

BRIHANMUMBAI ELECTRIC SUPPLY
And
TRANSPORT UNDERTAKING (BEST)



EXECUTIVE SUMMARY

OF

**TRUE-UP of FY 2008-09, ANNUAL PERFORMANCE
REVIEW for FY 2009-10 & ARR and TARIFF PROPOSAL
for FY 2010-11**

TO

MAHARASHTRA ELECTRICITY REGULATORY COMMISSION

Executive Summary

Background

BEST is submitting this Annual Performance Review (APR) Petition for FY 2009-10 and ARR and tariff proposal for FY 2010-11 as per Regulation 17 of MERC (Terms and Conditions of Tariff) Regulations, 2005. BEST is also submitting the Annual Accounts for the period 1st April 2008 to 31st March 2009 audited by the municipal auditors for the purpose of truing up of expenses and revenue for FY 2008-09.

Revised Aggregate Revenue Requirement (ARR) of BEST for FY 2009-10 is estimated after considering the actual expenses till September 2009. Based on the estimates of FY 2009-10, ARR of FY 2010-11 has been projected.

Complying with the Tariff Regulations, BEST is submitting the following data for this Annual Performance Review:-

- a. True-up of expenses and revenue for the year FY 2008-09 based on audited accounts.
- b. Comparison of the revenue, expenses and performance of BEST of FY 2008-09 with those approved by the MERC in the APR order dated 15th June 2009.
- c. Based on the revised estimates of FY 2009-10 and other factual considerations, projections for the year FY 2010-11 have been finalized.

True Up for FY 2008-09

Based on the audited accounts of BEST the true up amount for FY 2008-09 is determined as (-)Rs.27.39 crores. BEST expenditure in Power Purchase cost is less than that approved by Hon'ble Commission. True up for FY 2008-09 and the variation in actual expenditure vis-à-vis the approval of the Commission in tariff order is summarized below.

(Amount in Rs. Crore)

Particulars	MERC Approved	BEST Actual	Difference
	(A)	(B)	(C)=(A-B)
Power Purchase Expenses	2327.05	2209.28	117.77
Operation & Maintenance Expenses	242.72	258.77	-16.05
<i>Employee Expenses</i>	142.94	158.65	-15.71
<i>Administration & General Expenses</i>	72.51	74.80	-2.29
<i>Repair & Maintenance Expenses</i>	27.28	25.32	1.96
Depreciation, including advance against depreciation	42.78	43.4	-0.62
Interest on Long-term Loan Capital	14.83	32.44	-17.62
Interest on Working Capital (Normative)	3.94	10.87	-6.93
Interest on Working Capital (Actual)	0	12.36	-12.36
Interest on Consumer security deposits	14.13	12.94	1.19
Bad Debts Written off	0.04	0	0.04
SLDC Charges	0.74	0.74	0
Transmission Charges paid to Transmission Licensee	109.61	106.61	3
Stand-by charges	108.78	114	-5.22
Reduction of cost (DSM)	-3.38	0	-3.38
Contribution to contingency reserves	3.11	6.45	-3.34
Other expenses	0	10.87	-10.87
Incentive on reduction of Distribution loss	0	25.23	-25.23
Total Expenditure	2864.35	2843.98	20.37
Return on Equity	100.53	108.81	-8.28
Return as Interest on Internal Funds	4.91	4.91	0
Gross Revenue Requirement	2969.79	2957.70	12.09
Other Income	-55.53	-70.83	15.3
Net Aggregate Revenue Requirement	2914.26	2886.87	27.39

Particulars	FY 2008-09 (in Rs Crore)		
	MERC Approved	BEST Actual	True -up Amount
	A	B	C=B-A
Net ARR	2914.26	2886.87	-27.39
Revenue from Sale of Power	2832.28	2832.28	0.00
Revenue Gap of FY 2008-09	81.98	54.59	-27.39

Provisional Truing up for FY 2009-10

Provisional truing up requirement for FY 2009-10 has been estimated after considering the actual O&M expenses, Power Purchase, Sales and Capex related expenses till September 2009.

