

**Before the  
MAHARASHTRA ELECTRICITY REGULATORY COMMISSION  
World Trade Centre, Centre No.1, 13<sup>th</sup> Floor, Cuffe Parade, Mumbai – 400 005  
Tel. No. 022- 22163964/ 65/ 69 Fax No. 022 - 22163976**

**Email: [mercindia@merc.gov.in](mailto:mercindia@merc.gov.in)**

**Website: [www.merc.gov.in](http://www.merc.gov.in)**

**CASE No. 212 of 2022**

**In the matter of**

**Petition of Brihanmumbai Electric Supply and Transport Undertaking (BEST) for  
Truing-up of Aggregate Revenue Requirement (ARR) for FY 2019-20, FY 2020-21  
and FY 2021-22, Provisional Truing-up of ARR FY 2022-23 and revised ARR &  
Tariff for FY 2023-24 and FY 2024-25**

**Coram**

**Sanjay Kumar, Chairperson**

**I. M. Bohari, Member**

**Mukesh Khullar, Member**

**Date: 31 March, 2023**

**ORDER**

In accordance with Regulation 5 of the Maharashtra Electricity Regulatory Commission (Multi-Year Tariff) Regulations, 2019 ('**MYT Regulations, 2019**'), Brihanmumbai Electric Supply and Transport Undertaking (BEST) has filed its Mid Term Review Petition for Truing-up of Aggregate Revenue Requirement (ARR) for FY 2019-20, 2020-21 and FY 2021-22, Provisional Truing-up of ARR for FY 2022-23 and revised ARR & Tariff for FY 2023-24 and FY 2024-25. The original Petition was filed on 30 November, 2019 and the revised Petition after incorporating the replies to the data gaps was filed on 17 January, 2023.

The Petition has been filed in accordance with MERC (Multi Year Tariff) Regulations, 2015 ('**MYT Regulations, 2015**'), for Truing-up of ARR for FY 2019-20 and in accordance with MYT Regulations, 2019, for Truing-up of ARR of FY 2020-21 and FY 2021-22, Provisional Truing-up of ARR for FY 2022-23 and revised ARR and Tariff for FY 2023-24 and FY 2024-25.

The Commission, in exercise of the powers vested in it under Sections 61 and 62 of the Electricity Act (**EA**), 2003 and all other powers enabling it in this behalf, and after taking into consideration the submissions made by BEST and suggestions/objections received during the public consultation process, and all other relevant material, has approved the Truing-up of ARR for FY 2019-20, FY 2020-21 and FY 2021-22, Provisional Truing-up of ARR for FY 2022-23 and revised ARR and Tariff for FY 2023-24 and FY 2024-25 in this Order.

**TABLE OF CONTENTS**

<b>1</b>	<b>INTRODUCTION .....</b>	<b>22</b>
1.1	Background .....	22
1.2	MYT Regulations .....	22
1.3	Petition and Prayers of BEST.....	22
1.4	Admission of Petition and Public Hearing Process .....	24
1.5	Organisation of the Order.....	25
<b>2</b>	<b>SUGGESTIONS / OBJECTIONS RECEIVED, RESPONSE OF BEST AND COMMISSION’S RULING .....</b>	<b>26</b>
2.1	Promotional Tariff for EV Charging Stations .....	26
2.2	Wheeling Charges.....	26
2.3	Mumbai Transmission Constraints and its Impact on Power Purchase Cost .....	29
2.4	Operation & Maintenance Expenses.....	30
2.5	Missing Balance Sheet Data.....	30
2.6	Recovery of Dues of Security Deposit.....	31
2.7	Energy Audit of Distribution Network .....	32
2.8	Demand Side Management Expenses .....	33
2.9	Peak Hour Management.....	33
2.10	Revision of TOD Slots and TOD Tariff.....	34
2.11	Prepaid Metering .....	35
2.12	Absence of Transparent Bidding Process.....	36
2.13	Inadequate Publicity to the Tariff Revision Petition.....	36
2.14	Virtual Net Metering/Group Net Metering.....	37
2.15	Solar Rooftop Capacity .....	38
2.16	Incentive For Prompt Payment.....	38
2.17	Reduction in Schedule of Charges.....	38
2.18	Need For Consumer Representatives .....	39
2.19	Tariff Proceeding Duration .....	39
2.20	kVAh Billing .....	40
<b>3</b>	<b>TRUING-UP OF ARR FOR FY 2019-20.....</b>	<b>41</b>
3.1	Background .....	41

3.2	Energy Sales .....	41
3.3	Distribution Losses and Energy Balance.....	43
3.4	Power Purchase Expense.....	45
3.5	Operation and Maintenance Expenses .....	60
3.6	Capital Expenditure and Capitalisation.....	69
3.7	Funding of Capitalization.....	71
3.8	Depreciation .....	73
3.9	Interest on Long Term Loan.....	74
3.10	Interest on Working Capital .....	77
3.11	Interest on Consumers Security Deposit (CSD) .....	82
3.12	Contribution to Contingency Reserves .....	83
3.13	Other Expenses .....	84
3.14	Provision for Bad and Doubtful Debts.....	85
3.15	Income Tax.....	87
3.16	Return on Equity.....	87
3.17	Return as Interest on Internal Funds .....	89
3.18	Non-Tariff Income .....	90
3.19	Sharing of Gain and Losses of Controllable Factors .....	91
3.20	Summary of Truing-up of Aggregate Revenue Requirement for FY 2019-20.....	96
<b>4</b>	<b>TRUING UP OF ARR FOR FY 2020-21 AND FY 2021-22.....</b>	<b>101</b>
4.1	Background .....	101
4.2	Energy Sales.....	101
4.3	Distribution Losses and Energy Balance.....	103
4.4	Power Purchase expenses.....	106
4.5	Operation and Maintenance (O&M) Expenses.....	128
4.6	Capital Expenditure and Capitalisation.....	139
4.7	Funding of Capitalization.....	142
4.8	Depreciation .....	143
4.9	Interest on Long Term Loan.....	145
4.10	Interest on Working Capital .....	148
4.11	Interest on Consumer Security Deposit (CSD).....	152
4.12	Contribution to Contingency Reserves .....	153
4.13	Other Expenses .....	155

4.14	Provision for Bad and Doubtful Debts.....	158
4.15	Income Tax.....	159
4.16	Return on Equity.....	160
4.17	Return as Interest on Internal Funds .....	165
4.18	Non-Tariff Income .....	166
4.19	Sharing of gain and losses of Controllable Factors.....	167
4.20	True-up of Aggregate Revenue Requirement for FY 2020-21 and FY 2021-22.....	173
<b>5</b>	<b>PROVISIONAL TRUING-UP OF ARR FOR FY 2022-23.....</b>	<b>179</b>
5.1	Background .....	179
5.2	Energy Sales.....	179
5.3	Distribution Losses and Energy Balance.....	182
5.4	Power Purchase Expense for FY 2022-23.....	184
5.5	Operation & Maintenance Expenses.....	189
5.6	Capital Expenditure .....	193
5.7	Funding of Capital Expenditure.....	194
5.8	Depreciation .....	195
5.9	Interest on Long Term Loans .....	197
5.10	Interest on Working Capital (IoWC) Loans .....	199
5.11	Interest on Consumer Security Deposit (CSD).....	201
5.12	Contribution to Contingency Reserves .....	202
5.13	Other Expenses .....	203
5.14	Provision for Bad and Doubtful Debts.....	204
5.15	Return on Equity.....	205
5.16	Return as Interest on Internal Funds .....	207
5.17	Non-Tariff Income .....	207
5.18	Revenue from Existing Tariff.....	208
5.19	Provisional Truing up of Aggregate Revenue Requirement of FY 2022-23.....	210
<b>6</b>	<b>APPROVAL OF REVISED ARR FOR FY 2023-24 AND FY 2024-25.....</b>	<b>214</b>
6.1	Background .....	214
6.2	Energy Sales.....	214
6.3	Distribution Losses and Energy Balance.....	220
6.4	Power Purchase Expenses .....	222

6.5	Operation and Maintenance Expenses .....	243
6.6	Capital Expenditure and Capitalization.....	247
6.7	Funding of Capitalization.....	250
6.8	Depreciation .....	252
6.9	Interest on Long Term Loan.....	253
6.10	Interest on Working Capital (IoWC) Loans .....	255
6.11	Interest on Consumer Security Deposit (CSD).....	258
6.12	Contribution to Contingency Reserves .....	260
6.13	Other Expenses .....	261
6.14	Provision for Bad and Doubtful Debts.....	262
6.15	Return on Equity.....	263
6.16	Return as Interest on Internal Funds .....	265
6.17	Non-Tariff Income .....	266
6.18	Summary of Aggregate Revenue Requirement for FY 2023-24 and FY 2024-25 .....	267
<b>7</b>	<b>COMPLIANCE OF DIRECTIVES .....</b>	<b>272</b>
7.1	Background .....	272
7.2	Replacement of Electro-Mechanical Meters with Electronic Meter.....	272
7.3	Demand Side Management .....	272
7.4	Delay in Bill Generation .....	274
7.5	Non-Recovery of Overdue Security Deposit from Consumers .....	275
7.6	Sharing of Historical Data of Energy Consumption .....	275
7.7	Financial Accounting of BEST.....	276
7.8	Distribution Losses and Energy Balance.....	277
7.9	Power Purchase Expenses .....	278
7.10	Delay in Power Purchase from Manikaran Power Limited .....	279
7.11	Expiry of TPC-G PPA.....	280
7.12	Impact of FBSM bills.....	281
7.13	Operation and Maintenance Expenses .....	281
7.14	Capital Expenditure and Capitalisation.....	282
7.15	Funding of Capital Expenditure.....	282
7.16	Contribution to Contingency Reserves .....	283
7.17	Provision for Bad and Doubtful Debts.....	283
7.18	Non-Tariff Income .....	284

7.19	Sharing of Efficiency Gain / Loss on account of IoWC.....	284
7.20	kVAh Billing for Consumer categories having load above 20 kW .....	285
7.21	Single Meter for Single Premises .....	285
7.22	Time of Day Tariff.....	286
7.23	Miscellaneous .....	286
7.24	Publishing Energy Accounting report.....	287
7.25	Improvement in energy billing system.....	287
7.26	Reduction in Distribution loss .....	287
7.27	RDSS and Smart Meter Expenditure .....	288
7.28	Funding of Capital Expenditure through grants .....	288
7.29	Contribution to Contingency Reserves .....	288
7.30	Consumer Security Deposit.....	288
7.31	Provision for doubtful debts: .....	289
7.32	kVAh Billing for Consumer categories having load above 20 kW .....	289
7.33	Time of Day Tariff.....	289
7.34	Treatment of Electricity Duty and Municipality Tax recovered from theft .....	289
7.35	Demand Response Scheme for saving power purchase expenses. ....	289
<b>8</b>	<b>TARIFF PHILOSOPHY .....</b>	<b>290</b>
8.1	Past Recoveries of Revenue Gaps / (Surplus) from FY 2019 to FY 2021-22.....	290
8.2	Tariff Philosophy .....	296
8.3	Rationalization of Fixed Cost.....	297
8.4	Energy Charges.....	300
8.5	Wheeling Charges.....	301
8.6	Cross Subsidy .....	303
8.7	Time of Day Tariff.....	307
8.8	kVAh billing of LT consumers with load above 20kW: .....	311
8.9	Inclusion of Street Lights / thorough fares in HT .....	316
8.10	Grid Support Charges for Rooftop Net Metering Arrangements.....	317
8.11	Schedule of Charges .....	319
8.12	Green Power Tariff .....	321
8.13	Change in Billing Demand .....	324
8.14	Load Factor Incentive .....	324
8.15	Prepaid Meter Rebate.....	325

8.16	Advance Payment .....	325
8.17	Stabilising variation in consumer bill on account of FAC .....	326
8.18	Tariff for FY 2023-24 and FY 2024-25 .....	329
8.19	Applicability of Revised Tariff.....	332
<b>9</b>	<b>APPLICABILITY OF THE ORDER .....</b>	<b>333</b>
<b>10</b>	<b>APPENDIX-1: LIST OF PERSONS WHO ATTENDED THE TECHNICAL VALIDATION SESSION HELD ON 03 JANUARY, 2023 .....</b>	<b>334</b>
<b>11</b>	<b>APPENDIX –2: LIST OF PERSONS WHO ATTENDED THE PUBLIC HEARING HELD ON 20 FEBRUARY, 2023.....</b>	<b>335</b>
	ANNEXURE 1: CATEGORY-WISE REVENUE WITH REVISED TARIFF FOR FY 2023-24 .....	337
	ANNEXURE 2: CATEGORY-WISE REVENUE WITH REVISED TARIFF FOR FY 2024-25 .....	338
	ANNEXURE 3: TARIFF SCHEDULE FOR FY 2023-24 AND FY 2024-25.....	339

**LIST OF TABLES**

Table 1 : Tariff Category-wise energy consumption for FY 2019-20, as submitted by BEST (MU).....	41
Table 2 : Electricity Consumptions of Street Lights, as submitted by BEST (MU) .....	43
Table 3: Energy Sales for FY 2019-20, as approved by the Commission (MU) .....	43
Table 4 : Energy Balance, as submitted by BEST. ....	44
Table 5: Energy Balance for FY 2019-20, as approved by the Commission.....	45
Table 6 : Summary of Power Purchase Expenses from TPC-G for FY 2019-20, as submitted by BEST.....	46
Table 7: Summary of Power Purchase from TPC-G for FY 2019-20, as approved by .....	46
Table 8 : Monthly Power Purchase from Bilateral Sources and Power Exchanges, as submitted by BEST ....	48
Table 9 : Power Procurement from Manikaran Power Limited for FY 2019-20, as submitted by BEST (Rs. Crore) .....	49
Table 10: Summary of Power Purchase from MPL for FY 2019-20, as approved by .....	51
Table 11 : RE Power Purchased for FY 2019-20, as submitted by BEST (Rs. Crore).....	51
Table 12 : Details of Non-Solar RE purchases for FY 2019-20, as approved by the Commission (Rs. Crore) 53	
Table 13 : RPO Compliance for FY 2019-20, as submitted by BEST (MU) .....	53
Table 14: Power Purchase from RE Sources for FY 2019-20, as approved by the.....	53
Table 15 : Short Term Power Procurement for FY 2019-20, as submitted by BEST (Rs. Crore) .....	54
Table 16: Power Purchase from Short Term Sources for FY 2019-20, as approved by the.....	55
Table 17 : Summary of Prior Period Payment and Other Costs for FY 2019-20, as submitted by BEST (Rs. Crore) .....	55
Table 18 : Summary of Power Purchase Expenses for FY 2019-20, as submitted by BEST (Rs. Crore).....	58
Table 19: Power Purchase for FY 2019-20, as approved by the Commission (Rs. Crore) .....	59
Table 20 : Operation and Maintenance for FY 2019-20, as submitted by BEST (Rs. Crore) .....	60
Table 21 : Operation and Maintenance for FY 2019-20, as submitted by BEST .....	61
Table 22 : Operation and Maintenance for FY 2019-20, as submitted by BEST (Rs. Crore) .....	61
Table 23 : Actual Employee Expenses for 2018-19 and FY 2019-20, as submitted by BEST (Rs. Crore).....	61
Table 24 : Actual A&G Expenses for FY 2018-19 and 2019-20, as submitted by BEST (Rs. Crore).....	62
Table 25 : Break-up of Misc. Expenses for FY 2019-20, as submitted by BEST (Rs. Crore) .....	64
Table 26 : Allocation of General and Administration between Electricity Supply and Transport for FY 2019-20, as submitted by BEST (Rs. Crore) .....	64
Table 27 : Details of allocation of General Administration expenses to Supply Division, as submitted by BEST (Rs. Crore) .....	64
Table 28 : Actual R&M Expenses for FY 2019-20, as submitted by BEST (Rs. Crore) .....	65
Table 29: Escalation factor for O&M Expenses for FY 2019-20, as approved by the Commission .....	66
Table 30: Revised Normative O&M Expenses for FY 2019-20, as approved by the Commission. (Rs. Crore) .....	66
Table 31 : Impact of wage revision in total employee expenses for FY 2019-20, as submitted by BEST (Rs. Crore) .....	67
Table 32: Actual O&M Expenses / kWh for FY 2015-16 to FY 2019-20.....	68
Table 33: O&M expenses for FY 2019-20, approved by Commission (Rs. Crore).....	68



Table 34 : Break-up of Capital Expenditure for FY 2019-20, as submitted by BEST (Rs. Crore).....	69
Table 35: Capitalisation in FY 2019-20, as approved by the Commission (Rs. Crore) .....	71
Table 36 : Details of funding of Capitalisation for FY 2019-20, as submitted by BEST (Rs. Crore).....	72
Table 37: Details of funding of Capitalisation for FY 2019-20, as approved by the Commission (Rs. Crore)	72
Table 38 : Depreciation for FY 2019-20, as submitted by BEST (Rs. Crore).....	73
Table 39: Depreciation for FY 2019-20, as approved by the Commission (Rs. Crore) .....	74
Table 40 : Detail of Actual Interest Expenses for FY 2019-20, as submitted by BEST (Rs. Crore) .....	75
Table 41 : Detail of Normative Interest on loan for FY 2019-20, as submitted by BEST (Rs. Crore) .....	75
Table 42: Interest on Loan Capital for FY 2019-20, as approved by the Commission (Rs. Crore).....	77
Table 43 : Actual Interest on Working Capital for FY 2019-20, as submitted by BEST (Rs. Crore).....	78
Table 44 : Interest on Working Capital details for Distribution Wires Business for FY 2019-20, as submitted by BEST (Rs. Crore).....	78
Table 45 : Interest on Working Capital details for Retail Supply Business for FY 2019-20, as submitted by BEST (Rs. Crore).....	78
Table 46: Rate of Interest on Working Capital for FY 2019-20 (%) .....	80
Table 47: Interest on Working Capital for FY 2019-20, as approved by the Commission (Rs. Crore) .....	81
Table 48 : Interest on Consumer Security Deposit for FY 2019-20, as submitted by BEST (Rs. Crore) .....	82
Table 49 : Interest on Consumer Security Deposit for FY 2019-20, as submitted by BEST (Rs. Crore) .....	82
Table 50: Interest on Consumers' Security Deposit for FY 2019-20, as approved by the Commission (Rs. Crore) .....	82
Table 51 : Interest on Consumer Deposit for FY 2019-20, as submitted by BEST (Rs. Crore).....	83
Table 52: Contribution to Contingency Reserves for FY 2019-20, as approved by the Commission (Rs. Crore) .....	83
Table 53 : Other Expenses Details for FY 2019-20, as submitted by BEST (Rs. Crore).....	84
Table 54: Other Expenses for FY 2019-20, as approved by the Commission (Rs. Crore).....	85
Table 55 : Bad Debts Written off for FY 2019-20, as submitted by BEST (Rs. Crore).....	86
Table 56: Provision for Bad and Doubtful Debts for FY 2019-20, as approved by the Commission (Rs. Crore) .....	87
Table 57 : Return on Equity for Wires Business for FY 2019-20, as submitted by BEST (Rs. Crore).....	87
Table 58 : Return on Equity for Supply Business for FY 2019-20, as submitted by BEST (Rs. Crore) .....	88
Table 59: Return on Equity for FY 2019-20, as approved by the Commission (Rs. Crore).....	89
Table 60 : Return on Internal Fund Detail for FY 2019-20, as submitted by BEST (Rs. Crore).....	89
Table 61: Return as Interest on Internal Funds for FY 2019-20, as approved by the Commission (Rs. Crore)	90
Table 62 : Details of the Non-Tariff Income for FY 2019-20, as submitted by BEST (Rs. Crore).....	90
Table 63: Non-Tariff Income for FY 2019-20, as approved by the Commission (Rs. Crore).....	91
Table 64 : Details of the Incentive on reduction of Distribution Loss for FY 2019-20, as submitted by BEST (Rs. Crore) .....	92
Table 65 : O&M Expenses Gain for FY 2019-20, as submitted by BEST (Rs. Crore).....	93
Table 66: Incentive on reduction of Distribution Loss for FY 2019-20, as approved by the Commission .....	93
Table 67: Sharing of Gain/ (Loss) on account of O&M expenses for FY 2019-20, as approved by the Commission (Rs. Crore).....	94

Table 68: Sharing of IoWC Gain/ (Loss) for FY 2019-20, as approved by the Commission (Rs. Crore).....	96
Table 69 : True-up of Aggregate Revenue Requirement for FY 2019-20 -Wires Business, as submitted by BEST (Rs. Crore) .....	96
Table 70 : True-up of Aggregate Revenue Requirement for FY 2019-20 -Retail Supply Business, as submitted by BEST (Rs. Crore).....	97
Table 71 : True-up of Aggregate Revenue Requirement for FY 2019-20, as submitted by BEST (Rs. Crore)	97
Table 72: ARR and Revenue Gap for FY 2019-20 of Wire Business, as approved by the Commission (Rs. Crore) .....	98
Table 73: ARR and Revenue Gap for FY 2019-20 of Retail Supply Business, as approved by the Commission (Rs. Crore) .....	99
Table 74: ARR and Revenue Gap for FY 2019-20 of Distribution Business, as approved by the Commission (Rs. Crore) .....	99
Table 75 : Tariff Category-wise Energy Consumption FY 2020-21 and FY 2021-22, as submitted by BEST .....	101
Table 76: Energy Sales for FY 2020-21 and FY 2021-22, as approved by the Commission (MU) .....	103
Table 77 : Energy Balance for FY 2020-21 and FY 2021-22 (Sales in kWh), as submitted by BEST.....	103
Table 78 : Calculation of adjustment of Excess Units in Sales FY 2020-21 (Sales in MU), as submitted by BEST .....	105
Table 79: Energy Balance for FY 2020-21 and FY 2021-22, as approved by the Commission:.....	106
Table 80 : Summary of Power Purchase Expenses from TPC-G for FY 2020-21, as submitted by BEST:...	107
Table 81 : Summary of Power Purchase Expenses from TPC-G for FY 2021-22, as submitted by BEST:...	107
Table 82 : Rise in Price of HBA Index Summary of Power Purchase Expenses from TPC-G for FY 2021-22, as submitted by BEST: .....	108
Table 83: Power Purchase from TPC-G for FY 2020-21, as approved by the Commission: .....	109
Table 84: Power Purchase from TPC-G for FY 2021-22, as approved by the Commission: .....	109
Table 85 : Power Procurement from MPL for FY 2020-21, as submitted by BEST: .....	110
Table 86 : Power Procurement from MPL for FY 2021-22, as submitted by BEST: .....	110
Table 87: Power Procurement from MPL for FY 2020-21 and FY 2021-22, approved by Commission: .....	110
Table 88 : RE Power Purchased for FY 2020-21, as submitted by BEST:.....	111
Table 89 : RE Power Purchased for FY 2021-22, as submitted by BEST:.....	111
Table 90: Power Procurement from Renewable Sources for FY 2020-21, approved by Commission: .....	113
Table 91: Power Procurement from Renewable Sources for FY 2021-22, approved by Commission: .....	113
Table 92: RPO Settlement data for FY 2020-21:.....	114
Table 93: RPO Settlement data for FY 2021-22:.....	114
Table 94: RPO Shortfall as on FY 2021-22.....	117
Table 95 : Bilateral Power Procurement for FY 2020-21, as submitted by BEST: .....	119
Table 96 : Bilateral Power Procurement for FY 2021-22, as submitted by BEST: .....	119
Table 97: : Power Procurement from Short Term Sources for FY 2020-21, approved by Commission:.....	120
Table 98: Power Procurement from Short Term Sources for FY 2021-22, approved by Commission:.....	120
Table 99 : Summary of Prior Period Payment for FY 2020-21, as submitted by BEST (Rs. Crore).....	121
Table 100 : Summary of Prior Period Payment for FY 2021-22, as submitted by BEST (Rs. Crore).....	121
Table 101: Prior Period Payment for FY 2020-21, approved by Commission (Rs. Crore).....	123

Table 102: Prior Period Payment for FY 2021-22, approved by Commission (Rs. Crore).....	124
Table 103: Intra-State Transmission Charges and MSLDC Charges approved by Commission (Rs. Crore).	125
Table 104 : Summary of Power Purchase Expenses for FY 2020-21, as submitted by BEST: .....	125
Table 105 : Summary of Power Purchase Expenses for FY 2021-22, as submitted by BEST: .....	126
Table 106: Summary of Power Purchase Expenses for FY 2020-21, as approved by the Commission (Rs. Crore) .....	127
Table 107: Summary of Power Purchase Expenses for FY 2021-22, as approved by the Commission (Rs. Crore) .....	127
Table 108 : Operation and Maintenance Expenses for FY 2020-21 and FY 2021-22, as submitted by BEST: .....	128
Table 109 : Growth in Consumers in Past Year as on FY 2020-21 and FY 2021-22 .....	129
Table 110 : Efficiency Factor for FY 2020-21 and FY 2021-22, as submitted by BEST: .....	129
Table 111 : New CPI Numbers Calculated and Considered for Escalation Rate for FY 2020-21, as submitted by BEST: .....	130
Table 112 : Inflation Factor for Turing-up of O&M Expenses for FY 2020-21, as submitted by BEST.....	130
Table 113 : Inflation Factor for Turing-up of O&M Expenses for FY 2021-22, as submitted by BEST.....	131
Table 114 : Normative Operation and Maintenance for FY 2020-21 and FY 2021-22, as submitted by BEST (Rs. Crore) .....	131
Table 115 : Actual Employee Expenses for FY 2020-21 and FY 2021-22, as submitted by BEST (Rs. Crore) .....	131
Table 116 : Actual A&G Expenses for FY 2020-21 and FY 2021-22, as submitted by BEST (Rs. Crore)...	133
Table 117 : Break-up of Other Costs FY 2020-21 and FY 2021-22, as submitted by BEST (Rs. Crore).....	134
Table 118 : Allocation of General Administration between Electricity Supply and Transport for FY 2020-21 and FY 2021-22, as submitted by BEST .....	135
Table 119 : Detailed of Allocation of General Administration to Supply Division for FY 2020-21 and FY 2021- 22, as submitted by BEST (Rs. Crore) .....	135
Table 120 : Actual R&M Expenses for FY 2020-21 and FY 2021-22, as submitted by BEST (Rs. Crore) ..	135
Table 121: Determination of O&M escalation factor for FY 2020-21 and FY 2021-22.....	137
Table 122: Normative O&M Expenses for FY 2020-21 and FY 2021-22, as approved by the Commission (Rs. Crore) .....	137
Table 123 : Impact of Wage Revision in Total Employee Expenses for FY 2020-21, as submitted by BEST (Rs. Crore) .....	138
Table 124: Actual O&M Expenses for FY 2020-21 and FY 2021-22, as approved by Commission (Rs. Crore) .....	139
Table 125 : Break-up of Capital Expenditure & Capitalisation for FY 2020-21 and FY 2021-22, as submitted by BEST (Rs. Crore) .....	140
Table 126: Capitalisation in FY 2020-21 and FY 2021-22, as approved by the Commission (Rs. Crore) ....	142
Table 127 : Details of funding of Capitalisation for FY 2020-21 and FY 2021-22, as submitted by BEST (Rs. Crore) .....	142
Table 128: Details of funding of Capitalisation for FY 2020-21 and FY 2021-22, as approved by the Commission (Rs. Crore).....	143
Table 129 : Depreciation for FY 2020-21 and FY 2021-22, as submitted by BEST (Rs. Crore) .....	144
Table 130: Depreciation Rate for FY 2020-21 and FY 2021-22, as approved by the Commission (Rs. Crore)	

.....	145
Table 131 : Actual Interest Expense for FY 2020-21 and FY 2021-22, as submitted by BEST (Rs. Crore) .	145
Table 132 : Details of Normative Interest on Loan for FY 2020-21 and FY 2021-22, as submitted by BEST (Rs. Crore) .....	146
Table 133: Interest on Loan Capital for FY 2020-21 and FY 2021-22, as approved by the Commission (Rs. Crore) .....	148
Table 134 : Interest on Working Capital details for FY 2020-21 and FY 2021-22, as submitted by BEST (Rs. Crore) .....	148
Table 135 : Interest on Working Capital for Distribution Wires Business for FY 2020-21 and FY 2021-22, as submitted by BEST (Rs. Crore) .....	149
Table 136 : Interest on Working Capital for Retail Supply for FY 2020-21 and FY 2021-22, as submitted by BEST (Rs. Crore).....	149
Table 137: Rate of Interest on Working Capital for FY 2020-21 and FY 2021-22 (%).....	151
Table 138: Interest on Working Capital for FY 2020-21 and FY 2021-22, as approved by the Commission (Rs. Crore) .....	151
Table 139 : Interest on Consumer Security Deposit for FY 2020-21 and FY 2021-22, as submitted by BEST (Rs. Crore) .....	153
Table 140: Interest on Consumers' Security Deposit for FY 2020-21 and FY 2021-22, as approved by the Commission (Rs. Crore).....	153
Table 141 : Contribution to Contingency Reserve for FY 2020-21 and FY 2021-22, as submitted by BEST (Rs. Crore) .....	153
Table 142: Contribution to Contingency Reserve for FY 2020-21 and FY 2021-22, as approved by the Commission (Rs. Crore).....	155
Table 143 : Other Expenses Details for FY 2020-21 and FY 2021-22, as submitted by BEST (Rs. Crore) ..	155
Table 144 : Month-wise outstanding arrears for FY 2020-21, as submitted by BEST (Rs. Crore) .....	156
Table 145: Other Expenses for FY 2020-21 and FY 2021-22, as approved by the Commission (Rs. Crore)	158
Table 146 : Bad Debts Written off for FY 2020-21 and FY 2021-22, as submitted by BEST (Rs. Crore)....	159
Table 147: Provision for Bad and Doubtful Debts for FY 2020-21 and FY 2021-22, as approved by the Commission (Rs. Crore).....	159
Table 148 : Return on Equity for FY 2020-21 and FY 2021-22 for Distribution Wires Business, as submitted by BEST (Rs. Crore).....	160
Table 149 : Additional Return on Equity for Distribution Wires Business FY 2020-21 and FY 2021-22, as submitted by BEST (Rs. Crore) .....	161
Table 150 : Return on Equity for Retail Supply Business FY 2020-21 and FY 2021-22, as submitted by BEST (Rs. Crore) .....	162
Table 151 : Additional Return on Equity for Retail Supply Business for FY 2020-21 and FY 2021-22, as submitted by BEST (Rs. Crore) .....	162
Table 152: Return on Equity for FY 2020-21 and FY 2021-22, as approved by the Commission (Rs. Crore) .....	163
Table 153: Additional RoE for FY 2020-21 and FY 2021-22, as approved by the Commission (Rs. Crore)	164
Table 154 : Return on Internal Fund Detail for FY 2020-21 and FY 2021-22, as submitted by BEST (Rs. Crore) .....	165
Table 155 : Details of the Non-Tariff income for FY 2020-21 and FY 2021-22, as submitted by BEST (Rs.	

Crore) .....	166
Table 156: Non-Tariff Income for FY 2020-21 and FY 2021-22, as approved by the Commission (Rs. Crore) .....	167
Table 157 : Details of the gain on account of low Distribution Loss for FY 2020-21 and FY 2021-22, as submitted by BEST (Rs. Crore) .....	168
Table 158 : Sharing of O&M Expenses gain for FY 2020-21 and FY 2021-22, as submitted by BEST (Rs. Crore) .....	169
Table 159: Incentive on reduction of Distribution Loss for FY 2020-21 and FY 2021-22, as approved by the Commission. ....	169
Table 160: Sharing of O&M expense gain/ (loss) for FY 2020-21, as approved by Commission (Rs. Crore) .....	170
Table 161: Sharing of O&M expense gain/ (loss) for FY 2021-22, as approved by Commission (Rs. Crore) .....	171
Table 162: Actual Interest on Working Capital Loan and DPC for FY 2020-21 and FY 2021-22 (Rs. Crore) .....	173
Table 163: Sharing of IoWC Gain/ (Loss) for FY 2020-21 and FY 2021-22, as approved by the Commission (Rs. Crore) .....	173
Table 164 : True-up of Aggregate Revenue Requirement for FY 2020-21 and FY 2021-22 – Wires Business, as submitted by BEST (Rs. Crore) .....	174
Table 165 : True-up of Aggregate Revenue Requirement for FY 2020-21 and FY 2021-22– Retail Supply Business, as submitted by BEST (Rs. Crore) .....	174
Table 166 : True-up of Aggregate Revenue Requirement for FY 2020-21, as submitted by BEST (Rs. Crore) .....	175
Table 167: ARR and Revenue Gap of Wire Business for FY 2020-21 and FY 2021-22, as approved by the Commission (Rs. Crore) .....	176
Table 168: ARR and Revenue Gap of Supply Business for FY 2020-21 and FY 2021-22, as approved by the Commission (Rs. Crore) .....	176
Table 169: ARR and Revenue Gap of Distribution Business for FY 2020-21 and FY 2021-22, as approved by the Commission (Rs. Crore) .....	177
Table 170 : Category Wise Energy Consumption for FY 2022-23, as submitted by BEST (MU- HT in kVAh & LT in kWh) .....	179
Table 171 : Category-Wise Ratio of H1 & H2 to Total Sales for FY 2018-19, as submitted by BEST .....	180
Table 172: Energy Sales for FY 2022-23, as approved by the Commission (MU) .....	182
Table 173 : Energy Balance for FY 2022-23, as submitted by BEST.....	182
Table 174 : Actual Power Purchase for H1 of FY 2022-23, as submitted by BEST.....	185
Table 175 : Estimated Power Purchase for H2 of FY 2022-23, as submitted by BEST .....	186
Table 176 : Estimated Power Purchase for FY 2022-23, as submitted by BEST .....	186
Table 177: RPO Shortfall for FY 2022-23 (MU).....	188
Table 178: Power Purchase by BEST for FY 2022-23, as approved by the Commission (Rs. Crore) .....	189
Table 179 : O&M Expenses for FY 2022-23, as submitted by BEST (Rs. Crore) .....	190
Table 180 : Growth rate considered for FY 2022-23, as submitted by BEST (Rs. Crore).....	190
Table 181 : Employee Expenses for FY 2022-23, as submitted by BEST (Rs. Crore) .....	190
Table 182 : A&G Expenses for FY 2022-23, as submitted by BEST (Rs. Crore).....	191

Table 183 : R&M Expenses for FY 2022-23, as submitted by BEST (Rs. Crore) .....	192
Table 184: Revised Normative O&M Expenses for FY 2022-23, as approved by the Commission (Rs. Crore) .....	192
Table 185 : Details of Capital Expenditure and Capitalisation for FY 2022-23, as submitted by BEST (Rs. Crore) .....	193
Table 186 : Capitalisation Proposed in FY 2022-23, as submitted by BEST (Rs. Crore).....	193
Table 187: Capitalisation for FY 2022-23, as approved by the Commission (Rs. Crore).....	194
Table 188 : Details of Funding for Capitalisation for FY 2022-23, as submitted by BEST (Rs. Crore).....	194
Table 189: Details of funding of Capitalisation for FY 2022-23, as approved by the Commission (Rs. Crore) .....	195
Table 190 : Gross Fixed Assets for FY 2022-23, as submitted by BEST (Rs. Crore) .....	196
Table 191 : Depreciation Expenses for FY 2022-23, as submitted by BEST (Rs. Crore).....	196
Table 192: Depreciation for FY 2022-23, as approved by the Commission (Rs. Crore).....	197
Table 193 : Provisional Interest Expenses for FY 2022-23, as submitted by BEST (Rs. Crore).....	197
Table 194 : Normative interest on Loans for FY 2022-23, as submitted by BEST (Rs. Crore) .....	197
Table 195: Interest on Loan Capital for FY 2022-23, as approved by the Commission (Rs. Crore).....	198
Table 196 : Normative Interest on Working Capital for Wires Business for FY 2022-23, as submitted by BEST (Rs. Crore) .....	199
Table 197 : Normative Interest on Working Capital for Supply Business for FY 2022-23, as submitted by BEST (Rs. Crore) .....	199
Table 198: Interest on Working Capital for FY 2022-23, as approved by the Commission (Rs. Crore) .....	200
Table 199 : Interest on Consumer Deposit for FY 2022-23, as submitted by BEST (Rs. Crore) .....	201
Table 200: Interest on Consumers' Security Deposit for FY 2022-23, as approved by the Commission (Rs. Crore) .....	202
Table 201 : Contribution to Contingency Reserve for FY 2022-23, as submitted by BEST (Rs. Crore).....	202
Table 202: Contribution to Contingency Reserves for FY 2022-23, as approved by the Commission (Rs. Crore) .....	203
Table 203 : Other Expenses for FY 2022-23, as submitted by BEST (Rs. Crore).....	203
Table 204: Other Expenses for FY 2022-23, as approved by the Commission (Rs. Crore).....	204
Table 205 : Provision for Bad and doubtful Debts for FY 2022-23, as submitted by BEST (Rs. Crore) .....	204
Table 206: Provision for Bad and Doubtful Debts for FY 2022-23, as approved by the Commission (Rs. Crore) .....	205
Table 207 : Return on Equity for Wires Business for FY 2022-23, as submitted by BEST (Rs. Crore) .....	205
Table 208 : Return on Equity for Retail Business for FY 2022-23, as submitted by BEST (Rs. Crore) .....	205
Table 209: Return on Equity for FY 2022-23, as approved by the Commission (Rs. Crore).....	206
Table 210 : Return on Interest on Internal Funds for FY 2022-23, as submitted by BEST (Rs. Crore) .....	207
Table 211: Return as Interest on Internal Funds for FY 2022-23, as approved by the Commission (Rs. Crore) .....	207
Table 212 : Non-Tariff Income for FY 2022-23, as submitted by BEST (Rs. Crore).....	208
Table 213: Non-Tariff Income for FY 2022-23, as approved by the Commission (Rs. Crore).....	208
Table 214: Provisional Revenue of FY 2022-23 as approved by the Commission.....	209
Table 215 : Provisional Truing-up of Aggregate Revenue Requirement of Wires Business of FY 2022-23, as	

submitted by BEST (Rs. Crore) .....	210
Table 216 : Provisional Truing-up of Aggregate Revenue Requirement of Retail Supply Business of FY 2022-23, as submitted by BEST (Rs. Crore) .....	210
Table 217 : Provisional Truing-up of Aggregate Revenue Requirement of FY 2022-23, as submitted by BEST (Rs. Crore) .....	211
Table 218: ARR and Revenue Gap of Wire Business for FY 2022-23, as approved by the Commission (Rs. Crore) .....	212
Table 219: ARR and Revenue Gap of Retail Supply Business for FY 2022-23, as approved by the Commission (Rs. Crore) .....	212
Table 220: ARR and Revenue Gap of Distribution Business for FY 2022-23, as approved by the Commission (Rs. Crore) .....	213
Table 221 : Revised Peak Demand Projections for FY 2023-24 and FY 2024-25, as submitted by BEST (MW) .....	214
Table 222 : Category wise energy sales from FY 2011-12 to FY 2018-19 (in MU) and CAGR (in %), as submitted by BEST .....	215
Table 223 : Category wise growth rate considered for FY 2023-24 & FY 2024-25, as submitted by BEST. 216	
Table 224 : Category wise sales estimated for FY 2023-24 & FY 2024-25, as submitted by BEST (MU – HT in kVAh & LT in kWh) .....	216
Table 226 : Category wise growth rate for projection of Sales for FY 2023-24 and FY 2024-25 .....	218
Table 226: Category-wise Energy Sales from FY 2023-24 to FY 2024-25, as approved by the Commission (MU) .....	219
Table 227 : Revised Energy Balance for the FY 2023-24 and FY 2024-25, as submitted by BEST .....	221
Table 228: Distribution Loss Trajectory for FY 2023-24 and FY 2024-25, as approved by the Commission (MU) .....	222
Table 229: Distribution Loss Trajectory for FY 2023-24 and FY 2024-25, as approved by the Commission (MU) .....	222
Table 230 : Carrying Cost to be recovered from TPC-G on Standby Charges, as submitted by BEST (Rs. Crore) .....	224
Table 231 : Revised Estimated Variable and Fixed Cost of TPC-G for FY 2023-24 and FY 2024-25, as submitted by BEST .....	225
Table 232 : Manikaran Rates for FY 2023-24 and FY 2024-25, as submitted by BEST (Rs./kWh) .....	226
Table 233 : Revised Estimated Variable & Fixed Cost of Manikaran for FY 2023-24 and FY 2024-25, as submitted by BEST .....	227
Table 234 : Revised Estimated Variable & Fixed Cost of Sai Wardha for FY 2023-24 and FY 2024-25, as submitted by BEST .....	227
Table 235 : Procurement of Power from Renewable Sources for FY 2023-24 and FY 2024-25, as submitted by BEST .....	228
Table 236 : RPO Compliance for FY 2023-24 and FY 2024-25, as submitted by BEST (MU) .....	229
Table 237 : Status of FBSM Bills, as submitted by BEST (Rs. Crore) .....	231
Table 238 : Revised Transmission and MSLDC Charges for FY 2023-24 and FY 2024-25 (Rs. Crore) .....	231
Table 239 : Summary of Power Purchase Expenses for FY 2023-24, as submitted by BEST (Rs. Crore) .....	232
Table 240: Summary of Power Purchase Expenses for FY 2024-25, as submitted by BEST (Rs. Crore) .....	232
Table 241 : Allocation of Available Transfer Capability .....	233

Table 242: RPO Compliance for FY 2023-24 and FY 2024-25 (MU).....	239
Table 243: Total Power Purchase Quantum and Cost for FY 2023-24, as approved by the Commission. ....	241
Table 244: Total Power Purchase Quantum and Cost for FY 2024-25, as approved by the Commission. ....	242
Table 245 : Summary of Revised O&M Expenses for FY 2023-24 and FY 2024-25, as submitted by BEST (Rs. Crore) .....	243
Table 246 : Total O&M Expenses for FY 2023-24 and FY 2024-25, as submitted by BEST (Rs. Crore) ....	244
Table 247: Escalation rate for O&M expenses for FY 2023-24 and FY 2024-25 .....	246
Table 248: Normative O&M Expenses for FY 2023-24 and FY 2024-25, as approved by the Commission (Rs. Crore) .....	246
Table 250 : Revised Capital Expenditure and Capitalisation for FY 2023-24 and FY 2024-25, as submitted by BEST (Rs. Crore).....	248
Table 251: Capitalization for FY 2017-18 to FY 2021-22 (Rs. Crore) .....	249
Table 252: Capitalisation for FY 2023-24, as approved by the Commission (Rs. Crore).....	250
Table 253: Capitalisation for FY 2024-25, as approved by the Commission (Rs. Crore).....	250
Table 254 : Grant Considered for RDSS Project for FY 2023-24 and FY 2024-25, as submitted by BEST (Rs. Crore) .....	250
Table 255 : Revised Funding of Capitalization for FY 2023-24 and FY 2024-25, as submitted by BEST (Rs. Crore) .....	251
Table 256: Details of funding of Capitalisation for FY 2023-24 and FY 2024-25, as approved by the Commission (Rs. Crore).....	252
Table 257 : Revised Depreciation for FY 2023-24 and FY 2024-25, as submitted by BEST (Rs. Crore).....	252
Table 258: Depreciation for FY 2023-24 and FY 2024-25, as approved by the Commission (Rs. Crore) ....	253
Table 259 : Revised Normative Interest on Loan for FY 2023-24 and FY 2024-25, as submitted by BEST (Rs. Crore) .....	254
Table 260: Interest on Loans for FY 2023-24 to FY 2024-25, as approved by the Commission (Rs. Crore)	255
Table 261 : Revised Normative Interest on Working Capital for Wire Business for FY 2023-24 and FY 2024-25, as submitted by BEST (Rs. Crore) .....	256
Table 262 : Revised Normative Interest on Working Capital for Retail Supply Business for FY 2023-24 and FY 2024-25, as submitted by BEST (Rs. Crore).....	256
Table 263: Interest on Working Capital for FY 2023-24 and FY 2024-25, as approved by the Commission (Rs. Crore) .....	257
Table 264 : Revised Interest on consumer Security Deposit for FY 2023-24 and FY 2024-25, as submitted by BEST (Rs. Crore).....	259
Table 265: Interest on Consumer Security Deposit for FY 2023-24 and FY 2024-25, as approved by the Commission (Rs. Crore).....	259
Table 266 : Revised Contribution to Contingency Reserves for FY 2023-24 and FY 2024-25, as submitted by BEST (Rs. Crore).....	260
Table 267: Contribution to Contingency Reserves for FY 2023-24 and FY 2024-25, as approved by the Commission (Rs. Crore).....	261
Table 268 : Other Expenses revised for FY 2023-24 and FY 2024-25, as submitted by BEST (Rs. Crore)..	261
Table 269: Other Expenses for FY 2023-24 and FY 2024-25, as approved by the Commission (Rs. Crore)	261
Table 270 : Provision for bad and Doubtful Revised for FY 2023-24 and FY 2024-25, as submitted by BEST (Rs. Crore) .....	262



Table 271: Provision for Bad and Doubtful Debts for FY 2023-24 and FY 2024-25, as approved by the Commission (Rs. Crore).....	263
Table 272 : Revised Return on Equity for Wires Business for FY 2023-24 and FY 2024-25, as submitted by BEST (Rs. Crore).....	263
Table 273 : Revised Return on Equity for Supply Business for FY 2023-24 and FY 2024-25, as submitted by BEST (Rs. Crore).....	264
Table 274: Return on Equity for FY 2023-24 and FY 2024-25, as approved by the Commission (Rs. Crore) .....	265
Table 275 : Revised Return on Internal Funds for FY 2023-24 and FY 2024-25, as submitted by BEST (Rs. Crore) .....	265
Table 276: Return on Internal Funds for FY 2023-24 and FY 2024-25, as approved by the Commission (Rs. Crore) .....	266
Table 277 : Revised Non-Tariff Income for FY 2023-24 and FY 2024-25, as submitted by BEST (Rs. Crore) .....	266
Table 278: Non-Tariff Income for FY 2023-24 and FY 2024-25, as approved by the Commission (Rs. Crore) .....	267
Table 279 : Revised ARR for Distribution Wires Business for FY 2023-24 and FY 2024-25, as submitted by BEST (Rs. Crore).....	267
Table 280 : Revised ARR Retail Supply Business for FY 2023-24 and FY 2024-25, as submitted by BEST (Rs. Crore) .....	268
Table 281 : Revised Summary Aggregate Revenue Requirement for FY 2023-24 and FY 2024-25, as submitted by BEST (Rs. Crore).....	268
Table 282: Summary of ARR for Distribution Wires Business for FY 2023-24 to FY 2024-25, as approved by the Commission (Rs. Crore) .....	269
Table 283: Summary of ARR for Retail Supply Business for FY 2023-24 to FY 2024-25, as approved by the Commission (Rs. Crore).....	270
Table 284: Summary of ARR for Distribution Business for FY 2023-24 to FY 2024-25, as approved by the Commission (Rs. Crore).....	270
Table 229 : Numbers of Electro-Mechanical meters with Electronic Meters from FY 2019-20 to FY 2021-22 .....	272
Table 230 : Demand Side Management Schemes before FY 2017-18.....	273
Table 285 : Carrying Cost on Truing-up Years till FY 2023-24, as submitted by BEST (Rs. Crore) .....	290
Table 286 : Cumulative Revenue gap till FY 2024-25 including carrying / (holding) cost, as submitted by BEST (Rs. Crore) .....	291
Table 287: Recovery of fixed and variable charges and Wires Business through wheeling charges from FY 2019-20 and FY 2024-25, as submitted by BEST.....	292
Table 288: ARR, Revenue gap and Tarif hike as per proposed tariff for FY 2023-24 and FY 2024-25, as submitted by BEST .....	293
Table 289: Carrying / (Holding) Cost for Revenue Gap/(Surplus) of FY 2019-20 to FY 2021-22, approved by the Commission (Rs. Crore) .....	293
Table 290: Cumulative Revenue Gap/(Surplus) to be recovered in FY 2023-24, as approved by the Commission (Rs. Crore) .....	294
Table 291: Revenue Gap/ (Surplus) at existing Tariff for Distribution Business approved by Commission (Rs. Crore) .....	294

Table 292: Revenue Gap/ (Surplus) at existing Tariff with deferment for Distribution Business approved by Commission (Rs. Crore).....	295
Table 293 : Proportion of Recovery of Fixed Charges, as submitted by BEST (Rs. Crore) .....	297
Table 294 : Fixed / Demand Charges for FY 2023-24 to FY 2024-25, as submitted by BEST (Rs. Crore) ..	298
Table 295: Proportion of Recovery of Fixed Charges, approved by Commission (Rs. Crore) .....	299
Table 296 : Energy Charges for FY 2023-24 to FY 2024-25, as submitted by BEST (HT: Rs./kVAh and LT: Rs./kWh).....	300
Table 297 : Wheeling Charges for FY 2023-24 and FY 2024-25, as submitted by BEST (Rs./Unit) .....	301
Table 298 : Recovery of Wires Business through Wheeling Charges from FY 2019-20 to FY 2024-25, as submitted by BEST (Rs. Crore) .....	302
Table 299: Wheeling Charges for FY 2023-24 to FY 2024-25, as approved by the Commission (Rs. Crore) .....	303
Table 300 : Category wise Cross Subsidy Percentage for FY 2023-24 and FY 2024-25, as submitted by BEST .....	304
Table 301: Category-wise ABR and Tariff Increase/Decrease approved by Commission for FY 2023-24 and FY 2024-25 .....	305
Table 302: Category-wise Cross-subsidy for FY 2023-24 and FY 2024-25, as approved by the Commission .....	306
Table 303 : Grid Support Charges for FY 2023-24 and FY 2024-25, as submitted by BEST .....	318
Table 304 : Proposed Schedule of Charges, as submitted by BEST .....	320
Table 305: Approved Schedule of Charges related to Lost / Burnt Meter Charges .....	321
Table 306: Proposed Tariff for FY 2023-24 and FY 2024-25, as submitted by BEST.....	330
Table 307: Revised tariff effective from 1 April 2023 for the FY 2023-24 as approved by Commission. ....	331
Table 308: Revised tariff effective from 1 April 2024 for the FY 2024-25 as approved by Commission.....	331

**LIST OF ABBREVIATIONS**

A&G	Administrative and General
ABT	Availability Based Tariff
ACoS	Average Cost of Supply
APDRP	Accelerated Power Development and Reforms Programme
APTEL	Appellate Tribunal for Electricity
ARR	Aggregate Revenue Requirement
AT&C	Average Technical & Commercial Losses
AVG	Average
BEST	Brihanmumbai Electric Supply & Transport Undertaking
BPL	Below Poverty Line
CAGR	Compound Annual Growth Rate
CEA	Central Electricity Authority
CPI	Consumer Price Index
CR	Crore
CSD	Consumer Security Deposit
CWIP	Capital work in progress
D.A.	Dearness Allowance
DPR	Detailed Project Report
DSM	Deviation Settlement Mechanism
DSS	Distribution Sub-Station
ED	Electricity Duty
EHV	Extra High Voltage
EV	Electric Vehicle
FAC	Fuel Adjustment Cost
FBSM	Final Balancing & Settlement Mechanism
FY	Financial Year
G.A	General Administration
GFA	Gross Fixed Assets
Hosp	Hospital
HT	High Tension
HV	High Voltage
IDC	Interest During Construction
InSTS	Intra-State Transmission System
IoWC	Interest on Working Capital
IPDS	Integrated Power Development Scheme
kVAh	kilo-Volt Ampere hour
kW	kilo Watt
kWh	kilo Watt hour

LT	Low Tension
LV	Low Voltage
M.TOSE	Maharashtra Tax on Sale of Electricity
MCGM	Municipal Corporation of Greater Mumbai
MERC	Maharashtra Electricity Regulatory Commission
MMC	Mumbai Municipal Corporation
MMRDA	Mumbai Metropolitan Region Development Authority
MOD	Merit Order Dispatch
MoU	Memorandum of Understanding
MPL	Manikaran Power Ltd
MSEDCL	Maharashtra State Electricity Distribution Company Ltd.
MSETCL	Maharashtra State Electricity Transmission Company Limited
MSLDC	Maharashtra State Load Despatch Centre
MTR	Mid-Term Review
MU	Million Units
<del>MU</del>	<del>Million Units</del>
MW	MegaWatt
MYT	Multi-Year Tariff
NCLT	National Company Law Tribunal
NEF	National Electricity Fund
O&M	Operation and Maintenance
PF	Power Factor
PPA	Power Purchase Agreement
PWW	Public Water Works
R&M	Repair and Maintenance
RE	Renewable Energy
REC	Renewable Energy Certificate
RoE	Return on Equity
RPO	Renewable Purchase Obligation
RPS	Renewable Power Source
Rs	Rupees
RSS	Receiving Sub-Station
SCADA	Supervisory Control And Data Acquisition
SCH	School
SECI	Solar Energy Corporation of India
SLDC	State Load Despatch Centre
SWPGL	Sai Wardha Power Generation Ltd
ToD	Time of Day
TPC-G	The Tata Power Company-Generation Business
WEF	With Effect From

WPI	Wholesale Price Index
WRPC	Western Regional Power Committee
YoY	Year on Year

## **1 INTRODUCTION**

### **1.1 Background**

- 1.1.1 BEST is an undertaking of the Municipal Corporation of Greater Mumbai (MCGM), an urban local government established under Mumbai Municipal Corporation Act, 1888. It distributes electricity to consumers in the island area of Mumbai and provides public road transport in the entire city and some adjoining areas of Mumbai.
- 1.1.2 The erstwhile Bombay Electric Supply & Tramways Company started supplying electricity in Bombay city in 1905. Until 1926, it was generating its own electricity for distribution to its consumers. Subsequently it started purchasing electricity from the Tata Electric Company (now Tata Power Co. Ltd.). In 1947, the Bombay Electric Supply & Tramways Company was municipalised and came to be known as the Bombay Electric Supply & Transport Undertaking, which was later changed to Brihanmumbai Electric Supply and Transport Undertaking. BEST distributes electricity from Colaba in South Mumbai to Sion/Mahim in the North.
- 1.1.3 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 Electricity Act, 2003, 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, as ‘Local Authority’ was exempted from the provisions of Schedule VI, and 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, the surplus generated by the Electric Supply Division, if any, was used for subsidising its Transport Business.
- 1.1.4 BEST being a Local Authority, is also exempted from offering its network for wheeling of electricity under Section 42 (3) of the Electricity Act, 2003.

### **1.2 MYT Regulations**

- 1.2.1 The Commission notified the MYT Regulations, 2015 on 8 December, 2015 which were amended vide notification dated 29 November, 2017. These Regulations were applicable for the 3<sup>rd</sup> Control Period FY 2016-17 to FY 2019-20.
- 1.2.2 Subsequently, the Commission has notified the MYT Regulations, 2019 on 1 August, 2019 and notified the first amendment on 10 February, 2023. These Regulations are applicable for the 4<sup>th</sup> Control Period from FY 2020-21 to FY 2024-25.

### **1.3 Petition and Prayers of BEST**

- 1.3.1 BEST has filed its MTR Petition on 30 November, 2022 for Truing-up of ARR for FY 2019-20 under the MYT Regulations, 2015, Truing-up of ARR for FY 2020-21 and FY 2021-22 and Provisional Truing-up of ARR for FY 2022-23 and revised ARR

and Tariff for FY 2023-24 and FY 2024-25 in accordance with the MYT Regulations, 2019.

- 1.3.2 On 14 December, 2022, the Commission conveyed the preliminary data gaps and information required from BEST. Subsequently, a Technical Validation Session on the BEST's MTR Petition was held on 3 January, 2023. The List of persons who participated in the discussion during the TVS is at **Appendix -1**.
- 1.3.3 BEST filed the revised Petition on 17 January, 2023, in accordance with the relevant provisions of MYT Regulations, 2019, incorporating replies to the queries raised in preliminary data gaps and clarifications on the issues raised during the discussion.
- 1.3.4 BEST's main prayers in the revised Petition are as follows:

“

- 1) *Admit the MTR Petition for Fourth MYT Control Period in accordance with Regulation 5.1 (b) of the MERC (Multi Year Tariff) Regulations, 2019;*
- 2) *Approve the final true-up for FY 2019-20, FY 2020-21, FY 2021-22 and provisional true-up of FY 2022-23 and consequential revenue gaps for the claim in accordance with MERC (MYT) Regulations, 2015 and MERC (MYT) Regulations, 2019, as submitted by BEST;*
- 3) *Approve the Revised ARR and Tariff for Fourth MYT Control Period from FY 2023-24 to FY 2024-25 as proposed by BEST;*
- 4) *Approve mechanism for recovery of computed revenue gap along with carrying cost and Tariff Schedule considering the Tariff Design principles and other suggestions proposed by BEST;*
- 5) *Verify the Compliance of RPO targets by BEST for FY 2020-21 and FY 2021-22 under RPO Regulations 2019 as per the directives of the Hon'ble Commission in its Order dated 07.09.2021 in Case No. 50 of 2021, mentioned in Section 3 of the petition;*
- 6) *Allow power procurement from SECI from January 2024 as the delay is caused by CTU transmission constraints which are uncontrollable in nature;*
- 7) *Allow BEST to carry forward the shortfall in RPO compliance of 4th control period, if any, to the next control period considering surplus tied up capacity (SECI 400 MW Hybrid Power & SECI – 234 MW Solar Power);*
- 8) *Condone the delay in Investment of the amount of Contribution to Contingency reserves for FY 2020-21 and FY 2021-22;*
- 9) *Consider the request of BEST to allow wage revision expenses as uncontrollable factor in the True-up of FY 2020-21 & FY 2021-22 and COVID-19 related expenses as uncontrollable factor in the True-up of FY 2020-21 and accordingly allow sharing of gains & losses;*
- 10) *Consider the request of BEST in terms of certain claims made in the petition*

*on actual basis rather than normative considering Covid-19 pandemic situation affecting BEST in the true-up period of FY 2019-20 to FY 2021-22;*

- 11) Allow recovery as per Case no.163 of 2020 to BEST for past standby charges paid to TPC-G along with carrying cost in future Power purchase bill of FY 2023-24;*
- 12) Consider Smart Meter Scheme expenses under Opex Scheme and allow Smart Meter Scheme expenses over & above normative O&M expenses in accordance with Regulations 84.7 of MYT Regulations, 2019;*
- 13) Allow to continue the existing Green Power Tariff of Rs. 0.66/kWh the consumer opting for meeting its 100% of power requirement through RE sources.*
- 14) Approve the Grid Support charges proposed by BEST, mentioned in the petition*
- 15) Approve the Lost/Burnt meter charges proposed by BEST, mentioned in the petition;*
- 16) To extend the applicability of HT V(B) – Public Services (others) category to lighting of public streets/ thorough fares which are open for use by the general public.*
- 17) 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;*
- 18) 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.*

.....”

#### **1.4 Admission of Petition and Public Hearing Process**

- 1.4.1 The Commission admitted the Petition on 19 January, 2023 and directed BEST to publish its Public Notice in accordance with Section 64 of the EA, 2003, in the prescribed abridged form and manner. The Commission also directed BEST to reply expeditiously to any suggestions and comments received.
- 1.4.2 BEST published a Public Notice inviting comments/suggestions/objections on its Petition and scheduling the e-public hearing in the matter. The Public Notice was published in English in The Indian Express, The Free Press Journal and The Economic Times and in Marathi in Maharashtra Times and Nawakal, daily newspapers, on 23 January, 2023. The Petition and its Summary were made available for inspection/purchase at BEST's offices and website ([www.bestundertaking.com](http://www.bestundertaking.com)). The Public Notice and Executive Summary of the Petition were also made available on the website of the Commission ([www.merc.gov.in](http://www.merc.gov.in)) in a downloadable format.



- 1.4.3 The Commission received written and oral suggestions or objections to the Petition during the public consultation process in response to the Public Notice. An e-Public Hearing was held on 20 February, 2023. Oral suggestions or objections were raised during the Public Hearing. The list of persons who participated in the Public Hearing is at **Appendix 2**.
- 1.4.4 The Commission has ensured that the due process contemplated under law to ensure transparency and public participation was followed at every stage and an adequate opportunity was given to all concerned to express their views.
- 1.4.5 The suggestions and objections made in writing as well as during the e-Public Hearing, along with BEST's responses and the Commission's rulings have been summarised in Chapter 2 of this Order.

## **1.5 Organisation of the Order**

- 1.5.1 This Order is organised in the following Sections:
- **Section 1** provides a brief of the regulatory process undertaken by the Commission.
  - **Section 2** deals with suggestions/ objections received, BEST's Response and the Commission's Ruling
  - **Section 3** deals with the Truing-up of ARR for FY 2019-20.
  - **Section 4** deals with the Truing-up of ARR for FY 2020-21 & FY 2021-22.
  - **Section 5** deals with the approval of the Provisional Truing-up of ARR for FY 2022-23.
  - **Section 6** deals with the approval of revised ARR for FY 2023-24 and FY 2024-25.
  - **Section 7** deals with Compliance of directives
  - **Section 8** deals with the Tariff Philosophy adopted by the Commission and category-wise Tariffs approved for FY 2023-24 and FY 2024-25
  - **Section 9** deals with the applicability of the present Order.

## **2 SUGGESTIONS / OBJECTIONS RECEIVED, RESPONSE OF BEST AND COMMISSION'S RULING**

### **2.1 Promotional Tariff for EV Charging Stations**

Father Luke Rodrigues, Catholic Priest and other members of ECO AMBASSADORS, have requested to relook tariff proposal to either reduce or eliminate the existing tariff framework for private EV Charging stations. He has suggested a Rupee 1/- to be kept as a tariff for such EV Charging stations as the same will promote usage of electric vehicles and thus reduce the fossil fuel usage.

#### ***BEST's Response***

BEST submitted that Commission in its Order in Case No 203 of 2017 had introduced new tariff category for Electric Vehicles Charging Station and has been determining tariff since then in every tariff Order. BEST is following the same tariff applicability which balances interests of both side i.e., by keeping lower demand and energy charges for consumers on one hand and on other hand allows recovering the cost of supplying electricity. BEST submitted that EV Charging at residential and commercial facilities will need the installation of new energy meters which will increase the cost and also may lead to misuse of electric supply which will be difficult to monitor. BEST requested the Commission to determine the tariff for Electric charging station appropriately so as to it provides recovery of cost of supply of electricity. BEST will comply with the Regulations and Orders of the Commission.

#### ***Commission's Ruling***

The Commission appreciates the suggestions of ECO AMBASSADORS representatives, to promote usage of electric vehicle and reduce usage of fossil fuel. The Commission, having acknowledged the need to promote usage of electric vehicles has determined Demand Charges and Energy Charges in this Order based on the Average Cost of Supply (ACoS).

### **2.2 Wheeling Charges**

Mr. Guruprasad Shetty and Mr. Sukesh Shetty, President of India Hotel and Restaurant Association (AHAR) have objected to the consideration of Wheeling Charges proposed by BEST. The levy of wheeling charges was contrary to the letter and spirit of Electricity Act 2003 they argued and thus requested to reject the tariff proposal w.r.t. wheeling charges.

Mr. Sukesh Shetty suggested that the Commission should clearly specify whether Wheeling Charges are computed in accordance with MYT Regulations 2015 and can

be charged to consumers of Retail Supply Business of BEST. There should be no ambiguity or opportunity to misuse, misinterpret, misrepresent the Commission's Order. It is unfair and unjust to allow BEST to misguide its consumers that it is charging "wheeling charges" because the Commission has ordered it to do so.

It was submitted that Wheeling Charges if allowed by the Commission to be collected from Retail Consumers of BEST be deposited in Escrow account so that the same may be available for refund to consumers if wheeling charge are disallowed at subsequent stage. It has been experienced earlier in case of TDLR that BEST collected charges from the consumer for its transport department loss recovery for many years till the matter was decided by Hon'ble the Supreme Court in appeal. BEST did not repay TDLR charges collected after it lost the case. It is unfair and unjust on consumer to pay charges which as per EA,2003 is not applicable, then the amount is not refunded when the same is disallowed after the time taken by legal process.

Mr. Blasé D'Souza objected to the increase in wheeling charges as there is no major investment done by the Distribution Licensee.

***BEST's Response***

BEST submitted that the businesses of Distribution Wires and Supply are intertwined as without a distribution network, BEST would not be able to supply electricity to its consumers. Therefore, as per the present tariff framework, power purchase and other cost are recovered through Fixed/ Demand and Energy charges and Network cost (wheeling of power on distribution network) is recovered through Wheeling charges. In earlier years, the entire ARR was being recovered through Fixed/ Demand and Energy charges and there was no segregation of Network and Other cost. Therefore, wheeling charges are part of ARR recovery and proposed according to Electricity Act, 2003 and MYT Regulations, 2019. There is no violation of provisions of Act, Rules, Regulations and Orders of the Commission.

BEST further submitted that the Commission has ruled as follows in response to same query at time of MTR Order in Case No. 203 of 2017 dated 12 September, 2018.

*"The EA, 2003 exempts BEST from the obligation to provide Open Access through its wires to consumers for sourcing power from other sources. However, in accordance with the provisions of the MYT Regulations, 2015, Wheeling Charges which reflect the cost pertaining to the distribution infrastructure are required to be determined for BEST. Accordingly, the Commission has computed the Wheeling Charges for FY 2018-19 and FY 2019-20 in accordance with the MYT Regulations, 2015."*

In response to submission made by Mr. Blasé D'Souza, BEST submitted that it has made

significant capitalisation in past three financial years of FY 2019-20 to FY 2021-22 as shown herein below:

<b>Particulars</b>	<b>FY 2019-20 (Actual)</b>	<b>FY 2020-21 (Actual)</b>	<b>FY 2021-22 (Actual)</b>
Capital Expenditure	233.92	137.30	124.58
Capitalisation	243.46	136.30	122.98
IDC	-	-	-
Capitalisation + IDC	243.46	136.30	122.98

BEST further submitted that it plans to invest significantly in the next few years under the Revamped Distribution Sector Scheme (RDSS). BEST received approval against the Detailed Project Report and Action Plan from the Government of India for the capex to the tune of Rs. 3460.98 crore and has proposed capitalization according to the proposal submitted to GoI for the future as follows:

<b>Particulars</b>	<b>FY 2022-23</b>	<b>FY 2023-24</b>	<b>FY 2024-25</b>
Capital Expenditure	134.53	960.65	828.06
Capitalisation	143.43	960.65	828.06
IDC	-	-	-
Capitalisation + IDC	143.43	960.65	828.06

Accordingly, ARR of wire business has been projected as per the MYT Regulations 2019 and in order to recover these expenses, BEST has proposed a hike in Wheeling Charges such that there is 80.60% recovery of wires ARR (including past wires business gap/(surplus)) through wheeling charges for FY 2023-24. While, for FY 2024-25, BEST has proposed 100% recovery of wires ARR (including past wires business gap/(surplus)) through wheeling charges for FY 2024-25.

