

**Petition for
Mid-term Review for 3rd Control Period, Truing
up of the Aggregate Revenue Requirement (ARR)
and Revenue for FY 2015-16 & 2016-17,
Provisional Truing up for FY 2017-18 and Revised
ARR and Electricity tariff for FY 2018-19 to FY
2019-20**

Executive Summary



**Brihan Mumbai Electric Supply & Transport
Undertaking
(of the Brihan Mumbai Mahanagar Palika)**

June 2018



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List of Abbreviations

A&G	Administrative & General
ABR	Average Billing Rate
ACoS	Average Cost of Supply
APDRP	Accelerated Power Development and Reforms Program
ARR	Aggregate Revenue Requirement
APR	Annual Performance Review
ATC	Available Transmission Capacity
ATE	Appellate Tribunal for Electricity
BEST	Brihan Mumbai Electric Supply and Transport Undertaking
CAGR	Compounded Annual Growth Rate
COS	Cost of Supply
CWIP	Capital Works in Progress
CPI	Consumer Price Index
DSM	Demand Side Management
DPDC	District Planning & Development Council
DPR	Detailed Project Report
EA 2003	The Electricity Act, 2003
ECS	Electronic Clearing System
ED	Electricity Duty
EPA	Energy Purchase Agreement
FY	Financial Year
FBSM	Final Balancing Settlement Mechanism
FAC	Fuel Adjustment Cost
GFA	Gross Fixed Assets
H1	First half of the financial year
H2	Second half of the financial year
HT	High Tension
IT	Information Technology
IDC	Interest During Construction
IWC	Interest on Working Capital
kV	Kilovolt
kWh	Kilowatt Hour
kW	Kilowatt
kVA	Kilo Volt Ampere
LT	Low Tension
LoI	Letter of Intent
MCGM	Municipal Corporation of Greater Mumbai
MERC	Maharashtra Electricity Regulatory Commission
MTR	Mid Term Review
MYT	Multi Year Tariff
MD	Maximum Demand
MMC Act	Mumbai Municipal Corporation Act
MMRDA	Mumbai Metropolitan Region Development Authority
MoU	Memorandum of Understanding
MSLDC	Maharashtra State Load Despatch Centre
M Tax	Maharashtra Tax
MU	Million Units
NEF	National Electricity Fund



NTI	Non-Tariff Income
O&M	Operation and Maintenance
PF	Power Factor
PPA	Power Purchase Agreement
PRC	Pay Revision Committee
RE	Revised Estimates
REC	Renewable Energy Certificates
REC Ltd.	Rural Electrification Corporation Ltd.
RLNG	Re-gasified Liquefied Natural Gas
R&M	Repair and Maintenance
T&D	Transmission and Distribution
TDLR	Transport Division Loss Recovery
TOD	Time of Day
TPC- G	Tata Power Company limited (Generation)
TVS	Technical Validation Session
Unit	One kilo-watt-hour of energy
VRS	Voluntary Retirement Scheme
YOY	Year on Year
WPI	Wholesale Price Index



1 Background

1.1 Background

- 1.1.1 Maharashtra Electricity Regulatory Commission has notified the MERC (Multi Year Tariff) Regulation, 2011 (herein after referred as MYT Regulations, 2011) which are applicable for the second control period from FY 2012-13 to FY 2015-16.
- 1.1.2 Maharashtra Electricity Regulatory Commission has notified the MERC (Multi Year Tariff) Regulation, 2015 (herein after referred as MYT Regulations, 2015). These Regulations are applicable for the third MYT control period from FY 2016-17 to FY 2019-20.
- 1.1.3 BEST filed MYT Petition for the Third MYT Control Period on 26th April 2016. The Hon'ble Commission issued MYT tariff order in case no. 33 of 2016 for BEST Undertaking for the third control period from FY 2016-17 to FY 2019-20 along with Truing-up of ARR for FY 2012-13 to FY 2014-15, Provisional Truing-up for FY 2015-16 on 28th October, 2016. In subsequent sections of this petition, MYT order issued by Hon'ble Commission in case no. 33 of 2016 is referred as "MYT order".
- 1.1.4 Further, BEST had filed Petition for review of MYT Order 33 of 2016 on 23rd December 2016. The Hon'ble Commission has issued Order No. 4 of 2017 on 12th January 2018 in relation to the same.
- 1.1.5 BEST had submitted MTR Petition on 21st December 2017 for Mid Term Performance Review for the third MYT Control Period along with the audited accounts for FY 2015-16, audited accounts for FY 2016-17 and the details in the stipulated formats. BEST is hereby filing revised MTR petition subsequent to replies of data gap queries.
- 1.1.6 BEST submits that as per 8 of MERC (MYT) Regulations, 2015:
*" 8.1 The Generating Company or Licensee or MSLDC shall file a Petition for Mid-term Review and Truing-up of the Aggregate Revenue Requirement and Revenue for the Years 2015-16 and 2016-17, and provisional Truing-up for the Year 2017-18, by November 30, 2017:
Provided that the Petition shall include information in such form as may be stipulated by the Commission, together with the Accounting Statements, extracts of books of account and such other details, including Cost Accounting Reports or extracts thereof, as it may require to assess the reasons for and extent of any difference in operational and financial performance from the approved forecast of Aggregate Revenue Requirement and expected revenue from Tariff and charges".*



- 1.1.7 BEST is filling for final Truing-up of FY 2015-16 as per MYT Regulations 2011; final Truing-up of FY 2016-17, provisional Truing-up of FY 2017-18, revision of ARR and for determination of Tariff for FY 2018-19 and FY 2019-20 under MYT Regulations, 2015.

1.2 Special Status of BEST Undertaking

- 1.2.1 The erstwhile Bombay Electric Supply & Tramways Company (BEST) started supplying electricity to the Mumbai city in 1905. In 1947, the Company was municipalized and came to be known as Bombay Electric Supply & Transport Undertaking ('BEST Undertaking' or 'BEST'). BEST is an Undertaking of Brihanmumbai Mahanagarपालिका and is in the business of providing electricity in the old city limits and public transport (Bus transport) covering the entire city and suburbs and some areas of the Mumbai Metropolitan region.
- 1.2.2 BEST is recognised as a 'Local Authority' under the Electricity Act 2003 (herein after referred as "the Act"). Historically there was a common administration set up for both the business activities, i.e., the Electric Supply division and the Transport division. Prior to enactment of the Act, the revenue of electricity utilities was approved under provisions of Schedule VI of the Electricity Supply Act 1948, however, the 'Local Authority' was exempted from applicability of provisions of Schedule VI of the Electric Supply Act 1948. Thus, BEST being a 'Local Authority', and with the objective of providing better and essential services of Electricity supply and Transport to the citizens of Mumbai as its social obligation.

1.3 Exemptions granted to a Local Authority in Electricity Act 2003:

- 1.3.1 BEST submits that the EA, 2003 grants certain exemptions to Local Authorities engaged in the business of electricity distribution under Section 51, which is reproduced below:
- 1.3.2 BEST submits that the EA, 2003 grants certain exemptions to Local Authorities engaged in the business of electricity distribution under Section 51 & 42(3), which is reproduced below:

"Section 51. (Other businesses of distribution licensees):

A distribution licensee may, with prior intimation to the Appropriate Commission, engage in any other business for optimum utilisation of its assets:

Provided that a proportion of the revenues derived from such business shall, as may be specified by the concerned State Commission, be utilised for reducing its charges for wheeling :

Provided further that the distribution licensee shall maintain separate accounts for each such business undertaking to ensure that distribution business neither subsidises in any way such business undertaking nor encumbers its distribution assets in any way to support such business.

***Provided also that nothing contained in this section shall apply to a local authority engaged, before the commencement of this Act, in the business of distribution of electricity."* (emphasis added)**



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- 1.3.3 Admissibility of transport deficit in annual revenue requirement of electric supply business beyond FY 2015-16 will be clarified after finality of Civil Appeal No. 10488 of 2014 pending before the Supreme Court.



2 Truing up for FY 2015-16

2.1 Truing up details

2.1.1 The Annual Accounts of BEST for the period 1 April, 2015 to 31 March, 2016 have been approved by the BEST Committee and audited by the Municipal Auditors and is already submitted to the Hon'ble Commission.

2.1.2 BEST proposes Truing up of its expenses and revenues based on the Accounts audited by the Municipal Auditors for FY 2015-16, provisions of MERC MYT Regulations, 2011 and other aspects as submitted in the Petition.

2.2 Energy Sales and Energy Balance

2.2.1 The summary of the category-wise sales as approved by the Hon'ble Commission in the MYT Order and actual for FY 2015-16 shown in Table below:

Table 1 Tariff Category-wise energy consumption for FY 2015-16 (MU)

Sr. No.	Consumer Category	Slab	Approved in MYT Order	Actual
	LT Category			
1.	BPL	0 – 30	0.21	0.21
2.	LT - I Residential	0 – 100	721.19	721.19
		101 - 300	648.11	648.11
		301 - 500	204.38	204.38
		> 501	367.31	367.31
		Sub-total	1,941.20	1,941.20
3.	LT - II (a) Commercial	0 – 500	556.15	556.15
		> 500	349.55	349.55
		Sub-total	905.70	905.70
4.	LT - II (b) Commercial	all units	236.19	236.19
5.	LT - II (c) Commercial	all units	462.17	462.17
6.	LT - III Industrial	0 – 500	20.50	20.50
		> 500	22.61	22.61
		Sub-total	43.11	43.11
7.	Before Nov 16- LT - IV (a) Industrial	all units	51.82	51.82
8.	Before Nov 16- LT - IV (b) Industrial	all units	48.29	48.29
9.	LT - V Adv. & Hoardings	all units	1.68	1.68
10.	LT - VI St. Lighting	all units	29.79	29.79
11.	LT - VII (a) Temp – Religious	all units	2.36	2.36
12.	LT - VII (b) Temp – Others	all units	40.38	40.38
13.	LT - VIII Crematorium	all units	1.30	1.30
14.	LT - IX (a) Hospitals /Educational Institutions	all units	13.70	13.70
15.	LT - IX (b) Hospitals /Educational Institutions	all units	87.25	87.25



Sr. No.	Consumer Category	Slab	Approved in MYT Order	Actual
	HT Category			
16.	HT - I Industry	all units	199.51	199.51
17.	HT - II Commercial	all units	362.65	362.65
18.	HT - III Group Housing	all units	32.02	32.02
19.	HT - IV Temp	all units	7.78	7.78
20.	HT V-(a) Hospitals /Educational Institutions	all units	109.71	109.71
21.	Total		4576.60	4576.60

2.2.2 BEST has considered actual intra-state transmission loss to determine energy requirement at G<>T interface. Energy balance for FY 2015-16 is produced as below.

Table 2: Energy balance for FY 2015-16

Sr. No.	Particulars	Approved in MYT Order	Actual
1	Sales (MU)	4,576.60	4,576.60
2	Distribution loss (%)	7.43%	5.83%
3	Energy Requirement at T-D interface (MU)	4,944.20	4,859.77
4	Intra-state Transmission loss (%)	3.92%	3.92%
5	Energy Requirement at G-T interface (MU)	5,145.92	5,058.17

2.2.3 BEST has considered the correct figures of T<>D drawl as certified by MSLDC.

2.3 Power Purchase expense for FY 2015-16

2.3.1 Summary of Power Purchase expenses for FY 2015-16 are shown in Table below:

Table 3: Summary of Power Purchase Expenses for FY 2015-16

Sr. No.	Particulars	Approved in this Order			Actual		
		Quantum (MU)	Total Cost (Rs. crore)	Rate (Rs./ kWh)	Quantum (MU)	Total Cost (Rs. crore)	Rate (Rs./ kWh)
1	TPC-G	3,526.82	1,512.89	4.29	3,526.82	1,512.98	4.29
2	RPS-Spark Green	-	-	-	5.57	1.04	1.86^
3	RPS-Solar	31.50	26.96	8.56	32.88	28.15	8.56
4	RPS Non-Solar	298.70	194.17	6.50	291.90	195.08	6.68
5	REC Procurement	-	18.75	-	-	18.75	-
6	RPS rebate	-	(3.82)	-	-	(2.88)	-
7	External power purchase	669.95	235.80	3.52	667.61	235.81	3.53
8	Bilateral rebate	-	(3.91)	-	-	(3.15)	-
9	Pool imbalances	615.64	30.19	0.49	529.04	104.09	1.97
10	Stand-by Energy Purchase	3.32	1.72	5.18	3.13	1.29	4.11



Sr. No.	Particulars	Approved in this Order			Actual		
		Quantum (MU)	Total Cost	Rate (Rs./ kWh)	Quantum (MU)	Total Cost	Rate (Rs./ kWh)
			(Rs. crore)			(Rs. crore)	
11	Prior period payment to TPC-G	-	112.23	-		112.23	
12	Prior period payment to MSLDC	-	188.26	-		51.48	
13	Stand-by Charges	-	107.22	-		107.22	
14	Short Term Mini Micro Hydro Purchase				1.23	0.71	5.78
15	Other expenses /charges					11.09	
16	Transmission charges		227.02			227.02	
17	MSLDC charges		1.24			1.24	
	Total Power Purchase	5,145.92	2,648.70	5.15	5,058.17	2,602.12	5.14

2.4 Operation and Maintenance Expenses

2.4.1 Operation and Maintenance Expenses approved by the Hon'ble Commission in MYT order, normative O&M expenses based on provisional sales, number of consumers and opening GFA; and actual expense of BEST as per audited accounts are shown in Table as below.

Table 4: Operation and Maintenance Expenses for FY 2015-16 (Rs. crore)

Sr. No.	Particulars	Approved in MYT Order	Revised Normative	Actual
1	Employee Expenses			321.30
2	A&G Expenses			143.60
3	R&M Expenses			58.78
4	Net O&M Expenses	414.40	411.07	523.68
5	Impact of Wage Agreement	36.54	53.33	53.33
6	Total O&M Expenses	450.94	464.40	577.01

2.4.2 BEST requests the Hon'ble Commission to approve the O&M expenses as revised normative as presented in the table above.



2.5 Depreciation

2.5.1 In MYT Petition, in accordance with the provisions of MYT Regulations, 2011, for arriving at the average depreciation rate for each year, BEST had already reduced the GFA addition to each year by the amount equivalent to Consumer Contribution during the year. BEST therefore requests the Hon'ble Commission to approve the depreciation for FY 2015-16 as submitted in table below:

Table 5: Depreciation for FY 2015-16 (Rs. crore)

Particulars	Opening GFA
<u>Calculation of average GFA</u>	
Opening GFA after adjusting consumer contribution	2,184.59
Capitalisation with IDC during FY 2015-16	124.62
Retirement of assets	11.19
Closing GFA	2,298.02
Average GFA [A]	2,241.30
<u>Calculation of Average Depreciation Rate</u>	
Audited opening GFA	2,179.70
Audited closing GFA	2,292.46
Average audited GFA	2,236.08
Audited depreciation	106.10
Average Depreciation on average audited GFA [B]	4.74%
<u>Calculation of depreciation</u>	
Depreciation [C]=[A]*[B]	106.35

2.6 Capital Expenditure and Capitalisation

2.6.1 BEST incurred total capital expenditure of Rs. 120.77 crore in FY2015-16. Break-up of which is as follows:

Table 6 Break-up of capital expenditure for FY2015-16 (Rs crore)

Particulars	DPR scheme	Non-DPR scheme
Distribution wire business		
Approved in principle by MERC	99.42	13.83
Awaited in-principle approval by MERC	0	
Sub-total [A]	99.42	13.83
Retail supply business		
Approved in principle by MERC	7.52	0.0
Awaited in-principle approval by MERC	0.0	0.0
Sub-total [B]	7.52	0.0
Grand total [A]+[B]	120.77	
Capital expenditure approved as per Case No. 33 of 2016	120.77	



2.6.2 BEST requests the Hon'ble Commission to approve the capitalisation submitted as under:

Table 7: Capitalisation for FY 2015-16 (Rs. crore)

Sr. No.	Particulars	MYT Order	Actual
1	Capitalisation with IDC	124.62	124.62

2.7 Funding of Capitalization

2.7.1 The Capital Expenditure Plan is prepared based on the existing approved funding and the limitations in terms of infusion of equity or internal accrual.

Table 8: Details of funding of Capitalisation for FY 2015-16 (Rs. crore)

Sr. No.	Particulars	BEST Submission
1	Capital Connection Fee	10.07
2	Government Grant	0
3	Loan	80.19
4	Internal Source	34.36
	Total	124.62

2.8 Interest on Long term loan

2.8.1 The computation of interest expenses is submitted as under:

Table 9: Details of Normative Interest on loan for FY 2015-16 (Rs. crore)

Sr. No.	Particulars	MYT Order	Normative
1	Opening balance of loan	70.28	70.28
2	Add: Loan drawl during the year	80.37	80.19
3	Loan repayment during the year	98.73	106.35
4	Closing balance of loan	51.93	44.12
5	Applicable interest rate (%)	10.50%	10.49%
	Interest Expenses	6.42	6.00

2.8.2 BEST humbly request the Hon'ble Commission to approve the normative interest expenses as calculated in table above.

2.9 Interest on Working Capital (IWC)

2.9.1 BEST claims IWC on normative basis as under:

Table 10: Interest on Working Capital details (Rs. crore)

Sr. No.	Particulars	Approved in MYT Order	Normative
1	One-twelfth of the amount of Operations and Maintenance Expenses	37.58	48.08
2	One-twelfth of the sum of the book value of stores, materials and supplies	1.80	2.31
3	Two months of the revenue from sale of electricity at the prevailing tariffs	800.84	805.11
4	Less: Security Deposit from Consumers	358.65	369.69
5	Less: One-twelfth amount of Cost of power purchased	220.73	216.84



Sr. No.	Particulars	Approved in MYT Order	Normative
6	Total Working Capital = (1+2+3) – (4+5)	260.85	268.97
7	Rate of interest (%)	14.45%	14.45%
8	Interest of Working Capital	37.69	38.87

2.10 Interest on consumer security deposit

2.10.1 The Interest on Consumer security deposit for FY 2015-16 is as under:

Table 11: Interest on Consumer Deposit for FY 2015-16 (Rs. crore)

Sr. No.	Particulars	Approved in MYT Order	Actual
1	Less: Amount held as security deposit	358.65	369.69
2	Rate of Interest (% p.a.)	7.75%	7.75%
3	Total Interest on consumer security deposit	27.80	28.65
4	Less: interest on consumer deposit amount paid for the earlier year in current year		1.17
5	Total Interest on consumer security deposit	27.80	27.48

2.10.2 The actual interest on consumer deposit is calculated as per the stipulated interest rate of 7.75% on net security deposit with BEST. BEST humbly requests the Hon'ble Commission to approve the same.