Provisional Truing up requirement for FY 2009-10 and the variation in estimated expenditure and revenue vis-à-vis the approval of the Commission in tariff order is summarized below:

Computation of ARR for FY 2009-10

Particulars	Rs. crore		
	MERC Approved for FY 2009-10	BEST Projection for FY 2009-10	Difference
	(A)	(B)	(C)=(A-B)
Power Purchase Expenses	1477.56	1784.22	-306.66
Operation & Maintenance Expenses	258.97	279.36	-20.39
<i>Employee Expenses</i>	153.39	170.45	-17.06
<i>Administration & General Expenses</i>	76.89	79.39	-2.5
<i>Repair & Maintenance Expenses</i>	28.69	29.52	-0.83
Depreciation, including advance against depreciation	45.3	46.56	-1.26
Interest on Long-term Loan Capital	19.42	19.17	0.25
Interest on Working Capital (Normative)	8.14	12.97	-4.83
Interest on Working Capital (Additional)	0	8.04	-8.04
Interest on Consumer security deposits	15.54	12.46	3.08
Bad Debts Written off	0.04	0.15	-0.11

Particulars	MERC Approved for FY 2009-10	BEST Projection for FY 2009-10	Difference
	(A)	(B)	(C)=(A-B)
SLDC Charges	0.53	0.53	0
Under Recovery of TPC	0	0	0
Transmission Charges paid to Transmission Licensee	91.38	91.38	0
Stand-by charges	112.13	112.13	0
Contribution to contingency reserves	3.28	7.18	-3.9
Other expenses	0	56.26	-56.26
Incentive on reduction of Distribution loss	0		0
Total Expenditure	2032.29	2430.40	-398.11
Return on Equity	103.41	114.66	-11.25
Return as Interest on Internal Funds	5.21	5.19	0.02
Gross Revenue Requirement	2140.91	2550.25	-409.34
Other Income	-55.53	-71.15	15.62
Net Revenue Requirement	2085.38	2479.10	-393.72

Computation of Revenue Gap for FY 2009-10

Particulars	FY 2009-10 (in Rs Crore)		
	MERC Approved	FY 2009-10 Estimated	True -up Amount
	A	B	C=A-B
Net Revenue Requirement	2085.38	2479.10	-393.72
Revenue-Gap for FY 2007-08	225.79	225.79	0
Revue - Gap of FY 2008-09	392.22	430.98	-38.76
Net Aggregate Revenue Requirement	2703.39	3135.87	-432.5
Revenue from Sale of Power	2704.99	2699.50	5.49
Add: <i>estimated FAC revenue from consumers</i>		200.87	-200.87
Total estimated revenue of FY 2009-10	2704.99	2900.37	-195.38
Revenue Gap of FY 2009-10	-1.60	235.50	-237.10

Projections for FY 2010-11

Based on the estimates of FY 2009-10 and other factual considerations, revised projections for the year FY 2010-11 has been finalized.

Estimated Revenue Gap in FY 2010-11 is derived from the estimated expenditure and expected revenue based on realistic projections.

Computation of ARR for FY 2010-11

Particulars	BEST Projection for FY 2010-11
	Rs. Crore
Power Purchase Expenses	2014
Operation & Maintenance Expenses	301.11
<i>Employee Expenses</i>	182.84
<i>Administration & General Expenses</i>	84.15
<i>Repair & Maintenance Expenses</i>	34.12
Depreciation, including advance against depreciation	47.25
Interest on Long-term Loan Capital	30.12
Interest on Working Capital (Normative)	5.72
Interest on Working Capital (Additional)	5.73
Interest on Consumer security deposits	15.77
Bad Debts Written off	0.15
SLDC Charges	1.14
Transmission Charges paid to Transmission Licensee	95.9
Stand-by charges	112.13
Contribution to contingency reserves	7.87
Other expenses	57.26
Total Expenditure	2694.13
Return on Equity	121.5
Return as Interest on Internal Funds	5.79
Gross Revenue Requirement	2821.42
Other Income	-71.49
Net Aggregate Revenue Requirement	2749.93