### ***Commission's Response***

The Commission in the MTR Order dated 12 September, 2018 in Case No. 203 of 2017 has already explained the basis for levying Wheeling Charges. As required under the MYT Regulations, expenses of Distribution Licensee are divided into Wire Business and Supply Business. Recovery of charges towards Wire Business is made through Wheeling Charges and that of Supply Business is through Fixed/ Demand Charges & Energy Charges. Retail consumers use services of both segment of Distribution Licensee i.e., Wire Business which is responsible for construction and maintenance of distribution infrastructure and Supply Business which procures power from various sources for supplying it to end consumers. Therefore, consumer is required to pay Wheeling Charge, Fixed/Demand Charge and Energy Charge. Such segregation of cost components is necessary for effective performance monitoring of Distribution

Licensee.

The Commission has been approving Capital Expenditure of BEST after prudence check. BEST is entitled to recover such expenditure for Wires Business by way of Wheeling Charges as approved by the Commission. Computation of Wheeling Charges has been explained in subsequent sections of this Order.

### **2.3 Mumbai Transmission Constraints and its Impact on Power Purchase Cost**

Dr. Ashok Pendse submitted that in view of transmission constraints and delay in availability of renewable power tied up by BEST, the power purchase cost of BEST will increase and will not be as per power purchase plan submitted by BEST without considering transmission constraints.

Mr. Blasé D'Souza and Mr. Guruprasad Shetty have objected to the inclusion of Standby Charges in power purchase and requested to exclude the same while determining the tariff.

#### ***BEST's Response***

BEST reiterated the details of power procurement sources considered in the Petition and highlighted that BEST has also filed separate Petition for approval of power procurement plan for FY 2023-24 to FY 2029-30.

BEST submitted that to ensure uninterrupted power supply to the consumers of Mumbai city, BEST has been availing Stand-by support from MSEDCL for any reduction in availability from contracted generation. Therefore, BEST has included the Stand-by charges as approved in the MYT Order dated 30 March, 2020 in Case No 324 of 2019 for FY 2023-24 and FY 2024- 25.

#### ***Commission's Ruling***

The Commission acknowledges the transmission constraints and also accepts that the same needs to be factored in while planning for the power purchase. Uninterrupted Power Supply cannot be compromised and hence the Commission in its Order dated 15 March, 2023 in Case No 240 of 2022 has approved the Power Purchase based on these constraints. The Commission in the said Order has held that various transmission strengthening schemes may be commissioned from FY 2024-25 progressively which will help in reducing transmission constraints to bring power into Mumbai, but based on submission of STU and MSLDC, the Commission has decided to consider such enhanced capacity for decision making only after actual commissioning of these transmission projects/scheme. Accordingly, the Commission has directed BEST to extend the existing PPA with TPC-G for one year i.e., up to March 2025. In accordance

with the aforesaid Order, the Commission has dealt with the issues raised in Power Purchase section of this Order.

#### **2.4 Operation & Maintenance Expenses**

Dr. Pendse has submitted that BEST has projected the O&M expenses not commensurate with increase in energy sale. Year-on-year energy sale from FY 2022-23 to FY 2024-25 projected as 1% increase, however, the O&M expenses has been projected as 31% increase for corresponding years.

##### ***BEST's Response***

BEST submitted that it has considered increase in sales as per approved MYT Order whereas O&M for FY 2023-24 and FY 2024-25 is calculated on normative basis as per the MYT Regulations, 2019. BEST has submitted that it has planned to undertake the Smart Metering Scheme under RDSS through OPEX mode which has added Rs. 47.51 crore and Rs. 136.48 crore, respectively to O&M Expenses for FY 2023-24 and FY 2024-25.

##### ***Commission's Ruling***

The Commission has approved normative O&M Expenses as per provisions of the MYT Regulations, 2019. Further, the Commission has also allowed additional O&M expenses to undertake smart metering scheme. It is expected that with implementation of the said scheme, BEST would be able to achieve savings in cost, which will be considered by the Commission at the time of Truing-up in the next Tariff Petition.

#### **2.5 Missing Balance Sheet Data**

Mr. Mahaveer Kumar Jain has highlighted the missing balance sheet data in respect of security deposit and interest cost in the Petition. He contended that BEST is not providing such data as it didn't want to encourage questions on security deposit and interest cost which otherwise would've been raised.

##### ***BEST's Response***

BEST has submitted that it prepares and has submitted two sets of financial statements. i.e., Statement of Accounts and Proforma Accounts. BEST being a local authority, prepares the Statement of Accounts according to the MMC Act, 1888. The Proforma Accounts are made according to the Companies Act, 2013, as directed by the Commission vide its Order dated 9 March, 2006, to maintain its Proforma Accounts and Financial Statements separately for its Electricity Business. BEST submitted that it has submitted the Proforma Accounts as Annexure 2,8 and 14 of the Petition.

BEST submitted that it has included the Balance Sheet for FY 2019-20, FY 2020-21 and FY 2021-22 as Annexures 1,7 and 13 respectively of the Petition and amount of consumer deposit has been provided in each of the balance sheets under head of ‘Current Liabilities’.

### ***Commission’s Ruling***

The Commission takes note of the comments/suggestions and BEST’s submission on the same. The Commission has undertaken the Truing-up of ARR for FY 2019-20, FY 2020-21 and FY 2021-22 based on BEST's submission, Audited Proforma Accounts and the relevant Regulations for the respective years.

## **2.6 Recovery of Dues of Security Deposit**

Mr. Jain has submitted that as per Supply Code and previous Tariff Orders of the Commission, there are specific provision to recover additional security deposit based on annual assessment. Mr. Jain stated his inability to validate how much security deposit was overdue and whether the same was recovered. Mr. Jain further submitted that in case of BEST’s inability to recover such Security Deposit overdue, there is additional cost burden of working capital interest which could’ve been met by the security deposit.

Mr. Blasé D’Souza opined that Interest must be paid on Security Deposit @ 9.55% (8.55% current highest interest rate being offered for Fixed Deposits by RBL Bank plus 1%). This will then encourage the Consumer to pay their Security deposit.

### ***BEST’s Response***

BEST has submitted that there is no additional burden to the customers on account of consumer Security Deposit.

BEST submitted that the amount of Security Deposit is significant and as such on normative principles the requirement of working capital for Retail supply business is negative as shown in the table below:

Particulars	FY 2023-24		FY 2024-25	
	MYT Order	MTR Petition	MYT Order	MTR Petition
O&M expenses for a month	17.94	19.77	18.45	20.74
Maintenance Spares at 1% of Opening GFA	2.84	28.44	2.87	36.91
One and half months equivalent of the expected revenue from sale of electricity including revenue from CSS and Additional Surcharge	387.16	448.61	391.70	355.60
Less: Amount held as security deposit	415.90	414.46	428.38	425.87

Particulars	FY 2023-24		FY 2024-25	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Less: One month equivalent of cost of power purchase, transmission charges and MSLDC Charges	221.01	249.90	203.70	179.27
<b>Total Working Capital Requirement</b>	<b>(228.97)</b>	<b>(167.53)</b>	<b>(219.05)</b>	<b>(191.89)</b>
<b>Computation of Working Capital Interest</b>				
Interest Rate (%) - SBI Base Rate +150 basis points	9.50%	9.55%	9.50%	9.55%
<b>Interest on Working Capital</b>	-	-	-	-

BEST also submitted that it has undertaken the exercise of re-calculating amount of Security Deposit as mandated under Regulation 13.4 of the Supply Code Regulations, 2021. BEST has recently taken up a drive for recovery of additional Security Deposit in December, 2022. BEST has re-calculated the amount of Security Deposit based on actual billing and raised the demand for additional security deposit to be recovered in six (6) equal monthly interest-free installments. The consumers were also given an option to pay the total additional security deposit amount in less than 6 equal monthly installments in accordance with the Supply Code Regulations, 2021.

BEST submitted that the Commission in the previous Orders has done its due diligence in seeking the details of the opening balance, addition during the year, closing balance and whether the interest on Security Deposit was actually paid to the consumers before approving it according to the audited accounts.

In response to suggestion of Mr. Blasé D'Souza, BEST has submitted that it has followed Clause 30.11 of the MYT Regulations, 2019 and has calculated the interest on Security Deposit according to the RBI Bank Rate as on the 1<sup>st</sup> of April of each year and amount of interest on Security Deposit of consumers being claimed based on actual payment made to the consumers.

### ***Commission's Ruling***

The Commission has scrutinised the Security Deposit considered by BEST and has notionally recomputed the Security Deposit amount as per prevailing Regulations and considered the same while computing Interest on Working Capital.

Further, the Commission notes that interest rate on Consumer Security Deposit is considered as per the MYT Regulations, 2019.

## **2.7 Energy Audit of Distribution Network**

Mr. Jain has suggested that in order to evaluate the efficiency of the Distribution Licensee, there is requirement of energy audit of the distribution network as per BEE



parameters, preferably by reputed government agencies e.g., ERDA or TERI

***BEST's Response***

BEST submitted that in past it has been doing energy audit through their internal energy auditors and energy managers. However, as per the notification published by Bureau of Energy Efficiency (BEE) on 28 October, 2022, BEST is required to submit the Annual Energy Audit Report for the FY 2020-21 & FY 2021-22 and Periodic Energy Accounting reports. In view of the above, BEST has appointed Accredited Energy Auditor on 09 January, 2023 for auditing reports for the above-mentioned financial years to be submitted to BEE. The Periodic Energy Accounting Reports are being submitted regularly and the Annual Audit Report will be submitted shortly.

***Commission's Ruling***

The Commission takes note of the BEST submission and directs BEST to upload the energy audit report on their website for public information.

**2.8 *Demand Side Management Expenses***

Mr. Jain has highlighted the importance of demand side management in shaving off the peak load requirement and need for rebates to promote Demand Side Management. Mr. Jain has also suggested that BEST should come out with Demand Side Management plan for Brushless Direct Current (BLDC) fan, with 32W/35W power consumption, which can only help to reduce load regularly for almost entire household, whoever goes for it, otherwise other items do not help much as compared to fan.

***BEST's Response***

BEST submitted that it has taken into consideration the suggestions and will work out a proposal for Demand Side Management for Brushless Direct Current (BLDC) fans and other such initiatives and will submit their proposals to the Commission in due course of time as per the Demand Side Management Regulations 2010.

***Commission's Ruling***

The Commission has noted the submission of Shri Mahaveer Jain and the reply submitted by BEST. The Commission expects the initiatives for such proposals from BEST as per the provisions of the Demand Side Management Regulations 2010.

**2.9 *Peak Hour Management***

Mr. Jain has highlighted the lacking TOD and Power Factor (PF) framework applicable on residential consumers. Mr. Jain suggested that the Commission may issue necessary directions for meter conversion to bring residential consumers under the loop of TOD

and PF framework.

Mr. Blasé D'Souza has opined that the Distribution Licensees should adopt new technology as this would help reducing cost. He further suggested that wherever there is a cluster of 100 plus Residential Meters, the Distribution Licensees must be forced to install Digital Meters with Wireless connectivity, as it will bring down the Operations costs and improve their profitability and dependence on labour.

***BEST's Response***

BEST in its response has submitted that it has proposed the installation of Smart Meters program under the Revamped Distribution Sector Scheme (RDSS). With this project, about 10.80 Lakh conventional / static customer meters will be replaced with Smart Meters in order to give consumers greater control over their energy use. The project is to be carried out under TOTEX model through Advanced Metering Infrastructure Service Provider (AMISP) and is scheduled to be completed within 30 months of the date of award of contract.

BEST submitted that Smart Meters enable a utility to provide customers with detailed information about their energy usage at different times of the day, which in turn enables customers to manage their energy use more proactively.

BEST further stated that Smart metering implementation will enable improvement in the following:

- *outage detection*
- *service restoration*
- *billing efficiency*
- *reduce manual meter reading*
- *work and asset management*
- *outage management*

BEST submitted that it has already installed Capacitors at their Receiving Sub Station and Distribution Sub Stations. These installed capacitors are helping in improvement of Power Factor for the total installed load of residential consumers.

***Commission's Ruling***

The Commission has taken note of the suggestion/comments and BEST submission on the same. Implementation of Smart Meter by BEST will address the issues raised through the suggestions.

**2.10 Revision of TOD Slots and TOD Tariff**

Mr. Jain has requested BEST to provide month wise hour wise energy and cost data period from April 2019 to January 2023. Mr. Jain felt that there was need to revise the TOD slots reflecting the costly power purchase during peak hours.

***BEST's Response***

BEST has submitted that a detailed TOD report with required data. Based on the outcome of the report, BEST has requested to continue the existing TOD Tariff framework till smart meter installation. BEST submitted that post installation of smart meters, TOD charges can be programmed according to customized time slots.

***Commission's Ruling***

The Commission has undertaken a study on this issue and has shared the report with the Distribution Licensees including BEST. Also, in the present MTR, the Commission has taken cognizance of the details submitted by the BEST and accordingly dealt it in Tariff Philosophy section of this Order.

**2.11 Prepaid Metering**

Mr. Jain has submitted that the Commission shall maintain parity between Distribution Licensees while declaring tariff discount for prepaid metering. He further suggested discount of 5% on advance payment under prepaid metering and requested to keep the same for all the Distribution Licensees.

***BEST's Response***

BEST has submitted that at present it does not have any consumers with prepaid metering Tariff. BEST has submitted to comply with the Orders of the Commission in this regard.

***Commission's Ruling***

The Commission has taken note of the BEST's submission. The Commission notes that Smart metering rollout proposed by BEST under RDSS has provision of pre-paid metering. Hence, option of pre-paid meter based billing needs to be enabled. The Commission also notes that in the past, discount of 5% was approved by the Commission for pre-paid metering for consumers of other Distribution Licensee in the State. But the said pre-paid metering was envisaged for limited number of consumers and with intention of improving collection efficiency. But when almost all consumers are being installed with Smart meter having pre-paid facility, providing such discount of 5% per month would not be useful as some cost is again loaded into ARR and hence tariff of consumers. Therefore, as explained in Tariff Philosophy section, the Commission has approved rebate of 2% for consumers who are opting for pre-paid

metering.

### **2.12 Absence of Transparent Bidding Process**

Mr. Blasé D'Souza has objected to the present process of Tariff determination which lacks transparency mandated under Section 63 of the Electricity Act 2003 and requested to reject the Tariff Petition.

#### ***BEST's Response***

BEST in its response submitted that it has submitted the MTR Petition according to Clause 5(b) of the MYT Regulations, 2019. It has submitted True Up of FY 20-21 as per its financial statements and as per relevant MYT Regulations.

#### ***Commission's Ruling***

The Commission has noted the response of BEST. The Commission has framed and notified the MYT Regulations 2019 as per Section 61 of the Electricity Act 2003. The objections raised by the Consumer w.r.t. rejection of Tariff Petition filed under MYT Regulations 2019 is not tenable.

### **2.13 Inadequate Publicity to the Tariff Revision Petition**

Mr. D'Souza submitted that BEST has not given adequate publicity of the Tariff Petition. Mr. D'Souza suggested following practice for publicity to public at large:

1. The link to the advertisement / Public Notice should have appeared in at least 2 months Bills by being in a very highlighted manner at a place which gets the attention of the Consumer. The spots used for Commercial advertisements would be ideal.
2. An email should have been sent out to each of the Consumers (where emails are available) giving the full Public Notice.
3. An SMS should have been sent out to the Consumers on their Mobile nos. (wherever available) giving the link to the Public Notice.
4. The Public Notice should have been in the form of a Banner appearing on Google Search Engine such that when anyone logs in and is within the territory of the Distribution Licensee then they would get to see the Public Notice.

Mr. Ponrathnam suggested that public notice for tariff determination should be circulated with the bills and SMS/electronic media.

#### ***BEST's Response***

BEST submitted that it has followed Clause 14.6 of the MYT Regulations 2019. BEST further submitted that it has published its Public Notice in 3 English and 2 Marathi Newspapers. Also, it has made provisions for consumers to avail the hard copy, as well as uploaded it on its website for the benefit of the public. BEST submitted that it will

follow any changes in the Rules and Regulations as stipulated by the Commission in this regard.

***Commission's Ruling***

The Commission takes note of the response of BEST. The Commission opines that BEST has followed the due procedure in accordance with the MYT Regulations, 2019. At the same time, the Commission appreciates measures suggested by Mr. D'Souza and Mr. Mr. Ponrathnam asking for giving still larger publicity and generating consumer awareness on tariff petition. BEST may consider other non mandatory measures as suggested above while filing the next Tariff Petition. The Commission will also consider feasibility of including such additional measures while making new Tariff Regulations for next control period.

**2.14 *Virtual Net Metering/Group Net Metering***

Mr. D'Souza submitted that the Distribution Licensee has not put forward any proposal with respect to Virtual Net Metering/Group Net Metering. He opined that this would bring down the cost of procurement of Power for the Distribution Licensee. It will get supply of electricity with zero Distribution Losses. The Commission shall get all the Distribution Licensees to make this as part of their Tariff Plans. He opined that the costs benefit out of this have to be passed on to the Consumers at large by reduced Tariff for Retail Customers.

***BEST's Response***

BEST has submitted that it is getting equipped for the future scenario. Currently it has around 280 Green Tariff Consumers and a capacity of 13.57 MW Solar Rooftop Connections.

BEST has proposed installation of Smart Meters program under the Revamped Distribution Sector Scheme (RDSS) scheme. With this project, about 10.80 Lakh conventional / static customer meters will be replaced with Smart Meters in order to give consumers greater control over their energy use.

With the installation of Smart Meters, BEST will be able to consider the provisions of Virtual Net Metering/ Group Net Metering etc. as and when stipulated by the Commission.

***Commission's Ruling***

The Commission takes note of the BEST response. The Commission will explore and deliberate the concept of Virtual Net Metering/Group Net Metering and its consequential impact in separate proceedings.

### **2.15 Solar Rooftop Capacity**

Mr. Blasé D'Souza stated that Rooftop Solar System Consumers should be allowed to maximize the installation such that they utilize their entire roof capacity. In all such cases the power generated should be purchased on a monthly basis @ Rs. 4/- per unit. He opined that this would give power to the Distribution Licensee at a cheap rate and without any distribution loss. He suggested that no tariff shall be approved unless any buy price from Solar Rooftop is notified.

#### ***BEST's Response***

BEST has submitted that it has been following Clause 6.2 of the (Grid Interactive Rooftop Renewable Energy Generating Systems) Regulations, 2019 which states that:

*“6.2 The capacity of the Renewable Energy Generating System to be connected at the Eligible Consumer's premises shall not exceed the Sanctioned load (in kW) or the Contract Demand (in kVA) of the Consumer, as applicable.”*

Therefore, it cannot offer Solar Rooftop Systems greater than the load utilised. BEST stated that it would follow the Commission's direction in this regard.

#### ***Commission's Ruling***

The Commission noted the response of the BEST. The Commission clarifies that the aforementioned Regulation with respect to the Renewable Generating System has been formulated and notified after following the due public consultation process and considering the public comments keeping in mind the technical constraints and energy accounting challenges faced by the Distribution Licensees.

### **2.16 Incentive For Prompt Payment**

Mr. Blasé D'Souza has suggested a two layered incentive on prompt payment of electricity bill. He suggested 2 slabs of first seven and 15 days to be adopted with proposed incentive of 3%. He opined that this would help improving the working capital of BEST.

#### ***BEST's Response***

BEST has submitted that it will abide by the direction of the Commission in this regard.

#### ***Commission's Ruling***

The Commission expects that the suggestion may be put forward when the process begins for formulating MYT Regulations for the next control period. The Commission will evaluate the same while finalising the Regulation.

### **2.17 Reduction in Schedule of Charges**

Mr. Blasé D'Souza has suggested that due to digitisation, all distribution Licencees have significant savings in operational costs. This benefit has to be passed to the consumer through reduction in Schedule of Charges.

***BEST's Response***

BEST has submitted that the benefits of digitization etc. are already factored into the Annual Revenue Requirement (ARR) in the form of reduced Operational Expenses if any and are therefore also shared with consumers in the form of Sharing of gains/losses of Controllable Factors wherein according to Clause 11.1 of the MYT Regulations 2/3<sup>rd</sup> of gains will be passed on to consumers as a rebate in Tariff.

Furthermore, BEST submitted that it has not increased any charges in its Schedule of Charges except for adding a charge for the Cost of Burnt/Broken Smart Meters which it is planning to install for all its consumers.

***Commission's Ruling***

The Commission has taken note of the response of BEST and concurs with the same.

**2.18 *Need For Consumer Representatives***

Mr. Blasé D'Souza opined that the Commission shall appoint representatives from consumers to espouse the cause of consumers. He opined that the selected representatives could be from corporate HT users or the residential LT users for a minimum tenure of three years. Mr. D'Souza suggested that the Commission should appoint a consumer representative for the full involvement in the tariff proceedings.

***BEST's Response***

BEST has submitted that this being suggestion to the Commission, no comments are offered.

***Commission's Ruling***

The Commission follows the transparent process of tariff determination by inviting suggestions/objections from public as per procedure prescribed under the Electricity Act, 2003. All the relevant documents along with the Petition are kept in the public domain on the website for perusal of the public which everyone can access and submit its comments during the public consultation process. Thus, non-appointment of Consumer Representatives does not vitiate or adversely impact the Tariff proceedings.

**2.19 *Tariff Proceeding Duration***

Mr. Blasé D'Souza has submitted that the Electricity Act, 2003 provides for a 120-day period to pass a Reasoned Order by the Commission from the date of admission of the

Petition / application. He felt that since the present application has been admitted in the month of January, 2023, why there shall be hurry to close the study, audit, investigation, public suggestions and objections in a period of less than even 90 days when there is already a Tariff approved for the relevant period 2023-24. He opined that the Commission should maintain a status quo as a Multi-Year Tariff (MYT) for FY 2023-24 is in place, take their time to audit the data (especially power purchase data) shared by BEST and work on the suggestions and objections given / raised by the general public. The decision can then be taken before 30 September, 2023.

***BEST's Response***

BEST has submitted that it has followed Clause 5(b) of the MYT Regulations, 2019 and submitted its original Petition by 30 November, 2022 and has followed the timelines stipulated by the commission for the submission of the data gap queries and the revised Petition. BEST submitted that the suggestion made by the Objector is under the purview of the Commission, hence BEST has no comments to offer on the same.

***Commission's Ruling***

The Commission determines Tariff as per provisions of Electricity Act, 2003 and MYT Regulations 2019 by following due process of law for timely notification of tariff.

**2.20 kVAh Billing**

Shri N. Ponrathnam objected to kVAh based billing since only real power is used by consumers and not apparent power. He suggested that the billing must be done only for Real power. He has requested the Commission to direct utility and consumers to maintain unity power factor.

***BEST's Response***

In the MTR Order dated 12 September, 2018 in Case No. 203 of 2017, the Commission has stated the intention to implement the kVAh billing and accordingly BEST has proposed kVAh billing to HT Consumers from 1 April, 2020.

***Commission's Ruling***

The Commission has noted the objection and also reply submitted by BEST. The Commission has discussed on the issue of kVAh tariffs and billing in the Tariff Philosophy section of this Order.



### 3 TRUING-UP OF ARR FOR FY 2019-20

#### 3.1 Background

- 3.1.1 BEST has sought Truing-up of ARR for FY 2019-20 based on the actual expenditure and revenue as per the Audited Accounts for FY 2019-20 and in accordance with the provisions of the MYT Regulations, 2015. BEST also submitted reasons for variation in the actual expenses for FY 2019-20, as compared to the expenses approved in the Order dated 30 March, 2020 in Case No. 324 of 2019 (“MYT Order”).
- 3.1.2 The Books of Accounts of BEST are audited by the Municipal Chief Auditor as per the M.M.C Act, 1888. Separate Books of Accounts as per Proforma Accounts are not maintained by the BEST for Supply & Transport Division, however, for meeting the Regulatory requirements, BEST submitted the Proforma Accounts which are audited by an external auditor appointed by BEST. Accordingly, BEST has submitted Petition as per Audited Proforma Accounts for FY 2019-20 which has been considered by the Commission for the purpose of Truing-up of ARR of FY 2019-20.
- 3.1.3 The analysis underlying the Commission’s approval of Truing-up for FY 2019-20 is set out below.

#### 3.2 Energy Sales

##### *BEST’s Submission*

- 3.2.1 BEST has submitted the summary of the category-wise sales as approved by the Commission in the MYT Order for FY 2019-20 and the actual sales is shown in the Table as under:

**Table 1 : Tariff Category-wise energy consumption for FY 2019-20, as submitted by BEST (MU)**

Consumer Category & Consumption Slab	FY 2019-20		
	MYT Order	April-March (Audited)	True-up Requirement
<b>HT Category</b>			
HT - I Industry	156.77	178.86	22.09
HT - II Commercial	246.67	225.83	-20.85
HT - III Group Housing	30.65	30.03	-0.62
HT IV- PWW	35.73	37.34	1.61
HT V- Railways, Metro, Monorail	2.14	2.22	0.08
HT VI-(A)Public services (Govt. Hospitals and Educational Institutions)	26.59	25.84	-0.75
HT VI-(B) Public services (Others)	160.99	159.87	-1.12
HT-VII Temporary Supply	26.27	20.81	-5.46
<b>Sub-total</b>	<b>685.83</b>	<b>680.80</b>	<b>-5.03</b>
<b>LT Category</b>			
LT-I (A) Residential (BPL)	0.07	0.03	-0.04
LT - I(B) Residential	-	-	-

Consumer Category & Consumption Slab	FY 2019-20		
	MYT Order	April-March (Audited)	True-up Requirement
0 – 100 units	749.52	750.10	0.58
101 – 300 units	693.02	699.57	6.55
301 - 500 units	221.82	217.26	4.56
> 501 units	382.33	367.76	-14.57
LT - II (a) Commercial	895.92	885.74	-10.18
LT - II (b) Commercial >20 & <=50 kW	211.19	209.25	-1.94
LT - II (c) Commercial >50	370.11	369.41	-0.70
LT - III (A) Industry (upto 20 kW)	43.25	46.88	3.63
LT-III (b) Industrial above 20 kW	90.33	84.49	-5.84
LT-IV PWW	6.82	5.45	-1.37
LT - V Advertisement & Hoardings	1.52	1.43	-0.09
LT - VI Street Lights	19.05	18.96	-0.09
LT - VII (a) Temporary Supply Religious	0.20	0.17	-0.03
LT - VII (b) Temporary Supply Others	14.90	10.75	-4.15
LT - VIII Crematorium and Burial Grounds	1.54	1.47	-0.07
LT - IX (A) Public Services -Govt. Hosp. & Edu. Institutions	55.22	56.79	1.57
LT - IX (B) Public Services -others	163.17	162.42	-0.74
LT-X (A) Agriculture- Pumpsets	-	-	-
LT-X (B) Agriculture- Others	-	-	-
LT XI Vehicle Charging	0.24	0.62	0.38
<b>Sub-total</b>	<b>3,920.22</b>	<b>3,888.54</b>	<b>-31.67</b>
<b>Total</b>	<b>4,606.03</b>	<b>4,569.34</b>	<b>-36.69</b>

3.2.2 The actual energy sales of FY 2019-20 are lower than the energy sales approved by the Commission in the MYT Order.

3.2.3 BEST has submitted that energy sales had decreased in recent years for many consumer categories. Such decrease is not specific to any geographic area. However, the decrease in actual sales in FY 2019-20 is very negligible and mainly attributed to loss in electricity sales due to nation-wide lockdown imposed by Central Government w.e.f. 24 March, 2020.

### ***Commission's Analysis and Ruling***

3.2.4 In response to the query raised by the Commission in respect of reduction of sales for FY 2019-20 apart from the lockdown impact, BEST submitted that in the recent past it has been observed that, there is reduction of demand in street lighting load due to widespread use of LED. BEST has replaced around 96% of street lights with LED in the last 5 years which resulted in great savings. In FY 2019-20, reduction of energy sale of streetlights ~2.79 MU as compared to sales of street lights in FY 2018-19. The same can be seen from following consumption table:

**Table 2 : Electricity Consumptions of Street Lights, as submitted by BEST (MU)**

Year	Annual Consumption (MU)
FY 2016-17	26.63
FY 2017-18	24.92
FY 2018-19	18.99
FY 2019-20	16.20

- 3.2.5 BEST further submitted that, the energy sales in BEST area of supply have remained more-or-less constant during past few years. Also, due to rooftop installations of around 13.69 MW, sales have decreased.
- 3.2.6 Also, BEST submitted that consumers are increasingly becoming aware of the need for energy conservation due to the initiatives taken by various authorities in promotion of energy conservation. Overall inflationary trend coupled with availability of star rated appliances at affordable prices is nudging the consumers to switch to energy efficient LED Tube lights, Star rated Fans/ Refrigerators, Five Star ACs, etc. However, it is difficult to quantify the reduction in sales due to use of energy efficient devices by consumers.
- 3.2.7 The Commission notes that the sales in FY 2019-20 have been marginally lower by 36.69 MU as against the sales approved in the MYT Order. The Commission also notes the submission of BEST that the decrease in sales is not specific to any geographic area and is mainly impacted due to reduction in electricity sales on account of nation-wide lockdown imposed by Central Government w.e.f. 24 March, 2020. BEST also has highlighted the lower sales due to roof top solar installations as well as usage of LED for streetlights leading to lower street light sales as shown in the Table 2 above.
- 3.2.8 Based on the above explanation provided by BEST, the Commission approves the actual sales for FY 2019-20 as submitted by BEST. The summary of energy sales approved by the Commission on Truing-up of FY 2019-20 is given in the Table below:

**Table 3: Energy Sales for FY 2019-20, as approved by the Commission (MU)**

Particulars	MYT Order	MTR Petition	Approved in this Order
Energy Sales	4,606.03	4,569.34	4,569.34

- 3.2.9 The Commission approves energy sales of 4,569,34 MU on final Truing up of ARR for FY 2019-20.

### **3.3 Distribution Losses and Energy Balance**

#### ***BEST's Submission***

- 3.3.1 The energy balance for FY 2019-20 is as summarized in table below:

**Table 4 : Energy Balance, as submitted by BEST.**

Sr. No.	Particulars	FY 2019-20	
		Approved in MYT Order	Actual
1	Sales (MU)	4,606.03	4,569.34
2	Distribution Loss (%)	5.60%	4.65%
3	Energy Requirement at T-D interface (MU)	4,879.27	4,792.25
4	Intra-State Transmission Loss (%)	3.18%	3.16%
5	<b>Energy Requirement at G-T interface (MU)</b>	<b>5,039.45</b>	<b>4,948.73</b>

3.3.2 The monthly energy drawl at T<>D interface is grossed-up by monthly InSTS loss available on MSLDC’s website to derive energy requirement at G<>T interface. The summation of 12 months’ energy drawl at T<> D Interface & summation of 12 months’ energy drawl at G<>T interface is considered for working out InSTS loss for FY 2019-20. Further, BEST has calculated distribution losses after considering the energy injected into the BEST network at T<>D interface based on the MSLDC certification and the actual sales for FY 2019-20. BEST has achieved distribution loss of 4.65% vis-à-vis approved distribution loss of 5.60% for FY 2019-20 in MYT Order.

3.3.3 On account of the lower distribution loss vis-à-vis distribution loss approved in MYT Order and lower than expected sales, the overall energy requirement at G<>T interface for FY 2019-20 is lower than approved in MYT Order.

***Commission’s Analysis and Ruling***

3.3.4 The Commission has noted the submission of BEST. The Commission has considered the actual InSTS Loss as 3.16% for FY 2019-20 as per monthly InSTS Loss details as provided by MSLDC and energy drawn at T<>D interface for FY 2019-20 as per MSLDC certificate for calculation of Distribution losses. There is minor variation in data provided by BEST and MSLDC for energy drawn at G<>T interface. However, the Commission has considered readings as per details given by MSLDC.

3.3.5 Considering the energy injected into the BEST network at T<>D interface based on the MSLDC certification and the actual sales as approved by the Commission in this Order, the Distribution Loss for FY 2019-20 works out to be 4.65% as against 5.60% approved by the Commission in the MYT Order.

3.3.6 In response to the query raised by the Commission, BEST submitted that its losses have been hovering around 4-5% and are almost near to the technical minimum through various initiatives such as continuous vigilance activities, raids, consumer awareness on theft and energy conservation, legal actions against theft incidences and faulty meter replacements. However, it would be difficult to identify exact contributions from above mentioned initiatives. The Commission notes that the Distribution Loss of 4.65% for FY 2019-20, though lower than approved loss in MYT order, is higher than 4.18% achieved during FY 2018-19. BEST submitted that loss

level achieved in FY 2018-19 is an aberration in that year and not be considered as constant achievable target.

- 3.3.7 Accordingly, for the purpose of Truing-up, the Commission approves the actual Distribution Loss as 4.65% as against 5.60% approved in MYT Order for FY 2019-20. The efficiency gain on account of Distribution Loss lower than target loss levels has been computed subsequently in this Order.
- 3.3.8 Based on the above, the energy balance approved by the Commission for FY 2019-20 is given in the following Table:

**Table 5: Energy Balance for FY 2019-20, as approved by the Commission.**

Particulars	MYT Order	MTR Petition	Approved in this Order
Sales (MU)	4,606.03	4,569.34	4,569.34
Distribution loss (%)	5.60%	4.65%	4.65%
Energy Requirement at T-D interface (MU)	4,879.27	4,792.25	4,792.25
Intra-state Transmission loss (%)	3.18%	3.16%	3.16%
Energy Requirement at G-T interface (MU)	5,039.45	4,948.73	4,948.66

- 3.3.9 The Commission approves energy requirement at G<>T interface of 4,948.66 MU on final Truing-up of ARR for FY 2019-20.

### **3.4 Power Purchase Expense**

#### ***BEST's Submission***

- 3.4.1 BEST has presented the actual power purchase for FY 2019-20 based on the actual energy input requirement. The energy requirement of BEST has been met through the following sources:
- i) Power Purchase from Tata Power-G (TPC-G)
  - ii) Power Purchase from Manikaran Power Ltd.
  - iii) Power Purchase from Renewable Sources
  - iv) Power Purchase from short term sources

#### **TPC-G**

- 3.4.2 BEST submitted that it has procured power primarily from TPC-G. Power purchase expense has been considered as per Accounts for FY 2019-20. The summary of power purchase from TPC-G is as under:

**Table 6 : Summary of Power Purchase Expenses from TPC-G for FY 2019-20, as submitted by BEST**

Unit of TPC-G	Power Purchase Quantum	Fixed / Capacity Charges	Fixed / Capacity Charges Rate	Total Variable Cost	Variable Charges Rate	Total Power Purchase Cost	Total Power Purchase Rate
	MU	Rs. Crore	Rs./kWh	Rs. Crore	Rs./kWh	Rs. Crore	Rs./kWh
Unit-5	1,513.94	235.37	1.55	539.81	3.57	775.17	5.12
Unit-7	563.68	84.02	1.49	148.59	2.64	232.61	4.13
Unit-8	606.15	99.55	1.64	217.12	3.58	316.68	5.22
Hydro	762.79	73.68	0.97	91.04	1.19	164.72	2.16
Thermal Incentive		(0.00)				(0.00)	
<b>Total</b>	<b>3,446.56</b>	<b>492.62</b>	<b>1.43</b>	<b>996.56</b>	<b>2.89</b>	<b>1,489.18</b>	<b>4.32</b>

3.4.3 BEST submitted that it has purchased the power from TPC-G at average rate of Rs. 4.32/kWh during FY 2019-20 as against approved rate of Rs. 4.34/kWh and requested the Commission to approve the power purchase cost from TPC-G as shown above for FY 2019-20.

***Commission's Analysis and Ruling***

3.4.4 The cost of power purchase from TPC-G claimed by BEST is in line with the Fixed Charges and Variable Charges as approved by the Commission for TPC-G for FY 2019-20 as well as the revenue considered by TPC-G from sale of power in FY 2019-20. Hence, the Commission has approved the actual quantum and cost of power purchase from TPC-G for FY 2019-20, as follows:

**Table 7: Summary of Power Purchase from TPC-G for FY 2019-20, as approved by the Commission**

Unit of TPC-G	MTR Petition			Approved in this Order		
	Quantum	Total Cost	Rate	Quantum	Total Cost	Rate
	MU	Rs. Crore	Rs./kWh	MU	Rs. Crore	Rs./kWh
Unit-5	1,513.94	775.17	5.12	1,513.94	775.17	5.12
Unit-7	563.68	232.61	4.13	563.68	232.61	4.13
Unit-8	606.15	316.68	5.22	606.15	316.68	5.22
Hydro	762.79	164.72	2.16	762.79	164.72	2.16
Thermal Incentive		(0.00)			(0.00)	
<b>Total</b>	<b>3,446.56</b>	<b>1,489.18</b>	<b>4.32</b>	<b>3,446.56</b>	<b>1,489.18</b>	<b>4.32</b>

3.4.5 Accordingly, the Commission approves Rs. 1,489.18 Crore as the cost of power purchased from TPC-G for Final Truing up for FY 2019-20.

**Manikaran Power Ltd. (MPL)**

***BEST's Submission***

3.4.6 The Commission in its Order in Case No. 249 of 2018 dated 02 January, 2019,

allowed BEST to purchase 100 MW power from M/s. Manikaran Power Ltd. (MPL) through M/s. Sai Wardha Power Generation Ltd. with supply starting from 01 April, 2019 at cost of Rs. 3.94/kWh.

- 3.4.7 Power procurement from MPL was delayed due to admittance of M/s Sai Wardha Power Generation Ltd. (SWPGL) to NCLT and other unavoidable circumstances and supply of power started from 1 March, 2020. The Commission in the MYT Order had directed BEST to file separate Petition for approval of delay in supply of power from MPL covering aspects like various measures that were available to BEST under the terms of the PPA to address the delay in supply and the provisions which were actually invoked by BEST.
- 3.4.8 As directed by the Commission in the MYT Order, BEST had filed Case No 61 of 2021 on dated 29 April, 2021 for condonation and approval of the inadvertent delay and deficiency in the course of procurement of 100 MW power from MPL.
- 3.4.9 The Commission vide Order dated 12 July, 2021 in Case No. 61 of 2021 has calculated the impact on power procurement expenses of BEST due to such delay in supply of power from approved PPA with MPL. It was mentioned by the Commission that BEST has procured power from bilateral sources and power exchange at a cheaper rate. Hence, there was not any adverse impact on total power purchase cost. Further, the Commission had directed to provide detailed analysis of impact on power procurement if power from MPL was received and its impact on Merit Order dispatch at the time of MTR Petition. The relevant extract of the said Order is given below:

***“9. Issue A: Whether there is any adverse impact on power procurement expenses of BEST due to such delay in supply of power from approved PPA with MPL?”***

*9.1 As stated earlier in this Order, supply of power under 100 MW PPA with MPL was to be started from 1 April, 2019. However, actual supply under this PPA started from 1 March, 2020. Thus, there is delay of 11 months in commencement of power supply. During this period, BEST has procured power from short term sources. As stated by BEST, such short-term power procurement is at rate which is lower than the tariff under the PPA with MPL. Hence, BEST has contended that there is no adverse financial implication on its power procurement cost.*

*9.2 In this regard, the Commission notes that in its MYT Order dated 30 March, 2020, it has undertaken provisional truing-up of FY 2019-20 based on actual data up to September 2019 and projections for the period of October 2019 to March 2020. Due to delay in supply of power from MPL, the Commission has considered such shortfall be fulfilled by short-term power procurement at rate of Rs 4/ kWh. In present Petition, BEST has stated that its actual short term power procurement rate for FY 2019-20 is Rs 3.86/kWh. Details of the same are as follows:*



Sr. No	Detail	Units	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Total
	<b>Quantum:</b>													
1	Bilateral Power Purchase	MU	25.55	49.08	35.75	-	-	-	84.46	16.64	-	-	-	211.48
2	Purchase through Power Exchange		17.48	27.48	33.81	32.11	45.97	67.44	12.60	44.47	96.19	15.98	43.19	436.72
	<b>Total quantity of Power Purchase through bilateral and Px source (A)</b>		<b>43.03</b>	<b>76.56</b>	<b>69.56</b>	<b>32.11</b>	<b>45.97</b>	<b>67.44</b>	<b>97.06</b>	<b>61.11</b>	<b>96.19</b>	<b>15.98</b>	<b>43.19</b>	<b>648.20</b>
	<b>Cost:</b>													
3	Bilateral Power Purchase	Rs. Crore	15.40	27.45	20.02	-	-	-	33.17	7.63	-	-	-	103.67
4	Purchase through Power Exchange		6.48	10.82	12.33	10.71	14.94	19.73	4.09	14.98	32.27	5.45	14.81	146.61
	<b>Total Pwer purchase cost through bilateral &amp; Px source (B)</b>		<b>21.88</b>	<b>38.27</b>	<b>32.35</b>	<b>10.71</b>	<b>14.94</b>	<b>19.73</b>	<b>37.26</b>	<b>22.61</b>	<b>32.27</b>	<b>5.45</b>	<b>14.81</b>	<b>250.28</b>
5	<b>Average Rate/unit (B/A)*10</b>	Rs./Unit	<b>5.08</b>	<b>5.00</b>	<b>4.65</b>	<b>3.34</b>	<b>3.25</b>	<b>2.93</b>	<b>3.84</b>	<b>3.70</b>	<b>3.35</b>	<b>3.41</b>	<b>3.43</b>	<b>3.86</b>

9.3 Based on above stated actual average Short Term power purchase rate of Rs 3.86/ kWh which is less than PPA rate of MPL i.e. Rs 3.94/ kWh and Rs 4/ kWh envisaged in MYT Order, BEST has stated that there is no adverse impact of delay in supply of power from MPL. Although prima facie it seems no adverse impact on power purchase cost, in the opinion of the Commission, such simplistic approach may not reflect correct picture. BEST cannot ignore the fact that power from MPL can also be used for replacing some of its costly long term power procurement from Tata Power on the Merit Order Desptach Principles. Therefore, while calculating impact of delay in supply from MPL, BEST should also have factored in any such lost opportunity. The Commission is not at all intending to indulge in fault finding exercise, but such analysis is a must for making continuous improvement in power procurement strategies. Therefore, the Commission directs BEST to submit such improved analysis during upcoming MTR proceeding wherein truing up of FY 2019-20 will be undertaken. Based on such submissions, the Commission will take appropriate decision on power purchase expenses for FY 2019-20. ”

3.4.10 BEST submitted that it has procured power from bilateral sources at Rs. 3.86/ kWh. Month-wise details are given in below table:

**Table 8 : Monthly Power Purchase from Bilateral Sources and Power Exchanges, as submitted by BEST**

Sr. No	Month	Total (Including Rebate)		
		MU	Rs. Cr	Avg. Rate (Rs./kWh)
1	Apr-19	43.03	21.87	5.08
2	May-19	76.56	38.27	5.00
3	Jun-19	69.55	32.35	4.65
4	Jul-19	32.11	10.71	3.34
5	Aug-19	45.97	14.94	3.25
6	Sep-19	67.44	19.73	2.93
7	Oct-19	95.23	36.58	3.84
8	Nov-19	61.11	22.61	3.70
9	Dec-19	96.19	32.27	3.35



Sr. No	Month	Total (Including Rebate)		
		MU	Rs. Cr	Avg. Rate (Rs./kWh)
10	Jan-20	15.88	5.42	3.41
11	Feb-20	43.19	14.81	3.43
12	Mar-20	0.88	0.28	3.18
<b>Total</b>		<b>647.15</b>	<b>249.85</b>	<b>3.86</b>

- 3.4.11 BEST submitted that average power purchase rate from alternate source in absence of power from MPL was at the rate lower than approved in the PPA.
- 3.4.12 BEST also submitted that, it had tied up capacity of 808.69 MW through long-term, & medium-term PPA. While BEST has peak load of 957.90 MW and base load of 392.96 MW only. Therefore, there was no adverse impact on actual power procurement.
- 3.4.13 Further, as directed by the Commission in its Order in Case No. 61 of 2021, BEST further submitted that presuming the medium-term power flow from MPL would have started at scheduled date of 1 April, 2019, the consequences would have been as follows.
- i. BEST could have got 744.60 MU at the rate of Rs 3.94/kWh from SWPGL/MPL.
  - ii. Since in FY 2019-20, FBSM mechanism was prevailing there would be no impact on power scheduling from TPC. Under FBSM, centralized Merit Order Dispatch (MoD) scheduling, TPC generating stations were scheduled by MSLDC irrespective of BEST's demand due to transmission constraint. Hence TPC-G power purchase cost would have remained the same.
  - iii. Even with power purchase from all sources, BEST was in shortfall by ~694 MU. SWPGL/MPL power could have been utilized to replace this shortfall. As per MYT Order for FY 2019-20, the rate of this pool energy is Rs 2.86/kWh (As approved in the MYT Order). This power of Rs. 2.86/kWh could have been replaced with medium term power of Rs 4.01/kWh (Discovered rate of Manikaran as per PPA). The final bills for actual pooled energy under FBSM are yet to be received by MSLDC.
- 3.4.14 After receipt of Order dated 17 October, 2019 from NCLT, MPL secured the Medium-Term Open Access and started supplying power from March, 2020. The summary of power purchase from MPL is given below:

**Table 9 : Power Procurement from Manikaran Power Limited for FY 2019-20, as submitted by BEST (Rs. Crore)**

Sr. No.	Particular	Energy Quantum	Energy Charges	Fixed Charges	Incentive Charges	Total Charges	Avg. Rate
		MU	Rs. Crore			Rs./kWh	
1	Manikaran Power Ltd.	64.21	12.84	12.52	0.10	25.46	3.97

### ***Commission's Analysis and Ruling***

3.4.15 The Commission in its Order dated 12 July, 2021 in Case No 61 of 2021 has condoned the delay in supply of power and revised the start date from 1 March, 2020. The relevant extract of the Order is as reproduced below for ready reference:

*“2. The Commission condones the delay for execution of Power Purchase Agreement and approves the continuation of power from Manikaran Power Limited to Brihanmumbai Electric Supply and Transport Undertaking and revises the start date as 1 March 2020.”*

3.4.16 The Commission observes that BEST has made additional submissions in respect of purchase from TPC-G and Imbalance Pool considering FBSM mechanism justifying the alternate source of power purchase due to delay from MPL. The Commission agrees with the fact that under FBSM Mechanism, centralized MoD was followed by MSLDC and even if power from MPL was available, TPC-G would have been scheduled considering the transmission constraints to bring power within Mumbai. Further, short term power purchase is also considered under MoD. As power purchase rate of alternate source, which is single part tariff, would be higher than variable cost of power from MPL, the power from MPL would have been scheduled by MSLDC. Accordingly, BEST would have ended up paying variable cost-plus fixed cost for such power purchase i.e., 3.96/kWh. The Commission notes that average short-term power procured during the month of April to June 2019 was at a rate above Rs. 3.96/kWh and hence BEST could have saved some expenses on power purchase during this month. But for remaining period of FY 2019-20, tariff for short term sources is much lower than MPL and hence on overall basis, BEST has saved power purchase expense. Thus, it can be concluded that considering the total cost of power purchase from alternate source, there is no adverse impact of power purchased from alternate source.

3.4.17 Further, in respect of comparison with imbalance pool made by BEST, the Commission is of the view such comparison is not correct. This is due to the fact that the Licensee is expected to plan and purchase power to meet its demand and not rely on imbalance pool as source of power. Any underdrawl/overdrawl in real time is settled through imbalance pool as per FBSM prevailing in FY 2019-20.

3.4.18 In view of the above, it is observed that power purchased from alternate sources due to delay in supply from MPL for the period April, 2019 to February, 2019 is at a lower rate of Rs 3.86/kWh than PPA rate of Rs 3.96/kWh. Accordingly, the Commission approves the power purchase from MPL for FY 2019-20 as given in Table below:

**Table 10: Summary of Power Purchase from MPL for FY 2019-20, as approved by the Commission**

Sr. No.	Particular	MTR Petition			Approved in this Order		
		Quantum	Total Cost	Avg. Rate	Quantum	Total Cost	Avg. Rate
		MU	Rs. Crore	Rs./kWh	MU	Rs. Crore	Rs./kWh
1	Manikaran Power Ltd.	64.21	25.46	3.97	64.21	25.46	3.97

**Renewable Power Purchase**

***BEST's Submission***

3.4.19 BEST has procured RE power of 91.20 MU through short-term and long-term PPA. The details of RE procurement is provided below:

**Table 11 : RE Power Purchased for FY 2019-20, as submitted by BEST (Rs. Crore)**

Particulars	Quantum	Energy Charges	OA Charges	Net Charges	RPS Rebate	Total Charges	Rate
		Rs. Cr.	Rs. Cr.	Rs. Cr.	Rs. Cr.	Rs. Cr.	Rs./kWh
Walwhan Solar Energy Maharashtra (Erstwhile Welspun)	32.25	26.96	-	26.96	(0.25)	26.72	8.28
Additional Power of March-2019		0.77	-	0.77	(0.68)	0.09	0.99
Greta	56.94	39.54	0.09	39.63	(0.07)	39.56	6.95
Lokmangal	2.02	1.42	0.05	1.48	(0.01)	1.46	7.26
REC-Solar	136.69	-	-	34.52	-	34.52	2.53
REC-Non-Solar	513.00	-	-	99.54	-	99.54	1.94
PXIL_REC GST of Prior period	-	-	-	0.09	-	0.09	
<b>Total</b>	<b>91.20</b>	<b>68.70</b>	<b>0.14</b>	<b>203.00</b>	<b>(1.01)</b>	<b>202.00</b>	

\*REC-Solar & Non-Solar quantum is excluded from total as those are certificates only.

\*\* Additional Power for March 2019 from Walwhan is 0.90 MU for which cost is considered in FY 2019-20

3.4.20 BEST submitted that it has long term PPA with Walwhan Solar MH Ltd (Erstwhile Welspun). Accordingly, BEST is procuring 31.50 MU of energy annually. Since Walwhan Solar MH Ltd. has PPA with BEST, they have offered additional 0.75 MU generated in month of March 2020 (totaling to 32.35 MU) to BEST and BEST has accepted the same in Order to avoid purchase of Solar REC and subsequently to reduce the cumulative shortfall of the Solar RPO. BEST has purchased additional solar energy generated in FY 2019-20 at discounted tariff i.e., Rs. 1.00 per unit based on mutual discussion with Walwhan Solar MH Ltd.

3.4.21 BEST submitted that, it has procured 0.90 MU on the same condition from Walwhan Solar MH Ltd for FY 2018-19. The quantum is already accounted in Truing-up of FY 2018-19 in MYT Order dated 30 March, 2020 in Case No. 324 of 2019. However, as Walwhan Solar MH Ltd. has raised bills of the same in FY 2019-20, the net cost of the same of Rs. 0.09 Crore is accounted in FY 2019-20. BEST requested the Commission to approve the same while approving Power Purchase Cost of FY 2019-

20.

- 3.4.22 Further, BEST submitted that it has purchased REC certificates of Rs. 134.06 Crore as against approved cost of Rs. 181.98 Crore in MYT Order by the Commission.
- 3.4.23 Hence, BEST requested the Commission to approve power purchase cost from RE source including RECs for FY 2019-20 as shown in above Table.

***Commission's Analysis and Ruling***

- 3.4.24 BEST, on the directions of the Commission, has submitted the source-wise RE purchase for FY 2019-20, separately indicating the quantum of purchase, landed cost, wheeling loss, wheeling charges and preferential Tariff approved by the Commission. The same has formed the basis for the approval of the power purchase cost from RE Sources for FY 2019-20 as elaborated in the subsequent paragraphs.
- 3.4.25 **Solar RE Purchase:** BEST has submitted that it meets the solar RE purchase obligation through a long-term power purchase agreement entered with M/s. Walwhan Solar MH Ltd for FY 2019-20. As per agreement, BEST procures entire solar power from 20 MW solar plant of M/s Walwhan Solar MH Ltd. During FY 2019-20, BEST has purchased 31.50 MU at rate of Rs. 8.56/kWh as approved in the PPA. Further, an additional power of 0.75 MU is purchased by BEST at discounted rate of Rs. 1.00/kWh from Walwhan Solar MH Ltd to avoid purchase of Solar REC and subsequently to reduce the cumulative shortfall of the Solar RPO. Also, BEST had procured 0.90 MUs on the same condition from Walwhan Solar MH Ltd for FY 2018-19 which was accounted for that respective period, but the cost of Rs. 0.09 Crore related to the same is accounted in FY 2019-20. The Commission has verified that past period due was not considered in FY 2018-19. Therefore, average cost of power purchase for 32.25 MU of solar power purchase from M/s Walwhan Solar MH Ltd is Rs. 8.28/kWh and the same is being considered by the Commission. The Commission directs BEST that the energy balance and the cost of the same needs to be accounted for in the same financial year and the approval of the Commission for considering the expense of FY 2018-19 in the FY 2019-20 shall not be taken as precedence in future.
- 3.4.26 **Non-Solar RE Purchase:** The total landed price at InSTS periphery for all non-solar RE purchases as submitted by BEST includes the Wheeling charge, short term open access charge and scheduling charge to wheel power to BEST's license area from non-solar RE projects connected to the MSEDCL network in Maharashtra. BEST has purchased the above non-solar RE Power at approved preferential Tariffs and the same has been verified by the Commission. The detail of the non-solar RE power purchase as approved by the Commission is given in the Table below:

**Table 12 : Details of Non-Solar RE purchases for FY 2019-20, as approved by the Commission (Rs. Crore)**

Name of RE Generator	RE Source	Quantum	Energy Charges	OA Charges	Total Charges	Rebate	Net Charges	Rate
		MU	Rs. Cr.	Rs. Cr.	Rs. Cr.	Rs. Cr.	Rs.Cr.	Rs./kWh
Greta Energy Ltd	Biomass	56.94	39.54	0.09	<b>39.63</b>	-0.07	<b>39.56</b>	6.95
Lokmangal Agro Ltd	Bagasse	2.02	1.42	0.05	<b>1.48</b>	-0.01	<b>1.46</b>	7.26

3.4.27 **REC Purchase:** The Commission in the MYT Order has allowed BEST to purchase RECs to meet the RPO target for FY 2019-20. To meet solar RPO of 3.50% for FY 2019-20, BEST has purchased 136.69 MU of solar REC at Rs 2.94/kWh and to meet non-solar RPO, BEST has also purchased 513 MU of non-solar REC at Rs 1.94/kWh. BEST has also submitted the documentary evidence regarding the number of RECs purchased and their cost. The Commission has verified the actual cost from the documentary evidence and considered the same as submitted by BEST.

3.4.28 The Commission in its Order dated 7 September, 2021 in Case No 50 of 2021 has already held that BEST has cumulatively met RPO till FY 2019-20 with marginal surplus as shown in the Table below:

**Table 13 : RPO Compliance for FY 2019-20, as submitted by BEST (MU)**

Sr. No.	Particular	Standalone Position for FY 2019-20	Cumulative Position till FY 2019-20
1	Solar RPO	0.85	(2.92)
2	Non-Solar RPO	(2.82)	(7.43)
3	Mini/Micro Hydro RPO	1.14	(13.15)

3.4.29 Accordingly, the Commission approves the RE purchase from solar and non-solar sources for FY 2019-20 as shown in Table below:

**Table 14: Power Purchase from RE Sources for FY 2019-20, as approved by the Commission**

Particulars	MYT Order			MTR Petition			Approved in this Order		
	Quantum	Cost	Rate	Quantum	Cost	Rate	Quantum	Cost	Rate
	MU	Rs. Cr	Rs./kWh	MU	Rs. Cr	Rs./kWh	MU	Rs. Cr	Rs./kWh
Walwhan Solar MH Ltd	31.50	26.96	8.56	32.25	26.96	8.36	32.25	26.96	8.36
Short Term Non-Solar	68.00	47.40	6.97	58.95	41.11	6.97	58.95	41.11	6.97
REC - Solar	144.41	39.16	2.71	136.69	34.52	2.53	136.69	34.52	2.53
REC - Non-Solar	504.65	142.82	2.83	513.00	99.54	1.94	513.00	99.54	1.94
Past Period RE related cost *					0.87			0.87	
<b>Total</b>	<b>748.56</b>	<b>256.34</b>	<b>3.42</b>	<b>740.89</b>	<b>203.00</b>	<b>2.74</b>	<b>740.89</b>	<b>203.00</b>	<b>2.73</b>

\*-Prior Period cost relates to power procured from Walwhan Solar MH Ltd

3.4.30 Accordingly, the Commission approves Rs. 202.14 Crore as the cost of power

purchased from RE sources (both Solar as well as non-Solar) for FY 2019-20.

### **Short Term Power Purchase**

#### ***BEST's Submission***

- 3.4.31 After considering the procurement from long term sources and renewable sources, BEST has met its balance power requirement through purchase of power from short term sources.
- 3.4.32 BEST has procured bilateral power from various power Traders/ Generators after inviting e-tender through DEEP e-portal, in line with Ministry of Power (MoP) guidelines on short term competitive bidding.
- 3.4.33 The details of Short-Term Power Procurement by BEST is given below:

**Table 15 : Short Term Power Procurement for FY 2019-20, as submitted by BEST (Rs. Crore)**

Sr. No.	Source	Quantum	Total Cost	Rates
		MU	Rs.Cr.	Rs./Kwh
1	PTC India Ltd.	32.06	16.02	5.00
2	JSW	72.41	42.12	5.82
3	Kreate Energy (I) Pvt. Ltd.	34.92	15.23	4.36
4	Dhariwal Infrastructure Ltd.	29.80	10.73	3.60
5	Adani Enterprises Ltd.	31.37	14.56	4.64
6	GMRETL	10.91	5.00	4.59
7	Net IEX Procurement	435.68	146.32	3.36
	<b>Total</b>	<b>647.15</b>	<b>249.98</b>	<b>3.86</b>

- 3.4.34 BEST submitted that, the average rate of bilateral power procurement is Rs. 3.86/kWh which is less than Average Power Purchase Cost of Rs. 4.88/kWh.
- 3.4.35 BEST further submitted that, actual bilateral power purchase of 647.15 MU is less than the approved bilateral power purchase of 1,418.50 MU. Hence, BEST requested the Commission to approve the bilateral power purchase.

#### ***Commission's Analysis and Ruling***

- 3.4.36 The Commission notes that during April 2019 to June 2019, BEST has procured bilateral power from various power traders/ Generators for FY 2019-20 after inviting e-tender through Ministry of Power's DEEP e-portal, in line with MoP guidelines for short term competitive bidding. Power is also purchased through Power Exchange to meet shortfall, if any. BEST submitted that short term power is purchased to meet its demand and also meet the shortfall due to non-availability of power from MPL.
- 3.4.37 The Commission in MYT Order had allowed ceiling tariff of Rs. 4/ kWh for FY 2019-20 for purchase of short-term power. BEST has procured short-term power at weighted average rate of Rs. 3.86/ kWh for FY 2019-20. The Commission has verified the copy of result of the e-bidding for the verification of the rate.

3.4.38 Considering the above, the cost of procurement from short term sources as approved by the Commission is summarised in the Table below:

**Table 16: Power Purchase from Short Term Sources for FY 2019-20, as approved by the Commission**

Particulars	MYT Order			MTR Petition			Approved in this Order		
	Quantum	Cost	Rate	Quantum	Cost	Rate	Quantum	Cost	Rate
	MU	Rs. Cr	Rs./kWh	MU	Rs. Cr	Rs./kWh	MU	Rs. Cr	Rs./kWh
Bilateral Power / Power Exchange	1,418.50	567.40	4.00	647.15	249.99	3.86	647.15	249.99	3.86

**Prior Period Payment & Other Costs**

***BEST's Submission***

3.4.39 BEST has made payment of Rs. 222.41 Crore towards prior payment charges. The details of the same is provided in below Table:

**Table 17 : Summary of Prior Period Payment and Other Costs for FY 2019-20, as submitted by BEST (Rs. Crore)**

Sr. No.	Particulars	Approved (Rs. Cr.)	Amount (Rs. Cr.)
1	Payment for stand-by energy purchase in FY 2016-17 & FY 2017-18	2.78	-
2	Prior period payments for pool imbalances of FY 2017-18 & FY 2018-19	77.30	1.61
3	Payment of 20% Bill Amount of Provisional Fixed Charge Bill (Rs.112.68 Crore) under Intra State ABT for the financial year 2011-12 to 2017-18		22.53
4	MSLDC_Payment of FBSM Bills (1307) of FY 2017-18		92.55
5	Payment of charges to MSLDC UI Account for paying same for the DSM bills issued by WRPC.		10.77
6	Refund of Provisional Bill amount collected towards payment of WRPC from MSPC UI Account		(5.48)
7	Stand-by Charges	102.64	102.64
8	Bilateral Rebate	-	(0.15)
9	Rebate of 1% on Transmission Charges	-	(2.06)
10	Rebate of 1% on monthly MSLDC Charges	-	(0.01)
	<b>Total</b>	<b>182.72</b>	<b>222.41</b>

3.4.40 BEST submitted that, it has made a payment of Rs. 22.53 Crore in December 2019 against the bill received dated 25 January 2019 towards 20% of Provisional Fixed Charge under Intra State ABT for FY 2011-12 to FY 2017-18 as per the Order in Case No. 297 of 2018.

3.4.41 BEST submitted that it has made payment of Rs. 92.55 Crore against FBSM Bills of FY 2017-18 received during FY 2019-20. Further, BEST submitted that the FBSM bill itself is generated to find the share of individual utility in regional UI payments for all the unscheduled energy exchanged by Maharashtra State with the regional pool, the due date for making payment is 15 to 25 days from the end of the week.

However, the liability share/contribution of individual SPP (State Pool Participant) can't be estimated without generation of FBSM bill. Since FBSM bill lags behind by around 2 years, an advance payment is being collected from Discoms in terms of WRPC DSM bill as per methodology decided in MSPC Sub-Committee meeting held on 22 February, 2019 at SLDC Kalwa, as and when a bill is raised by WRPC. Accordingly, BEST has made payment of Rs. 10.77 Crore against regional DSM bill issued in the first half of FY 2019-20.

- 3.4.42 BEST has paid stand-by charges of Rs. 102.64 Crore as approved by the Commission in its MYT Order.
- 3.4.43 The actual prior period payment was higher than the approved as payment made towards FBSM bills of FY 2017-18 which was received during FY 2019-20.

### ***Commission's Analysis and Ruling***

- 3.4.44 The Commission has noted the submissions of BEST. It is seen that actual costs are higher than those approved in the MYT Order for FY 2019-20. The Commission notes that at the time of MYT Order, the cost was allowed based on the submissions of BEST against estimated payments towards prior period expenses. However, in the present submission, BEST has provided details of the actual payments made against the FBSM settlements for the FY 2016-17, FY 2017-18 and FY 2018-19 which is at variance with the previous estimates. Further, BEST has also received rebates against timely payments made for bilateral power purchase, RE power purchase, transmission charges and SLDC charges paid during the year. The Commission has also reconciled the claim with Audited Accounts of BEST for FY 2019-20.
- 3.4.45 The total Stand-by Charges of Rs. 396 Crore payable to MSEDCL are recovered from Distribution Licensees availing the stand-by facility. In FY 2019-20, these charges were recoverable from TPC-D, AEML-D, BEST and Indian Railways. The charges are allocated between these Licensees in the ratio of their Base Transmission Capacity Rights (TCR) in the overall TCR.
- 3.4.46 Based on the above and the information available in the audited accounts, the Commission has accepted BEST's submissions in this regard and has approved the actual Stand-by Charges of Rs.102.64 Crore paid by BEST on Truing up for FY 2019-20. This is also in accordance with the relevant Order in respect of MSEDCL.
- 3.4.47 Accordingly, the Commission approves other charges of Rs. 222.41 Crore which also includes Stand-by charges for FY 2019-20 in line with BEST submission.

### **MSLDC Pool Imbalance and MSEDCL Standby Support Power**

#### ***BEST's Submission***

- 3.4.48 BEST submitted that it has overdrawn power (694.06 MU) from imbalance pool and MSEDCL standby support power (5.55 MU) i.e., total of 699.61 MU in FY 2019-20.



3.4.49 BEST further submitted that FBSM was prevailing in FY 2019-20 due to which centralized MoD was applicable for the entire State. This has resulted into backing down of units of TPC-G (which was the tied-up source of BEST) and power was made available for BEST from the state pool. Hence such a huge quantum of power is reflected under the Imbalance Pool. Further, FBSM bills lags behind by 2 years. Hence, the cost associated with the Pool Imbalance & Standby Support Power is not considered and shall be considered as and when bills are received and accounted for by the BEST in appropriate claims/ filing related to MYT Petition/FAC submission.

#### ***Commission's Analysis and Ruling***

3.4.50 The Commission notes that BEST has only considered quantum of imbalance pool and power purchased under standby arrangement from MSEDCL. The Cost is not considered as invoice is not raised either by MSLDC or MSEDCL for the said power. In view of the fact that cost was being accounted on cash basis by BEST, the Commission has considered only quantum of imbalance pool and power purchased under standby arrangement from MSEDCL as submitted by BEST for FY 2019-20.

3.4.51 However, the Commission notes that BEST has considered the cost towards imbalance pool quantum of FY 2019-20 in FY 2020-21 based on the invoice received from MSLDC in the said year. The Commission has thus considered the said cost while Truing-up of FY 2020-21 in the subsequent chapter of this Order.

#### **Intra-State Transmission Charges & MSLDC Charges**

##### ***BEST's Submission***

3.4.52 BEST submitted that, it has paid Transmission Charges of Rs. 224.88 Crore (i.e., Rs.18.71 Crore for 12 months + Rs.0.36 Crore) during FY 2019-20 as against Rs. 224.52 Crore approved in MYT Order. There is an increase of Rs. 0.36 Crore in Transmission Charges paid during FY 2019-20. This variation of Rs. 0.36 Crore was billed in the monthly bill for the month of February-2020 by STU as an additional Transmission charge for the use of InSTS in excess of Base TCR/Contracted Capacity as per the MYT Regulations, 2015.

3.4.53 BEST has also claimed MSLDC charges of Rs 1.13 Crore for FY 2019-20.

#### ***Commission's Analysis and Ruling***

3.4.54 The Commission has approved the Transmission Charges and MSLDC Charges based on the information available in the Audited Accounts and relevant Orders issued by the Commission. The Commission notes that amount of Rs 0.36 Crore claimed by BEST was directed to be refunded in Order dated 18 October, 2020 in Case No 52 of 2020. However, since BEST has paid the amount in FY 2019-20, it has considered the amount in FY 2019-20 and claimed refund in FY 2020-21 when the said amount was adjusted in Transmission Charges for the respective year. Accordingly, the actual Transmission Charges and MSLDC charges approved by the

Commission are Rs. 224.88 Crore and Rs. 1.13 Crore respectively for FY 2019-20.