2.11 Contribution to Contingency Reserves

2.11.1 BEST has calculated contribution to contingency reserve at the rate of 0.25 % on opening Gross Fixed Assets.

Table 12: Contribution to Contingency Reserve for FY 2015-16 (Rs. crore)

Sr. No.	Particular	Approved in MYT Order	Actual
1	Contribution to Contingency Reserve	5.46	5.44

2.12 Other expenses

2.12.1 BEST has incurred other expense of Rs. 137.21 crore in FY 2015-16 against the approved amount of Rs. 120.75 crore. The break-up of other expense is as given below:

Table 13: Other Expenses Details for FY 2015-16 (Rs. crore)

Sr. No.	Particulars	Approved in MYT Order	Actual
1	Power Factor Incentive	95.00	92.60
2	Prompt Payment Discount	20.00	18.33
3	ECS Discount	0.75	0.52
4	Load Factor Incentive	5.00	1.83
	Total	120.75	113.28



2.12.2 BEST humbly requests the Hon'ble Commission to approve the actual other expenses of Rs. 137.21 crore for FY 2015-16.

2.13 Provision for Bad and doubtful Debts

2.13.1 Hon'ble Commission had provisionally allowed Rs. 7.24 crore as provision for bad debts for FY 2015-16 in previous MYT order. Further, Hon'ble Commission directed that any variation shall be tried up based on the Audited Accounts during Mid Term Performance Review.

2.13.2 BEST submits that the amount of Rs. 7.84 crore was written off against pending dues.

Table 14: Bad Debts written off for FY 2015-16

Sr. No.	Particulars	Approved in MYT Order (Rs. crore)	Actual (Rs. crore)
1	Bad debts written off / provision for bad and doubtful debts	7.24	7.84

2.13.3 BEST humbly request the Hon'ble Commission to approve actual expenses of Rs. 7.84 crore incurred towards bad debt during FY 2015-16.

2.14 Income Tax

2.14.1 As per the Income Tax Act under Section 10(20), the income of local authority is exempted. Hence, BEST has not considered any Income Tax for FY 2015-16.

2.15 Return on Equity

2.15.1 BEST submits that it has considered the Return on equity computed as per Regulation 32 of MERC MYT Regulations, 2011.

Table 15: Return on Equity for FY 2015-16 (Rs. crore)

Sr. No.	Particulars	Approved in MYT Order	Normative
1	Regulatory Equity at the beginning of the year	790.71	790.71
2	Equity portion of capitalization	34.45	34.37
3	Reduction in Equity due to Retirement/Replacement of Assets	2.04	3.36
4	Regulatory Equity at the end of the year	823.12	821.72
5	Return on Regulatory Equity at the beginning of the year @ 15.70%	124.14	124.14
6	Return on Equity portion of capitalisation @15.70%	2.54	2.43
7	Total Return on Regulatory Equity	126.69	126.58

2.15.2 BEST requests Hon'ble Commission to approve the above Return on Equity on normative basis.

2.16 Return as Interest on Internal Funds



2.16.1 BEST submits the Interest on internal funds as under:

Table 16: Return on Internal Fund Detail (Rs. crore)

Sr. No.	Particulars	Approved in MYT Order	Actual
1	Cumulative Grants at the end of the year	87.99	87.99
2	Addition of Grant during the year	0	0
3	Rate of Interest on internal funds	6%	6%
4	Return as Interest on Internal funds	5.28	5.28

2.16.2 BEST requests the Hon'ble Commission to approve the above Return on Internal Fund of Rs. 5.28 crore for FY 2015-16.

2.17 Non-tariff Income

2.17.1 BEST submits that it has earned the non-tariff income for FY 2015-16 at Rs. 59.46 crore. The details of non-tariff income under various sub-heads are as given below:

Table 17: Details of the Non-Tariff income for FY 2015-16 (Rs. crore)

Sr. No.	Particular	Approved in MYT Order	Actual
1	Income from sale of tender documents	73.34	0.13
2	Income from recovery against theft and/or pilferage of electricity		6.90
3	Income from consumer charges levied in accordance with Schedule of Charges approved by the Commission		40.08
4	Rent of land & buildings		0.90
5	Advertisement Receipts		
6	Others		3.34
7	Share of General Administration		9.47
8	Income from investments		2.01
9	<u>Less:</u> Sale of scrap of capitalised assets		0.00
	Total		62.83

2.17.2 BEST requests the Hon'ble Commission to approve non-tariff income of Rs. 59.46 crore for FY 2015-16.

2.18 Impact of ATE Judgment in Appeal No. 265 of 2012

2.18.1 BEST has included the disallowed RE cost, with carrying cost, of Rs. 130.36 crore as approved by the Hon'ble Commission in MYT order.

Table 18: Impact of ATE Judgment in Appeal No. 265 of 2012

Sr. No.	Year	Disallowed RE Power Purchase (Rs. crore)	SBI PLR (Weighted Avg.)	Carrying Cost (Rs. crore)
1	FY 2009-10	40.65		



Sr. No.	Year	Disallowed RE Power Purchase (Rs. crore)	SBI PLR (Weighted Avg.)	Carrying Cost (Rs. crore)
2	Carrying Cost for FY 2009-10 (half yearly)		11.87%	2.41
3	Carrying Cost for FY 2010-11		12.26%	4.99
4	Carrying Cost for FY 2011-12		14.40%	5.85
5	Carrying Cost for FY 2012-13		14.61%	5.94
6	Carrying Cost for FY 2013-14		14.58%	5.93
7	Carrying Cost for FY 2014-15		14.75%	6.00
8	Carrying Cost for FY 2015-16		14.75%	6.00
9	FY 2010-11	29.35		
10	Carrying Cost for FY 2010-11 (half yearly)		12.26%	1.80
11	Carrying Cost for FY 2011-12		14.40%	4.23
12	Carrying Cost for FY 2012-13		14.61%	4.29
13	Carrying Cost for FY 2013-14		14.58%	4.28
14	Carrying Cost for FY 2014-15		14.75%	4.33
15	Carrying Cost for FY 2015-16		14.75%	4.33
16	Impact to be included in FY 2015-16	70.00		60.36
17	Total Impact			130.36

2.18.2 The Hon'ble Commission may approve the impact of ATE judgment on account of the disallowed RE cost for FY 2009-10 and FY 2010-11 along with the carrying cost in FY 2015-16.

2.19 Impact of review of previous MYT order (Case No.26 of 2013)

2.19.1 The Commission, in its Order dated 9 January, 2014 in Case No. 166 of 2013 reviewing the previous MYT Order, approved an additional recovery of Rs. 7.31 crore by BEST towards power purchase cost which was earlier disallowed. BEST has included this amount in the ARR of FY 2015-16, along with carrying cost, as shown in the following Table:

Table 19: Impact of review of MYT Order (Rs. Crore)

S.No.	Year	Disallowed RE Power Purchase (Rs. Crore)	SBI PLR (Weighted Avg.)	Carrying Cost (Rs. Crore)
1	Impact due to Truing up for FY 2007-08	2.68		
2	Carrying Cost for FY 2007-08 (half yearly)		12.83%	0.17
3	Carrying Cost for FY 2008-09		12.79%	0.34
4	Carrying Cost for FY 2009-10		11.87%	0.32
5	Carrying Cost for FY 2010-11		12.26%	0.33
6	Carrying Cost for FY 2011-12		14.40%	0.39
7	Carrying Cost for FY 2012-13		14.61%	0.39
8	Carrying Cost for FY 2013-14		14.58%	0.39
9	Carrying Cost for FY 2014-15		14.75%	0.40
10	Carrying Cost for FY 2015-16		14.75%	0.40



S.No.	Year	Disallowed RE Power Purchase (Rs. Crore)	SBI PLR (Weighted Avgas)	Carrying Cost (Rs. Crore)
	FY 2011-12	4.63		
1	Carrying Cost for FY 2011-12 (half yearly)		14.40%	0.33
2	Carrying Cost for FY 2012-13		14.61%	0.68
3	Carrying Cost for FY 2013-14		14.58%	0.68
4	Carrying Cost for FY 2014-15		14.75%	0.68
5	Carrying Cost for FY 2015-16		14.75%	0.68
6	Impact to be included FY 2015-16	7.31		6.17
7	Total Impact			13.48

2.20 Impact of review of MYT review order Case No.4 of 2017 dated 12th January 2018 (RE cost)

2.20.1 As mentioned by the Hon'ble Commission in its Review Order in Case No. 4 of 2017 dated 12th January 2018, BEST submits details of additional cost of procurement of renewable energy as below:

(Rs. crore)

Table 20: Impact of additional cost of power procurement of RE energy

No.	Financial Year	Total landed cost	Cost approved in MYT order	Additional cost to be approved [A]	Carrying cost [B]	Impact on ARR of FY 2015-16
1	Prior period payment of FY 2009-10	0.61	-	0.61	0.31	0.92
2	2012-13	55.47	54.54	0.93	0.48	1.41
3	2013-14	116.03	113.62	2.42	0.88	3.30
4	2014-15	157.06	153.57	3.49	0.76	4.25
	Total	329.17	321.73	7.45	2.43	9.88

2.20.2 Additional cost for procurement of renewable energy is incurred towards various charges including wheeling charges, short term open access charges, scheduling charges. BEST requests the Hon'ble Commission to approve Rs. 9.88 crore towards additional cost incurred towards procurement of renewable energy including carrying cost.

2.21 Impact of review of MYT review order dated 12th January 2018 (Depreciation)

2.21.1 As mentioned by the Hon'ble Commission in its Review Order in Case No. 4 of 2017 dated 12th January 2018, BEST has submitted the details regarding depreciation as follows considering opening GFA of FY 2012-13 as approved in MYT order 33 of 2016 i.e. Rs. 1,838.84 crore. BEST has submitted GFA as follows in revised petition:

Table 21: Revised GFA for FY 2012-13 to FY 2014-15 as per review petition of MYT order

S.No.	Particular	FY 2012-13	FY 2013-14	FY 2014-15
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S.No.	Particular	FY 2012-13	FY 2013-14	FY 2014-15
1	Opening GFA	1,838.84	1,953.53	2,039.60
2	Capitalisation with IDC	127.07	101.27	152.53
3	Retirement	12.39	15.20	7.54
4	Closing GFA	1,953.53	2,039.60	2,184.59
5	Average GFA	1,896.19	1,996.56	2,112.09

2.21.2 Average depreciation rate for FY 2012-13 to FY 2014-15 as per methodology adopted by the Hon'ble Commission is as follows:

Table 22: Average rate of depreciation for FY 2012-13 to FY 2014-15

S.No.	Particular	FY 2012-13	FY 2013-14	FY 2014-15
1	Audited opening GFA	1,851.38	1,961.51	2,037.23
2	Audited closing GFA	1,961.51	2,037.23	2,179.70
3	Average audited GFA	1,906.45	1,999.37	2,108.47
4	Audited depreciation	91.16	96.53	99.55
5	Audited depreciation on average audited GFA	4.78%	4.83%	4.72%

2.21.3 Depreciation for true-up of FY 2012-13 to FY 2014-15 submitted by BEST is calculated by applying average depreciation rate as approved by the Hon'ble Commission on corrected average GFA as submitted above.

Table 23: Depreciation claimed by BEST for true-up of FY 2012-13 to FY 2014-15

S.No.	Particular		FY 2012-13	FY 2013-14	FY 2014-15
1	Average Depreciation on average audited GFA		4.78%	4.83%	4.72%
2	Approved average GFA		1,896.19	1,996.56	2,112.09
3	Depreciation claimed by BEST		90.67	96.39	99.72
4	Depreciation approved in MYT order		87.37	92.65	95.64
5	Unapproved Depreciation		3.30	3.74	4.08
6	Carrying Cost for FY 2012-13	14.61%	0.24	-	-
7	Carrying Cost for FY 2013-14	14.58%	0.48	0.27	-
8	Carrying Cost for FY 2014-15	14.75%	0.49	0.55	0.30
9	Carrying Cost for FY 2015-16	14.75%	0.49	0.55	0.60
10	Revenue Gap including carrying cost		5.00	5.12	4.99
	Impact in true-up of FY 2015-16			15.10	



2.22 Incentive on performance of Wire and Supply Availability

Wire Availability

2.22.1 BEST has calculated incentive for over achievement in wires & supply availability as shown in table below:

Table 24: Wire availability for FY 2015-16

Sr. No.	Particular		Units	Actual
1	SAIDI		min	100.29
2	Actual Wires Availability	[A]	%	99.98%
3	Target Wires Availability	[B]	%	99.00%
4	Over achievement/ (Under Achievement) in Wires Availability	$[C]=[A]-[B]$	%	0.98%
5	Additional RoE rate for computing incentive for Wires Availability	$[D]=0.1*[C]$	%	0.098%
6	Target Supply Availability	[E]	%	100%
7	Actual Supply Availability	[F]	%	108.52%
8	Over achievement/ (Under Achievement) in supply Availability	$[G]=[E]-[F]$	%	8.52%
9	Additional RoE rate for computing incentive for supply Availability	$[H]=0.1*[G]$	%	0.852%
10	Effective additional RoE rate for incentive computations	$[I]=0.9*[D]+0.1*[H]$	%	0.17%
	Additional RoE for Wires and Supply Availability			
11	Equity at the beginning of the year	[J]	Rs. Crore	790.71
12	RoE on Equity at the beginning of the year	$[K]=[I]*[J]$	Rs. Crore	1.34
13	Average equity added during the year	[L]	Rs. Crore	30.99
14	RoE on average equity during the year	$[M]=[I]*[L]$	Rs. Crore	0.053
15	Incentive for wires & supply availability	$[N]=[K]+[M]$		1.40

2.22.2 BEST proposes to recover the incentive for wire & supply availability in true-up of FY 2015-16 as shown in Table above.

2.23 Incentive on reduction of Distribution loss

2.23.1 BEST has calculated incentive for reduction in distribution loss as shown in table below:

Table 25: Details of the Incentive on reduction of Distribution loss

Sr. No.	Particular	Units	FY 2015-16
1	Normative Distribution Loss (target)	%	6.75
2	Normative sales considering same energy input	MU	4,531.73
3	Actual Distribution Loss	%	5.83%
4	Actual Sales	MU	4,576.60
5	Additional sales due to actual distribution loss less than the normative target	MU	44.87



Sr. No.	Particular	Units	FY 2015-16
6	Actual revenue for the year	Rs. crore	4,828.98
7	Average billing rate	Rs./Unit	10.55
8	Additional revenue due to lower distribution loss	Rs. crore	47.34
9	Amount retained by BEST (2/3rd of above incentive/(loss) at Sr. No. 7)	Rs. crore	31.57
10	Amount passed on to consumers by BEST (1/3rd of above incentive/(loss) at Sr.No.8)	Rs. crore	15.79

2.23.2 BEST proposes recovery of the incentive for reduction of distribution loss in true-up of FY 2015-16 as shown in Sr. No. 9 of table above.

2.24 Sharing of loss due to higher O&M expenses

2.24.1 BEST submits actual O&M expense of for FY 2015-16 are higher than normative O&M expense for FY 2015-16. Therefore, as per Regulation 14 of MERC MYT Regulations 2011; BEST is sharing loss with the consumers as shown in table below:

Table 26: Sharing of O&M expense loss for FY 2015-16 (Rs crore)

Sr. No.	Particular	Amount
1	Actual O&M expense [A]	577.01
2	Normative O&M expense [B]	464.40
3	Loss passed on to consumers $1/3 * ([A] - [B])$	37.54

2.24.2 BEST submits that losses on account of higher O&M expenses be included in ARR of FY 2015-16 as shown in table above.

2.25 True-up of Aggregate Revenue Requirement of FY 2015-16

2.25.1 The True-up summary for FY 2015-16 is as under:

Table 27: True-up of Aggregate Revenue Requirement for FY 2015-16 (Rs. crore)

Sr. No.	Particular	Approved in MYT Order	Actual	Deviation
1	Power Purchase Expenses	2,420.46	2,373.87	(42.09)
2	Operation & Maintenance Expenses	450.94	464.40	13.46
3	Depreciation	98.73	106.35	7.62
4	Interest on Loan Capital	6.42	6.00	(0.42)
5	Interest on Working Capital	37.69	38.87	1.17
6	Interest on Consumer Security Deposit	27.80	27.48	(0.31)
7	Provision for bad and doubtful debts	7.24	7.84	0.60
8	Contribution to contingency reserves	5.46	5.44	(0.02)
9	Income Tax	-	-	-
10	Other expenses	120.75	113.28	(7.47)
10-A	Intra State Transmission & SLDC charges	228.26	228.26	-



Sr. No.	Particular	Approved in MYT Order	Actual	Deviation
11	Total Revenue Expenditure	3,403.74	3,371.78	(31.97)
12-A	Add: Return on Equity Capital	126.69	126.58	(0.11)
12-B	Add: Return as interest on internal funds	5.28	5.28	-
12-C	Add: Incentive for supply availability		0.14	0.14
12-D	Add: Incentive of reduction of distribution loss		31.57	31.57
12-E	Add: Incentive for wires availability		1.26	1.26
12-F	Add: O&M sharing of gain and loss		37.54	37.54
13	Aggregate Revenue Requirement	3,535.71	3,574.14	38.43
14-A	Less: Non-Tariff Income	73.34	62.83	(10.51)
14-B	Less: Income from other business	-	-	-
14-C	Less: Receipts on account of Cross-Subsidy Surcharge		-	-
14-D	Less: Receipts on account of Additional Surcharge, if any		-	-
15	Aggregate Revenue Requirement from Retail Tariff	3,462.37	3,511.31	48.94
16	Add: Deficit of Transport Operations	(20.34)	-	20.34
17	Aggregate Revenue Requirement adding deficit of transport operations	3,442.03	3,511.31	69.28
18-A	Past recoveries of BEST along with carrying cost	1,151.72	1,151.72	-
18-B	Impact of ATE Judgment in Appeal No. 265 of 2012	130.36	130.36	-
18-C	Impact of MYT Review Order dated 9 January, 2014	13.48	13.48	-
18-D	Impact of MYT Review Order dated 12 January, 2018 (RE procurement cost)		9.88	9.88
18-E	Impact of MYT Review Order dated 12 January, 2018 (Depreciation)		15.10	15.10
A	Aggregate Revenue Requirement from Retail Tariff	4,737.59	4,831.85	94.26
B	Revenue	4,805.05	4,830.65	25.60
	Revenue from sale of electricity	4,805.05	4,830.65	25.60
C	Total Revenue Gap/(Surplus)	(67.47)	1.19	68.66

2.26 Revenue Gap of FY 2015-16

2.26.1 The Hon'ble Commission in MYT Order had approved provisional revenue surplus of Rs. 67.47 crore for FY 2015-16. As against this, the actual revenue gap works out as given in the table below:

Table 28: Revenue Gap for FY 2015-16 (Rs. crore)

Sr. No.	Particular	Rate	MYT order	Actual
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Sr. No.	Particular	Rate	MYT order	Actual
1	Revenue gap for FY 2013-14		1,025.32	1,025.32
	Carrying cost for FY 2013-14	14.58%	74.76	74.76
	Carrying cost for FY 2014-15	14.75%	151.23	151.23
	Carrying cost for FY 2015-16	14.45%	148.16	148.16
	Revenue Gap of FY 2013-14 including carrying cost		1,399.47	1,399.47
2	Revenue gap for FY 2014-15		132.92	132.92
	Carrying cost for FY 2014-15	14.75%	9.80	9.80
	Carrying cost for FY 2015-16	14.45%	19.21	19.21
	Revenue gap for FY 2014-15 including carrying cost		161.93	161.93
3	Revenue gap/(surplus) for FY 2015-16		(113.94)	1.19
4	Cumulative revenue gap till FY 2015-16		1,447.46	1,562.60
5	Less: Revenue from TDLR Charge from April to September, 2016		375.28	358.49
	Cumulative Revenue Gap for recovery at end of FY 2015-16		1,072.18	1,204.10

2.26.2 BEST humbly requests Hon'ble Commission to approve revenue gap as shown above.

2.27 Recovery of cumulative revenue gap at end of FY 2015-16

2.27.1 In MYT order, Hon'ble Commission had approved revenue gap at end of FY 2015-16 during 3 years from FY 2016-17 to FY 2018-19 as follows:

Table 29: Recovery of Cumulative Revenue Gap as approved by the Commission (Rs. crore)

Sr. No.	Particulars	Electricity Business			
		FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
1	Opening Balance	1,072.18	472.18	156.09	-
2	Recovery of previous Gap	600.00	316.09	156.09	-
3	Closing Balance	472.18	156.09	-	-
4	Average Balance	772.18	314.14	78.05	-
5	Interest Rate (%)	10.80%	10.80%	10.80%	-
6	Carrying Cost	83.40	33.93	8.43	-
7	Total recovery during the year	683.40	350.02	164.52	-

2.27.2 BEST submits that due to increase in cumulative revenue gap at end of FY 2015-16, the recovery in the respective years has been revised as follows:

Table 30: Recovery of the past revenue gap at end of FY 2015-16 during the third control period (Rs crore)

Electricity Business	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
Opening balance (Rs. Crore)	1204.10	530.16	175.22	0.00
Recovery (Rs. Crore)	673.94	354.94	175.22	0.00
Closing balance (Rs. Crore)	530.16	175.22	0.00	0.00
Avg. balance (Rs. Crore)	867.13	352.69	87.61	0.00
Interest rate (%)	10.80%	9.50%	9.50%	9.50%
Carrying Cost (Rs. Crore)	93.65	33.51	8.32	0.00
Total Recovery (Rs. Crore)	767.59	388.45	183.55	0.00



2.27.3 BEST humbly requests the Hon'ble Commission to approve the recovery of cumulative revenue gaps at end of FY 2015-16 as proposed above.