Computation of Stand alone Revenue Gap in FY 2010-11

Particulars	FY 2010-11
	(in Rs Crore)
Net ARR	2749.93
Revenue from Sale of Power	2797.74
Revenue Gap of FY 2010-11	-47.81

Power Purchase

BEST procure power mainly from TPC-G. The revised Power purchase expenses for FY 2009-10 and projection for FY 2010-11 are summarized below:

Summary of Power Purchase Expense

Particulars	BEST Revised Projection for FY 2009-10		Unit Rate	BEST Projection for FY 2010-11		Unit Rate
	MU	Rs. Crore		MU	Rs. Crore	
TPC-G: Thermal including unit 4 and Hydel	4559	1536	3.37	4716	1669	3.54
TPC-G: Unit 8	622	209	3.36	678	239	3.53
Fixed cost of TPC-G		325		0	369	0.00
RPS	195	88	4.52	105	45	4.28
Additional PP	188	103	5.46			
Sales from BEST share	-702	-475	6.76	-453	-268	5.91
Standby charges		112			112	
Less Hydel Rebate		-40			-40	
Sub Total (Power Purchase)	4862	1859	3.82	5046	2126	4.21
Transmission Charges		91			95.9	
SLDC Charges		0.53			1.14	
Payment as per case no. 111 of 2008 (MERC Order dated 28th May,2009)		31				
Credit received from M/s TPC-G		-1.46				
Refund in case no. 26 of 2008(MERC Order dated 2nd Feb,2009)		7.86				
Total	4862	1988	4.09	5046	2223	4.41

Energy Balance

BEST has computed energy balance based on sales forecast, transmission and distribution losses for FY 2008-09, FY 2009-10 and FY 2010-11. BEST has considered normative Intra-State Transmission losses at 4.85% for FY 2009-10 and FY 2010-11. Based on the Distribution loss trajectory as approved by Hon'ble Commission BEST has considered distribution loss of 10% for FY 2009-10. BEST has also considered the distribution loss for FY 2010-11 as 10 % for the purpose of determining energy balance.

The Energy Balance for all three years is tabulated below:

Energy Balance for BEST

Particulars	FY 2008-09 Actual	FY 2009-10 Revised Projection	FY 2010-11 Forecasting
Energy Sale (MU)	4103	4164	4321
Distribution loss (in %)	9.29%	10%	10%
Energy Purchase at T-D interface(MU)	4523	4627	4801
InSTS losses (%)	4.86%	4.85%	4.85%
Energy purchase at G-T interface(MU)	4754	4862	5046

Sales Projection

FY 2009-10

BEST has considered actual sales for H1 of FY 2009-10. For the purpose of estimating the sales projection for H2 of FY 2009-10, BEST has adopted the method which is similar to the one that was adopted in the previous APR petition of FY 2008-09. It has computed averages of monthly

energy input over a horizon of 15-year period vis a vis the total annual power purchase as base. Assuming that the percentage of energy procured during a particular month and the amount of energy sold in that month follow a similar trend, projections for H2 of FY 09-10 has been made.

FY 2010-11

The Growth considered for FY 2010-11 is arrived by taking in to consideration the 5-year CAGR i.e. 3.77%. Total sales projection is shown below

Particulars	Actual	Revised Projection	Projection
	FY 2008-09	FY 2009-10	FY 2010-11
Total BEST Consumer Sales (MUs)	4103	4164	4321

Distribution loss Reduction Incentive Calculation

- ✓ BEST has achieved the Distribution loss level of 9.29% for FY 2008-09 as against the MYT trajectory of 10.5% set by MERC.
- ✓ Lower distribution loss of 9.29% has resulted in reduction of 1.21% than approved which translates to Revenue of Rs 37.84 crore in line with methodology adopted by Hon'ble Commission.
- ✓ Claim of Rs 25.23 Crore (2/3rd of Rs 37.84 Crore) as incentive is considered in true-up of FY 2008-09.
- ✓ Out of this amount Rs 12.61 Crore is to be retained by BEST, and remaining Rs 12.61 Crore needs to be transferred to special reserves.