**Summary of Power Purchase**

***BEST's Submission***

3.4.55 BEST has submitted the summary of Power Purchase Expenses for FY 2019-20 as shown in Table below:

**Table 18 : Summary of Power Purchase Expenses for FY 2019-20, as submitted by BEST (Rs. Crore)**

Particulars	MYT Order			MTR Petition		
	Quantum	Cost	Rate	Quantum	Cost	Rate
	MU	Rs. Crore	Rs./kWh	MU	Rs. Crore	Rs./kWh
<b>Long / Medium term Sources</b>						
TPC-G	3,521.45	1,529.59	4.34	3,446.56	1,489.18	4.32
Walwhan Solar MH Ltd	31.50	26.96	8.56	32.25	26.96	8.36
Manikaran Power Limited				64.21	25.46	3.97
<b>Short term Sources</b>						
Bilateral Power Purchase / Power Exchange	1,418.50	567.40	4.00	647.15	249.99	3.86
Standby support from MSEDCL				5.55	-	-
Imbalance Pool				694.06	-	-
Short Term Non-Solar Purchase	68.00	47.40	6.97	58.95	41.11	6.97
REC Procurement Solar	144.41	39.16	2.71	136.69	34.52	2.53
REC Procurement Non-Solar	504.65	142.82	2.83	513.00	99.54	1.94
<b>Other Charges</b>						
Payment for Standby in Energy Purchase In FY2016-17 & 2017-18		2.78				
Prior Period Payments for Pool Imbalances of FY2017-18 & 2018-19		77.30			1.61	
Payment of 20% Bill Amount of Provisional Fixed Charge Bill (Rs.112.68 Crore) under Intra State ABT for the financial year 2011-12 to 2017-18					22.53	
MSLDC_Payment of FBSM Bills (1307) of FY 2017-18					92.55	
Payment of charges to MSLDC UI Account for paying same for the DSM bills issued by WRPC.					10.77	
Refund of Provisional Bill amount collected towards payment of WRPC from MSPC UI Account					(5.48)	
Stand By Charges		102.64			102.64	
Rebate on Power Purchase and Transmission Charges					(3.23)	
Other Prior Period Charges					0.87	
Intra-State Transmission Charges		224.52			224.88	
MSLDC Charges		1.13			1.13	
<b>Total</b>	<b>5,039.45</b>	<b>2,761.69</b>	<b>5.48</b>	<b>4,948.73</b>	<b>2,415.04</b>	<b>4.88</b>

3.4.56 BEST has incurred Rs. 30.17 Crore for FY 2019-20 towards delay payment charges, however, BEST is not claiming delay payment charges as the same was not allowed by the Commission in the previous Orders for BEST.

**Commission's Analysis and Ruling**

3.4.57 The summary of power purchase quantum and expenses, including Stand-by Charges and Transmission Charges as approved by the Commission for FY 2019-20 after final Truing-up, is given in the following Table:

**Table 19: Power Purchase for FY 2019-20, as approved by the Commission (Rs. Crore)**

Particulars	MTR Petition			Approved in this Order		
	Quantum	Cost	Rate	Quantum	Cost	Rate
	MU	Rs. Crore	Rs./kWh	MU	Rs. Crore	Rs./kWh
<b>Long / Medium term Sources</b>						
TPC-G	3,446.56	1,489.18	4.32	3,446.56	1,489.18	4.32
Walwhan Solar MH Ltd	32.25	26.96	8.36	32.25	26.96	8.36
Manikaran Power Limited	64.21	25.46	3.97	64.21	25.46	3.97
<b>Short term Sources</b>						
Bilateral Power Purchase / Power Exchange	647.15	249.99	3.86	647.15	249.99	3.86
Standby support from MSEDCL	5.55	-	-	5.55	-	-
Imbalance Pool	694.06	-	-	693.99	-	-
Short Term Non-Solar Purchase	58.95	41.11	6.97	58.95	41.11	6.97
REC Procurement Solar	136.69	34.52	2.53	136.69	34.52	2.53
REC Procurement Non-Solar	513.00	99.54	1.94	513.00	99.54	1.94
<b>Other Charges</b>						
Payment for Standby in Energy Purchase In FY2016-17 & 2017-18						
Prior Period Payments for Pool Imbalances of FY2017-18 & 2018-19		1.61			1.61	
Payment of 20% Bill Amount of Provisional Fixed Charge Bill (Rs.112.68 Crore) under Intra State ABT for the financial year 2011-12 to 2017-18		22.53			22.53	
MSLDC_Payment of FBSM Bills (1307) of FY 2017-18		92.55			92.55	
Payment of charges to MSLDC UI Account for paying same for the DSM bills issued by WRPC.		10.77			10.77	
Refund of Provisional Bill amount collected towards payment of WRPC from MSPC UI Account		(5.48)			(5.48)	
Stand By Charges		102.64			102.64	
Rebate on Power Purchase and Transmission Charges		(3.23)			(3.23)	
Other Prior Period Charges		0.87			0.87	
Intra-State Transmission Charges		224.88			224.88	
MSLDC Charges		1.13			1.13	
<b>Total</b>	<b>4,948.73</b>	<b>2,415.04</b>	<b>4.88</b>	<b>4,948.66</b>	<b>2,415.04</b>	<b>4.88</b>

3.4.58 The Commission approves the total cost of power purchase of Rs. 2,415.04 Crore on final Truing up of ARR for FY 2019-20.

### 3.5 Operation and Maintenance Expenses

#### *BEST's Submission*

3.5.1 O&M Expenses consist of the following expenditure heads:

- Employee Expenses
- Administrative and General Expenses
- Repairs and Maintenance Expenses

3.5.2 BEST has made extensive efforts for reduction in Operation and Maintenance expenses and incurred lower expenses than the approved expenses in the MYT Order for FY 2019-20. The actual O&M expense of BEST vis-à-vis approved O&M expenses in the MYT Order are shown in Table below:

**Table 20 : Operation and Maintenance for FY 2019-20, as submitted by BEST (Rs. Crore)**

Particulars	MYT Order	April-March (Audited )
Employee Expenses	579.64	350.58
A& G Expenses		111.17
R&M Expenses		77.43
<b>Total Operation &amp; Maintenance Expenses</b>	<b>579.64</b>	<b>539.18</b>

3.5.3 While BEST has claimed O&M Expenses as per the Audited Annual Accounts, it has also computed the same as per the norms specified in the MYT Regulations, 2015 for the purpose of sharing of gains & losses. Accordingly, it has worked out the O&M Expenses separately for the Wires Business and Supply Business on a normative basis in accordance with Regulation 72.3 of the MYT Regulations, 2015 (1st Amendment).

3.5.4 The Commission in the MYT Order has noted that Office of the Economic Advisor has stopped publishing WPI 2004-05 data series since 2017. Hence, to calculate the WPI numbers for FY 2017-18 & FY 2018-19, the Commission has applied escalation rate of 2011-12 WPI data series on 2016-17 WPI numbers of 2004-05 data series. BEST has adopted same methodology to calculate FY 2019-20 WPI numbers.

3.5.5 As per MYT Regulations, 2015, the year-on-year variation of CPI and WPI, the inflation factor based on 30% of WPI inflation and 70% of CPI inflation from FY 2015-16 to FY 2019-20 has been computed and reduced by efficiency factor of 1%. The Escalation Factor net of efficiency factor works out to 3.22%, as shown in Table below:

**Table 21 : Operation and Maintenance for FY 2019-20, as submitted by BEST**

Year	WPI	Percentage Annual Change in WPI	CPI	Percentage Annual Change in CPI
FY 2014-15	181.19		250.83	
FY 2015-16	176.68	-2.49%	265.00	5.65%
FY 2016-17	183.20	3.69%	275.92	4.12%
FY 2017-18	188.55	2.92%	284.42	3.08%
FY 2018-19	196.62	4.28%	299.92	5.45%
FY 2019-20	199.92	1.68%	322.50	7.53%
Average from FY 2015-16-FY 2019-20		2.02%		5.17%
Weights		30%		70%
Escalation Factor			4.22%	
Efficiency Factor			1%	
Escalation Factor Net of Efficiency Factor			3.22%	

3.5.6 Normative O&M expense of FY 2019-20 is computed by applying escalation factor of 3.22% on approved normative O&M expense of FY 2018-19.

**Table 22 : Operation and Maintenance for FY 2019-20, as submitted by BEST (Rs. Crore)**

Particulars	MYT Order	MTR Petition
Normative O&M expenses of FY 2018-19 after applying escalation factor	562.40	562.40
Escalation Factor for FY 2019-20	3.07%	3.22%
Normative O&M expenses of FY 2019-20 after applying escalation factor	579.64	580.51

### Employee Expense

3.5.7 BEST submitted that it has incurred Rs. 350.58 Crore as employee expenses for FY 2019-20. The details of actual employee expense as per Audited Accounts of 2019-20 along with comparison of FY 2018-19 is given in the table below:

**Table 23 : Actual Employee Expenses for 2018-19 and FY 2019-20, as submitted by BEST (Rs. Crore)**

S. No.	Particulars	FY 2018-19	FY 2019-20
		Actual	Actual
1	Basic Salary	102.95	153.91
2	Dearness Allowance (DA)	127.32	106.58
3	House Rent Allowance	25.57	31.62
4	Conveyance Allowance	0.97	0.93
5	Leave Travel Allowance	3.29	2.97
6	Medical Allowance	4.14	3.95
7	Overtime Payment	11.21	10.00

S. No.	Particulars	FY 2018-19	FY 2019-20
		Actual	Actual
8	Bonus/Ex-Gratia Payments	0	5.93
9	Interim Relief / Wage Revision	0.49	0.01
10	Functional Allowance as per Agreement	8.36	7.42
11	Provident Fund Contribution	30.37	33.01
12	Gratuity Payment	40.86	40.22
<b>13</b>	<b>Gross Employee Expenses</b>	<b>355.53</b>	<b>396.55</b>
14	Less: Expenses towards Establishment of Allied departments	31.39	45.97
<b>15</b>	<b>Net Employee Expenses (including Wage Impact)</b>	<b>324.14</b>	<b>350.58</b>
16	Wage Revision Impact		36.03
<b>17</b>	<b>Net Employee Expenses (Excluding Wage Impact) for Sharing of Gains &amp; Losses</b>	<b>324.14</b>	<b>314.55</b>

3.5.8 BEST also submitted that BEST organization has some allied departments namely Consumer Advisory Services Dept., Telecommunications & Electronics Dept., Street Lighting Dept. & Electrical works Dept., which provide services to transport division as well as electricity supply business. Since, MCGM provides expenses towards street lightening department 100% cost towards employee expenses has been deducted. For other departments, only 45% employee cost of such departments have been considered for calculating employee expenses and 55% employee cost has been deducted from the total expenses.

3.5.9 BEST requested the Commission to approve employee expenses including wage revision impact for FY 2019-20 as shown in above Table.

#### A&G Expenses

3.5.10 The actual A&G Expense incurred by BEST as per Audited Accounts of FY 2019-20 are Rs. 111.17 Crore which are detailed in Table below along with previous year actual A&G expenses.

**Table 24 : Actual A&G Expenses for FY 2018-19 and 2019-20, as submitted by BEST (Rs. Crore)**

S. No.	Particulars	FY 2018-19	FY 2019-20
		Actual	Actual
1	Rent Rates & Taxes	6.43	7.50
2	Insurance	1.45	1.46
3	Telephone & Postage, etc.	4.87	5.29
4	Legal charges & Audit fee	0.98	1.41
5	Professional, Consultancy, Technical fee	0.33	0.37
6	Electricity charges	5.14	3.49
7	Security arrangements	12.20	8.77
8	Printing & Stationery	1.51	1.83
9	Advertisements	2.18	0.80

S. No.	Particulars	FY 2018-19	FY 2019-20
		Actual	Actual
10	License Fee and other related fee	0.91	0.78
11	Vehicle Running Expenses Truck / Delivery Van	6.88	8.82
12	Bank Charges	2.03	1.20
13	Miscellaneous Expenses	8.39	10.25
14	Share of General Administration Expenses	55.50	59.20
<b>15</b>	<b>Gross A &amp;G Expenses</b>	<b>108.80</b>	<b>111.17</b>
16	Less: Expenses Capitalised	-	-
<b>17</b>	<b>Net A &amp;G Expenses</b>	<b>108.80</b>	<b>111.17</b>

3.5.11 The actual audited A&G Expense for FY 2019-20 is Rs. 111.17 Crore which is marginally higher as compared to previous year. This is mainly due to the following:

- i. Rent, Rates & Taxes increased by Rs. 1.07 Crore mainly due to revision in property taxes by MCGM, to be levied on capital value.
- ii. Expenses incurred towards “Employees Deposit Linked Insurance Scheme i.e., EDLI” which resulted in insurance expenses of Rs. 1.46 Crore.
- iii. Vehicle Running expenses is increased by 1.94 Crore due to increase in fuel cost.
- iv. Share of G.A. increase by 3.70 Crore due to wage revision settlement arrived from October-2019 in case of employees of the general administration department.
- v. The Security expenses depend upon the placing of Security personnel according to the requirement of the supply department. In the year 2018-19, 31% of total Security personnel were posted. However, for 2019-20, 21% of total Security personnel were posted. This has resulted in the decrease in the cost of Security & Vigilance by Rs. 3.43 Crore.
- vi. The Advertisement expenses has decreased due to reduction in Tender invited through public advertisement for procurement/availing of goods and services & etc. This has resulted in the decrease in the cost of Advertisement expenses by Rs. 2.32 Crore.
- vii. The Miscellaneous expenditure increased due to additional expenditure towards printing ribbon/cartridge, Medical reimbursement to staff, charges for collection of bills etc.
- viii. Marginal increased in Telephone & Postage, Legal charges & Audit fees & other cost.

3.5.12 The break-up of other Miscellaneous expenses is shown in table below:

**Table 25 : Break-up of Misc. Expenses for FY 2019-20, as submitted by BEST (Rs. Crore)**

S. No.	Particulars	FY 2018-19	FY 2019-20
		Actual	Actual
1	Clothing	0.57	1.12
2	Accident Compensation to Staff	0.02	0.11
3	Consumer Advisory Services	-	-
4	Miscellaneous and General Expenses	8.46	10.25
5	Motor Vehicle and third party insurance fund	-	0.01
6	Free issue of Petrol to officers	0.63	0.59
7	Provision for Obsolescence of Stores	0.04	0.04
	<b>Total</b>	<b>9.72</b>	<b>12.12</b>
8	Less - Other Cost towards allied department expenses	1.33	1.87
	<b>Total</b>	<b>8.39</b>	<b>10.25</b>

### Share of General Administration Expenses

3.5.13 BEST has considered the allocation of the general administration expenses between Electric Supply & Transport Division based on the number of employees deployed in respective division. The percentage of the allocation considered based on the actual employees for major departments for FY 2019-20 is as under:

**Table 26 : Allocation of General and Administration between Electricity Supply and Transport for FY 2019-20, as submitted by BEST (Rs. Crore)**

Particulars	FY 2019-20	
	Transport	Supply
Security & Vigilance	79%	21%
Civil Engineering Department	55%	45%
Time Keeping, Personnel, Welfare, Medical, etc	80%	20%
EDP Department	50%	50%
Legal, Audit, Account, Cash, Secretarial, PRO, etc	50%	50%

3.5.14 BEST submitted that it has provided details of electricity supply division's expenses from the total General Administration Expenses for FY 2019-20 in below table:

**Table 27 : Details of allocation of General Administration expenses to Supply Division, as submitted by BEST (Rs. Crore)**

Particulars	Actual
Establishment Cost	40.27
Administration and General Expenses	16.01
Repair & Maintenance Work	10.09
Other cost including depreciation	1.60
<b>Sub-Total</b>	<b>67.97</b>
Less: Security Expenses	8.77
<b>Net Share of General Administration</b>	<b>59.20</b>



3.5.15 Security Expenses has been deducted from Share of General Expenses as those are considered separately in A&G Expenses.

3.5.16 BEST requested the Commission to approve A&G Expenses for FY 2019-20 as shown in above table.

### **R & M Expenses**

3.5.17 The details of actual R&M expense incurred by BEST is shown below:

**Table 28 : Actual R&M Expenses for FY 2019-20, as submitted by BEST (Rs. Crore)**

S. No.	Particulars	FY 2018-19	FY 2019-20
		Actual	Actual
1	Plant & Machinery	5.75	8.96
2	Buildings	-	0.03
3	Civil Works	31.64	37.45
4	Hydraulic Works	-	-
5	Lines & Cable Networks	21.03	22.01
6	Vehicles	-	-
7	Furniture & Fixtures	0.25	0.12
8	Office Equipment	3.03	4.65
9	Meter & Equipment	4.29	4.21
10	<b>Gross R&amp;M Expenses</b>	<b>65.99</b>	<b>77.43</b>
11	Less: R&M Expenses Capitalised		-
12	<b>Net R&amp;M Expenses</b>	<b>65.99</b>	<b>77.43</b>

3.5.18 BEST submitted that actual R&M expenses has increased from Rs. 65.99 Crore as approved in True-up for FY 2018-19 to Rs.77.43 Crore. The increase is mainly attributed to increase in Civil Works by Rs. 5.81 Crore & Lines & Cable Network by Rs.0.98 Crore.

3.5.19 BEST requested the Commission to approve R&M Expenses for FY 2019-20 as shown in above table.

3.5.20 Further, BEST requested the Commission to approve O&M Expenses of Rs. 539.18 Crore for FY 2019-20 subject to further sharing of efficiency gains/ (losses) as per MYT Regulations 2015.

### ***Commission's Analysis and Ruling***

3.5.21 In the MYT Order, the Commission had approved normative O&M Expenses for FY 2019-20 in accordance with the provisions of the MYT Regulations, 2015 and its amendments.

3.5.22 **Calculation of Escalation Factor:** The Commission had notified the MYT (First Amendment) Regulations, 2017 on 29 November, 2017 outlining certain changes to the methodology for computation of normative O&M expenses. The Commission has analysed the methodology submitted by BEST for computation of Escalation Factor and notes that it is as per provisions of MYT Regulations, 2015 and its amendment.

By applying 30% and 70% weightage to WPI and CPI respectively for FY 2019-20, the escalation rate works out to 4.22%. For calculating the O&M expenses for FY 2019-20, the Commission has applied the efficiency factor of 1% to the escalation rate of 4.22% to arrive at the escalation factor of 3.22%. The calculation of the escalation factor is outlined in the following table:

**Table 29: Escalation factor for O&M Expenses for FY 2019-20, as approved by the Commission**

Year	WPI	WPI Inflation	CPI	CPI Inflation
FY 2014-15	181.19		250.83	
FY 2015-16	176.73	-2.46%	265.00	5.65%
FY 2016-17	183.16	3.64%	275.92	4.12%
FY 2017-18	188.51	2.92%	284.42	3.08%
FY 2018-19	196.57	4.28%	299.92	5.45%
FY 2019-20	199.86	1.67%	322.50	7.53%
<b>Average from FY 2015-16 to FY 2019-20</b>		<b>2.01%</b>		<b>5.17%</b>
Weight		30%		70%
<b>Escalation Factor</b>	<b>4.22%</b>			
Less: Efficiency Factor	1.00%			
<b>Escalation Factor net of efficiency factor</b>	<b>3.22%</b>			

3.5.23 The Commission is of the view that since the escalation factor originally considered in the MYT Order was based on WPI of 2004-05 series, the escalation factor to be applied at the time of Truing-up should also be based on WPI of 2004-05 series. However, from FY 2017-18, WPI based on 2004-05 series is no longer published and has been replaced by WPI based on 2011-12 series. Hence, the Commission has modified the WPI based on 2011-12 series for FY 2017-18 and FY 2018-19 to appropriately reflect WPI based on 2004-05 series so as to maintain consistency for comparison of approved numbers vis-à-vis Truing-up.

3.5.24 The Commission has considered the O&M expenses approved in the Truing-up for FY 2018-19 as base O&M expenses for arriving at normative O&M expenses for FY 2019-20. The Commission has computed the normative O&M Expenses for FY 2019-20 by applying an escalation factor of 3.22% to base O&M expenses. As per the provisions of the MYT Regulations, 2015, the MYT (First Amendment) Regulations, 2017 and above escalation factor, the Commission has approved the revised normative O&M expenses as shown in the Table below:

**Table 30: Revised Normative O&M Expenses for FY 2019-20, as approved by the Commission. (Rs. Crore)**

Particulars	MYT Order	MTR Petition	Approved in this Order
Normative O&M expenses of FY 2018-19 after applying escalation factor	562.40	562.40	562.40
Escalation Factor for FY 2019-20	3.07%	3.22%	3.22%
Normative O&M expenses of FY 2019-20 after applying escalation factor	579.64	580.51	580.50

3.5.25 The Commission notes that the actual employee expenses excluding wage revision of FY 2019-20 are lower than previous year. In response to the data gaps raised by the Commission in respect of impact of wage revision on various heads of employee expenses, BEST submitted that basic pay has increased by Rs 50.96 Crore is mainly on account of Wage revision for FY 2016-17 to FY 2020-21 for individual employee in their respective grade w.e.f. September, 2019. This has also resulted in increase of overtime payment. Further, Dearness Allowance (DA) is merged with the Basic pay as per the Wage revision and revised percentage of DA is very lesser compared to earlier wage revision which resulted into the dearness allowances decreased by Rs 20.77 Crore.

3.5.26 BEST also submitted that MoU has been signed between Union & management for wage revision for the period of FY 2016-17 to FY 2020-21. The same was approved & implemented from September, 2019 in case of employees and from October, 2020 in case of officer and the same is continued in FY 2020-21 also. The actual employee expense which also includes wage revision impact is as mentioned below:

**Table 31 : Impact of wage revision in total employee expenses for FY 2019-20, as submitted by BEST (Rs. Crore)**

Sr. No.	Particulars	Amount
1	Net Employee expenses excluding Wage impact	<b>314.55</b>
2	Impact of Wage Revision Agreement	
a	Basic Salary	50.96
b	Dearness Allowance	(20.77)
c	House Rent Allowance	6.05
d	Leave Travel Allowance	(0.32)
e	Leave Encashment	(0.49)
f	Medical Allowances	(0.19)
g	Overtime Payment	(1.21)
h	Provident Fund	2.64
i	Gratuity	(0.64)
	<b>Total Impact of Wage Revision Agreement</b>	<b>36.03</b>
3	<b>Gross Employee expenses including impact of wage agreement</b>	<b>350.58</b>

3.5.27 With respect to A&G expenses, the following justification was provided for variation in the various component of A&G Expenses:

- In FY 2018-19, 31% of total Security personnel were posted but in FY 2019-20, 21% of total Security personnel were posted, resulted in the decrease in the cost of Security & Vigilance by Rs. 3.43 Crore.
- The Advertisement expenses has decreased due to reduction in Tender invited through public advertisement for procurement/availing of goods and services, resulted in the decrease in the cost of Advertisement expenses by Rs. 2.32 Crore.

- BEST has incurred insurance expenses incurred towards “Employees Deposit Linked Insurance Scheme i.e., EDLI” which resulted in insurance expenses of Rs. 1.46 Crore.
- Also, the heads under Miscellaneous expenses are medical reimbursement to staff, Printing cartridge/material, Employers Contribution to ESIC, Contribution to best staff amenities fund, charges for collection of bills, fees to forum members, MERC fees and charges, Lease rent of DSS, websites maintenance, deputation/training expenses, reward to employees, travelling, tea charges etc. The cost of Miscellaneous Expenses has increased due to increase in hike in website maintenance charges, increase in the cost of Printing cartridge/material due to inflation and other similar expenses.

3.5.28 In relation to increase in R&M expense, BEST in response to data gaps raised by the Commission submitted that expenditure on this account is increased due to increase in the Civil work due to increased excavation undertaken for repairing underground cable faults occurring during the year as well as increase in the Lines & Cable Network. In addition to this, R&M expenses related to Plant & Machinery is increased by Rs.3.21 Crore and expenses related to Office Equipment is increased by Rs.1.62 Crore due to increase in cost of material required for Receiving / Sub-station and increase in repair and maintenance cost of Office Equipment

3.5.29 To observe improvement in efficiency of BEST, the Commission has worked out ratio of O&M Cost per kWh. O&M Cost per kWh for last five audited years is as under

**Table 32: Actual O&M Expenses / kWh for FY 2015-16 to FY 2019-20**

Particulars	Unit	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
Actual O&M Expenses	Rs. Crore	573.92	533.14	494.82	498.93	503.15 (Excluding Wage Revision)
Sales	MU	4576.6	4402.96	4544.19	4572.01	4569.34
O&M Cost per unit	Rs./kWh	1.25	1.21	1.09	1.09	1.10

3.5.30 The Commission has noted the improvement in O&M Cost in FY 2019-20 in comparison to FY 2015-16 and FY 2016-17. The Commission has verified the same from audited annual accounts of FY 2019-20 and approves the actual O&M expenses as sought by BEST and specified in the Table below:

**Table 33: O&M expenses for FY 2019-20, approved by Commission (Rs. Crore)**

Particulars	MTR Petition		Approved in this Order	
	Normative	Actual	Normative	Actual
Employee Expenses	<b>580.51</b>	314.55	<b>580.50</b>	314.55
A&G Expenses		111.17		111.17
R&M Expenses		77.43		77.43
<b>Base Actual O&amp;M Expense</b>		<b>503.15</b>		<b>503.15</b>

Particulars	MTR Petition		Approved in this Order	
	Normative	Actual	Normative	Actual
Wage Revision		36.03		36.03
<b>Total O&amp;M Expenses</b>		<b>539.18</b>		<b>539.18</b>
<b>Wire Business</b>	377.33	350.47	377.33	350.47
<b>Supply Business</b>	203.18	188.71	203.18	188.71

3.5.31 The Commission has also undertaken computation of sharing of efficiency losses/gains arising from the difference between the actual and the normative O&M expenses as approved above, considering the O&M expenses as controllable, in accordance with the MYT Regulations, 2015, the same is discussed subsequently in this Order.

### 3.6 Capital Expenditure and Capitalisation

#### *BEST's Submission*

3.6.1 BEST has submitted that the Commission has approved capital expenditure of Rs. 179.72 Crore for FY 2019-20 in MYT Order which included expenditure towards unplanned capital expenditure. BEST has incurred total capital expenditure of Rs. 233.92 Crore in FY 2019-20. Break-up of the same is as follows:

**Table 34 : Break-up of Capital Expenditure for FY 2019-20, as submitted by BEST (Rs. Crore)**

Sr. No	Particulars	Approved in MYT Order	Actual
1	Capital Expenditure		233.92
2	Capitalisation		243.46
3	IDC		-
4	Capitalisation + IDC	179.72	243.46

3.6.2 BEST has incurred capital expenditure for creating sufficient redundancy in the network to give reliable and quality power to consumers, for meeting universal supply obligation and future demand in the area of supply and also for introducing IT/Automation to give better service and meet the standard of performance obligations as stipulated in the MYT Regulations, 2015.

3.6.3 BEST submitted that capitalization approved in MYT Order was lower in view of the fact that DPR Schemes pertaining to “Revamping of RSS” and “Energy Meters” were not considered at the time of issuance of MYT Order. BEST has also provided justification for capitalization of various schemes during FY 2019-20.

3.6.4 Also, capitalization towards streetlight has increased drastically (increase of Rs. 53.81 Cr.) due to replacement of streetlights with LED lights. However, BEST has received grant for capitalization towards streetlight, hence, there is no effect of the higher capitalization of streetlight on the tariff.

- 3.6.5 BEST also submitted that in the MYT Order, the Commission has disallowed the part capitalization towards civil works as the said DPR can't be put to use in isolation of Rs. 3.28 Cr in FY 2018-19 and shifted in FY 2019-20. However, the same is not yet capitalized but was inadvertently capitalized in books of accounts and the same is rectified in the MTR Petition.
- 3.6.6 Further, BEST claimed that it has received a capital connection fee, Grant for IPDS & MCGM amounting to Rs. 101.81 Crore The same is deducted while calculating normative loan and equity.

### ***Commission's Analysis and Ruling***

- 3.6.7 The Commission has examined the actual capitalisation claimed for FY 2019-20 against the capital expenditure schemes approved in principle. BEST has claimed capitalization including IDC of Rs. 163.91 Crore for FY 2019-20 which pertains to the following major DPR schemes:
- Revamping of Existing RSS
  - New DSS and augmentation and alteration to existing DSS
  - Extension of distribution network
  - IPDS
  - Energy meters
- 3.6.8 Capitalization of non-DPR schemes has been proposed as Rs. 61.62 Crore for FY 2019-20.
- 3.6.9 In response to query raised by the Commission in relation to difference in capitalisation shown in the audited accounts i.e., Rs. 246.48 Crore (Rs. 246.22 Crore of Electricity Supply Business & Rs. 0.26 Crore of General Administration Business) and Rs. 243.46 Crore considered in the Petition, BEST submitted that since the General Administration is common for both the businesses i.e., Electric Supply and Transport, according to past practice, 50% of General Administration capitalisation is claimed along with the Electric Supply Business (Rs 0.26 Crore instead of Rs 0.52 Crore considered in Audited Accounts). Additionally, BEST confirmed that civil work of Rs. 3.02 Crore capitalised in the books of accounts is not claimed for capitalization and hence the same is not added in FY 2019-20.
- 3.6.10 Approved DPR Cost for Extension of Distribution Network is Rs 152.25 Crore. BEST has claimed cumulative capitalization up to FY 2019-20 of Rs. 193.56 Crore. The Commission notes that the Cost Overrun is primarily due to increased length of laying of HV / LV cables and higher number of installations of Distribution Pillars than approved in the DPR. Accordingly, the Commission has allowed excess capitalization for the said DPR scheme and approves the capitalisation considered by BEST for the said scheme for FY 2019-20

- 3.6.11 The Commission while scrutinizing DPR of “Revamping of existing RSS” observed that BEST has considered capitalization of Rs 4.37 Crore towards expenditure incurred on installation & commissioning of 33kV additional GIS Bus Section at 110 kV DBA RSS and was wrongly included in the DPR for “Revamping of existing RSS”. Accordingly, the Commission has disallowed the said cost from the capitalization of the said scheme.
- 3.6.12 The capitalisation of Rs. 177.47 Crore towards DPR schemes approved in principle by the Commission has been accepted, as the work executed is in accordance with the approved Scope of Work.
- 3.6.13 The Commission notes that Non-DPR expenditure for FY 2019-20 is Rs 61.62 Crore, which is higher than 20% of approved DPR Schemes. However, the said Non-DPR schemes also includes capitalization towards street light of Rs. 56.06 Crore due to replacement of streetlights with LED lights. BEST has received grant for capitalization towards streetlight and thus there is no effect of the higher capitalization of streetlight. If the said amount is excluded from the capitalization of non-DPR, the balance amount of Rs 5.56 Crore towards Non-DPR Schemes is within limit of 20%. Accordingly, the capitalisation against non-DPR schemes is accepted as per the provisions of the MYT Regulations, 2015.
- 3.6.14 Accordingly, for the Truing-up of FY 2019-20, the Commission has approved capitalisation of Rs. 239.09 Crore as shown in the following Table:

**Table 35: Capitalisation in FY 2019-20, as approved by the Commission (Rs. Crore)**

Particulars	MYT Order	MTR Petition	Approved in this Order	Wire Business	Retail Supply Business
DPR – Approved	166.35	181.84	177.47	159.54	17.93
Additional Capitalisation	3.28				
Non-DPR	10.09	61.62	61.62	61.62	-
<b>Total Capitalisation</b>	<b>179.72</b>	<b>243.46</b>	<b>239.09</b>	<b>221.16</b>	<b>17.93</b>

- 3.6.15 The Commission approves Capitalisation including IDC of Rs. 239.09 Crore for final Truing up of FY 2019-20.

### **3.7 Funding of Capitalization**

#### ***BEST’s Submission***

- 3.7.1 BEST submitted that in FY 2019-20, opening CWIP was Rs.15.84 Crore and it has incurred CAPEX of Rs. 233.92 Crore. BEST has capitalized Rs 243.46 Crore in FY 2019-20 and Rs. 6.30 Crore remain as closing CWIP. IDC considered for FY 2019-20 is ‘Nil’.
- 3.7.2 BEST has submitted that it has considered the normative debt: equity ratio of 70:30



for funding of the capital expenditure schemes after deducting the funding from capital connection fee and Government Grants.

- 3.7.3 BEST submitted that, it has received Capital Connection Fee of Rs. 7.76 Crore, grant for IPDS Project of Rs. 37.99 Crore in FY 2019-20 and grant from MCGM for street lighting capital expenses. BEST has computed loan and equity portion after reducing all such grants and capital connection fee from total capitalization.
- 3.7.4 The details of the funding of the capitalisation as provided by BEST are given in the Table below:

**Table 36 : Details of funding of Capitalisation for FY 2019-20, as submitted by BEST (Rs. Crore)**

Particulars	MTR Petition
Capital Connection Fee	7.76
Grants for IPDS Scheme	37.99
Grants for Street Light	56.06
Loan - 70%	99.16
Equity - 30%	42.50
<b>Total of Capitalisation</b>	<b>243.46</b>

***Commission's Analysis and Ruling***

- 3.7.5 The Commission has approved capitalization of Rs. 239.09 Crore for FY 2019-20. The Commission has verified the funding available from the consumer contribution and grants from the Audited Accounts for FY 2019-20. The remaining funding has been done through loans and equity infusion by BEST. Accordingly, for funding of capitalization, the Commission has considered the normative debt: equity ratio of 70:30 in accordance with Regulation 30 of the MYT Regulations, 2015 after deducting the capital connection fee and grants received by BEST.
- 3.7.6 Accordingly, the sources of capitalisation considered by the Commission for Truing-up of FY 2019-20 is as shown in Table below:

**Table 37: Details of funding of Capitalisation for FY 2019-20, as approved by the Commission (Rs. Crore)**

Particulars	MYT Order	MTR Petition	Approved in this Order
Capital Connection Fee	10.69	7.76	7.76
Grants for IPDS Scheme	40.24	37.99	37.99
Grants for Street Light		56.06	56.06
Loan - 70%	90.15	99.16	96.10
Equity - 30%	38.64	42.50	41.18
<b>Total of Capitalisation</b>	<b>179.72</b>	<b>243.46</b>	<b>239.09</b>



3.7.7 The Commission approves the funding of the Capitalisation at Rs. 7.76 Crore out of Consumer Contribution, Rs. 37.99 Crore through Grants from IPDS scheme, Rs. 56.06 Crore through Grants for Street Light, Rs. 96.10 Crore through loan and Rs. 41.18 Crore through equity on final Truing up of ARR for FY 2019-20.

### 3.8 Depreciation

#### ***BEST's Submission***

3.8.1 The opening GFA for FY 2019-20 is Rs. 2614.33 Crore as per 'schedule of fixed assets' given in Audited accounts of FY 2019-20 for electricity supply division. Closing regulatory GFA of FY 2018-19 is considered as opening GFA of FY 2019-20.

3.8.2 BEST submitted that it has incurred depreciation expense of Rs. 100.68 Crore in FY 2019-20 towards electric supply division as per audited accounts of FY 2019-20. Depreciation of Rs. 1.60 Crore towards depreciation in General Administrative Department as per audited accounts of FY 2019-20 is already added in general administrative expenses in A&G expenses, hence not claimed here. For truing-up, BEST has calculated depreciation using average depreciation rate of 3.69% in FY 2019-20. Depreciation rate is arrived by dividing depreciation as per audited accounts by average of opening and closing GFA as per accounts. The approach adopted by BEST for the claim of depreciation is in line with previous submissions and approval of the Commission in the relevant Orders.

3.8.3 Average depreciation rate arrived above is applied on average of opening of regulatory GFA and closing of regulatory GFA submitted by BEST for approval of the Commission.

**Table 38 : Depreciation for FY 2019-20, as submitted by BEST (Rs. Crore)**

<b>Particulars</b>	<b>Actual</b>
Audited Opening GFA	2,614.33
Audited Closing GFA	2,841.23
Average Audited GFA	<b>2,727.78</b>
Audited Depreciation	100.68
Average Depreciation on Average audited GFA	3.69%
Average Regulatory GFA	2,710.05
<b>Depreciation</b>	<b>100.03</b>

3.8.4 BEST therefore requested the Commission to approve the depreciation for FY 2019-20 as submitted in table above.

#### ***Commission's Analysis and Ruling***

3.8.5 The Commission notes that BEST has not considered depreciation for the assets funded through grants. BEST has computed the average rate of depreciation considering such depreciation which excludes assets funded through Grants.

However, such assets funded by Grants are included in the GFA.

- 3.8.6 The Commission has computed the depreciation in accordance with Regulation 27 of the MYT Regulations, 2015. Accordingly, the Commission has considered the opening GFA of Rs. 2,598.11 Crore for FY 2019-20 same as closing GFA approved for FY 2018-19 in the MYT Order.
- 3.8.7 Addition in GFA is considered equal to capitalization approved by the Commission during FY 2019-20. As regards asset retirement, the Commission has accepted the submission of BEST which is as per Audited Accounts. Based on the approved opening GFA, asset addition and asset retirement, the Commission has approved the closing GFA for FY 2019-20.
- 3.8.8 The Commission has considered actual depreciation rate of FY 2019-20 as per Audited Annual Accounts of the BEST and applied the same on the regulatory GFA. The Commission has noted that regulatory GFA includes assets funded through consumer contribution and grants, however, depreciation is not allowed on the assets funded by consumer contribution and grants. The Commission has examined the depreciation working of the BEST and observed that BEST, in line with its submission, is also not calculating depreciation on assets funded by consumer contribution and grants in line with the provisions of the MYT Regulations, 2015.
- 3.8.9 The summary of depreciation expense for FY 2019-20 as submitted by BEST and as approved by the Commission is as given in the Table below:

**Table 39: Depreciation for FY 2019-20, as approved by the Commission (Rs. Crore)**

Particulars	MYT Order	MTR Petition	Approved in this Order
Opening GFA	2598.11	2,598.11	2,598.11
Capitalisation with IDC	179.72	243.46	239.09
Retirement	39.51	19.58	19.58
<b>Closing GFA</b>	<b>2,738.32</b>	<b>2,821.99</b>	<b>2,817.62</b>
Average GFA	<b>2,668.22</b>	<b>2,710.05</b>	<b>2,707.87</b>
Depreciation Rate	4.07%	3.69%	3.69%
<b>Depreciation</b>	<b>108.72</b>	<b>100.03</b>	<b>99.94</b>

- 3.8.10 The Commission approves depreciation of Rs. 99.94 Crore on final Truing up of ARR for FY 2019-20.

### **3.9 Interest on Long Term Loan**

#### ***BEST's Submission***

- 3.9.1 The actual interest expenses incurred by BEST in FY 2019-20 is as shown in Table below:

**Table 40 : Detail of Actual Interest Expenses for FY 2019-20, as submitted by BEST (Rs. Crore)**

Sr.	Particulars	Op. Bal	Addition	Repayment	Cl. Bal	Interest
1	APDRP Loan	13.40	-	2.22	11.19	1.28
2	REC	395.32	-	39.53	355.79	39.95
	<b>Total</b>	<b>408.72</b>	<b>-</b>	<b>41.75</b>	<b>366.97</b>	<b>41.24</b>

3.9.2 BEST has taken loan from REC in four tranches under National Electricity Fund (NEF) for keeping AT&C losses under 8%.

1. Tranche 1: BEST submitted a claim of Rs. 167.45 Crore for the FY 2013-14 & 2014-15 against which REC released Rs.134.09 Crore @11.75% interest.
2. Tranche 2: BEST submitted a claim of Rs. 83.11 Crore for the FY2015-16 against which REC released the amount of Rs.105.98 Crore including the balance amount of earlier year contribution @10.75% interest.
3. Tranche 3: BEST submitted a claim of Rs.115.54 Crore for the FY 2016-17 against which REC released the amount of Rs.80.88 Crore @10.50% interest.
4. Tranche 4: BEST has submitted a claim of 74.36 Crore for the FY 2017-18 against which REC released the amount of Rs.74.36 Crore @ 10.75% interest.

3.9.3 BEST submitted that out of total outstanding Term Financial Assistance, Rs. 41.75 Crore was paid in FY 2019-20 & interest paid was of Rs. 41.24 Crore.

3.9.4 BEST also submitted that it has computed the interest on long term loan as per Regulation 29 of the MYT Regulations, 2015. The weighted average interest rates are computed on the basis of average loan and actual interest paid.

3.9.5 BEST has considered the opening balance of net normative loan for the FY 2019-20 as 'Nil'.

3.9.6 The normative interest expenses computed in Table below is lower than the actual interest expenses incurred by BEST in FY 2019-20. The computation of interest expenses is submitted as under:

**Table 41 : Detail of Normative Interest on loan for FY 2019-20, as submitted by BEST (Rs. Crore)**

Particulars	MYT Order	Actual
Opening Balance of Normative Loan	-	-
Less: Reduction of Normative Loan due retirement or replacement of assets	27.66	13.71
Loan Drawl during the year	90.15	99.16
Loan Repayment during the year	62.50	85.45
Closing Balance of Normative Loan	-	-
Average Balance of Normative Loan	-	-
Applicable Interest Rate (%)	11.27%	10.63%

Particulars	MYT Order	Actual
<b>Interest Expenses</b>	-	-

- 3.9.7 BEST submitted that, in FY 2019-20, from the total capitalization of Rs. 243.36 Crore, BEST has received a grant of Rs. 101.81 Crore Hence, the addition of normative loan is very low. On the other hand, depreciation is calculated over total regulated GFA (excluding depreciation on Grant component) and hence, the same is comparatively high compared to total addition of normative loan during the year. This has resulted to zero requirement of interest on loan capital.
- 3.9.8 Further, BEST submitted that it has to adhere to the stipulated provisions of MMC Act, 1888 for raising of any long-term loan and BEST has to follow the provisions of Section 106 and procedure laid down under the said Act, wherein approval of the Government of Maharashtra is absolutely necessary. The same needs significant time for overall application and approval process. Therefore, BEST has found it difficult to raise new long-term loan in recent past.
- 3.9.9 In actuals, BEST has paid Rs. 41.23 Crore towards interest on loan. Hence, approving a normative interest on loan as per regulations would hamper the BEST's financial position adversely. Hence BEST requested the Commission to consider allowing interest on actual basis rather than normative basis. BEST also requested to the Commission to exercise its powers available under Regulation 102 of the MYT Regulations, 2015 and Regulation 96 of earlier Conduct of Business Regulations 2004 which is now replaced by Regulation 46(a) of MERC (Transaction of Business and Fees and Charges) Regulations, 2022 and may kindly allow interest on loan on actual basis.

### ***Commission's Analysis and Ruling***

- 3.9.10 For Truing up, the Commission has computed the interest on loan capital in accordance with Regulation 29 of the MYT Regulation, 2015. For computation of interest on loan capital, the Commission has considered the opening balance of net normative loan of FY 2019-20 as Nil, which is same as approved closing balance of loan for FY 2018-19.
- 3.9.11 The addition in normative loan has been considered equal to the debt component of approved asset addition during the year. The repayments are considered equal to depreciation allowed during the year. The weighted average interest rate is to be worked out as per proviso of Regulation 29.5 of the MYT Regulations, 2015. Same is quoted as follows:

*“Provided that at the time of Truing-up, the weighted average rate of interest computed on the basis of the actual loan portfolio during the concerned year shall be considered as the rate of interest”*

- 3.9.12 The Commission has considered the rate equal to the weighted average interest rate

of actual loans during the year, as per the provisions of the MYT Regulations, 2015. For computing the weighted average interest rate, the Commission has considered the average of the opening and closing balances of the loan and the actual interest paid during the year based on the documentary evidence submitted by BEST and also available in the Audited Accounts to calculate the weighted average interest rate to be considered for computation of the interest on normative long term loans. Based on the above, actual weighted interest rate works out to 10.63% for FY 2019-20.

- 3.9.13 Further, BEST has requested the Commission to exercise its powers available under Regulation 102 of MYT Regulations, 2015 and Regulation 96 of earlier Conduct of Business Regulations 2004 which is now replaced by Regulation 46(a) of MERC (Transaction of Business and Fees and Charges) Regulations, 2022 and allow interest on actual basis rather than normative basis. However, the Commission is not inclined to relax the norms as provided in the Regulations and is following the set principles as provided in the MYT Regulations 2015.
- 3.9.14 Accordingly, the Commission has approved the interest on loan capital for FY 2019-20 as given in the Table below:

**Table 42: Interest on Loan Capital for FY 2019-20, as approved by the Commission (Rs. Crore)**

Particulars	MYT Order	MTR Petition	Approved in this Order
Opening Balance of Normative Loan	-	-	-
Less: Reduction of Normative Loan due retirement or replacement of assets	27.66	13.71	13.71
Loan Drawl during the year	90.15	99.16	96.10
Loan Repayment during the year	62.50	85.45	82.39
Closing Balance of Normative Loan	-	-	-
Average Balance of Normative Loan	-	-	-
Applicable Interest Rate (%)	11.27%	10.63%	10.63%
<b>Interest Expenses</b>	-	-	-

- 3.9.15 The Commission approves NIL Interest on Long Term Loan on Final Truing up of ARR for FY 2019-20.

### **3.10 Interest on Working Capital**

#### ***BEST's Submission***

- 3.10.1 BEST has computed the IoWC on normative basis as per Regulation 31 of the MYT Regulations, 2015. BEST submitted that it has incurred the actual Interest on Working Capital (IoWC) of Rs. 8.88 Crore in FY 2019-20.
- 3.10.2 BEST submitted that Canara bank Overdraft (O.D.) is used for electric supply as well

as transport. Amount of actual interest on O.D account is allocated to electric supply based on usage of O.D. limit by Electric Supply Division. Further BEST's day to day inflow of cash/bank from Electric bill receipt from consumers varies from month to month (i.e., date of payment of bill every month by consumer is uncertain) and the huge payment of power purchase/Employee salary and vital items are to be paid in bulk. Hence this facility is availed by BEST.

3.10.3 Actual Interest of Working capital has been detailed in the below Table:

**Table 43 : Actual Interest on Working Capital for FY 2019-20, as submitted by BEST (Rs. Crore)**

Particulars	Op. Bal	Rate of Interest	Amount Raised	Amount Paid	Interest
Canara OD	225.00	8.65%	-	-	8.88
MCGM	21.64	10.00%	-	21.64	
<b>Total</b>	<b>246.64</b>		<b>-</b>	<b>21.64</b>	<b>8.88</b>

3.10.4 BEST submitted that it made maximum efforts to lower the working capital requirement and has paid lower interest on working capital as compared to FY 2018-19.

3.10.5 The computation of IoWC on normative basis is calculated based on the MYT Regulations, which is shown as under:

**Table 44 : Interest on Working Capital details for Distribution Wires Business for FY 2019-20, as submitted by BEST (Rs. Crore)**

Particulars	MYT Order	Normative as per BEST
O&M expenses for a month	4.83	29.21
Maintenance Spares at 1% of Opening GFA	2.60	2.60
One and half months equivalent of the expected revenue from charges for use of Distribution Wires	43.09	76.33
Less: Amount held as Security Deposit from consumers	41.06	41.64
<b>Total Working Capital Requirement</b>	<b>9.46</b>	<b>66.50</b>
Rate of Interest (%)	9.50%	9.66%
<b>Interest on Working Capital</b>	<b>0.90</b>	<b>6.42</b>
<b>Actual Interest on Working Capital</b>	<b>-</b>	<b>0.89</b>

**Table 45 : Interest on Working Capital details for Retail Supply Business for FY 2019-20, as submitted by BEST (Rs. Crore)**

Particulars	MYT Order	MTR Petition
O&M expenses for a month	43.47	15.73
Maintenance Spares at 1% of Opening GFA	23.38	23.38

Particulars	MYT Order	MTR Petition
One and half months equivalent of the expected revenue from sale of electricity including revenue from CSS and Additional Surcharge	387.85	357.00
Less: Amount held as security deposit	369.52	374.74
Less: One month equivalent of cost of power purchase, transmission charges and MSLDC Charges	230.14	201.25
<b>Total Working Capital Requirement</b>	<b>(144.96)</b>	<b>(179.89)</b>
Rate of Interest (%)	9.50%	9.66%
<b>Interest on Working Capital</b>	-	-
<b>Actual Interest on Working Capital</b>	-	<b>7.99</b>

- 3.10.6 BEST submitted that the provision in the MYT Regulation, 2015 of reducing the working capital by total amount of consumer security is resulting in the net working capital being negative for the Supply Business. Therefore, the working capital requirement based on normative principle works out to zero. However, as per the Audited Account, BEST has paid IoWC. The working capital loan is being taken to meet actual daily requirements of overall business whereas as per the regulatory provisions the same is computed separately for Wires and Supply ARR. One of the factors for negative working capital is that the security deposit amount being considered for working capital is the cumulative/ accumulated amount over the period of years and the other components are for the year. However, the interest on working capital for wires business has been worked out to Rs. 6.42 Crore and the same is provided in the tables above.
- 3.10.7 As mentioned under the interest on loan, due to stringent conditions of MMC Act, 1888, BEST has to rollover the short-term loan thereby effectively using it as a long term fund till BEST get exemption under Section 106 of MMC Act. It leads to increase in actual working capital requirement.
- 3.10.8 BEST further submitted that its collection efficiency dropped in FY 2019-20 (97.99%) as compared to FY 2018-19 (99.99%), mainly due to Covid-19 pandemic and nationwide lockdown effect called on 24 March, 2020 and hence the requirement of working capital was higher. In lieu of the above, BEST requested the Commission to kindly consider allowing Interest on working capital on actual basis rather than normative basis without any sharing of gains/ losses.
- 3.10.9 BEST has paid total actual interest on working capital of Rs.8.88 Cr and as against that it is eligible for Rs.6.42 Cr on normative basis for Wires ARR. Hence, BEST has requested the Commission to allow actual interest on working capital without any sharing mechanism. BEST also requested the Commission to exercise its powers available under Regulation 102 of the MYT Regulation 2015 and Regulation 96 of earlier Conduct of Business Regulations 2004 which is now replaced by Regulation 46(a) of MERC (Transaction of Business and Fees and Charges) Regulations, 2022.



**Commission’s Analysis and Ruling**

3.10.10 The MYT Regulations, 2015 stipulate that the rate of IoWC shall be considered on normative basis and shall be equal to the weighted average Base Rate prevailing during the concerned year plus 150 basis points. As per Regulation 31.2 of the MYT Regulations, 2015:

*“....Provided that for the purpose of Truing-up for any year, interest on working capital shall be allowed at a rate equal to the weighted average Base Rate prevailing during the concerned Year plus 150 basis points.”.*

3.10.11 As per the First Amendment in the MYT Regulations, 2015, definition of Base Rate is changed to one-year MCLR as declared by the State Bank of India from time to time. The Commission has calculated weighted average base rate for FY 2019-20 as per the said Regulations and as specified in the table below:

**Table 46: Rate of Interest on Working Capital for FY 2019-20 (%)**

FY	From	To	Days	Rate	Wtd Avg. Base Rate	IoWC Rate
FY 2019-20	01-04-2019	09-04-2019	9	8.55%	8.16%	9.66%
	10-04-2019	09-05-2019	30	8.50%		
	10-05-2019	09-07-2019	61	8.45%		
	10-07-2019	09-08-2019	31	8.40%		
	10-08-2019	09-09-2019	31	8.25%		
	10-09-2019	09-10-2019	30	8.15%		
	10-10-2019	09-11-2019	31	8.05%		
	10-11-2019	09-12-2019	30	8.00%		
	10-12-2019	09-02-2020	62	7.90%		
	10-02-2020	09-03-2020	29	7.85%		
	10-03-2020	31-03-2020	22	7.75%		

3.10.12 Accordingly, the rate of IoWC works out to 9.66% (8.16% plus 1.50%) for FY 2019-20.

3.10.13 Also, in MYT Order in Case No. 324 of 2019 dated 30 March 2020, the Commission has computed the interest on working capital considering the Allocation Matrix as specified in MYT Regulations 2015 whereby, the components of working capital was allocated in the ratio of 10:90 between Wire and Supply Business. Further, the Commission further notes that the Hon’ble Supreme Court in its judgment Civil Appeal No(s). 4324/2015 and 4324/2015 dated 18 October, 2022, has observed as follows:

*“53. This view has been consistently followed by the APTEL in its subsequent judgments and we are in complete agreement with the above view of the APTEL. In our opinion, ‘truing up’ stage is not an opportunity for the DERC to rethink de novo on the basic principles, premises and issues involved in the initial projections of the revenue requirement of the licensee. ‘Truing*



*up’ exercise cannot be done to retrospectively change the methodology/principles of tariff determination and re-opening the original tariff determination order thereby setting the tariff determination process to a naught at ‘true up’ stage.”*

3.10.14 Accordingly, the Commission is of the view that while undertaking the Truing-up exercise, as held by the Hon’ble Supreme Court, it is not prudent to consider the different methodology as proposed by BEST in MTR Petition. Hence, as per the methodology as approved in MYT Order, the Commission adopts the similar methodology to determine the allocation of each component of working capital in the ratio of 10:90 as per MYT Regulations 2015.

3.10.15 The summary of normative IoWC for FY 2019-20 as approved by the Commission is given in the Table below:

**Table 47: Interest on Working Capital for FY 2019-20, as approved by the Commission (Rs. Crore)**

Particulars	MYT Order	MTR Petition	Approved in this Order
<b>Wheeling Business</b>			
O&M expenses for a month	4.83	29.21	4.84
Maintenance Spares at 1% of Opening GFA	2.60	2.60	2.60
One and half months equivalent of the expected revenue from charges for use of Distribution Wires	43.09	76.33	43.33
Less: Amount held as Security Deposit from consumers	41.06	41.64	41.64
<b>Total Working Capital Requirement</b>	<b>9.46</b>	<b>66.50</b>	<b>9.13</b>
Rate of Interest (%)	9.50%	9.66%	9.66%
<b>Interest on Working Capital</b>	<b>0.90</b>	<b>6.42</b>	<b>0.88</b>
<b>Retail Business</b>			
O&M expenses for a month	43.47	15.73	43.54
Maintenance Spares at 1% of Opening GFA	23.38	23.38	23.38
One and half months equivalent of the expected revenue from sale of electricity including revenue from CSS and Additional Surcharge	387.85	357.00	390.00
Less: Amount held as security deposit	369.52	374.74	374.74
Less: One month equivalent of cost of power purchase, transmission charges and MSLDC Charges	230.14	201.25	201.25
<b>Total Working Capital Requirement</b>	<b>(144.96)</b>	<b>(179.89)</b>	<b>(119.07)</b>
Rate of Interest (%)	9.50%	9.66%	9.66%
<b>Interest on Working Capital</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Total Distribution Business</b>			
<b>Interest on Working Capital</b>	<b>0.90</b>	<b>6.42</b>	<b>0.88</b>

3.10.16 The Commission approves Normative Interest on Working Capital of Rs. 0.88 Core on Final Truing-up of ARR for FY 2019-20.

3.10.17 As IoWC Expenses is controllable and hence the Commission has undertaken sharing

of efficiency gain/losses in accordance with the MYT Regulations, 2015 and the treatment of the actual interest on working capital loan in the subsequent chapter of this order.

### 3.11 Interest on Consumers Security Deposit (CSD)

#### *BEST's Submission*

3.11.1 In MYT Order for final Truing-up of FY 2017-18 and FY 2018-19, the Commission allowed interest on CSD based on the actual payment of interest on CSD to consumers. Accordingly, BEST has considered interest on CSD for FY 2019-20 as per Audited Accounts.

3.11.2 BEST submitted that there is an addition of Rs. 17.75 Crore in the CSD in FY 2019-20. The details of consumer deposit are given in below table:

**Table 48 : Interest on Consumer Security Deposit for FY 2019-20, as submitted by BEST (Rs. Crore)**

Sr. No	Particulars	Actual
1	Opening Balance of Security Deposit	398.62
2	Addition during the year	17.75
3	Closing balance of Security Deposit	416.38
4	Net Interest on Security Deposit for current year (actual Paid)	37.69

3.11.3 BEST submitted that interest on CSD amount claimed is on actual paid basis which is adjusted in consumer's bill. BEST requested the Commission to approve interest on CSD on actual basis as shown in Table below.

**Table 49 : Interest on Consumer Security Deposit for FY 2019-20, as submitted by BEST (Rs. Crore)**

Particulars	MYT Order	MTR Petition
Interest on Consumer Security Deposit	38.44	37.69

#### *Commission's Analysis and Ruling*

3.11.4 The Commission accepts the submission of BEST that the Interest on consumer Security deposit claimed is actually paid to consumers and approves the actual interest on CSD as reported in the Audited Accounts for FY 2019-20 as shown in the Table below:

**Table 50: Interest on Consumers' Security Deposit for FY 2019-20, as approved by the Commission (Rs. Crore)**

Particulars	MYT Order	MTR Petition	Approved in this Order	Wire Business	Supply Business
Interest on Consumer Security Deposit	38.44	37.69	37.69	3.77	33.92

3.11.5 The Commission approves Interest on Consumers' Security Deposit of Rs. 37.69

Creore on Final Truing-up of ARR for FY 2019-20.

### 3.12 Contribution to Contingency Reserves

#### *BEST's Submission*

3.12.1 As per MYT Regulations, 2015, the Commission has approved contribution to the Contingency Reserve at the rate of 0.25 % on Opening Gross Fixed Assets (GFA) as against ceiling of 0.5% on Opening GFA.

3.12.2 BEST submitted the Contribution to Contingency Reserves for FY 2019-20 as shown in the following Table.

**Table 51 : Interest on Consumer Deposit for FY 2019-20, as submitted by BEST (Rs. Crore)**

Particulars	MYT Order	MTR Petition
Opening Balance of Contingency Reserves		47.99
Opening Gross Fixed Assets		2,598.11
Op. Contingency Reserves as % of Opening GFA		1.85%
Contribution to Contingency Reserves during the year	6.50	-

3.12.3 For FY 2019-20, a provision for Rs. 6.50 Crore was made for investment for the contingency reserves in the books of accounts. This investment needs to be invested in the first 6 months' time of FY 2020-21.

3.12.4 However, due to the unprecedented times that followed due to the Covid-19 pandemic, and overall affecting the cash-flows and operation of BEST the same was not invested and accordingly, is not being claimed.

#### *Commission's Analysis and Ruling*

3.12.5 The Commission notes that BEST has not made any contribution towards contingency reserves citing the reason of Covid-19 pandemic. This reflects the lack of discipline on the part of BEST with regard to ensuring timely investment of amount which is already approved by the Commission in the ARR and recovered by BEST through the tariff. The Commission expresses its displeasure and is of the view that such actions of BEST are not desirable and should be avoided by BEST in future.

3.12.6 Accordingly, the Commission has considered nil investment for FY 2019-20 since the investment was not done by BEST as shown in the Table below:

**Table 52: Contribution to Contingency Reserves for FY 2019-20, as approved by the Commission (Rs. Crore)**

Particulars	MYT Order	MTR Petition	Approved in this Order
Contribution to Contingency Reserves	6.50	-	-

3.12.7 The Commission approves NIL Contribution to Contingency Reserves on Final Truing up of ARR for FY 2019-20.

### 3.13 Other Expenses

#### *BEST's Submission*

3.13.1 BEST has submitted that it has incurred other expense of Rs. 46.68 Crore in FY 2019-20. The break-up of other expense is as given below:

**Table 53 : Other Expenses Details for FY 2019-20, as submitted by BEST (Rs. Crore)**

S. No.	Particulars	MYT Order	MTR Petition
1	Prompt payment Discount	50.75	12.99
2	Power factor Incentive		26.20
3	ECS discount		-
4	Load factor Incentive		4.58
5	Load management rebate		2.23
6	Discount on Digital Payment to Consumers		0.08
7	Reimbursement of Transaction charges against payment through Visa Master Debit/Credit card.		0.60
8	ED & M.ToSE paid to Government		
	<b>Total</b>	<b>50.75</b>	<b>46.68</b>

3.13.2 BEST submitted that in other expenses, Power factor incentives and Prompt payment discount are the major expenses and BEST requested the Commission to approve as submitted in the above Table.

3.13.3 BEST submitted that it has given discount on digital payments as approved by the Commission in MYT Order. Accordingly, the BEST has given discount of Rs. 2.23 Crore on digital payment.

3.13.4 BEST has not included the costs for various activities such as Load Research, Energy Auditing, Capacity Building, Consumer awareness Education, etc. which were carried out under DSM since DSM expenses are met through LMC funds. The actual expense incurred in FY 2019-20 is Rs. 0.23 Crore. This expense will be adjusted under the LMC fund available with BEST. The Opening balance of this fund was Rs. 2.08 Crore and at the end of FY 2019-20, the balance of LMC fund was Rs. 1.85 Crore.

3.13.5 BEST submitted that the Recovery of theft income is inclusive of Electricity Duty (ED) and Maharashtra Tax on Sale of Electricity (M-TOSE). Collection of ED and M-TOSE transferred to the treasury account of the State Government. Hence ED and M-TOSE components are shown separately in the other expenses.

3.13.6 BEST requested the Commission to approve the Other Expenses for FY 2019-20 as provided above.

### ***Commission's Analysis and Ruling***

- 3.13.7 BEST has claimed the actual expenses incurred during FY 2019-20 under other expenses for payment of PF incentive, prompt payment discount, and ECS discount. The Commission would like to highlight that such expenses are related to billing and collection to the consumers and hence such cost is allocated to supply function of the distribution business. The Commission further notes that BEST is considering the collection of ED and M-TOSE in the revenue in respect of recovery of theft income and also showing it as expense. The Commission is of the view that as a normal practice any amount payable to GoM towards ED, M-TOSE or otherwise is not considered in the revenue from sales. Accordingly, the Commission directs BEST to apply the similar treatment and not consider amount towards ED and M-TOSE as revenue as well as expense in respect of recovery of theft income.
- 3.13.8 As per Regulation 35 of the MYT Regulations, 2015, the Commission has verified the other expenses from Audited Accounts for BEST's submissions in the Truing up for FY 2019-20 and approved other expenses as shown in Table below:

**Table 54: Other Expenses for FY 2019-20, as approved by the Commission (Rs. Crore)**

Particulars	MYT Order	MTR Petition	Approved in this Order	Wire Business	Supply Business
Other Expenses	50.75	46.68	46.68	-	46.68

- 3.13.9 The Commission approves Other Expenses of Rs. 46.68 Crore on Final Truing-up of ARR for FY 2019-20.

### ***3.14 Provision for Bad and Doubtful Debts***

#### ***BEST's Submission***

- 3.14.1 The Commission had provisionally allowed Rs. 6.74 Crore as provision for bad debts for FY 2019-20 in the MYT Order. BEST submitted that the amount of Rs. 5.09 Crore was written off against pending dues for FY 2019-20.
- 3.14.2 BEST had made extensive efforts for recovery of such amount. However, the recovery of some dues is not expected due to various reasons such as demolition of premises / buildings /structures change in ownership of premises, shifting of consumer to outside BEST license area and addresses of such consumers not being available etc.
- 3.14.3 Regulation 73 & 82 of the MYT Regulations, 2015, allows a provision for bad and doubtful debts up to 1.5% of the receivables for the year. Accordingly, BEST has claimed the amount of provision for bad & doubtful debt as per actual written off amount based on Audited Accounts as given in Table below:

**Table 55 : Bad Debts Written off for FY 2019-20, as submitted by BEST (Rs. Crore)**

Sr. No.	Particulars	MYT Order	MTR Petition
1	Opening Balance of Provision for bad and doubtful debts	-	-
2	Receivables for the year	449.33	322.47
3	Opening Balance of Provision of bad and doubtful debt as % of Receivables	1.50%	1.58%
4	Provision for bad & doubtful debts during the year	<b>6.74</b>	5.09
5	Actual bad and doubtful debts written off		5.09
6	Closing Balance of Provision for bad and doubtful debts		-

- 3.14.4 BEST submitted that, major reasons for bills remaining unpaid in BEST area is Demolition of buildings / slum structures, vacating of premises etc. In such cases, before giving reconnection to original residents of the Plot in rehab buildings, arrears are recovered.
- 3.14.5 Further, in some cases, consumers staying in existing premises fail to pay the bills due to unavoidable circumstances. In such cases Vigilance department carry out regular raids and register cases against consumers using unauthorised supply. Recovery of old arrears is made and then supply is reconnected through meters. Also in such cases, meters are removed, and final bills are prepared after 2 years of meter removal. An amnesty scheme was brought in by BEST Undertaking whereby the delay payment charge (DPC) and interest on arrears (IOA) charged after meter removal is waived and only energy charges are recovered. At present, this scheme is applicable for meter removal prior to 2015. Consumers have taken advantage and got their meters reconnected after paying energy charges.
- 3.14.6 In case of SRA projects, BDD chawl redevelopment project, Government authorities ask BEST to certify that the concerned resident was BEST consumer. In such cases, before giving the certificate, the consumer is asked to make payment of arrears, if any.
- 3.14.7 BEST requested the Commission to approve provision towards bad and doubtful debt as shown in Table above.

***Commission's Analysis and Ruling***

- 3.14.8 The Commission has noted the submission of BEST. As per the provisions of the Regulation 73 of the MYT Regulations, 2015, the Commission may allow provisioning of bad and doubtful debts up to 1.5% of the amount shown as receivables in the Audited Accounts.
- 3.14.9 The Commission has verified the provision for bad and doubtful debts from the audited annual accounts and it has been observed that BEST has claimed 1.58% of the receivables which is over and above the norms as specified in the MYT Regulations, 2015. Accordingly, the Commission approves the provision for Bad and Doubtful Debt limited to 1.50% of the Receivable in the Audited accounts and the

same is shown in the Table below:

**Table 56: Provision for Bad and Doubtful Debts for FY 2019-20, as approved by the Commission (Rs. Crore)**

Particulars	MYT Order	MTR Petition	Approved in this Order	Wire Business	Supply Business
Provision for Doubtful debts	6.74	5.09	4.84	0.48	4.35

3.14.10 While the Commission has approved provision for write-off of bad and doubtful debts, in case there is some recovery in the future period from consumers against whom the past debts were written off, then the same shall be included as part of the ARR and the benefit should be passed on to the consumers.

