 300	14.20	171.40	11.1511	0.0000	11.15	196.74		196.74
	301 - 500	3.77	82.33	3.4732	31.9019	35.38	121.47		121.47
	501 - 1000	4.85	140.12	4.9454	45.4248	50.37	195.34		195.34
	> 1000	7.37	716.75	21.9912	201.9930	223.98	948.10		948.10
Sub-total		30.18	1110.59	42	279	320.88	1461.66		1461.66
LT-3	all units	17.11	137.61	5.1965	47.7309	52.93	207.65		207.65
LT-4	all units	0.06	2.73	0.0550	0.5047	0.56	3.35		3.35
LT-5	0 - 300	1.36	7.76	0.5823	0.0000	0.58	9.71		9.71
	301 - 500	0.36	4.19	0.2308	2.1197	2.35	6.90		6.90
	501 - 1000	0.64	7.97	0.3649	3.3513	3.72	12.33		12.33
	> 1000	0.91	22.37	0.8331	7.6519	8.48	31.77		31.77
Sub-total		3.28	42.29	2.0110	13.1229	15.13	60.71		60.71
LT-6A	all units	0.61	46.49	1.8192	16.7099	18.53	65.63		65.63
LT-6B	all units	0.02	21.90	1.0024	9.2071	10.21	32.13		32.13
LT-7A	all units	2.98	9.77	0.4887	4.4887	4.98	17.73		17.73
LT-7B	all units	0.09	2.42	0.1212	1.1129	1.23	3.75		3.75
LT-8	all units	0.00	0.19	0.0270	0.0000	0.03	0.22		0.22
LT-9	all units	0.07	17.43	0.4524	4.1558	4.61	22.10		22.10
LT-10	all units	0.00	2.81	0.1267	1.1634	1.29	4.10		4.10
LT-11	0 - 100	0.01	0.00	0.0003	0.0000	0.00	0.01		0.01
	101 - 300	0.01	0.00	0.0003	0.0000	0.00	0.01		0.01
	301 - 500	0.01	0.00	0.0003	0.0023	0.00	0.01		0.01
	> 501	0.01	0.01	0.0003	0.0023	0.00	0.02		0.02
HT Category									
HT - 1	all units	1.96	16.50	1.5359	5.6887	7.22	25.68		25.68
HT - 2	all units	43.84	236.31	13.4322	123.3777	136.81	416.96		416.96
Power factor incentive / charge								-12.20	-12.20
Total		128.97	2167.20	117.1815	661.6823	778.86	3075.04	-12.20	3062.84

The projected revenue from the above tariff structure for FY 2008-09 = Rs. 3062.84 crores.

Revenue Surplus / (Gap) for FY 2008-09.

= (Income from revised tariff) – (Net Aggregate Revenue Requirement)

= Rs. 3062.84 Crores – Rs. 3060.07 Crores

= Rs. 2.77 Crores.