Summary of Total Revenue Gap for FY 2010-11

Based on true-up requirement of FY 2008-09, provisional true-up of FY 2009-10 and projected gap of FY 2010-11, BEST is in revenue deficit of **Rs. 173.85 crore**.

S.No.	Particulars	Rs Crore	%
1	True Up requirement of FY 2008-09	-27.39	-0.98%
2	Provisional True up of FY 2009-10	237.10	8.47%
3	Revenue Gap of FY 2010-11	-47.81	-1.71%
4	Impact of Review Order in case no. 44 of 2009	11.95	0.43%
5	Total Revenue(+) Gap/ (-)Surplus	173.85	6.21%

Tariff Schedule

The expected revenue for FY 2010-11 has been estimated by applying the existing tariff to the projected sales and consumer related data as per segregation provided by Hon'ble Commission in its previous tariff order dated 15th June 2009. As given in table above, BEST's revenue gap to be recovered from tariff of FY 2010-11 is **Rs. 173.85** crore, which requires an increase of **6.21%** in existing tariff. BEST would like to humbly submit before Hon'ble Commission that BEST has taken following consideration while determining proposed tariff for FY 2010-11

1. No increase proposed for residential categories up to 300 units.
2. No increase in demand charge proposed for any category.
3. For Industrial categories increase in energy charge proposed for high end consumers.
4. BEST has proposed change in tariff, in accordance with the provisions of the EA 2003, Tariff Policy and previous Orders of the Commission.

The proposed tariff schedule along with existing tariff and comparison of the same is given below.

The detailed revenue computation has been given in Form 14 of the APR Formats specified by the Commission.

Comparison of Existing & proposed LT Tariff Schedule

Tariff Category	Slab	Components of tariff			Components of tariff			Increase in tariff (%)	
		Single/ Three Phase meter (Rs./ connection / month)	Demand charge (Rs./ kVA/ month)	Variable charge (Rs./ kWh)	Single/ Three Phase meter (Rs./ connection / month)	Demand charge (Rs./ kVA/ month)	Variable charge (Rs./ kWh)		
		Existing Tariff			Proposed tariff			Demand Charges	Variable Charges
LT category									
BPL	0-30	3		0.4	3		0.4	0%	0%
LT-I	0-100	30		1.8	30		1.8	0%	0%
	101-300	50 & 100		3.7	50 & 100		3.7	0%	0%
	301-500	50 & 100		5.9	50 & 100		6.8	0%	15%
	>500	100		7.9	100		9.2	0%	16%
LT-II A	0-300	200		5.1	200		5.5	0%	8%
	301-500	200		6.8	200		7.15	0%	5%
	501-1000	200		7.9	200		8.5	0%	8%
	>1000	200		8.3	200		9.2	0%	11%
LT-II B	all units		150	8.9		150	9.3	0%	4%
LT-II C	all units		150	9.8		150	10.3	0%	5%
LT-III	0-300	250		4.3	250		4.3	0%	0%
	301-500	300		5.8	300		5.8	0%	0%
	501-1000	350		6.6	350		6.6	0%	0%
	>1000	350		7.5	350		8.35	0%	11%
LT-IV A	all units		150	7.19		150	7.5	0%	4%
LT-IV B	all units		150	7		150	7.25	0%	4%
LT - V	all units	300		12.92	300		14	0%	8%
LT-VI #	all units		150	6.09		150	6.2	0%	2%

Tariff Category	Slab	Components of tariff			Variable charge (Rs./ kWh)	Components of tariff		Variable charge (Rs./ kWh)	Increase in tariff (%)	
		Single/ Three Phase meter (Rs./ connection / month)	Demand charge (Rs./ kVA/ month)			Single/ Three Phase meter (Rs./ connection / month)	Demand charge (Rs./ kVA/ month)			
		Existing Tariff			Proposed tariff			Demand Charges	Variable Charges	
LT category										
LT-VII (A)	all units	150		2.85	150		3	0%	5%	
LT-VII(B)	all units	150		10.59	150		10.59	0%	0%	
LT-VIII	all units	100		2.66	100		2.66	0%	0%	

Note: Terms and Condition of ToD tariff remains unchanged.