### 3.15 Income Tax

#### *BEST's Submission*

3.15.1 BEST has submitted that being a Local Authority, it is exempted under Section 10 (20) of the Income Tax Act, 1961. Accordingly, it does not pay any income tax and has hence not claimed any for FY 2019-20

#### *Commission's Analysis and Ruling*

3.15.2 Since BEST is exempted from paying Income Tax under Section 10(20) of the Income Tax Act, 1961, the Commission has not considered any Income Tax for FY 2019-20

### 3.16 Return on Equity

#### *BEST's Submission*

3.16.1 BEST submitted that it has computed Return on equity as per Regulation 28 of MYT Regulations, 2015.

3.16.2 BEST submitted that the allocation of assets of Wires and Supply business for FY 2019-20 is in ratio of 90:10. BEST has considered the weighted average rate of RoE as per Regulation 28 of MYT Regulations, 2015 with weights as given in Allocation Matrix. For the propose of arriving at the Regulatory Equity at the beginning of the year for FY 2019-20, BEST has considered the closing equity of FY 2018-19. The details of return on equity as claimed by BEST are as shown in Table below:

**Table 57 : Return on Equity for Wires Business for FY 2019-20, as submitted by BEST (Rs. Crore)**

Sr.	Particulars	MYT Order	MTR Petition
1	Regulatory Equity at the beginning of the year	795.85	795.85
2	Capitalisation during the year	-	219.11



Sr.	Particulars	MYT Order	MTR Petition
3	Consumer Contribution and Grants used during the year for Capitalisation	-	91.63
4	Equity portion of capitalisation during the year	34.78	38.25
5	Reduction in Equity Capital on account of retirement / replacement of assets	10.67	5.29
6	Regulatory Equity at the end of the year	819.96	828.81
	<b>Return on Equity Computation</b>	15.50%	15.50%
7	Return on Regulatory Equity at the beginning of the year	124.95	123.36
8	Return on Regulatory Equity addition during the year	1.89	2.55
9	<b>Total Return on Equity</b>	<b>126.84</b>	<b>125.91</b>

**Table 58 : Return on Equity for Supply Business for FY 2019-20, as submitted by BEST (Rs. Crore)**

Sr.	Particulars	MYT Order	MTR Petition
1	Regulatory Equity at the beginning of the year	88.43	88.43
2	Capitalisation during the year	-	24.35
3	Consumer Contribution and Grants used during the year for Capitalisation	-	10.18
4	Equity portion of capitalisation during the year	3.86	4.25
5	Reduction in Equity Capital on account of retirement / replacement of assets	1.19	0.59
6	Regulatory Equity at the end of the year	91.11	92.09
	<b>Return on Equity Computation</b>	17.50%	17.50%
7	Return on Regulatory Equity at the beginning of the year	13.88	15.47
8	Return on Regulatory Equity addition during the year	0.21	0.32
9	<b>Total Return on Equity</b>	<b>14.09</b>	<b>15.80</b>

3.16.3 BEST requested the Commission to approve Return on Equity on normative basis as shown in Table above for FY 2019-20.

#### ***Commission's Analysis and Ruling***

3.16.4 The Commission has computed the RoE, as per Regulation 28 of the MYT Regulations, 2015, based on opening equity, addition of equity as per approved capitalisation and weighted average rate of RoE based on allocation of assets to wires and supply business.

3.16.5 To determine the equity eligible for return as per Regulations, the Commission has considered the opening equity of Rs. 884.28 Crore for FY 2019-20 same as approved closing equity for FY 2018-19 in MYT Order.

3.16.6 As regards the impact of retirement of assets in the computation of RoE for FY 2019-20, the Commission has considered the impact of asset retirement by reducing the equity equivalent to 30 % of value of the assets retired during the year.

3.16.7 The Commission has computed the RoE for FY 2019-20 as per Regulation 28 of the MYT Regulations, 2015. The Commission has accepted the allocation of assets



between the wires and supply business in the ratio of 90:10 in line with MYT Regulations, 2015 and computed the weighted average rate of return for FY 2019-20.

3.16.8 The summary of RoE for FY 2019-20 as approved by the Commission is provided in Table below:

**Table 59: Return on Equity for FY 2019-20, as approved by the Commission (Rs. Crore)**

Particulars	MYT Order	MTR Petition	Approved in this Order	Wire Business	Supply Business
Regulatory Equity at the beginning of the year	884.28	884.28	884.28	795.85	88.43
Equity portion of capitalisation during the year	38.64	42.50	41.18	37.07	4.12
Reduction in Equity Capital on account of retirement / replacement of assets	11.85	5.87	5.87	5.29	0.59
<b>Regulatory Equity at the end of the year</b>	<b>911.07</b>	<b>920.90</b>	<b>919.59</b>	<b>827.63</b>	<b>91.96</b>
Return on Regulatory Equity at the beginning of the year	138.83	138.83	138.83	123.36	15.47
Return on Regulatory Equity addition during the year	2.10	2.87	2.77	2.46	0.31
<b>Total Return on Equity</b>	<b>140.93</b>	<b>141.71</b>	<b>141.60</b>	<b>125.82</b>	<b>15.78</b>

3.16.9 The Commission approves Return on Equity of Rs. 141.60 Crore on Final Truing up of ARR for FY 2019-20.

### **3.17 Return as Interest on Internal Funds**

#### ***BEST's Submission***

3.17.1 The Appellate Tribunal of Electricity, in its Judgment dated 27 August, 2007 in appeal No. 13 of 2007 had directed the Commission to take into consideration interest on Government Grant as well as interest on internal funds, which is not included in the calculation of the Capital Base or notional equity in any way.

3.17.2 Accordingly, BEST submitted the Interest on internal funds as under:

**Table 60 : Return on Internal Fund Detail for FY 2019-20, as submitted by BEST (Rs. Crore)**

Particulars	MYT Order	MTR Petition
Return on Internal Funds	5.28	5.28

#### ***Commission's Analysis and Ruling***

3.17.3 The Commission has accepted the submission of BEST and approved the return as interest on internal funds of Rs.5.28 Crore for FY 2019-20 as per direction given by the Hon'ble Appellate Tribunal of Electricity in its judgment in Appeal No 13 of 2007. However, the Commission notes that said return is allowed on internal funds of Rs 87.99 Crore at 6% rate of interest.

**Table 61: Return as Interest on Internal Funds for FY 2019-20, as approved by the Commission (Rs. Crore)**

Particulars	MYT Order	MTR Petition	Approved in this Order	Wire Business	Supply Business
Return on Internal Funds	5.28	5.28	5.28	4.75	0.53

3.17.1 The Commission approves the Return on Internal Funds of Rs. 5.28 Crore on Final Truing up of ARR for FY 2019-20.

### 3.18 Non-Tariff Income

#### *BEST's Submission*

3.18.1 BEST submitted that it has earned non-Tariff income of Rs. 39.27 Crore in FY 2019-20. The details of non-Tariff income under various sub-heads is as given below:

**Table 62 : Details of the Non-Tariff Income for FY 2019-20, as submitted by BEST (Rs. Crore)**

Particulars	MYT Order	MTR Petition
Contract Charges		8.94
Rent of land or buildings		1.11
Income from investments		4.14
Income from consumers charges levied as per Schedule of Charges approved by Commission		0.60
Income from recovery against theft and / or pilferage of electricity		7.35
Income from advertisements		5.86
Income from sale of tender documents		0.21
Others		3.42
Share of General Administration		7.64
<b>Total</b>	<b>53.63</b>	<b>39.27</b>

3.18.2 The BEST explained some of the major heads of Non-Tariff income as given below:

- **Contract charges:** The total revenue under the Contract charges is Rs.53.92 Crore and the total expenditure is Rs.44.98 Crore thus Contract charges are shown as Rs. 8.94 Crore.
- **Rent of Land, Buildings, Staff Quarters & Contractors:** This comprises of three heads, i.e., Rent of Land & Building, rent from Staff Quarters & rent from Contractors. In addition, there are certain premises wherein shops are allotted to outside parties. The rent of these shops varies as per the location of the premises and the offers of the bidders.
- **Income from consumers' charges levied as per the schedule charges approved by Commission:** This includes the Reconnection charges, Requisition charges, Damaged meter charges, etc. amounting to Rs.0.60 Crore.

- **Other Charges:** Other charges include two heads i.e. Others & Electricity Duty collected on behalf of Government at a rate of Rs.45 per 100 consumers and cash discount received from various suppliers, penalty recovered from the suppliers / employees etc.
- **Share of General Administration:** This consists of share of General Administration Receipts wherein interest on deposit and General investment, (net) rent of building and land, apprentice premium received from the Government etc.

3.18.3 BEST requested the Commission to approve Non-Tariff income as shown in Table above for FY 2019-20.

***Commission’s Analysis and Ruling***

3.18.4 The Commission has noted the submissions of BEST and also verified the details of the Non-Tariff income from the Audited Accounts submitted by BEST. Accordingly, the Commission has considered the Non-Tariff income for FY 2019-20 as shown in Table below:

**Table 63: Non-Tariff Income for FY 2019-20, as approved by the Commission (Rs. Crore)**

Particulars	MYT Order	MTR Petition	Approved in this Order	Wire Business	Supply Business
Non-Tariff Income	53.63	39.27	39.27	3.93	35.34

3.18.5 The Commission approves the Non-Tariff Income of Rs. 39.27 Crore on Final Truing up of ARR for FY 2019-20.

**3.19 Sharing of Gain and Losses of Controllable Factors**

***BEST’s Submission***

3.19.1 As per Regulation 11 of the MYT Regulations, 2015, the Commissions allows the sharing of gains or losses between the distribution licensee and the consumers.

3.19.2 The heads included in the controllable expenses include the following:

- Reduction in Distribution Loss
- O&M Expenses

**Incentive on Distribution Loss**

3.19.3 BEST has achieved an actual distribution loss of 4.65% against the normative target of 5.60% as approved by the Commission for FY 2019-20.

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

**Table 64 : Details of the Incentive on reduction of Distribution Loss for FY 2019-20, as submitted by BEST (Rs. Crore)**

Particulars	Units	MTR Petition
Normative Distribution loss (target)	%	5.60%
Normative Energy Input at same sales level	MU	4,998.46
Actual Distribution Loss	%	4.65%
Actual Energy Input	MU	4,948.73
Variation in Power Purchase due to difference in actual distribution loss and the normative target	MU	49.73
Actual Power Purchase Cost	Rs. Crore	2,189.03
Average Power Purchase Rate	Rs. / unit	4.42
Power Purchase Cost gain/(loss) due to actual distribution loss	Rs. Crore	22.00
Amount retained by BEST	Rs. Crore	7.33
Amount passed on to consumers by BEST	Rs. Crore	14.66

3.19.5 BEST proposed recovery of the incentive for reduction of distribution loss in Truing-up of FY 2019-20 as shown in the above Table.

### **O&M Expenses**

3.19.6 BEST submitted that the actual O&M expense for FY 2019-20 are lower than normative O&M expense for FY 2019-20.

3.19.7 In line with the directions given in the MYT Order, BEST has submitted impact of wage revision separately in this Petition for the purpose of final Truing-up of FY 2019-20. Implementation of wage revision also led to introduction/increase of other salary component allowances. The impact on employee expenses on account of these new expenses need to be added separately to normative expenses. It is also submitted that impact of wage revision is not captured in YoY escalation and considering the same the Commission had approved impact of wage revision separately in its earlier Order. As the impact on employee expenses on account of these new expenses are not captured in normative expenses. Hence, it is not appropriate to consider the same under actual expenses for computing with normative expenses for comparing with normative expenses for computation of sharing of gains/losses. BEST further submitted that there is absence of explicit provision regarding treatment of wage revision in MYT Regulations, 2015. Further, there was no clarity regarding treatment of wage revision in MYT Order, hence BEST has not considered the amount paid against wage revision for sharing purposes. BEST requested the Commission to approve such wage revision over and above normative expenses.

3.19.8 BEST claimed sharing of gains on account of O&M expense as shown in table below:

**Table 65 : O&M Expenses Gain for FY 2019-20, as submitted by BEST (Rs. Crore)**

Particulars	MTR Petition
Normative O&M Expenses	580.51
Actual O&M Expenses	503.15
Gain / (Loss) due to variation in O&M expenses	77.36
Amount retained by BEST (1/3 <sup>rd</sup> of above gains)	25.79
Amount passed on to consumers by BEST (2/3 <sup>rd</sup> of above gain)	51.57

3.19.9 BEST submitted that 2/3<sup>rd</sup> of these gains will be passed on to the consumers. BEST also submitted that gain on account of lower O&M expenses as shown above to be included in ARR of FY 2019-20.

### *Commission's Analysis and Ruling*

#### **Distribution Loss**

3.19.10 The Commission has approved distribution loss of 4.65% for FY 2019-20. In accordance with the MYT Regulations, 2015, the Commission has considered the distribution loss to be a controllable parameter and has computed the efficiency gain on account of lower distribution loss of 4.65% against the target of 5.60% as approved in the MYT Order.

3.19.11 The Commission has computed the sharing of efficiency gain on account of lower distribution loss considering the approved energy balance, sales and power purchase cost. Average power purchase cost has been computed by dividing the actual total power purchase cost by the total power purchase quantum. Accordingly, the Commission has approved the sharing of efficiency gain on account of lower distribution loss than target distribution loss as shown in the Table below:

**Table 66: Incentive on reduction of Distribution Loss for FY 2019-20, as approved by the Commission**

Particulars	Units	MTR Petition	Approved in this Order
Normative Distribution loss (target)	%	5.60%	5.60%
Normative Energy Input at same sales level	MU	4,998.46	4,998.39
Actual Distribution Loss	%	4.65%	4.65%
Actual Energy Input	MU	4,948.73	4,948.66
Variation in Power Purchase due to difference in actual distribution loss and the normative target	MU	49.73	49.73
Actual Power Purchase Cost	Rs. Crore	2,189.03	2,189.03
Average Power Purchase Rate	Rs. / unit	4.42	4.42
Power Purchase Cost gain/(loss) due to actual distribution loss	Rs. Crore	22.00	22.00
Amount retained by BEST	Rs. Crore	7.33	7.33
Amount passed on to consumers by BEST	Rs. Crore	14.66	14.66

3.19.12 The Commission approves an incentive of Rs. 7.33 Crore on account of lower

Distribution Loss for FY 2017-18 and FY 2018-19, respectively.

### **O&M Expenses**

3.19.13 As discussed in the earlier section of this Order, the Commission has considered the normative O&M Expenses for FY 2019-20, and has computed the efficiency gain/ (loss) for O&M expenses without considering the wage revision impact as the same is considered at actuals, as shown in the following Table:

**Table 67: Sharing of Gain/ (Loss) on account of O&M expenses for FY 2019-20, as approved by the Commission (Rs. Crore)**

Particulars	MTR Petition	Approved in this Order
Normative O&M Expenses	580.51	580.50
Actual O&M Expenses	503.15	503.15
Gain / (Loss) due to variation in O&M expenses	77.36	77.35
Amount retained by BEST	25.79	25.78
Amount passed on to consumers by BEST	51.57	51.57
Additional Impact of Wage Revision	36.03	36.03
<b>Net Entitlement of O&amp;M expenses of BEST</b>	<b>564.97</b>	<b>564.96</b>

3.19.14 The Commission approves the sharing of efficiency gain/ (loss) of Rs. 25.78 Crore on account of O&M Expenses, with BEST for FY 2019-20.

### **Interest on Working Capital**

3.19.15 The Commission notes that BEST has not considered sharing of gain/(loss) in respect of IoWC even if the same is controllable parameter as per Regulation 11 of the MYT Regulations, 2015.

3.19.16 BEST has submitted that the provision in the MYT Regulation, 2015 of reducing the working capital by total amount of consumer security is resulting in the net working capital being negative for the Supply Business. Therefore, the working capital requirement based on normative principle works out to zero. However, as per the Audited Account, BEST has paid IoWC. The working capital loan is being taken to meet actual daily requirements of overall business whereas as per the regulatory provisions the same is computed separately for Wires and Supply ARR. One of the factors for negative working capital is that the security deposit amount being considered for working capital is the cumulative/ accumulated amount over the period of years and the other components are for the year. BEST has requested that since the collection efficiency has been affected due to COVID pandemic and nationwide lockdown effect called on 24 March 2020, the requirement of working capital was higher. Accordingly, BEST has requested kindly consider allowing Interest on working capital on actual basis rather than normative basis without any sharing of gains/ losses.

3.19.17 Further, BEST has submitted that it has overdraft facility arrangement with Canara Bank for Rs. 225 Crore for consolidated business (Transport and Electricity Supply). Based on utilization of the facility, interest is charged by Canara Bank. BEST has paid Rs. 8.88 Crore as interest for FY 2019-20.

3.19.18 However, the Commission has also observed that BEST has not considered contribution of delay in receipt of payment to the actual interest on working capital. Relevant extract of Regulation 31.6 of MYT Regulations, 2015 is reproduced below:

*“31.6 For the purpose of Truing-up for each year, the variation between the normative interest on working capital computed at the time of Truing-up and the actual interest on working capital incurred by the Generating Company or Licensee or MSLDC, substantiated by documentary evidence, shall be considered as an efficiency gain or efficiency loss, as the case may be, on account of controllable factors, and shared between it and the respective Beneficiary or consumer as the case may be, in accordance with Regulation 11 :*

*Provided that the contribution of delay in receipt of payment to the actual interest on working capital shall be deducted from the actual interest on working capital, before sharing of the efficiency gain or efficiency loss, as the case may be.”*

3.19.19 Accordingly, the Commission has reduced actual IOWC by delayed payment charges along with interest on arrears of Rs. 10.37 Crore collected by BEST during FY 2019-20. Hence, actual IoWC works out to nil for FY 2019-20.

3.19.20 Further, the Commission has noted the submission made by BEST for higher working capital requirement and would like to highlight that for FY 2019-20, the nationwide lockdown was declared on 24 March 2020 affecting 7 days of the FY 2019-20 which cannot impact the working capital requirement to a larger extent as depicted by BEST. Also, the contention of the BEST that negative working capital is due to consideration of security deposit amount which is the cumulative/ accumulated amount over the period of years and the other cost components are for the year does not suit the financial principle as the security deposit is made available to Licensee as form of working capital loan and hence it has been excluded from the computation of the working capital requirement.

3.19.21 Hence, the Commission has approved the normative IoWC as per Regulation 31 of the MYT Regulations, 2015 in earlier section. BEST has provided details of actual interest on working capital for FY 2019-20 and as specified in earlier para, the Commission has approved ‘nil’ actual IoWC for FY 2019-20.

3.19.22 Accordingly, the Commission has computed the efficiency Gain/ (Loss) for IoWC as shown in the following Table:



**Table 68: Sharing of IoWC Gain/ (Loss) for FY 2019-20, as approved by the Commission (Rs. Crore)**

Particulars	Approved in this Order
Normative Interest on Working Capital	0.88
Actual Interest on Working Capital	-
Gain / (Loss) due to variation in Interest on Working Capital Expenses	0.88
Amount retained by BEST	0.29
Amount passed on to consumers by BEST	0.59

3.19.23 The Commission approves the sharing of efficiency gain/ (loss) of Rs. 0.29 Crore on account of IoWC, with BEST for FY 2019-20.

### 3.20 Summary of Truing-up of Aggregate Revenue Requirement for FY 2019-20

#### *BEST's Submission*

3.20.1 BEST has submitted the Truing up for FY 2019-20 based on comparison of the actual expense incurred and the revenue earned during the year vis-à-vis the figures approved by the Commission in MYT Order. The Truing-up summary for FY 2019-20 is as under:

**Table 69 : True-up of Aggregate Revenue Requirement for FY 2019-20 -Wires Business, as submitted by BEST (Rs. Crore)**

Particulars	MYT Order	MTR Petition	Deviation
Operation & Maintenance Expenses	376.77	350.47	(26.30)
Depreciation	97.85	90.02	(7.83)
Interest on Loan Capital	-	37.11	37.11
Interest on Working Capital	0.90	0.89	(0.01)
Interest on security deposit from Consumers	3.84	3.77	(0.07)
Provision for bad and doubtful debts	0.67	0.51	(0.16)
Contribution to contingency reserves	5.85	-	(5.85)
Income Tax	-	-	-
<b>Total Revenue Expenditure</b>	<b>485.88</b>	<b>482.77</b>	<b>(3.11)</b>
Add: Return on Equity Capital	126.84	125.91	(0.93)
Add: Return on Internal fund	4.75	4.75	0.00
Add: Sharing of Gain/(Loss) of Distribution loss	-	7.33	7.33
Add: Sharing of Gain/(Loss) on IoWC	-	-	-
Add: O&M sharing of gain and loss	-	16.76	16.76
<b>Aggregate Revenue Requirement</b>	<b>617.47</b>	<b>637.52</b>	<b>20.05</b>
Less: Non-Tariff Income	5.36	3.93	(1.43)
<b>Aggregate Revenue Requirement from Distribution Wires Revenue</b>	<b>612.11</b>	<b>633.60</b>	<b>21.49</b>
Revenue from sale of electricity	616.54	610.68	(5.86)
<b>Total Revenue Gap/(Surplus)</b>	<b>(4.43)</b>	<b>22.92</b>	<b>27.35</b>



**Table 70 : True-up of Aggregate Revenue Requirement for FY 2019-20 -Retail Supply Business, as submitted by BEST (Rs. Crore)**

Particulars	MYT Order	MTR Petition	Deviation
Power Purchase Expenses (including Inter-State Transmission Charges)	2,536.04	2,189.03	(347.01)
Operation & Maintenance Expenses	202.87	188.71	(14.16)
Depreciation	10.87	10.00	(0.87)
Interest on Loan Capital	-	4.12	4.12
Interest on Working Capital	-	7.99	7.99
Interest on Consumer Security Deposit	34.59	33.92	(0.67)
Provision for bad and doubtful debts	6.07	4.58	(1.49)
Contribution to contingency reserves	0.65	-	(0.65)
Intra-State Transmission Charges	224.52	224.88	0.36
MSLDC Fees & Charges	1.13	1.13	(0.00)
Income Tax	-	-	-
Other Expenses	50.75	46.68	(4.07)
<b>Total Revenue Expenditure</b>	<b>3,067.49</b>	<b>2,711.05</b>	<b>(356.44)</b>
Add: Return on Equity Capital	14.09	15.80	1.71
Add: Return on Internal fund	0.53	0.53	(0.00)
Add: Sharing of Gain & Loss on IoWC	-	-	-
Add: O&M sharing of gain and loss	-	9.03	9.03
<b>Aggregate Revenue Requirement</b>	<b>3,082.11</b>	<b>2,736.40</b>	<b>(345.71)</b>
Less: Non-Tariff Income	48.27	35.34	(12.93)
<b>Aggregate Revenue Requirement from Retail Tariff</b>	<b>3,033.85</b>	<b>2,701.06</b>	<b>(332.79)</b>
<b>Revenue</b>			-
Revenue from sale of electricity	2,830.98	2,856.00	25.02
<b>Total Revenue Gap/(Surplus)</b>	<b>202.87</b>	<b>(154.94)</b>	<b>(357.81)</b>

**Table 71 : True-up of Aggregate Revenue Requirement for FY 2019-20, as submitted by BEST (Rs. Crore)**

Particulars	MYT Order	MTR Petition	Deviation
Power Purchase Expenses (including Inter-State Transmission Charges)	2,536.04	2,189.03	(347.01)
Operation & Maintenance Expenses	579.64	539.18	(40.46)
Depreciation	108.72	100.03	(8.69)
Interest on Loan Capital	-	41.24	41.24
Interest on Working Capital	0.90	8.88	7.98
Interest on Consumer Security Deposit	38.43	37.69	(0.74)
Provision for bad and doubtful debts	6.74	5.09	(1.65)
Contribution to contingency reserves	6.50	-	(6.50)
Intra-State Transmission Charges	224.52	224.88	0.36
MSLDC Fees & Charges	1.13	1.13	(0.00)
Income Tax	-	-	-
Other Expenses	50.75	46.68	(4.07)
<b>Total Revenue Expenditure</b>	<b>3,553.37</b>	<b>3,193.82</b>	<b>(359.55)</b>
Add: Return on Equity Capital	140.93	141.71	0.78

Particulars	MYT Order	MTR Petition	Deviation
Add: Return on Internal fund	5.28	5.28	(0.00)
Add: Sharing of Gain & Loss on IoWC	-	-	-
Add: Sharing of Gain/(Loss) of Distribution loss	-	7.33	7.33
Add: O&M sharing of gain and loss	-	25.79	25.79
<b>Aggregate Revenue Requirement</b>	<b>3,699.59</b>	<b>3,373.93</b>	<b>(325.66)</b>
Less: Non-Tariff Income	53.63	39.27	(14.36)
<b>Aggregate Revenue Requirement from Retail Tariff</b>	<b>3,645.96</b>	<b>3,334.66</b>	<b>(311.30)</b>
<b>Revenue</b>			-
Revenue from sale of electricity	3,447.52	3,466.68	19.16
<b>Total Revenue Gap/(Surplus)</b>	<b>198.44</b>	<b>(132.02)</b>	<b>(330.46)</b>

### *Commission's Analysis and Ruling*

3.20.2 Based on the ARR components approved in the preceding paragraphs in this Order and considering the net revenue from retail Tariff, the Commission approves the ARR and Revenue Gap for FY 2019-20 as shown in the Table below:

**Table 72: ARR and Revenue Gap for FY 2019-20 of Wire Business, as approved by the Commission (Rs. Crore)**

Particulars	MYT Order	MTR Petition	Approved in this Order
Operation & Maintenance Expenses	376.77	350.47	350.47
Depreciation	97.85	90.02	89.95
Interest on Loan Capital	-	37.11	-
Interest on Working Capital	0.90	0.89	0.88
Interest on deposit from Consumers and Distribution System Users	3.84	3.77	3.77
Provision for bad and doubtful debts	0.67	0.51	0.48
Contribution to contingency reserves	5.85	-	-
Income Tax	-	-	-
<b>Total Revenue Expenditure</b>	<b>485.88</b>	<b>482.77</b>	<b>445.55</b>
Add: Return on Equity Capital	126.84	125.91	125.82
Add: Return on Internal fund	4.75	4.75	4.75
Add: Sharing of Gain/(Loss) of Distribution loss	-	7.33	7.33
Add: Sharing of Gain/(Loss) on IoWC	-	-	(0.06)
Add: O&M sharing of gain and loss	-	16.76	16.76
<b>Aggregate Revenue Requirement</b>	<b>617.47</b>	<b>637.52</b>	<b>600.16</b>
Less: Non-Tariff Income	5.36	3.93	3.93
<b>Aggregate Revenue Requirement from Distribution Wires</b>	<b>612.11</b>	<b>633.60</b>	<b>596.23</b>
<b>Revenue</b>			
Revenue from sale of electricity	616.54	610.68	610.68
<b>Total Revenue Gap/(Surplus)</b>	<b>(4.43)</b>	<b>22.92</b>	<b>(14.45)</b>

**Table 73: ARR and Revenue Gap for FY 2019-20 of Retail Supply Business, as approved by the Commission (Rs. Crore)**

Particulars	MYT Order	MTR Petition	Approved in this Order
Power Purchase Expenses (including Inter-State Transmission Charges)	2,536.04	2,189.03	2,189.03
Operation & Maintenance Expenses	202.87	188.71	188.71
Depreciation	10.87	10.00	9.99
Interest on Loan Capital	-	4.12	-
Interest on Working Capital	-	7.99	-
Interest on Consumer Security Deposit	34.59	33.92	33.92
Provision for bad and doubtful debts	6.07	4.58	4.35
Contribution to contingency reserves	0.65	-	-
Intra-State Transmission Charges	224.52	224.88	224.88
MSLDC Fees & Charges	1.13	1.13	1.13
Income Tax	-	-	-
Other Expenses	50.75	46.68	46.68
<b>Total Revenue Expenditure</b>	<b>3,067.49</b>	<b>2,711.05</b>	<b>2,698.70</b>
Add: Return on Equity Capital	14.09	15.80	15.78
Add: Return on Internal fund	0.53	0.53	0.53
Add: Sharing of Gain & Loss on IoWC	-	-	(0.53)
Add: O&M sharing of gain and loss	-	9.03	9.02
<b>Aggregate Revenue Requirement</b>	<b>3,082.11</b>	<b>2,736.40</b>	<b>2,723.51</b>
Less: Non-Tariff Income	48.27	35.34	35.34
<b>Aggregate Revenue Requirement from Retail Tariff</b>	<b>3,033.85</b>	<b>2,701.06</b>	<b>2,688.17</b>
<b>Revenue</b>			
Revenue from sale of electricity	2,830.98	2,856.00	2,856.00
<b>Total Revenue Gap/(Surplus)</b>	<b>202.87</b>	<b>(154.94)</b>	<b>(167.83)</b>

**Table 74: ARR and Revenue Gap for FY 2019-20 of Distribution Business, as approved by the Commission (Rs. Crore)**

Particulars	MYT Order	MTR Petition	Approved in this Order
Power Purchase Expenses (including Inter-State Transmission Charges)	2,536.04	2,189.03	2,189.03
Operation & Maintenance Expenses	579.64	539.18	539.18
Depreciation	108.72	100.03	99.94
Interest on Loan Capital	-	41.24	-
Interest on Working Capital	0.90	8.88	0.88
Interest on Consumer Security Deposit	38.43	37.69	37.69
Provision for bad and doubtful debts	6.74	5.09	4.84
Contribution to contingency reserves	6.50	-	-
Intra-State Transmission Charges	224.52	224.88	224.88
MSLDC Fees & Charges	1.13	1.13	1.13
Income Tax	-	-	-

Particulars	MYT Order	MTR Petition	Approved in this Order
Other Expenses	50.75	46.68	46.68
<b>Total Revenue Expenditure</b>	<b>3,553.37</b>	<b>3,193.82</b>	<b>3,144.25</b>
Add: Return on Equity Capital	140.93	141.71	141.60
Add: Return on Internal fund	5.28	5.28	5.28
Add: Sharing of Gain & Loss on IoWC	-	-	(0.59)
Add: Sharing of Gain/(Loss) of Distribution loss	-	7.33	7.33
Add: O&M sharing of gain and loss	-	25.79	25.78
<b>Aggregate Revenue Requirement</b>	<b>3,699.59</b>	<b>3,373.93</b>	<b>3,323.66</b>
Less: Non-Tariff Income	53.63	39.27	39.27
<b>Aggregate Revenue Requirement from Retail Tariff</b>	<b>3,645.96</b>	<b>3,334.66</b>	<b>3,284.39</b>
<b>Revenue</b>			
Revenue from sale of electricity	3,447.52	3,466.68	3,466.68
<b>Total Revenue Gap/(Surplus)</b>	<b>198.44</b>	<b>(132.02)</b>	<b>(182.28)</b>

3.20.3 The Commission approves consolidated Revenue Surplus of Rs. 182.28 Crore on Truing-up of ARR for FY 2019-20. This revenue surplus is adjusted along with the associated holding cost in the ARR of FY 2023-24.

## 4 TRUING UP OF ARR FOR FY 2020-21 AND FY 2021-22

### 4.1 Background

- 4.1.1 BEST has sought Truing-up of ARR for FY 2020-21 and FY 2021-22 based on the actual expenditure and revenue as per the Audited Accounts for FY 2020-21 and FY 2021-22 and in accordance with the provisions of the MYT Regulations, 2019. BEST also submitted reasons for variation in the actual expenses for FY 2020-21 and FY 2021-22, as compared to the expenses approved in the Multi Year Tariff (MYT) Order dated 30 March, 2020 in Case No. 324 of 2019.
- 4.1.2 The Books of Accounts of BEST are audited by the Municipal Chief Auditor as per the M.M.C Act, 1888. BEST has submitted audited Proforma Accounts for FY 2020-21 and FY 2021-22 which has been considered by the Commission for the purpose of Truing-up of ARR of FY 2020-21 and FY 2021-22.
- 4.1.3 BEST has bifurcated allocation of cost between the Wires and Supply Business is in accordance with the Regulation 71 of the MYT Regulations, 2019 for FY 2020-21 and FY 2021-22. However, normative working capital requirement for Wires and supply business is computed in accordance with Regulation 32.3 and 32.4 of the MYT Regulation 2019 for FY 2020-21 and FY 2021-22. Further, BEST has claimed IoWC as per actual IoWC paid and it is allocated in Wires and Supply Business.
- 4.1.4 The analysis underlying the Commission's approval of Truing-up for FY 2020-21 and FY 2021-22 is set out below.

### 4.2 Energy Sales

#### *BEST's Submission*

- 4.2.1 BEST has submitted the summary of the category-wise sales as approved by the Commission in the MYT Order and actuals for FY 2020-21 and FY 2021-22 as shown in Table below:

**Table 75 : Tariff Category-wise Energy Consumption FY 2020-21 and FY 2021-22, as submitted by BEST**

Consumer Category & Consumption Slab	FY 2020-21			FY 2021-22		
	MYT Order	MTR Petition	True-up Requirement	MYT Order	MTR Petition	True-up Requirement
<b>HT Category</b>						
HT - I Industry	156.73	144.92	(11.81)	156.66	147.67	(8.99)
HT - II Commercial	278.98	162.09	(116.88)	286.41	193.68	(92.73)
HT - III Group Housing	30.65	29.01	(1.64)	30.63	26.53	(4.10)
HT IV- Railways, Metro, Monorail	2.14	1.82	(0.32)	2.14	2.52	0.38
HT V-(A)Public services Govt. Hospitals and Educational Institutions)	26.59	21.80	(4.79)	26.57	26.26	(0.31)
HT V-(B) Public services Others)	196.66	184.75	(11.91)	196.57	184.87	(11.71)
HT-VI Electrical vehicle	-	-	-	-	-	-

Consumer Category & Consumption Slab	FY 2020-21			FY 2021-22		
	MYT Order	MTR Petition	True-up Requirement	MYT Order	MTR Petition	True-up Requirement
<b>Sub-total</b>	<b>691.74</b>	<b>544.39</b>	<b>(147.35)</b>	<b>698.99</b>	<b>581.54</b>	<b>(117.45)</b>
<b>LT Category</b>						
LT-I (A) Residential (BPL)	0.07	0.02	(0.05)	0.07	0.01	(0.06)
<u>LT - I(B) Residential</u>						
0 – 100 units	759.42	725.88	(33.54)	769.35	729.87	(39.48)
101 – 300 units	702.37	639.38	(62.99)	711.56	680.51	(31.05)
301 - 500 units	226.30	189.19	(37.11)	229.24	216.88	(12.36)
> 501 units	387.39	348.98	(38.41)	392.45	360.46	(31.99)
LT - II (a) Commercial	919.85	533.85	(386.00)	927.29	676.08	(251.21)
LT - II (b) Commercial - >20 & ≤50 kW	211.13	151.07	(60.06)	211.04	144.39	(66.65)
LT - II (c) Commercial - >50	370.00	283.89	(86.11)	369.84	290.96	(78.88)
LT - III (A) Industry (upto 20 kW)	43.23	72.89	29.66	43.21	93.72	50.50
LT-III (b) Industrial	90.31	71.78	(18.53)	90.27	77.18	(13.09)
LT - IV (A) Public Services - (Govt. Hosp. & Edu. Institutions)	55.68	59.25	3.57	56.14	54.39	(1.75)
LT - IV (B) Public Services - Others	185.87	162.46	(23.41)	183.95	161.15	(22.80)
LT-V (A) Agriculture- Pumpsets	-	-	-	-	-	-
LT-V (B) Agriculture- Others	-	-	-	-	0.02	0.02
LT VI Vehicle Charging	0.30	2.42	2.12	0.37	11.25	10.88
<b>Sub-total</b>	<b>3,951.92</b>	<b>3,241.05</b>	<b>(710.87)</b>	<b>3,984.79</b>	<b>3,496.89</b>	<b>(487.90)</b>
<b>Total Sales (HT in kVAh &amp; LT in kWh)</b>	<b>4,643.66</b>	<b>3,785.44</b>	<b>(858.22)</b>	<b>4,683.78</b>	<b>4,078.43</b>	<b>(605.34)</b>

4.2.2 The actual Energy Sales of FY 2020-21 and FY 2021-22 were almost 18% and 13% respectively, lower than the Energy Sales approved by the Commission in the MYT Order.

4.2.3 The main reason for the sharp decrease is nation-wide lockdown imposed on account of COVID-19 w.e.f. 24 March, 2020. As can be seen from above table, there is decrease of nearly 650 MU in LT & HT Commercial Category as compared to approved in MYT Order and around 560 MU decrease as compared to previous year's sales. The nation-wide lockdown resulted in lower commercial and industrial demand for first six months of FY 2020-21.

4.2.4 BEST further submitted that lockdown was eased during FY 2021-22 & economy had started recovering post June 2022. However, due to second wave of COVID-19, Government had imposed certain restrictions again on commercial & industrial category of consumers. As can be seen in the table above, there is decrease of nearly 444 MU in the commercial & industrial categories (LT and HT) as compared to the approved figures in the MYT order.

### ***Commission's Analysis and Ruling***

4.2.5 The Commission notes that the sales in FY 2020-21 and FY 2021-22 have been

significantly lower as against the sales approved in the MYT Order. The Commission also notes the submission of BEST that the decrease in sales is not specific to any geographic area and is mainly impacted due to loss in electricity sales due to nation-wide lockdown imposed by Central Government w.e.f. 24 March, 2020. Further, there were certain restrictions imposed during 2<sup>nd</sup> Covid-19 wave in FY 2021-22 as well impacting the sales in the said year. However, the Commission notes that sales in FY 2021-22 have increased by approximately 8% as compared to FY 2020-21. The Commission has also observed decrease in sales across all utilities due to impact of Covid-19.

- 4.2.6 Based on the above explanation provided by BEST, the Commission approves the actual sales for FY 2020-21 and FY2021-22 as submitted by BEST. The summary of energy sales approved by the Commission on Truing-up of FY 2020-21 and FY2021-22 is given in the Table below:

**Table 76: Energy Sales for FY 2020-21 and FY 2021-22, as approved by the Commission (MU)**

Particulars	FY 2020-21			FY 2021-22		
	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order
Energy Sales	4,643.66	3,785.44	3,785.44	4,683.78	4,078.43	4,078.43

- 4.2.7 The Commission approves energy sales of 3,785.44 MU and 4,078.43 MU for FY 2020-21 and FY 2021-22, respectively.

### 4.3 Distribution Losses and Energy Balance

#### *BEST's Submission*

- 4.3.1 The energy balance for FY 2020-21 and FY 2021-22 is as summarized in table below:

**Table 77 : Energy Balance for FY 2020-21 and FY 2021-22 (Sales in kWh), as submitted by BEST**

Particulars	FY 2020-21		FY 2021-22	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Sales (MU)	4,643.66	3,776.84	4,683.78	4,068.97
Distribution loss (%)	4.18%	3.93%	4.18%	4.63%
Energy Requirement at T-D interface (MU)	4,846.23	3,931.42	4,888.10	4,266.59
Intra-state Transmission loss (%)	3.18%	2.93%	3.18%	3.19%
Energy Requirement at G-T interface (MU)	5,005.33	4,050.12	5,048.57	4,407.20

- 4.3.2 The monthly energy drawl at T<>D interface is grossed-up by monthly InSTS loss available on MSLDC's website to derive energy requirement at G<>T interface. The summation of 12 months' energy drawl at T<> D Interface & summation of 12 months' energy drawl at G<>T interface is considered for working out InSTS loss for FY 2020-21 and FY 2021-22. Based on above mentioned method, InSTS loss of



2.93% and 3.19% for FY 2020-21 and FY 2021-22 respectively, are worked out. Further, BEST has calculated Distribution losses after considering the energy injected into the BEST network at T <> D interface based on the MSLDC certification and the actual sales for FY 2020-21 and FY 2021-22.

- 4.3.3 Though the actual distribution loss vis-à-vis distribution loss approved in MYT Order is higher, the overall energy requirement at G <> T interface for FY 2020-21 and FY 2021-22 is lesser than that approved in MYT Order on account of the lower than expected sales.
- 4.3.4 BEST requested the Commission to approve distribution loss as shown in the table above.

### ***Commission's Analysis and Ruling***

- 4.3.5 The Commission has noted the submission of BEST. The Commission has considered the actual InSTS Loss of 2.93% and 3.19% for FY 2020-21 and FY 2021-22 respectively as per monthly InSTS Loss details as provided by MSLDC and energy drawn at T<>D interface for FY 2020-21 and FY 2021-22 as per MSLDC certificate for calculation of Distribution losses.
- 4.3.6 Considering the energy injected into the BEST network at T<>D interface based on the MSLDC certification, and the actual sales as approved by the Commission in this Order, the Distribution Loss for FY 2020-21 and FY 2021-22 works out to be 3.93% and 4.63% as against 4.18% approved by the Commission in the MYT Order.
- 4.3.7 The Commission notes that in the Petition filed on 30 November, 2022, BEST has claimed Distribution Loss of 2.58% for FY 2020-21. In response to query raised by the Commission to submit reasons for achieving lower loss as compared to approved loss of 4.18%, BEST submitted as follows:
- 4.3.8 BEST submitted that the sales for the period Apr 20 to Mar 21 as per the billing system is 3829.81 MU. Meter reading activity was suspended, and consumers were billed on average between April 2020 to June 2020 in view of COVID 19 lockdown imposed from 22nd March 2020. Thereafter, billing was resumed as per actual reading from July 2020 onwards depending upon easing of restrictions (Due to restrictions in zones based on different contamination levels and easing of lockdown thereof). Post easing of lockdown, for consumers of cycle 1 to 18, the re-estimation was carried out for the period of average billing (varying from March - April 2020 to June, July, August, September 2020 for different consumers) and their average billed units were adjusted in the system based on the actual meter reading.
- 4.3.9 However, for the consumers of Cycle 19 and 24, the re-estimation was done on monetary terms whereas units were not adjusted in the billing system. BEST submitted that, as per its billing program, the billing of Cycle 19 and 24 is feasible only when the actual reading of the meter is available and the billing on estimation is



not feasible as readings of 11 registers are required. Further, during the pandemic, it was not feasible to develop estimated reading of 11 registers in the system. This has resulted in credit units not been accounted in the main billing whereas only the cost difference is accounted. Therefore, the excess sale units pertaining to consumers in Billing Cycle 19 and 24 during the lockdown period has been ascertained to be 52.97 MU for the period April 2020 to July 2020, as outlined in the following table and adjusted manually.

**Table 78 : Calculation of adjustment of Excess Units in Sales FY 2020-21 (Sales in MU), as submitted by BEST**

Tariff	Units as per Billing				Net Excess
	Apr-20	May-20	Jun-20	Jul-20	Total
LT1B	9.62	9.62	(2.40)	(22.21)	(5.37)
LT2A	5.11	5.10	1.00	(5.03)	6.17
LT2B	14.90	14.92	2.86	(19.74)	12.94
LT2C	26.52	26.46	2.08	(33.77)	21.28
LT3A	0.50	0.50	(0.18)	(2.13)	(1.31)
LT3B	6.16	6.15	(2.09)	(5.10)	5.12
LT4A	3.78	3.78	2.54	(2.83)	7.27
LT4B	10.38	10.39	(0.59)	(13.67)	6.52
LT6	0.18	0.18	-	-	0.35
<b>Total</b>	<b>77.14</b>	<b>77.09</b>	<b>3.21</b>	<b>(104.49)</b>	<b>52.97</b>

- 4.3.10 BEST has erroneously adjusted 135 MU to arrive at a Distribution Loss of 2.58%. However, after detailed scrutiny, the excess units which were not adjusted in the billing system was 52.97 MU as per details given above. Accordingly, BEST has restated the sales for FY 2020-21 by reducing the same by 52.97 MU and recomputed the Distribution Loss of 3.93% for FY 2020-21.
- 4.3.11 The Commission notes that aforesaid submission by BEST clearly shows the limitation of BEST billing system to adjust the estimated sales with actual sales whenever meter reading is done. The Commission observes that this issue came to fore only when quantum of assessed units were higher due to Covid-19 and which remained unadjusted in billing system, even though the credit in monetary terms was passed to consumers, resulting in overstating the sales of BEST and reduced Distribution Loss. In fact, if the actual meter reading is higher than lower estimated sales considered in billing system and if it remains unadjusted, Distribution loss would be higher. The Commission is concerned with the fact that this would have been continuing for past period as well, wherein all the approved figures of Distribution Loss, efficiency gains earned by BEST and all other connected parameters cannot be relied upon and its sanctity is questionable. This is the very serious issue and needs to be attended to and rectified immediately. Further, BEST should also have been vigilant enough while making submissions in the Petition and not scrutinize the same after data gaps are raised by the Commission. Considering the seriousness of the issue and its implications, the Commission directs BEST to do complete audit of the billing system from the external reputed agency having relevant experience and submit the compliance report along with Audit report within 6 months

of the Order and take corrective action immediately to avoid such issues in future. Further, the Commission also directs BEST to rectify the billing issues within the IT System so as to capture the units which are billed subsequently due to billing error, average billing or for any other billing adjustment, so as to reflect the correct sales and distribution loss of the respective financial year and provide the status of the same in the next tariff proceedings.

4.3.12 In response to the query raised by the Commission regarding reasons for higher Distribution Loss of 4.63% in FY 2021-22 as compared to approved loss of 4.18% in MYT Order, BEST submitted that its losses have been hovering around 4-5% and are almost near to the technical minimum of the network. This is possible because of various initiatives taken by BEST. Further, the distribution losses are impacted by various technical, commercial and other parameters; such as sales mix, weather variations, vintage of the network and equipment, line loading, etc. BEST also submitted that loss level of 4.18% achieved in FY 2018-19 is an aberration in that year and not be considered as constant achievable target.

4.3.13 Accordingly, for the purpose of Truing-up, the Commission approves the actual Distribution Loss as 3.93% and 4.63% for FY 2020-21 and FY 2021-22 respectively as against 4.18% approved in MYT Order. The efficiency gain(loss) on account of Distribution Loss lower than target loss levels has been computed subsequently in this Order.

4.3.14 Based on the above, the energy balance approved by the Commission for FY 2020-21 and FY 2021-22 is given in the following Table:

**Table 79: Energy Balance for FY 2020-21 and FY 2021-22, as approved by the Commission:**

Particulars	FY 2020-21			FY 2021-22		
	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order
Sales (MU)	4,643.66	3,776.84	3,776.84	4,683.78	4,068.97	4,068.97
Distribution loss (%)	4.18%	3.93%	3.93%	4.18%	4.63%	4.63%
Energy Requirement at T-D interface (MU)	4,846.23	3,931.42	3,931.42	4,888.10	4,266.59	4,266.59
Intra-state Transmission loss (%)	3.18%	2.93%	2.93%	3.18%	3.19%	3.19%
Energy Requirement at G-T interface (MU)	5,005.33	4,050.12	4,050.14	5,048.57	4,407.20	4,407.20

4.3.15 The Commission approves energy requirement at G-T interface of 4,050.41 MU and 4,407.20 MU for FY 2020-21 and FY 2021-22, respectively.

#### **4.4 Power Purchase expenses**

##### ***BEST's Submission***

4.4.1 BEST has presented the actual power purchase for FY 2020-21 and FY 2021-22 based on the actual energy input requirement as shown above. The energy requirement of

BEST has been met through the following sources:

- i) Power Purchase from Tata Power-G (TPC-G)
- ii) Power Purchase from Manikaran Power Ltd.
- iii) Power Purchase from Renewable sources
- iv) Power Purchase from short term sources

### **TPC-G**

4.4.2 BEST submitted that it has procured power primarily from TPC-G. Power purchase expense has been considered as per Accounts for FY 2020-21 and FY 2021-22. The summary of power purchase from TPC-G is as under:

**Table 80 : Summary of Power Purchase Expenses from TPC-G for FY 2020-21, as submitted by BEST:**

Unit of TPC-G	Power Purchase Quantum	Fixed/ Capacity Charges	Fixed/ Capacity Charges Rate	Total Variable Cost	Variable Charges Rate	Total Power Purchase Cost	Total Power Purchase Rate
	MU	Rs. Crore	Rs. /Kwh	Rs. Crore	Rs. /Kwh	Rs. Crore	Rs. /Kwh
Unit-5	1,317.53	194.54	1.48	424.46	3.22	619.00	4.70
Unit-7	685.75	75.86	1.11	133.89	1.95	209.75	3.06
Unit-8	315.38	93.96	2.98	107.40	3.41	201.36	6.38
Hydro	766.56	73.80	0.96	93.55	1.22	167.36	2.18
Thermal Incentive	-	0.61	-	-	-	0.61	-
Hydro Incentive	-	7.57	-	-	-	7.57	-
TPC-G Past Period						68.92	
<b>Total</b>	<b>3,085.23</b>	<b>446.34</b>	<b>1.45</b>	<b>759.31</b>	<b>2.46</b>	<b>1,274.57</b>	<b>4.13</b>

**Table 81 : Summary of Power Purchase Expenses from TPC-G for FY 2021-22, as submitted by BEST:**

Unit of TPC-G	Power Purchase Quantum	Fixed/ Capacity Charges	Fixed/ Capacity Charges Rate	Total Variable Cost	Variable Charges Rate	Total Power Purchase Cost	Total Power Purchase Rate
	MU	Rs. Crore	Rs. /Kwh	Rs. Crore	Rs. /Kwh	Rs. Crore	Rs. /Kwh
Unit-5	1,485.42	197.25	1.33	792.16	5.33	989.41	6.66
Unit-7	448.94	74.88	1.67	116.18	2.59	191.06	4.25
Unit-8	560.28	93.35	1.67	305.66	5.46	399.01	7.12
Hydro	790.09	76.11	0.96	96.57	1.22	172.68	2.20
Thermal Incentive	-	-0.00	-	-	-	-0.00	-
Hydro Incentive	-	8.05	-	-	-	8.05	-
<b>Total</b>	<b>3,284.74</b>	<b>449.65</b>	<b>1.37</b>	<b>1,310.56</b>	<b>3.99</b>	<b>1,760.21</b>	<b>5.36</b>

4.4.3 BEST submitted that, the Commission in the MYT Order in respect of TPC-G has allowed to recover the past recoveries from BEST, TPC-D and AEML-D in 12 equal installments in FY 2020-21. Accordingly, the Commission in the MYT Order of

BEST has approved the past recovery of Rs. 83.78 Crore (Monthly Rs.6.98 Crore) of TPC-G in the Power Purchase Cost of BEST. However, vide Order dated 21 December, 2020 in Case No. 163 of 2020, the Commission directed TPC-G not to recover the component of Standby Charges included in the past recovery from the concerned distribution licensees, viz, BEST, AEML-D and TPC-D in the balance installments. Accordingly, TPC-G has billed revised recovery of Rs. 3.27 Crore per month from December, 2020 to March, 2021.

- 4.4.4 BEST has also accordingly claimed Rs. 68.92 Crore (Rs.6.98 Crore for 8 Months + Rs. 3.27 Crore for 4 Months) for FY 2020-21 as against Rs. 83.78 Crore approved in MYT Order.
- 4.4.5 BEST submitted that it has purchased the power from TPC-G at average rate of Rs. 3.91/kWh during FY 2020-21 and at the rate of Rs. 4.13/kWh considering past period payment as against approved rate of Rs. 4.51/kWh by the Commission. Also, the average rate of power purchase from TPC-G was Rs.5.36/kWh compared to the approved cost of Rs. 4.60/ kWh during FY 2021-22.
- 4.4.6 BEST requested the Commission to approve the power procurement cost from TPC-G as submitted above for FY 2020-21 and FY 2021-22.

***Commission’s Analysis and Ruling***

- 4.4.7 The Commission notes that TPC-G rates are lower in FY 2020-21 than approved in MYT Order mainly due to lower rate of imported coal mainly due to demand reduction on account of Covid-19 pandemic. However, the TPC-G rate has increased in FY2021-22. The increase in price is primarily due to increase in electricity demand across India which resulted in an increase in coal demand and ultimately resulted in coal shortage in the country. Also, Prices of imported coal had increased. It can clearly be seen from the HBA index which was at \$86.68/MT in April 2021, and rose to \$203.69/MT in March 2022, leading to a sharp increase in the price of thermal power from TPC-G.

**Table 82 : Rise in Price of HBA Index Summary of Power Purchase Expenses from TPC-G for FY 2021-22, as submitted by BEST:**

<b>Month</b>	<b>HBA Index (\$/MT)</b>
April 2021	86.68
May 2021	89.74
June 2021	100.33
July 2021	115.35
August 2021	130.99
September 2021	150.03
October 2021	161.63
November 2021	215.01
December 2021	159.79

Month	HBA Index (\$/MT)
January 2022	158.5
February 2022	188.38
March 2022	203.69

4.4.8 The cost of power purchase from TPC-G claimed by BEST is in line with the Fixed Charges and Variable Charges as approved by the Commission for TPC-G for FY 2020-21 and FY 2021-22 as well as the revenue considered by TPC-G from sale of power for the said period. Hence, the Commission has approved the actual quantum and cost of power purchase from TPC-G for FY 2020-21 and FY 2021-22, as follows:

**Table 83: Power Purchase from TPC-G for FY 2020-21, as approved by the Commission:**

Unit of TPC-G	MTR Petition			Approved in this Order		
	Power Purchase Quantum	Power Purchase Cost	Power Purchase Rate	Power Purchase Quantum	Power Purchase Cost	Power Purchase Rate
	MU	Rs. Crore	Rs. /Kwh	MU	Rs. Crore	Rs. /Kwh
Unit-5	1,317.53	619	4.70	1,317.53	619	4.70
Unit-7	685.75	209.75	3.06	685.75	209.75	3.06
Unit-8	315.38	201.36	6.38	315.38	201.36	6.38
Hydro	766.56	167.36	2.18	766.56	167.36	2.18
Thermal Incentive	-	0.61	-	-	0.61	-
Hydro Incentive	-	7.57	-	-	7.57	-
TPC-G Past Period		68.92			68.92	
<b>Total</b>	<b>3,085.23</b>	<b>1,274.57</b>	<b>4.13</b>	<b>3,085.23</b>	<b>1,274.57</b>	<b>4.13</b>

**Table 84: Power Purchase from TPC-G for FY 2021-22, as approved by the Commission:**

Unit of TPC-G	MTR Petition			Approved in this Order		
	Power Purchase Quantum	Power Purchase Cost	Power Purchase Rate	Power Purchase Quantum	Power Purchase Cost	Power Purchase Rate
	MU	Rs. Crore	Rs. /Kwh	MU	Rs. Crore	Rs. /Kwh
Unit-5	1,485.42	989.41	6.66	1,485.42	989.41	6.66
Unit-7	448.94	191.06	4.25	448.94	191.06	4.25
Unit-8	560.28	399.01	7.12	560.28	399.01	7.12
Hydro	790.09	172.68	2.2	790.09	172.68	2.2
Thermal Incentive	-	0	-	-	0	-
Hydro Incentive	-	8.05	-	-	8.05	-
<b>Total</b>	<b>3,284.74</b>	<b>1,760.21</b>	<b>5.36</b>	<b>3,284.74</b>	<b>1,760.21</b>	<b>5.36</b>

4.4.9 Accordingly, the Commission approves Rs. 1274.57 Crore and Rs. 1760.21 Crore as the cost of power purchased from TPC-G for Final Truing up for FY 2020-21 and FY 2021-22 respectively.

## **Manikaran Power Limited (MPL)**

### ***BEST's Submission***

4.4.10 As mentioned in earlier chapter for FY 2019-20, MPL has started supplying power from March, 2020 as per approval of the Commission vide its Order dated 2 January, 2019 in Case No. 249 of 2018. The summary of power purchase from MPL for FY 2020-21 and FY 2021-22 is given below:

**Table 85 : Power Procurement from MPL for FY 2020-21, as submitted by BEST:**

Particular	Energy Quantum	Energy Charges	Fixed Charges	Incentive Charges	Total Charges	Avg. Rate
	MU	Rs. Crore				Rs./kWh
Manikaran Power Ltd.	846.41	171.82	148.92	10.18	330.92	3.91

**Table 86 : Power Procurement from MPL for FY 2021-22, as submitted by BEST:**

Particular	Energy Quantum	Energy Charges	Fixed Charges	Damage Charges	Total Charges	Avg. Rate
	MU	Rs. Crore				Rs./kWh
Manikaran Power Ltd.	720.08	147.62	146.90	-0.51	294.01	4.08

### ***Commission's Analysis and Ruling***

4.4.11 The Commission notes that power has been purchased from MPL as per PPA approved by the Commission. The Commission has also verified the cost of power purchase from the invoices raised by MPL and also from the Audited Accounts. It has also been observed that due to lower PLF, the damage of Rs. 0.51 Crore has been recovered as per the provisions of the PPA. Accordingly, the Commission approves Rs. 330.92 Crore and Rs. 294.01 Crore as the cost of power purchased from MPL for Final Truing up for FY 2020-21 and FY 2021-22 respectively, as given in Table below:

**Table 87: Power Procurement from MPL for FY 2020-21 and FY 2021-22, approved by Commission:**

Manikaran Power Limited	MTR Petition			Approved in this Order		
	Power Purchase Quantum	Power Purchase Cost	Power Purchase Rate	Power Purchase Quantum	Power Purchase Cost	Power Purchase Rate
	MU	Rs. Crore	Rs. /Kwh	MU	Rs. Crore	Rs. /Kwh
FY 2020-21	846.41	330.92	3.91	846.41	330.92	3.91
FY 2021-22	720.08	294.01	4.08	720.08	294.01	4.08

4.4.12 Accordingly, the Commission approves Rs. 330.92 Crore and Rs. 294.01 Crore as the cost of power purchased from Manikaran Power Limited for Final Truing up for FY 2020-21 and FY 2021-22 respectively.

## Renewable Power Purchase

### *BEST's Submission*

4.4.13 BEST has long term PPA with Walwhan Solar MH Ltd and has procured 31.91 MU and 31.50 MU solar power in FY 2020-21 and FY 2021-22 respectively. The total cost for solar procurement were Rs. 26.77 Crore and 136.31 Crore for FY 2020-21 and FY 2021-22, respectively. The details of RE procurement is provided below:

**Table 88 : RE Power Purchased for FY 2020-21, as submitted by BEST:**

Particulars	Quantum	Energy Charges	Total Charges	Rate	RPS Rebate	Net Charges	Rate
		Rs.Cr.	Rs.Cr.	Rs.Cr.	Rs.Cr.	Rs.Cr.	Rs./kWh
Walwhan Solar Energy Maharashtra (Erstwhile Welspun)	31.50	26.96	26.96	8.56	(0.27)	26.69	8.47
Additional Power of March-2020	0.75	0.64	0.64	8.56	(0.57)	0.07	0.99
Quantum towards Additional Power of March 2021	0.41	-	-	-	-	-	-
<b>Total</b>	<b>31.91</b>	<b>27.60</b>	<b>27.60</b>	<b>8.65</b>	<b>(0.84)</b>	<b>26.77</b>	<b>8.39</b>

*\*Additional power for March 2020 from Walwhan Solar is 0.75 MU for which cost is considered in this financial year*

**Table 89 : RE Power Purchased for FY 2021-22, as submitted by BEST:**

Particulars	Quantum	Energy Charges	OA Charges	Net Charges	Rate	RPS Rebate	Grand Total
	MU	Rs.Cr.	Rs.Cr.	Rs.Cr.	Rs/kWh	Rs.Cr.	Rs. Cr.
Walwhan	31.50	26.96	-	26.96	8.56	-0.27	26.69
Additional Power of March-2021	0.41	0.35	-	0.35		-0.31	0.04
Additional Power of March-2022	0.12	-	-	-	-	-	-
RPS-Solar_IEX_GTAM_GDAM	19.79	7.46	0.76	8.22	4.15	-	8.22
RPS-Non-Solar_IEX_GTAM_GDAM	0.57	0.21	0.03	0.24	4.22	-	0.24
REC-Solar	-	-	-	37.42		-	37.42
REC-Non-Solar	-	-	-	63.69		-	63.69
<b>Total</b>	<b>51.98</b>	<b>34.99</b>	<b>0.79</b>	<b>136.89</b>	<b>26.33</b>	<b>-0.58</b>	<b>136.31</b>

*\* Additional power for March 2021 from Walwhan Solar is 0.41 MU for which cost is considered in this financial year*

4.4.14 As mentioned in the earlier section of True-up for FY 2019-20, BEST has accepted 0.75 MU and 0.41 MU in the month of March 2020 and March 2021 respectively at the discounted tariff of Rs. 1.00 per unit from Walwhan Solar MH Ltd. to avoid purchase of Solar REC & to reduce shortfall of Solar RPO. Since, BEST has made payment of for the said purchase in next financial year, the same is also accordingly considered in the books of accounts in the year in which payment is made.

4.4.15 BEST submitted that, due to suspension of REC trading on the power exchanges by Hon'ble APTEL, it has not procured any Solar REC & Non-Solar REC in FY 2020-21.



- 4.4.16 In FY 2021-22, BEST submitted that it has procured REC certificate of Rs. 101.11 Crore as against approved cost of Rs. 71.59 Crore in MYT Order by the Commission.
- 4.4.17 BEST has also procured Solar/Non-Solar power from GTAM/ GDAM market to meet demand as well as to fulfil the cumulative shortfall in the RPO obligation at the rate of Rs. 4.15/kWh and Rs. 4.22/kWh respectively, in FY 2021-22.
- 4.4.18 Hence, BEST requested the Commission to approve Rs. 26.77 Crore and 136.31 Crore as power purchase cost from RE sources for FY 2020-21 and FY 2021-22.

***Commission's Analysis and Ruling***

- 4.4.19 **Solar RE Purchase:** BEST has submitted that it meets the solar RE purchase obligation through a long-term power purchase agreement entered with M/s. Walwhan Solar MH Ltd for FY 2020-21 and FY 2021-22. As per agreement, BEST has procured entire solar power from 20 MW solar plant of Walwhan Solar MH Ltd. During FY 2020-21 and FY 2021-22, BEST has purchased 31.50 MU at rate of Rs. 8.56/kWh as approved in the PPA. Further, an additional power of 0.41 MU and 0.12 MU is purchased by BEST at discounted rate of Rs. 1.00/kWh for FY 2020-21 and FY 2021-22 respectively to avoid purchase of Solar REC and subsequently to reduce the cumulative shortfall of the Solar RPO. Also, BEST had procured 0.75 MU and 0.41 MW on the same condition from Walwhan Solar MH Ltd for FY 2019-20 and FY 2020-21 respectively which was accounted for that respective period, but the cost related to the same of Rs. 0.07 Crore and Rs. 0.04 Crore is accounted in FY 2020-21 and FY 2021-22 respectively. The Commission has verified that past period due was not considered in FY 2019-20 and FY 2020-21. Therefore, average cost for 31.91 MU and 31.62 MU of solar power purchase from Walwhan Solar MH Ltd is Rs. 8.45/kWh and Rs. 8.53/kWh for FY 2020-21 and FY 2021-22 respectively and the same is being considered by the Commission. In addition to the aforesaid, BEST has also purchased 19.79 MU of solar power from IEX in GDAM/GTAM market. The Commission has verified the same from the Daily Obligation report of IEX and has considered the total cost of Rs. 8.22 Crore for FY 2021-22 for the said purchase.
- 4.4.20 Having allowed additional Solar power purchase from Walwham Solar MH Ltd at discount of Rs. 1/kWh in PPA tariff of Rs. 8.56/kWh, the Commission notes that now short term RE power is available on GDAM/GTAM market at relatively lower tariff. Hence, in future, before procuring any additional solar power, BEST shall ensure that its effective rate is not higher than market rate.
- 4.4.21 **Non-Solar RE Purchase:** The Commission notes that BEST has not purchased Non-Solar power in FY 2020-21, whereas only 0.57 MU has been purchased in FY 2021-22 from IEX in GDAM/GTAM market. The Commission has verified the same from the Daily Obligation report of IEX and has considered the total cost of Rs. 0.24 Crore for FY 2021-22 for the said purchase.
- 4.4.22 **REC Purchase:** The Commission in the MYT Order has allowed BEST to purchase



RECs to meet the RPO for FY 2020-21 and FY 2021-22. The Commission notes the submission of BEST that it was not able to purchase RECs in FY 2020-21 due to stay of REC trading by Hon'ble APTEL. However, in FY 2021-22, BEST has purchased 157 MU of solar REC at Rs 2.38/kWh and to meet solar RPO and 529.2 MU of non-solar REC at Rs 1.20/kWh. BEST has incurred total cost of Rs 37.42 Crore and 63.69 Crore to purchase solar and non-solar RECs respectively. BEST has also submitted the documentary evidence regarding the number of RECs purchased and their cost. The Commission has verified the actual cost from the documentary evidence and considered the same as submitted by BEST.

4.4.23 Accordingly, the Commission approves the RE purchase from solar and non-solar sources for FY 2020-21 and FY 2021-22 as shown in Table below:

**Table 90: Power Procurement from Renewable Sources for FY 2020-21, approved by Commission:**

Particulars	MYT Petition			Approved in this Order		
	Quantum	Total Charges*	Rate	Quantum	Total Charges*	Rate
	MU	Rs. Cr.	Rs./kWh	MU	Rs. Cr.	Rs./kWh
Walwhan Solar Energy Maharashtra (Erstwhile Welspun)	31.50	26.96	8.56	31.50	26.96	8.56
Additional Power of March-2020	0.75	0.64	8.56	0.75	0.64	8.56
Quantum towards Additional Power of March 2021	0.41	-	-	0.41	-	-
<b>Total</b>	<b>31.91</b>	<b>27.60</b>	<b>8.65</b>	<b>31.91</b>	<b>27.60</b>	<b>8.65</b>

\*- total charges excluding Rebate is highlighted and rebate adjusted in other charges

**Table 91: Power Procurement from Renewable Sources for FY 2021-22, approved by Commission:**

Particulars	MYT Petition			Approved in this Order		
	Quantum	Total Charges*	Rate	Quantum	Total Charges*	Rate
	MU	Rs.Cr.	Rs./kWh	MU	Rs.Cr.	Rs./kWh
Walwhan Solar Energy	31.50	26.96	8.56	31.50	26.96	8.56
Additional Power of March-2021	-	0.35		-	0.35	
Additional Power of March-2022	0.12	-	-	0.12	-	-
RPS-Solar_IEX_GTAM_GDAM	19.79	8.22	4.15	19.79	8.22	4.15
RPS-Non-Solar_IEX_GTAM_GDAM	0.57	0.24	4.22	0.57	0.24	4.22
REC-Solar	-	37.42		-	37.42	
REC-Non-Solar	-	63.69		-	63.69	
<b>Total</b>	<b>51.98</b>	<b>136.89</b>	<b>26.33</b>	<b>51.98</b>	<b>136.89</b>	<b>26.33</b>

\*- total charges excluding Rebate is highlighted and rebate adjusted in other charges

4.4.24 Accordingly, the Commission approves Rs. 27.60 Crore and Rs. 136.98 Crore as the cost of power purchased from Renewable sources for Final Truing up for FY 2020-21 and FY 2021-22 respectively.

**RPO Compliance**

***BEST's Submission***

**Solar RPO**

4.4.25 BEST's standalone Solar RPO target was 4.5% and 6% for FY 2020-21 and FY 2021-22 respectively. Accordingly, BEST has to purchase 147.76 MU and 217.35 MU for FY 2020-21 and FY 2021-22 respectively. To meet Solar RPO, the details of RE/REC purchase as elaborated herein above in this Order. In addition, BEST has also considered 6.55 MU and 9.20 MU of solar energy purchased from consumer who have opted for Net Metering.