3 Truing Up for FY 2016-17

3.1 Truing Up Details

3.1.1 BEST proposes Truing up of its expenses and revenues based on the audited accounts for FY 2016-17, provisions of MERC (MYT) Regulations, 2015 and other aspects as discussed in the Petition.

3.2 Renaming & introduction of tariff categories

3.2.1 The Hon'ble Commission had undertaken the rationalization of the tariff categories and harmonization of the definitions and applicability of each tariff category for BEST.

3.2.2 New tariff category was created for HT Railways, Metro and Monorail operations under the HT V category. The LT IV (A) and (B) Industrial categories have been merged under "LT III (B)- Industry" for Sanctioned Load above 20 kW. Separate category for Public Water Works was created under HT-IV & LT-IV category.

3.2.3 The HT IV Temporary category has been re-named as HT VII. The "LT X (A) Agriculture – Pump sets" and "LT X (B) Agriculture - Others sub-categories have been created for Pre-cooling Plants and Cold Storage units for agricultural products, Poultries, High-technology Agriculture, Floriculture, Horticulture, Aquaculture, etc.

3.2.4 The previous categories of "LT IX (A) Hospitals and Educational Institutions 0-20 kW" and "LT IX (B) Hospitals and Educational Institutions above 20 kW" have been changed to "LT IX (A) Public Service - Government Educational Institutions & Hospitals" and "LT IX (B) Public Service-Others" categories.

3.3 Energy Sales and Energy Balance

3.3.1 The summary of the category-wise sales as approved by the Hon'ble Commission in the MYT Order for FY 2016-17 and the actual sales is shown in the Table as under:

Table 31: Tariff Category-wise energy sales for FY 2016-17 (MU)

Sr. No.	Consumer Category	Slab	Approved in MYT Order	Actual
	LT Category			
1.	BPL	0 – 30	0.24	0.06
2.	LT - I Residential	0 – 100	733.63	724.82
		101 – 300	659.29	623.99
		301 – 500	207.91	181.99
		> 501	373.65	324.64
		Sub-total	1,974.48	1855.43
3.	LT - II (a) Commercial	0 – 500	558.45	536.82
		> 500	351.12	316.82
		Sub-total	909.57	853.64
4.	LT - II (b) Commercial	all units	226.20	221.87
5.	LT - II (c) Commercial	all units	408.10	407.91



Sr. No.	Consumer Category	Slab	Approved in MYT Order	Actual
6.	LT - III (a) Industrial	0 – 500	20.55	20.05
		> 500	22.68	21.92
		Sub-total	43.23	41.97
7.	LT - III (b) Industrial	all units	51.50	94.99
8.	LT - III (b) Industrial	all units	48.00	
9.	LT - V Adv. & Hoardings	all units	1.76	1.69
10.	LT - VI St. Lighting	all units	28.10	29.61
11.	LT - VII (a) Temp – Religious	all units	2.69	2.69
12.	LT - VII (b) Temp – Others	all units	41.73	38.50
13.	LT - VIII Crematorium	all units	1.32	1.46
14.	LT - IX (a) Hospitals / Educational Institutions.	all units	33.30	29.05
15.	LT - IX (b) Hospitals/Educational Institutions	all units	160.01	113.25
16.	LT-IV PWW	all units	1.81	2.68
	Sub-total [A]	all units	3,932.04	3,694.81
	HT Category			
17.	HT - I Industry	all units	179.98	185.36
18.	HT - II Commercial	all units	344.87	332.12
19.	HT - III Group Housing	all units	32.08	31.69
20.	From Nov 16- HT-VII Temporary Previous- HT - IV Temporary	all units	7.80	8.60
21	From Nov 16- HT V- Railways, Metro, Monorail	all units	0.00	0.94
22	HT VI-Public service Hospitals and Educational Institutions (Gov)	all units	11.29	18.44
23	HT VI-Public service. Hospitals and Educational Institutions (Others)	all units	129.13	117.05
24	From Nov16- HT IV- PWW	all units	30.71	13.95
	Sub-total [B]	all units	735.86	708.15
	Total [A]+[B]		4,667.90	4,402.96

3.3.2 The Energy balance for FY 2016-17 is as given below:

Table 32: Energy Balance for FY 2016-17

Sr. No.	Particulars	Approved in MYT Order	Actual
1	Sales (MU)	4,667.90	4,402.96
2	Distribution loss (%)	5.90%	5.58%
3	Energy Requirement at T-D interface (MU)	4,960.57	4,663.13
4	Intra-state Transmission loss (%)	3.92%	3.62%
5	Energy Requirement at G-T interface (MU)	5,162.96	4,838.50



3.4 Power Purchase expense for FY 2016-17

3.4.1 The Summary of Power Purchase expenses for FY 2016-17 are shown in Table below:

Table 33: Summary of Power Purchase Expenses for FY 2016-17 (Rs. crore)

Sr. No.	Particulars	Approved in MYT order			Actual		
		Quantum (MU)	Total Cost (Rs. crore)	Rate (Rs./ kWh)	Quantum (MU)	Total Cost (Rs. crore)	Rate (Rs./ kWh)
1	TPC-G	3,819.47	1,598.91	4.19	3,629.56	1,464.45	4.03
2	TPC-G past revenue gap		9.95	-		9.95	-
3	Welspun Energy Maharashtra (Solar RE Power)	31.50	26.96	8.56	33.39	27.15	8.13
4	Spark Green Energy Ahmednagar	71.28	53.46	7.50	1.41	-	-
5	Spark Green Energy Satara Ltd.	71.28	53.46	7.50	-	-	-
6	Bilateral Power Purchase	1169.43	411.59	3.52	658.36	203.44	3.09
7	REC Procurement-Solar		7.05			5.44	-
8	REC Procurement-Non-Solar		56.06			30.23	-
9	Short Term Non Solar Purchase				230.84	160.64	6.96
10	Short Term Mini Micro Hydro Purchase				2.46	1.42	5.78
11	Stand by Energy Purchase				2.19	-	-
12	Pool Imbalances				280.28	6.05	0.22 ¹
13	Stand-by Charges		107.50			107.10	-
14	Other charges					5.85	
15	Intra-State Transmission Charges		205.13			203.31	
16	MSLDC Charges		0.65			0.76	
	Total	5,162.96	2,530.73	4.90	4,838.50	2,225.79	4.60

3.4.2 Further, BEST humbly requests the Hon'ble Commission to allow Power Purchase expenses at actuals as submitted.

3.5 Operation and Maintenance Expenses

3.5.1 Operation and Maintenance Expenses approved by the Hon'ble Commission and actual expense of BEST as per audited accounts is shown as under:

Table 34: Operation and Maintenance Expenses for FY 2016-17 (Rs. crore)

Sr. No.	Particulars	Approved in previous MYT Order	Actual
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¹ Rate appears to be low as this amount is for 2 months only



Sr. No.	Particulars	Approved in previous MYT Order	Actual
1	Employee Expenses		363.46
2	A&G Expenses		114.66
3	R&M Expenses		55.02
4	Total O&M Expenses	503.02	533.14
5	Impact of wage agreement		41.03
6	Net O&M Expenses		492.11

3.5.2 Calculation of base O&M expense as per the first amendment is presented as below:

Table 35: Operation and Maintenance Expenses for FY 2016-17 (Rs. crore)

Sr. No.	Particular	Total
1	Actual O&M expenses FY2016 inclusive of impact of wage agreement	577.01
2	Actual impact of wage agreement in FY2016	53.33
3	Actual O&M expenses FY2016 exclusive of impact of wage agreement	523.68
4	Revised normative O&M expense for FY2016	411.07
5	Total efficiency losses	112.61
6	Efficiency losses shared by consumers	37.54
7	O&M expense for FY2016 after sharing of efficiency losses	448.61
8	Impact of wage agreement for FY2016	53.33
9	Base O&M expense for the third control period	501.94

3.5.3 Applying the escalation factor of 5.05% on base O&M expense gives normative O&M expense for FY2016-17 as Rs. 527.27 crore vis-à-vis actual O&M expense for FY2016-17 as 533.14 crore.

3.5.4 BEST has claimed normative O&M expenses. BEST requests the Hon'ble Commission to approve the O&M expenses as claimed by BEST.

3.6 Depreciation

3.6.1 The average depreciation rate for FY 2016-17 is 4.59% on average approved GFA of Rs. 2,353.56 crore.

Table 36: Depreciation for FY 2016-17 (Rs. crore)

Particulars	MYT Order	Actual
Depreciation	108.41	108.06

3.6.2 BEST humbly requests the Hon'ble Commission to approve the above Depreciation expenses for FY 2016-17.

3.7 Capital Expenditure and Capitalisation

3.7.1 The Hon'ble Commission in MYT Order has approved the capitalization and IDC of Rs. 199.30 crore for FY 2016-17. The Actual Capital Expenditure & Capitalisation incurred by BEST for FY 2016-17 submitted as under:

Table 37: Capitalization details for FY 2016-17 (Rs. crore)

Capital Expenditure*	Capitalisation
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Submission by BEST in MYT Petition	Approved in MYT Order	Actual	Submission by BEST in MYT Petition	Approved in MYT Order	Actual
238.58	202.38	120.82	234.59	199.30	123.86

3.7.2 BEST requests the Hon'ble Commission to approve the capitalisation submitted as under:

Table 38: Capitalisation for FY 2016-17 (Rs. crore)

Sr. No.	Particulars	MYT Order	Actual
1	Capitalisation	199.30	122.42
2	IDC		1.44
3	Total		123.86

3.8 Funding of Capitalization

3.8.1 BEST has to arrange the funding plan for execution of capital expenditure schemes as envisaged for each year.

Table 39: Details of funding of Capitalisation for FY 2016-17 (Rs. crore)

Sr. No.	Particulars	Normative
1	Consumer Contribution	10.06
2	Debt	79.66
3	Equity	34.14
5	Total	123.86

3.9 Interest Expenses on Long Term Loan for FY 2016-17

3.9.1 The computation of interest expenses is submitted as under:

Table 40: Details of Normative Interest on loan for FY 2016-17 (Rs. crore)

Sr. No.	Particulars	MYT Order	Normative
1	Opening balance of loan	51.93	44.12
2	Loan drawl during the year	132.65	79.66
3	Loan repayment during the year	108.41	108.06
4	Closing balance of loan	76.17	15.72
5	Applicable interest rate (%)	10.50%	8.61%
6	Interest Expenses	6.72	2.57

3.9.2 BEST humbly request the Hon'ble Commission to approve the interest expenses on normative basis in accordance with MERC MYT Regulations 2015.

3.10 Interest on Working Capital (IWC)

3.10.1 BEST has computed the IWC on normative basis as per Regulation 31 of MERC MYT Regulations, 2015. The computation of IWC on normative basis is as under:

Table 41: Interest on Working Capital details (Rs. crore)

Sr.No.	Particulars	Approved in MYT Order	Normative submitted by BEST
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Sr.No.	Particulars	Approved in MYT Order	Normative submitted by BEST
1	O&M expenses for a month	41.92	44.43
2	Maintenance Spares at 1% of Opening GFA	23.02	22.98
3	One and half months equivalent of the expected revenue	553.61	557.07
4	Less: Amount held as Security Deposit	369.41	365.12
4.1	Less: One month equivalent of cost of power Purchase, Transmission Charges and MSLDC Charges	210.89	185.48
5	Total Working Capital Requirement	38.25	73.87
6	Computation of Working Capital Interest		
7	Interest Rate (%) - SBI Base Rate +150 basis points	10.80%	10.80%
8	Interest on Working Capital	4.13	7.98

3.10.2 BEST humbly request the Hon'ble Commission to approve Interest on Working Capital on normative basis for FY 2016-17 as shown in table above.

3.11 Interest on consumer security deposit

3.11.1 The Interest on Consumer security deposit for FY 2016-17 is as under:

Table 42: Interest on Consumer Deposit for FY 2016-17 (Rs. crore)

Sr. No.	Particulars	Approved in MYT Order	Actual
1	Opening balance of security deposit	358.65	369.69
2	Closing balance of security deposit	369.41	365.12
3	Average of opening & closing balance of security deposit	364.03	367.41
4	Interest Rate (%) - SBI Base Rate +150 basis points	10.80%	10.80%
5	Interest on consumer security deposit	39.32	39.68
6	Add/Less: interest on consumer deposit amount paid for the earlier year in current year	-	4.16
	Net Interest on Security Deposit	39.32	43.84

3.11.2 BEST has claimed interest on consumer deposit as per methodology adopted by the Hon'ble Commission in MYT order. BEST humbly requests the Hon'ble Commission to approve the same.

3.12 Contribution to Contingency Reserves

3.12.1 BEST has calculated contribution to contingency reserve at the rate of 0.25 % on opening Gross Fixed Assets instead of 0.50% on opening G.F.A.

Table 43: Details of Contingency Reserve for FY 2016-17 (Rs. crore)



Particulars	Approved in MYT order	Actual
Opening GFA	2,302.42	2,298.02
Contingency Reserves as % of Opening GFA	0.25%	0.25%
0.25% of GFA	5.76	5.75
Contribution to Contingency Reserves during the year		5.72

3.13 Other expenses

3.13.1 BEST has incurred other expense of Rs. 112.63 crore in FY 2016-17 as against the approved amount of Rs. 124.37 crore. The break-up of other expense is as given below:

Table 44: Other Expenses Details for FY 2016-17 (Rs. crore)

Sr. No.	Particulars	Approved in MYT Order	Actual
1	Power Factor Incentive	97.85	89.01
2	Prompt Payment Discount	20.60	18.94
3	ECS Discount	0.77	0.48
4	Load factor incentive	5.15	4.20
	Total	124.37	112.63

3.13.2 BEST humbly requests the Hon'ble Commission to approve the actual other expenses as shown in table above for FY 2016-17.

3.14 Provision for Bad and doubtful Debts

3.14.1 BEST submits the actual bad debts written off based on audited accounts as under:

Table 45: Bad Debts written off for FY 2016-17

Sr. No.	Particulars	Approved in MYT Order(Rs. crore)	Actual (Rs. crore)
1	Bad debts written off / provision for bad and doubtful debts	7.83	7.24

3.14.2 BEST humbly request the Hon'ble Commission to approve actual expenses as shown in table above incurred towards bad debt during FY 2016-17.

3.15 Income Tax

3.15.1 The Hon'ble Commission in MYT Order accepted that BEST, being Local Authority, the income of BEST is exempted under Section 10 (20) of the Income Tax Act. Hence, BEST is not paying any Income Tax. Hence, BEST has not considered any Income Tax for FY 2016-17.

3.16 Return on Equity

3.16.1 BEST submits that it has considered the Return on equity computed as per Regulation 28 of MERC MYT Regulations, 2015). BEST submits the details of Return on Equity as under:

**Table 46: Return on Equity for FY 2016-17 (Rs. crore)**

Sr. No.	Particulars	Approved in MYT Order	BEST submission
1	Regulatory Equity at the beginning of the year	823.12	821.72
2	Capitalisation during the year	199.30	123.86
3	Consumer Contribution and Grants used during the year for Capitalisation	9.80	10.06
4	Equity portion of capitalisation during the year	56.85	34.14
5	Reduction in Equity Capital on account of retirement / replacement of assets		3.83
6	Regulatory Equity at the end of the year	879.97	852.03
7	Return on Regulatory Equity at the beginning of the year	129.23	129.01
8	Return on Regulatory Equity addition during the year	4.46	2.38
9	Total Return on Equity	133.69	131.39

3.16.2 BEST requests Hon'ble Commission to approve the above Return on Equity as shown in the table above for FY 2016-17.

3.17 Return as Interest on Internal Funds

3.17.1 BEST submits the Interest on internal funds as under:

Table 47: Return as Interest on Internal Fund (Rs. crore)

Sr. No.	Particulars	Approved in MYT Order	Actual
1	Cumulative Grants at the end of the year	87.99	87.99
2	Addition of Grant during the year	0	0
3	Rate of Interest on internal funds	6%	6%
4	Return as Interest on Internal funds	5.28	5.28

3.17.2 BEST requests the Hon'ble Commission to approve the above Return as interest on Internal Fund of Rs. 5.28 crore for FY 2016-17.

3.18 Non-tariff Income

3.18.1 BEST submits that it has earned the non-tariff income for FY 2016-17 under various heads. The details of non-tariff income under various sub-heads are as given below:

Table 48: Details of the Non-Tariff income for FY 2016-17 (Rs. crore)

Sr. No.	Particular	Approved	Actual
1	Income from sale of tender documents		0.24
2	Income from recovery against theft and/or pilferage of electricity		9.46
3	Income from consumer charges levied in accordance with Schedule of Charges approved by the Commission		1.32
4	Rent of Buildings		0.89
5	Advertisement Receipts		5.17
6	Others		6.98



Sr. No.	Particular	Approved	Actual
7	Share of General Administration		7.97
8	Income from investments		2.54
	Total	39.84	34.57

3.18.2 Further, BEST requests the Hon'ble Commission to approve non-tariff income as shown in table above for FY 2016-17.