Comparison of Existing & proposed HT Tariff Schedule

Tariff Category	Slab	Components of tariff			Variable charge (Rs./ kWh)	Components of tariff		Variable charge (Rs./ kWh)	Increase in tariff (%)	
		Single phase meter (Rs./ connection / month)	Demand charge (Rs./ kVA/ month)			Single phase meter (Rs./ connection / month)	Demand charge (Rs./ kVA/ month)			
		Existing Tariff			Proposed tariff			Demand Charges	Variable Charges	
HT category										
HT-I	all units		200	5.81		200	6.4	0%	10%	
HT-II	all units		200	6.36		200	6.36	0%	0%	
HT-III	all units		200	3.61		200	4.1	0%	14%	
HT-IV	all units		200	9		200	9		0%	

Note: Terms and Condition of ToD tariff remains unchanged.

Cross Subsidy across various Consumer Categories as per the proposed tariff for FY

2010-11

Category	Slabs	Projected Average Cost of Supply for FY 2010-11 (Rs/kWh)	Average Billing Rate (Rs/Kwh)		Ratio of Average Billing Rate to Projected Average Cost of Supply (%)			% Increase in Average Billing Rate
			Existing Tariff	Proposed Tariff	APR Order for FY 09	Existing Tariff	Proposed Tariff	
LT Category								
LT-I BPL	0-30	6.88	0.50	0.50	19%	7%	7%	0%
LT-I Residential			4.41	4.79	67%	64%	70%	9%
LT-II A Comml. Up to 20 kW			7.32	7.89	115%	106%	115%	8%
LT-II B comml. > 20 kW and <= 50 kW	all units		9.38	9.78	149%	136%	142%	4%
LT-II C comml. > 50 kW	all units		10.32	10.82	163%	150%	157%	5%
LT-III Incl. Up to 20 kW			6.74	7.01	106%	98%	102%	4%
LT-IV A Incl. > 20 kW and <= 100 kW	all units		7.87	8.18	125%	114%	119%	4%
LT-IV B Incl. > 100 kW	all units		7.47	7.72	118%	109%	112%	3%
LT - V Advt. and Hoarding	all units		13.74	14.82	214%	200%	215%	8%
LT-VI streetlight	all units		6.79	6.90	104%	99%	100%	2%
LT-VII (A) Temp. religious	all units		2.89	3.04	45%	42%	44%	5%
LT-VII(B) Temp. Others	all units		10.62	10.62	168%	154%	154%	0%
LT-VIII Cremation and Burial Grounds	all units		2.67	2.67	42%	39%	39%	0%
HT category								
HT-I Insudtry	all units	6.88	6.31	6.90	101%	92%	100%	9%
HT-II commercial	all units		6.92	6.92	109%	101%	101%	0%
HT-III Group Housing	all units		4.32	4.81	69%	63%	70%	11%

PRAYERS

BEST Undertaking prays to the Honourable Commission to

- a) Approve total recovery of ARR of FY 2010-11 Provisional true-up amount of FY 2009-10, the true-up amount of FY 2008-09 and other claims as proposed by BEST.
- b) Approve proposed category-wise tariff revision for FY 2010-11.
- c) Consider ceiling distribution loss of 10% for FY 2010-11.
- d) Approve the tariff philosophy suggestions requested by BEST.
- e) Any errors/omissions may please be condoned, and opportunity be given to rectify the same
- f) Permit BEST to file additional data/information as may be necessary