**Table 92: RPO Settlement data for FY 2020-21:**

Particulars	Cumulative RPO (Surplus)/ Shortfall up to FY 2019-20	FY 2020-21		Net Shortfall /(Surplus) for FY 2020-21
	MU	%	MU	MU
Gross Energy at G-T Interface (Excluding Hydro)			3,283.55	
<b>Solar</b>				
RPO Target		4.50%	147.76	
Solar RE			31.91	
Solar REC			-	
Solar energy from Net Metered Consumers			6.55	
RPO Achieved		1.17%	38.46	
<b>RPO (Surplus) / Shortfall</b>	<b>(2.92)</b>		<b>109.30</b>	<b>106.38</b>
<b>Non-Solar</b>				
RPO Target		11.50%	377.61	
Non-Solar RE			-	
Non-Solar REC			-	
Non-Solar RPO Achieved		0.00%	-	
<b>RPO (Surplus) / Shortfall</b>	<b>(7.43)</b>		<b>377.61</b>	<b>370.18</b>
<b>Total RPO Target for FY 2020-21</b>		16.00%	525.37	
Total RPO Achieved in FY 2020-21		1.17%	38.46	
Standalone shortfall of FY 2020-21			<b>486.91</b>	
<b>Cumulative shortfall/ (surplus) of FY 2020-21</b>	<b>(10.35)</b>			<b>476.56</b>

**Table 93: RPO Settlement data for FY 2021-22:**

Particulars	Cumulative RPO (Surplus)/ Shortfall up to FY 2019-20	FY 2021-22		Net Shortfall /(Surplus) for FY 2020-21
	MU	%	MU	MU
Gross Energy at G-T Interface (Excluding Hydro)			3,622.49	
<b>Solar</b>				
RPO Target		6.00%	217.35	
Solar RE			31.62	

Particulars	Cumulative RPO (Surplus)/ Shortfall up to FY 2019-20	FY 2021-22		Net Shortfall /(Surplus) for FY 2020-21
	MU	%	MU	MU
Solar RE from Power Exchange			19.79	
Solar REC			157.00	
Solar energy from Net Metered Consumers			9.20	
RPO Achieved		6.01%	217.61	
<b>RPO (Surplus) / Shortfall</b>	<b>106.38</b>		<b>(0.26)</b>	<b>106.12</b>
<b>Non-Solar</b>				
RPO Target		11.50%	416.59	
Non-Solar RE			0.57	
Non-Solar REC			529.20	
Non-Solar RPO Achieved		14.62%	529.77	
<b>RPO (Surplus) / Shortfall</b>	<b>370.18</b>		<b>(113.18)</b>	<b>256.99</b>
<b>Total RPO Target for FY 2020-21</b>			633.94	
Total RPO Achieved in FY 2020-21			747.38	
Standalone shortfall of FY 2020-21			<b>(113.44)</b>	
<b>Cumulative shortfall/ (surplus) of FY 2020-21</b>	<b>476.56</b>			<b>363.11</b>

4.4.26 BEST submitted that as Hon'ble the APTEL had suspended the REC trading session from July 2020, BEST could not purchase Solar REC's in FY 2020-21.

4.4.27 Considering the past period surplus 2.92 MU (up to 2019-20) and RE/REC purchase, in FY 2020-21 and FY 2021-22, there is cumulative shortfall of 106.12 MU up to FY 2021-22.

### **Non-Solar RPO**

4.4.28 BEST's standalone Non-Solar RPO target for FY 2020-21 and FY 2021-22 was 11.50% respectively. Accordingly, BEST has to purchase 377.61 MU and 416.59 MU for FY 2020-21 and FY 2021-22 respectively. To meet Non-Solar RPO, the details of RE/REC purchase as elaborated herein above in this Order.

4.4.29 Considering the past period surplus 7.43 MU (up to 2019-20) and RE/REC purchase, in FY 2020-21 and FY 2021-22, there is cumulative shortfall of 256.99 MU up to FY 2021-22.

4.4.30 BEST submitted that as Hon'ble the APTEL had suspended the REC trading session from July 2020, BEST could not purchase Non-Solar REC's in FY 2020-21. Subsequently, after resumption of REC trading in November, 2021, BEST has purchased REC's from IEX.

4.4.31 BEST further submitted that it has tied up long term PPA with SECI for 400 MW Wind-Solar Hybrid power at tariff of Rs. 2.48/unit for 25 years. The projects under the scheme were expected to be commissioned by third quarter of FY 2022-23.

However, vide email dated 1 December, 2022, SECI has informed that the SCOD of the project is extended up to December 2024.

- 4.4.32 BEST has also signed a PPA with SECI for procurement of 234 MW Solar Power at Rs. 2.71 per unit which includes a fixed tariff of Rs. 2.54 per unit discovered through competitive bidding plus SECI's trading margin of Rs. 0.07 per unit plus additional risk premium of Rs 0.10 per unit due to not covered under State Government Guarantee for 25 years. The Commission vide its Order dated 30 December, 2022 in Case No. 120 of 2022 has approved the tariff & PPA. Accordingly, BEST has signed a PPA on 9 December, 2022. The power from the said PPA will be available from April 25 onwards.
- 4.4.33 BEST had conducted the bidding process for procurement of 250 MW Solar power and 500 MW Wind power on short term basis to fulfil Solar and Non solar RPO of BEST of FY 2020-21, FY 2021-22 and FY 2022-23. E-tenders were uploaded on DEEP portal on 10.08.2022 for procurement of 250 MW Solar power (Tender No. BEST/Short/22-23/ET/132) and procurement of 500 MW Wind power (Tender No. BEST/Short/22-23/ET/133) on short term basis. However, no bidders have responded to BEST's Tender.
- 4.4.34 BEST is also in the process of conducting bidding for procurement of 325 MW Solar power and 475 MW Wind power on short term basis for the period of April 2023 to March 2024. BEST will approach the Commission for the approval of the tariff if, the discovered tariff is competitive.
- 4.4.35 BEST submitted that it has made every effort to fulfil its RPO compliance. However due to various reasons such as suspension of REC trading, extension of COD of 400 MW SECI Hybrid project, non-response of generators/traders to the short-term bidding conducted by BEST, it has cumulative shortfall of Solar and Non solar RPO till FY 2021-22.
- 4.4.36 BEST requested the Commission not to levy penalty and allow BEST to carry forward the shortfall in RPO compliance, if any, to the next control period considering surplus tied up capacity (SECI 400 MW Hybrid Power & SECI – 234 MW Solar Power) at competitive rate as BEST has good record of complying with RPO targets in past period.

#### ***Commission's Analysis and Ruling***

- 4.4.37 The Commission notes that BEST has complied with its RPO up to FY 2019-20 with marginal surplus as approved in Order dated 07 July. 2021 in Case No 50 of 2021. However, as per RE/REC purchase for FY 2020-21 and FY 2021-22, there is cumulative shortfall of 106.12 MU and 256.99 MU respectively.

**Table 94: RPO Shortfall as on FY 2021-22**

<b>RPO Targets &amp; Achievement</b>	<b>Units</b>	<b>FY 2020-21</b>	<b>FY 2021-22</b>
Net Energy Requirement (Excluding Hydro)	MU	3,283.55	3,622.49
Solar RPO target	%	4.50%	6.00%
Solar RPO target	MU	147.76	217.35
Solar Rooftop	MU	6.55	9.20
Solar RE Power	MU	31.91	51.41
Solar REC	MU		157.00
Op. Balance of Solar RPO	MU	(2.92)	106.38
Add: Solar RPO Target	MU	147.76	217.35
Less: Solar RPO Achievement	MU	38.46	217.61
Solar RPO Shortfall/(Surplus) during the year	MU	109.30	(0.26)
<b>Cl. Balance of Solar RPO</b>	<b>MU</b>	<b>106.38</b>	<b>106.12</b>
Non-Solar RPO target	%	11.50%	11.50%
Non-Solar RPO target	MU	377.61	416.59
Non-Solar RPO Power	MU	-	0.57
Non-Solar REC	MU		529.20
Op. Balance of Non-Solar RPO	MU	(7.43)	370.18
Non-Solar RPO target	MU	377.61	416.59
Non-Solar RPO Achievement			529.77
Non-Solar RPO Shortfall/(Surplus) during the year	MU	377.61	(113.19)
<b>Cl. Balance of Non-Solar RPO</b>	<b>MU</b>	<b>370.18</b>	<b>256.99</b>
<b>Total Shortfall</b>	<b>MU</b>	<b>476.56</b>	<b>363.12</b>

4.4.38 The Commission observes that BEST has only one operational PPA for Solar Power of 20 MW and is supplying ~31MU per annum. BEST has relied heavily on REC purchase for RPO fulfillment. Infact, REC trading commenced on Power Exchange, BEST has purchased significant quantum of RECs to meet the RPO.

4.4.39 To meet the RPO, BEST has tied up 400 MW Solar Wind Hybrid power at rate of Rs 2.48 per unit for a period of 25 years and the same is approved by the Commission vide its Order dated 26 April, 2021 in Case No. 16 of 2021. The power from the said project was envisaged to be available from January, 2023 and would be able to meet the RPO for future years. However, as submitted by BEST, the said power will now be available only from December, 2024. It was expected that power from this source will help BEST to meet any cumulative RPO shortfall over the entire Control Period from FY 2020-21 to FY 2024-25 and will also help in lowering the Power Purchase cost to that extent. Since the power from the said source is delayed, BEST is likely to have continuing shortfall over the control period.

4.4.40 The Commission notes from the past record of BEST that it has always complied with RPO as specified in the Regulations. Also, it is seen that BEST has tied up long term PPA with SECI to meet the cumulative RPO for the Control Period, but the said PPA got delayed by almost 18 months, which is beyond the control of BEST. The Commission further notes that directing BEST to meet RPO by purchasing REC in the remaining years of the Control Period will add to the cost in the said years and also increase the tariff of consumers. It is evident that power available from long term PPA's signed by BEST (1166 MU considered for 634 MW) from FY 2025-26 onwards will be higher than required to meet RPO for each year of the next Control Period. Further, such power would be available at very competitive rate as approved by the Commission. Thus, the Commission deems it fit to invoke power under Regulation 16: Power To Relax of RPO-REC Regulations, 2019 and allow BEST as one time exception considering the past performance of meeting RPO targets and to reduce the tariff impact on consumers, to meet the shortfall in RPO target of FY 2020-21 and FY 2021-22 in FY 2024-25 without levying any penalty as per Regulation 12.3 of the said Regulations.

### **Short Term Power Purchase**

#### ***BEST's Submission***

- 4.4.41 After considering the procurement from long term/medium term sources and renewable sources, BEST has met its balance power requirement through purchase of power from short term sources. BEST submitted that Regulation 22 of the MYT Regulations, 2019 allow BEST to procure additional power in case of an unanticipated increase in the demand for electricity or a shortfall or failure in the supply of electricity from any approved source of supply for short-term basis. BEST submitted that it has contracted capacity of around 800 MW. However, BEST has purchased short term power from bilateral market and Power Exchange as and when required to fulfill its peak demand requirement.
- 4.4.42 BEST further submitted that, actual bilateral power purchase of 309.07 MU was less than the approved bilateral power purchase of 615.84 MU and the average rate of bilateral power procurement was Rs. 4.70/kWh which was lesser than Average Power Purchase Cost of Rs. 6.33/kWh.
- 4.4.43 Also, BEST has procured bilateral power from various power Traders/ Generators after inviting e-tender through DEEP e-portal, in line with Ministry of Power (MoP) guidelines on short term competitive bidding in the month of October 2021 and December 2021 and had informed the Commission regarding the procurement of short term bilateral power and the results of the e-bidding process via letter dtd. 29.09.2021 & 11.11.2021.
- 4.4.44 The details of Short-Term Power Procurement by BEST is given below:

**Table 95 : Bilateral Power Procurement for FY 2020-21, as submitted by BEST:**

Source	Quantum	Total Cost	Rates
	MU	Rs. Cr.	Rs./Kwh
IEX Purchase	133.99	49.01	3.66
IEX Sale	(19.43)	(5.67)	2.92
STOA Application processing Fee of MSLDC	-	0.01	-
<b>IEX Net Purchase</b>	<b>114.55</b>	<b>43.35</b>	<b>3.78</b>

**Table 96 : Bilateral Power Procurement for FY 2021-22, as submitted by BEST:**

Source	Quantum	Total Cost	Rates
	MU	Rs. Cr.	Rs./kWh
IEX Purchase	290.24	132.67	4.57
IEX Sale	(23.48)	(16.17)	6.89
<b>IEX Net Purchase</b>	<b>266.76</b>	<b>116.50</b>	<b>4.37</b>
Tata Power Trading Company Ltd.	25.80	17.91	6.94
Dhariwal Infrastructure Ltd.	16.51	10.94	6.62
STOA Application processing Fee of MSLDC		0.01	
<b>Total</b>	<b>309.07</b>	<b>145.36</b>	<b>4.70</b>

4.4.45 BEST has paid the STOA application processing fee for MSLDC of Rs. 0.01 Crore in FY 2020-21 and FY 2021-22.

4.4.46 Hence, BEST requested the Commission to approve the short-term power purchase as shown in table above.

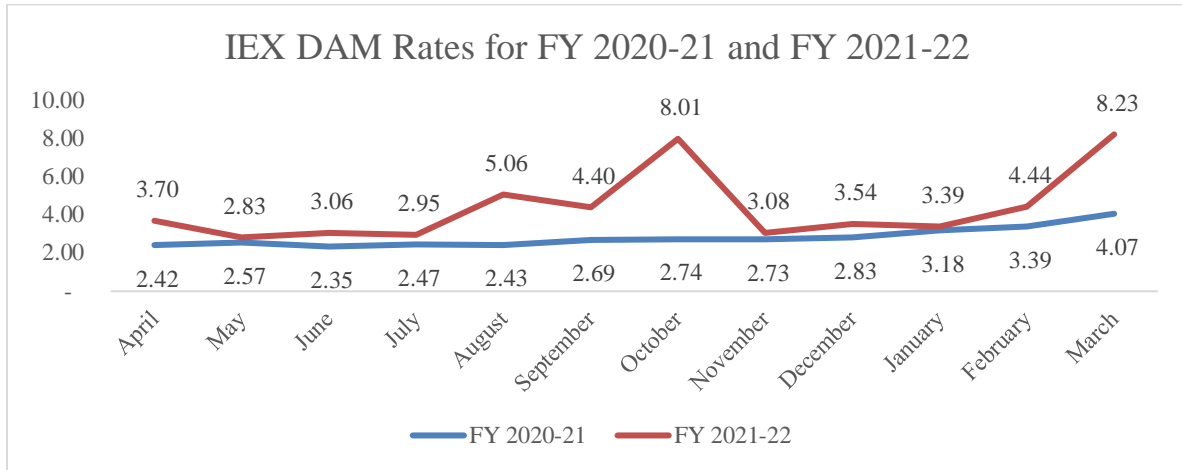
***Commission's Analysis and Ruling***

4.4.47 The Commission notes that BEST has purchased short term power only from IEX in FY 2020-21 and the rate (Rs 3.66/kWh) was also lower than approved (Rs 4/kWh) by the Commission in the MYT Order.

4.4.48 In FY 2021-22, BEST has procured bilateral power from various power traders/ Generators after inviting e-tender through Ministry of Power's DEEP e-portal, in line with MoP guidelines for short term competitive bidding. Power is also purchased through Power Exchange to meet shortfall. BEST submitted that short term power is purchased to meet its demand.

4.4.49 The Commission in the MYT Order has allowed ceiling tariff of Rs. 4/ kWh for FY 2021-22 for purchase of short-term power. BEST has procured short-term power at weighted average rate of Rs. 4.70/ kWh for FY 2021-22. The Commission has verified the copy of result of the e-bidding for the verification of the rate for October 2021 and December 2021 when BEST has purchased power bilaterally through competitive bidding. The Commission notes that rate on IEX started showing upward trend as compared to FY 2020-21 which has resulted in higher power purchase rate

than approved in the MYT Order as outlined in the following graph:



4.4.50 Considering the above, the cost of procurement from short term sources as approved by the Commission is summarised in the Table below:

**Table 97: Power Procurement from Short Term Sources for FY 2020-21, approved by Commission:**

Source	MTR Petition			Approved in this Order		
	Quantum	Total Cost	Rates	Quantum	Total Cost	Rates
	MU	Rs.Cr.	Rs./Kwh	MU	Rs.Cr.	Rs./Kwh
IEX Purchase	133.99	49.01	3.66	133.99	49.01	3.66
IEX Sale	(19.43)	(5.67)	2.92	(19.43)	(5.67)	2.92
STOA processing Fee	-	0.01	-	-	0.01	-
<b>IEX Net Purchase</b>	<b>114.55</b>	<b>43.35</b>	<b>3.78</b>	<b>114.55</b>	<b>43.35</b>	<b>3.78</b>

**Table 98: Power Procurement from Short Term Sources for FY 2021-22, approved by Commission:**

Source	MTR Petition			Approved in this Order		
	Quantum	Total Cost	Rates	Quantum	Total Cost	Rates
	MU	Rs.Cr.	Rs./kWh	MU	Rs.Cr.	Rs./kWh
IEX Purchase	290.24	132.67	4.57	290.24	132.67	4.57
IEX Sale	(23.48)	(16.17)	6.89	(23.48)	(16.17)	6.89
<b>IEX Net Purchase</b>	<b>266.76</b>	<b>116.50</b>	<b>4.37</b>	<b>266.76</b>	<b>116.50</b>	<b>4.37</b>
Tata Power Trading Company Ltd.	25.80	17.91	6.94	25.80	17.91	6.94
Dhariwal Infrastructure Ltd.	16.51	10.94	6.62	16.51	10.94	6.62
STOA processing Fee		0.01			0.01	
<b>Total</b>	<b>309.07</b>	<b>145.36</b>	<b>4.70</b>	<b>309.07</b>	<b>145.36</b>	<b>4.70</b>

4.4.51 Accordingly, the Commission approves Rs. 43.35 Crore and Rs. 145.36 Crore as the cost of power purchased from Short Term sources for Final Truing up for FY 2020-21 and FY 2021-22 respectively.



## **Prior Period Payment & Other Costs**

### ***BEST's Submission***

4.4.52 BEST has made payment of Rs. 355.51 Crore and Rs. 194.85 Crore towards prior payment charges in FY 2020-21 and FY 2021-22, respectively. The details of the same is provided in table below:

**Table 99 : Summary of Prior Period Payment for FY 2020-21, as submitted by BEST (Rs. Crore)**

<b>Particulars</b>	<b>MYT Order</b>	<b>MTR Petition</b>
Payment for stand-by energy purchase in FY 2016-17 & FY 2017-18		1.27
MSLDC pool imbalance cost DSM/WRPC PAYMENT for FY 2017-18		11.27
MSLDC pool imbalance cost for FY 2018-19 and FY 2019-20.		178.50
MS/MSPC/FCR bill//00071 dtd.06.01.2021. Fixed Cost Reconciliation and Carrying Cost bills for FY 2018-19.	274.48	39.82
MSLDC variable ch..as per MERC Order 297 of 2018 dtd.03.10.2019 and 90 of 2020 dtd.20.07. 2020 FY 2011-12 to 2017-18		26.95
Stand-by Charges	100.28	100.28
Rebate of 1% on Trans. Charges	-	(2.58)
Rebate of 1% on monthly MSLDC Charges	-	(0.01)
<b>Total</b>	<b>374.76</b>	<b>355.51</b>

**Table 100 : Summary of Prior Period Payment for FY 2021-22, as submitted by BEST (Rs. Crore)**

<b>Particulars</b>	<b>MYT Order</b>	<b>MTR Petition</b>
Stand-by Charges	99.40	99.40
Bilateral Rebate	-	(0.06)
RPS Rebate	-	(0.58)
Rebate of 1% on Trans. Charges	-	(2.58)
Rebate of 1% on monthly MSLDC Charges	-	(0.01)
MSLDC Pool Imbalance	-	17.86
Net DSM Charges (Payable/Receivable)	-	4.48
Prior Period (RPS )_Additional Power of March-2021 from M/s.Walwhan	-	0.35
Provisional bill of variable cost to MSLDC FBSM pool for 2nd half for FY 2019-20	-	59.50
Provisional monthly Energy Balancing and settlement Account under Intra State ABT of MSLDC for the month from April'2020 to September'2020	-	15.24
Provisional monthly Energy Balancing and settlement Account under Intra State ABT to MSLDC for the month March'2021	-	1.25
<b>Total</b>	<b>99.40</b>	<b>194.85</b>

4.4.53 BEST submitted that it has made payment of stand-by charges of Rs. 100.28 Crore and Rs. 99.40 Crore in FY 2020-21 and FY 2021-22, respectively as approved by the Commission in the MYT order.

## **FY 2020-21**

- 4.4.54 BEST submitted that in its Order in Case No 297 of 2018, the Commission has directed MSLDC to follow new methodology for computation of FBSM bills and to revise all the FBSM bills from August, 2011. MSLDC has started raising the revised differential bill. BEST submitted that some bills from February, 2013 onwards are yet to be received from MSLDC. All these bills will have to be considered as prior period recovery. BEST has made an Outstanding Creditors (OC) provision in its accounts for all the bills received during the year amounting to Rs.248.66 Crore and only Rs.7.89 Crore are paid by BEST. The Commission had approved Rs.274.48 Cr as against the same in the MYT order.
- 4.4.55 As regards to payments made under UI charges under regional DSM for WRPC, BEST would like to state that the FBSM bill itself is generated to find the share of individual utility in regional UI payments for all the unscheduled energy exchanged by Maharashtra State with the regional pool, the due date for making payment is 15 to 25 days from the end of the week. However, the liability share/contribution of individual SPP (State Pool Participant) cannot be estimated without generation of FBSM bill. Since FBSM bill lags behind by around 2 years, an advance payment is being collected from Discoms in terms of WRPC DSM bill as per methodology decided in MSPC Sub-Committee meeting held on 22 February 2019 at SLDC Kalwa, as and when a bill is raised by WRPC. Accordingly, BEST has paid Rs. 11.27 Crore against the same.

## **FY 2021-22**

- 4.4.56 BEST has received Bilateral payment rebate of Rs. 0.06 Crore, RPS rebate of Rs. 0.58 Crore, 1% rebate on Transmission charges of Rs. 2.58 Crore and rebate of 1% on monthly MSLDC charges of Rs. 0.01%.
- 4.4.57 BEST submitted that for FY 2021-22, MSLDC has issued a Provisional monthly energy Balancing and Settlement Account under Intra State ABT for July-2021, August-2021 & September-2021 considering Imbalance pool Rate of Rs. 2.86/kWh.
- 4.4.58 Further, BEST has made payment of DSM Bills (Current Year) of Rs.4.48 Crore and the same is claimed in the petition.
- 4.4.59 BEST submitted that for FY 2021-22, O/C (Outstanding Creditors) provision have been made for Rs. 17.86 Crore of FBSM Bills (Current Year) which currently are not paid by BEST. BEST also have made O/C provisions for prior period FBSM bills of Rs. 75.99 Cr which also currently not paid by BEST.
- 4.4.60 BEST requested the Commission to approve the total past period cost & other charges as shown above for FY 2020-21 and FY 2021-22.

### ***Commission's Analysis and Ruling***

- 4.4.61 The Commission notes that BEST in the earlier years has sought Truing-up of other costs based on actual payment done even though invoices have been received by it. However, from FY 2020-21, BEST has sought Truing-up based on the amount as per Invoices received and not on the actual payment done. The Commission in the MYT Order has also allowed the cost based on the submissions of BEST against estimated payments towards prior period expenses. The Commission is of the view that allowing cost based on the invoices raised in the Financial Year for which Truing-up is being sought is the correct approach as any Late Payment Surcharge is not allowed in ARR and it is responsibility of Licensee to make the payments. Accordingly, the Commission has allowed the Prior Period Payment and other costs as submitted by BEST and after reconciling the same with Audited Accounts. Further, BEST has also received rebates against timely payments made for bilateral power purchase, RE power purchase, transmission charges and SLDC charges paid during the year.
- 4.4.62 The total Stand-by Charges of Rs. 396 Crore payable to MSEDCL are recovered from distribution Licensees availing the stand-by facility. In FY 2020-21 and FY 2021-22, these charges were recoverable from TPC-D, AEML-D, BEST and Indian Railways. The charges are allocated between these Licensees in the ratio of their Base Transmission Capacity Rights (TCR) in the overall TCR.
- 4.4.63 Based on the above and the information available in the audited accounts, the Commission has accepted BEST's submissions in this regard and has approved the actual Stand-by Charges of Rs.100.28 Crore and Rs. 99.40 Crore paid by BEST on Truing up for FY 2020-21 and FY 2021-22. This is also in accordance with the relevant Order in respect of MSEDCL.
- 4.4.64 Accordingly, the Commission approves other charges which also includes Stand-by charges for FY 2020-21 and FY 2021-22 as shown in Table below:

**Table 101: Prior Period Payment for FY 2020-21, approved by Commission (Rs. Crore)**

<b>Particulars</b>	<b>MYT Order</b>	<b>MTR Petition</b>	<b>Approved in this Order</b>
Payment for stand-by energy purchase in FY 2016-17 & FY 2017-18		1.27	1.27
MSLDC pool imbalance cost DSM/WRPC PAYMENT for FY 2017-18		11.27	11.27
MSLDC pool imbalance cost for FY 2018-19 and FY 2019-20.		178.50	178.50
MS/MSPC/FCR bill//00071 dtd.06.01.2021. Fixed Cost Reconciliation and Carrying Cost bills for FY 2018-19.	274.48	39.82	39.82
MSLDC variable charges as per MERC Order 297 of 2018 dtd.03.10.2019 and 90 of 2020 dtd.20.07. 2020 FY 2011-12 to 2017-18		26.95	26.95
Stand-by Charges	100.28	100.28	100.28
Rebate of 1% on Transmission Charges	-	(2.58)	(2.58)
Rebate of 1% on monthly MSLDC Charges	-	(0.01)	(0.01)
<b>Total</b>	<b>374.76</b>	<b>355.51</b>	<b>355.51</b>

**Table 102: Prior Period Payment for FY 2021-22, approved by Commission (Rs. Crore)**

Particulars	MYT Order	MTR Petition	Approved in this Order
Stand-by Charges	99.40	99.40	99.40
Bilateral Rebate	-	(0.06)	(0.06)
RPS Rebate	-	(0.58)	(0.58)
Rebate of 1% on Trans.Charges	-	(2.58)	(2.58)
Rebate of 1% on monthly MSLDC Charges	-	(0.01)	(0.01)
MSLDC Pool Imbalance	-	17.86	17.86
Net DSM Charges (Payable/Receivable)	-	4.48	4.48
Prior Period (RPS )_Additional Power of March-2021 from M/s.Walwhan	-	0.35	0.35
Provisional bill of variable cost to MSLDC FBSM pool for 2nd half for FY 2019-20	-	59.50	59.50
Provisional monthly Energy Balancing and settlement Account under Intra State ABT of MSLDC for the month from April'2020 to September'2020	-	15.24	15.24
Provisional monthly Energy Balancing and settlement Account under Intra State ABT to MSLDC for the month March'2021	-	1.25	1.25
<b>Total</b>	<b>99.40</b>	<b>194.85</b>	<b>194.85</b>

4.4.65 Accordingly, the Commission approves Rs. 355.51 Crore and Rs. 194.85 Crore as the Prior Period Cost for Final Truing up for FY 2020-21 and FY 2021-22 respectively.

### **Intra-State Transmission Charges & MSLDC Charges**

#### ***BEST's Submission***

#### **FY 2020-21**

4.4.66 BEST submitted that, it has paid Transmission Charges of Rs. 258.48 Crore (i.e., Rs.21.57 Crore for 12 months - Rs.0.36 Crore) during FY 2020-21 as against Rs. 258.80 Crore approved in the MYT Order. There is a decrease of Rs. 0.33 Crore in Transmission Charges paid during FY 2020-21. This variation is mainly due to adjustment of Rs. (-0.36) Crore given by STU in the monthly Transmission charges bill for October-2020 as per MERC Order in Case No. 52 of 2020 and adjustment of Rs. 0.03 Crore due to decimal adjustment of monthly Transmission charges bill amount for 12 months.

4.4.67 BEST has also claimed MSLDC charges of Rs. 1.29 Crore.

#### **FY 2021-22**

4.4.68 BEST has paid Transmission Charges of Rs. 258.00 Crore (i.e., Rs.21.50 Crore\*12 months + Rs.0.04 Crore) during FY 2021-22 as against Rs. 257.96 Crore approved in MYT Order. There is an increase of Rs. 0.04 Crore due to decimal adjustment of

monthly Transmission charges bill amount for 12 months in Transmission Charges paid during FY 2021-22.

4.4.69 BEST has also claimed MSLDC charges of Rs. 1.20 Crore.

***Commission’s Analysis and Ruling***

4.4.70 The Commission has approved the Transmission Charges and MSLDC Charges based on the information available in the Audited Accounts and relevant Orders issued by the Commission. Accordingly, the actual Transmission Charges and MSLDC charges approved by the Commission for FY 2020-21 and FY 2021-22 is as given in Table below:

**Table 103: Intra-State Transmission Charges and MSLDC Charges approved by Commission (Rs. Crore)**

Particulars	MYT Petition	Approved in this Order
	Cost	Cost
<b>FY 2020-21</b>		
Intra-State Transmission Charges	258.48	258.48
MSLDC Charges	1.29	1.29
<b>Total</b>	<b>259.77</b>	<b>259.77</b>
<b>FY 2021-22</b>		
Intra-State Transmission Charges	258.00	258.00
MSLDC Charges	1.20	1.20
<b>Total</b>	<b>259.20</b>	<b>259.20</b>

4.4.71 Accordingly, the Commission approves Rs. 259.77 Crore and Rs. 259.20 Crore as the Intrastate Transmission Charges and MSLDC Charges for Final Truing up for FY 2020-21 and FY 2021-22 respectively.

**Summary of Power Purchase**

***BEST’s Submission***

4.4.72 BEST has submitted the summary of Power Purchase Expenses for FY 2020-21 and FY 2021-22 are shown in Table below:

**Table 104 : Summary of Power Purchase Expenses for FY 2020-21, as submitted by BEST:**

Particulars	Approved with MYT Order			MTR Petition		
	Quantum	Total Cost	Rate	Quantum	Total Cost	Rate
	MU	Rs. Cr	Rs./kWh	MU	Rs. Cr	Rs./kWh
TPC-G	3,588.43	1,702.00	4.51	3,085.23	1,274.57	4.13
Walwhan Solar Energy Maharashtra (Erstwhile Welspun)	31.50	26.96	8.56	31.91	26.77	8.39
Manikaran Power Limited	744.60	325.64	4.37	846.41	330.92	3.91
Bilateral Power Purchase	640.80	256.32	4.00	114.55	43.35	3.78

Particulars	Approved with MYT Order			MTR Petition		
	Quantum	Total Cost	Rate	Quantum	Total Cost	Rate
	MU	Rs. Cr	Rs./kWh	MU	Rs. Cr	Rs./kWh
Short Term Non-Solar Purchase	-	-	-	-	-	-
Standby Support from MSEDCL	-	-	-	2.86	-	-
MSLDC Pool Imbalance	-	-	-	-30.85	-	-
REC Procurement-Solar	156.33	15.63	1.00	-	-	-
REC Procurement-Non-Solar	490.04	49.00	1.00	-	-	-
Other Charges	-	374.76	-	-	355.50	-
Intra-State Transmission Charges	-	258.80	-	-	258.48	-
MSLDC Charges	-	1.29	-	-	1.29	-
<b>Total</b>	<b>5,005.33</b>	<b>3,010.40</b>	<b>6.01</b>	<b>4,050.12</b>	<b>2,290.87</b>	<b>5.66</b>

**Table 105 : Summary of Power Purchase Expenses for FY 2021-22, as submitted by BEST:**

Particulars	Approved with MYT Order			MTR Petition		
	Quantum	Total Cost	Rate	Quantum	Total Cost	Rate
	MU	Rs. Cr	Rs./kWh	MU	Rs. Cr	Rs./ kWh
TPC-G	3,656.63	1,681.09	4.60	3,284.74	1,760.21	5.36
Walwhan Solar Energy Maharashtra (Erstwhile Welspun)	31.50	26.96	8.56	31.62	26.96	8.53
Manikaran Power Limited	744.60	328.83	4.42	720.08	294.01	4.08
Bilateral Power Purchase	615.84	246.34	4.00	-	-	-
Trader	-	-	-	42.31	28.85	6.82
Short Term Non-Solar Purchase	-	-	-	-	-	-
Standby Support from MSEDCL	-	99.40	-	-	99.40	-
MSLDC Pool Imbalance	-	-	-	34.99	17.86	5.10
REC Procurement-Solar	220.87	22.09	1.00	-	37.42	-
REC Procurement-Non-Solar	495.02	49.50	1.00	-	63.69	-
IEX net	-	-	-	266.76	116.50	4.37
RPS-Non-Solar_IEX_GTAM_GDAM	-	-	-	0.57	0.24	4.22
RPS-Solar_IEX_GTAM_GDAM	-	-	-	19.79	8.22	4.15
Other Charges	-	-	-	6.33	77.60	-
Intra-State Transmission Charges	-	257.96	-	-	258.00	-
MSLDC Charges	-	1.20	-	-	1.20	-
<b>Total</b>	<b>5,048.58</b>	<b>2,713.36</b>	<b>5.37</b>	<b>4,407.20</b>	<b>2,790.17</b>	<b>6.33</b>

4.4.73 BEST has incurred Rs. 26.71 Crore for FY 2020-21 and Rs. 12.86 Crore towards delayed payment charges but BEST is not claiming delay payment charges as the same was not allowed by the Commission in the previous Orders for BEST.

***Commission's Analysis and Ruling***

4.4.74 The summary of power purchase quantum and expenses, including Stand-by Charges and Transmission Charges as approved by the Commission for FY 2020-21 and FY 2021-22 after final Truing up, is given in the following Table:

**Table 106: Summary of Power Purchase Expenses for FY 2020-21, as approved by the Commission (Rs. Crore)**

Particulars	MTR Petition			Approved in this Order		
	Quantum	Total Cost	Rate	Quantum	Total Cost	Rate
	MU	Rs. Cr	Rs./kWh	MU	Rs. Cr	Rs./ kWh
<b>Long term / Medium term Sources</b>						
TPC-G	3,085.23	1,205.64	3.91	3,085.23	1,205.64	3.91
TPC-G past Period Charges		68.92			68.92	
Walwhan Solar MH Ltd	31.91	26.96	8.45	31.91	26.96	8.45
Manikaran Power Limited	846.41	330.92	3.91	846.41	330.92	3.91
<b>Short term Sources</b>						
Bilateral Power Purchase / Power Exchange	114.55	43.35	3.78	114.55	43.35	3.78
Standby support from MSEDCL	2.86	-		2.86	-	
Imbalance Pool	(30.85)	-		(30.82)	-	
Short Term Non-Solar Purchase						
REC Procurement Solar						
REC Procurement Non-Solar						
<b>Other Charges</b>						
Pool Imbalance charges		256.54			256.54	
Stand By Charges		100.28			100.28	
Payment for stand-by energy purchase in FY 2016-17 & FY 2017-18		1.27			1.27	
Rebate on Power Purchase and Transmission Charges		(2.79)			(2.79)	
Intra-State Transmission Charges		258.48			258.48	
MSLDC Charges		1.29			1.29	
<b>Total</b>	<b>4,050.12</b>	<b>2,290.87</b>	<b>5.66</b>	<b>4,050.14</b>	<b>2,290.87</b>	<b>5.66</b>

**Table 107: Summary of Power Purchase Expenses for FY 2021-22, as approved by the Commission (Rs. Crore)**

Particulars	MTR Petition			Approved in this Order		
	Quantum	Total Cost	Rate	Quantum	Total Cost	Rate
	MU	Rs. Cr	Rs./kWh	MU	Rs. Cr	Rs./ kWh
<b>Long term / Medium term Sources</b>						
TPC-G	3,284.74	1,760.21	5.36	3,284.74	1,760.21	5.36
Walwhan Solar MH Ltd	31.62	26.96	8.53	31.62	26.96	8.53
Manikaran Power Limited	720.08	294.01	4.08	720.08	294.01	4.08
<b>Short term Sources</b>						
Bilateral Power Purchase / Power Exchange	309.07	145.36	4.70	309.07	145.36	4.70
RPS-Non-Solar_IEX	0.57	0.24	4.22	0.57	0.24	4.22
RPS-Solar_IEX	19.79	8.22	4.15	19.79	8.22	4.15
Standby support from MSEDCL	3.83	-	-	3.83	-	-
Imbalance Pool / Deviation Settlement	37.50	22.34	5.96	37.50	22.34	5.96
REC Procurement Solar	157.00	37.42	2.38	157.00	37.42	2.38



Particulars	MTR Petition			Approved in this Order		
	Quantum	Total Cost	Rate	Quantum	Total Cost	Rate
	MU	Rs. Cr	Rs./kWh	MU	Rs. Cr	Rs./ kWh
REC Procurement Non-Solar	529.20	63.69	1.20	529.20	63.69	1.20
<b>Other Charges</b>						
Pool Imbalance Charges		75.99			75.99	
Stand By Charges		99.40			99.40	
Rebate on Power Purchase and Transmission Charges		(3.23)			(3.23)	
Other Prior Period Charges		0.35			0.35	
Intra-State Transmission Charges		258.00			258.00	
MSLDC Charges		1.20			1.20	
<b>Total</b>	<b>4,407.20</b>	<b>2,790.15</b>	<b>6.33</b>	<b>4,407.20</b>	<b>2,790.15</b>	<b>6.33</b>

4.4.75 The Commission approves the total cost of power purchase of Rs. 2,290.87 Crore and Rs. 2,790.15 Crore on final Truing up of ARR for FY 2020-21 and FY 2021-22 respectively.

#### 4.5 Operation and Maintenance (O&M) Expenses

##### *BEST's Submission*

4.5.1 For FY 2020-21, BEST has incurred Rs. 590.81 Crore as O&M Expenses including wage revision impact of Rs. 74.93 Crore. However, if the wage revision is excluded for comparison purpose, the actual O&M expenses would be Rs.515.88 Crore as against approved O&M expenses of Rs.565.54 Crore.

4.5.2 In FY 2021-22, it has incurred Rs. 638.20 Crore as O&M expenses, an increase of Rs. 56.64 Crore than the approved O&M expenses.

4.5.3 BEST has made extensive efforts for reduction in O&M expenses. However due to impact of wage revision, the total actual O&M expenses are higher than the approved expenses in the MYT Order for the FY 2020-21 and FY 2021-22. The actual expense of BEST vis-à-vis approved O&M expense in the MYT Order are shown in Table as below:

**Table 108 : Operation and Maintenance Expenses for FY 2020-21 and FY 2021-22, as submitted by BEST:**

Sr. No.	Particulars	FY 2020-21		FY 2021-22	
		MYT Order	MTR Petition	MYT Order	MTR Petition
1	Employee Expenses*		413.19		444.31
2	A&G Expenses	565.54	130.91	581.56	137.85
3	R&M Expenses		46.71		56.04
<b>4</b>	<b>Total O&amp;M Expenses</b>	<b>565.54</b>	<b>590.81</b>	<b>581.56</b>	<b>638.20</b>

\*Includes wage impact of Rs. 79.93 Crore



4.5.4 While BEST has claimed O&M Expenses as per the Audited Annual Accounts, it has also computed the same as per the norms specified in the MYT Regulations, 2019 for the purpose of sharing of gains & losses. Accordingly, it has worked out the O&M Expenses separately for the Wires Business and Supply Business on a normative basis in accordance with Regulation 75 and 84 of the MYT Regulations, 2019.

4.5.5 The Consumer growth of BEST in past years is shown in the following table.

**Table 109 : Growth in Consumers in Past Year as on FY 2020-21 and FY 2021-22**

Year	No. of Consumers	Annual Growth in 3 years. (CAGR - 3 Years)
FY 2017-18	10,25,840.00	
FY 2018-19	10,36,194.00	
FY 2019-20	10,39,439.00	
FY 2020-21	10,43,871.00	<b>0.58%</b>
FY 2021-22	10,46,216.00	<b>0.32%</b>

4.5.6 As per Regulation 75 and 84 of the MYT Regulations, 2019, since the increase in the number of consumers is lower than 2 percent annually over the last 3 years, then the reduction in efficiency factor shall be considered in proportion to the percentage growth in the number of consumers. Accordingly, BEST has calculated the efficiency factor of 0.29% and 0.16% for the growth rate of 0.58% and 0.32% for FY 2020-21 and FY 2021-22 respectively.

**Table 110 : Efficiency Factor for FY 2020-21 and FY 2021-22, as submitted by BEST:**

FY	Efficiency Factor	CAGR - 3 Years
FY 2020-21	0.29%	0.58%
FY 2021-22	0.16%	0.32%

4.5.7 Further, the Commission in the MYT Order has calculated normative O&M Cost considering WPI data based on 2011-12 data series and CPI data based on 2001 data series. BEST submitted that Labour Bureau of India has stopped publishing 2001 series data numbers from August 2020. Hence, to overcome the non-availability of CPI data from September 2020, BEST has calculated CPI numbers from September 2020 by multiplying CPI 2016 series numbers with the linking factor given by Labour Bureau of India i.e., 2.88 for FY 2020-21 and FY 2021-22.

4.5.8 BEST has calculated the new CPI number from September 2020 which is given below:

**Table 111 : New CPI Numbers Calculated and Considered for Escalation Rate for FY 2020-21, as submitted by BEST:**

Month	CPI 2001 Series Data	CPI 2016 Series Data	New CPI Numbers considered via multiplying linkage factor - 2.88	Month	CPI 2001 Series Data	CPI 2016 Series Data	New CPI Numbers considered via multiplying linkage factor - 2.88
<b>FY 2020-21</b>				<b>FY 2021-22</b>			
Apr-20	329.00	-	-	Apr-21	120.10	345.89	345.89
May-20	330.00	-	-	May-21	120.60	347.33	347.33
Jun-20	332.00	-	-	Jun-21	121.70	350.50	350.50
Jul-20	336.00	-	-	Jul-21	122.80	353.66	353.66
Aug-20	338.00	-	-	Aug-21	123.00	354.24	354.24
Sep-20	-	118.10	340.13	Sep-21	123.30	355.10	355.10
Oct-20	-	119.50	344.16	Oct-21	124.90	359.71	359.71
Nov-20	-	119.90	345.31	Nov-21	125.70	362.02	362.02
Dec-20	-	118.80	342.14	Dec-21	125.40	361.15	361.15
Jan-21	-	118.20	340.42	Jan-22	125.10	360.29	360.29
Feb-21	-	119.00	342.72	Feb-22	125.00	360.00	360.00
Mar-21	-	119.60	344.45	Mar-22	126.00	362.88	362.88
<b>Average</b>	<b>338.69</b>			<b>Average</b>	<b>356.06</b>		

4.5.9 As per the MYT Regulations, 2019, the year-on-year variation of CPI and WPI, the inflation factor based on 30% of WPI inflation and 70% of CPI inflation from FY 2016-17 to FY 2020-21 for FY 2020-21 and from FY 2017- 18 to FY 2021-22 for FY 2021-22 has been computed and reduced by efficiency factor of 0.29% and 0.16%, respectively. The Escalation Factor net of efficiency factor worked out to 3.95% and 4.90% for FY 2020-21 and FY 2021-22 respectively, as shown in table below:

**Table 112 : Inflation Factor for Turing-up of O&M Expenses for FY 2020-21, as submitted by BEST**

Year	WPI	Percentage Annual Change in WPI	CPI	Percentage Annual Change in CPI
FY 2015-16	109.72		265.00	
FY 2016-17	111.62	1.73%	275.92	4.12%
FY 2017-18	114.88	2.92%	284.42	3.08%
FY 2018-19	119.79	4.28%	299.92	5.45%
FY 2019-20	121.80	1.68%	322.50	7.53%
FY 2020-21	123.38	1.29%	338.69	5.02%
Average from FY 2015-16-FY 2019-20	2.38%		5.04%	
Weights	30%		70%	
Escalation Factor	4.24%			
Efficiency Factor	0.29%			
<b>Escalation Factor Net of Efficiency Factor</b>	<b>3.95%</b>			

**Table 113 : Inflation Factor for Turing-up of O&M Expenses for FY 2021-22, as submitted by BEST**

Year	WPI	Percentage Annual Change in WPI	CPI	Percentage Annual Change in CPI
FY 2016-17	111.62		275.92	
FY 2017-18	114.88	2.92%	284.42	3.08%
FY 2018-19	119.79	4.28%	299.92	5.45%
FY 2019-20	121.80	1.68%	322.50	7.53%
FY 2020-21	123.38	1.29%	338.69	5.02%
FY 2021-22	139.41	13.00%	356.06	5.13%
<b>Average from FY 2015-16-FY 2019-20</b>		<b>4.63%</b>		<b>5.24%</b>
Weights		30%		70%
<b>Escalation Factor</b>			<b>5.06%</b>	
Efficiency Factor			0.16%	
<b>Escalation Factor Net of Efficiency Factor</b>			<b>4.90%</b>	

4.5.10 Normative O&M expense of FY 2020-21 is computed by applying escalation factor of 3.95% on O&M expense of FY 2019-20 after sharing of gains & losses and Normative O&M expense of FY 2021-22 is computed by applying escalation factor of 4.90% on normative O&M expense of FY 2020-21. Normative O&M expense of FY 2020-21 and FY 2021-22 computed as per the MYT Regulations, 2019 is as given below:

**Table 114 : Normative Operation and Maintenance for FY 2020-21 and FY 2021-22, as submitted by BEST (Rs. Crore)**

Particulars	FY 2020-21		FY 2021-22	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Normative O&M Expenses for FY 2019-20	579.64	564.97	565.54	587.29
Escalation Factor for FY 2020-21	3.07%	3.95%	2.83%	4.90%
<b>Normative O&amp;M Expenses for FY 2020-21</b>	<b>597.41</b>	<b>587.29</b>	581.56	616.07

### Employee Expense

4.5.11 BEST submitted that it has incurred Rs. 413.19 Crore and Rs. 444.31 Crore as employee expenses for FY 2020-21 and FY 2021-22 respectively. The details of actual employee expense as per Audited Accounts of FY 2020-21 and FY 2021-22 along with comparison with past Financial Year are given in table below:

**Table 115 : Actual Employee Expenses for FY 2020-21 and FY 2021-22, as submitted by BEST (Rs. Crore)**

Particulars	FY 2019-20 (Actual)	FY 2020-21 (Actual)	FY 2021-22 (Actual)
Basic Salary	153.91	264.47	270.22
Dearness Allowance (DA)	106.58	60.60	48.05
House Rent Allowance	31.62	40.10	39.59
Conveyance Allowance	0.93	0.86	0.81
Leave Travel Allowance	2.97	2.98	3.71

<b>Particulars</b>	<b>FY 2019-20 (Actual)</b>	<b>FY 2020-21 (Actual)</b>	<b>FY 2021-22 (Actual)</b>
Medical Allowance	3.95	3.65	3.45
Overtime Payment	10.00	11.00	13.69
Bonus/Ex-Gratia Payments	5.93	6.73	11.35
Interim Relief / Wage Revision	0.01	-	-
Functional Allowance as per Agreement	7.42	6.95	6.60
Provident Fund Contribution	33.01	33.80	36.50
Gratuity Payment	40.22	40.59	70.29
<b>Gross Employee Expenses</b>	<b>396.55</b>	<b>471.73</b>	<b>504.26</b>
Less: Establishment of Allied Departments	45.97	58.54	59.95
<b>Net Employee Expenses (including Wage Impact)</b>	<b>350.58</b>	<b>413.19</b>	<b>444.31</b>
Wage Revision Impact	36.03	74.93	-
<b>Net Employee Expenses (Excluding Wage Impact) for Sharing of Gains &amp; Losses</b>	<b>314.55</b>	<b>338.26</b>	<b>444.31</b>

- 4.5.12 BEST submitted that the actual employee expenses (excluding wage revision impact) of FY 2020-21 are marginally higher than employee expenses of previous year FY 2019-20.
- 4.5.13 BEST further submitted that, the increase on employee expenses for FY 2021-22 is mainly attributed to increase in basic salary and other components due to wage revision implementation from FY 2019-20. Further, the impact of the wage revision has resulted in increase in the gratuity payments which ultimately resulted in increased the total employee expenses. The main reasons for reduction in DA as it is merged with the Basic pay as per the Wage revision and revised percentage of DA is much lesser compared to earlier wage revision which resulted in the DA decrease of Rs. 12.55 Crore compared to FY 2020-21.
- 4.5.14 BEST further submitted that BEST organization has some allied departments namely Consumer Advisory Services Dept., Telecommunications & Electronics Dept., Street Lighting Dept. & Electrical works Dept., who provide services to transport division as well as electricity supply business. Since, MCGM provides expenses towards street lightening department 100% cost towards employee expenses has been deducted. For other departments, only 45% employee cost of such departments have been considered for calculating employee expenses and 55% employee cost has been deducted.
- 4.5.15 BEST requested the Commission to approve Employee Expenses as shown above for FY 2020-21 and FY 2021-22.

### **A&G Expenses**

- 4.5.16 The A&G Expenses claimed by BEST as per Audited Accounts of FY 2020-21 and FY 2021-22 is as given in table below along with previous year actual A&G expenses:

**Table 116 : Actual A&G Expenses for FY 2020-21 and FY 2021-22, as submitted by BEST (Rs. Crore)**

Particulars	FY 2019-20 (Actual)	FY 2020-21 (Actual)	FY 2021-22 (Actual)
Rent Rates & Taxes	7.50	6.20	6.01
Insurance	1.46	1.79	0.58
Telephone & Postage, etc.	5.29	5.35	5.54
Legal charges & Audit fee	1.41	0.39	1.39
Professional, Consultancy, Technical fee	0.37	0.48	0.13
Electricity charges	3.49	3.30	4.46
Security arrangements	8.77	9.38	10.99
Printing & Stationery	1.83	1.12	1.48
Advertisements	0.80	0.73	0.73
License Fee and other related fee	0.78	0.74	0.70
Vehicle Running Expenses Truck / Delivery Van	8.82	12.95	15.55
Bank Charges	1.20	1.40	6.93
Miscellaneous Expenses	10.25	19.69	14.15
Share of General Administration Expenses	59.20	67.39	69.20
<b>Gross A &amp;G Expenses</b>	<b>111.17</b>	<b>130.91</b>	<b>137.85</b>
Less: Expenses Capitalised	-	-	-
<b>Net A &amp;G Expenses</b>	<b>111.17</b>	<b>130.91</b>	<b>137.85</b>

4.5.17 The actual audited A&G Expense for FY 2020-21 is Rs. 130.91 Crore which is higher than expenses for FY 2019-20 (Rs. 111.17 Cr) and for FY 2021-22 is Rs. 137.85 Crore which is slightly higher than Rs. 130.91 Crore for FY 2020-21. The main reasons for the deviation are as follows:

- a) Vehicle Running expenses increased by Rs. 4.13 Crore due to increase in hiring of vehicles. The hiring vehicles increased as 25 own vehicles of BEST were scrapped and only 4 vehicles were replaced against these scrapped vehicles leading to an increase in hiring costs for vehicles used for service along with increase in fuel cost.
- b) Security arrangement & share of G.A. increased due to wage revision settlement arrived in FY 2020-21 of employees of the general administration department.
- c) The increase in expenses related to Professional, consultancy, technical fees is due to the payment to western region power exchange of Rs. 9.82 Crore.

4.5.18 The increase in Bank Charges were due to renewal charges of Rs. 2.31 Crore of Letters of Credit amounting to Rs. 43 Crore in favour of MSETCL, Rs. 2.25 Crore in favour of Walwhan power and Rs. 7.37 Crore in favour of MPL. The bank has also charged commission, processing and documentation charges amounting to Rs. 2.31Crore

4.5.19 The legal charges have increased on account of various cases filed against BEST and where BEST had to hire the services of legal professionals.

- 4.5.20 Further, BEST submitted that it has incurred Rs. 9.44 Crore towards COVID-19 related expenses. These expenses are mainly related to cleanliness of premises, providing face mask, sanitizer & other material to staff/officers to prevent from Covid-19 infection & financial aid in lieu of ex-gratia compensation of Rs. 50 Lakhs for each deceased employee's family who died due to Covid-19 infection during performing his duty.
- 4.5.21 BEST recognises the fact that the Commission in the MYT Order under section/para of "Applicability of the Order has provided for Special Interim Dispensation considering covid-19 pandemic and need for additional working capital to manage business. The said dispensation also provides that there will be other additional cost required to be incurred for continuing of operations. Accordingly, BEST requested the Commission to consider COVID-19 related expenses as uncontrollable and requested to allow such expenses over & above normative expenses. Further, BEST requested the Commission to calculate sharing of gains & losses on account of O&M expenses.
- 4.5.22 BEST submitted that miscellaneous/General expenses include Medical reimbursement to staff, Printing cartridge/material, Employers Contribution to ESIC, Contribution to best staff amenities fund, charges for collection of electricity bills, fees to forum members, MERC fees and charges, Lease rent of DSS, websites maintenance, deputation/training expenses, Interest on Gratuity payment, reward to employees, travelling, tea charges, Books & Periodicals etc.
- 4.5.23 The break-up of other miscellaneous expenses is shown in table below:

**Table 117 : Break-up of Other Costs FY 2020-21 and FY 2021-22, as submitted by BEST (Rs. Crore)**

Particulars	FY 2020-21 (Actual)	FY 2021-22 (Actual)
Clothing	0.69	0.90
Accident compensation to staff	-	0.01
Miscellaneous and general expenses	19.71	15.10
Electrical Appliances on Hire	-	0.03
Free issue of petrol to Officers	0.56	0.68
Provision for obsolescence of stores	0.04	0.04
<b>Total</b>	<b>21.00</b>	<b>16.76</b>
(less) other cost towards allied dept. expenses	1.31	2.61
<b>Total</b>	<b>19.69</b>	<b>14.15</b>

### Share of General Administration Expenses

- 4.5.24 BEST has considered the allocation of the General Administration Expenses between Electric Supply & Transport Division based on the number of employees deployed in respective division. The percentage of the allocation considered based on the actual employees for major departments for FY 2020-21 and FY 2021-22 are as under:

**Table 118 : Allocation of General Administration between Electricity Supply and Transport for FY 2020-21 and FY 2021-22, as submitted by BEST**

Particulars	FY 2020-21		FY 2021-22	
	Transport	Supply	Transport	Supply
Security & Vigilance	78%	22%	85%	15%
Civil Engineering Department	55%	45%	55%	45%
Time keeping, Personnel, Welfare, Medical etc.	80%	20%	80%	20%
EDP Department	44%	56%	50%	50%
Legal, Audit, Account, Cash, Secretarial, PRO etc.	50%	50%	50%	50%

4.5.25 BEST submitted that it has provided details of electricity supply division's expenses from the total General Administration Expenses for FY 2020-21 and FY 2021-22 in below table:

**Table 119 : Detailed of Allocation of General Administration to Supply Division for FY 2020-21 and FY 2021-22, as submitted by BEST (Rs. Crore)**

Particulars	FY 2020-21 (Actual)	FY 2021-22 (Actual)
Establishment cost	45.29	49.60
Administration and General Expense	19.93	14.52
Repair and Maintenance work	9.99	9.04
Other cost including depreciation	1.56	6.45
<b>Sub-total</b>	<b>76.77</b>	<b>79.60</b>
(less) Security expense	9.38	10.40
<b>Net Share of General Administration</b>	<b>67.39</b>	<b>69.20</b>

4.5.26 Security Expenses has been deducted from Share of General Expenses as those are considered separately in A&G Expenses.

4.5.27 BEST requested the Commission to approve A&G Expenses as shown above for FY 2020-21 and FY 2021-22.

### **R&M Expenses**

4.5.28 The details of actual R&M expenses incurred by BEST are shown below for FY 2020-21 and FY 2021-22 along with actual previous year expenses for comparison purpose:

**Table 120 : Actual R&M Expenses for FY 2020-21 and FY 2021-22, as submitted by BEST (Rs. Crore)**

Particulars	FY 2019-20 (Actual)	FY 2020-21 (Actual)	FY 2021-22 (Actual)
Plant & Machinery	8.96	3.82	5.78
Building			0.00
Civil Works	37.45	29.03	26.41
Lines & Cable Networks	22.01	9.65	17.38
Furniture & Fixtures	0.12	0.05	0.11
Office Equipment	4.65	2.00	4.21
Meter & Equipment	4.21	2.16	2.15



Particulars	FY 2019-20 (Actual)	FY 2020-21 (Actual)	FY 2021-22 (Actual)
Gross R&M Expenses	77.43	46.71	56.04
Less: R&M Expenses Capitalised	-	-	-
Net R&M Expenses	77.43	46.71	56.04

- 4.5.29 BEST submitted that in FY 2020-21 actual R&M expenses have decreased from FY 2019-20 (Rs. 77.43 Cr). It is mainly attributed to sharp decrease in R&M of lines & Cable Network due to COVID Pandemic and in FY 2021-22 actual R&M expenses have increased from FY 2020-21 primarily due to an increase in the R&M of the lines and cable networks following the opening of the pandemic lockdowns.
- 4.5.30 BEST also submitted that as per Regulation 75.6 and 84.6 of the MYT Regulations 2019, R&M expenses need to be at least 20% of the total O&M expenses and in case the same are below 20% then such savings in R&M expenses shall not be off-set against other heads of O&M expenses. BEST submitted that its R&M expenses to total O&M expenses is 7.90% (9.05% if wage revision impact is excluded) and the same is less due to the reasons explained above which are attributable to covid-19 pandemic situation. Hence, BEST requested the Commission to kindly not set off the saving in repairs and maintenance against other heads of O&M expenses under the Regulations of “Power to relax” and “Power to remove difficulties” of the MYT Regulations, 2019 and accordingly allow expenses as per normal sharing of gains and losses.
- 4.5.31 BEST requested the Commission to approve R&M expenses for FY 2020-21 and FY 2021-22 as per above table.
- 4.5.32 Further, BEST requested the Commission to approve O&M Expenses of Rs 590.81 Crore and Rs 638.20 Crore for FY 2020-21 and FY 2021-22 respectively subject to further sharing of efficiency gains/ (losses) as per the MYT Regulations, 2019.

### ***Commission’s Analysis and Ruling***

- 4.5.33 In the MYT Order, the Commission had approved normative O&M Expenses for FY 2020-21 and FY 2021-22 in accordance with the provisions of the MYT Regulations, 2019.
- 4.5.34 **Calculation of Escalation Factor:** The Commission had notified the MYT Regulations, 2019 specifying methodology for computation of normative O&M expenses. The Commission has analysed the methodology submitted by BEST for computation of Escalation Factor and notes that it is as per provisions of MYT Regulations, 2019. By applying 30% and 70% weightage to WPI and CPI respectively for FY 2020-21 and FY 2021-22, the escalation rate works out to 4.24% and 5.06%. The Commission notes that there been annual growth of 0.58% in number of consumers over the last three years (FY 2017-18 to FY 2019-20) for FY 2020-21 and 0.32% for FY 2021-22 considering the last three years as FY 2018-19 to FY



2021-22. As per Regulation 75 and 84 of the MYT Regulations, 2019, the reduction in efficiency factor shall be considered in proportion to the percentage growth in the number of consumers. Accordingly, for calculating the O&M expenses for FY 2020-21 and FY 2021-22, the Commission has applied the efficiency factor of 0.71% and 0.84% respectively to the escalation rate to arrive at the escalation factor as outlined in the following Table:

**Table 121: Determination of O&M escalation factor for FY 2020-21 and FY 2021-22**

Year	FY 2020-21		FY 2021-22	
	WPI Percentage	CPI Percentage	WPI Percentage	CPI Percentage
Average from FY 2016-17 to FY 2020-21	2.38%	5.04%		
Average from FY 2017-18 to FY 2021-22			4.63%	5.24%
Weights	30%	70%	30%	70%
Escalation Factor	4.24%		5.06%	
Efficiency Factor	0.71%		0.84%	
<b>Escalation Factor Net of Efficiency Factor</b>	<b>3.53%</b>		<b>4.22%</b>	

4.5.35 The Commission notes that, in the MYT Order, normative O&M Cost was calculated considering WPI data based on 2011-12 data series and CPI data based on 2001 data series. Since, Labour Bureau of India has stopped publishing 2001 series data numbers from August 2020, the Commission has calculated CPI numbers from September 2020 by multiplying CPI 2016 series numbers with the linking factor given by Labour Bureau of India i.e., 2.88 for FY 2020-21 and FY 2021-22.

4.5.36 The Commission has computed the normative O&M Expenses for FY 2020-21 and FY 2021-22 by applying an escalation factor of 3.53% and 4.22% respectively to base O&M expenses (of previous year). As per the provisions of the MYT Regulations, 2019 and above escalation factor, the Commission has approved the revised normative O&M expenses as shown in the Table below:

**Table 122: Normative O&M Expenses for FY 2020-21 and FY 2021-22, as approved by the Commission (Rs. Crore)**

Particulars	FY 2020-21	FY 2021-22
Normative O&M expenses of Preceding year	564.96	584.93
Escalation Factor Of respective years	3.53%	4.22%
<b>Normative O&amp;M expenses after applying escalation factor</b>	<b>584.93</b>	<b>609.61</b>

4.5.37 As discussed herein above in previous chapter, wage revision agreement was implemented from September, 2019 in case of employees and from October, 2020 in case of officers. Accordingly, BEST has claimed wage revision expenses in FY 2020-21 also. In response to the data gaps raised by the Commission in respect of impact of wage revision on various heads of employee expenses, BEST submitted that Increase in basic salary is due to revision of wages for employees from September, 2019. Also, as per wage revision Dearness Allowances (DA) is merged with the Basic Pay. Further, as per wage revision, revised percentage of DA is much lesser compared

to earlier wage revision which resulted in the decrease in DA by Rs. 45.98 Crore. The actual employee expense which also includes wage revision impact is as mentioned below:

**Table 123 : Impact of Wage Revision in Total Employee Expenses for FY 2020-21, as submitted by BEST (Rs. Crore)**

Sr. No.	Particulars	Rs. Cr
1	Net Employee expenses excluding Wage impact	<b>338.26</b>
2	<b>Impact of Wage Revision Agreement</b>	
A	Basic Salary	110.56
B	Dearness Allowance	(45.98)
C	House Rent Allowance	8.48
D	Leave Travel Allowance	0.01
E	Medical Allowances	(0.30)
F	Overtime Payment	1.00
G	Provident Fund	0.79
H	Gratuity	0.37
	<b>Total Impact of Wage Revision Agreement</b>	<b>74.93</b>
3	<b>Gross Employee expenses including impact of wage agreement</b>	<b>413.19</b>

- 4.5.38 The Commission notes that BEST has submitted similar reasons as mentioned above for increase in employee expenses for FY 2021-22 as compared to FY 2020-21. Further, in response to query regarding increase in LTA and almost 50% increase in Gratuity, BEST submitted that the LTA paid to the employees is as per the slab and the slab is dependent upon the Basic Pay to the respective Employees. Basic pay has increased due to the merging of Dearness Allowances with Basic pay as per the Wage revision resulting in increase in the LTA amount. Further, the bonus /ex-gratia is approved jointly by MCGM/BEST Committee. Every year the variation depends upon the approval of the said Authority. Gratuity has increased due to increase in the number of retirees during FY 2021-22. During FY 2021-22, 585 no. of employees from supply division have retired (increased by 65 no. when compared to previous year) which has bearing on gratuity computations as mainly retirement has been from the officer cadre.
- 4.5.39 The Commission notes the justification given by BEST for A&G and R&M expenses incurred by BEST as specified in para 4.5.17 to 4.5.31 of this Order.
- 4.5.40 The Commission has verified the same from Audited Accounts of FY 2019-20 and approves the actual O&M expenses as sought by BEST and specified in the Table below:

**Table 124: Actual O&M Expenses for FY 2020-21 and FY 2021-22, as approved by Commission (Rs. Crore)**

Particulars	MTR Petition	Approved in this Order	MTR Petition	Approved in this Order
	FY 2020-21		FY 2021-22	
Employee Expenses	338.26	338.26	444.31	444.31
A&G Expenses	130.91	130.91	137.85*	137.85*
R&M Expenses	46.71	46.71	56.04	56.04
<b>Base O&amp;M Expense</b>	<b>515.88</b>	<b>515.88</b>	<b>638.20</b>	<b>638.20</b>
Add Wage Revision Impact	74.93	74.93		
<b>Total O&amp;M Expenses</b>	<b>590.81</b>	<b>590.81</b>	<b>638.20</b>	<b>638.20</b>

\*- Includes the additional COVID related expenses of Rs. 9.44 Crore

4.5.41 The Commission notes that R&M expenses incurred by BEST is less than 20% of the total O&M Expenses. The provisions of MYT Regulations, 2019 clearly state that if R&M expenses are below 20%, then such savings in R&M expenses shall not be off-set against other heads of O&M expenses. The Commission is unable to accept the justification of Covid-19 given by BEST for lower R&M expense as in the same year with all restrictions of Covid-19, BEST has incurred higher capital expenditure than approved by the Commission in the MYT Order. Further, electricity being essential services, there was no restriction on functioning of electricity utilities during COVID-19 lockdown period. Thus, the Commission has recomputed the approved O&M expenses as specified in the MYT Regulations, 2019 by reworking the actual O&M expenses considering 20% R&M expenses. Based on such revised O&M expenses, the Commission has also undertaken sharing of efficiency losses/gains arising from the difference between the actual and the normative O&M expenses as approved above, considering the O&M expenses as controllable, in accordance with the MYT Regulations, 2019 as discussed subsequently in this Order.

4.5.42 The detailed treatment of the net entitlement of O&M expenses post providing in the impact of COVID Expenses, Wage Revision and 20% R&M expenses is calculated in the subsequent chapter of sharing of efficiency losses/ gains of O&M expenses.

#### **4.6 Capital Expenditure and Capitalisation**

##### ***BEST's Submission***

4.6.1 BEST has submitted that it has incurred total capital expenditure of Rs. 137.30 Crore and Rs. 124.58 Crore for FY 2020-21 and FY 2021-22 respectively and capitalized assets of Rs. 136.30 Crore and Rs. 122.98 Crore respectively for the said years. Break-up of same is as follows:

**Table 125 : Break-up of Capital Expenditure & Capitalisation for FY 2020-21 and FY 2021-22, as submitted by BEST (Rs. Crore)**

Particulars	FY 2020-21		FY 2021-22	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Capital Expenditure		137.30		124.58
Capitalisation		136.30	71.10	122.98
IDC		-		-
<b>Capitalisation + IDC</b>	<b>77.73</b>	<b>136.30</b>	<b>71.10</b>	<b>122.98</b>

- 4.6.2 BEST has to incurred capital expenditure for creating sufficient redundancy in the network to give reliable and quality power to consumers, for meeting universal supply obligation and future demand in the area of supply and also for introducing IT/Automation to give better service and meet the standard of performance obligations as stipulated in Regulations by the Commission.
- 4.6.3 BEST submitted that in the MYT Order, the Commission has mentioned, for the MYT Period, that the DPRs for majority of the schemes were not submitted. Hence, Commission has allowed 50% of average capitalization for past 5 years. BEST submitted that, since approved capitalisation was only 50% of the past trend, it would be imprudent to compare the same with the actual capitalization.
- 4.6.4 BEST submitted that during FY 2020-21, due to nationwide lockdown, the capital expenditure & capitalization were lesser than previous year. BEST submitted that, in the Audited Accounts of FY 2020-21 the total capitalization shown is Rs. 136.30 Crore (Rs. 135.83 Crore of Electricity Supply Business & Rs. 0.47 Crore of General Administration Business).
- 4.6.5 Further, BEST submitted that it has not received any grant from MCGM in FY 2020-21 and FY 2021-22 except for Street Lighting. Hence, only capital connection fee of Rs. 6.29 Crore and Rs 7.71 Crore for FY 2020-21 and FY 2021-22 respectively & Street Lighting capitalization is deducted while calculating normative loan and equity.