3.19 Incentive for Distribution Loss Reduction

3.19.1 BEST has calculated incentive for FY 2016-17 on account of reduction in distribution loss is as under:

Table 49: Details of the Incentive on reduction of Distribution loss

Sr. No.	Particular	Units	FY 2016-17
1	Normative Distribution loss (target)	%	5.90%
2	Normative sales considering same Energy input	MU	4,388.00
3	Actual sales	MU	4,402.96
4	Additional sales due to actual distribution loss less than the normative target at 9.00%	MU	14.96
5	Actual revenue for the year	Rs. crore	4,421.53
6	Average billing rate	Rs./Unit	10.04
7	Additional revenue due to actual distribution loss	Rs. crore	15.02
8	Amount retained by BEST (1/3rd of above incentive/(loss))	Rs. crore	5.01
9	Amount passed on to consumers by BEST (2/3rd of above incentive/(loss))	Rs. crore	10.01

3.19.2 However, BEST is not proposing the incentive for reduction of distribution loss presently.

3.20 True-up of Aggregate Revenue Requirement of FY 2016-17

3.20.1 BEST submits the summary ARR for FY 2016-17 is as under:

Table 50: True-up of Aggregate Revenue Requirement for FY 2016-17 (Rs. crore)

Sr. No.	Particular	Approved in MYT Order	Actual	Deviation
1	Power Purchase Expenses (including Standby Charges)	2,324.95	2,021.72	(303.22)
2	Operation & Maintenance Expenses	503.02	527.27	24.25
3	Depreciation	108.41	108.06	(0.35)
4	Interest on Loan Capital	6.73	2.57	(4.15)
5	Interest on Working Capital	4.13	7.98	3.85
6	Interest on Consumer Security Deposit	39.32	43.84	4.52
7	Provision for bad and doubtful debts	7.83	7.24	(0.59)
8	Contribution to contingency reserves	5.76	5.72	(0.04)
8-A	Intra-State Transmission Charges	205.13	203.31	(1.82)
8-B	MSLDC Fees & Charges	0.65	0.76	0.11
9	Income Tax	-	-	-
10	Other expenses	124.37	112.63	(11.74)



Sr. No.	Particular	Approved in MYT Order	Actual	Deviation
11	Total Revenue Expenditure	3,330.30	3,041.11	(289.18)
12-A	Add: Return on Equity Capital	133.69	131.39	(2.30)
12-B	Add: Return as interest on internal funds	5.28	5.28	-
12-D	Add: Incentive of reduction of distribution loss		5.01	5.01
12-E	Add: O&M sharing of gain and loss	-	1.96	1.96
13	Aggregate Revenue Requirement	3,469.26	3,184.74	(284.52)
14-A	Less: Non-Tariff Income	39.84	34.57	(5.27)
14-B	Less: Income from other business	-	-	-
14-C	Less: Receipts on account of Cross-Subsidy Surcharge	-	-	-
14-D	Less: Receipts on account of Additional Surcharge, if any	-	-	-
15	Aggregate Revenue Requirement from Retail Supply and Distribution Wire business	3,429.43	3,150.17	(279.25)
16	Add: Revenue Gap from 2 nd control period	683.40	767.59	84.19
A	Aggregate Revenue Requirement (inclu. Revenue recovery for 2nd control period)	4,112.83	3,917.75	(195.06)
B	Revenue	4,112.83	4,063.04	(49.78)
17	Revenue from sale of electricity	4,112.83	4,063.04	(49.78)
C	Total Revenue Gap/(Surplus)	(0.00)	(145.28)	(145.28)

3.20.2 BEST requests the Hon'ble Commission to approve revenue surplus at the end of FY 2016-17 as claimed by BEST.



4 Truing up for FY 2017-18

4.1 Background

4.1.1 Regulation 5.1 (b) (iii) of MYT Regulations 2015 specifies for provisional truing up to be filed for FY 2017-18 in line with the MYT Regulations, 2015 along with the Aggregate Revenue Requirement (ARR) and tariff petition for FY 2018-19 to FY 2019-20.

4.2 Energy Sales

4.2.1 The summary of the category-wise sales as approved by the Hon'ble Commission in the MYT Order, actual sales from April to October 2017, estimated sales for November 2017 to March 2018 and sales considered for provisional True-Up are shown in the Table below:

Table 51: Category wise energy consumption for FY 2017-18 (MUs)

Consumer Category & Consumption Slab	FY 2017-18				
	MYT Order	Apr-Dec (Actual)	Jan-Mar (Actual)	Apr-Mar (Actual)	Provisional True-Up requirement
	(g)	(h)	(i)	(j) = (h) + (i)	(k) = (g) - (j)
HT Category					
HT - I Industry	190.07	108.32	30.66	138.98	(51.09)
HT - II Commercial	354.31	210.52	59.18	269.70	(84.61)
HT - III Group Housing	32.14	25.31	6.82	32.13	(0.01)
HT IV- PWW from FY2016-17	32.43	29.83	8.63	38.46	6.03
HT V- Railways, Metro, Monorail	0.00	1.81	0.48	2.28	2.28
HT VI-(A)Public services (Govt. Hospitals and Educational Institutions)	11.60	20.92	5.54	26.46	14.86
HT VI-(B) Public services (Others)	132.66	132.89	34.17	167.06	34.40
HT-VII Temporary Supply from FY 2016-17	7.81	8.22	3.76	11.98	4.17
<i>Sub-total</i>	<i>761.02</i>	<i>537.82</i>	<i>149.25</i>	<i>687.07</i>	<i>(73.95)</i>
LT Category					
LT-I (A) Residential (BPL)	0.26	0.17	0.04	0.22	(0.04)
<u>LT - I(B) Residential</u>					
0 – 100 units	746.55	557.73	176.69	734.42	(12.13)
101 – 300 units	670.89	540.54	127.18	667.72	(3.17)
301 - 500 units	211.57	175.11	31.10	206.21	(5.36)
> 501 units	380.23	296.64	62.50	359.14	(21.09)
<u>LT - II (a) Commercial</u>					
0 - 500 units	577.25	425.61	124.57	550.18	(18.76)
> 500 units	362.81	262.73	67.02	329.75	(27.97)
LT - II (b) Commercial >20 & <=50 kW	238.47	167.94	46.49	214.43	(12.84)
LT - II (c) Commercial >50	460.31	287.02	81.78	368.80	(38.39)
<u>LT - III (A) Industry (upto 20 kW)</u>					
0 - 500 units	20.62	14.97	4.53	19.51	(1.11)
> 500 units	22.75	18.37	5.22	23.58	0.83



Consumer Category & Consumption Slab	FY 2017-18				
	MYT Order	Apr-Dec (Actual)	Jan-Mar (Actual)	Apr-Mar (Actual)	Provisional True-Up requirement
	(g)	(h)	(i)	(j) = (h) + (i)	(k) = (g) - (j)
LT III(B) Industry Above 20 kW	100.10	68.49	21.56	90.04	(10.06)
LT-IV PWW	1.83	5.24	1.63	6.87	5.04
LT - V Advertisement & Hoardings	1.84	1.22	0.41	1.63	(0.21)
LT - VI Street Lights	28.10	20.77	7.45	28.22	0.12
LT - VII (a) Temporary Supply Religious	3.06	0.20	0.02	0.21	(2.85)
LT - VII (b) Temporary Supply Others	43.12	27.28	5.12	32.40	(10.72)
LT - VIII Crematorium and Burial Grounds	1.34	1.27	0.40	1.66	0.32
LT - IX (A) Public Services - Govt. Hosp. & Educational Institutions from FY2016-17 onwards	37.51	43.55	11.65	55.20	17.69
LT - IX (B) Public Services - others from FY2016-17 onwards	172.00	131.00	35.93	166.92	(5.08)
LT-X (A) Agriculture- Pump sets	-	-	-	-	-
LT-X (B) Agriculture- Others	-	-	-	-	-
Sub-total	4,002.89	3,045.84	811.29	3,857.13	(145.76)
Total	4763.91	3,583.66	960.54	4,544.20	(219.71)

4.2.2 BEST submits that the provisional actual sales figure for FY 2017-18 is 4,544.20 MU.

4.3 Distribution Losses and Energy Balance

4.3.1 The following table shows the energy balance for FY 2017-18.

Table 52: Energy Balance for FY 2017-18

Sr. No.	Particulars	Approved in MYT Order	Apr-Dec 2017	Jan-March FY 2017-18	FY2017-18 (Actual)
1	Sales (MU)	4,764.51	3,583.66	960.54	4,544.20
2	Distribution loss (%)	5.80%	5.82%	5.82%	5.82%
3	Energy Requirement at T-D interface (MU)	5,057.23	3,804.99	1,019.86	4,824.85
4	Intra-state Transmission loss (%)	3.92%	3.31%	3.31%	3.31%
5	Energy Requirement at G-T interface (MU)	5,263.56	3,935.11	1,054.74	4,989.85

4.3.2 BEST therefore request the Hon'ble Commission to approve energy requirement of **4,989.85 MU** for FY 2017-18 at G<>T interface.



4.4 Power Purchase expense for FY 2017-18

4.4.1 The following table shows the source wise power purchase for FY 2017-18 considered for the purpose of provisional truing up for FY 2017-18

Table 53: Source wise Power Purchase for FY 2017-18

S. No.	Source of Power (Station wise)	Approved in MYT order			Revised Estimates		
		Quantum (MU)	Total Cost (Rs Crore)	Rate (Rs/kWh)	Quantum (MU)	Total Cost (Rs Crore)	Rate (Rs/kWh)
1	Long term / Medium term Sources						
1.1	TPC-G	3,842.42	1,613.30	4.2	3,625.43	1,577.42	4.35
1.2	TPC-G past revenue gap	-	-	-	-	-	-
1.3	Welspun Energy Maharashtra	31.5	26.96	8.56	31.50	26.96	8.56
1.4	Spark Green Energy Ahmednagar	142.56	106.92	7.5	-	-	-
1.5	Spark Green Energy Satara Ltd.	142.56	106.92	7.5	-	-	-
		-	-	-	-	-	-
2	Short term Sources	-	-	-	-	-	-
2.1	Bilateral Power Purchase	1,104.52	388.75	3.52	568.30	186.10	3.27
2.2	REC Procurement-Solar	-	25.82	-	68.30	6.83	-
2.3	REC Procurement-Non-Solar	-	40.13	-	382.03	57.63	1.51
2.4	Short Term Non Solar Purchase	-	-	-	190.61	123.16	6.46
2.5	Short Term Mini Micro Hydro Purchase	-	-	-	0.42	0.24	5.74
2.6	Pool Imbalances	-	-	-	567.88	187.97	3.31
2.7	Stand by Energy Purchase	-	-	-	5.72	2.35	4.11
3	Other Charges						
3.1	Stand-by Charges	-	105.66	-	-	105.72	-
3.2	Other charges/rebates except standby charges					(9.69)	
3.3	Additional power procurement charges to RE generators as per Review Order 4 of 2017	-	-	-	-	1.44	-
3.4	Intra-State Transmission Charges		248.24			248.28	
3.5	MSLDC Charges		0.8			0.804	
3	Total	5,263.56	2,663.51	5.06	4,989.85	2,515.21	5.04

4.5 O&M expenses

4.5.1 Operation and Maintenance Expenses approved by the Hon'ble Commission and actual expense of BEST as per audited accounts is shown as under:

Table 54: O&M Expenses for FY 2017-18



Sr. No.	Particulars	Approved in MYT Order	FY2017-18 (Apr-Sep) Actual	FY2017-18 (Apr-March) Estimated	Normative
1	Employee Expenses	517.95	147.57	388.01	553.89
2	A&G Expenses		36.32	122.80	
3	R&M Expenses		14.93	59.34	
4	Total O&M Expenses		198.82	570.15	

4.5.2 BEST has claimed normative O&M expenses for FY 2017-18 as mentioned in the table above.

4.6 Capital Expenditure

4.6.1 The provisional Capital Expenditure for FY 2017-18 estimated by BEST is as shown in table below as against approved value of Rs. 88.79 crore in MYT.

Table 55: Details of Capital expenditure and capitalization for FY 2017-18

Sr. No.	Particulars	Capital Expenditure		Capitalization	
		Approved in case no 33 of 2016	Provisional	Approved in case no 33 of 2016	Provisional
1	Project schemes	88.79	195.20	80.55	194.29

4.6.2 BEST therefore request the Hon'ble Commission to approve the capital expenditure and capitalization as per the provisional estimates mentioned in the table above.

Funding of Capital Expenditure

4.6.3 The funding of capitalization is through loan, equity and capital connection fee.

Table 56: Table showing Funding plan for Capitalization during FY 2017-18 (in Rs. crores)

Sr. no.	Particulars	Provisional	Actual
1	Capital Connection Fee	9.80	10.06
2	Government Grant	-	-
3	Loan	49.52	128.96
4	Internal Source	21.22	55.27
	Total of Capitalization including IDC	80.55	194.29

4.7 Depreciation

4.7.1 The following table shows the opening balance of Gross block and the corresponding depreciation that has been charged during the year.

Table 57: Depreciation Expense for FY 2017-18

S.No.	Particular	FY 2017-18
1	Opening GFA	2,409.11
2	Capitalisation with IDC	194.29
3	Retirement	12.77
4	Closing GFA	2,590.63
5	Average GFA	2,499.87
6	Average Rate of Depreciation (%)	4.72%
7	Depreciation (Rs. crores)	118.00



4.7.2 BEST requests the Hon'ble Commission to approve depreciation expense of **Rs.118.00 crore** for FY 2017-18.

4.8 Interest on Long Term Loans

4.8.1 BEST has worked out the actual weighted average interest rate for FY 2017-18 based on the existing loan portfolio and applied on the normative loan opening for FY 2017-18 as specified in the Regulation 33 of MERC MYT Regulations.

Table 58: Normative Interest on loan for FY 2017-18

Particulars	Approved in MYT Order	Normative
Opening balance of loan	76.17	15.72
Less: Reduction of Normative Loan due to retirement or replacement of assets		-
Less: Reduction of Normative Loan due to consumer contribution		7.04
Loan drawl during the year	49.52	136.00
Loan repayment during the year	114.55	118.00
Closing Balance of Loan	11.14	26.68
Applicable Interest Rate (%)	10.50%	11.07%
Interest Expenses	4.58	2.35

4.8.2 BEST therefore request the Hon'ble Commission to approve the interest expense on normative basis for FY 2017-18.

4.9 Interest on Working Capital Loans

4.9.1 BEST has calculated interest on working capital on normative basis as per Regulation 35 of MERC MYT Regulations, 2015.

Table 59: Normative Interest on Working Capital for FY 2017-18 (Rs. crores)

Particulars	FY 2017-18 (Approved)	FY 2017-18 (Normative)
One-twelfth (1/12) of amount of O&M expense	43.16	47.51
Maintenance Spares at 1% of Opening GFA	25.02	24.09
One and half months equivalent of the expected revenue from sale of electricity including revenue from CSS and Additional Surcharge	564.35	501.99
Less: Amount held as security deposit	380.49	365.12
Less: One month equivalent of cost of power purchase, transmission charges and MSLDC Charges	221.96	195.64
Total Working Capital Requirement	30.08	12.83
Interest Rate (%) - SBI MCLR +150 basis points	10.80%	9.50%
Interest on Working Capital	3.25	1.22

4.9.2 BEST therefore requests the Hon'ble Commission to approve the interest on Working Capital on normative basis.



4.10 Interest on Consumer Security Deposit

4.10.1 The Interest on Consumer Deposit for FY 17-18 is as in table below

Table 60: Interest on Consumer Deposit for FY 2017-18

Sr. No.	Particulars	FY 2017-18	
		MYT Order	Estimated
1	Opening balance of consumer security deposit	369.41	365.12
2	Closing balance of consumer security deposit	380.49	365.12
3	Average consumer security deposit	374.95	365.12
4	Interest rate (%)	10.80%	9.50%
5	Interest on security deposit	40.49	34.69

4.10.2 BEST requests the Hon'ble Commission to approve the interest on consumer security deposit of **Rs. 34.69 crore** for FY 2017-18.

4.11 Contribution to Contingency Reserves

4.11.1 BEST submits the contribution to contingency reserve for FY 2017-18 as shown in table below against Rs. 6.25 crore approved by the Hon'ble Commission in MYT order.

Table 61: Contribution to contingency reserve for FY 2017-18

Sr. No.	Particulars	FY 2017-18		
		MYT Order	April-March (Provisional)	True-Up requirement
1	Opening Balance of Contingency Reserves	35.93	35.87	
2	Opening Gross Fixed Assets	2,501.72	2,409.11	
3	Opening Balance of Contingency Reserves as % of Opening GFA	1.44%	1.49%	
4	Contribution to Contingency Reserves during the year	6.25	6.02	-0.23
5	Utilisation of Contingency Reserves during the year	-	-	
6	Closing Balance of Contingency Reserves	42.18	41.89	
7	Closing Balance of Contingency Reserves as % of Opening GFA	1.69%	1.74%	

4.12 Other Expenses

4.12.1 BEST submits that the provisional 'other expense' for FY 2017-18 is **Rs. 114.61 crore** as against the approved amount of Rs. 128.11 crore.

Table 62: Other Expenses for FY 2017-18

Sr. No.	Particulars	FY 2017-18	
		Approved in MYT Order	Provisional
1	Prompt payment Discount	21.22	19.50
2	Power factor Incentive	100.79	90.00
3	ECS discount	0.80	0.60
4	Load factor Incentive	5.30	4.50



Sr. No.	Particulars	FY 2017-18	
		Approved in MYT Order	Provisional
	Total	128.11	114.61

4.12.2 BEST requests the Hon'ble Commission to approve the actual amount of 'other expenses' incurred as shown in the table above for FY 2017-18.

4.13 Provision for Bad and doubtful Debts

4.13.1 BEST submits that it has kept provision for Bad and Doubtful Debts at the rate of 1.5% of the amount shown as Trade Receivables.

Table 63: Provision for Bad and doubtful Debts for FY 2017-18

Sr. No.	Particulars	FY 2017-18	
		Approved in MYT order	Provisional
1	Opening Balance of Provision for bad and doubtful debts	-	-
2	Receivables for the year	522.00	569.08
3	Opening Balance of Provision of bad and doubtful debt as % of Receivables	1.50%	1.50%
4	Provision for bad & doubtful debts during the year	7.83	8.54
5	Actual bad and doubtful debts written off	7.83	8.54
6	Closing Balance of Provision for bad and doubtful debts	-	-

4.13.2 BEST requests the Hon'ble Commission to approve the Provision for Bad and doubtful Debts as shown in table above for FY 2017-18.