### **Commission's Analysis and Ruling**

- 4.6.6 The Commission has examined the actual capitalisation claimed for FY 2020-21 and FY 2021-22 against the capital expenditure schemes approved in principle. BEST has claimed capitalization including IDC of Rs. 136.30 Crore and Rs. 108.35 Crore for FY 2020-21 and FY 2021-22 which pertains to the following major DPR schemes:
- Revamping of Existing RSS
  - New DSS and augmentation and alteration to existing DSS
  - Extension of distribution network
  - IPDS

- Energy meters
- 4.6.7 Capitalization of non-DPR schemes has been proposed as Rs. 10.17 Crore and Rs 23.49 Crore for FY 2020-21 and FY 2021-22 respectively.
- 4.6.8 In response to query raised by the Commission in relation to difference in capitalisation shown in the audited accounts for FY 2021-22, BEST submitted that according to statements of accounts of FY 2021-22, the capitalization is Rs. 123.68 Crore however, civil cost of Rs. 0.67 Crore towards Non-DPR Scheme – Revamping of RSS & Other schemes is inadvertently capitalized by BEST in statement of accounts. Also, BEST has inadvertently showed Rs. 0.03 Crore as IDC in statement of accounts. The same is not considered while claiming capitalization in MTR Petition.
- 4.6.9 The Capitalisation of Rs. 126.13 Crore and Rs. 84.86 Crore for FY 2020-21 and FY 2021-22 respectively towards DPR schemes approved in principle by the Commission has been accepted, as the work executed is in accordance with the approved Scope of Work.
- 4.6.10 Further, the Commission observed that BEST has claimed the capitalisation of Rs. 14.63 Crore in FY 2021-22 against which the DPR is yet to be approved and is in relation to implementation of Energy Meters. As per the past approach of the Commission, the capitalisation undertaken for the scheme which is yet to be approved is not allowed and accordingly, the Commission not considered the capitalisation of Rs. 14.63 Crore in FY 2021-22. BEST may seek approval for such capitalisation in next tariff Petition post seeking approval of the Commission for said DPR.
- 4.6.11 The Commission notes that Non-DPR expenditure for FY 2020-21 is Rs 10.17 Crore and is within 20% of approved DPR Scheme and is being considered by the Commission. However, for FY 2021-22. Non-DPR expenditure is higher than 20% of approved DPR Schemes. However, the said Non-DPR schemes also includes capitalization towards street light of Rs. 10.46 Crore due to replacement of streetlights with LED lights. However, BEST has received grant for capitalization towards street light and thus there is no effect of the higher capitalization of street light. If the said amount is excluded from the capitalization of Non-DPR, the balance amount of Rs 13.03 Crore towards Non-DPR Schemes is within limit of 20%. Accordingly, the capitalisation of Rs 23.49 Crore against non-DPR Schemes is accepted as per the provisions of the MYT Regulations, 2019.
- 4.6.12 Accordingly, for the Truing-up of FY 2020-21 and FY 2021-22, the Commission has approved capitalisation of Rs. 136.30 Crore and Rs 108.35 Crore respectively as shown in the following Table:

**Table 126: Capitalisation in FY 2020-21 and FY 2021-22, as approved by the Commission (Rs. Crore)**

Particulars	FY 2020-21			FY 2021-22		
	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order
<b>Distribution Business</b>						
DPR – Approved		126.13	126.13		84.86	84.86
Additional Capitalisation	77.73	-	-	71.10	14.63	-
Non-DPR		10.17	10.17		23.49	23.49
<b>Total Capitalisation</b>	<b>77.73</b>	<b>136.30</b>	<b>136.30</b>	<b>71.10</b>	<b>122.98</b>	<b>108.35</b>
<b>Wire Business</b>		<b>124.35</b>	<b>124.35</b>		<b>108.35</b>	<b>108.35</b>
<b>Supply Business</b>		<b>11.95</b>	<b>11.95</b>		<b>14.63</b>	<b>-</b>

4.6.13 The Commission approves Capitalisation of Rs. 136.30 Crore and Rs. 108.35 Crore for FY 2020-21 and FY 2021-22, respectively.

#### 4.7 Funding of Capitalization

##### *BEST 's Submission*

4.7.1 BEST submitted that in FY 2020-21 and FY 2021-22, opening CWIP was Rs. 6.30 Crore and Rs. 7.30 Crore respectively and it has incurred CAPEX of Rs. 137.31 Crore and Rs. 124.58 Crore for the said years. BEST has capitalised Rs. 136.31 Crore and Rs. 122.98 Crore and Rs. 7.30 Crore and Rs. 8.90 Crore remain as closing CWIP, for FY 2020-21 and FY 2021-22 respectively.

4.7.2 BEST submitted that, it has received Capital Connection Fee of Rs. 6.29 Crore in FY 2020-21 and Rs. 7.71 Crore in FY 2021-22. Further, capitalization of streetlights for FY 2020-21 and FY 2021-22 has not been considered for calculating normative loan and equity as BEST gets grant from MCGM towards capitalization for street lights under all-in-one hire charges. BEST has computed loan and equity portion after reducing the Capital Connection Fee & Street Light capitalization from Total Capitalization.

4.7.3 The details of the funding of the capitalisation as provided by BEST is given in the Table below for FY 2020-21 and FY 2021-22:

**Table 127 : Details of funding of Capitalisation for FY 2020-21 and FY 2021-22, as submitted by BEST (Rs. Crore)**

Particulars	FY 2020-21	FY 2021-22
Total Capitalization	136.30	122.98
Capital Connection Fee	6.29	7.71
Grants for Street Lights	6.46	10.46
Total Capitalization excluding grant & capital connection fee	123.55	104.81

Particulars	FY 2020-21	FY 2021-22
Normative Loan	86.49	73.36
Normative Equity	37.07	31.44

### Commission's Analysis and Ruling

4.7.4 The Commission has approved capitalization of Rs. 136.30 Crore and Rs. 108.35 Crore for FY 2020-21 and FY 2021-22 respectively. The Commission has verified the funding available from the consumer contribution and grants from the Audited Accounts for the said years. The remaining funding has been done through loans and equity infusion by BEST. Accordingly, for funding of capitalization, the Commission has considered the normative debt: equity ratio of 70:30 in accordance with Regulation 27 of the MYT Regulations, 2019 after deducting the capital connection fee and grants received by BEST.

4.7.5 Accordingly, the sources of capitalisation and finding of Capitalisation considered by the Commission for Truing-up of FY 2020-21 and FY 2021-22 is as shown in Table below:

**Table 128: Details of funding of Capitalisation for FY 2020-21 and FY 2021-22, as approved by the Commission (Rs. Crore)**

Particulars	FY 2020-21			FY 2021-22		
	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order
Capital Connection Fee	10.69	6.29	6.29	10.69	7.71	7.71
Grants for IPDS Scheme	2.55	-	-	2.37	-	-
Grants for Street Light		6.46	6.46		10.46	10.46
Loan - 70%	45.14	86.49	86.49	40.63	73.36	63.12
Equity - 30%	19.35	37.07	37.07	17.41	31.44	27.05
<b>Total of Capitalisation</b>	<b>77.73</b>	<b>136.30</b>	<b>136.30</b>	<b>71.10</b>	<b>122.98</b>	<b>108.35</b>

4.7.6 The Commission approves the funding of the Capitalisation considering Rs. 6.29 Crore & Rs. 7.71 Crore of Capital Connection Fee, Rs. 6.46 Crore & Rs. 10.46 Crore of grants and balance as Debt: Equity in ratio of 70:30 for FY 2020-21 and FY 2021-22, respectively.

### 4.8 Depreciation

#### *BEST's Submission*

4.8.1 The opening GFA for FY 2020-21 is Rs. 2841.23 Crore and FY 2021-22 is Rs. 2946.45 Crore as per 'schedule of fixed assets' given in Audited accounts for electricity supply division.

4.8.2 As per audited accounts of FY 2020-21 and FY 2021-22, BEST has incurred



depreciation expense of Rs. 104.66 Crore and Rs. 105.99 Crore in FY 2020-21 and FY 2021-22 towards electric supply division, respectively. Depreciation of Rs. 1.56 Crore and Rs. 6.45 Crore towards depreciation in General Administrative Department is already added in general administrative expenses in A&G expenses.

- 4.8.3 For truing-up, BEST has calculated depreciation using average depreciation rate of 3.62% in FY 2020-21 and 3.53% in FY 2021-22. Depreciation rate is arrived by dividing depreciation as per audited accounts by average of opening and closing GFA as per accounts. Average depreciation rate as arrived above is applied on average of opening regulatory GFA and closing regulatory GFA submitted by BEST for approval of the Commission.
- 4.8.4 Closing regulatory GFA of FY 2019-20 is considered as opening regulatory GFA of FY 2020-21 and Closing regulatory GFA of FY 2020-21 as arrived is considered as opening regulatory GFA of FY 2021-22. Following table summarizes depreciation calculation for Truing-up of FY 2020-21 and FY 2021-22.

**Table 129 : Depreciation for FY 2020-21 and FY 2021-22, as submitted by BEST (Rs. Crore)**

Particulars	FY 2020-21	FY 2021-22
Audited Opening GFA	2,841.23	2,946.45
Audited Closing GFA	2,946.45	3,050.43
Average audited GFA	2,893.84	2,998.44
Audited Depreciation	104.66	105.99
Depreciation Rate	3.62%	3.53%
Average regulatory GFA	2,877.76	2,985.16
<b>Depreciation</b>	<b>104.08</b>	<b>105.52</b>

- 4.8.5 BEST therefore requested the Commission to approve the depreciation as above for FY 2020-21 and FY 2021-22.

***Commission’s Analysis and Ruling***

- 4.8.6 The Commission notes that BEST has not considered depreciation for the assets funded through grants. BEST has computed the average rate of depreciation considering such depreciation which excludes assets funded through Grants. However, such assets funded by Grants are included in the GFA.
- 4.8.7 The Commission has computed the depreciation in accordance with Regulation 28 of the MYT Regulations, 2019. Accordingly, the Commission has considered the opening GFA of Rs. 2817.62 Crore for FY 2020-21 same as closing GFA approved for FY 2019-20 in this Order. For FY 2021-22, the Commission has considered the opening GFA same as closing GFA of FY 2020-21 as approved by the Commission in this Order.
- 4.8.8 Addition in GFA is considered equal to capitalization approved by the Commission



during FY 2020-21 and FY 2021-22. As regards asset retirement, the Commission has accepted the submission of BEST which is as per Audited Accounts. Based on the approved opening GFA, asset addition and asset retirement, the Commission has approved the closing GFA for FY 2020-21 and FY 2021-22.

4.8.9 The Commission has considered actual depreciation rate of FY 2020-21 and FY 2021-22 as per Audited Annual Accounts of the BEST and applied the same on the regulatory GFA. The Commission has noted that regulatory GFA includes assets funded through consumer contribution and grants, however, depreciation is not allowed on the assets funded by consumer contribution and grants. The Commission has examined the depreciation working of the BEST and observed that BEST, in line with its submission, is also not calculating depreciation on assets funded by consumer contribution and grants in line with the provisions of the MYT Regulations, 2019.

4.8.10 The summary of depreciation expense for FY 2020-21 and FY 2021-22 as submitted by BEST and as approved by the Commission is as given in the Table below:

**Table 130: Depreciation Rate for FY 2020-21 and FY 2021-22, as approved by the Commission (Rs. Crore)**

Particulars	FY 2020-21			FY 2021-22		
	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order
Opening GFA	2738.32	2,821.99	2,817.62	2,776.54	2,933.52	2,922.83
Capitalisation with IDC	77.73	136.30	136.30	71.10	122.98	108.35
Retirement	39.51	24.77	31.09	39.51	19.70	19.70
<b>Closing GFA</b>	<b>2,776.54</b>	<b>2,933.52</b>	<b>2,922.83</b>	<b>2,808.13</b>	<b>3,036.80</b>	<b>3,011.48</b>
Average GFA	<b>2,757.43</b>	<b>2,877.76</b>	<b>2,870.23</b>	<b>2,792.34</b>	<b>2,985.16</b>	<b>2,967.15</b>
Depreciation Rate	4.07%	3.62%	3.62%	4.07%	3.53%	3.53%
<b>Depreciation</b>	<b>112.36</b>	<b>104.08</b>	<b>103.81</b>	<b>113.78</b>	<b>105.52</b>	<b>104.88</b>

4.8.11 The Commission approves depreciation of Rs. 103.81 Crore and Rs. 104.88 Crore for FY 2020-21 and FY 2021-22 respectively.

#### **4.9 Interest on Long Term Loan**

##### ***BEST's Submission***

4.9.1 The actual interest expense incurred by BEST in FY 2020-21 and FY 2021-22 is as shown in table below:

**Table 131 : Actual Interest Expense for FY 2020-21 and FY 2021-22, as submitted by BEST (Rs. Crore)**

Particulars	Opening Balance	Addition	Repayment	Closing Balance	Interest Expense
<b>FY 2020-21</b>					
APDRP Loan	11.19	-	2.22	8.97	1.05
REC	355.79	-	39.53	316.25	35.55
<b>Total</b>	<b>366.97</b>	<b>-</b>	<b>41.75</b>	<b>325.23</b>	<b>36.60</b>

Particulars	Opening Balance	Addition	Repayment	Closing Balance	Interest Expense
FY 2021-22					
APDRP Loan	8.97	-	2.22	6.76	0.82
REC	316.25	-	39.53	276.72	30.94
<b>Total</b>	<b>325.23</b>	<b>-</b>	<b>41.75</b>	<b>283.48</b>	<b>31.76</b>

- 4.9.2 BEST submitted that a total interest of Rs. 36.60 Crore Rs. 31.76 Crore was paid by it for FY 2020-21 and FY 2021-22 respectively.
- 4.9.3 BEST submitted that it has computed the interest on long term loan as per Regulation 30 of MYT Regulations, 2019. The weighted average interest rates are computed as per actual loan portfolio during the year.
- 4.9.4 BEST has considered the opening balance of net normative loan for the FY 2020-21 and FY 2021-22 as 'Nil'.
- 4.9.5 The normative interest expenses as computed in table below is lower (nil) as compared to actual interest expenses incurred by BEST. The computation of interest expenses is submitted as under:

**Table 132 : Details of Normative Interest on Loan for FY 2020-21 and FY 2021-22, as submitted by BEST (Rs. Crore)**

Particulars	FY 2020-21		FY 2021-22	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Opening Balance of Normative Loan	-	-	-	-
Less: Reduction of Normative Loan due retirement or replacement of assets	27.66	17.34	27.66	13.79
Loan Drawl during the year	45.14	86.49	40.63	73.36
Loan Repayment during the year	17.49	69.15	12.97	59.57
Closing Balance of Normative Loan	-	-	-	-
Average Balance of Normative Loan	-	-	-	-
Applicable Interest Rate (%)	11.27%	10.58%	11.27%	10.44%
<b>Interest Expenses</b>	-	-	-	-

- 4.9.6 BEST submitted that, in FY 2020-21 and FY 2021-22, from the total capitalization of Rs. 136.31 Crore and Rs. 122.98 Crore, BEST has received a grant of Rs. 12.75 Crore and 18.17 Crore, respectively. Hence, considering the retirement of assets and repayment of loan is higher compared to the addition to normative loan due to capitalisation, there is NIL loan balance for computation of interest on loan. This leads to zero requirement of interest on loan capital on normative basis.
- 4.9.7 In actuals, BEST has paid Rs. 36.60 Crore and Rs. 31.76 Crore towards interest on loan in FY 2020-21 and FY 2021-22 respectively. Hence, approving a normative loan as per regulations would hamper the BEST's financial position adversely. BEST recognises the fact that Commission in the MYT Order has provided for Special Interim Dispensation considering Covid-19 pandemic and need for additional

working capital to manage business. The said dispensation also provides that there will be other additional cost required to be incurred for continuing of operations. BEST submitted that such high amount of actual interest on loan cannot be foregone and it would be total financial loss if not allowed. BEST requested the Commission to approve the actual interest of loan capital as submitted in above table for FY 2020-21 and FY 2021-22.

### ***Commission's Analysis and Ruling***

- 4.9.8 For Truing up, the Commission has computed the interest on loan capital in accordance with Regulation 30 of the MYT Regulations, 2019. For computation of interest on loan capital, the Commission has considered the opening balance of net normative loan of FY 2020-21 as 'Nil' which is same as approved closing balance of loan for FY 2019-20.
- 4.9.9 The addition in normative loan has been considered equal to the debt component of approved asset addition during the year. The repayments are considered equal to depreciation allowed during the year. The weighted average interest rate is to be worked out as per proviso of Regulation 30.5 of the MYT Regulations, 2015. Same is quoted as follows:
- “Provided that at the time of Truing-up, the weighted average rate of interest computed on the basis of the actual long term loan portfolio during the concerned year shall be considered as the rate of interest”*
- 4.9.10 The Commission has considered the rate equal to the weighted average interest rate of actual loans during the year, as per the provisions of the MYT Regulations, 2019. For computing the weighted average interest rate, the Commission has considered the average of the opening and closing balances of the loan and the actual interest paid during the year based on the documentary evidences submitted by BEST and also available in the Audited Accounts to calculate the weighted average interest rate to be considered for computation of the interest on normative long-term loans. Based on the above, actual weighted interest rate works out to 10.58% and 10.44% for FY 2020-21 and FY 2021-22 respectively.
- 4.9.11 Further, BEST has requested the Commission to exercise its powers available under Regulation 105 of the MYT Regulations, 2019 and Regulation 96 of earlier Conduct of Business Regulations 2004 which is now replaced by Regulation 46(a) of MERC (Transaction of Business and Fees and Charges) Regulations, 2022 and allow interest on actual basis rather than normative basis. However, the Commission is not inclined to relax the norms as provided in the Regulations and is following the set principles as provided in the MYT Regulations 2019. BEST has also highlighted COVID-19 circumstances for allowing actual interest on long term loan, without giving any justification as how COVID-19 has lead to such expenses or how it is different from pre and post COVID circumstances. Hence, the Commission has not considered such request of BEST.

4.9.12 Accordingly, the Commission has approved the interest on loan capital for FY 2020-21 and FY 2021-22 as given in the Table below:

**Table 133: Interest on Loan Capital for FY 2020-21 and FY 2021-22, as approved by the Commission (Rs. Crore)**

Particulars	FY 2020-21			FY 2021-22		
	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order
Opening Balance of Normative Loan	-	-	-	-	-	-
Less: Reduction of Normative Loan due retirement or replacement of assets	27.66	17.34	21.76	27.66	13.79	13.79
Loan Drawal during the year	45.14	86.49	86.49	40.63	73.36	63.12
Loan Repayment during the year	17.49	69.15	64.72	12.97	59.57	49.33
Closing Balance of Normative Loan	-	-	-	-	-	-
Average Balance of Normative Loan	-	-	-	-	-	-
Applicable Interest Rate (%)	11.27%	10.58%	10.58%	11.27%	10.44%	10.44%
<b>Interest Expenses</b>	-	-	-	-	-	-

4.9.13 The Commission approves Interest on Long Term Loan as nil for FY 2020-21 and FY 2021-22.

#### 4.10 Interest on Working Capital

##### BEST's Submission

4.10.1 BEST submitted that it has incurred the actual Interest on Working Capital (IoWC) of Rs. 10.57 Crore in FY 2020-21 and Rs. 9.93 Crore in FY 2021-22. The details are as given below:

**Table 134 : Interest on Working Capital details for FY 2020-21 and FY 2021-22, as submitted by BEST (Rs. Crore)**

Name of the Bank	Opening Balance of loan	Rate of Interest (%)	Loan amount raised	Loan amount paid during the year	Loan balance at the end of the year	Interest Expenses
<b>FY 2020-21</b>						
Canara O.D.	225.00	8.65%	-	-	225.00	10.57
Bank of India	-	8.10%	100.00	-	100.00	-
<b>Total</b>	<b>225.00</b>		<b>100.00</b>	-	<b>325.00</b>	<b>10.57</b>
<b>FY 2021-22</b>						
Canara O.D.	225.00	8.65%	-	-	225.00	5.52
Bank of India	100.00	10.00%	-	100.00	-	4.41
<b>Total</b>	<b>325.00</b>		-	<b>100.00</b>	<b>225.00</b>	<b>9.93</b>

4.10.2 Canara bank Overdraft (O.D.) is used for electric supply as well as transport. Amount

of actual interest on O.D account is allocated to electric supply based on usage of O.D. limit by electric supply division. Further BEST's day to day inflow of cash/bank from Electric bill receipt from consumers varies from month to month (i.e., date of payment of bill every month by consumer is uncertain) and the huge payment of power purchase/Employee salary and vital items are to be paid in bulk. Hence this facility is availed by BEST. Loan from Bank of India is taken on 31 March 2021. Hence, the interest on the same during FY 2020-21 is nil.

4.10.3 BEST has computed the IoWC on normative basis as per Regulation 32 of the MYT Regulations, 2019, which is shown as under:

**Table 135 : Interest on Working Capital for Distribution Wires Business for FY 2020-21 and FY 2021-22, as submitted by BEST (Rs. Crore)**

Particulars	FY 2020-21		FY 2021-22	
	MYT Order	MTR Petition	MYT Order	MTR Petition
O&M expenses for a month	30.63	31.81	31.50	33.37
Maintenance Spares at 1% of Opening GFA	24.64	2.82	24.99	2.93
One and half months equivalent of the expected revenue from charges for use of Distribution Wires	42.01	57.69	42.38	66.17
Less: Amount held as Security Deposit from consumers	42.29	42.45	43.56	43.61
<b>Total Working Capital Requirement</b>	<b>54.99</b>	<b>49.87</b>	<b>55.31</b>	<b>58.86</b>
Rate of Interest (%)	9.50%	8.57%	9.50%	8.50%
<b>Interest on Working Capital</b>	<b>5.22</b>	<b>4.28</b>	<b>5.25</b>	<b>5.00</b>
<b>Actual Interest on Working Capital</b>		<b>1.06</b>		<b>0.99</b>

**Table 136 : Interest on Working Capital for Retail Supply for FY 2020-21 and FY 2021-22, as submitted by BEST (Rs. Crore)**

Particulars	FY 2020-21		FY 2021-22	
	MYT Order	MTR Petition	MYT Order	MTR Petition
O&M expenses for a month	16.49	17.13	16.96	17.97
Maintenance Spares at 1% of Opening GFA	2.74	25.40	2.78	26.40
One and half months equivalent of the expected revenue from sale of electricity including revenue from CSS and Additional Surcharge	378.06	233.72	381.41	242.06
Less: Amount held as security deposit	380.61	382.01	392.02	392.53
Less: One month equivalent of cost of power purchase, transmission charges and MSLDC Charges	250.87	190.91	226.11	232.51
<b>Total Working Capital Requirement</b>	<b>(234.19)</b>	<b>(296.67)</b>	<b>(216.98)</b>	<b>(338.61)</b>
Rate of Interest (%)	9.50%	8.57%	9.50%	8.50%
<b>Interest on Working Capital</b>	-	-	-	-
<b>Actual Working Capital Interest</b>		<b>9.51</b>		<b>8.94</b>

4.10.4 The normative interest on working capital for retail supply business is nil since there is no working capital requirement due to of higher consumer security deposit.

4.10.5 BEST submitted that the Commission in the MYT Order has mentioned about the

outbreak of COVID-19 and resulted lockdown. The Commission has also issued a Practice Direction on 26 March, 2020 whereby meter reading and physical bill distribution work was suspended and utilities were asked to issue bills on average usage basis till the current crisis gets subsided. Further, the Commission has mentioned that Distribution Licensees will be required to borrow/avail additional working capital over and above the amount allowed by the Commission as per Regulations. BEST further submitted that the Commission in the MYT Order under section of 'Applicability of the Order' has provided for Special Interim Dispensation considering covid-19 pandemic and need for additional working capital to manage business.

- 4.10.6 BEST submitted that, it has been severely affected by the ongoing pandemic of COVID-19 and the resultant restrictions/ measures adopted by the State Government as well as the Central Government. The pandemic has affected the sales of the BEST. Considering the concessions as granted by the Commission to the consumers in payment of electricity, and due to the continuation of the pandemic of COVID-19, BEST has faced issues with regard to under-recovery of cross-subsidy for the FY 2020-21.
- 4.10.7 BEST submitted that even Ministry of Power ("MOP") in its direction to CERC (Ref No. 23/22/2019-R&R Part-4 dated 28th March 2020) had acknowledged the gravity and unprecedented nature of the situation.
- 4.10.8 In FY 2020-21, BEST required additional working capital due to delay in receipts from consumers which resulted in around Rs. 1.70 Crore additional interest on working capital (Rs. 10.57 Crore) as compared to previous year (Rs. 8.88 Crore). BEST requested the Commission to consider it as uncontrollable.
- 4.10.9 In FY 2021-22, BEST submitted that the provision in the MYT Regulation, 2019 of reducing the working capital by total amount of consumer security is resulting in the net working capital being negative for the Supply Business. Therefore, the working capital requirement based on normative principle works out to zero. However, as per the Audited Account, BEST has paid IoWC. The working capital loan is being taken to meet actual daily requirements of overall business whereas as per the regulatory provisions the same is computed separately for Wires and Supply ARR. One of the factors for negative working capital is that the security deposit amount being considered for working capital is the cumulative/ accumulated amount over the period of years and the other components are for the year. However, the interest on working capital for wires business has been worked out and the same is provided in the tables above.
- 4.10.10 BEST submitted that working capital requirement is very crucial for BEST as it has to rollover the short-term loan thereby effectively using it as a long term fund. The normative interest on working capital is very low on account of high consumer security deposit as compared to actual interest paid during FY 2020-21 and FY 2021-22. Hence, BEST requested the Commission to approve the interest on working

capital on actual basis. BEST also requested the Commission to exercise its powers to relax and help BEST to mitigate this financial loss

4.10.11 BEST requested the Commission to approve the actual Interest on Working Capital as shown in tables above for FY 2020-21 and FY 2021-22.

***Commission’s Analysis and Ruling***

4.10.12 The MYT Regulations, 2019 stipulate that the rate of IoWC shall be considered on normative basis and shall be equal to the weighted average Base Rate prevailing during the concerned year plus 150 basis points. As per Regulation 32.3 and 32.4 of the MYT Regulations, 2019:

*“...Provided that for the purpose of Truing-up for any year, interest on working capital shall be allowed at a rate equal to the weighted average Base Rate prevailing during the concerned Year plus 150 basis points.”.*

4.10.13 The Commission has calculated weighted average base rate for FY 2020-21 and FY 2021-22 as per the said Regulations and as specified in the table below:

**Table 137: Rate of Interest on Working Capital for FY 2020-21 and FY 2021-22 (%)**

FY	From	To	Days	Rate	Wtd Avg. Base Rate	IoWC Rate
FY 2020-21	01-04-2020	09-04-2020	9	7.75%	7.07%	8.57%
	10-04-2020	09-05-2020	30	7.40%		
	10-05-2020	09-06-2020	31	7.25%		
	10-06-2020	31-03-2021	295	7.00%		
FY 2021-22	01-04-2021	31-03-2022	365	7.00%	7.00%	8.50%

4.10.14 Accordingly, the rate of IoWC works out to 8.57% and 8.50% for FY 2020-21 and FY 2021-22 respectively.

4.10.15 The summary of normative IoWC for FY 2020-21 and FY 2021-22 as approved by the Commission is given in the Table below:

**Table 138: Interest on Working Capital for FY 2020-21 and FY 2021-22, as approved by the Commission (Rs. Crore)**

Particulars	FY 2020-21			FY 2021-22		
	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order
<b>Wheeling Business</b>						
O&M expenses for a month	30.63	31.81	31.68	31.50	33.37	33.02
Maintenance Spares at 1% of Opening GFA	24.64	2.82	25.36	24.99	2.93	26.31
One and half months equivalent of the expected revenue from charges for use of Distribution Wires	42.01	57.69	34.91	42.38	66.17	37.44

Particulars	FY 2020-21			FY 2021-22		
	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order
Less: Amount held as Security Deposit from consumers	42.29	42.45	42.45	43.56	43.61	43.61
<b>Total Working Capital Requirement</b>	<b>54.99</b>	<b>49.87</b>	<b>49.51</b>	<b>55.31</b>	<b>58.86</b>	<b>53.15</b>
Rate of Interest (%)	9.50%	8.57%	8.57%	9.50%	8.50%	8.50%
<b>Interest on Working Capital</b>	<b>5.22</b>	<b>4.28</b>	<b>4.24</b>	<b>5.25</b>	<b>5.00</b>	<b>4.52</b>
<b>Retail Business</b>						
O&M expenses for a month	16.49	17.13	17.06	16.96	17.97	17.78
Maintenance Spares at 1% of Opening GFA	2.74	25.40	2.82	2.78	26.40	2.92
One and half months equivalent of the expected revenue from sale of electricity including revenue from CSS and Additional Surcharge	378.06	233.72	314.18	381.41	242.06	336.96
Less: Amount held as security deposit	380.61	382.01	382.01	392.02	392.53	392.53
Less: One month equivalent of cost of power purchase, transmission charges and MSLDC Charges	250.87	190.91	190.91	226.11	232.51	232.51
<b>Total Working Capital Requirement</b>	<b>(234.19)</b>	<b>(296.67)</b>	<b>(238.86)</b>	<b>(216.98)</b>	<b>(338.61)</b>	<b>(267.39)</b>
Rate of Interest (%)	9.50%	8.57%	8.57%	9.50%	8.50%	8.50%
<b>Interest on Working Capital</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Total Distribution Business</b>						
<b>Interest on Working Capital</b>	<b>5.22</b>	<b>4.28</b>	<b>4.24</b>	<b>5.25</b>	<b>5.00</b>	<b>4.52</b>

4.10.16 The Commission approves Normative Interest on Working Capital of Rs. 4.24 Crore and Rs. 4.52 Crore on Final Truing up of ARR for FY 2020-21 and FY 2021-22 respectively.

4.10.17 As IoWC Expenses is controllable and hence the Commission has undertaken sharing of efficiency gain/losses in accordance with the MYT Regulations, 2019 and the treatment of the actual interest on working capital loan along-with the impact of COVID is discussed in the subsequent chapter of this Order.

#### **4.11 Interest on Consumer Security Deposit (CSD)**

##### ***BEST's Submission***

4.11.1 BEST has considered actual interest paid to consumers during FY 2020-21 and FY 2021-22 on CSD.

4.11.2 As per Regulation 30.11 of the MYT Regulations, 2019, the interest rate considered for FY 2020-21 is 4.65% (RBI Bank Rate) as on 1<sup>st</sup> April 2020 and the interest rate considered for FY 2021-22 is 4.25% (RBI Bank Rate) as on 1st April 2021. Further, Actual interest paid to the consumers on CSD as per Audited Accounts is claimed by BEST.

4.11.3 The details of CSD and interest paid is given in table below:



**Table 139 : Interest on Consumer Security Deposit for FY 2020-21 and FY 2021-22, as submitted by BEST (Rs. Crore)**

Particulars	FY 2020-21		FY 2021-22	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Opening balance of security deposit		416.38		424.46
Addition during the year		8.08		11.69
Closing balance of security deposit		424.46		436.15
<b>Net Interest on Security Deposit for current year</b>	<b>22.50</b>	<b>17.13</b>	<b>23.18</b>	<b>15.65</b>

4.11.4 BEST requested the Commission to approve interest on CSD on actual basis as shown in table above for FY 2020-21 and FY 2021-22.

***Commission's Analysis and Ruling***

4.11.5 The Commission accepts the submission of BEST that the Interest on consumer Security deposit claimed is actual paid to consumers and approves the actual interest on CSD as reported in the Audited Accounts for FY 2020-21 and FY 2021-22 as shown in the Table below:

**Table 140: Interest on Consumers' Security Deposit for FY 2020-21 and FY 2021-22, as approved by the Commission (Rs. Crore)**

Particulars	MYT Order	MTR Petition	Approved in this Order	Wire Business	Supply Business
<b>FY 2020-21</b>					
Interest on Consumer Security Deposit	22.50	17.13	17.13	1.71	15.42
<b>FY 2021-22</b>					
Interest on Consumer Security Deposit	23.18	15.65	15.65	1.56	14.08

4.11.6 The Commission approves Rs. 17.13 Crore and Rs. 15.65 Crore as the Interest on Consumer's Security Deposit for FY 2020-21 and FY 2021-22, respectively.

**4.12 Contribution to Contingency Reserves**

***BEST's Submission***

4.12.1 As per the MYT Regulations, 2019, the Commission has approved contribution to the Contingency Reserve at the rate of 0.25 % on Opening Gross Fixed Assets (GFA) as against ceiling of 0.5% on Opening GFA.

4.12.2 BEST submitted the Contribution to Contingency Reserves for FY 2020-21 and FY 2021-22 as shown in the following table:

**Table 141 : Contribution to Contingency Reserve for FY 2020-21 and FY 2021-22, as submitted by BEST (Rs. Crore)**

Particular	FY 2020-21		FY 2021-22	
	MYT Order	MTR Petition	MYT Order	MTR Petition

Opening Balance of Contingency Reserves	-	47.99	-	55.11
Opening Gross Fixed Assets	-	2,821.99	-	2,933.52
Opening Balance of Contingency Reserves as % of Opening GFA	0.00%	1.70%	0.00%	1.88%
Contribution to Contingency Reserves during the year	-	7.12	-	7.40
Utilisation of Contingency Reserves during the year	-	-	-	-
Closing Balance of Contingency Reserves	-	55.11	-	62.51
Closing Balance of Contingency Reserves as % of Opening GFA	-	1.95%	0.00%	2.13%
<b>Total</b>	<b>6.85</b>	<b>7.12</b>	<b>6.94</b>	<b>7.40</b>

- 4.12.3 In FY 2020-21, BEST has invested amount of Rs. 7.12 Crore in Kerala SDL on 30 December, 2021 against the provision made of Rs. 7.09 Crore in books of account. The proof of the investment made against contingency reserves is submitted.
- 4.12.4 The investment was delayed due to the disruption caused by Covid-19 lockdowns which resulted in significant delays in getting the appropriate approvals for the investment to be made. BEST submitted that despite cash flow issues and pandemic situation it has complied with the regulatory provision with slight delay and hence, requested the Commission to condone the same and allow amount of contribution to contingency reserves as per investment made by BEST in ARR.
- 4.12.5 In FY 2021-22, BEST has invested amount of Rs. 7.40 Crore in TN SDL on 18 October, 2022 against the provision made of Rs. 7.36 Crore. The proof of the investment made against contingency reserves is submitted. The investment was slightly delayed in getting the appropriate approvals for the investment to be made and requested the Commission to condone the delay and allow the same in ARR.

### ***Commission's Analysis and Ruling***

- 4.12.6 The Commission notes that BEST has made delayed contribution towards contingency reserves citing the reason of Covid-19 pandemic. This reflects the lack of discipline on the part of BEST with regard to ensuring timely investment of amount which is already approved by the Commission in the ARR. The Commission has already expressed its displeasure and is of the view that such actions of BEST are not desirable and should be avoided by BEST in future.
- 4.12.7 As per third proviso of the MYT Regulations 2019, the Commission has considered nil investment for FY 2020-21 and FY 2021-22 since the investment was done after prescribed timeline.

*“Provided also that if the Licensee does not invest the amount of contribution to Contingency Reserves in authorised securities within a period of six months of the close of the Year, then the contribution allowed in the calculation of Aggregate Revenue Requirement shall be disallowed at the time of true-up.”*

- 4.12.8 Accordingly, the Contribution to contingency reserve as contributed by BEST and approved by the Commission for FY 2020-21 and FY 2021-22 is outlined in the table

below:

**Table 142: Contribution to Contingency Reserve for FY 2020-21 and FY 2021-22, as approved by the Commission (Rs. Crore)**

Particulars	MYT Order	MTR Petition	Approved in this Order
<b>FY 2020-21</b>			
Contribution to Contingency Reserves	6.85	7.12	-
<b>FY 2021-22</b>			
Contribution to Contingency Reserves	6.94	7.40	-

4.12.9 The Commission approves NIL Contribution to Contingency Reserve for FY 2020-21 and FY 2021-22, respectively.

#### 4.13 Other Expenses

##### *BEST's Submission*

4.13.1 BEST has incurred other expense of Rs. 44.55 Crore and Rs. 53.81 Crore in FY 2020-21 and FY 2021-22 respectively. The break-up of other expense is as given below:

**Table 143 : Other Expenses Details for FY 2020-21 and FY 2021-22, as submitted by BEST (Rs. Crore)**

Particulars	FY 2020-21		FY 2021-22	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Prompt payment Discount		7.85	-	9.37
Power factor Incentive		8.51	-	7.02
ECS discount		0.07	-	3.05
Load factor Incentive		3.35	-	3.25
Load management rebate			-	-
Discount on Digital Payment to Consumers		2.38	-	2.59
Reimbursement of Transaction charges against payment through Visa Master Debit/Credit card.		0.18	-	0.20
ED & M-Tax paid to Government		0.29	-	0.28
Rebate under Incentive Scheme 2020		21.92		-
Interest on Bill Discounting		-		28.05
<b>Total</b>	<b>44.70</b>	<b>44.55</b>	<b>46.04</b>	<b>53.81</b>

4.13.2 BEST submitted that in the other expenses, Power factor incentives and Prompt payment discount are the major expenses apart from the payment incentive scheme which was launched in 2020.

4.13.3 The Recovery of theft income is inclusive of ED and M-TOSE and is being paid/transferred to the treasury account of the State Government. Hence ED and M-TOSE components are shown separately in the other expenses.

4.13.4 BEST submitted that, due to Covid-19 pandemic, revenue collection was hampered. Till October 2020, arrears have increased to Rs. 534.24 Crore

**Table 144 : Month-wise outstanding arrears for FY 2020-21, as submitted by BEST (Rs. Crore)**

Month	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20
<b>Total</b>	197.22	189.60	181.84	311.46	429.48	475.98	520.31	619.13	626.20	534.24

4.13.5 To improve the revenue realization, BEST has implemented the Incentive Scheme of 2020, to motivate customers to pay their arrears. The customers were given 2 options.

a) **Option 1:** If the consumer pays bill of October on time, then he is eligible for following rebate:

- Delayed Payment Charges & Interest on Arrears on bills for the month of April, May, June, July, August & September 2020 would be waived off.
- 2% discount on April, May, June, July, August & September bills.

b) **Option 2:** If the consumer pays bill of October in three installments October, November & December, then he is eligible for following rebate:

- Delayed Payment Charges & Interest on Arrears on bills for the month of April, May, June, July, August & September 2020 would be waived off.
- 1% discount on April, May, June, July, August & September bills.
- If the October months bill paid on three instalments on time, then interest on arrears would be waived off.

4.13.6 BEST submitted that it has given a rebate of Rs. 21.92 Crore under above mentioned Incentive Scheme 2020 in FY 2020-21.

4.13.7 Further, BEST submitted that it has given discount on digital payments as approved by the Commission in the MYT Order. Accordingly, the BEST has given discount of Rs. 2.38 Crore and Rs. 2.59 Crore on digital payment in FY 2020-21 and FY 2021-22 respectively.

4.13.8 COVID 19 pandemic impact has affected the Supply division business due to lockdown. The Industrial and Commercial billing was very meagre which are the main sources of Supply income and the same resulted into the shortage of working Capital. The residential consumers were also delaying the payment of bills. Further Supply division was in deficit of Rs. 285.75 Crore in FY 2020-21 and Rs. 609.13 Crore for FY 2021-22 which led to a situation for additional working capital / bill discounting facility. On the other side, the Undertaking is required to pay Power purchase bills in time (to avoid Late payment surcharge) along with other vital expenses and therefore in Order to provide uninterrupted supply in the city of Mumbai the bill discounting facility was availed to meet the working capital. The key details of bill discounting are:

- a) Receivables amount - Rs. 364.78 Crore
- b) Interest Rate - 6% p.a.

- c) Due date of discounting - 12 months from the principal payment being realized at the end of the month, starting from the end of 7<sup>th</sup> month to the end of 12<sup>th</sup> month.
- 4.13.9 BEST had availed such facility for first time and hence considered/ booked it under other expenses.
- 4.13.10 Accordingly, BEST requested the Commission to approve other Expenses for FY 2020-21 and FY 2021-22 as shown in above table.

***Commission's Analysis and Ruling***

- 4.13.11 The Commission notes that BEST has claimed rebate given to consumers as per Incentive Scheme 2020 to improve revenue collection. The Commission is of the view that BEST has not taken any prior approval before giving rebate to the Consumers. Further, if the rebate is allowed, it would be unfair to burden the cost to the Consumers who have made payment in timely manner even during covid times. Also, as per Regulations 36 of the MYT Regulations 2019, the rebate allowed to be claimed is only related to payment of bills by consumers within 7 days and rebate for improving collection efficiency cannot be allowed as the same is implemented for recovery of dues which is in lieu of inefficiency of the licensee to collect the revenue from the consumers who have the power to carry out disconnection under the relevant provisions of the Electricity Act 2003 and adjustment of arrears with security deposit is with the licensee. Thus, the Commission is not inclined to allow the rebate given by BEST in FY 2020-21.
- 4.13.12 BEST has also claimed Rs 28.05 Crore towards Interest on Bill Discounting. The Commission notes that Bill Discounting is nothing but a facility of early recovery of revenue or deferring the payment by paying interest. It is nothing but working capital facility availed by BEST. The Commission is allowing IoWC as per provisions of the MYT Regulations, 2019 which takes into account the receivable and payable. Allowing interest on Bill Discounting as claimed by BEST would be akin to allowing additional interest on working capital which is contrary to the MYT Regulations, 2019. Accordingly, the Commission has not considered the said interest amount while allowing the other expenses.
- 4.13.13 BEST has also claimed the actual expenses incurred during for FY 2020-21 and FY 2021-22 under other expenses for payment of PF incentive, prompt payment discount, and ECS discount. The Commission would like to highlight that such expenses are related to billing and collection to the consumers and hence such cost is allocated to supply function of the distribution business. As per Regulation 36 of the MYT Regulations, 2019, the Commission has verified the other expenses from Audited Accounts for BEST's submissions in the Truing up for FY 2020-21 and FY 2021-22 and approved other expenses as shown in Table below:

**Table 145: Other Expenses for FY 2020-21 and FY 2021-22, as approved by the Commission (Rs. Crore)**

Particulars	FY 2020-21			FY 2021-22		
	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order
Prompt payment Discount		7.85	7.85	-	9.37	9.37
Power factor Incentive		8.51	8.51	-	7.02	7.02
ECS discount		0.07	0.07	-	3.05	3.05
Load factor Incentive		3.35	3.35	-	3.25	3.25
Load management rebate				-	-	-
Discount on Digital Payment to Consumers		2.38	2.38	-	2.59	2.59
Reimbursement of Transaction charges against payment through Visa Master Debit/Credit card.		0.18	0.18	-	0.20	0.20
ED & M.Tax paid to Government		0.29	0.29	-	0.28	0.28
Rebate under Incentive Scheme 2020		21.92	-		-	-
Interest on Bill Discounting		-	-		28.05	-
<b>Total</b>	<b>44.70</b>	<b>44.55</b>	<b>22.63</b>	<b>46.04</b>	<b>53.81</b>	<b>25.76</b>

4.13.14 The Commission approves Rs. 22.63 Crore and Rs. 25.76 Crore as Other Expenses for FY 2020-21 and FY 2021-22, respectively.

#### **4.14 Provision for Bad and Doubtful Debts**

##### ***BEST's Submission***

4.14.1 The Commission had allowed Rs. 6.74 Crore and Rs. 6.74 Crore as provision for bad debts for FY 2020-21 and FY 2021-22 respectively in the MYT Order.

4.14.2 BEST submitted that the amount of Rs. 3.91 Crore and Rs. 4.59 Crore was written off against pending dues for FY 2020-21 and FY 2021-22 respectively.

4.14.3 BEST had made extensive efforts for recovery of such amount. However, the recovery of some dues is not expected due to various reasons such as demolition of premises / buildings /structures change in ownership of premises, shifting of consumer to outside BEST license area and addresses of such consumers not being available etc.

4.14.4 As per Regulation 76 and 85 of the MYT Regulations, 2019, the Commission may allow a provision for bad and doubtful debts.

4.14.5 Accordingly, BEST claimed the amount of bad debts written off based on accounts as under:

**Table 146 : Bad Debts Written off for FY 2020-21 and FY 2021-22, as submitted by BEST (Rs. Crore)**

Particulars	FY 2020-21		FY 2021-22	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Bad debts written off / provision for bad and doubtful debts	6.74	3.91	6.74	4.59

4.14.6 BEST requested the Commission to approve provision towards bad and doubtful debt as shown in table above for FY 2020-21 and FY 2021-22.

***Commission’s Analysis and Ruling***

4.14.7 The Commission has noted the submission of BEST. As per the provisions of the Regulation 76 and 85 of the MYT Regulations, 2019, the Commission may allow provisioning of bad and doubtful debts up to 1.5% of the amount shown as receivables in the Audited Accounts.

4.14.8 The Commission has verified the provision for bad and doubtful debts from the audited annual accounts and approved the same as shown in the Table below:

**Table 147: Provision for Bad and Doubtful Debts for FY 2020-21 and FY 2021-22, as approved by the Commission (Rs. Crore)**

Particulars	MYT Order	MTR Petition	Approved in this Order	Wire Business	Supply Business
<b>FY 2020-21</b>					
Provision for Doubtful debts	6.74	3.91	3.91	0.39	3.52
<b>FY 2021-22</b>					
Provision for Doubtful debts	6.74	4.59	4.59	0.46	4.13

4.14.9 While the Commission has approved provision for write-off of bad and doubtful debts, in case there is some recovery in the future period from consumers against whom the past debts were written off, then the same shall be included as part of the ARR and the benefit should be passed on to the consumers.

4.14.10 The Commission approves the Provision for Bad and Doubtful Debts of Rs. 3.91 Crore and Rs. 4.59 Crore for FY 2020-21 and FY 2021-22, respectively.

**4.15 Income Tax**

***BEST’s Submission***

4.15.1 BEST has submitted that being a Local Authority, it is exempted under Section 10 (20) of the Income Tax Act, 1961. Accordingly, it does not pay any income tax and has hence not claimed any for FY 2021-22 and FY 2022.

### ***Commission's Analysis and Ruling***

4.15.2 Since BEST is exempted from paying Income Tax under Section 10(20) of the Income Tax Act, 1961, the Commission has not computed any tax rate nor grossed up Return on Equity with any effective tax rate.

#### **4.16 Return on Equity**

##### ***BEST's Submission***

4.16.1 BEST submitted that it has computed Return on Equity (RoE) as per Regulation 29 of the MYT Regulations, 2019. BEST further submitted that the allocation of assets of Wires and Supply business for FY 2020-21 and FY 2021-22 are in ratio of 90:10 as per Regulation 71 of the MYT Regulations, 2019.

4.16.2 BEST has considered the weighted average rate of RoE as per Regulation 29 of the MYT Regulations, 2019 with weights as given in Allocation Matrix. For the propose of arriving at the Regulatory Equity at the beginning of the year for FY 2020-21, BEST has considered the closing equity of FY 2019-20. For FY 2021-22, the Commission has considered the opening equity same as closing equity of FY 2020-21 as approved by the Commission in this Order.

4.16.3 BEST submitted that it has calculated base RoE and additional RoE for Wires & supply business separately.

4.16.4 As per Regulation 29 of the MYT Regulation 2019, the additional rate of equity for the Wires business is linked to 0.5% increase in RoE for every 0.5% increase of Wires Availability from 98%. BEST submitted that SAIDI numbers for FY 2020-21 and FY 2021-22 are already published by BEST on its website. Based on the given formula in the Regulations, BEST has calculated the Wires Availability of 99.24% and 99.31% for FY 2020-21 and FY 2021-22 respectively.

4.16.5 Accordingly, for FY 2020-21 and FY 2021-22, BEST has computed the Base RoE for the Wires Business at 14% and Additional RoE at 1% as shown in the table below:

**Table 148 : Return on Equity for FY 2020-21 and FY 2021-22 for Distribution Wires Business, as submitted by BEST (Rs. Crore)**

Particulars	FY 2020-21		FY 2021-22	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Regulatory Equity at the beginning of the year	819.95	828.81	826.70	855.48
Capitalisation during the year	-	111.20	-	94.33
Equity portion of capitalisation during the year	17.42	33.36	15.67	28.30
Reduction in Equity Capital on account of retirement / replacement of assets	10.67	6.69	10.67	5.32
Regulatory Equity at the end of the year	826.70	855.48	831.70	878.46
	-	-		-
<b>Return on Equity Computation</b>	-	-		-
<b>Base Rate of Return on Equity</b>	14.00%	14.00%	14.00%	14.00%



Particulars	FY 2020-21		FY 2021-22	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Pretax Return on Equity after considering effective Tax rate	14.00%	14.00%	14.00%	14.00%
Return on Regulatory Equity at the beginning of the year	116.02	116.03	115.74	119.77
Return on Regulatory Equity addition during the year	0.48	1.87	0.35	1.61
<b>Total Return on Equity</b>	<b>115.27</b>	<b>117.90</b>	<b>116.09</b>	<b>121.38</b>

**Table 149 : Additional Return on Equity for Distribution Wires Business FY 2020-21 and FY 2021-22, as submitted by BEST (Rs. Crore)**

Particulars	Unit	FY 2020-21	FY 2021-22
Wires Availability above 98% (95% for MSEDCL)	%	99.24%	99.31%
Additional Rate of Return on Equity for Wire Availability	%	1.00%	1.00%
<b>Additional Return on Equity Computation</b>			
Return on Regulatory Equity at the beginning of the year	Rs. Crore	8.29	8.55
Return on Regulatory Equity addition during the year	Rs. Crore	0.13	0.11
<b>Total Additional Return on Equity</b>	<b>Rs. Crore</b>	<b>8.42</b>	<b>8.67</b>
<b>Total Return on Equity</b>	<b>Rs. Crore</b>	<b>126.32</b>	<b>130.05</b>

- 4.16.6 For FY 2020-21 and FY 2021-22, BEST has computed the Base RoE for the Retail Supply Business at 15.5%. As per Regulation 29 of the MYT Regulations, 2019, for Retail Supply Business, the additional RoE was based on the percentage of assessed bills and collection efficiency.
- 4.16.7 BEST submitted that, the percentage of assessed bills was around 28.58% for FY 2020-21, owing to the Covid-19 lockdowns which resulted in average billing being done to consumers for lockdown period. Hence BEST is not claiming any additional RoE towards % of assessed bills for FY 2020-21. However, in view of pandemic situation, which was beyond the control of BEST, BEST requested the Commission to allow additional 1% RoE for this criteria while approving the Truing-up for FY 2020-21.
- 4.16.8 The collection efficiency for FY 2020-21 was 94.13%. BEST submitted that during FY 2020-21, as the billing was affected, hence the percentage of collection efficiency also got affected and desired targets could not be achieved. Hence, BEST hasn't claimed any additional RoE towards Collection Efficiency.
- 4.16.9 The percentage of assessed bills with respect to total bills issued during FY 2021-22 was 1.68% leading to a reduction in % of assessed bills of 26.90% from FY 2020-21 which entitles BEST for additional ROE of 1%.
- 4.16.10 The collection efficiency for FY 2021-22 was 101.25% owing to arrears being recovered from the past year which increased the collection efficiency to more than a 100%. Therefore, the maximum of 1% is added to the ROE for the collection efficiency and a total of 2% for the retail supply business is considered.

4.16.11 Accordingly, for FY 2020-21 and FY 2021-22, BEST has computed the Base RoE for the Supply Business at 15.5% and Additional RoE at 2% (only for FY 2021-22) as shown in the table below:

**Table 150 : Return on Equity for Retail Supply Business FY 2020-21 and FY 2021-22, as submitted by BEST (Rs. Crore)**

Particulars	FY 2020-21		FY 2021-22	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Regulatory Equity at the beginning of the year	91.11	92.09	91.86	95.05
Capitalisation during the year excluding of grant	-	12.36	-	10.48
Equity portion of capitalisation during the year	1.94	3.71	1.74	3.14
Reduction in Equity Capital on account of retirement / replacement of assets	1.19	0.74	1.19	0.59
Regulatory Equity at the end of the year	91.86	95.05	92.41	97.61
<b>Return on Equity Computation</b>				
Base Rate of Return on Equity	15.50%	15.50%	15.50%	15.50%
Pretax Return on Equity after considering effective Tax rate	15.50%	15.50%	15.50%	15.50%
Return on Regulatory Equity at the beginning of the year	12.89	14.27	14.24	14.73
Return on Regulatory Equity addition during the year	0.05	0.23	0.04	0.20
<b>Total Return on Equity</b>	<b>14.18</b>	<b>14.50</b>	<b>14.28</b>	<b>14.93</b>

**Table 151 : Additional Return on Equity for Retail Supply Business for FY 2020-21 and FY 2021-22, as submitted by BEST (Rs. Crore)**

Particulars	Unit	FY 2020-21	FY 2021-22
% of Assessed bills with respect total bills issued during the year	%	28.58%	1.68%
Additional Rate of Return on Equity for Assessment of bills (a)	%	0.00%	1.00%
Collection Efficiency for the year	%	94.13%	101.25%
Additional Rate of Return for collection efficiency (b)	%	0.00%	1.00%
Total Additional Return on Equity (c) = (a) + (b)	%	0.00%	2.00%
<b>Additional Return on Equity Computation</b>			
Return on Regulatory Equity at the beginning of the year	Rs. Crore	-	1.90
Return on Regulatory Equity addition during the year	Rs. Crore	-	0.03
Total Additional Return on Equity	Rs. Crore	-	1.93
<b>Total Return on Equity</b>	<b>Rs. Crore</b>	<b>14.50</b>	<b>16.86</b>

4.16.12 BEST requested the Commission to approve the Return on Equity as shown in above table for FY 2020-21 and FY 2021-22.

***Commission's Analysis and Ruling***

4.16.13 The Commission has computed Base RoE at 14% and 15.5% for the Distribution Wires and Retail Supply Business, respectively, in accordance with the Regulations, on the opening equity of FY 2020-21 and FY 2021-22 taking the approved

Capitalisation and on 50% of the approved asset Capitalisation during the year, at the debt: equity ratio of 70:30.

4.16.14 As Income Tax is not applicable for BEST, for FY 2020-21 and FY 2021-22, the RoE rate has not been grossed up with the Tax rate.

4.16.15 As regards the impact of retirement of assets in the computation of RoE for FY 2020-21 and FY 2021-22, the Commission has considered the impact of asset retirement by reducing the equity equivalent to 30 % of value of the assets retired during the year.

4.16.16 The Commission has accepted the allocation of assets between the wires and supply business in the ratio of 90:10 in line with MYT Regulations, 2019 and computed the weighted average rate of return for FY 2020-21 and FY 2021-22.

4.16.17 The summary of base RoE for FY 2020-21 and FY 2021-22 as approved by the Commission is provided in Table below:

**Table 152: Return on Equity for FY 2020-21 and FY 2021-22, as approved by the Commission (Rs. Crore)**

Particulars	FY 2020-21				FY 2021-22			
	MTR Petition	Approved in this Order	Wire Business	Supply Business	MTR Petition	Approved in this Order	Wire Business	Supply Business
Regulatory Equity at the beginning of the year	920.90	919.59	827.63	91.96	950.54	947.33	852.60	94.73
Equity portion of capitalisation	37.07	37.07	33.36	3.71	31.44	27.05	24.35	2.71
Reduction in Equity Capital on account of retirement / replacement of assets	7.43	9.33	8.39	0.93	5.91	5.91	5.32	0.59
<b>Regulatory Equity at the end of the year</b>	<b>950.54</b>	<b>947.33</b>	<b>852.60</b>	<b>94.73</b>	<b>976.07</b>	<b>968.47</b>	<b>871.62</b>	<b>96.85</b>
Return on Regulatory Equity at the beginning of the year	130.31	130.12	115.87	14.25	134.50	134.05	119.36	14.68
Return on Regulatory Equity addition during the year	2.10	1.96	1.75	0.21	1.81	1.50	1.33	0.16
<b>Total Return on Equity</b>	<b>132.40</b>	<b>132.08</b>	<b>117.62</b>	<b>14.47</b>	<b>136.31</b>	<b>135.54</b>	<b>120.70</b>	<b>14.85</b>

4.16.18 BEST has claimed additional RoE of 1% for Distribution Wires Business based on its Wires Availability as per Regulation 29.8 of the MYT Regulations, 2019. The Commission has scrutinized the SOP reports and computed Wires Availability of 99.24% and 99.31% for FY 2021-22 and FY 2021-22 respectively. Accordingly, the Commission is allowing additional RoE of 1% for Distribution Wires Business for the said years.

4.16.19 In respect of additional RoE for Retail Supply Business, the Commission notes that assessed bills are 28.58% in FY 2020-21 which is much higher than 1.5% specified

in the Regulations for claiming additional RoE. However, the Commission notes that it has allowed the Distribution Licensees to raise assessed bills considering the lockdown and other restrictions imposed due to Covid-19 pandemic. Accordingly, the Commission has considered additional RoE of 1% for FY 2020-21.

4.16.20 For FY 2021-22, the assessed bills are 1.68%. BEST has claimed 1% additional RoE by relying on the Regulation 29.9 (b) of MYT Regulations, 2019 that there has been reduction of ~27% in assessed bills as compared to previous year. The Commission has already allowed maximum possible additional RoE of 1% considering the Covid-19 situation for FY 2020-21. Therefore, the comparison sought to be done by BEST with FY 2020-21 for claiming additional RoE is not correct approach. The Commission has thus computed additional RoE for FY 2021-22 considering it as standalone year due to peculiar circumstances of previous year and accordingly allowed 0.75% additional RoE as per Regulation 29.9 (b) of MYT Regulations, 2019.

4.16.21 It is observed that collection efficiency for FY 2020-21 is 94.13% much below 99% and hence BEST is not entitled for additional RoE for FY 2020-21. For FY 2021-22, the collection efficiency has increased to 101.25%, which is substantial improvement over FY 2020-21. In response to data gaps raised by the Commission, Auditor Certificate giving certification of Collection Efficiency for the said years. BEST has also submitted that as per 29.9 (d) of the MYT Regulations, 2019, for every 0.5% improvement in overall collection efficiency, rate of return shall be increased by 0.25%, subject of ceiling of additional RoE of 1%. Accordingly, as per the said Regulations, BEST is entitled to additional RoE of 1% for FY 2021-22 and the same is allowed by the Commission for FY 2021-22.

4.16.22 The additional RoE approved by the Commission for FY 2020-21 and FY 2021-22 is summarized in table below:

**Table 153: Additional RoE for FY 2020-21 and FY 2021-22, as approved by the Commission (Rs. Crore)**

Particulars	Unit	FY 2020-21		FY 2021-22	
		MTR Petition	Approved in this Order	MTR Petition	Approved in this Order
<b>Wire Business</b>					
Wires Availability above 98% (95% for MSEDCL)	%	99.24%	99.24%	99.31%	99.31%
Additional Rate of Return on Equity for Wire Availability	%	1.00%	1.00%	1.00%	1.00%
<b>Additional Return on Equity Computation</b>					
Return on Regulatory Equity at the beginning of the year	Rs. Crore	8.29	8.28	8.55	8.53
Return on Regulatory Equity addition during the year	Rs. Crore	0.13	0.12	0.11	0.10
<b>Total Additional Return on Equity</b>	<b>Rs. Crore</b>	<b>8.42</b>	<b>8.40</b>	<b>8.67</b>	<b>8.62</b>
<b>Total Return on Equity for Wire Business</b>	<b>Rs. Crore</b>	<b>126.32</b>	<b>126.02</b>	<b>130.05</b>	<b>129.32</b>
<b>Supply Business</b>					
% of Assessed bills with respect total bills issued during the year	%	28.58%	28.58%	1.68%	1.68%

Particulars	Unit	FY 2020-21		FY 2021-22	
		MTR Petition	Approved in this Order	MTR Petition	Approved in this Order
Additional Rate of Return on Equity for Assessment of bills (a)	%	0.00%	1.00%	1.00%	0.75%
Collection Efficiency for the year	%	94.13%	94.13%	101.25%	101.25%
Additional Rate of Return for collection efficiency (b)	%	0.00%	0.00%	1.00%	1.00%
Total Additional Return on Equity (c) = (a) + (b)	%	0.00%	1.00%	2.00%	1.75%
Additional Return on Equity Computation					
Return on Regulatory Equity at the beginning of the year	Rs. Crore	-	0.92	1.90	1.66
Return on Regulatory Equity addition during the year	Rs. Crore	-	0.01	0.03	0.02
Total Additional Return on Equity	Rs. Crore	-	<b>0.93</b>	<b>1.93</b>	<b>1.68</b>
<b>Total Return on Equity for Retail Supply Business</b>	<b>Rs. Crore</b>	<b>14.50</b>	<b>15.40</b>	<b>16.86</b>	<b>16.52</b>
<b>Total Return on Equity for Distribution business</b>	<b>Rs. Crore</b>	<b>140.82</b>	<b>141.42</b>	<b>146.91</b>	<b>145.84</b>

4.16.23 The Commission approves the Return on Equity of Rs. 141.42 Crore and Rs. 145.84 Crore for FY 2020-21 and FY 2021-22, respectively.

#### 4.17 Return as Interest on Internal Funds

##### *BEST's Submission*

4.17.1 The Appellate Tribunal of Electricity, in its Judgment dated 27 August, 2007 in Appeal No. 13 of 2007 had directed the Commission to take into consideration interest on Government Grant as well as interest on internal funds, which is not included in the calculation of the Capital Base or notional equity in any way.

4.17.2 Accordingly, BEST submitted the Interest on Internal Funds as under:

**Table 154 : Return on Internal Fund Detail for FY 2020-21 and FY 2021-22, as submitted by BEST (Rs. Crore)**

Particulars	FY 2020-21		FY 2021-22	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Return as Interest on Internal funds	5.28	5.28	5.28	5.28

##### *Commission's Analysis and Ruling*

4.17.3 The Commission has accepted the submission of BEST and approved the return as interest on internal funds of Rs.5.28 Crore for FY 2020-21 and FY 2021-22 as per direction given by the Hon'ble Appellate Tribunal of Electricity in its Judgment in Appeal No 13 of 2007. Also, the Commission notes that said return is allowed on internal funds of Rs 87.99 Crore at 6% rate of interest.

#### 4.18 Non-Tariff Income

##### *BEST's Submission*

4.18.1 BEST submitted that it has earned the non-tariff income of Rs. 17.44 Crore and Rs. 26.84 Crore in FY 2020-21 and FY 2021-22 respectively. The details of non-tariff income under various sub-heads are as given below:

**Table 155 : Details of the Non-Tariff income for FY 2020-21 and FY 2021-22, as submitted by BEST (Rs. Crore)**

Particulars	FY 2020-21		FY 2021-22	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Rent of land or buildings	-	2.06		1.79
Sale of Scrap	-	-	-	9.71
Income from investments	-	4.02		4.10
Income from consumers charges levied as per Schedule of Charges approved by Commission	-	0.20	-	0.24
Income from recovery against theft and / or pilferage of electricity	-	2.78	-	2.85
Income from sale of tender documents	-	0.16	-	0.21
Others	-	2.29	-	0.15
Share of General Administration	-	5.93	-	7.79
<b>Total</b>	<b>55.24</b>	<b>17.44</b>	<b>56.90</b>	<b>26.84</b>

4.18.2 BEST explained some of the major heads of the Non-Tariff Income:

- **Rent of land or buildings:** This comprises three heads, i.e., Rent of Land & Building, Rent from Staff Quarters & Rent from Contractors. In addition, there are certain premises wherein shops are allotted to outside parties. The rent of these shops varies as per the location of the premises and the offer of the bidders.
- **Income from consumer charges levied as per the schedule charges approved by Commission:** This includes the Reconnection charges, Requisition charges, Damaged meter charges, etc. amounting to Rs.0.20 Crore.
- **Income from recovery against theft and / or pilferage of electricity:** Efforts for recovery for theft and pilferage were also greatly affected due to lockdowns caused by the Covid-19 pandemic.
- **Income from Advertisements:** Due to Covid-19 pandemic and resulting lockdowns, advertisements were not put up and hence no revenue was generated from advertisements for FY 2020-21.
- **Others:** This includes two heads i.e. Others & Charges for collection of Electricity Duty collected on behalf of Government at a rate of Rs.45 per 100 consumers and cash discount received from various suppliers, penalty recovered from the suppliers/employees etc.

- **Share of General Administration receipt:** This consists of share of General Administration Receipts including interest on deposit and General investment, apprentice premium received from the Government etc.

4.18.3 **Sale of Scrap:** BEST submitted that after retirement of assets, BEST sells these retired assets through a tendering system via E-Auction. The amount realized against the retired assets is recorded as non-tariff income under the head of sale of scrap. However, it is to be noted that the non-tariff income against such head is booked in the financial year in which the asset is sold out through E auction. BEST submitted that the approved Non-Tariff income was forecasted based on NTI of FY 2018-19. Hence, it is inappropriate to compare the actual NTI with the approved NTI.

4.18.4 BEST requested the Commission to approve non-tariff income as shown above for FY 2020-21 and FY 2021-22.

***Commission’s Analysis and Ruling***

4.18.5 The Commission has noted the submissions of BEST and also verified the details of the Non-Tariff income from the Audited Accounts submitted by BEST. Accordingly, the Commission has considered the Non-Tariff income for FY 2020-21 and FY 2021-22 as shown in Table below:

**Table 156: Non-Tariff Income for FY 2020-21 and FY 2021-22, as approved by the Commission (Rs. Crore)**

Particulars	MYT Order	MTR Petition	Approved in this Order	Wire Business	Supply Business
<b>FY 2020-21</b>					
Non-Tariff Income	55.24	17.44	17.44	1.74	15.70
<b>FY 2021-22</b>					
Non-Tariff Income	56.90	26.84	26.84	2.68	24.16

4.18.6 The Commission approves Non-Tariff Income of Rs. 26.85 Crore and Rs. 24.16 Crore for FY 2020-21 and FY 2021-22, respectively

**4.19 Sharing of gain and losses of Controllable Factors**

***BEST’s Submission***

4.19.1 As per Regulation 11 of the MYT Regulations 2019, the Commissions allows the sharing of gains or losses between the distribution licensee and the consumers.

4.19.2 The controllable expenses are as follows:

- Distribution Loss
- O&M Expenses



### **Distribution Loss**

4.19.3 BEST has achieved a lower distribution loss of 3.93% against the normative target of 4.18% in FY 2020-21 and higher distribution loss of 4.63% against the normative target of 4.18% in FY 2021-22 as approved by the Commission. Hence, BEST has accordingly calculated gain for lower distribution loss in FY 2020-21 and loss for higher distribution loss in FY 2021-22 along with the sharing of the same as shown in table below:

**Table 157 : Details of the gain on account of low Distribution Loss for FY 2020-21 and FY 2021-22, as submitted by BEST (Rs. Crore)**

<b>Particulars</b>	<b>Units</b>	<b>FY 2020-21</b>	<b>FY 2021-22</b>
Normative Distribution loss (target)	%	4.18%	4.18%
Energy input @ Normative Distribution Loss	MU	4,060.61	4,386.42
Energy input @ Actual Distribution Los	MU	4,050.12	4,407.20
Reduction in Power Purchase due to actual distribution loss less than the normative target	MU	10.49	(20.78)
Actual Power Purchase Cost for the year	Rs. Crore	2,031.10	2,530.96
Average Power Purchase Rate	Rs. / unit	5.01	5.74
Power Purchase Cost gain/(loss) due to actual distribution loss	Rs. Crore	5.26	(11.93)
Amount retained by BEST (1/3rd of incentive/(loss))	Rs. Crore	1.75	(3.98)
Amount passed on to consumers by BEST (2/3rd of above incentive/(loss))	Rs. Crore	3.51	(7.95)

### **O&M Expenses**

4.19.4 BEST submitted that actual O&M expense for FY 2020-21 are lower than normative O&M expense for FY 2020-21 excluding wage revision.

4.19.5 In line with the directions given in the MYT Order, BEST has submitted impact of wage revision separately for the purpose of final truing-up. Implementation of wage revision also led to introduction/increase of other salary component allowances. The impact on employee expenses on account of these new expenses need to be added separately to normative expenses. It is also submitted that impact of wage revision is not captured in YoY escalation and considering the same the Commission had approved impact of wage revision separately in its earlier Order. As the impact on employee expenses on account of these new expenses are not captured in normative expenses it is inappropriate to consider the same under actual expenses. BEST has not considered the amount paid against wage revision for sharing purposes. BEST humbly requested the Commission to approve such wage revision over and above normative expenses.

4.19.6 Therefore, working of sharing of gains & losses for O&M expenses for FY 2020-21 and FY 2021-22 is shown in table below:



**Table 158 : Sharing of O&M Expenses gain for FY 2020-21 and FY 2021-22, as submitted by BEST (Rs. Crore)**

Particulars	FY 2020-21	FY 2021-22
Normative O&M expenses	587.29	616.06
Actual O&M expenses	506.44	638.20
Sharing of Gains	80.85	(22.15)
Amount retained by BEST (1/3rd of incentive/v (loss))	26.95	(7.38)
Amount passed on to consumers by BEST (2/3rd of above incentive/(loss))	53.90	(14.76)

***Commission's Analysis and Ruling***

**Distribution Loss**

4.19.7 The Commission has approved distribution loss of 3.93% and 4.63% for FY 2020-21 and FY 2021-22 respectively. In accordance with the MYT Regulations, 2019, the Commission has considered the distribution loss to be a controllable parameter and has accordingly computed the efficiency gain/loss as the case may against the target of 4.18% as approved in the MYT Order.

4.19.8 The Commission has computed the sharing of efficiency gain on account of lower distribution loss considering the approved energy balance, sales and power purchase cost. Average power purchase cost has been computed by dividing the actual total power purchase cost by the total power purchase quantum. Accordingly, the Commission has approved the sharing of efficiency gain on account of lower distribution loss than target distribution loss as shown in the Table below:

**Table 159: Incentive on reduction of Distribution Loss for FY 2020-21 and FY 2021-22, as approved by the Commission.**

Particulars	Units	FY 2020-21		FY 2021-22	
		MTR Petition	Approved in this Order	MTR Petition	Approved in this Order
Normative Distribution loss (target)	%	4.18%	4.18%	4.18%	4.18%
Normative Energy Input at same sales level	MU	4,060.61	4,060.63	4,386.42	4,386.42
Actual Distribution Loss	%	3.93%	3.93%	4.63%	4.63%
Actual Energy Input	MU	4,050.12	4,050.14	4,407.20	4,407.20
Variation in Power Purchase due to difference in actual distribution loss and the normative target	MU	10.49	10.48	(20.78)	(20.78)
Actual Power Purchase Cost	Rs. Crore	2,031.10	2,031.10	2,530.96	2,530.96
Average Power Purchase Rate	Rs. / unit	5.01	5.01	5.74	5.74
Power Purchase Cost gain/(loss) due to actual distribution loss	Rs. Crore	5.26	5.26	(11.93)	(11.93)
Amount retained by BEST	Rs. Crore	1.75	1.75	(7.95)	(7.96)
Amount passed on to consumers by BEST	Rs. Crore	3.51	3.51	(3.98)	(3.98)

4.19.9 The Commission approves an incentive of Rs. 1.75 Crore and loss of Rs. 7.96 Crore on account of variation in Distribution Loss for FY 2020-21 and FY 2021-22,

respectively.

### **O&M Expenses**

4.19.10 As discussed in the earlier section of this Order, the Commission has considered the normative O&M Expenses for FY 2020-21 and FY 2021-22 and has computed the efficiency gain/ (loss) for O&M expenses.

4.19.11 With respect FY 2020-21, BEST has excluded the Wage Revision impact while calculating the sharing of efficiency gain / (Loss) for O&M expenses. However, as per Regulations 75.4 and Regulations 84.4 of the MYT Regulations 2019 for Wire and Supply Business, it states that efficiency gains shall not be considered excluding the impact of wage revision.

*“Provided that if actual employee expenses are higher than normative expenses on this account, then no sharing of efficiency losses shall be done to that extent:*

*Provided further that efficiency gains shall not be allowed by deducting the impact of Wage Revision and comparison of such reduced value with normative value.”*

4.19.12 Accordingly, in line with the proviso as specified in the MYT Regulation 2019, the Commission has not considered any efficiency of gains / Losses as the amount of O&M expenses are lower than the norms, if wage revision is excluded and exceeds the norm post inclusion of the same amount.

4.19.13 Further, as specified in para 4.5.41 of this Order, it has been observed that expenditure on Repairs & Maintenance falls below 20% of total O&M expenses allowed and hence to that extent such savings in Repairs & Maintenance is considered as part of O&M Expenses and accordingly, the sharing of gains / losses is calculated.

**Table 160: Sharing of O&M expense gain/ (loss) for FY 2020-21, as approved by Commission (Rs. Crore)**

<b>Particulars</b>	<b>Amount</b>
Base O&M Expenses	584.93
Actual O&M Expenses without Wage Revision	515.88
Wage Revision	74.93
Actual O&M Expenses with Wage Revision	590.81
Difference between Base and Actual O&M without Wage Revision	(69.05)
Wage Revision	74.93
<b>Net Entitlement of O&amp;M - (A)</b>	<b>590.81</b>
R&M Expenses - 20% of Actual Expenses without wage revision	103.18
Actual R&M Expenses	46.71
<b>Shortfall in R&amp;M Expenses - (B)</b>	<b>56.47</b>

Particulars	Amount
O&M Expenses if R&M incurred was 20% - (Actual O&M expenses + Shortfall)	572.35
Efficiency Gain on revised actual O&M expenses – (Base O&M expenses compared with revised O&M Expenses)	12.58
<b>Efficiency Gain to be passed on to Consumers - (C)</b>	<b>8.39</b>
<b>O&amp;M Expenses to be claimed in ARR - (D) = (A - C)</b>	<b>582.42</b>

**Table 161: Sharing of O&M expense gain/ (loss) for FY 2021-22, as approved by Commission (Rs. Crore)**

Particulars	Amount
Base O&M Expenses - (A)	609.61
Actual O&M Expenses - (B)	638.20
R&M Expenses - 20% of Actual Expenses	127.64
Actual R&M Expenses	56.04
<b>Shortfall in R&amp;M Expenses - (C)</b>	<b>71.60</b>
O&M Expenses if R&M incurred was 20%	709.80
Efficiency Loss on revised actual O&M expenses	(100.20)
<b>Efficiency Loss to be passed on to Consumers - (D)</b>	<b>(33.40)</b>
<b>O&amp;M Expenses to be claimed in ARR - (E) = (B - D)</b>	<b>604.81</b>

### **Interest on Working Capital**

- 4.19.14 The Commission notes that BEST has not considered sharing of gain/(loss) in respect of IoWC even if the same is controllable parameter as per Regulation 11 of the MYT Regulations, 2019. The Commission has however computed the same as per the said Regulations.
- 4.19.15 The Commission has approved the normative IoWC as per Regulation 32 of the MYT Regulations, 2019 in earlier section. BEST has provided details of actual interest on working capital for FY 2020-21 and FY 2021-22.
- 4.19.16 BEST has submitted that the Commission in its Order in Case No. 324 of 2019 dated 30 March, 2020 has mentioned about the outbreak of COVID-19 and resulted lockdown. The Commission had also issued a practice direction on 26 March, 2020 whereby meter reading and physical bill distribution work was suspended, and utilities were asked to issue bills on average usage basis till the current crisis gets subsided. Further, the Commission had mentioned that Distribution Licensees will be required to borrow/avail additional working capital over and above the amount allowed by the Commission as per Regulations. BEST recognises the fact that the Commission in the MYT Order under section of ‘Applicability of the Order’ has provided for Special Interim Dispensation considering covid-19 pandemic and need for additional working capital to manage business. Further, BEST submitted that it has been severely affected by the ongoing pandemic of COVID- 19 and the resultant

restrictions/ measures adopted by the State Government as well as the Central Government. The pandemic has affected the sales of the BEST. Considering the concessions as granted by the Commission to the consumers in payment of electricity, and due to the continuation of the pandemic of COVID-19, BEST has faced issues with regard to under-recovery of cross-subsidy for the FY 2020-21. Accordingly, BEST submitted that it required additional working capital due to delay in receipts from consumers which resulted in approx. Rs. 1.70 Cr. additional interest on working capital (Rs. 10.57 Cr.) as compared to previous year (Rs. 8.88 Cr.). BEST requested the Commission to consider it as uncontrollable.

4.19.17 Further, BEST submitted that provision in the MYT Regulations, 2019 of reducing the working capital by total amount of consumer security is resulting in the net working capital being negative for the Supply Business. Therefore, the working capital requirement based on normative principle works out to zero. However, as per the Audited Account, BEST has paid IoWC. BEST has requested that since the collection efficiency has been affected due to COVID pandemic and nationwide lockdown effect called on 24 March 2020, the requirement of working capital was higher. Accordingly, BEST has requested to kindly consider allowing Interest on working capital on actual basis rather than normative basis without any sharing of gains/ losses.

4.19.18 However, the Commission has also observed that BEST has not considered contribution of delay in receipt of payment to the actual interest on working capital. Relevant extract of Regulation 32.6 of MYT Regulations, 2015 is reproduced below:

*“32.6 For the purpose of Truing-up for each year, the variation between the normative interest on working capital computed at the time of Truing-up and the actual interest on working capital incurred by the Generating Company or Licensee or MSLDC, substantiated by documentary evidence, shall be considered as an efficiency gain or efficiency loss, as the case may be, on account of controllable factors, and shared between it and the respective Beneficiary or consumer as the case may be, in accordance with Regulation 11 :*

*Provided that the **Delayed Payment Surcharge and Interest on Delayed Payment as per books of accounts of the Generating Company or Licensee or MSLDC shall be deducted from the actual interest on working capital, before sharing of the efficiency gain or efficiency loss, as the case may be.**”*  
(Emphasis Added)

4.19.19 Further considering the additional working capital burden of Rs. 1.70 Cr (increased interest on working capital (Rs. 10.57 Cr.) as compared to previous year (Rs. 8.88 Cr.)), as submitted by BEST, it has been observed that BEST has collected DPC of Rs. 10.03 Crore in FY 2020-21 and which has increased by Rs. 4.28 Crore and has collected Rs. 14.31 Crore in FY 2021-22. Accordingly, the Commission has reduced actual IOWC by DPC along with interest on arrears collected by BEST during FY 2020-21 and FY 2021-22. Hence, the impact of increase in working capital has been

offset by the DPC collected from the consumers and is outlined in the following table:

**Table 162: Actual Interest on Working Capital Loan and DPC for FY 2020-21 and FY 2021-22 (Rs. Crore)**

Particulars	FY 2020-21	FY 2021-22
Actual Interest on Working Capital Loan	10.57	9.93
DPC / Interest on arrears received	10.03	14.31
<b>Net Interest on Working Capital loan</b>	<b>0.54</b>	<b>-</b>

4.19.20 As can be observed from the above table, only in FY 2020-21, the additional burden of Rs. 0.54 Crore is borne by BEST in respect of IoWC and hence the same is allowed as passthrough on actual basis.

4.19.21 Hence, the Commission has approved the normative IoWC as per Regulation 32 of the MYT Regulations, 2019 in earlier section. BEST has provided details of actual IoWC for FY 2020-21 and FY 2021-22 and as specified in earlier paragraph, the Commission has approved Rs. 0.54 Crore for FY 2020-21 and 'nil' actual IoWC for FY 2021-22 respectively.

4.19.22 Accordingly, the Commission has computed the efficiency Gain/ (Loss) for IoWC as shown in the following Table:

**Table 163: Sharing of IoWC Gain/ (Loss) for FY 2020-21 and FY 2021-22, as approved by the Commission (Rs. Crore)**

Particulars	FY 2020-21	FY 2021-22
	Approved in this Order	
Normative Interest on Working Capital	4.24	4.52
Actual Interest on Working Capital	0.54	-
Gain / (Loss) due to variation in Interest on Working Capital Expenses	3.70	4.52
Amount retained by BEST	1.23	1.51
Amount passed on to consumers by BEST	2.47	3.01

4.19.23 The Commission approves the sharing of efficiency gain/ (loss) of Rs. 1.23 Crore and Rs. 1.51 Crore on account of IoWC, with BEST for FY 2020-21 and FY 2021-22 respectively.

#### **4.20 True-up of Aggregate Revenue Requirement for FY 2020-21 and FY 2021-22**

##### ***BEST's Submission***

4.20.1 BEST has submitted the Truing-up for FY 2020-21 and FY 2021-22 based on comparison of the actual expense incurred and the revenue earned during the year vis-à-vis the figures approved by the Commission in MYT Order. The Truing-up summary for FY 2020-21 and FY 2021-22 is as under:

**Table 164 : True-up of Aggregate Revenue Requirement for FY 2020-21 and FY 2021-22 – Wires Business, as submitted by BEST (Rs. Crore)**

Particulars	FY 2020-21		FY 2021-22	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Operation & Maintenance Expenses	367.60	384.03	378.02	414.83
Depreciation	101.12	93.67	102.40	94.97
Interest on Loan Capital	-	32.94	-	28.59
Interest on Working Capital	5.22	1.06	5.25	0.99
Interest on Consumer Security Deposit	2.25	1.71	2.32	1.56
Provision for bad and doubtful debts	0.67	0.39	0.67	0.46
Contribution to contingency reserves	6.17	6.41	6.25	6.66
Income Tax	-	-	-	-
<b>Total Revenue Expenditure</b>	<b>483.03</b>	<b>520.21</b>	<b>494.92</b>	<b>548.06</b>
Add: Return on Equity Capital	115.27	126.32	116.09	130.05
Add: Return on Internal fund	4.75	4.75	4.75	4.75
Add: Sharing of Gain/(Loss) of Distribution loss	-	1.75	-	(3.98)
Add: Sharing of Gain/(Loss) on IoWC	-	-	-	-
Add: O&M sharing of gain and loss	-	17.52	-	(9.60)
<b>Aggregate Revenue Requirement</b>	<b>603.05</b>	<b>670.55</b>	<b>615.75</b>	<b>669.29</b>
Less: Non-Tariff Income	5.52	1.74	5.69	2.68
<b>Aggregate Revenue Requirement from Distribution Wires</b>	<b>597.53</b>	<b>668.81</b>	<b>610.06</b>	<b>666.60</b>
<b>Past Revenue Gap Adjusted</b>	(30.13)	(30.13)	-	-
<b>ARR from Distribution Wires Business with Revenue Gap Revenue</b>	<b>567.40</b>	<b>638.68</b>	<b>610.06</b>	<b>666.60</b>
Revenue from sale of electricity	567.40	461.50	610.06	529.35
<b>Total Revenue Gap/(Surplus)</b>	<b>-</b>	<b>177.18*</b>	<b>-</b>	<b>137.26</b>

\*-Error in calculation of Gap by BEST has been rectified

**Table 165 : True-up of Aggregate Revenue Requirement for FY 2020-21 and FY 2021-22– Retail Supply Business, as submitted by BEST (Rs. Crore)**

Particulars	FY 2020-21		FY 2021-22	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Power Purchase Expenses (including Inter-State Transmission Charges)	2,750.30	2,031.10	2,454.20	2,530.96
Operation & Maintenance Expenses	197.94	206.78	203.55	223.37
Depreciation	11.24	10.41	11.38	10.55
Interest on Loan Capital	-	3.66	-	3.18
Interest on Working Capital	-	9.51	-	8.94
Interest on Consumer Security Deposit	20.25	15.42	20.86	14.08
Provision for bad and doubtful debts	6.07	3.52	6.07	4.13
Contribution to contingency reserves	0.68	0.71	0.69	0.74
Intra-State Transmission Charges	258.80	258.48	257.96	258.00
MSLDC Fees & Charges	1.29	1.29	1.20	1.20
Other Expenses	44.70	44.55	46.04	53.81
<b>Total Revenue Expenditure</b>	<b>3,291.27</b>	<b>2,585.43</b>	<b>3,001.95</b>	<b>3,108.96</b>
Add: Return on Equity Capital	14.18	14.50	14.28	16.86
Add: Return on Internal fund	0.53	0.53	0.53	0.53
Add: Sharing of Gain & Loss on IoWC	-	-	-	-
Add: O&M sharing of gain and loss	-	9.43	-	(5.17)

Particulars	FY 2020-21		FY 2021-22	
	MYT Order	MTR Petition	MYT Order	MTR Petition
<b>Aggregate Revenue Requirement</b>	<b>3,305.97</b>	<b>2,609.90</b>	<b>3,016.76</b>	<b>3,121.17</b>
Less: Non-Tariff Income	49.72	15.70	51.21	24.16
Less: Receipts on account of Cross-Subsidy Surcharge	-	-	-	-
Less: Receipts on account of Additional Surcharge, if any	-	-	-	-
<b>Aggregate Revenue Requirement from Retail Tariff</b>	<b>3,256.26</b>	<b>2,594.20</b>	<b>2,965.55</b>	<b>3,097.02</b>
<b>Past Revenue Gap Adjusted</b>	<b>(741.37)</b>	<b>(741.37)</b>		
<b>ARR from Retail Supply Business with Revenue Gap</b>	<b>2,514.89</b>	<b>1,852.83</b>	<b>2,965.55</b>	<b>3,097.02</b>
<b>Revenue</b>				
Revenue from sale of electricity	2,826.24	2,331.25	2,813.34	2,465.85
<b>Total Revenue Gap/(Surplus)</b>	<b>(311.35)</b>	<b>(478.42)*</b>	<b>152.21</b>	<b>631.17</b>

\*- Error in calculation of Gap by BEST has been rectified

**Table 166 : True-up of Aggregate Revenue Requirement for FY 2020-21, as submitted by BEST (Rs. Crore)**

Particulars	FY 2020-21		FY 2021-22	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Power Purchase Expenses (including Inter-State Transmission Charges)	2,750.30	2,031.10	2,454.20	2,530.96
Operation & Maintenance Expenses	565.54	590.81	581.57	638.20
Depreciation	112.36	104.08	113.78	105.52
Interest on Loan Capital	-	36.60	-	31.76
Interest on Working Capital	5.22	10.57	5.25	9.93
Interest on Consumer Security Deposit	22.50	17.13	23.18	15.65
Provision for bad and doubtful debts	6.74	3.91	6.74	4.59
Contribution to contingency reserves	6.85	7.12	6.94	7.40
Intra-State Transmission Charges	258.80	258.48	257.96	258.00
MSLDC Fees & Charges	1.29	1.29	1.20	1.20
Other Expenses	44.70	44.55	46.04	53.81
<b>Total Revenue Expenditure</b>	<b>3,774.30</b>	<b>3,105.64</b>	<b>3,496.86</b>	<b>3,657.02</b>
Add: Return on Equity Capital	129.45	140.83	130.37	146.90
Add: Return on Internal fund	5.28	5.28	5.28	5.28
Add: Sharing of Gain & Loss on IoWC	-	-	-	-
Add: Sharing of Gain/(Loss) of Distribution loss	-	1.75	-	(3.98)
Add: O&M sharing of gain and loss	-	26.95	-	(14.76)
<b>Aggregate Revenue Requirement</b>	<b>3,909.03</b>	<b>3,280.45</b>	<b>3,632.51</b>	<b>3,790.46</b>
Less: Non-Tariff Income	55.24	17.44	56.90	26.84
Less: Receipts on account of Cross-Subsidy Surcharge	-	-	-	-
Less: Receipts on account of Additional Surcharge, if any	-	-	-	-
<b>Aggregate Revenue Requirement from Retail Tariff</b>	<b>3,853.79</b>	<b>3,263.01</b>	<b>3,575.61</b>	<b>3,763.62</b>
<b>Past Revenue Gap Adjusted</b>	<b>(771.50)</b>	<b>(771.50)</b>	<b>(340.93)</b>	<b>(340.93)</b>
<b>ARR from Distribution Business with Revenue Gap</b>	<b>3,082.29</b>	<b>2,491.51</b>	<b>3,234.68</b>	<b>3,422.69</b>
<b>Revenue</b>				
Revenue from sale of electricity	3,393.64	2,792.74	3,423.40	2,995.19
<b>Total Revenue Gap/(Surplus)</b>	<b>(311.35)</b>	<b>(301.24)</b>	<b>(188.72)</b>	<b>427.50</b>



## Commission's Analysis and Ruling

4.20.2 Based on the ARR components approved in the preceding paragraphs in this Order and considering the net revenue from retail Tariff, the Commission approves the ARR and Revenue Gap/(Surplus) for FY 2020-21 and FY 2021-22 as shown in the Table below:

**Table 167: ARR and Revenue Gap of Wire Business for FY 2020-21 and FY 2021-22, as approved by the Commission (Rs. Crore)**

Particulars	FY 2020-21		FY 2021-22	
	MTR Petition	Approved in this Order	MTR Petition	Approved in this Order
Operation & Maintenance Expenses	384.03	384.03	414.83	414.83
Depreciation	93.67	93.43	94.97	94.40
Interest on Loan Capital	32.94	-	28.59	-
Interest on Working Capital	1.06	4.24	0.99	4.52
Interest on deposit from Consumers and Distribution System Users	1.71	1.71	1.56	1.56
Provision for bad and doubtful debts	0.39	0.39	0.46	0.46
Contribution to contingency reserves	6.41	-	6.66	-
<b>Total Revenue Expenditure</b>	<b>520.21</b>	<b>483.80</b>	<b>548.06</b>	<b>515.77</b>
Add: Return on Equity Capital	126.32	126.02	130.05	129.32
Add: Return on Internal fund	4.75	4.75	4.75	4.75
Add: Sharing of Gain/(Loss) of Distribution loss	1.75	1.75	(3.98)	(7.96)
Add: Sharing of Gain/(Loss) on IoWC	-	(0.25)	-	(2.71)
Add: O&M sharing of gain and loss	17.52	(5.45)	(9.60)	(21.71)
<b>Aggregate Revenue Requirement</b>	<b>670.55</b>	<b>610.62</b>	<b>669.29</b>	<b>617.46</b>
Less: Non-Tariff Income	1.74	1.74	2.68	2.68
<b>Aggregate Revenue Requirement from Distribution Wires</b>	<b>668.81</b>	<b>608.88</b>	<b>666.60</b>	<b>614.78</b>
<b>Past Revenue Gap Adjusted</b>	<b>(30.13)</b>	<b>(30.13)</b>	<b>-</b>	<b>-</b>
<b>ARR from Distribution Wires Business with Revenue Gap</b>	<b>638.68</b>	<b>578.75</b>	<b>666.60</b>	<b>614.78</b>
Revenue from sale of electricity	461.50	461.50	529.35	529.35
<b>Total Revenue Gap/(Surplus)</b>	<b>177.18</b>	<b>117.25</b>	<b>137.26</b>	<b>85.43</b>

**Table 168: ARR and Revenue Gap of Supply Business for FY 2020-21 and FY 2021-22, as approved by the Commission (Rs. Crore)**

Particulars	FY 2020-21		FY 2021-22	
	MTR Petition	Approved in this Order	MTR Petition	Approved in this Order
Power Purchase Expenses (including Inter-State Transmission Charges)	2,031.10	2,031.10	2,530.96	2,530.96
Operation & Maintenance Expenses	206.78	206.78	223.37	223.37
Depreciation	10.41	10.38	10.55	10.49



Particulars	FY 2020-21		FY 2021-22	
	MTR Petition	Approved in this Order	MTR Petition	Approved in this Order
Interest on Loan Capital	3.66	-	3.18	-
Interest on Working Capital	9.51	-	8.94	-
Interest on Consumer Security Deposit	15.42	15.42	14.08	14.08
Provision for bad and doubtful debts	3.52	3.52	4.13	4.13
Contribution to contingency reserves	0.71	-	0.74	-
Intra-State Transmission Charges	258.48	258.48	258.00	258.00
MSLDC Fees & Charges	1.29	1.29	1.20	1.20
Other Expenses	44.55	22.63	53.81	25.76
<b>Total Revenue Expenditure</b>	<b>2,585.43</b>	<b>2,549.60</b>	<b>3,108.96</b>	<b>3,067.99</b>
Add: Return on Equity Capital	14.50	15.40	16.86	16.52
Add: Return on Internal fund	0.53	0.53	0.53	0.53
Add: Sharing of Gain & Loss on IoWC	-	(2.22)	-	(0.30)
Add: O&M sharing of gain and loss	9.43	(2.94)	(5.17)	(11.69)
<b>Aggregate Revenue Requirement</b>	<b>2,609.90</b>	<b>2,560.37</b>	<b>3,121.17</b>	<b>3,073.05</b>
Less: Non-Tariff Income	15.70	15.70	24.16	24.16
Less: Receipts on account of Cross-Subsidy Surcharge	-	-	-	-
Less: Receipts on account of Additional Surcharge, if any	-	-	-	-
<b>Aggregate Revenue Requirement from Retail Tariff</b>	<b>2,594.20</b>	<b>2,544.68</b>	<b>3,097.02</b>	<b>3,048.89</b>
<b>Past Revenue Gap Adjusted</b>	<b>(741.37)</b>	<b>(741.37)</b>		<b>(340.93)*</b>
<b>ARR from Retail Supply Business with Revenue Gap</b>	<b>1,852.83</b>	<b>1,803.31</b>	<b>3,097.02</b>	<b>2,707.96</b>
<b>Revenue</b>				
Revenue from sale of electricity	2,331.25	2,331.25	2,465.85	2,465.85
<b>Total Revenue Gap/(Surplus)</b>	<b>(478.42)</b>	<b>(527.94)</b>	<b>631.17</b>	<b>242.12</b>

\*-BEST considered the past surplus in Distribution business ARR

**Table 169: ARR and Revenue Gap of Distribution Business for FY 2020-21 and FY 2021-22, as approved by the Commission (Rs. Crore)**

Particulars	FY 2020-21		FY 2021-22	
	MTR Petition	Approved in this Order	MTR Petition	Approved in this Order
Power Purchase Expenses (including Inter-State Transmission Charges)	2,031.10	2,031.10	2,530.96	2,530.96
Operation & Maintenance Expenses	590.81	590.81	638.20	638.20
Depreciation	104.08	103.81	105.52	104.88
Interest on Loan Capital	36.60	-	31.76	-
Interest on Working Capital	10.57	4.24	9.93	4.52
Interest on Consumer Security Deposit	17.13	17.13	15.65	15.65
Provision for bad and doubtful debts	3.91	3.91	4.59	4.59
Contribution to contingency reserves	7.12	-	7.40	-
Intra-State Transmission Charges	258.48	258.48	258.00	258.00
MSLDC Fees & Charges	1.29	1.29	1.20	1.20

Particulars	FY 2020-21		FY 2021-22	
	MTR Petition	Approved in this Order	MTR Petition	Approved in this Order
Other Expenses	44.55	22.63	53.81	25.76
<b>Total Revenue Expenditure</b>	<b>3,105.64</b>	<b>3,033.40</b>	<b>3,657.02</b>	<b>3,583.76</b>
Add: Return on Equity Capital	140.83	141.42	146.90	145.84
Add: Return on Internal fund	5.28	5.28	5.28	5.28
Add: Sharing of Gain & Loss on IoWC	-	(2.47)	-	(3.01)
Add: Sharing of Gain/(Loss) of Distribution loss	1.75	1.75	(3.98)	(7.96)
Add: O&M sharing of gain and loss	26.95	(8.39)	(14.76)	(33.40)
<b>Aggregate Revenue Requirement</b>	<b>3,280.45</b>	<b>3,171.00</b>	<b>3,790.46</b>	<b>3,690.51</b>
Less: Non-Tariff Income	17.44	17.44	26.84	26.84
Less: Receipts on account of Cross-Subsidy Surcharge	-	-	-	-
Less: Receipts on account of Additional Surcharge, if any	-	-	-	-
<b>Aggregate Revenue Requirement from Retail Tariff</b>	<b>3,263.01</b>	<b>3,153.56</b>	<b>3,763.62</b>	<b>3,663.67</b>
<b>Past Revenue Gap Adjusted</b>	<b>(771.50)</b>	<b>(771.50)</b>	<b>(340.93)</b>	<b>(340.93)</b>
<b>ARR from Distribution Business with Revenue Gap</b>	<b>2,491.51</b>	<b>2,382.06</b>	<b>3,422.69</b>	<b>3,322.74</b>
<b>Revenue</b>				
Revenue from sale of electricity	2,792.74	2,792.74	2,995.19	2,995.19
<b>Total Revenue Gap/(Surplus)</b>	<b>(301.24)</b>	<b>(410.69)</b>	<b>427.50</b>	<b>327.55</b>

4.20.3 The Commission approves consolidated Revenue Surplus of Rs. 410.69 Crore and Revenue Gap of Rs. 327.55 Crore on Truing-up of ARR for FY 2020-21 and FY 2021-22 respectively. This revenue surplus is adjusted along with the associated carrying/(holding) cost in the ARR of FY 2023-24.

## 5 PROVISIONAL TRUING-UP OF ARR FOR FY 2022-23

### 5.1 Background

- 5.1.1 BEST has proposed provisional Truing-up of FY 2022-23 in accordance with Regulation 5.1 (b) (iii) of the MYT Regulations, 2019 along with the revised Multi Year Tariff Petition for FY 2023-24 and FY 2024-25.
- 5.1.2 BEST has considered latest available actual figures for the H1 of FY 2022-23 and estimated value for the H2 of the FY 2022-23 since FY 2022-23 is not yet completed.
- 5.1.3 The estimated numbers are therefore compared with the numbers approved in the MYT Order for provisional Truing-up of ARR for FY 2022-23.
- 5.1.4 The analysis underlying the provisional Truing-up of ARR for FY 2022-23 undertaken by the Commission is set out below.

### 5.2 Energy Sales

#### *BEST's Submission*

- 5.2.1 The summary of the category-wise sales as approved by the Commission in the MYT Order, actual sales from April to September 2022, estimated sales for October 2022 to March 2023 and sales considered for provisional Truing-Up are shown in the Table below:

**Table 170 : Category Wise Energy Consumption for FY 2022-23, as submitted by BEST (MU- HT in kVAh & LT in kWh)**

Consumer Category	FY 2022-23				Provisional True-Up requirement
	MYT Order	Apr-Sep (Actual)	Oct-Mar (Estimated)	Apr-Mar (Estimated)	
<b>HT Category</b>					
HT-1 Industrial	156.56	86.38	104.00	190.39	33.83
HT-2 Commercial	295.54	117.47	90.98	208.45	(87.09)
HT-3 Group Hsg	30.61	17.18	14.94	32.12	1.51
HT-4 Railway Metro	2.14	1.32	1.25	2.57	0.43
HT 5A Govt Sch & Hosp.	26.56	15.17	12.62	27.78	1.22
HT 5B Public Ser. Oths	196.45	101.35	84.66	186.01	(10.44)
HT 6 EV chg.	-	-	-	-	-
<b>Sub-total</b>	<b>707.85</b>	<b>338.88</b>	<b>308.45</b>	<b>647.33</b>	<b>(60.54)</b>
<b>LT Category</b>					
LT-I (A) Residential (BPL)	0.07	0.01	0.03	0.04	(0.04)
<u>LT - I(B) Residential</u>	-	-	-	-	-
0 – 100 units	779.27	378.95	370.76	749.71	(29.56)
101 – 300 units	720.72	386.84	334.26	721.10	0.38

Consumer Category	FY 2022-23				Provisional True-Up requirement
	MYT Order	Apr-Sep (Actual)	Oct-Mar (Estimated)	Apr-Mar (Estimated)	
301 - 500 units	232.17	134.12	103.50	237.62	5.45
> 501 units	397.51	220.37	174.96	395.33	(2.18)
<u>LT - II (a) Commercial</u>	934.60	430.42	396.07	826.49	(108.11)
LT - II (b) Commercial >20 & <=50 kW	210.90	90.98	79.78	170.76	(40.14)
LT - II (c) Commercial >50	369.60	191.79	166.44	358.23	(11.37)
LT - III (A) Industry (upto 20 kW)	43.19	51.22	54.52	105.74	62.55
LT-III (b) Industrial	90.21	41.07	38.74	79.81	(10.40)
LT - IV (A) Public Services - (Govt. Hosp. & Edu. Institutions)	56.59	32.68	28.71	61.40	4.80
LT - IV (B) Public Services - Others	183.84	96.19	82.63	178.82	(5.02)
LT-V (A) Agriculture- Pumpsets	-	-	-	-	-
LT-V (B) Agriculture- Others	-	0.03	0.02	0.05	0.05
LT VI Vehicle Charging	0.46	9.08	9.09	18.17	17.71
Debit/credit adjustment	-	-	-	-	-
<b>Sub-total</b>	<b>4,019.14</b>	<b>2,063.75</b>	<b>1,839.52</b>	<b>3,903.27</b>	<b>(115.87)</b>
<b>Total</b>	<b>4,726.99</b>	<b>2,402.63</b>	<b>2,147.97</b>	<b>4,550.60</b>	<b>(176.40)</b>

5.2.2 BEST submitted that sales for FY 2020-21 & FY 2021-22 are lower than approved due to COVID-19 pandemic and hence, the same may reflect incorrect scenario for projection purpose. Further, due to nationwide lockdown, billing activities were suspended which resulted in recording lower sales in March 2020 as compared to March 2019. Hence, sales of FY 2019-20 are also excluded for projection purpose. Therefore, it was difficult for BEST to use Trend Analysis method to forecast H2 sales of FY 2022-23.

5.2.3 BEST has thus calculated ratio of category wise sales of H1 to H2 to the total sales of FY 2018-19 which is shown in following table:

**Table 171 : Category-Wise Ratio of H1 & H2 to Total Sales for FY 2018-19, as submitted by BEST**

Consumer Category	FY 2018-19 H1	FY 2018-19 H2
<b>HT Category</b>		
HT-1 Industrial	45%	55%
HT-2 Commercial	56%	44%
HT-3 Group Hsg	53%	47%
HT-4 Railway Metro	51%	49%
HT 5A Govt Sch & Hosp.	55%	45%
HT 5B Public Ser. Oths	54%	46%
HT 6 EV chg.	0%	0%
<b>Sub-total</b>	<b>53%</b>	<b>47%</b>

<b>Consumer Category</b>	<b>FY 2018-19 H1</b>	<b>FY 2018-19 H2</b>
<b>LT Category</b>		
LT-I (A) Residential (BPL)	25%	75%
<u>LT - I(B) Residential</u>		
0 – 100 units	51%	49%
101 – 300 units	54%	46%
301 - 500 units	56%	44%
> 501 units	56%	44%
<u>LT - II (a) Commercial</u>	52%	48%
LT - II (b) Commercial >20 & <=50 kW	53%	47%
LT - II (c) Commercial >50	54%	46%
LT - III (A) Industry (upto 20 kW)	48%	52%
LT-III (b) Industrial	51%	49%
LT - IV (A) Public Services - (Govt. Hosp. & Edu. Institutions)	53%	47%
LT - IV (B) Public Services - Others	54%	46%
LT-V (A) Agriculture- Pumpsets	0%	0%
LT-V (B) Agriculture- Others	0%	0%
LT VI Vehicle Charging		
<b>Sub-total</b>	<b>53%</b>	<b>47%</b>
<b>Total</b>	<b>53%</b>	<b>47%</b>

- 5.2.4 Since, BEST has actual sales of H1 of FY 2022-23, it has calculated H2 sales of FY 2022-23 based on above category wise ratio. Actual sales for each category for H1 are deducted from estimated sales to arrive at sales for October 2022 to March 2023. Further, estimated sales for October 2022 to March 2023 is divided on pro-rata basis of sales in FY 2018-19 for that month vis-à-vis total actual sales for H2 - FY 2018-19.
- 5.2.5 Further, sales for LT-VI Vehicle Charging are considered same as H1 of FY 2022-23 since, in FY 2018-19, there was negligible sale in this category.
- 5.2.6 BEST requested the Commission to approve the forecasted sales for FY 2022-23 as shown in above table which would be subject to approval and final Truing-up.

### **Commission’s Analysis and Ruling**

- 5.2.7 The Commission notes that there has been reduction of sales for FY 2019-20, FY 2020-21 and FY 2021-22 as compared to approved sales in the MYT Order as well as actual sales for FY 2018-19. However, there has been substantial increase in sales in FY 2022-23 as compared to previous sales. The estimated sales by BEST are almost 10% higher than actual sales of FY 2021-22.
- 5.2.8 The Commission further notes the comparison made by BEST with sales of FY 2018-19 to arrive at estimated sales of H2 of FY 2022-23. In absence of any specific trend due to disruption in demand for FY 2020-21 and FY 2021-22, the Commission

accepts the methodology suggested by BEST.

**Table 172: Energy Sales for FY 2022-23, as approved by the Commission (MU)**

Particulars	MYT Order	MTR Petition	Approved in this Order
Energy Sales	4,726.93	4,550.60	4,550.60

5.2.9 Further, sales being an uncontrollable factor as per Regulations 9 of the MYT Regulations, 2019, the energy sales as submitted by BEST are provisionally approved by the Commission for FY 2022 -23 as shown in Table above.

### 5.3 Distribution Losses and Energy Balance

#### *BEST's Submission*

5.3.1 BEST has achieved a distribution loss of 4.63% in FY 2021-22. BEST has projected reduction in distribution loss further by 0.1% and considered distribution loss at 4.53% for FY 2022-23.

5.3.2 BEST submitted that the Intra-State Transmission (InSTS) loss of 3.18% has been considered while estimating the energy balance for FY 2022-23 as approved by the Commission in the MYT Order.

5.3.3 Based on proposed distribution loss of 4.53% and provisional transmission loss of 3.18% (as estimated by InSTS in its MTR Tariff Petition), BEST has estimated energy requirement for FY 2022-23 at G-T interface as shown in the below table.

**Table 173 : Energy Balance for FY 2022-23, as submitted by BEST**

Particulars	MYT Order	MTR Petition
Sales (MU)	4,726.99	4,537.98
Distribution loss (%)	4.18%	4.53%
Energy Requirement at T-D interface (MU)	4,933.20	4,753.30
Intra-state Transmission loss (%)	3.18%	3.18%
Energy Requirement at G-T interface (MU)	5,095.15	4,909.42

5.3.4 BEST has been taking various initiatives such as continuous vigilance activities, raids, consumer awareness on theft and energy conservation, legal actions against theft incidences and faulty meter replacements. BEST submitted that for the past few years except some exceptional years, BEST has been able to consistently maintain its distribution losses in the range of 4.5% to 5% which are almost near to the technical minimum of the network. The present distribution losses are one of the lowest in the country.

5.3.5 Further, the purchase units are recorded on the 1st of every month i.e., the purchase

are for 365 days. Whereas BEST has a total of 24 billing cycles of 30 days billing period for its around 10.36 lacs consumers, these cycles have different meter reading dates spread throughout the month. Sometimes there is a possibility of this period getting reduced or increased by a day or two due to holidays etc. Hence in some years the billing period can vary from 365 days to 366 days. Hence, any such variation in the billing cycle for a day or two can also cause the loss to vary. Therefore, the distribution loss targets for the future periods should have a buffer to accommodate such variations. Hence, BEST has taken a realistic approach and proposed 0.1% reduction in the distribution loss achieved in FY 2021-22.

### ***Commission’s Analysis and Ruling***

- 5.3.6 The Commission noted the submission of BEST. For computation of Energy Balance and energy requirement for FY 2022-23, the Commission has considered the estimated sales as approved in this Order.
- 5.3.7 In MYT Order, the Commission has approved Distribution loss target of 4.18% for FY 2022-23. The Commission notes BEST has sought Distribution loss target of 4.53% for FY 2022-23 even though it has achieved actual Distribution loss of 3.93% for FY 2020-21. BEST has not been able to conclusively justify its claim that it may not be able to maintain the loss levels as approved in the MYT Order. The justification given is very generic in nature. To maintain consistency in its approach, the Commission has decided not to restate the loss trajectory as approved in the MYT Order and thus during provisional Truing-up for FY 2022-23, the Commission maintains Distribution loss target of 4.18% same as approved in MYT Order.
- 5.3.8 Accordingly, the Commission has considered the T<>D input of 4,735.94 MU for FY 2022-23. The InSTS Loss has been considered as 3.18% based on the loss as approved in the MYT Order.
- 5.3.9 In view of the above, the Distribution Loss and Energy Balance as provisionally approved by the Commission for FY 2022-23 are given in the Table below:

<b>Particulars</b>	<b>MYT Order</b>	<b>MTR Petition</b>	<b>Approved in this Order</b>
Sales (MU)*	4,726.99	4,537.98	4,537.98
Distribution loss (%)	4.18%	4.53%	4.18%
Energy Requirement at T-D interface (MU)	4,933.20	4,753.30	4,735.94
Intra-state Transmission loss (%)	3.18%	3.18%	3.18%
Energy Requirement at G-T interface (MU)	5,095.15	4,909.42	4,891.49

\*-Sales considered on kWh basis

- 5.3.10 The Commission approves energy requirement at G<>T interface of 4,891.49 MU on provisional Truing up of ARR for FY 2022-23.

## 5.4 Power Purchase Expense for FY 2022-23

### *BEST's Submission*

- 5.4.1 BEST has worked out power purchase expenses for FY 2022-23 based on the energy balance submitted above. BEST has considered the actual power purchase for H1 and projected power purchase for H2.
- 5.4.2 BEST submitted that, BEST had filed a petition before Commission vide Case No.151 of 2022 for approval of tariff discovered through competitive bidding process undertaken by BEST for short term bilateral power purchase for the period August 2022 to December 2022. The final Order in Case No.151 of 2022 was issued by the Commission on 24.08.2022. After the receipt of the Commission's Order in Case No.151 of 2022, Short-term bilateral power commenced/scheduled from 25.08.2022. Due to this the power procured from successful bidders during the month of August 2022 was on the lower side. Also, no penalty was made applicable for low procurement of short-term bilateral power.
- 5.4.3 Since there was delay in commencement of Short-term bilateral power due to the absence of the Commission's Order/approval, power procurement was carried out through Power Exchange i.e., IEX for meeting BEST's shortfall as well as backing down of costly thermal generation.
- 5.4.4 BEST submitted that the Commission has approved the procurement of power at weighted average tariff of Rs. 7.72/kWh for August to December 2022. On the other hand, BEST has procured power from IEX @ Rs. 5.49/kWh. Therefore, BEST has procured very less quantum in the month of August and September 2022 from Bilateral.
- 5.4.5 BEST has considered following assumption for the projection of power purchase for H2 of FY 2022-23:
- **Walwhan Solar Energy Maharashtra:** BEST has considered quantum & cost as per PPA.
  - **Manikaran Power Ltd.:** BEST has considered quantum & cost as per PPA.
  - **Bilateral Power:** In H2, BEST has considered 100 MU for October, 2022 to December, 2022 from Bilateral power as per the Commission's Order in Case No. 151 of 2022. Per unit cost considered is weighted average cost of H1 for trader & power exchange.
  - **RE Power:** BEST has projected procurement of 100 MU RE power from power exchange (GTAM/GDAM). The per unit cost considered is same as H1.
  - **New RTC Contract:** BEST submitted that it is in the process of short-term bidding for procurement of 100 MW RTC power from February 2023 to January 2024. BEST will approach the Commission for approval of the discovered tariff.



Hence, BEST has considered units for 2 months from 100 MW project at 85% PLF.

- **TPC-G Hydro:** In the MYT Order, the Commission has approved 743 MU annually from TPC-G Hydro for 4<sup>th</sup> Control Period. After considering the actual units procured in H1, BEST has considered balance units in H2. Capacity charges considered for TPC-G Hydro in H2 is the difference of capacity charges considered by TPC-G in its MTR petition and actual capacity charges paid in H1. Further, energy charges for hydro considered in H2 is as per TPC-G MTR petition.
- **TPC-G Thermal (Unit 7 & 8):** BEST submitted that quantum and fixed cost considered in H2 for Unit 7 and Unit 8 is as per TPC-G's submission in its MTR Petition, in accordance with BEST's share as per PPA. BEST has considered variable cost for H2 as per TPC-G's submission in its MTR Petition.
- **TPC-G Thermal (Unit 5):** BEST has considered it will procure balancing required quantum from TPC-G Unit 5. BEST has considered variable cost of Unit 5 as per TPC-G MTR Petition for H2. Fixed cost considered is also as per TPC-G's submission in its MTR Petition, in accordance with BEST's share as per PPA.

5.4.6 Following table shows the actual power purchase cost in H1 and estimated power purchase cost for H2 for FY 2022-23.

**Table 174 : Actual Power Purchase for H1 of FY 2022-23, as submitted by BEST**

Source of Power (Station wise)	Quantum	Total Cost	Rate
	MU	Rs. Crore	Rs./kWh
<b>Long term / Medium term Sources</b>			
TPC-G	1,667.07	1,406.65	8.44
Walwhan Solar MH Ltd	14.45	12.37	8.56
<b>Medium-Term</b>			
Manikaran Power	336.70	139.86	4.15
<b>Short term Sources</b>			
Trader	77.39	42.52	5.49
IEX (Purchase)	452.93	260.57	5.75
IEX (Sale)	(5.26)	(5.86)	11.14
RPS-Non-Solar_IEX	5.26	2.27	4.32
RPS-Solar_IEX	29.13	12.63	4.33
Standby Support from MSEDCL	7.10	-	-
Deviation Settlement (DSM) Energy	(20.13)	5.12	(2.54)
MSLDC Pool Imbalance	19.73	-	-
Inter Discom Sale (IDT)	(1.14)	(1.37)	11.98
Stand By Charges	-	49.27	-
<b>Bilateral Rebate</b>			
RPS Rebate	-	(0.21)	-
Rebate of 1% on Trans.Charges	-	(1.28)	-
Rebate of 1% on monthly MSLDC Charges	-	(0.01)	-
Prior Period (RPS )_Additional Power of March-2022 from M/s.Walwhan	-	0.01	-
Prior Period Payment of DSM Bills	-	0.01	-
TPC-G Credit Bill (Oct-2021 to Mar-2022)	-	(0.35)	-
<b>Total</b>	<b>2,583.24</b>	<b>1,922.20</b>	<b>7.44</b>

**Table 175 : Estimated Power Purchase for H2 of FY 2022-23, as submitted by BEST**

Source of Power (Station wise)	Quantum	Total Cost	Rate
	MU	Rs. Crore	Rs./kWh
<b>Long term / Medium term Sources</b>			
TPC-G	1,580.87	1,346.52	8.52
Walwhan Solar MH Ltd	17.05	14.59	8.56
<b>Medium-Term</b>			
Manikaran Power	407.90	174.19	4.27
<b>Short term Sources</b>			
New Bilateral Power Purchase	220.36	124.74	5.66
RPS-Non-Solar_IEX	15.30	6.63	4.33
RPS-Solar_IEX	84.70	36.70	4.33
Stand By Charges	-	49.26	-
<b>Total</b>	<b>2,326.18</b>	<b>1,752.63</b>	<b>7.53</b>

**Table 176 : Estimated Power Purchase for FY 2022-23, as submitted by BEST**

Particulars	MYT Order			MTR Petition		
	Quantum	Cost	Rate	Quantum	Cost	Rate
	MU	Rs. Cr	Rs./kWh	MU	Rs. Cr	Rs./kWh
<b>Long term / Medium term Sources</b>						
TPC-G	3,510.94	1,660.96	4.73	3,247.94	2,753.17	8.48
Walwhan Solar MH Ltd	31.50	26.96	8.56	31.50	26.96	8.56
<b>Medium-Term</b>						
Manikaran Power	744.60	332.03	4.46	744.60	314.05	4.22
<b>Short term Sources</b>						
Bilateral Power Purchase				220.36	124.74	
Trader				77.39	42.52	5.49
IEX (Purchase)				452.93	260.57	5.75
IEX (Sale)				(5.26)	(5.86)	11.14
Non Solar Energy				20.56	8.90	4.33
RPS-Non-Solar_IEX_GTAM_GDAM	500.37	143.61	2.87			
RPS-Solar_IEX_GTAM_GDAM	307.74	89.25	2.90	113.84	49.32	4.33
Standby Support from MSEDCL				7.10	-	-
Deviation Settlement (DSM) Energy				(20.13)	5.12	(2.54)
MSLDC Pool Imbalance				19.73	-	-
Inter Discom Sale (IDT)				(1.14)	(1.37)	11.98
Stand By Charges		98.53		-	98.53	
Transmission Charges		256.72			256.72	
MSLDC Charges		1.27			1.27	
RPS Rebate				-	(0.21)	
Rebate of 1% on Trans.Charges				-	(1.28)	
Rebate of 1% on monthly MSLDC Charges				-	(0.01)	
Prior Period (RPS )_Additional Power of March-2022 from M/s.Walwhan				-	0.01	
Prior Period Payment of DSM Bills				-	0.01	
TPC-G Credit Bill (Oct-2021 to Mar-2022)				-	(0.35)	
<b>Total</b>	<b>5,095.15</b>	<b>2,609.33</b>	<b>5.12</b>	<b>4,909.42</b>	<b>3,932.83</b>	<b>8.01</b>

- 5.4.7 BEST has signed PPA with SECI on 25 June, 2021 for procurement of 400 MW Wind-Solar Hybrid power at tariff of Rs. 2.48/unit for 25 years. The projects under the scheme were expected to be commissioned by third quarter of FY 2022-23. However, vide email dated 1 November, 2022, SECI has informed about the delay for project.
- 5.4.8 BEST submitted that, the PPA doesn't have any penalty clause to compensate of loss on account of delay in SCOD. Further, BEST submitted that due to said delay, BEST will have to procure power from TPC-G which is the costliest source and will have additional burden of Rs 74.64 Crore.

### ***Commission's Analysis and Ruling***

- 5.4.9 **Procurement from TPC-G:** BEST is purchasing power from TPC-G in accordance with the Tariff approved by the Commission for sale of energy of TPC-G. BEST for H2 has proposed to procure power from TPC-G as per tariff proposed by TPC-G in its MTR Petition. Accordingly, the Commission has considered the power purchase cost of TPC-G as approved in TPC-G's MTR Order. The quantum of power from TPC-G approved by the Commission is ~235.33 MU less than proposed by BEST. The same is due to lower Distribution Loss approved by the Commission than proposed by BEST and as per the quantum as approved in MTR Order. In view of the above, the Commission approves power purchase cost of TPC-G for FY 2022-23.
- 5.4.10 **Manikaran Power Limited:** The Commission has provisionally approved power purchase quantum of 744.60 MU and cost of Rs 314.05 Crore as submitted by BEST as per PPA.
- 5.4.11 **Non-Solar RE Sources:** BEST is purchasing non-solar power from IEX in H1 of FY 2022-23 and has also proposed to procure additional non-solar RE in H2 of FY 2022-23. BEST has estimated power purchase cost of Rs. 8.88 Crore of 20.56 MU at Rs. 4.32 per kWh. Accordingly, the Commission provisionally approves non-solar power purchase cost of Rs. 8.88 Crore for FY 2022-23.
- 5.4.12 **Solar RE Sources:** BEST has submitted that it meets the solar RE purchase obligation through a long-term power purchase agreement entered with Walwhan Solar Energy Maharashtra. As per agreement, BEST procures entire solar power from 20 MW solar plant of Walwhan Solar Energy Maharashtra with guaranteed generation of 31.50 MU. During FY 2022-23, BEST has purchased 31.50 MU at PPA rate of Rs. 8.56/kWh. Therefore, power purchase cost for 31.50 MU is Rs. 26.96 Crore. Further, BEST has also estimated 113.84 MU of solar purchase from IEX for FY 2022-23 at estimated cost of Rs 49.35 Crore as submitted by BEST. The Commission provisionally approves solar power purchase cost of Rs. 76.31 Crore for FY 2022-23.
- 5.4.13 The Commission notes that BEST has not proposed any REC purchase for FY 2022-23. Considering the RE power purchase approved above, BEST will have shortfall of

186.55 MU of Solar RPO compliance and 456.52 MU of Non-Solar RPO Compliance as outlined in the following table:

**Table 177: RPO Shortfall for FY 2022-23 (MU)**

<b>RPO Targets &amp; Achievement</b>	<b>Units</b>	<b>FY 2022-23</b>
Total Energy Requirement	MU	4,891.49
Less: Hydro	MU	743.00
Net Energy Requirement	MU	4,148.49
Solar RPO target	%	8.00%
Solar RPO target	MU	331.88
Solar Rooftop	MU	
Solar RPO Achievement	MU	145.33
Op. Balance of Solar RPO	MU	106.12
Solar RPO Shortfall/(Surplus) during the year	MU	186.55
<b>Cl. Balance of Solar RPO</b>	<b>MU</b>	<b>292.67</b>
Non-Solar RPO target	%	11.50%
Non-Solar RPO target	MU	477.08
Non-Solar RPO Achievement	MU	20.56
Op. Balance of Non-Solar RPO	MU	256.99
Non-Solar RPO Shortfall/(Surplus)	MU	456.52
<b>Cl. Balance of Non-Solar RPO</b>	<b>MU</b>	<b>713.51</b>
<b>Total Shortfall</b>	<b>MU</b>	<b>1,006.18</b>

- 5.4.14 The Commission, herein above while Truing-up of FY 2020-21 and FY 2021-22, has allowed BEST to carry forward the RPO shortfall to FY 2024-25 considering the availability of surplus RE power due to operationalization of 400 MW (Hybrid) and 234 MW (solar) PPA signed with SECI. As per the said ruling, the Commission deems it fit to also allow BEST to carry forward the RPO shortfall for FY 2022-23 to FY 2024-25 as a onetime exception considering the past period compliance of RPO by BEST.
- 5.4.15 **Power Purchase from Short Term Sources:** The Commission has observed that BEST has estimated purchase of 745.43 MU from short term sources amounting to Rs. 421.98 Crore at the average rate of Rs. 5.66/ kWh. BEST has proposed to purchase the short-term power either on power exchange or through competitive bidding process from DEEP portal. In line with assumption of BEST, the Commission has also considered balance power purchase requirement from short term sources. Accordingly, the Commission approves power purchase of balance 962.83 MU amounting to Rs. 540.88 Crore for FY 2022-23, based on the quantum as approved from other sources, as discussed in the above section.
- 5.4.16 **Other Charges:** BEST has estimated other charges of Rs 96.70 Crore which mainly includes Rs 98.53 Crore towards standby charges and rebate on payment of

transmission charges. Accordingly, the Commission has provisionally approved the other charges of Rs 96.70 Crore for FY 2022-23.

5.4.17 **Transmission Charges and MSLDC Charges:** The Commission approves actual Transmission Charges of Rs. 256.72 Crore as per InSTS Order and MSLDC Charges of Rs. 1.27 Crore as per MSLDC Order for the provisional Truing-up of FY 2022-23.

5.4.18 The summary of power purchase quantum and expenses, including other charges, Stand-by Charges and transmission Charges for FY 2022-23, as submitted by BEST and as approved by the Commission in provisional Truing up, is given in the following Table:

**Table 178: Power Purchase by BEST for FY 2022-23, as approved by the Commission (Rs. Crore)**

Particulars	MTR Petition			Approved in this Order		
	Quantum	Cost	Rate	Quantum	Cost	Rate
	MU	Rs. Cr	Rs. /kWh	MU	Rs. Cr	Rs. /kWh
<b>Long term / Medium term Sources</b>						
TPC-G	3,247.94	2,753.17	8.48	3,012.62	2,381.20	7.90
Walwhan Solar MH Ltd	31.50	26.96	8.56	31.50	26.96	8.56
Manikaran Power Limited	744.60	314.05	4.22	744.60	314.05	4.22
<b>Short term Sources</b>						
Bilateral Power Purchase / Power Exchange	745.43	421.98	5.66	962.83	540.79	5.62
Standby support from MSEDCL	7.10	-	-	7.10	-	-
Imbalance Pool / DSM	(0.40)	5.12	(127.36)	(0.40)	5.12	(127.36)
Inter Discom Sale (IDT)	(1.14)	(1.37)	11.98	(1.14)	(1.37)	
Short Term Solar Purchase	113.84	49.32	4.33	113.84	49.35	
Short Term Non-Solar Purchase	20.56	8.90	4.33	20.56	8.88	4.32
Stand By Charges		98.53			98.53	
Rebate on Power Purchase and Transmission Charges		(1.50)			(1.50)	
Other Prior Period Charges		(0.33)			(0.33)	
<b>Total</b>	<b>4,909.42</b>	<b>3,674.84</b>	<b>7.49</b>	<b>4,891.49</b>	<b>3,421.68</b>	<b>7.00</b>

5.4.19 The Commission approves the total cost of power purchase of Rs. 3,421.68 Crore on provisional Truing up of ARR for FY 2022-23.

## 5.5 Operation & Maintenance Expenses

### *BEST Submission*

5.5.1 BEST has computed normative O&M expense for FY 2022-23 by considering escalation factor same as considered for FY 2021-22 as shown in table below:

**Table 179 : O&M Expenses for FY 2022-23, as submitted by BEST (Rs. Crore)**

Particulars	Total
Normative O&M expenses of FY 2021-22 after applying escalation factor	616.06
Escalation Factor for FY 2022-23	4.90%
Normative O&M expenses of FY 2022-23 after applying escalation factor	646.24

5.5.2 BEST submitted that the above normative O&M expense may not reflect the correct picture of actual O&M expenses of BEST for FY 2022-23. As mentioned in the truing-up chapter of FY 2021-22, employee expenses have increased due to increase in basic wages and other components related to it.

5.5.3 BEST has calculated the growth rate of Normative O&M expense of FY 2022-23 to the Net Entitlement O&M expenses of FY 2021-22 i.e., 3.66% and has considered the same growth rate for projecting each component of O&M cost for FY 2022-23. The growth rate considered for projecting O&M Cost of FY 2022-23.

**Table 180 : Growth rate considered for FY 2022-23, as submitted by BEST (Rs. Crore)**

Particulars	Amount
Net entitlement of O&M expenses for FY 2021-22	623.44
Revised Normative O&M expenses for FY 2022-23	646.24
Growth Rate	3.66%

5.5.4 BEST requested the Commission to approve revised normative O&M expenses considering wage revision etc. for FY 2022-23.

### Employee Expenses

5.5.5 As mentioned above, employee expenses are projected by escalating actual employee expenses of FY 2021-22 by growth rate shown above. Further, employee cost of H2 is the difference between actual H1 data and projected employee cost for FY 2022-23.

**Table 181 : Employee Expenses for FY 2022-23, as submitted by BEST (Rs. Crore)**

Particulars	Apr-Sep (Actual)	Oct-Mar (Estimated)	April - March (Estimated)
Basic Salary	144.94	161.18	306.12
Dearness Allowance (DA)	30.59	34.02	64.60
House Rent Allowance	9.11	10.13	19.23
Conveyance Allowance	0.22	0.24	0.46
Leave Travel Allowance	6.66	7.41	14.08
Medical Allowance	0.79	0.88	1.67
Overtime Payment	2.04	2.27	4.32
Bonus/Ex-Gratia Payments	0.80	0.89	1.69
Interim Relief / Wage Revision	-	-	-
Functional Allowance as per Agreement	3.18	3.53	6.71
Provident Fund Contribution	19.61	21.81	41.42

Particulars	Apr-Sep (Actual)	Oct-Mar (Estimated)	April - March (Estimated)
Gratuity Payment	23.35	25.97	49.32
<b>Gross Employee Expenses</b>	<b>241.29</b>	<b>268.33</b>	<b>509.62</b>
Less: Establishment of Allied Departments	23.23	25.83	49.06
<b>Net Employee Expenses (including Wage Impact)</b>	<b>218.06</b>	<b>242.50</b>	<b>460.56</b>
Wage Revision Impact	-	-	-
<b>Net Employee Expenses (Excluding Wage Impact) for Sharing of Gains &amp; Losses</b>	<b>218.06</b>	<b>242.50</b>	<b>460.56</b>

### Administrative & General Expenses

5.5.6 As mentioned above, A&G expenses is projected by escalating actual A&G expense of FY 2021-22 by growth rate shown above. Further, A&G expense of H2 is the difference between actual H1 data and projected A&G expenses for FY 2022-23.

**Table 182 : A&G Expenses for FY 2022-23, as submitted by BEST (Rs. Crore)**

Particulars	Apr-Sep (Actual)	Oct-Mar (Estimated)	April - March (Estimated)
Rent, Rates and Taxes	0.23	0.42	0.65
Insurance	0.21	0.39	0.60
Telephone & Postage, etc.	1.29	2.36	3.66
Legal charges & Audit fee	0.20	0.36	0.55
Professional, Consultancy, Technical fee	0.09	0.16	0.25
Electricity charges	2.57	4.70	7.27
Security arrangements	9.89	18.08	27.97
Printing & Stationery	0.62	1.14	1.76
Advertisements	0.18	0.34	0.52
License Fee and other related fee	0.56	1.03	1.59
Vehicle Running Expenses Truck / Delivery Van	2.20	4.03	6.23
Bank Charges	0.57	1.05	1.62
Miscellaneous Expenses	4.18	7.65	11.83
Share of General Administration Expenses	27.71	50.68	78.39
<b>Gross A &amp;G Expenses</b>	<b>50.51</b>	<b>92.38</b>	<b>142.89</b>
Less: Expenses Capitalised	-	-	-
<b>Net A &amp;G Expenses</b>	<b>50.51</b>	<b>92.38</b>	<b>142.89</b>

### Repair & Maintenance Expenses

5.5.7 As mentioned above, R&M projected via escalating actual R&M expense of FY 2021-22 by growth rate shown above. Further, R&M expense of H2 is the difference between actual H1 data and projected R&M expenses for FY 2022-23.



**Table 183 : R&M Expenses for FY 2022-23, as submitted by BEST (Rs. Crore)**

Particulars	Apr-Sep (Actual)	Oct-Mar (Estimated)	April - March (Estimated)
Plant & Machinery	4.67	3.25	7.91
Buildings	-	-	-
Civil Works	8.23	5.73	13.96
Hydraulic Works	-	-	-
Lines & Cable Networks	18.16	12.64	30.81
Vehicles	-	-	-
Furniture & Fixtures	0.08	0.05	0.13
Office Equipment	1.61	1.12	2.73
Meter & Equipment	1.50	1.05	2.55
<b>Gross R&amp;M Expenses</b>	<b>34.25</b>	<b>23.84</b>	<b>58.09</b>
Less: R&M Expenses Capitalised	-	-	-
<b>Net R&amp;M Expenses</b>	<b>34.25</b>	<b>23.84</b>	<b>58.09</b>

5.5.8 BEST submitted that projected O&M expenses are Rs. 661.54 Crore. However, BEST has claimed the normative O&M expenses only which would be subject to Truing-up at a later date based on actuals/ regulatory provisions.

***Commission's Analysis and Ruling***

5.5.9 As per the MYT Regulations, 2019, the normative O&M charges for FY 2022-23 would be determined by escalating the base expenses determined for FY 2021-22 at the inflation factor reduced by an efficiency factor. The Commission in earlier section of this Order, has already computed and approved the O&M expenses for FY 2021-22 which is considered as the base expenses for calculation of normative expenses for FY 2022-23.

5.5.10 Considering the normative O&M expense of FY 2021-22 and applying escalation factor of 4.22% (same as worked out for FY 2021-22) on the same, normative O&M expense for FY 2022-23 works out to Rs. 635.33 Crore.

5.5.11 Accordingly, the Commission has provisionally approved the normative O&M expenses for FY 2022-23 as given in the following Table:

**Table 184: Revised Normative O&M Expenses for FY 2022-23, as approved by the Commission (Rs. Crore)**

Particulars	MTR Petition	Approved in this Order
Normative O&M expenses of FY 2021-22 after applying escalation factor	616.06	609.61
Escalation Factor for FY 2022-23	4.90%	4.22%
Normative O&M expenses of FY 2022-23 after applying escalation factor	646.24	635.33
<i>Wire Business</i>		<i>412.96</i>
<i>Supply Business</i>		<i>222.36</i>



5.5.12 The Commission provisionally approves the normative O&M expenses of Rs. 635.33 Crore on provisional Truing up of ARR for FY 2022-23.

## 5.6 Capital Expenditure

### BEST Submission

5.6.1 BEST has estimated the provisional capital expenditure Rs. 143.43 Crore for FY 2022-23 as against approved capitalisation of Rs. 71.10 Crore in MTR Order. The provisional capital expenditure and capitalization for FY 2022-23 is given in the Table below:

**Table 185 : Details of Capital Expenditure and Capitalisation for FY 2022-23, as submitted by BEST (Rs. Crore)**

Particulars	MYT Order	April - March (Estimated)
Capital Expenditure	-	134.53
Capitalisation	71.10	143.43
IDC	-	-
Capitalisation + IDC	71.10	143.43

5.6.2 BEST submitted that in the MYT Order, the Commission has allowed 50% of average capitalization for past 5 years as DPR were yet to be submitted for which capitalization was proposed by BEST.