4.14 Income Tax

4.14.1 As per the Income Tax Act under Section 10(20), the income of local authority is exempted from Income Tax.

4.15 Return on Equity

4.15.1 BEST submits that it has considered the Return on equity computed as per Regulation 28 of MERC MYT Regulations, 2015. BEST submits the details of Return on Equity as under:

Table 64: Return on Equity for FY 2017-18

Sr. No.	Particulars	FY 2017-18	
		MYT Order	Provisional
1	Regulatory Equity at the beginning of the year	879.97	852.03
2	Capitalisation during the year	80.53	194.29
3	Consumer Contribution and Grants used during the year for Capitalisation	9.80	10.06
4	Equity portion of capitalisation during the year	21.22	55.27
5	Reduction in Equity Capital on account of retirement / replacement of assets		3.83



Sr. No.	Particulars	FY 2017-18	
		MYT Order	Provisional
6	Regulatory Equity at the end of the year	901.19	903.46
	Return on Equity Computation		
7	Return on Regulatory Equity at the beginning of the year	138.16	133.77
8	Return on Regulatory Equity addition during the year	1.67	4.04
9	Total Return on Equity	139.82	137.81

4.15.2 BEST requests the Hon'ble Commission to approve the Return on Equity of as shown in table above for FY 2017-18.

4.16 Return as Interest on Internal Funds

4.16.1 BEST submits the Return as Interest on internal funds as under:

Table 65: Return on Interest on Internal Funds for FY 2017-18

S.No	Particulars	FY 2017-18	
		Approved in MYT Order	Provisional
1	Cumulative Grants at the end of the year	87.99	87.99
2	Addition of Grant during the year	0	0
3	Rate of Interest on internal funds	6%	6%
4	Return on Internal Fund	5.28	5.28

4.16.2 BEST requests the Hon'ble Commission to approve the Return as Interest on internal funds as shown in table above for FY 2017-18.

4.17 Non-Tariff Income

4.17.1 BEST submits that it has earned the non-tariff income for FY 2017-18 as shown in table below:

Table 66: Non-Tariff Income for FY 2017-18

Sr. No.	Particulars	FY 2017-18	
		MYT Order	FY2017-18 (Estimated)
1	Rents of land or buildings	41.52	0.92
2	Sale of Scrap		-
3	Income from investments		2.61
4	Interest on advances to suppliers/contractors		-
5	Rental from staff quarters		-
6	Rental from contractors		-
7	Income from hire charges from contractors and others		-
8	Supervision charges for capital works		-
9	Income from consumer charges levied in accordance with Schedule of Charges approved by the Commission		1.35
10	Income from advertisements		5.17



Sr. No.	Particulars	FY 2017-18	
		MYT Order	FY2017-18 (Estimated)
11	Income from sale of tender documents		0.27
12	Delayed payment charges		-
13	Interest on arrears		-
14	Income from recovery against theft and/or pilferage of electricity		9.20
15	Others		7.01
16	Share of General Administration		9.60
15	Total	41.52	36.13

4.17.2 BEST requests the Hon'ble Commission to approve the non-tariff income as shown in table above at estimated for FY 2017-18.

4.18 Revenue from Existing Tariff

4.18.1 The revenue from existing tariff is provisional actual sales for FY 2017-18. BEST requests the Hon'ble Commission to approve the provisional revenue of **Rs. 3,730.63 crore** for provisional true-up of FY 2017-18.

4.19 Provisional True-up of Aggregate Revenue Requirement of FY 2017-18

4.19.1 The Truing up summary for FY 2017-18 is as under:

Table 67: Provisional True-up of Aggregate Revenue Requirement of FY 2017-18

Particulars	FY 2017-18		
	MYT Order	April - March (Estimated)	Deviation
	(d)	(g) = (e) + (f)	(h) = (g) - (d)
Power Purchase Expenses (including Standby charges)	2,414.46	2,266.13	(164.45)
Operation & Maintenance Expenses	517.95	553.89	35.94
Depreciation	114.55	118.00	3.45
Interest on Loan Capital	4.58	2.35	(2.23)
Interest on Working Capital	3.25	1.22	(2.01)
Interest on Consumer Security Deposit	40.49	34.69	(5.80)
Provision for bad and doubtful debts	7.83	8.54	0.71
Contribution to contingency reserves	6.25	6.02	(0.23)
Intra-State Transmission Charges	248.24	248.28	0.04
MSLDC Fees & Charges	0.80	0.80	0.00
Income Tax	-	-	-
Other Expenses	128.11	114.61	(13.50)
Total Revenue Expenditure	3,486.51	3,354.51	(148.08)
Add: Return on Equity Capital	139.82	137.81	(2.02)
Add: Return as interest on Internal Fund	5.28	5.28	-
Aggregate Revenue Requirement	3,631.61	3,497.60	(150.10)
Less: Non-Tariff Income	41.52	36.13	(5.39)
Less: Income from other business	-	-	-



Particulars	FY 2017-18		
	MYT Order	April - March (Estimated)	Deviation
	(d)	(g) = (e) + (f)	(h) = (g) - (d)
Less: Receipts on account of Cross-Subsidy Surcharge			
Less: Receipts on account of Additional Surcharge, if any			
Aggregate Revenue Requirement from Wires and Retail Supply	3,590.09	3,461.47	(144.71)
Add Revenue Gap Recovery for 2nd control period	350.02	388.45	38.43
Total ARR including past Revenue gaps up to FY 2015-16 including carrying cost	3,940.11	3,849.91	(90.20)
Less: Revenue from Existing Tariff	3,940.11	3,730.63	(209.48)
Revenue Gap / (Surplus)	-	119.29	

4.19.2 BEST requests the Hon'ble Commission to approve the revenue gap as shown in table above for provisional truing up of FY 2017-18.



4.20 Cumulative revenue gap at end of FY 2017-18

4.20.1 The revenue gaps of FY 2016-17 and FY 2017-18 have been worked out after considering the past revenue gaps at the end of FY 2015-16 in the Aggregate Revenue Requirement sections of respective years. Further, the carrying cost/holding cost has been adjusted and cumulative revenue surplus at the end of FY 2017-18, which is required to be adjusted during FY 2018-19 has been worked out as follows:

Table 68: Cumulative revenue gap at end of FY 2017-18 (Rs crore)

Particulars		Rate	Electricity Business
Revenue gap/(surplus) for FY 2016-17			(145.28)
Carrying cost for FY 2016-17		10.80%	(7.85)
Carrying cost for FY 2017-18		9.45%	(13.80)
Revenue gap/(surplus) of FY 2016-17 including carrying cost at end of FY 2017-18	a		(166.93)
Revenue gap/(surplus) for FY 2017-18			119.29
Carrying cost for FY 2017-18		9.45%	5.67
Revenue gap/(surplus) including Carrying Cost for FY 2017-18	b		124.95
Cumulative revenue gap/(surplus) till FY 2017-18	c=a + b		(41.98)

4.20.2 BEST has carried forward revenue surplus of Rs. (41.98) crore along with holding cost to FY 2018-19 as follows:

Table 69: Revenue Gap to be recovered in FY 2018-19

Particulars	FY 2018-19
Opening balance of gap/ (surplus) from 3 rd control period (Rs. Crore)	(41.98)
Interest rate (%)	9.50%
Holding Cost (Rs. Crore)	(1.99)
Total Recovery from 3rd control period (Rs. Crore) [A]	(43.97)



5 Revised ARR for FY 2018-19 and FY 2019-20

5.1 Background

5.1.1 BEST has forecasted revised ARR for FY 2018-19 and FY 2019-20.

5.2 Energy Sales

5.2.1 BEST's energy demand predominantly comprises of commercial and residential consumers. BEST submits that it has considered the actual sales for the past 3 years and FY 2017-18 (till October) for projecting category wise sales for projecting sales of FY 2018-19 and FY 2019-20.

5.2.2 BEST has done trend analysis of all tariff categories for projecting energy sales. Accordingly, CAGR has been worked out from the past actual sales figures in the past years for respective tariff categories. This has given the sales growth trends for 1 year, 2 years, 3 years CAGR. Based on the available trend, BEST has considered the appropriate CAGR on case-to-case basis for FY 2018-19 and FY 2019-20. However, for any category if most of the CAGRs turn out to be negative, nil growth rates are considered.

5.2.3 Further, BEST submits that the Hon'ble Commission has undertaken rationalization of tariff categories and harmonisation of the definitions and applicability of each tariff category across the Distribution Licensees in Maharashtra, including BEST. Accordingly new tariff categories have been introduced. BEST has considered the combined CAGR for these categories along with their respective categories before rationalization. The category wise CAGR growth rate considered for sales projections is as presented in the table below:

Table 70: Category wise energy sales from FY 2010-11 to FY 2015-16 (in MU) and CAGR (in %)

Tariff category before November 2016	New tariff category from November 2016	Actual				CAGR (%) (Year ending FY 2017)			CAGR considered
		FY2015	FY2016	FY 2017	FY2018	1 yr.	2 yr.	3 yr.	
LT Sales									
BPL	LT-I (A) Residential (BPL)	0.05	0.21	0.06	0.22	236.6%	0.25%	64.01%	64.01%
LT - I Residential	LT - I(B) Residential	1,846.51	1,940.99	1,855.43	1,967.49	6.04%	0.68%	2.14%	6.04%
LT - II (a) Commercial and LT - IX (a) Pub Hosp., Edu Insti.		899.66	919.40	882.69	935.14	5.94%	0.85%	1.30%	5.94%
	LT - II (a) Commercial (less than 20kW)		905.70	853.64	879.93				5.94%
	LT - IX (A) Public Services – Govt. Hosp., Edu. Insti.		13.70	29.05	55.20				5.94%
LT - II (b) and (c) Commercial and LT - IX (b)		771.49	785.60	743.04	750.16	0.96%	-2.28%	-0.93%	0.96%
	LT - II (b) Commercial >20 & <=50 kW		236.19	221.87	214.43				0.96%
	LT - II (c) Commercial (upto 50 kW)		462.17	407.91	368.80				0.96%
	LT - IX (B) Public Services -others		87.25	113.25	166.92				0.96%
LT - III Industrial	LT-III(A) Industrial (upto 20 kW)	43.62	43.11	41.97	43.09	2.67%	-0.02%	-0.40%	2.67%
LT - IV (a) and (b) Industrial		99.80	100.11	97.67	96.91	-0.78%	-1.61%	-0.97%	0.00%
	LT-III (b) Industrial		100.11	94.99	90.04				0.00%
	LT-IV Public Water Works		-	2.68	6.87				0.00%
LT - V Adv. & Hoardings		1.60	1.68	1.69	1.63	-3.92%	-1.47%	0.57%	0.57%
LT - VI St. Lighting		29.99	29.79	29.61	28.22	-4.69%	-2.67%	-2.00%	0.00%
LT - VII (a) and (b) Temp - Religious		38.64	42.75	41.19	32.62	-20.81%	-12.65%	-5.49%	0.00%
	LT - VII (a) Temporary Supply Religious	2.27	2.36	2.69	0.21	-92.02%	-69.86%	-54.43%	0.00%
	LT - VII (b) Temporary Supply Others	36.37	40.38	38.50	32.40	-15.83%	-10.42%	-3.78%	0.00%
LT - VIII Crematorium		1.20	1.30	1.46	1.66	14.19%	13.16%	11.52%	14.19%



Tariff category before November 2016	New tariff category from November 2016	Actual				CAGR (%) (Year ending FY 2017)			CAGR considered
		FY2015	FY2016	FY 2017	FY2018	1 yr.	2 yr.	3 yr.	
LT Sales (Total)		3,732.5	3,864.9	3,694.8	3,857.13	4.39%	-0.10%	1.10%	
HT Sales									
<i>HT - I Industry</i>		<i>185.40</i>	<i>199.51</i>	<i>199.31</i>	<i>177.44</i>	<i>-10.97%</i>	<i>-5.69%</i>	<i>-1.45%</i>	<i>0.0%</i>
	HT - I Industry		199.51	185.36	138.98				0.0%
	HT IV- PWW		-	13.95	38.46				0.0%
<i>HT - II Commercial + HT - V Public Hospital/Schools and Charitable Organisations</i>		<i>456.33</i>	<i>472.36</i>	<i>468.55</i>	<i>465.51</i>	<i>-0.65%</i>	<i>-0.73%</i>	<i>0.67%</i>	<i>0.67%</i>
	HT-II Commercial		362.65	332.12	269.70				0.67%
	HT V- Railways, Metro, Monorail		-	0.94	2.28				0.67%
	HT-VI (A) Public service inclu. Hospitals and Educational Institutions (Gov)		-	18.44	26.46				0.67%
	HT VI-(B)Public service inclu. Hospitals and Educational Institutions (Others)		109.71	117.05	167.06				0.67%
HT - III Grp. Housing	HT - III Grp. Housing	33.19	32.02	31.69	32.13	1.39%	0.18%	-1.07%	1.39%
HT - IV Temp	HT-VII Temporary	11.37	7.78	8.60	11.98	39.31%	24.10%	1.75%	24.10%
HT Sales (Total)		686.29	711.66	708.15	687.07	-2.98%	-1.74%	0.04%	
HT and LT Sales (Total)		4,418.8	4,576.6	4,403.0		3.21%	-0.35%	0.94%	

5.2.4 Based on the category wise CAGR considered above, sales for MYT period of FY 2018-19 to FY 2019-20 is as shown in the table below.

Table 71: Category wise energy sales projections for FY 2018-19 to FY 2019-20 (MUs) considering estimated CAGR

Tariff category before November 2016	New tariff category from November 2016	Sales as per estimated CAGR		Impact of DSM, net metering & parallel licensing		Sales after impact of DSM, net metering & parallel licensing	
		FY2019	FY2020	FY2019	FY2020	FY2019	FY2020
BPL	LT-I (A) Residential (BPL)	0.35	0.58	0.00	0.00	0.35	0.58
LT - I Residential	LT - I(B) Residential	2086.32	2212.32	15.24	24.13	2,071.08	2,188.19
<i>LT - II (a) Commercial and LT - IX(a) Pub Hosp/Sch</i>		990.70	1,049.56	7.24	11.47	983.46	1,038.09
	LT - II (a) Commercial (<=20kW)	932.22	987.60	6.82	10.79	925.40	976.81
	LT - IX (A) Public Services -Govt. Hosp. & Edu. Institutions from FY2016-17 onwards	58.48	61.96	0.43	0.68	58.06	61.28
<i>LT - II (b) and (c) Commercial and LT - IX (b)</i>		757.35	764.61	5.81	9.20	751.54	755.41
	LT - II (b) Commercial (>20 & <=50 kW)	216.49	218.56	1.66	2.63	214.83	215.93
	LT - II (c) Commercial (>50 kW)	372.34	375.91	2.86	4.52	369.48	371.38
	LT - IX (B) Public Services -others from FY2016-17 onwards	168.52	170.14	1.29	2.05	167.23	168.09
<i>LT - III Industrial</i>	<i>LT - III (A) Industrial (upto 20 kW)</i>	44.24	45.42	0.33	0.53	43.91	44.90
<i>LT - IV (a) and (b) Industrial</i>		96.91	96.91	0.75	1.19	96.16	95.72
	LT-III (b) Industrial	90.04	90.04	0.70	1.10	89.35	88.94
	LT-IV Public Water Works	6.87	6.87	0.05	0.08	6.82	6.78
<i>LT - V Adv & Hoardings</i>		1.64	1.65	0.01	0.02	1.62	1.63
<i>LT - VI St. Lighting</i>		21.84	18.65			21.84	18.65
<i>LT - VII (a) and (b) Temp – Religious</i>		32.62	32.62	0.25	0.40	32.36	32.22
	LT - VII (a) Temporary Supply Religious	0.21	0.21	0.00	0.00	0.21	0.21
	LT - VII (b) Temporary Supply Others	32.40	32.40	0.25	0.40	32.15	32.00



LT - VIII Crematorium		1.90	2.17	0.01	0.02	1.89	2.15
LT Sales (Total)		4,033.86	4,224.49	29.66	46.96	4,004.21	4,177.52
HT Sales							
HT - I Industry		177.44	177.44	1.37	2.18	176.07	175.27
	HT - I Industry	138.98	138.98	1.08	1.70	137.90	137.28
	HT IV- Public water works	38.46	38.46	0.30	0.47	38.17	37.99
HT - II Commercial + HT-V Public Schools Hospitals & Charitable Institutes		468.61	471.73	3.61	5.71	465.01	466.02
	HT-II Commercial	271.50	273.31	2.09	3.31	269.41	270.00
	HT V- Railways, Metro, Monorail	2.30	2.32	0.02	0.03	2.28	2.29
	HT-VI (A) Public service including Hospitals and Educational Institutions (Gov)	26.64	26.82	0.20	0.32	26.44	26.49
	HT VI-(B) Public service including hospitals and educational Institutions (Others)	168.17	169.29	1.29	2.05	166.88	167.24
HT - III Grp. Housing	HT - III Grp. Housing	32.57	33.03	0.25	0.39	32.33	32.63
HT - IV Temp	HT-VII Temporary	14.87	18.46	0.09	0.15	14.78	18.31
HT Sales (Total)		693.50	700.66	5.32	8.43	688.18	692.23
Total HT & LT Sales		4,727.36	4,925.14	34.98	55.39	4,692.38	4,869.75

5.3 Energy Balance

5.3.1 The following table shows the energy balance for MYT period of FY 2018-19 to FY 2019-20.

Table 72: Energy Balance for FY 2018-19 to FY 2019-20

Sr. No.	Particulars	Unit	FY 2018-19 Approved	FY 2018-19 Revised	FY 2019-20 Approved	FY 2019-20 Revised
1	Power Purchase within Maharashtra					
1.1	TPC-G	MU	3,792.04	3,601.61	3,844.10	3,651.99
1.2	RPS	MU	316.62	31.50	316.62	31.50
1.3	Bilateral Purchase Including exchange	MU	1,265.63	1,513.08	1,323.97	1,651.57
2	Total Power Purchase available at G>T Periphery	MU	5,374.29	5,146.19	5,484.69	5,335.06
2.1	Intra-State Transmission Loss	%	3.92%	3.31%	3.92%	3.31%



Sr. No.	Particulars	Unit	FY 2018-19 Approved	FY 2018-19 Revised	FY 2019-20 Approved	FY 2019-20 Revised
2.2	Intra-State Transmission Loss	MU	210.67	170.17	215.00	176.42
3	Total Energy Available for Sale at 33kV	MU	5,163.63	4,976.02	5,269.69	5,158.63
3.1	Distribution Loss	%	5.70%	5.70%	5.60%	5.60%
3.2	Distribution Loss	MU	294.33	283.63	295.10	288.88
4	HT Sales	MU	787.23	688.18	814.50	692.23
4.1	Sales to Own Supply Consumers	MU	787.23	688.18	814.5	692.23
4.2	Sales by Licensee to Change-over consumers on other Licensee's network	MU	-	-	-	-
4.3	Sales by Other Licensee to consumers on Licensee's network	MU	-	-	-	-
4.4	Sales to Open Access Consumers	MU	-	-	-	-
5	LT Sales	MU	4,082.07	4,004,21	4,160.09	4,177.52
5.1	Sales to Own Supply Consumers	MU	4,082.07	4,004,21	4,160.09	4,177.52
6	Total sales (HT+LT)	MU	4,869.30	4,692.38	4,974.59	4,869.75



5.4 Power Purchase Expenses

5.4.1 BEST's PPA with TPC-G is expiring on 31st March, 2018. Accordingly, BEST Undertaking had filed a petition with the Hon'ble Commission vide case no. 25 of 2017 for approval of power procurement plan for FY 2018-19 to FY 2027-28.

In accordance with the Hon'ble Commission's order in case no. 25 of 2017, BEST has issued three tenders on 11th September, 2017 for procuring 750 MW of power on medium term basis. However, tenders were cancelled due to numerous issues and power purchase agreement with TPC-G was extended for FY 2018-19.

However, the above tendering process did not reach finality due to numerous issues and objections. New tenders were issued on 17th April 2018. Offers received for these tenders are under process. In view of above, BEST has considered the power purchase quantum/rates of TPC-G approved in BEST's MYT order for the purpose of this Mid-Term review petition.

5.4.2 Based on the energy balance, targeted distribution loss & actual transmission loss of FY 2017-18; BEST has estimated the energy requirement for FY 2018-19 and FY 2019-20.

5.4.3 Summary of power purchase cost for FY 2018-19 and FY 2019-20 is presented as below.

Table 73: Power purchase quantum and cost for FY 2018-19 and FY 2019-20 approved by the Commission

Source	FY 2018-19			FY 2019-20		
	MU	Rs. Crore	Rs/kWh	MU	Rs. Crore	Rs/kWh
TPC-G	3,792.04	1,525.96	4.02	3,844.10	1,535.65	3.99
Welspun Energy Maharashtra Ltd.	31.50	26.96	8.56	31.50	26.96	8.56
Spark Green Energy Ahmednagar Ltd.	142.56	106.92	7.50	142.56	106.92	7.50
Spark Green Energy Satara Ltd.	142.56	106.92	7.50	142.56	106.92	7.50
Stand-by Charges	-	103.77	-	-	101.82	-
Bilateral Power Purchase	1,265.63	445.45	3.52	1,323.97	465.98	3.52
REC Procurement- Solar	-	40.70	-	-	56.16	-
REC Procurement- Non-Solar	-	45.91	-	-	51.84	-
Sale of Surplus Power	-	-	-	-	-	-
Short Term Solar Purchase	-	-	-	-	-	-
Short Term Non Solar Purchase	-	-	-	-	-	-
Short Term Mini Micro Hydro Purchase	-	-	-	-	-	-
Total	5,374.30	2,402.60	4.47	5,484.69	2,452.26	4.47
Transmission Charges	-	270.60	-	-	265.88	-
MSLDC Charges	-	0.80	-	-	0.78	-
Grand Total	5,374.30	2,674.00	4.98	5,484.69	2,718.93	4.96



Table 74: Summary of estimated power purchase submitted by BEST for FY 2018-19 & FY 2019-20

Source	FY2018-19			FY2019-20		
	Power purchase (MU)	Total cost (Rs crore)	Landed unit cost (Rs/unit)	Power purchase (MU)	Total cost (Rs crore)	Landed unit cost (Rs/unit)
TPC-G Unit-5	1,790.64	756.78	4.23	1,790.64	756.68	4.23
TPC-G Unit-6	-	-	-	-	-	-
TPC-G Unit-7	388.57	189.23	4.87	388.57	203.44	4.64
TPC-G Unit-8	681.86	299.34	4.39	681.86	297.01	4.36
TPC-G Bhira	451.38	69.54	1.54	451.38	68.96	1.53
TPC-G Bhivpuri	151.13	41.44	2.74	151.13	41.37	2.74
TPC-G Khopoli	138.03	68.28	4.95	138.03	66.96	4.85
TPC-G TOTAL [A]	3,601.61	1,424.61	3.96	3,651.99	1,434.43	3.93
Renewable Power Purchase						
Welspun Energy Maharashtra	31.50	26.96	8.56	31.50	26.96	8.56
REC Procurement-Solar	110.02	11.00	1.00	155.23	15.52	1.00
REC Procurement-Non-Solar	566.08	84.91	1.50	613.53	92.03	1.50
Total [B]	707.60	122.87		800.25	134.51	
Bilateral Power Purchase	1,513.08	543.20	3.59	1,651.57	592.91	3.59
Stand-by Charges		103.77			101.82	
O/c provision for Payment of FBSM Bills to be received for FY 2016-17	-	80.54	-			
O/C provision for Standby support Energy availed from MSEDCL for FY 2016-17	-	0.90	-			
Intra-State Transmission Charges		270.60			265.88	
MSLDC Charges		0.80			0.78	
Grand Total	5,146.19	2,547.29	4.95	5,335.05	2,530.33	4.74

5.4.4 BEST requests Hon'ble Commission to approve the power purchase cost as submitted above.

5.5 Operation and Maintenance Expenses

5.5.1 O&M expenses details have been presented in the table below.

Table 75: O&M Expenses for FY 2018-19 and FY 2019-20 (Rs crore)

Particulars	FY 2018-19			FY 2019-20		
	Approved	Normative	Revised projections	Approved	Normative	Revised projections
O&M expense	533.31	581.85	412.54	549.13	611.21	433.36

5.5.2 BEST will take various efficiency measures due to which projected O&M expenses for FY 2018-19 is expected to be lower than normative O&M expenses. BEST submits Hon'ble Commission to approve revised projected O&M expenses given in the table above.



5.6 Capital Expenditure and Capitalization

5.6.1 The estimated capital expenditure and capitalization for FY 2018-19 and FY 2019-20 are as shown in the table below:

Table 76: Capital Expenditure and Capitalization for FY 2018-19 to FY 2019-20

Sr. No.	Particulars	Ensuing Years			
		FY 2018-19		FY 2019-20	
		MYT Order	Revised Projections	MYT Order	Revised Projections
1	Capital Expenditure	95.17	216.89	60.52	165.99
2	Capitalisation	99.52	217.04	79.28	166.42

5.6.2 BEST humbly requests the Hon'ble Commission to approve the projected Capital Expenditure and Capitalization as submitted by BEST. Any variation in above expenses will be claimed on actual basis at the time of true-up.

5.7 Depreciation

5.7.1 Approved and projected depreciation for FY 2018-19 and FY 2019-20 is presented in the table below:

Table 77: Depreciation for FY 2018-19 to FY 2019-20

Particulars	Ensuing Years (Projected)			
	FY 2018-19		FY 2019-20	
	MYT order	Projected	MYT order	Projected
Opening GFA (Rs. crore)	2,582.26	2,590.63	2,681.79	2,794.90
Closing GFA (Rs. crore)	2,681.79	2,794.90	2,761.07	2,948.55
Average GFA (Rs. crore)		2,692.76		2,871.72
Avg. Depreciation rate (%)	4.72%	4.72%	4.72%	4.72%
Depreciation (Rs. crore)	124.27	127.10	128.49	135.55
Less: Depreciation on assets funded by Consumer Contribution	5.93	-	6.39	-
Net Depreciation (Rs. Crore)	118.34	127.10	122.10	135.55

5.7.2 BEST humbly request the Hon'ble Commission to approve the projected depreciation as submitted by BEST. Any variation in above expenses will be claimed on actual basis at the time of true-up.

5.8 Interest on Long term loan

5.8.1 BEST has computed interest on loan as specified in Regulation 29 of MYT Regulations, 2015.

5.8.2 BEST therefore request the Hon'ble Commission to approve the interest expense as shown in the table below calculated on normative basis as specified in the MYT Regulations, 2015. Any variation in interest expenses will be claimed on actual basis at the time of true-up.



Table 78: Normative Interest on loan for FY 2018-19 to FY 2019-20

Sr. No.	Particulars	FY 2018-19		FY 2019-20	
		MYT order	Revised projected	MYT order	Revised projected
1	Opening Balance of Net Normative Loan	11.14	26.68	-	51.51
2	Less: Reduction of Normative Loan due to retirement or replacement of assets	-	-	-	-
3	Net addition of Normative Loan due to capitalisation during the year	56.53	144.89	43.78	141.34
4	Repayment of Normative loan during the year	73.94	127.10	48.64	135.55
5	Closing Balance of Net Normative Loan	0.01	51.51	-	64.35
6	Average Balance of Net Normative Loan	5.58	39.10	-	57.93
7	Weighted average Rate of Interest on actual Loans (%)	10.50%	11.07%	10.50%	11.14%
8	Interest Expenses	4.47	4.33	2.55	6.45
9	Financing Charges	0	-	-	-
10	Total Interest & Financing Charges	4.47	4.33	2.55	6.45

5.9 Interest on Working Capital Loans

5.9.1 BEST has calculated interest on working capital based on the norms specified in Regulations 31 of MYT Regulations, 2015. The following table shows the Interest on Working Capital that has been projected for the entire control period.

Table 79: Normative Interest on Working Capital for FY 2018-19 to FY 2019-20

Sr. No.	Particulars	FY 2018-19		FY 2019-20	
		MYT Order	Revised Projections	MYT Order	Revised Projections
1	O&M expenses for a month	44.44	34.38	45.76	36.11
2	Maintenance Spares at 1% of Opening GFA	25.82	25.91	26.82	27.95
3	One and half months equivalent of the expected revenue from sale of electricity including revenue from CSS and Additional Surcharge	575.86	517.05	587.32	532.56
4	Less: Amount held as security deposit	391.91	376.07	403.66	387.36
5	Less: One month equivalent of cost of	222.83	201.51	226.58	207.55



Sr. No.	Particulars	FY 2018-19		FY 2019-20	
		MYT Order	Revised Projections	MYT Order	Revised Projections
	power purchase, transmission charges and MSLDC Charges				
6	Total Working Capital Requirement	31.38	(0.25)	29.66	1.71
	Computation of Working Capital Interest				
7	Interest Rate (%) - Base Rate +150 basis points	10.80%	9.50%	10.80%	9.50%
8	Interest on Working Capital	3.39	(0.02)	3.20	0.16

5.9.2 BEST therefore request the Hon'ble Commission to approve the interest expense on working capital as shown in the above table as calculated on normative basis. Any variation in above expenses will be claimed on actual basis at the time of true-up.

5.10 Interest on Consumer Security Deposit

5.10.1 BEST submits the interest on security deposit for MYT Control Period of FY 2018-19 to FY 2019-20 as presented in the table below:

Table 80: Interest on Consumer Security Deposit for FY 2018-19 to FY 2019-20

Particulars	FY 2018-19		FY 2019-20	
	MYT order	Revised estimates	MYT order	Revised estimates
Average annual amount held as security deposit	386.20	370.60	397.79	381.71
Interest Rate (%) - SBI Base Rate +150 basis points	10.80%	9.50%	10.80%	9.50%
Interest on Security Deposit	41.71	35.21	42.96	36.26

5.10.2 BEST humbly request the Hon'ble Commission to approve the projected Interest on Consumer Security Deposit as submitted by BEST. Any variation in above expenses will be claimed on actual basis at the time of true-up.

5.11 Contribution to Contingency Reserves

5.11.1 BEST submits that it has not considered any contribution to contingency reserves during FY 2018-19 and FY 2019-20.

5.12 Other expenses

5.12.1 The BEST has considered year-on-year 3% escalation for Projection of 'other expenses' for MYT Control Period of FY 2018-19 to FY 2019-20, on the revised estimated other expenses of FY 2017-18.

Table 81: Other Expenses for FY 2018-19 to FY 2019-20



Sr. No.	Particulars	FY 2018-19		FY 2019-20	
		MYT order	Revised estimates	MYT order	Revised estimates
1	Prompt payment Discount	21.85	20.09	22.51	20.70
2	Power factor Incentive	103.81	92.70	106.92	95.48
3	ECS discount	0.82	0.62	0.84	0.64
4	Load factor Incentive	5.46	4.64	5.63	4.77
6	Total	131.94	118.05	135.90	121.59

5.12.2 BEST humbly request the Hon'ble Commission to approve the projected Other Expenses as submitted by BEST. Any variation in above expenses will be claimed on actual basis at the time of true-up.

5.13 Provision for Bad and doubtful debts

5.13.1 Provision for Bad and doubtful debts for FY 2018-19 to FY 2019-20, has been considered as 1.5% of opening balance of receivables of FY 2015-16 in line with Regulation 82 of MERC MYT Regulations 2015. The details are as presented in table below:

Table 82: Provision for Bad and doubtful for FY 2018-19 & FY 2019-20

Sr. No.	Particulars	FY 2018-19		FY 2019-20	
		MYT order	Revised Projections	MYT order	Revised Projections
1	Opening Balance of Provision for bad and doubtful debts	0.00	-	0.00	-
2	Receivables for the year	522.00	603.74	522.00	621.85
3	Provision of bad and doubtful debt as % of Receivables	1.50%	1.50%	1.50%	1.50%
4	Provision for bad & doubtful debts during the year	7.83	9.06	7.83	9.33
5	Actual bad and doubtful debts written off	7.83	9.06	7.83	9.33
6	Closing Balance of Provision for bad and doubtful debts	-	-	-	-

5.13.2 BEST humbly request the Hon'ble Commission to approve the projected Provision for bad and doubtful debts as submitted by BEST. Any variation in above expenses will be claimed on actual basis at the time of true-up.

5.14 Income Tax

5.14.1 BEST being Local Authority, the income of BEST is exempted under Section 10 (20) of the Income Tax Act.



5.15 Return on equity

5.15.1 BEST submits that it has computed the Return on equity (RoE) as per Regulation 28 of MERC MYT Regulations, 2015. The details are as presented in the table below:

Table 83: Return on Equity for FY 2018-19 & FY 2019-20

Particulars	Ensuing Years			
	FY 2018-19		FY 2019-20	
	MYT Order	Revised Projections	MYT Order	Revised Projections
Regulatory Equity at the beginning of the year	901.19	903.46	928.11	961.73
Capitalisation during the year	99.53	217.04	79.30	166.42
Consumer Contribution and Grants used during the year for Capitalisation	9.80	10.06	9.80	10.06
Equity portion of capitalisation during the year	26.92	62.09	20.85	46.91
Reduction in Equity Capital on account of retirement / replacement of assets	-	3.83	-	3.83
Regulatory Equity at the end of the year	928.11	961.73	948.96	1,004.80
Return on Equity Computation				
Return on Regulatory Equity at the beginning of the year	141.49	141.84	145.71	150.99
Return on Regulatory Equity addition during the year	2.11	4.57	1.64	3.38
Total Return on Equity	143.60	146.42	147.35	154.37

5.15.2 BEST humbly request the Hon'ble Commission to approve the projected Return on Equity as submitted by BEST. Any variation in above expenses will be claimed on actual basis at the time of true-up.

5.16 Return as Interest on Internal funds

5.16.1 BEST submits the Interest on internal funds as under:

Table 84: Return on Internal Funds for FY 2018-19 to FY 2019-20

Particulars	FY 2018-19		FY 2019-20	
	MYT order	Revised projections	MYT order	Revised projections
Cumulative grant at the end of year	87.99	87.99	87.99	87.99
Rate of interest on internal funds	6%	6%	6%	6%
Return on internal fund	5.28	5.28	5.28	5.28

5.16.2 BEST humbly request the Hon'ble Commission to approve the projected return as interest on internal funds as submitted by BEST. Any variation in above expenses will be claimed on actual basis at the time of true-up.



5.17 Non-Tariff Income

5.17.1 BEST has considered the estimated non-tariff income of FY 2017-18 for computing non-tariff income for FY 2018-19 to FY 2019-20, by considering a nominal increase of 3% over the aggregate value for FY 2017-18.

Table 85: Non-tariff Income for FY 2018-19 to FY 2019-20

Particulars	FY 2018-19		FY 2019-20	
	MYT order	Revised projections	MYT order	Revised projections
Total	43.27	37.21	45.13	38.33

5.17.2 BEST humbly request the Hon'ble Commission to approve the projected Non-Tariff Income as submitted by BEST.

5.18 Summary of Aggregate Revenue Requirement for FY2018-19 to FY2019-20

5.18.1 The proposed Aggregate Revenue Requirement for the Distribution Wire business for the MYT Control Period of FY 2018-19 to FY 2019-20 is as presented in table below:

Table 86: Summary of Aggregate Revenue Requirement for FY 2018-19 to FY 2019-20 Distribution Wire Business (excluding past recoveries)

Particulars	FY 2018-19		FY 2019-20	
	MYT order	Revised projections	MYT order	Revised Projections
Operation & Maintenance Expenses	346.65	268.15	356.93	281.68
Depreciation	106.51	114.39	109.89	121.99
Interest on Loan Capital	4.02	3.89	2.30	5.99
Interest on Working Capital	0.34	(0.00)	0.32	0.02
Interest on deposit from Consumers and Distribution System Users	4.17	3.52	4.30	3.63
Provision for bad and doubtful debts	0.78	0.91	0.78	0.93
Contribution to contingency reserves	5.81	-	6.03	-
Income Tax	-	-	-	-
Other expenses	-	-	-	-
Total Revenue Expenditure	468.29	390.86	480.55	414.24
Add: Return on Equity Capital	129.24	131.78	132.61	138.94
Add: Return as interest on Internal Fund	4.75	4.75	4.75	4.75
Aggregate Revenue Requirement	602.28	527.38	617.92	557.92
Less: Non-Tariff Income	4.33	3.72	4.51	3.83
Less: Income from other	-	-	-	-



Particulars	FY 2018-19		FY 2019-20	
	MYT order	Revised projections	MYT order	Revised Projections
business				
Aggregate Revenue Requirement from Distribution Wires	597.95	523.66	613.40	554.09

5.18.2 The proposed Aggregate Revenue Requirement for the Retail Supply business for the MYT Control Period of FY 2018-19 to FY 2019-20 is as presented in table below:

Table 87: Summary of Aggregate Revenue Requirement for FY 2018-19 to FY 2019-20 for Retail Supply Business (excluding past recoveries)

Particulars	FY 2018-19		FY 2019-20	
	MYT order	Revised Projections	MYT order	Revised Projections
Power Purchase Expenses (including Standby Charges)	2,402.60	2,275.89	2,452.26	2,263.67
Operation & Maintenance Expenses	186.66	144.39	192.20	151.68
Depreciation	11.83	12.71	12.21	13.55
Interest on Loan Capital	0.45	0.44	0.26	0.47
Interest on Working Capital	3.05	(0.02)	2.88	0.15
Interest on Consumer Security Deposit	37.54	31.69	38.66	32.64
Provision for bad and doubtful debts	7.05	8.15	7.05	8.39
Contribution to contingency reserves	0.65	-	0.67	-
Intra-State Transmission Charges	270.60	270.60	265.88	265.88
MSLDC Fees & Charges	0.80	0.80	0.78	0.78
Income Tax	-	-	-	-
Other Expenses	131.94	118.05	135.90	121.59
Total Revenue Expenditure	3,053.15	2,862.68	3,108.74	2,858.80
Add: Return on Equity Capital	14.36	14.64	14.73	15.44
Add: Return as interest on Internal Fund	0.53	0.53	0.53	0.53
Aggregate Revenue Requirement	3,068.04	2,877.85	3,124.00	2,874.76
Less: Non-Tariff Income	38.94	33.49	40.62	34.50
Less: Income from other business	-	-	-	-
Less: Receipts on account of Cross-Subsidy Surcharge				
"Less: Receipts on account of Additional Surcharge, if any				



Particulars	FY 2018-19		FY 2019-20	
	MYT order	Revised Projections	MYT order	Revised Projections
Aggregate Revenue Requirement from Retail Supply	3,029.10	2,844.36	3,083.38	2,840.27

5.18.3 The proposed Aggregate Revenue Requirement for total distribution business for the MYT Control Period of FY 2018-19 to FY 2019-20 is as presented in table below:

Table 88: Summary of combined Aggregate Revenue Requirement for FY 2018-19 & FY 2019-20

Particulars	FY 2018-19		FY 2019-20	
	MYT order	Revised projections	MYT order	Revised projections
Power Purchase Expenses (excluding transmission charges & MSLDC fees)	2,402.59	2,275.89	2,452.25	2,263.67
Operation & Maintenance Expenses	533.31	412.54	549.13	433.36
Depreciation	118.34	127.10	122.10	135.55
Interest on Loan Capital	4.47	4.33	2.55	6.45
Interest on Working Capital	3.39	(0.02)	3.20	0.16
Interest on Consumer Security Deposit	41.71	35.21	42.96	36.26
Provision for bad and doubtful debts	7.83	9.06	7.83	9.33
Contribution to contingency reserves	6.46	-	6.70	-
Intra-State Transmission Charges	270.60	270.60	265.88	265.88
MSLDC Fees & Charges	0.80	0.80	0.78	0.78
Income Tax	-	-	-	-
Other Expenses	131.94	118.05	135.90	121.59
Total Revenue Expenditure	3,521.44	3,253.54	3,589.28	3,273.03
Add: Return on Equity Capital	143.60	146.42	147.35	154.37
Add: Return as interest on Internal Fund	5.28	5.28	5.28	5.28
Aggregate Revenue Requirement	3,670.32	3,405.24	3,741.91	3,432.69
Less: Non-Tariff Income	43.27	37.21	45.13	38.33
Less: Income from other business	-	-	-	-
Less: Receipts on account of Cross-Subsidy Surcharge				
Less: Receipts on account of Additional Surcharge, if any				
Aggregate Revenue Requirement from Wires and Retail Supply	3,627.05	3,368.02	3,696.78	3,394.36
Add recovery of revenue gap at end of 2 nd control period	164.52	183.55	-	-
Total ARR including past Revenue gaps upto FY 2015-16 including carrying cost	3,791.57	3,551.57	3,696.78	3,394.36

5.18.4 BEST, for the purpose of working out of ARR for FY 2018-19, has included recovery as shown in table above towards past gap at the end of FY 2015-16 along with carrying cost.



6 Tariff Philosophy

6.1 Recovery of revenue gap for FY 2016-17 and FY 2017-18:

6.1.1 The cumulative revenue surplus at the end of FY 2017-18 for the period FY 2016-17 and FY 2017-18 has been worked out as Rs. 41.98 crore. BEST proposes to adjust this revenue surplus during FY 2018-19. The adjustment to be done during FY 2018-19 with applicable holding cost has been worked out as below:

Table 89: Recovery of revenue gap for FY 2016-17 and FY 2017-18 (Rs. Crore)

Particulars	FY 2018-19
Opening balance (Rs. Crore)	(41.98)
Recovery (Rs. crore)	(41.98)
Closing balance (Rs. crore)	-
Average balance (Rs. crore)	(20.98)
Interest rate (%)	9.50%
Carrying/(Holding) Cost (Rs. Crore)	(1.99)
Total Recovery (Rs. Crore)	(43.97)

Aggregate revenue requirement for FY 2018-19 and FY 2019-20 including past revenue gaps

6.1.2 Aggregate revenue requirement for FY 2018-19 and FY2019-20 including the estimated revenue gap/ (surplus) at the end of FY 2017-18 has been worked out as follows:

Table 90: Aggregate revenue requirement for FY 2018-19 and FY 2019-20 including past revenue gaps (Rs crore)

Particulars	FY 2018-19		FY 2019-20	
	MYT order	Revised projections	MYT order	Revised projections
Sales (MU)	4,869.30	4,692.38	4,974.59	4,869.75
ARR incl.gap for 2nd control period	3,791.57	3,551.57	3,696.82	3,394.36
Add: Revenue gap/(surplus) at the end of previous year along with carrying cost		(43.97)		
Total ARR incl gap/(surplus) at the end of FY 2017-18	3,791.57	3,507.60	3,696.82	3,394.36
ACoS	7.79	7.48	7.43	6.97

6.1.3 It can be seen that Hon'ble Commission had approved average billing rate of Rs. 7.79 per kWh for FY 2018-19 and Rs. 7.43 per kWh for FY 2019-20 respectively. The revised average cost of supply (ACoS) for recovery of ARR including the past gaps works out to be Rs. 7.48 per kWh and Rs. 6.97 per kWh respectively.

6.1.4 BEST proposes recovery of the revenue requirement during FY 2018-19 and FY 2019-20 as follows:

Table 91: Proposed revenue recovery during FY 2018-19 and FY 2019-20

Particulars		FY2018-19	FY2019-20
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Particulars		FY2018-19	FY2019-20
Revised estimated energy Sales(MU)	A	4692.38	4869.75
Revised ARR including cumulative revenue gap at the end of FY 2017-18 (Rs Crore)	B	3,507.60	3,394.36
Add: Revenue gap/(surplus) of FY 2018-19 with holding cost	C		(103.83)
Total Revenue proposed to be recovered through revised tariff	D	3,606.72	3,282.13
Cumulative revenue gap/(surplus)	E=B+C-D	(99.13)	8.39
Proposed average billing rate (ABR) (Rs/kWh)	F=D/A*10	7.69	6.74
Decrease in Tariff w.r.t previous year	G	-7.06%*	-12.31%

* with respect to. Approved ABR of Rs. 8.27 for FY 2017-18

As can be seen from the above table, surplus at the end of FY 2018-19 is Rs. 99.13 crore. BEST has added holding cost of Rs. 4.71 crore on this surplus during FY 2019-20 and the same has been included in ARR of FY 2019-20. As such, the cumulative revenue gap at the end of FY 2019-20 will be Rs. 8.39 crore. BEST proposes to recover this revenue gap in the next control period.

6.2 Wheeling charges

6.2.1 BEST has worked out revised wheeling charges for FY 2018-19 and FY 2019-20 as follows:

Table 92: Proposed wheeling charges for FY 2018-19

Voltage	Estimated Sales (MU)	% of Sales	% of GFA	Network Cost (Rs. Crore)	Wheeling Cost (Rs. Crore)	Wheeling Charges (Rs/kWh)
HT level	688.18	14.67%	39.45%	206.69	30.31	0.44
LT level	4,004.21	85.33%	60.55%	317.24	493.62	1.23
Total	4,692.38	100.00%	100.00%	523.93	523.93	1.12

Table 93: Proposed wheeling charges for FY 2019-20

Voltage	Estimated Sales (MU)	% of Sales	% of GFA	Network Cost (Rs. Crore)	Wheeling Cost (Rs. Crore)	Wheeling Charges (Rs/kWh)
FY 2019-20						
HT level	692.23	14.21%	39.45%	218.70	31.09	0.45
LT level	4,177.52	85.79%	60.55%	335.69	523.30	1.25
Total	4,869.75	100.00%	100.00%	554.39	554.39	1.14



6.2.2 The category-wise wheeling charges for FY 2018-19 and FY 2019-20 proposed by BEST are as follows:

Table 94: Wheeling charges (Rs/kWh)

Voltage	FY 2018-19	FY 2019-20
HT Category	0.44	0.45
LT Category	1.23	1.25

6.3 Fixed/Demand charges

6.3.1 BEST has proposed same fixed and demand charges for FY 2018-19 and FY 2019-20 as approved by Hon'ble Commission in the MYT order in case no. 33 of 2016. The category-wise fixed/demand charges for FY 2018-19 and FY 2019-20 proposed by BEST are as follows:

Table 95: Fixed/Demand charges for FY 2018-19 and FY 2019-20

Year	FY 2018-19		FY 2019-20	
	Fixed Charges (Rs/connection /month)	Demand Charges (Rs/kVA/month)	Fixed Charges (Rs/connection /month)	Demand Charges (Rs/kVA/month)
HT Category				
HT - I Industry	-	250.00	-	260.00
HT - II Commercial	-	250.00	-	260.00
HT - III Group Housing	-	250.00	-	260.00
HT - IV Public water works	-	250.00	-	260.00
HT V- Railways, Metro, Monorail	-	250.00	-	260.00
HT VI-(A) Public services (Govt. Hospitals and Educational Institutions)	-	250.00	-	260.00
HT VI-(B) Public services (Others)	-	250.00	-	260.00
HT - VII (Temporary Supply)	480.00	-	490.00	-
LT Category				
LT-I (A) Residential (BPL)	10.00	-	10.00	-
LT - I(B) Residential			-	
0 – 100 units	55.00	-	55.00	-
101 – 300 units	85.00	-	85.00	-
301 - 500 units	85.00	-	85.00	-
> 501 units	110.00	-	110.00	-
LT - II (a) Commercial (<=20kW)				
0 - 500 units	300.00	-	310.00	-
> 500 units	300.00	-	310.00	-
LT - II (b) Commercial >20 & <=50 kW	-	250.00	-	260.00



Year	FY 2018-19		FY 2019-20	
Tariff category	Fixed Charges (Rs/connection /month)	Demand Charges (Rs/kVA/ month)	Fixed Charges (Rs/connection /month)	Demand Charges (Rs/kVA/ month)
LT - II (c) Commercial >50 kW	-	250.00	-	260.00
LT - III (A) Industry (upto 20 kW)				
0 - 500 units	300.00	-	310.00	-
> 500 units	300.00	-	310.00	-
LT III (B) >20 Industry Above 20 kW	-	250.00	-	260.00
LT IV Public Water Works	-	250.00	-	260.00
LT - V Advertisement & Hoardings	480.00	-	490.00	-
LT - VI Street Lights	-	250.00	-	260.00
LT - VII (a) Temporary Supply Religious	250.00	-	260.00	-
LT - VII (b) Temporary Supply Others	480.00	-	490.00	-
LT - VIII Crematorium and Burial Grounds	250.00	-	260.00	-
LT - IX (A) Public Services -Govt. Hosp. & Edu. Institutions	300.00	-	310.00	-
LT - IX (B) Public Services -others	300.00	-	310.00	-
LT-X (A) Agriculture- Pumpsets	30.00	-	30.00	-
LT-X (B) Agriculture- Others	75.00	-	75.00	-

6.4 Energy charges

6.4.1 The category-wise energy charges for FY 2018-19 and FY 2019-20 proposed by BEST are as follows:

Table 96: Energy charges (Rs/kWh)

Tariff category	FY 2018-19	FY 2019-20
HT Category		
HT - I Industry	7.58	6.29
HT - II Commercial	7.88	6.48
HT - III Group Housing	6.13	5.21
HT - IV Public water works	6.73	5.12
HT V- Railways, Metro, Monorail	6.18	5.02
HT VI-(A)Public services (Govt. Hospitals and Educational Institutions)	7.26	5.70
HT VI-(B) Public services (Others)	7.73	6.43
HT - VII (Temporary Supply)	8.73	6.90
LT Category		
LT-I (A) Residential (BPL)	1.22	1.02



Tariff category	FY 2018-19	FY 2019-20
LT - I(B) Residential		
0 – 100 units	1.67	1.65
101 – 300 units	3.92	3.90
301 - 500 units	6.72	6.70
> 501 units	8.72	8.70
LT - II (a) Commercial (<=20kW)		
0 - 500 units	6.52	5.29
> 500 units	7.82	5.29
LT - II (b) Commercial >20 & <=50 kW	6.12	4.26
LT - II (c) Commercial >50 kW	7.37	5.39
LT - III (A) Industry (upto 20 kW)		
0 - 500 units	6.12	5.15
> 500 units	7.32	5.15
LT III (B) >20 Industry Above 20 kW	6.02	4.45
LT IV Public Water Works	4.93	3.61
LT - V Advertisement & Hoardings	8.82	6.56
LT - VI Street Lights	5.82	4.75
LT - VII (a) Temporary Supply Religious	3.82	3.60
LT - VII (b) Temporary Supply Others	7.27	5.62
LT - VIII Crematorium and Burial Grounds	4.47	4.45
LT - IX (A) Public Services -Govt. Hosp. & Edu. Institutions	5.35	3.86
LT - IX (B) Public Services -others	7.37	5.20
LT-X (A) Agriculture- Pumpsets	2.72	2.70
LT-X (B) Agriculture- Others	4.22	4.20

6.5 Cross Subsidy Trajectory

6.5.1 The category-wise cross-subsidy for FY 2016-17 to FY 2018-19 is as shown in table below:

Table 97: Cross-Subsidy Percentage for FY 2016-17 and FY 2017-18 (%)

Category	FY 2016-17		FY 2017-18	
	Approved in MYT Order	Actual	Approved in MYT Order	Provisional
HT Category				
HT - I Industry	109%	109%	110%	112%
HT - II Commercial	120%	119%	119%	122%
HT - III Group Housing	86%	82%	92%	92%
HT - IV Public water works	103%	109%	97%	102%
HT V- Railways, Metro, Monorail		94%		95%
HT VI-(A)Public services (Govt. Hospitals and Educational Institutions)	102%	105%	97%	105%
HT VI-(B) Public services (Others)	114%	118%	114%	117%
HT - VII (Temporary Supply)	119%	131%	119%	124%



Category	FY 2016-17		FY 2017-18	
	Approved in MYT Order	Actual	Approved in MYT Order	Provisional
LT Category				
LT-I (A) Residential (BPL)	28%	26%	30%	31%
LT - I(B) Residential	74%	73%	74%	75%
LT - II (a) Commercial (<=20kW)	120%	121%	119%	122%
LT - II (b) Commercial >20 & <=50 kW	120%	128%	118%	121%
LT - II (c) Commercial (>50 kW)	127%	132%	125%	129%
LT - III (A) Industry (upto 20 kW)	110%	109%	111%	113%
LT III (B) >20 Industry Above 20 kW	108%	0%	107%	109%
LT IV Public Water Works	105%	111%	106%	111%
LT - V Advertisement & Hoardings	174%	188%	168%	171%
LT - VI Street Lights	103%	0%	106%	107%
LT - VII (a) Temporary Supply Religious	59%	0%	62%	68%
LT - VII (b) Temporary Supply Others	131%	110%	128%	142%
LT - VIII Crematorium and Burial Grounds	70%	63%	72%	73%
LT - IX (A) Public Services -Govt. Hosp. & Edu. Institutions	102%	59%	105%	106%
LT - IX (B) Public Services -others	110%	148%	113%	115%
LT-X (A) Agriculture- Pumpsets				
LT-X (B) Agriculture- Others				

6.5.2 The category-wise cross-subsidy proposed for FY 2018-19 to FY 2019-20 is as shown in table below:

Table 98: Cross-Subsidy Percentage for FY 2018-19 and FY 2019-20 (%)

Category	FY 2018-19		FY 2019-20	
	Approved in MYT Order	Revised Projection	Approved in MYT Order	Revised Projection
HT Category				
HT - I Industry	111%	114%	108%	111%
HT - II Commercial	116%	120%	112%	117%
HT - III Group Housing	93%	94%	95%	94%
HT - IV Public water works	100%	106%	99%	99%
HT V- Railways, Metro, Monorail		98%		96%
HT VI-(A)Public services (Govt. Hospitals and Educational Institutions)	100%	108%	101%	101%
HT VI-(B) Public services (Others)	112%	117%	109%	114%
HT - VII (Temporary Supply)	118%	122%	115%	112%
LT Category				
LT-I (A) Residential (BPL)	32%	33%	35%	35%
LT - I(B) Residential	75%	77%	78%	87%
LT - II (a) Commercial (<=20kW)	119%	122%	117%	113%
LT - II (b) Commercial >20 & <=50 kW	117%	114%	116%	103%
LT - II (c) Commercial >50 kW	125%	128%	123%	118%



Category	FY 2018-19		FY 2019-20	
	Approved in MYT Order	Revised Projection	Approved in MYT Order	Revised Projection
LT - III (A) Industry (upto 20 kW)	111%	113%	110%	106%
LT III (B) >20 Industry Above 20 kW	108%	109%	108%	102%
LT IV Public Water Works	104%	97%	103%	92%
LT - V Advertisement & Hoardings	165%	175%	160%	167%
LT - VI Street Lights	105%	110%	107%	115%
LT - VII (a) Temporary Supply Religious	65%	72%	68%	80%
LT - VII (b) Temporary Supply Others	123%	128%	119%	121%
LT - VIII Crematorium and Burial Grounds	74%	75%	76%	86%
LT - IX (A) Public Services -Govt. Hosp. & Edu. Institutions	104%	87%	105%	77%
LT - IX (B) Public Services -others	112%	114%	114%	98%

6.5.3 BEST proposes to continue with the prevailing Time of Day Tariff for the Third MYT Control period.



6.5.4 Proposed tariff for FY 2018-19 is as shown in table below:

Category	No. of consumers	Components of Existing tariff (FY 2017-18)				Components of Proposed tariff (FY 2018-19)				% decrease in ABR
		Fixed Charges (Per month per connection)	Demand Charges per kVA per month	Energy Charges (Rs per kWh)	Wheeling Charge (Rs./kWh)	Fixed Charges (Per month per connection)	Demand Charges per kVA per month	Energy Charges (Rs per kWh)	Wheeling Charge (Rs./kWh)	
HT Category										
HT - I Industry	46	-	240	8.45	0.07	-	250.00	7.58	0.44	-5.4%
HT - II Commercial	94	-	240	9.05	0.07	-	250.00	7.88	0.44	-8.1%
HT - III Group Housing	13	-	240	6.90	0.07	-	250.00	6.13	0.44	-4.7%
HT - IV Public water works	7	-	240	7.35	0.07	-	250.00	6.73	0.44	-2.9%
HT V- Railways, Metro, Monorail	-	-	240	6.85	0.07	-	250.00	6.18	0.44	-3.5%
HT VI-(A)Public services (Govt. Hospitals and Educational Institutions)	-	-	240	7.95	0.07	-	250.00	7.26	0.44	-3.9%
HT VI-(B) Public services (Others)	31	-	240	8.75	0.07	-	250.00	7.73	0.44	-6.7%
HT - VII (Temporary Supply)	4	470	-	9.80	0.07	480.00	-	8.73	0.44	-7.9%
Sub-total	195	-	-	-	-	-	-	-	-	
LT Category										
LT-I (A) Residential (BPL)	163	10	-	1.00	1.44	10.00	-	1.22	1.23	-0.1%
LT - I(B) Residential										-4.2%
0 – 100 units	3,21,449	50	-	1.80	1.44	55.00	-	1.67	1.23	-9.4%
101 – 300 units	3,57,909	80	-	4.00	1.44	85.00	-	3.92	1.23	-4.6%
301 - 500 units	51,913	80	-	6.80	1.44	85.00	-	6.72	1.23	-3.1%
> 501 units	30,105	105	-	8.80	1.44	110.00	-	8.72	1.23	-2.6%
LT - II (a) Commercial (<=20kW)										
0 - 500 units	2,30,451	290	-	6.90	1.44	300.00	-	6.52	1.23	-6.2%
> 500 units	31,373	290	-	8.30	1.44	300.00	-	7.82	1.23	-7.3%
LT - II (b) Commercial >20 & <=50 kW	5,784	-	240	7.10	1.44	-	250.00	6.12	1.23	-12.1%
LT - II (c) Commercial >50 kW	2,466	-	240	7.85	1.44	-	250.00	7.37	1.23	-6.5%



Category	No. of consumers	Components of Existing tariff (FY 2017-18)				Components of Proposed tariff (FY 2018-19)				% decrease in ABR
		Fixed Charges (Per month per connection)	Demand Charges per kVA per month	Energy Charges (Rs per kWh)	Wheeling Charge (Rs./kWh)	Fixed Charges (Per month per connection)	Demand Charges per kVA per month	Energy Charges (Rs per kWh)	Wheeling Charge (Rs./kWh)	
LT - III (A) Industry (up to 20 kW)										
0 - 500 units	5,933	290	-	6.50	1.44	300.00	-	6.12	1.23	-5.8%
> 500 units	2,038	290	-	7.70	1.44	300.00	-	7.32	1.23	-5.9%
LT III (B) >20 Industry Above 20 kW	1,261	-	240	6.40	1.44	-	250.00	6.02	1.23	-6.4%
LT IV Public Water Works	98	-	240	6.45	1.44	-	250.00	4.93	1.23	-18.6%
LT - V Advertisement & Hoardings	927	470	-	9.60	1.44	480.00	-	8.82	1.23	-4.1%
LT - VI Street Lights	400	-	240	6.20	1.44	-	250.00	5.82	1.23	-3.3%
LT - VII (a) Temporary Supply Religious	5	240	-	3.70	1.44	250.00	-	3.82	1.23	0.1%
LT - VII (b) Temporary Supply Others	1,640	470	-	8.90	1.44	480.00	-	7.27	1.23	-16.0%
LT - VIII Crematorium and Burial Grounds	31	240	-	4.45	1.44	250.00	-	4.47	1.23	-3.3%
LT - IX (A) Public Services -Govt. Hosp. & Educational Institutions	923	290	-	7.15	1.44	300.00	-	5.35	1.23	-23.2%
LT - IX (B) Public Services -others	4,327	290	-	7.85	1.44	300.00	-	7.37	1.23	-7.3%
LT-X (A) Agriculture-Pump sets	-	30	-	2.50	1.44	30.00	-	2.71	1.23	0.0%
LT-X (B) Agriculture-Others	-	75	-	4.00	1.44	75.00	-	4.21	1.23	0.0%
Sub-total	10,49,196									
Total	10,49,391									-6.5%



6.5.5 Proposed tariff for FY 2019-20 is as shown in table below:

Category	No. of consumers	Components of Proposed tariff (FY 2018-19)				Components of Proposed tariff (FY 2019-20)				% decrease in ABR
		Fixed Charges (Per month per connection)	Demand Charges per kVA per month	Energy Charges (Rs per kWh)	Wheeling Charge (Rs./kWh)	Fixed Charges (Per month per connection)	Demand Charges per kVA per month	Energy Charges (Rs per kWh)	Wheeling Charge (Rs./kWh)	
HT Category										
HT - I Industry	46	-	250.00	7.58	0.44	-	260.00	6.29	0.45	-14.0%
HT - II Commercial	94	-	250.00	7.88	0.44	-	260.00	6.48	0.45	-14.5%
HT - III Group Housing	13	-	250.00	6.13	0.44	-	260.00	5.21	0.45	-12.1%
HT - IV Public water works	7	-	250.00	6.73	0.44	-	260.00	5.12	0.45	-18.9%
HT V- Railways, Metro, Monorail	-	-	250.00	6.18	0.44	-	260.00	5.02	0.45	-14.4%
HT VI-(A)Public services (Govt. Hospitals and Educational Institutions)	-	-	250.00	7.26	0.44	-	260.00	5.70	0.45	-18.2%
HT VI-(B) Public services (Others)	31	-	250.00	7.73	0.44	-	260.00	6.43	0.45	-14.8%
HT - VII (Temporary Supply)	4	480.00	-	8.73	0.44	490.00	-	6.90	0.45	-19.8%
Sub-total	195	-	-	-	-	-	-	-	-	
LT Category										
LT-I (A) Residential (BPL)	163	10.00	-	1.22	1.23	10.00	-	1.02	1.25	-8.1%
LT - I(B) Residential										-0.3%
0 – 100 units	3,21,449	55.00	-	1.67	1.23	55.00	-	1.65	1.25	-0.5%
101 – 300 units	3,57,909	85.00	-	3.92	1.23	85.00	-	3.90	1.25	-0.5%
301 - 500 units	51,913	85.00	-	6.72	1.23	85.00	-	6.70	1.25	-0.2%
> 501 units	30,105	110.00	-	8.72	1.23	110.00	-	8.70	1.25	-0.1%
LT - II (a) Commercial (<=20kW)										-18.7%
0 - 500 units	2,30,451	300.00	-	6.52	1.23	310.00	-	5.29	1.25	-13.5%
> 500 units	31,373	300.00	-	7.82	1.23	310.00	-	5.29	1.25	-26.9%
LT - II (b) Commercial >20 & <=50 kW	5,784	-	250.00	6.12	1.23	-	260.00	4.26	1.25	-20.6%
LT - II (c) Commercial >50 kW	2,466	-	250.00	7.37	1.23	-	260.00	5.39	1.25	-19.8%



Category	No. of consumers	Components of Proposed tariff (FY 2018-19)				Components of Proposed tariff (FY 2019-20)				% decrease in ABR
		Fixed Charges (Per month per connection)	Demand Charges per kVA per month	Energy Charges (Rs per kWh)	Wheeling Charge (Rs./kWh)	Fixed Charges (Per month per connection)	Demand Charges per kVA per month	Energy Charges (Rs per kWh)	Wheeling Charge (Rs./kWh)	
LT - III (A) Industry (up to 20 kW)						-				-18.2%
0 - 500 units	5,933	300.00	-	6.12	1.23	310.00	-	5.15	1.25	-11.2%
> 500 units	2,038	300.00	-	7.32	1.23	310.00	-	5.15	1.25	-24.2%
LT III (B) >20 Industry Above 20 kW	1,261	-	250.00	6.02	1.23	-	260.00	4.45	1.25	-18.1%
LT IV Public Water Works	98	-	250.00	4.93	1.23	-	260.00	3.61	1.25	-16.9%
LT - V Advertisement & Hoardings	927	480.00	-	8.82	1.23	490.00	-	6.56	1.25	-16.3%
LT - VI Street Lights	400	-	250.00	5.82	1.23	-	260.00	4.75	1.25	-8.7%
LT - VII (a) Temporary Supply Religious	5	250.00	-	3.82	1.23	260.00	-	3.60	1.25	-3.6%
LT - VII (b) Temporary Supply Others	1,640	480.00	-	7.27	1.23	490.00	-	5.62	1.25	-16.7%
LT - VIII Crematorium and Burial Grounds	31	250.00	-	4.47	1.23	260.00	-	4.45	1.25	-0.1%
LT - IX (A) Public Services -Govt. Hosp. & Educational Institutions	923	300.00	-	5.35	1.23	310.00	-	3.86	1.25	-22.2%
LT - IX (B) Public Services –others	4,327	300.00	-	7.37	1.23	310.00	-	5.20	1.25	-24.7%
LT-X (A) Agriculture- Pump sets	-	30.00	-	2.71	1.23	30.00	-	2.69	1.25	0.0%
LT-X (B) Agriculture- Others	-	75.00	-	4.21	1.23	75.00	-	4.19	1.25	0.0%
Sub-total	10,49,196									
Total	10,49,391									

7 Schedule of Charges

7.1.1 BEST proposes schedule of charges for application registration & processing charges as shown in table below:

Table 99: Application registration & processing charges

Sr. No.	Particulars	Existing charges as per Order in case No. 90 of 2012 (Rs.)	Proposed Charges (Rs.)
1	New connections / Reduction or addition of Load / Shifting of service /Extension of service / Restoration of Supply / Temporary connection		
	a) Single phase	50	50
	b) Three phase	75	75
	c) HT. supply	200	200
2	Change of name		
	a) Single phase	50	50
	b) Three phase	50	50
	c) HT. supply	100	100

7.1.2 BEST proposes schedule of charges for service connection charges for new connection and Extension of Load as shown in table below:

Table 100: Service connection charges for new connection and extension of load

Sr. No.	Particulars	Existing charges as per Order in case No. 90 of 2012 (Rs.)	Proposed Charges (Rs.)	
1	L.T. Supply		As recently approved by the Hon'ble Commission in Order No. 86 of 2017 dated 16 th February 2018	
	Single Phase			
	For loads upto 5 KW	2,000		2,000
	Loads above 5kw and upto 10 KW	3,000		2,000
	Three Phase			
	Motive power upto 27 HP or other loads upto 20 KW	9,000		3,000
	Motive power above 27 HP but upto 67 HP or other loads above 20 KW but upto 50 KW.	15,000		6,500
	Motive power above 67 HP but upto 134 HP or other loads above 50 KW but upto 100 KW.	40,000		12,000
	Motive power above 134 HP but upto	60,000	12,000	



Sr. No.	Particulars	Existing charges as per Order in case No. 90 of 2012 (Rs.)	Proposed Charges (Rs.)	
	201 HP or other loads Over 100 KW but upto 150 KW.			
2	H.T. Supply (11 KV, 33 KV)			
	For loads upto 500 KVA	3,50,000	3,50,000	
	Loads above 500 KVA	4,00,000	4,00,000	
	Provision of dedicated distribution facility for power supply to HT consumer	At actual	At actual	
3	Supply for temporary use for a period not exceeding 1 year	At Actual	At Actual	
4	Extension of Load: the charges will be applicable on the total load (existing as well as additional load demanded)	As Per Sr. No. 1,2 & 3 above	As Per Sr. No. 1,2 & 3 above	
5	Security Deposit			
5.1	Permanent supply	Existing Charges as per case 26 of 2013. 28.08.2013 w.e.f. 01.09.2013	Proposed Charges (in Rs.)	
A	Residential Consumers (new connection/additional sanctioned load)	Rs. 200/- per kW or part thereof	Rs. 200/- per kW or part thereof	
B	Other Consumers (new connection/additional sanctioned load)	Rs. 500/- per kW or part thereof	Rs. 500/- per kW or part thereof	
5.2	Temporary Supply			
a	Religious Supply	Rs. 20/- per kW or part thereof per day	Rs. 20/- per kW or part thereof per day	
b	Other Consumers (new connection/additional sanctioned load)	Rs. 500/- per kW or part thereof per day	Rs. 500/- per kW or part thereof per day	



7.1.3 BEST proposes schedule of charges for miscellaneous and general charges for new connection and extension of load as shown in table below:

Table 101: Miscellaneous and general charges

Sr. No.	Particulars	Existing charges as per Order in case No. 90 of 2012, and case No. 22 of 2013 (Rs.)	Proposed Charges (Rs.)
Reconnection charges			
1	L.T. Service at cut-outs-		
	a) where meter is not removed	100	100
	b) where meter is removed	300	300
	c) At underground mains service	750	750
	d) H.T. Supply.	500	500
Changing the position of meter on consumer's request at same service position			
2	Single phase meter	100	100
	Three phase meter	200	200
Testing of Installation on consumer's request			
3	Single phase meter	100	100
	Three phase meter	350	350
Testing of meter at BEST's laboratory on consumer's request			
a	Single phase meter	200	200
b	Three phase whole current meter	500	500
c	Three phase CT meter	1000	1000
d	Single phase Prepaid meter	200	200
e	Three phase Prepaid meter	500	500
f	H.T. meter.	1,000	1,000
5	Meter testing at Government approved laboratory	At actual	At actual
Cost of meter (applicable in case consumer opts to purchase the meter from BEST Undertaking & in case of Lost and Burnt / Damaged meter).			
6	Single phase meter	1,000	1,000
	Three phase whole current meter	3,000	3,000
	Three phase C.T. operated meter	4,000	4,000
	Single phase Prepaid meter	3,300	3,300
	Three phase Prepaid meter	6,000	6,000
	H.T. meter.	4,500	4,500
6	Service shifting , if carried out on consumer's request	At actual	At Actual
	Service disconnection if carried out on consumer's request	At actual	At actual
	Charges for dishonored cheque	250	250.
7	Visit charges (only for new connection or additional supply request) (only in case of subsequent visit for inspection and test of installation and not for the first	100	100



Sr. No.	Particulars	Existing charges as per Order in case No. 90 of 2012, and case No. 22 of 2013 (Rs.)	Proposed Charges (Rs.)
	visit)		
8	Photocopying of Regulatory order etc., (Rs./page)	1	1
9	Duplicate copy of each monthly bill (Rs./Bill)	2	2
10	Statement of Accounts (Rs./ Page)	2	2

8 Compliance of directives

The Hon'ble Commission in MYT Order has given certain directives to be implemented by BEST. The status of the various directives is as given below:

- Analysis of Present System and time taken along with details of the action taken to improve reading, billing and collection cycles

Directive:

The Commission directed BEST to carry out Analysis of the Present System and time taken along with the details of the action taken to improve its reading, billing and collection cycles and reduce time gaps in respect of different consumer categories.

BEST's reply:

BEST submits that average monthly billing revenue of BEST Undertaking is about Rs. 300 crore out of which about Rs 140 crore pertains to billing cycle no. 19, 21 and 24. There are 19,517 high value consumers billed under cycle 19, 21 and 24. Meters of cycle 21, involving revenue of about Rs.54 crore, have remote reading facility and are billed by 6th of every month. The remaining High value consumer i.e. Cycle 19 & 24 are read between 1st to 22nd of each month and are billed up to 27th of each month. As such presently there is gap of about 27 days, between reading and billing due to which revenue realisation of about Rs. 85 crore is delayed. In order to reduce the gap between reading & billing, BEST has decided to replace existing static meters by smart meters / static meters with remote reading facility. BEST is in process of finalizing specifications of these meters & it would take about 1 year to procure & replace existing meters. However as an interim measure, BEST has decided to bifurcate high value consumptions cycles 19 & 24 zone-wise and complete entire process of reading & billing for each zone independently. With such arrangement, the bills to consumers in south zone would be delivered by 12th & in north zone would be delivered by 20th of each month. As a result, gap between the reading & billing would be reduced by 15 days in case of south zone high value consumers & by 7 days in case of north zone consumers.



b) Analysis of *benefits due to shift in peak load*

Directive:

The Commission directed BEST to submit detailed analysis indicating the benefits due to shift in peak load and other considerations including the implications in terms of cost as well as time required for installation of ToD meters and smart meters. Further vide letter No. MERC/Tech/Tariff/20162017/01174 dated 13th December 2016, Hon'ble Commission had directed as follows:

“In its Multi Year Tariff Order dated 21 October, 2016 in case No.47 of 2016 in respect of Tata Power (Distribution Business), the Commission had stated as follows:

“.....However, TPC-D and other Distribution Licensees should submit their detailed analysis indicating the benefits due to shift in peak load and other considerations at the time of the next MTR. They should also present in detail the implications in terms of cost as well as time required for installation of ToD meters and smart meters for other consumer categories considering the Tariff Policy provisions, and an analysis of their comparative benefits. The Commission may revisit the issue after public consultation on this aspect of the MTR Petitions.”

BEST's reply:

BEST submits that peak demand of BEST has remained more or less constant over the past 4 years and the peak demand had occurred in time slot of 14:30 to 15:00 hrs. More than 40% of BEST's sales is contributed by commercial categories which are mainly in operation during 10:00 hrs to 18:00 hrs. Activities of commercial category are related to operational hours of banks, government offices, stock market and other business organizations. Therefore BEST submits that there is little scope for shifting peak demand.

Table 102: Peak Maximum Demand & time of occurrence

Year	Peak MD	Time of MD occurrence	Sales (MU)	LT-II sales
2014-15	901	14:00-15:00	4,419	2,129
2015-16	890	14:00-15:00	4,577	2,179
2016-17	924	14:00-15:00	4,403	2,095
Apr- Nov 2017-18	914	14:00-15:00	3,323	1,509

BEST submits that it is in process of preparing specifications of smart meters. Further, there are 1.03 lakh meters having average consumption more than 500 units and 2.74 lakh meters having average consumption between 200 to 500 units per month. The estimated cost for replacement of these meters by smart meters has been worked out as below:

Table 103: Estimated cost of replacement by smart meters

Average consumption	Type of Meters	Nos. of meters	Rate per Meter	Total Cost (in Rs crore)
More than 500 units per month (A)	Single phase	32,000	5,000	16
	Three phase	66,400	9,000	59.76



Average consumption	Type of Meters	Nos. of meters	Rate per Meter	Total Cost (in Rs crore)
	C.T. Meter	4,500	14,000	6.3
	CT/PT meter	200	25,000	0.5
Total (A)		1,03,100		82.56
More than 200 but less than 500 units (B)	Single phase	2,27,000	5,000	113.5
	Three phase	47,400	9,000	42.66
Total (B)		2,74,400		156.16
Total (A+B)		3,77,500		238.72

c) Replacement of Electromechanical Energy Meters with Electronic Meters

Directive:

The Hon'ble Commission enquired BEST about the percentage of connections where billing using electro-mechanical meters is still in practice. Replacement of electro-mechanical meters by electronic meters is expected to improve revenue recovery.

BEST's reply:

BEST had stated that there are nearly 6.5 lakh electro-mechanical meters in the system, which account for nearly 65% of total consumer meters. BEST had set target to replace about 40,000 electro-mechanical meters each year, with a targeted replacement of 1.6 lakh meters. In FY 2016-17, about 22,000 meters are replaced. In FY 2017-18, about 36,500 meters are replaced.



9 Prayers

9.1.1 In the circumstances and for the reason mentioned above, BEST respectfully submits and prays for the following relief:

- a) Admit the Mid Term Review for Third MYT Control Period from FY 2016-17 to FY 2019-20 in accordance with Regulation 8 of the MYT Regulations, 2015;
- b) Approve true-up for FY 2015-16 and consequential revenue gaps in accordance with MERC MYT Regulations 2011;
- c) Approve true-up for FY 2016-17 and provisional true-up for FY 2017-18 in accordance with MYT Regulations 2015;
- d) Approve the revised ARR and tariff for FY 2018-19 and FY 2019-20 as proposed by BEST;
- e) Approve the Schedule of Charges as proposed by BEST;
- f) Condone any inadvertent omission / errors and grant the liberty to BEST to add/ change/ modify /alter this petition and make further submissions as may be required at a future date;
- g) Pass such further and other orders, as the Hon'ble Commission may deem fit and proper, keeping in view the facts and circumstances of the case.

(R. D. Patsute)

Chief Engineer (Regulatory)

Place: Mumbai

Date: 27th June, 2018