5.6.3 BEST has submitted the break-up of capital expenditure for FY 2022-23 as given in the Table below:

**Table 186 : Capitalisation Proposed in FY 2022-23, as submitted by BEST (Rs. Crore)**

Particulars	Capitalisation
<b>Wire Business</b>	
<b>DPR Scheme – In principle approved by MERC</b>	111.92
-New RSS commissioning	19.74
-Augmentation/Replacement of existing RSS	17.00
- New distribution Substation & Augmentation & alteration to existing DSS	25.00
- Extension of Distribution Network	49.68
-SCADA and digitization	0.50
<b>Non-DPR Scheme</b>	20.67
<b>Sub-Total</b>	<b>132.59</b>
<b>Supply Business</b>	
<b>DPR Scheme – In principle approved by MERC</b>	
Energy Meters	10.84
<b>Sub-Total</b>	<b>10.84</b>
<b>Total</b>	<b>143.43</b>

\*Non-DPR Scheme includes Street lighting capitalization

### ***Commission's Analysis and Ruling***

5.6.4 The Commission notes that out of total capitalization proposed by BEST, Rs 10.84 Crore claimed towards Energy Meters is related to DPR Scheme which is yet to be approved by the Commission as specified in Form 4.2 by BEST. Accordingly, the Commission has not considered the said capitalization for FY 2022-23.

5.6.5 The balance capitalization of Rs 132.59 Crore includes approved DPR schemes as well as Non-DPR schemes. In view of the above, the Commission approves capitalization of Rs 132.59 Crore for FY 2019-20 on provisional Truing-up of ARR for FY 2022-23 as shown in Table below:

**Table 187: Capitalisation for FY 2022-23, as approved by the Commission (Rs. Crore)**

Particulars	Wire	Supply	Total	Wire	Supply	Total
	MTR Petition			Approved in this Order		
DPR – Approved	111.92	-	<b>111.92</b>	111.92	-	<b>111.92</b>
DPR – Submitted/ Not Approved	-	10.84	<b>10.84</b>	-	-	
Non-DPR	20.67	-	<b>20.67</b>	20.67	-	<b>20.67</b>
<b>Total</b>	<b>132.59</b>	<b>10.84</b>	<b>143.43</b>	<b>132.59</b>	-	<b>132.59</b>

5.6.6 The Commission provisionally approves the capitalisation of Rs. 132.59 Crore on provisional Truing up of ARR for FY 2019-20.

### **5.7 Funding of Capital Expenditure**

#### ***BEST's Submission***

5.7.1 The funding of capitalization is through capital connection fee, loan, equity and grant. BEST has considered the normative debt: equity ratio of 70:30 after deducting the capital connection fee and Government grants. Capital connection fee i.e., consumer's contribution considered for FY 2022-23 is same as that for FY 2021-22. Any variation in actual consumer contribution may be adjusted at time of final Truing-up of FY 2022-23.

5.7.2 BEST requested to the Commission to approve capitalisation as claimed above for FY 2022-23. BEST has considered Interest During Construction (IDC) for the FY 2022-23 is considered as 'Nil' & would claim at the time Truing-up as per actuals.

5.7.3 The funding of capitalization as submitted by BEST is as shown in the table below:

**Table 188 : Details of Funding for Capitalisation for FY 2022-23, as submitted by BEST (Rs. Crore)**

Particulars	Amount
Capital Connection Fee	7.71
Grants for IPDS Scheme	-

Particulars	Amount
Grants for Street Lights	7.50
Loan	89.75
Internal Source	38.46
<b>Total of Capitalisation including IDC</b>	<b>143.43</b>

5.7.4 Further, any change in debt and equity due to actual capital connection fee realised will be considered during final Truing-up of FY 2022-23.

### ***Commission's Analysis and Ruling***

5.7.5 The Commission has noted the submissions of BEST and considered the normative debt: equity ratio of 70:30 in accordance with the MYT Regulations, 2019, after deducting the consumer contribution of Rs.7.71 Crore and Grant of Rs. 7.50 Crore as submitted by BEST. Accordingly, the sources of capitalisation considered by the Commission for provisional Truing up of FY 2022-23 as per approved capitalisation is shown in Table below:

**Table 189: Details of funding of Capitalisation for FY 2022-23, as approved by the Commission (Rs. Crore)**

Particulars	MYT Order	MTR Petition	Approved in this Order
Capital Connection Fee	10.69	7.71	7.71
Grants for IPDS Scheme	2.15	-	-
Grants for Street Light		7.50	7.50
Loan - 70%	40.78	89.75	82.16
Equity - 30%	17.48	38.46	35.21
<b>Total of Capitalisation</b>	<b>71.10</b>	<b>143.43</b>	<b>132.59</b>

## **5.8 Depreciation**

### ***BEST's Submission***

5.8.1 For arriving at depreciation for provisional Truing-up of FY 2022-23, BEST has considered the same approach as submitted in Truing-up for FY 2021-22.

5.8.2 BEST has considered the closing GFA for FY 2021-22 as the opening GFA for FY 2022-23. Closing GFA of FY 2021-22 is arrived at by adding capitalisation with IDC and deducting value of assets retired in FY 2022-23.

5.8.3 BEST has estimated assets to be retired in FY 2022-23 to be equal to assets retired in FY 2021-22 as per provisional accounts. The calculation of average GFA considered for calculation of depreciation for FY 2022-23 is as given in table below:

**Table 190 : Gross Fixed Assets for FY 2022-23, as submitted by BEST (Rs. Crore)**

Particular	Amount
Opening GFA	3,036.80
Capitalisation with IDC	143.43
Retirement	19.70
Closing GFA	3,160.53
Average GFA	3,098.66

5.8.4 BEST has considered the average depreciation rate of 3.53% that was derived for FY 2021-22 based on internally audited Final Accounts of FY 2021-22. The Depreciation for FY 2022-23 is calculated based on the average depreciation rate of 3.53% over the average GFA of FY 2022-23. The opening balance of Gross block and the corresponding depreciation that has been charged during the year is given in the Table below:

**Table 191 : Depreciation Expenses for FY 2022-23, as submitted by BEST (Rs. Crore)**

Particulars	Approved (Rs. Cr.)	Revised Projections (Rs. Cr.)
Audited opening GFA		3,050.43
Audited closing GFA		3,174.16
Average audited GFA		3,112.29
Audited depreciation		110.01
Depreciation Rate on average audited GFA	4.07%	3.53%
Average Regulatory GFA	2,823.92	3,098.66
<b>Depreciation</b>	<b>115.07</b>	<b>109.53</b>

***Commission's Analysis and Ruling***

5.8.5 The Commission has computed the depreciation in accordance with Regulation 28 of the MYT Regulations, 2019. The Commission has considered the closing GFA for FY 2021-22 as approved after Truing up in this Order, as the opening GFA for FY 2022-23. The Commission has considered the asset addition in FY 2022-23 in line with the approved capitalisation. The Commission has considered asset retirement same as proposed by BEST. Based on the approved opening GFA, asset addition and asset retirement, the closing GFA for FY 2022-23 is approved.

5.8.6 The Commission has computed the depreciation on the average of approved opening and closing GFA for FY 2022-23 by applying the depreciation rate of 3.53% approved for FY 2021-22 after Truing up in this Order. The depreciation for FY 2022-23 provisionally approved by the Commission as given in the following Table:

**Table 192: Depreciation for FY 2022-23, as approved by the Commission (Rs. Crore)**

Particulars	MYT Order	MTR Petition	Approved in this Order
Opening GFA	2808.13	3,036.80	3,011.48
Capitalisation with IDC	71.10	143.43	132.59
Retirement	39.51	19.70	19.70
<b>Closing GFA</b>	<b>2,839.71</b>	<b>3,160.53</b>	<b>3,124.37</b>
Average GFA	<b>2,823.92</b>	<b>3,098.66</b>	<b>3,067.92</b>
Depreciation Rate	4.07%	3.53%	3.53%
<b>Depreciation</b>	<b>115.07</b>	<b>109.53</b>	<b>108.45</b>

5.8.7 The Commission approves depreciation of Rs. 108.45 Crore on provisional Truing up of ARR for FY 2022-23.

## 5.9 Interest on Long Term Loans

### *BEST's Submission*

5.9.1 BEST has submitted the details of provisional loan portfolio and interest expenses incurred during FY 2022-23 as shown in the table below:

**Table 193 : Provisional Interest Expenses for FY 2022-23, as submitted by BEST (Rs. Crore)**

Particulars	Opening Balance	Addition	Repayment	Closing Balance	Interest Expenses
APDRP Loan	6.76	-	2.22	4.54	0.65
REC	276.72	-	39.53	237.19	26.91
<b>Total</b>	<b>283.48</b>	<b>-</b>	<b>41.75</b>	<b>241.73</b>	<b>27.56</b>

5.9.2 BEST has considered loan repayment equal to depreciation and loan addition is considered as per funding of capitalisation mentioned above. Change in loan addition due to change in amount of assets retired may be considered at time of final Truing-up.

5.9.3 BEST has worked out the weighted average interest rate based on opening loan balance of FY 2022-23 and applied on the normative loan as specified in the Regulation 30 of the MYT Regulations, 2019.

**Table 194 : Normative interest on Loans for FY 2022-23, as submitted by BEST (Rs. Crore)**

Source of Loan	MYT Order	Estimated	Provisional True-Up requirement
Opening Balance of Net Normative Loan	-	-	-
Less: Reduction of Normative Loan due to retirement or replacement of assets	27.66	13.79	(12.48)
Addition of Normative Loan due to capitalisation during the year	40.78	89.75	44.07

Source of Loan	MYT Order	Estimated	Provisional True-Up requirement
Repayment of Normative loan during the year	13.12	75.96	56.56
Closing Balance of Net Normative Loan	0.00	-	(0.00)
Closing Balance of Gross Normative Loan	-	-	-
Average Balance of Net Normative Loan	0.00	-	(0.00)
Weighted average Rate of Interest on actual Loans (%)	11.27%	10.49%	
Interest Expenses	-	-	-
Financing Charges	-	-	-
<b>Total Interest &amp; Financing Charges</b>	<b>-</b>	<b>-</b>	<b>-</b>

5.9.4 BEST requested the Commission to approve the interest expense on normative basis for FY 2022-23 as may be arrived under provisional truing-up process.

### ***Commission's Analysis and Ruling***

5.9.5 The Commission has noted the submissions of BEST. The closing normative loan for FY 2021-22 approved in this Order is considered as the opening normative loan for FY 2022-23. The addition in normative loan has been considered equal to the debt component of asset addition during the year. Loan repayment is considered equal to depreciation and loan addition is considered as per funding of capitalisation.

5.9.6 As regards the interest rate to be considered, the Regulation 30.5 of the MYT Regulations, 2019 states that the rate of interest shall be the weighted average rate of interest computed based on the actual loan portfolio at the beginning of each year shall be considered as the rate of interest. In view of the same and considering that BEST has fixed interest rate loans, the Commission has considered interest rate of 10.49% for FY 2022-23 based on BEST submission, subject to truing up subsequently. The Commission has applied this weighted average interest rate on the normative loan portfolio to compute the interest on loan capital. As there is nil opening balance of normative loan for FY 2022-23 and the depreciation amount approved during the year is more than the loan addition approved for the year, the effective average loan balance for the year is nil and hence the interest on long term loan is also nil. Accordingly, the Commission has approved the interest on loan capital for FY 2022-23 as shown in the following Table:

**Table 195: Interest on Loan Capital for FY 2022-23, as approved by the Commission (Rs. Crore)**

Particulars	MYT Order	MTR Petition	Approved in this Order
Opening Balance of Normative Loan	-	-	-
Less: Reduction of Normative Loan due retirement or replacement of assets	27.66	13.79	13.79
Loan Drawal during the year	40.78	89.75	82.16
Loan Repayment during the year	13.12	75.96	68.37

Particulars	MYT Order	MTR Petition	Approved in this Order
Closing Balance of Normative Loan	-	-	-
Average Balance of Normative Loan	-	-	-
Applicable Interest Rate (%)	11.27%	10.49%	10.49%
<b>Interest Expenses</b>	-	-	-

5.9.7 The Commission approves Nil Interest on Long Term Loan on provisional Truing up of ARR for FY 2022-23.

## 5.10 Interest on Working Capital (IoWC) Loans

### *BEST's Submission*

5.10.1 BEST has calculated IoWC on normative basis as per Regulation 32 of the MYT Regulations, 2019. Rate of IoWC is considered as SBI MCLR as on 15 November, 2022 viz. 8.05% + 150 basis point. The computation of Interest on Working Capital on normative basis is as given below:

**Table 196 : Normative Interest on Working Capital for Wires Business for FY 2022-23, as submitted by BEST (Rs. Crore)**

Particulars	MYT Order	MTR Petition
O&M expenses for a month	32.39	35.00
Maintenance Spares at 1% of Opening GFA	25.27	3.04
One and half months equivalent of the expected revenue from charges for use of Distribution Wires	42.61	82.54
Less: Amount held as Security Deposit from Distribution System Users	44.87	44.82
<b>Total Working Capital Requirement</b>	<b>55.40</b>	<b>75.77</b>
	-	-
<b>Computation of Working Capital Interest</b>	-	-
Interest Rate (%) - SBI Base Rate +150 basis points	9.50%	9.55%
<b>Interest on Working Capital</b>	<b>5.26</b>	<b>7.24</b>

**Table 197 : Normative Interest on Working Capital for Supply Business for FY 2022-23, as submitted by BEST (Rs. Crore)**

Particulars	MYT Order	MTR Petition
O&M expenses for a month	17.44	18.85
Maintenance Spares at 1% of Opening GFA	2.81	27.33
One and half months equivalent of the expected revenue from sale of electricity including revenue from CSS and Additional Surcharge	383.46	525.51
Less: Amount held as security deposit	403.79	403.35
<b>Less: One month equivalent of cost of power purchase, transmission charges and MSLDC Charges</b>	<b>217.44</b>	<b>327.74</b>
<b>Total Working Capital Requirement</b>	<b>(217.52)</b>	<b>(159.39)</b>
	-	-
Computation of Working Capital Interest		
<b>Interest Rate (%) - SBI Base Rate +150 basis points</b>	<b>9.50%</b>	<b>9.55%</b>
<b>Interest on Working Capital</b>	<b>-</b>	<b>-</b>



- 5.10.2 BEST submitted that the normative IoWC for retail supply business is nil, due to 90% of consumer security deposit being adjusted from working capital requirement as per allocation matrix in the MYT Regulations, 2019. However, the IoWC of distribution Wires business is not nil.
- 5.10.3 BEST therefore requested the Commission to approve the IoWC on normative basis in line with the MYT Regulations 2019.

***Commission’s Analysis and Ruling***

- 5.10.4 BEST has estimated the IoWC on normative basis as per Regulation 32.3 & 32.4 of the MYT Regulations, 2019.
- 5.10.5 In response to data gaps raised by the Commission, BEST submitted that Security Deposit to be collected as per as per provisions of MERC (Electricity Supply Code and Standard of Performance of Distribution Licensees including Power Quality), 2021 was Rs 303.10 Crore. However, BEST has only collected Rs 71.16 Crore and there is shortfall of Rs 231.94 Crore.
- 5.10.6 The Commission notes that BEST has not collected security deposit from the Consumers as per provisions of MERC (Electricity Supply Code and Standard of Performance of Distribution Licensees including Power Quality), 2021. The said provisions are included so that Distribution Licensee are adequately protected from any bad debts and also result in additional availability of working capital. The Commission directs BEST to collect the Security Deposit as per provisions of the aforesaid Regulations. However for the purpose of the computation of Working Capital, the Commission has considered Security Deposit as per actuals of FY 2021-22.
- 5.10.7 For provisional Truing up, the Commission approves the normative IoWC for FY 2022-23 in accordance with Regulation 32 of the MYT Regulation, 2019. The interest rate for computing IoWC is considered as per Regulation 32.3 and 32.4 of the MYT Regulations, 2019 and as per the said Regulations, weighted average SBI one-year MCLR as on 1 December, 2022 of 8.05% plus 150 basis points. Thus, the interest rate of 9.55% (8.00% + 1.55% = 9.55%) has been considered for estimation of the IoWC. The Commission has applied this rate to compute the normative IoWC. The IoWC approved by the Commission is given in the Table below:

**Table 198: Interest on Working Capital for FY 2022-23, as approved by the Commission (Rs. Crore)**

Particulars	MYT Order	MTR Petition	Approved in this Order
<b>Wheeling Business</b>			
O&M expenses for a month	32.39	35.00	34.41
Maintenance Spares at 1% of Opening GFA	25.27	3.04	27.10
One and half months equivalent of the expected revenue from charges for use of Distribution Wires	42.61	82.54	45.85



Particulars	MYT Order	MTR Petition	Approved in this Order
Less: Amount held as Security Deposit from consumers	44.87	44.82	43.61
<b>Total Working Capital Requirement</b>	<b>55.40</b>	<b>75.77</b>	<b>63.75</b>
Rate of Interest (%)	9.50%	9.55%	9.55%
<b>Interest on Working Capital</b>	<b>5.26</b>	<b>7.24</b>	<b>6.09</b>
<b>Retail Business</b>			
O&M expenses for a month	17.44	18.85	18.53
Maintenance Spares at 1% of Opening GFA	2.81	27.33	3.01
One and half months equivalent of the expected revenue from sale of electricity including revenue from CSS and Additional Surcharge	383.46	525.51	412.65
Less: Amount held as security deposit	403.79	403.35	392.53
Less: One month equivalent of cost of power purchase, transmission charges and MSLDC Charges	217.44	327.74	306.64
<b>Total Working Capital Requirement</b>	<b>(217.52)</b>	<b>(159.39)</b>	<b>(264.98)</b>
Rate of Interest (%)	9.50%	9.55%	9.55%
<b>Interest on Working Capital</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Total Distribution Business</b>			
<b>Interest on Working Capital</b>	<b>5.26</b>	<b>7.24</b>	<b>6.09</b>

5.10.8 The Commission approves Normative Interest on Working Capital of Rs. 6.09 Crore on provisional Truing up of ARR for FY 2022-23.

### 5.11 Interest on Consumer Security Deposit (CSD)

#### *BEST's Submission*

5.11.1 BEST has considered the closing balance of FY 2021-22 as the opening balance of security deposit for FY 2022-23. BEST submitted that it considered annual growth rate of 2.75% which has been observed in past years on amount of CSD held for computation of interest on CSD since no closing balance is available for computation of interest on CSD as FY 2022-23 being the current year of operation.

5.11.2 BEST has submitted that Rate of Interest considered for computation of interest on CSD is Bank Rate as on 1 April, 2022 as per Regulation 30.11 of the MYT Regulations, 2019. The Commission is requested to approve Interest on Consumer Deposit for FY 2022-23 as shown in table below:

**Table 199 : Interest on Consumer Deposit for FY 2022-23, as submitted by BEST (Rs. Crore)**

Particulars	MYT Order	MTR Petition
Average Consumer Security Deposit	442.12	448.16
Interest Rate (%) - Bank Rate	5.40%	4.25%
Interest on Security Deposit	23.87	18.79

#### *Commission's Analysis and Ruling*

- 5.11.3 The Commission has noted the submission of BEST. The Commission has calculated the interest on CSD applying the Bank Rate i.e., 4.25% as on 1 April, 2022 as per Regulation 30.11 of MYT Regulations, 2019. The Commission approves the interest on CSD as shown in the following Table:

**Table 200: Interest on Consumers' Security Deposit for FY 2022-23, as approved by the Commission (Rs. Crore)**

Particulars	MYT Order	MTR Petition	Approved in this Order	Wire Business	Supply Business
Interest on Consumer Security Deposit	23.87	18.79	18.54	1.85	16.68

- 5.11.4 The Commission approves Interest on Consumers' Security Deposit of Rs. 18.54 Crore on provisional Truing up of ARR for FY 2022-23.

## 5.12 Contribution to Contingency Reserves

### *BEST's Submission*

- 5.12.1 BEST has estimated Contribution to Contingency reserves to be 0.25% of opening GFA as per Regulation 35 of MYT Regulations, 2019.
- 5.12.2 The details of Contribution to Contingency Reserves are as shown in the table below:

**Table 201 : Contribution to Contingency Reserve for FY 2022-23, as submitted by BEST (Rs. Crore)**

Particulars	MYT Order	Estimated
Opening Balance of Contingency Reserves	-	62.51
Opening Gross Fixed Assets	-	3,036.80
Opening Balance of Contingency Reserves as % of Opening GFA	-	2.06%
Contribution to Contingency Reserves during the year	-	7.59
Utilisation of Contingency Reserves during the year	-	-
Closing Balance of Contingency Reserves	-	70.10
Closing Balance of Contingency Reserves as % of Opening GFA	-	2.31%
<b>Total</b>	<b>7.02</b>	<b>7.59</b>

### *Commission's Analysis and Ruling*

- 5.12.3 The Commission notes that BEST has either not made investment or has delayed investment in violation of provision of MYT Regulations, 2019 and accordingly, the Commission has not allowed any amount towards Contribution to Contingency Reserves for FY 2019-20 to FY 2021-22.
- 5.12.4 As per Regulation 35.1 of MYT Regulations, 2019, if the licensee does not invest the amount of contribution to Contingency Reserves in authorised securities for two consecutive Years, then the contribution to Contingency Reserves shall not be allowed in the calculation of Aggregate Revenue Requirement from the subsequent

Year onwards. Considering the fact that BEST has not been allowed any investment towards Contingency Reserves for last three years, the the Commission has not considered any Contribution to Contingency Reserves. However, the Commission directs BEST to invest such contribution as per Regulation 35.1 of the MYT Regulations, 2019. The Commission will consider the same at the time of Truing-up based on submission of documentary evidence of said investment.

**Table 202: Contribution to Contingency Reserves for FY 2022-23, as approved by the Commission (Rs. Crore)**

Particulars	MYT Order	MTR Petition	Approved in this Order	Wire Business	Supply Business
Contribution to Contingency Reserves	7.02	7.59	0	0	0

5.12.5 The Commission approves Nil Contribution to Contingency Reserves on provisional Truing up of ARR for FY 2022-23.

### 5.13 Other Expenses

#### *BEST's Submission*

5.13.1 BEST has submitted that the estimated 'other expense' for FY 2022-23 is lower than approved in the MYT Order as shown in the table below.

**Table 203 : Other Expenses for FY 2022-23, as submitted by BEST (Rs. Crore)**

Particulars	MYT Order	Estimated
Other Expenses	47.42	26.53

5.13.2 BEST submitted that there was unsteady growth observed in other costs for truing-up years. Hence, BEST has considered the approved escalation rate of 3% on the other expenses of FY 2021-22. Further, BEST submitted that expenses for elements like Bill Discounting, etc., if any, will be claimed at the time of truing-up.

5.13.3 BEST requested the Commission to approve the provisional amount as submitted by BEST for 'other expenses' as shown in above table. Any variation may be adjusted at time of final Truing-up of FY 2022-23.

#### *Commission's Analysis and Ruling*

5.13.4 As per Regulation 36 of the MYT Regulations, 2019, the Commission has accepted the submission of BEST regarding PF incentive, prompt payment discount, ECS discount and load factor incentive, and considered them accordingly in the provisional Truing up for FY 2022-23.

5.13.5 Accordingly, the Commission approves the other expenses equivalent to the average actual other expenses of FY 2020-21 and FY 2021-22 and is shown in the Table below:

**Table 204: Other Expenses for FY 2022-23, as approved by the Commission (Rs. Crore)**

Particulars	MYT Order	MTR Petition	Approved in this Order	Wire Business	Supply Business
Other Expenses	47.42	26.53	24.19	-	24.19

5.13.6 The Commission approves Other Expenses of Rs. 24.19 Crore on provisional Truing up of ARR for FY 2022-23.

#### 5.14 Provision for Bad and Doubtful Debts

##### *BEST's Submission*

5.14.1 BEST submitted that it has kept provision for Bad and Doubtful Debts at the rate of 1.5% of the amount shown as Trade Receivables. BEST has considered the receivables for the year to be same as that of FY 2021-22 for FY 2022-23. The details are shown in the Table below:

**Table 205 : Provision for Bad and doubtful Debts for FY 2022-23, as submitted by BEST (Rs. Crore)**

Particulars	MYT Order	Estimated
Opening Balance of Provision for bad and doubtful debts	-	-
Receivables for the year	449.33	702.00
Opening Balance of Provision of bad and doubtful debt as % of Receivables	1.50%	1.50%
Provision for bad & doubtful debts during the year	6.74	10.53
Actual bad and doubtful debts written off	-	-
Closing Balance of Provision for bad and doubtful debts	-	-
<b>Total</b>	-	-

5.14.2 BEST requested the Commission to approve the Provision for Bad and doubtful Debts of as shown in table above for FY 2022-23.

##### *Commission's Analysis and Ruling*

5.14.3 The Commission observed that BEST while claiming the Provision for Bad and Doubtful Debt has increased the Receivables in proportion to the increase in ARR with respect to FY 2021-22. The Commission is not inclined to consider the said methodology and approves the provision for bad and doubtful debt at the rate of 1.5% of the Receivables as per audited accounts of FY 2021-22, as specified 76 and 85 of MYT Regulations 2019. The same shall be reconciled at the time of final Truing-up based on the Receivables and provisions considered in the Audited Accounts. The provision for bad and doubtful debts provisionally approved by the Commission for FY 2022-23 is shown in the Table below:

**Table 206: Provision for Bad and Doubtful Debts for FY 2022-23, as approved by the Commission (Rs. Crore)**

Particulars	MYT Order	MTR Petition	Approved in this Order	Wire Business	Supply Business
Provision for Doubtful debts	6.74	10.53	7.97	0.80	7.18

5.14.4 The Commission approves the Provision for Bad and Doubtful Debts of Rs. 7.18 Crore on provisional Truing up of ARR for FY 2022-23.

### 5.15 Return on Equity

#### *BEST's Submission*

5.15.1 BEST submitted that it has considered the Return on equity computed as per Regulation 29 of the MYT Regulations, 2019. For the purpose of arriving at the Regulatory Equity at the beginning of FY 2022-23, BEST has considered the closing equity at the end of FY 2021-22 as submitted in Truing-Up of FY 2021-22.

5.15.2 BEST submitted the details of Return on Equity for Wires & Supply business as under:

**Table 207 : Return on Equity for Wires Business for FY 2022-23, as submitted by BEST (Rs. Crore)**

Particulars	MYT Order	Estimated
Regulatory Equity at the beginning of the year	831.70	878.46
Capitalisation during the year	-	115.39
Equity portion of capitalisation during the year	15.73	34.62
Reduction in Equity Capital on account of retirement / replacement of assets	10.67	17.73
Regulatory Equity at the end of the year	836.77	895.35
	-	-
<b>Return on Equity Computation</b>	-	-
<b>Base Rate of Return on Equity</b>	14.00%	14.00%
Pretax Return on Equity after considering effective Tax rate	-	-
Return on Regulatory Equity at the beginning of the year	116.44	122.98
Return on Regulatory Equity addition during the year	0.35	1.18
<b>Total Return on Equity</b>	<b>116.79</b>	<b>124.17</b>

**Table 208 : Return on Equity for Retail Business for FY 2022-23, as submitted by BEST (Rs. Crore)**

Particulars	MYT Order	Estimated
Regulatory Equity at the beginning of the year	92.41	97.61
Capitalisation during the year	-	12.82
Equity portion of capitalisation during the year	1.75	3.85
Reduction in Equity Capital on account of retirement / replacement of assets	1.19	1.97
Regulatory Equity at the end of the year	92.97	99.48
	-	-

Particulars	MYT Order	Estimated
<b>Return on Equity Computation</b>	-	-
Base Rate of Return on Equity	15.50%	15.50%
Pretax Return on Equity after considering effective Tax rate	-	-
Return on Regulatory Equity at the beginning of the year	14.32	15.13
Return on Regulatory Equity addition during the year	0.04	0.15
<b>Total Return on Equity</b>	<b>14.37</b>	<b>15.27</b>

5.15.3 BEST requested the Commission to approve the Return on Equity of as shown in table above for FY 2022-23.

***Commission’s Analysis and Ruling***

5.15.4 In absence of non-applicability of Income Tax as BEST being Local Authority, the Commission has computed RoE at 14% and 15.5% of the equity for Wires Business and Supply Businesses, respectively, in accordance with the MYT Regulations, 2019.

5.15.5 The Commission has computed RoE in accordance with Regulation 29 of the MYT Regulations, 2019, based on opening equity, addition of equity as per approved capitalisation and weighted average rate of RoE based on allocation of assets to the wires and supply business.

5.15.6 To determine the equity eligible for return as per the Regulations, the Commission has considered the closing equity for FY 2021-22 approved in this Order on Truing-up, as the opening equity for FY 2022-23. The addition in equity has been considered equal to the equity component of asset addition during the year. The impact of the replacement of assets is considered by reducing the equity to the extent of 30 % of the GFA of the assets that have been retired during the year.

5.15.7 The RoE approved upon provisional Truing up for FY 2022-23 is as per the following Table:

**Table 209: Return on Equity for FY 2022-23, as approved by the Commission (Rs. Crore)**

Particulars	MYT Order	MTR Petition	Approved in this Order	Wire Business	Supply Business
Regulatory Equity at the beginning of the year	924.11	976.07	968.47	871.62	96.85
Equity portion of capitalisation during the year	17.48	38.46	35.21	31.69	3.52
Reduction in Equity Capital on account of retirement / replacement of assets	11.85	19.70	5.91	5.32	0.59
<b>Regulatory Equity at the end of the year</b>	<b>929.74</b>	<b>994.83</b>	<b>997.77</b>	<b>898.00</b>	<b>99.78</b>
Return on Regulatory Equity at the beginning of the year	130.76	138.11	137.04	122.03	15.01
Return on Regulatory Equity addition during the year	0.40	1.33	2.07	1.85	0.23
<b>Total Return on Equity</b>	<b>131.16</b>	<b>139.44</b>	<b>139.11</b>	<b>123.87</b>	<b>15.24</b>

5.15.8 The Commission approves Return on Equity of Rs. 139.11 Crore on provisional Truing up of ARR for FY 2022-23.

## 5.16 Return as Interest on Internal Funds

### BEST's Submission

5.16.1 BEST submitted the return as interest on internal funds as under:

**Table 210 : Return on Interest on Internal Funds for FY 2022-23, as submitted by BEST (Rs. Crore)**

Particulars	MYT Order	Estimated
Cumulative Grants at the end of the year	87.99	87.99
Addition of Grant during the year	-	-
Rate of Interest on internal funds	6.00%	6.00%
Return on Internal Fund	5.28	5.28

5.16.2 BEST requested the Commission to approve the return as interest on internal funds for FY 2022-23.

### *Commission's Analysis and Ruling*

5.16.3 The Appellate Tribunal of Electricity, in its Judgment dated 27 August, 2007 in Appeal No. 13 of 2007 had directed the Commission to take into consideration interest on Government Grant as well as interest on internal funds, which is not included in the calculation of the Capital Base or notional equity in any way. Accordingly, the Commission has accepted the submission of BEST and approved the Return on Internal Funds of Rs.5.28 Crore for FY 2022-23 on provisional Truing up.

**Table 211: Return as Interest on Internal Funds for FY 2022-23, as approved by the Commission (Rs. Crore)**

Particulars	MYT Order	MTR Petition	Approved in this Order	Wire Business	Supply Business
Return on Internal Funds	5.28	5.28	5.28	4.75	0.53

5.16.4 The Commission approves Return on Internal Funds of Rs. 5.28 Crore on provisional Truing up of ARR for FY 2022-23.

## 5.17 Non-Tariff Income

### *BEST's Submission*

5.17.1 BEST submitted that there was no particular growth pattern observed in Non-tariff Income for truing-up years & on the contrary non-tariff income has reduced due to COVID-19. However, BEST estimates that since the COVID-19 impact has been annulled by FY 2021-22, the growth in Non-Tariff income will be the same as the pre-covid basis. Hence, BEST has considered the escalation rate of 3% on the other expenses of FY 2021-22 resulting non-tariff income of Rs. 27.65 Crore for FY 2022-23.



**Table 212 : Non-Tariff Income for FY 2022-23, as submitted by BEST (Rs. Crore)**

Particulars	MYT Order	Estimated
Non Tariff Income	58.61	39.60

***Commission’s Analysis and Ruling***

5.17.2 The Commission notes that non-Tariff income of Rs 39.60 Crore considered by BEST is not in sync with the justification given for it. It was observed that BEST has considered the amount equivalent to amount accrued in H1 which was Rs. 19.80 Crore for H2 of FY 2022-23 and has not considered any 3% escalation on the past FY 2021-22 amount claimed under Non-Tariff Income.

5.17.3 The Commission has accordingly considered the Non-Tariff Income of Rs 39.60 Crore for FY 2022-23. Accordingly, the Non-Tariff Income approved by the Commission on provisional Truing up of FY 2022-23 is as shown in Table below:

**Table 213: Non-Tariff Income for FY 2022-23, as approved by the Commission (Rs. Crore)**

Particulars	MYT Order	MTR Petition	Approved in this Order	Wire Business	Supply Business
Non-Tariff Income	58.61	39.60	39.60	3.96	35.64

5.17.4 The Commission approves Non-Tariff Income of Rs. 39.60 Crore on provisional Truing up of ARR for FY 2022-23.

**5.18 Revenue from Existing Tariff**

***BEST’s Submission***

5.18.1 BEST has submitted that the revenue from existing tariff has been worked out based on provisional actual data for FY 2022-23. BEST has considered the projected sales based on the number of consumers, demand charges, fixed charges, contract demand, energy charges and wheeling charges as per the Commission approved in the MYT Order. BEST has considered the estimated sales for FY 2022-23. BEST has estimated the revenue from FAC by considering the actual data available for H1 of FY 2022-23 and assumed the same may be collected for H2 of the FY 2022-23.

5.18.2 BEST has calculated the expected revenue from existing tariff for FY 2022-23 as summation of revenue from fixed charge, demand charge, energy charge, wheeling charge and FAC charges and other estimated revenue which includes PF penalty, ToD charges etc.

5.18.3 BEST requested the Commission to approve the revenue of Rs. 3,667.98 Crore for provisional Truing-up of FY 2022-23.



**Commission's Analysis and Ruling**

5.18.4 The Commission has noted the submission of BEST. BEST has considered actual revenue of April to September 2022 and estimated for October 2022 to March 2023. The Commission considers the submission of BEST and approves revenue of Rs. 3,667.98 Crore provisionally for FY 2022-23 same as submitted by BEST.

**Table 214: Provisional Revenue of FY 2022-23 as approved by the Commission.**

Consumer category	Sales*	Revenue	Average Billing Rate
	MU	Rs. Crore	Rs/kWh
<b>HT Category</b>			
HT-1 Industrial	190.39	146.55	7.70
HT-2 Commercial	208.45	187.14	8.98
HT-3 Group Hsg	32.12	24.32	7.57
HT-4 Railway Metro	2.57	2.71	10.54
HT 5A Govt Sch & Hosp.	27.78	20.71	7.45
HT 5B Public Ser. Oths	186.01	151.57	8.15
HT 6 EV chg.	-	-	
<b>Sub-Total</b>	<b>647.33</b>	<b>533.01</b>	8.23
<b>LT Category</b>			
LT-1 A (BPL)	0.04	0.01	3.57
LT-1 B Residential			
0-100	749.71	1,494.99	7.11
101-300	721.10		
301-500	237.62		
501<	395.33		
LT2 (a)Comm <20	826.49	710.33	8.59
LT2 (b) 20-50 Comm.	170.76	185.78	10.88
LT2 (c) >50 Comm.	358.23	396.11	11.06
LT3A Industrial <20 kW	105.74	74.88	7.08
LT 3B >20 Industrial	79.81	74.98	9.40
LT-4A Schools & Hosp	61.40	43.83	7.14
LT-4B Public Service	178.82	130.09	7.28
LT 5A Agriculture Pumpset	-	-	
LT 5B Agriculture Other	0.05	0.03	5.85
LT-11 Vehicle Chg	18.17	11.97	6.58
<b>Sub-Total</b>	<b>3,903.27</b>	<b>3,123.00</b>	8.00
Diff in billing adjustment		-3.38	
<b>Total</b>	<b>4,550.60</b>	<b>3,652.63</b>	8.03
Other adjustment related to Penalty, ToD, etc		<b>15.35</b>	
<b>Grand Total</b>	<b>4,550.60</b>	<b>3,667.98</b>	<b>8.06</b>

\*- HT units is in KVAh and LT is in kWh

## 5.19 Provisional Truing up of Aggregate Revenue Requirement of FY 2022-23

### *BEST's Submission*

5.19.1 BEST has submitted the Truing-up for FY 2022-23 based on comparison of the revised estimates of expense incurred and the revenue earned during the year vis-à-vis the figures approved by the Commission in MYT Order. The Truing-up summary for FY 2022-23 is as under:

**Table 215 : Provisional Truing-up of Aggregate Revenue Requirement of Wires Business of FY 2022-23, as submitted by BEST (Rs. Crore)**

Particulars	MYT Order	Apr-Sep (Actual)	Oct-Mar (Estimated)	April - March (Estimated)	Provisional True-Up requirement
Operation & Maintenance Expenses	388.73	210.03	210.03	420.05	31.32
Depreciation	103.56	49.29	49.29	98.58	(4.98)
Interest on Loan Capital	-	-	-	-	-
Interest on Working Capital	5.26	3.62	3.62	7.24	1.97
Interest on deposit from Consumers and Distribution System Users	2.39	0.94	0.94	1.88	(0.51)
Provision for bad and doubtful debts	0.67	0.39	0.39	0.79	0.12
Contribution to contingency reserves	6.32	3.42	3.42	6.83	0.51
<b>Total Revenue Expenditure</b>	<b>506.93</b>	<b>267.69</b>	<b>267.69</b>	<b>535.37</b>	<b>28.44</b>
Add: Return on Equity Capital	116.79	62.08	62.08	124.17	7.37
Add: Return on Internal Fund	4.75	2.38	2.38	4.75	0.00
<b>Aggregate Revenue Requirement</b>	<b>628.48</b>	<b>332.14</b>	<b>332.14</b>	<b>664.29</b>	<b>35.81</b>
Less: Non-Tariff Income	5.86	1.98	1.98	3.96	(1.90)
<b>Aggregate Revenue Requirement from Distribution Wires</b>	<b>622.62</b>	<b>330.16</b>	<b>330.16</b>	<b>660.33</b>	<b>37.71</b>

**Table 216 : Provisional Truing-up of Aggregate Revenue Requirement of Retail Supply Business of FY 2022-23, as submitted by BEST (Rs. Crore)**

Particulars	MYT Order	Apr-Sep (Actual)	Oct-Mar (Estimated)	April - March (Estimated)	Provisional True-Up requirement
Power Purchase Expenses (including Inter-State Transmission Charges)	2,351.34	1,922.20	1,752.63	3,674.83	1,323.49
Operation & Maintenance Expenses	209.32	113.09	113.09	226.18	16.87
Depreciation	11.51	5.48	5.48	10.95	(0.56)
Interest on Loan Capital	-	-	-	-	-
Interest on Working Capital	-	-	-	-	-
Interest on Consumer Security Deposit	21.49	8.46	8.46	16.91	(4.57)
Write-off of Provision for bad and doubtful debts	6.07	4.87	4.87	9.74	3.67
Contribution to contingency reserves	0.70	0.38	0.38	0.76	0.06
Intra-State Transmission Charges	256.72	128.36	128.36	256.72	(0.00)

Particulars	MYT Order	Apr-Sep (Actual)	Oct-Mar (Estimated)	April - March (Estimated)	Provisional True-Up requirement
MSLDC Fees & Charges	1.27	0.64	0.64	1.27	0.00
Other Expenses	47.42	13.26	13.26	26.53	(20.89)
<b>Total Revenue Expenditure</b>	<b>2,905.83</b>	<b>2,196.73</b>	<b>2,027.17</b>	<b>4,223.90</b>	<b>1,318.07</b>
Add: Return on Equity Capital	14.37	7.64	7.64	15.27	0.91
Add: return on Internal fund	0.53	0.26	0.26	0.53	(0.00)
<b>Aggregate Revenue Requirement</b>	<b>2,920.73</b>	<b>2,204.63</b>	<b>2,035.07</b>	<b>4,239.70</b>	<b>1,318.97</b>
Less: Non-Tariff Income	52.74	17.82	17.82	35.64	(17.10)
<b>Aggregate Revenue Requirement from Retail Supply</b>	<b>2,867.99</b>	<b>2,186.81</b>	<b>2,017.25</b>	<b>4,204.06</b>	<b>1,336.07</b>

**Table 217 : Provisional Truing-up of Aggregate Revenue Requirement of FY 2022-23, as submitted by BEST (Rs. Crore)**

Particulars	MYT Order	MTR Petition
Power Purchase Expenses (including Inter-State Transmission Charges)	2,351.34	3,674.83
Operation & Maintenance Expenses	598.05	646.24
Depreciation	115.07	109.53
Interest on Loan Capital	-	-
Interest on Working Capital	5.26	7.24
Interest on Consumer Security Deposit	23.87	18.79
Provision for bad and doubtful debts	6.74	10.53
Contribution to contingency reserves	7.02	7.59
Intra-State Transmission Charges	256.72	256.72
MSLDC Fees & Charges	1.27	1.27
Other Expenses	47.42	26.53
<b>Total Revenue Expenditure</b>	<b>3,412.77</b>	<b>4,759.27</b>
Add: Return on Equity Capital	131.16	139.44
Add: Return on Internal fund	5.28	5.28
<b>Aggregate Revenue Requirement</b>	<b>3,549.21</b>	<b>4,903.99</b>
Less: Non-Tariff Income	58.61	39.60
<b>Aggregate Revenue Requirement from Retail Tariff</b>	<b>3,490.60</b>	<b>4,864.39</b>
Past Revenue Gap Adjusted	(206.65)	(206.65)
<b>ARR from Distribution Business with Past Revenue Gap</b>	<b>3,283.95</b>	<b>4,657.74</b>
<b>Revenue</b>		
Revenue from sale of electricity	3,441.67	3,667.98
<b>Total Revenue Gap/(Surplus)</b>	<b>(157.72)</b>	<b>989.75</b>

5.19.2 BEST requested the Commission to approve the revenue gap as shown in table above for provisional Truing-up of FY 2022-23.

***Commission's Analysis and Ruling***

5.19.3 Based on approval of the ARR and revenue elements as set out above, the

Commission approves the Revenue Gap on provisional Truing up for FY 2022-23 as shown in the Table below:

**Table 218: ARR and Revenue Gap of Wire Business for FY 2022-23, as approved by the Commission (Rs. Crore)**

Particulars	MYT Order	MTR Petition	Approved in this Order
Operation & Maintenance Expenses	388.73	420.05	412.96
Depreciation	103.56	98.58	97.60
Interest on Loan Capital	-	-	-
Interest on Working Capital	5.26	7.24	6.09
Interest on Consumer Security deposit	2.39	1.88	1.85
Provision for bad and doubtful debts	0.67	0.79	0.80
Contribution to contingency reserves	6.32	6.83	-
<b>Total Revenue Expenditure</b>	<b>506.93</b>	<b>535.37</b>	<b>519.30</b>
Add: Return on Equity Capital	116.79	124.17	123.87
Add: Return on Internal fund	4.75	4.75	4.75
<b>Aggregate Revenue Requirement</b>	<b>628.48</b>	<b>664.29</b>	<b>647.93</b>
Less: Non-Tariff Income	5.86	3.96	3.96
<b>Aggregate Revenue Requirement from Distribution Wires</b>	<b>622.62</b>	<b>660.33</b>	<b>643.97</b>
<b>Revenue</b>			
Revenue from sale of electricity	623.58	601.21	601.21
<b>Total Revenue Gap/(Surplus)</b>	<b>(0.96)</b>	<b>59.12</b>	<b>42.76</b>

**Table 219: ARR and Revenue Gap of Retail Supply Business for FY 2022-23, as approved by the Commission (Rs. Crore)**

Particulars	MYT Order	MTR Petition	Approved in this Order
Power Purchase Expenses (including Inter-State Transmission Charges)	2,351.34	3,674.83	3,421.68
Operation & Maintenance Expenses	209.32	226.18	222.36
Depreciation	11.51	10.95	10.84
Interest on Loan Capital	-	-	-
Interest on Working Capital	-	-	-
Interest on Consumer Security Deposit	21.49	16.91	16.68
Provision for bad and doubtful debts	6.07	9.74	7.18
Contribution to contingency reserves	0.70	0.76	-
Intra-State Transmission Charges	256.72	256.72	256.72
MSLDC Fees & Charges	1.27	1.27	1.27
Other Expenses	47.42	26.53	24.19
<b>Total Revenue Expenditure</b>	<b>2,905.83</b>	<b>4,223.90</b>	<b>3,960.93</b>
Add: Return on Equity Capital	14.37	15.27	15.24
Add: Return on Internal fund	0.53	0.53	0.53
<b>Aggregate Revenue Requirement</b>	<b>2,920.73</b>	<b>4,239.70</b>	<b>3,976.69</b>
Less: Non-Tariff Income	52.74	35.64	35.64

Particulars	MYT Order	MTR Petition	Approved in this Order
<b>Aggregate Revenue Requirement from Retail Tariff</b>	<b>2,867.99</b>	<b>4,204.07</b>	<b>3,941.06</b>
<b>Revenue</b>			
Revenue from sale of electricity	2,818.09	3,066.77	3,066.77
<b>Total Revenue Gap/(Surplus)</b>	<b>49.90</b>	<b>1,137.30</b>	<b>874.29</b>

**Table 220: ARR and Revenue Gap of Distribution Business for FY 2022-23, as approved by the Commission (Rs. Crore)**

Particulars	MYT Order	MTR Petition	Approved in this Order
Power Purchase Expenses (including Inter-State Transmission Charges)	2,351.34	3,674.83	3,421.68
Operation & Maintenance Expenses	598.05	646.24	635.33
Depreciation	115.07	109.53	108.45
Interest on Loan Capital	-	-	-
Interest on Working Capital	5.26	7.24	6.09
Interest on Consumer Security Deposit	23.87	18.79	18.54
Provision for bad and doubtful debts	6.74	10.53	7.97
Contribution to contingency reserves	7.02	7.59	-
Intra-State Transmission Charges	256.72	256.72	256.72
MSLDC Fees & Charges	1.27	1.27	1.27
Other Expenses	47.42	26.53	24.19
<b>Total Revenue Expenditure</b>	<b>3,412.77</b>	<b>4,759.27</b>	<b>4,480.23</b>
Add: Return on Equity Capital	131.16	139.44	139.11
Add: Return on Internal fund	5.28	5.28	5.28
<b>Aggregate Revenue Requirement</b>	<b>3,549.21</b>	<b>4,903.99</b>	<b>4,624.62</b>
Less: Non-Tariff Income	58.61	39.60	39.60
<b>Aggregate Revenue Requirement from Retail Tariff</b>	<b>3,490.60</b>	<b>4,864.39</b>	<b>4,585.02</b>
Past Revenue Gap Adjusted*	(206.65)	(206.65)	(206.65)
<b>ARR from Distribution Business with Revenue Gap</b>	<b>3,283.95</b>	<b>4,657.74</b>	<b>4,378.37</b>
<b>Revenue</b>			
Revenue from sale of electricity	3,441.67	3,667.98	3,667.98
<b>Total Revenue Gap/(Surplus)</b>	<b>(157.72)</b>	<b>989.75</b>	<b>710.39</b>

\*- Past Revenue Gap approved in MYT Order adjusted in Distribution business.

5.19.4 Accordingly, the Commission approves a stand-alone Revenue Gap of Rs. 710.39 Crore on provisional Truing-up of ARR for FY 2022-23.

## 6 APPROVAL OF REVISED ARR FOR FY 2023-24 AND FY 2024-25

### 6.1 Background

6.1.1 In accordance with Regulation 5 of the MYT Regulations, 2019, BEST submitted the revised of ARR, Revenue from sale of power at existing Tariffs and charges, projected Revenue Gap/(Surplus) and proposed category-wise Tariff for FY 2023-24 and FY 2024-25.

6.1.2 The Commission has analysed the projected expenses for FY 2023-24 and FY 2024-25 under various heads, viz., O&M expenses, depreciation, interest on loans, interest on working capital, etc., in accordance with the MYT Regulations, 2019. The approach adopted by the Commission for approval of the expenditure on each expense head and the total expenditure approved is elaborated in the subsequent paragraphs.

### 6.2 Energy Sales

#### *BEST's Submission*

6.2.1 BEST has submitted that it has considered growth of around 2% for the projection of Base and Peak load over FY 2022-23. The following table shows the revised Base and Peak load considered by BEST for FY 2023-24 and FY 2024-25.

**Table 221 : Revised Peak Demand Projections for FY 2023-24 and FY 2024-25, as submitted by BEST (MW)**

Particulars	FY 2023-24	FY 2023-24	FY 2024-25	FY 2024-25
	MYT Order	MTR Petition	MYT Order	MTR Petition
Base Load	383.04	401.00	383.04	409.00
Peak Load	978.30	923.00	983.40	942.00

6.2.2 BEST's energy demand predominantly comprises of commercial and residential consumers. In the past, no significant growth is observed in energy sales. In fact, sales for past period i.e., FY 2020-21 and FY 2021-22 are lower than approved due to COVID-19 pandemic and hence, difficult to consider the same, as base for projections.

6.2.3 Accordingly, BEST has calculated CAGR with the base as FY 2018-19. BEST has calculated category-wise CAGR for 2-year, 3-year, 5-year & 7-year. The category wise CAGR is presented in below table:

**Table 222 : Category wise energy sales from FY 2011-12 to FY 2018-19 (in MU) and CAGR (in %), as submitted by BEST**

Tariff category	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	YoY	2 year	3 year	4 year	5 year	7 year
<b>HT Category</b>														
HT - I Industry	149.14	169.40	178.77	185.40	199.51	185.36	138.98	156.86	12.87%	-8.01%	-7.70%	-4.09%	-2.58%	0.72%
HT - II Commercial	429.01	419.71	440.52	467.70	480.14	340.72	281.69	268.13	-4.81%	-11.29%	-17.65%	-12.98%	-9.45%	-6.49%
HT - III Group Housing	31.76	32.27	32.82	33.19	32.02	31.69	32.13	30.67	-4.54%	-1.62%	-1.43%	-1.95%	-1.35%	-0.50%
HT IV- Railways, Metro, Monorail	-	-	-	-	-	0.94	2.28	2.14	-6.14%	50.88%	0.00%	0.00%	0.00%	0.00%
HT V-(A)Public services Govt. Hospitals and Educational Institutions)	-	-	-	-	-	75.20	26.46	26.61	0.57%	-40.51%	0.00%	0.00%	0.00%	0.00%
HT V-(B) Public services Others)	-	-	-	-	-	74.24	205.52	196.83	-4.23%	62.83%	0.00%	0.00%	0.00%	0.00%
HT-VI Electrical vehicle									0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
<b>Sub-total (HT)</b>	<b>609.91</b>	<b>621.38</b>	<b>652.11</b>	<b>686.29</b>	<b>711.67</b>	<b>708.15</b>	<b>687.06</b>	<b>681.24</b>	<b>-0.85%</b>	<b>-1.92%</b>	<b>-1.45%</b>	<b>-0.18%</b>	<b>0.88%</b>	<b>1.59%</b>
<b>LT Category</b>														
LT-I (A) Residential (BPL)	0.23	0.39	0.07	0.05	0.21	0.06	0.22	0.07	-65.99%	10.41%	-29.64%	9.98%	0.88%	-15.10%
LT - I(B) Residential	1,732.41	1,803.10	1,801.40	1,849.98	1,944.65	1,859.58	1,969.36	2,022.34	2.69%	4.28%	1.31%	2.25%	2.34%	2.24%
LT - II (a) Commercial	937.59	959.46	930.26	923.57	946.08	892.14	912.34	903.64	-0.95%	0.64%	-1.52%	-0.54%	-0.58%	-0.53%
LT - II (b) Commercial >20 & <=50 kW	276.35	263.55	242.76	236.19	237.87	223.56	216.06	212.83	-1.50%	-2.43%	-3.64%	-2.57%	-2.60%	-3.66%
LT - II (c) Commercial >50	546.12	516.42	470.70	462.91	462.17	407.91	368.80	370.32	0.41%	-4.72%	-7.12%	-5.43%	-4.68%	-5.40%
LT - III (A) Industry (upto 20 kW)	50.52	48.25	45.19	45.22	43.11	41.97	43.09	43.27	0.42%	1.54%	0.12%	-1.10%	-0.86%	-2.19%
LT-III (b) Industrial	103.02	103.79	99.96	99.81	100.11	94.99	90.04	90.39	0.38%	-2.45%	-3.35%	-2.45%	-1.99%	-1.85%
LT - IV (A) Public Services - (Govt. Hosp. & Edu.	-	46.44	78.08	86.44	100.95	83.75	55.20	54.78	-0.77%	-19.13%	-18.44%	-10.78%	-6.84%	0.00%
LT - IV (B) Public Services - Others	29.90	30.17	30.99	29.99	29.79	90.85	202.01	193.08	-4.42%	45.78%	86.45%	59.29%	44.18%	30.53%
LT-V (B) Agriculture- Others	-	-	-	-	-	-	-	-	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
LT VI Vehicle Charging	-	-	-	-	-	-	-	0.03	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
<b>Sub-total ( LT)</b>	<b>3,676.14</b>	<b>3,771.57</b>	<b>3,699.41</b>	<b>3,734.16</b>	<b>3,864.94</b>	<b>3,694.81</b>	<b>3,857.12</b>	<b>3,890.76</b>	<b>0.87%</b>	<b>2.62%</b>	<b>0.22%</b>	<b>1.03%</b>	<b>1.01%</b>	<b>0.81%</b>
<b>Total (HT+LT)</b>	<b>4,286.05</b>	<b>4,392.95</b>	<b>4,351.52</b>	<b>4,420.45</b>	<b>4,576.61</b>	<b>4,402.96</b>	<b>4,544.18</b>	<b>4,572.00</b>	<b>0.61%</b>	<b>1.90%</b>	<b>-0.03%</b>	<b>0.85%</b>	<b>0.99%</b>	<b>0.93%</b>



6.2.4 As can be seen from above table, CAGR results are abnormal which may not be suitable for forecasting purpose. Hence, BEST has considered growth rate considered by the Commission in the MYT Order which appears to be realistic for projection period. The Category wise growth rate considered for sales is given below:

**Table 223 : Category wise growth rate considered for FY 2023-24 & FY 2024-25, as submitted by BEST.**

Consumer Category	Growth Rate considered for FY 23-24 and FY 24-25
<b>HT Category</b>	
HT-1 Industrial	0.00%
HT-2 Commercial	0.00%
HT-3 Group Hsg	0.00%
HT-4 Railway Metro	0.00%
HT 5A Govt Sch & Hosp.	0.00%
HT 5B Public Ser. Oths	0.00%
HT 6 EV chg.	0.00%
<b>LT Category</b>	
LT-I (A) Residential (BPL)	0.00%
<u>LT - I(B) Residential</u>	
0 – 100 units	1.35%
101 – 300 units	1.35%
301 - 500 units	1.35%
> 501 units	1.35%
<u>LT - II (a) Commercial</u>	0.87%
LT - II (b) Commercial >20 & <=50 kW	0.87%
LT - II (c) Commercial >50	0.00%
LT - III (A) Industry (upto 20 kW)	0.00%
LT-III (b) Industrial	0.00%
LT - IV (A) Public Services - (Govt. Hosp. & Edu. Institutions)	0.00%
LT - IV (B) Public Services - Others	0.00%
LT-V (B) Agriculture- Others	0.00%
LT VI Vehicle Charging	25.00%

6.2.5 Based on the above assumptions, BEST has projected its sales using above growth rate on FY 2022-23 sales as given in table below:

**Table 224 : Category wise sales estimated for FY 2023-24 & FY 2024-25, as submitted by BEST (MU – HT in kVAh & LT in kWh)**

Consumer Category	FY 2023-24		FY 2024-25	
	MYT Order	Revised Projections	MYT Order	Revised Projections
<b>HT Category</b>				
HT-1 Industrial	156.41	190.39	156.18	190.39
HT-2 Commercial	306.74	208.45	320.49	208.45



Consumer Category	FY 2023-24		FY 2024-25	
	MYT Order	Revised Projections	MYT Order	Revised Projections
HT-3 Group Hsg	30.58	32.12	30.54	32.12
HT-4 Railway Metro	2.14	2.57	2.14	2.57
HT 5A Govt Sch & Hosp.	26.53	27.78	26.49	27.78
HT 5B Public Ser. Oths	196.26	186.01	195.97	186.01
HT 6 EV chg.	-	-	-	-
<b>Sub-total</b>	<b>718.66</b>	<b>647.33</b>	<b>731.81</b>	<b>647.33</b>
<b>LT Category</b>				
LT-I (A) Residential (BPL)	0.07	0.04	0.07	0.04
<u>LT - I(B) Residential</u>	-	-	-	-
0 – 100 units	789.08	759.84	798.67	770.09
101 – 300 units	729.79	730.83	738.66	740.70
301 - 500 units	235.07	240.83	237.91	244.08
> 501 units	402.51	400.66	407.41	406.07
<u>LT - II (a) Commercial</u>	941.70	833.68	948.41	840.93
LT - II (b) Commercial >20 & <=50 kW	210.69	172.24	210.39	173.74
LT - II (c) Commercial >50	369.24	358.23	368.70	358.23
LT - III (A) Industry (upto 20 kW)	43.14	105.74	43.08	105.74
LT-III (b) Industrial	90.12	79.81	89.99	79.81
LT - IV (A) Public Services - (Govt. Hosp. & Edu. Institutions)	57.03	61.40	57.45	61.40
LT - IV (B) Public Services - Others	183.68	178.82	183.43	178.82
LT-V (A) Agriculture- Pumpsets	-	-	-	-
LT-V (B) Agriculture- Others	-	0.05	-	0.05
LT VI Vehicle Charging	0.58	22.72	0.72	28.40
Debit/credit adjustment	-	-	-	-
<b>Sub-total</b>	<b>4,052.71</b>	<b>3,944.89</b>	<b>4,084.90</b>	<b>3,988.10</b>
<b>Total</b>	<b>4,771.37</b>	<b>4,592.22</b>	<b>4,816.71</b>	<b>4,635.43</b>

### *Commission's Analysis and Ruling*

6.2.6 The Commission notes that there has been reduction in sales for FY 2020-21 and FY 2021-22 due to Covid-19 pandemic. However, the Commission has observed that sales estimated and approved for FY 2022-23 in this Order are nearly equal to the sales for FY 2018-19. BEST has submitted that, the maximum demand in BEST area of supply has remained more or less constant during past few years.

6.2.7 BEST while estimating the sales for FY 2023-24 and FY 2024-25 has considered the growth projection as considered by the Commission in the MYT Order over the estimated sales of FY 2022-23. The Commission notes that there has been increase of ~10% in FY 2022-23 sales as compared to FY 2021-22. Further, the Commission has also worked out 7 year CAGR for

category wise sales considering the base sales for FY 2018-19.

- 6.2.8 The Commission observes that since sales of FY 2018-19 are almost equal to FY 2022-23 sales, the growth rate as per 7-year CAGR considering the base of FY 2018-19 needs to be considered. If 7-year CAGR is considered over base of FY 2022-23, it would not give correct projections considering the abnormal drop in sales for FY 2020-21 and FY 2021-22 due to Covid-19. The category-wise growth rate is as given below:

**Table 225 : Category wise growth rate for projection of Sales for FY 2023-24 and FY 2024-25**

<b>Tariff category</b>	<b>Growth Rate</b>
<b>HT Category</b>	
HT - I Industry	0.70%
HT - II Commercial	0.00%
HT - III Group Housing	0.00%
HT IV- Railways, Metro, Monorail	0.00%
HT V-(A)Public services Govt. Hospitals and Educational Institutions)	0.00%
HT V-(B) Public services Others)	0.00%
HT-VI Electrical vehicle	0.00%
<b>Sub-total (HT)</b>	
<b>LT Category</b>	
LT-I (A) Residential (BPL)	0.00%
LT - I(B) Residential	2.00%
LT - II (a) Commercial	0.00%
LT - II (b) Commercial - >20 & <=50 kW	0.00%
LT - II (c) Commercial - >50	0.00%
LT - III (A) Industry (upto 20 kW)	6.00%
LT-III (b) Industrial	0.00%
LT - IV (A) Public Services - (Govt. Hosp. & Edu. Institutions)	0.00%
LT - IV (B) Public Services - Others	5.00%
LT-V (B) Agriculture- Others	0.00%
LT VI Vehicle Charging	15.00%

- 6.2.9 The Commission observes that, if the sales are projected based on 7-year CAGR, the projected sales for various categories are much lower than pre-Covid sales of BEST in FY 2019-20. The Commission notes that there has been increase of ~10% in FY 2022-23 sales as compared to FY 2021-22. With

the impact of Covid-19 subsiding, there has been increasing trend in sales of BEST.

6.2.10 The Commission is of the view that since overall sales of FY 2018-19 and FY 2019-20 are almost equal to FY 2022-23 sales, it would be realistic approach to benchmark the category wise sales of the said years instead of considering the CAGR approach for BEST. Thus, Commission has analysed the sales for each category and projected the category-wise sales by benchmarking the same to the actual pre-Covid sales for FY 2019-20 and as approved by the Commission in the MYT Order.

6.2.11 Accordingly, the category wise sales approved by the Commission for FY 2023-24 and FY 2024-25 are given in the Table below:

**Table 226: Category-wise Energy Sales from FY 2023-24 to FY 2024-25, as approved by the Commission (MU)**

Consumer Category & Consumption Slab	FY 2023-24			FY 2024-25		
	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order
<b>HT Category</b>						
HT - I Industry	156.41	190.39	194.20	156.18	190.39	203.91
HT - II Commercial	306.74	208.45	245.97	320.49	208.45	290.25
HT - III Group Housing	30.58	32.12	32.12	30.54	32.12	32.12
HT IV- Railways, Metro, Monorail	2.14	2.57	2.57	2.14	2.57	2.57
HT V-(A)Public services Govt. Hospitals and Educational Institutions)	26.53	27.78	27.78	26.49	27.78	27.78
HT V-(B) Public services Others)	196.26	186.01	197.17	195.97	186.01	199.14
HT-VI Electrical vehicle	-	-	-	-	-	-
<b>Sub-total</b>	<b>718.66</b>	<b>647.33</b>	<b>699.82</b>	<b>731.81</b>	<b>647.33</b>	<b>755.77</b>
<b>LT Category</b>						
LT-I (A) Residential (BPL)	0.07	0.04	0.04	0.07	0.04	0.04
<u>LT - I(B) Residential</u>						
0 – 100 units	789.08	759.84	772.21	798.67	770.09	795.37
101 – 300 units	729.79	730.83	742.73	738.66	740.70	765.01
301 - 500 units	235.07	240.83	244.75	237.91	244.08	252.09
> 501 units	402.51	400.66	407.19	407.41	406.07	419.40
LT - II (a) Commercial	941.70	833.68	909.14	948.41	840.93	1,000.05

Consumer Category & Consumption Slab	FY 2023-24			FY 2024-25		
	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order
LT - II (b) Commercial - >20 & ≤50 kW	210.69	172.24	179.30	210.39	173.74	188.26
LT - II (c) Commercial - >50	369.24	358.23	365.40	368.70	358.23	372.71
LT - III (A) Industry (upto 20 kW)	43.14	105.74	112.08	43.08	105.74	118.81
LT-III (b) Industrial	90.12	79.81	83.80	89.99	79.81	87.99
LT - IV (A) Public Services - (Govt. Hosp. & Edu. Institutions)	57.03	61.40	61.40	57.45	61.40	61.40
LT - IV (B) Public Services - Others	183.68	178.82	187.76	183.43	178.82	197.15
LT-V (A) Agriculture- Pumpsets	-	-	-	-	-	-
LT-V (B) Agriculture- Others	-	0.05	0.05	-	0.05	0.05
LT VI Vehicle Charging	0.58	22.72	20.90	0.72	28.40	24.03
<b>Sub-total</b>	<b>4,052.71</b>	<b>3,944.89</b>	<b>4,086.73</b>	<b>4,084.90</b>	<b>3,988.10</b>	<b>4,283.37</b>
<b>Total</b>	<b>4,771.37</b>	<b>4,592.22</b>	<b>4,786.55</b>	<b>4,816.71</b>	<b>4,635.43</b>	<b>5,038.14</b>

\*-HT Sales in kVAH and LT in kWH

6.2.12 The Commission approves Energy Sales of 4,786.55 MU for FY 2023-24 and 5,038.14 MU for FY 2024-25 respectively.

### 6.3 Distribution Losses and Energy Balance

#### *BEST's Submission*

6.3.1 BEST submitted that it has been taking various initiatives such as continuous vigilance activities, raids, consumer awareness on theft and energy conservation, legal actions against theft incidences and faulty meter replacements. Through these initiatives BEST has been able to consistently maintain its distribution losses in the range of 4 % to 5% which are almost near to the technical minimum of the network. The present distribution losses are one of the lowest in the country. It is appreciable that reducing losses at higher loss levels are far easier than reducing losses at efficient levels. BEST's distribution losses are at most efficient levels and BEST has proposed to reduce it.

6.3.2 BEST has achieved a distribution loss of 4.63% for the FY 2021-22. BEST

has projected reduction in distribution loss for the remaining years of the control period by 0.1% each year vis-à-vis 4.63% achieved by BEST for FY 2021-22.

6.3.3 BEST submitted that the Intra-State Transmission (InSTS) loss of 3.18% has been considered while estimating the energy balance for FY 2023-24 & FY 2024-25 as approved by the Commission in MYT order.

6.3.4 Based on the target distribution loss proposed by BEST and Transmission loss of 3.18%, BEST has estimated the revised energy requirement for FY 2023-24 and FY 2024-25 is given in the table below:

**Table 227 : Revised Energy Balance for the FY 2023-24 and FY 2024-25, as submitted by BEST**

Particulars	Unit	FY 2023-24		FY 2024-25	
		MYT Order	Revised Projections	MYT Order	Revised Projections
Energy sales to consumers	MU's	4,771.37	4,579.60	4,816.71	4,622.81
Distribution Losses	MU's	208.14	212.28	210.12	209.23
Distribution Losses	%	4.18%	4.43%	4.18%	4.33%
Energy Input at Distribution Periphery	MU's	4,979.44	4,791.88	5,026.75	4,832.04
Intra State Transmission Losses	MU's	163.55	157.39	165.10	158.71
Intra State Transmission Losses	%	3.18%	3.18%	3.18%	3.18%
Total Power Purchase at G<math>\leftrightarrow</math>T Periphery	MU's	5,142.99	4,949.26	5,191.85	4,990.74

***Commission's Analysis and Ruling***

6.3.5 BEST has projected reduction in distribution loss for the remaining years of the control period by 0.1% each year vis-à-vis 4.63% achieved by BEST for FY 2021-22 and accordingly projected Distribution Loss of 4.43% and 4.33% for FY 2023-24 and FY 2024-25 respectively.

6.3.6 Though the Distribution Loss are slightly higher in FY 2021-22, BEST has achieved lower losses in FY 2020-21 then 4.18% approved by the Commission.

6.3.7 The Commission is of the view that there is scope for reduction of Distribution loss considering the replacement of electromechanical Meters and many such other measures. The Commission has approved capital expenditure schemes for replacement of such meters, development of substations, revamping of existing receiving substations, extension and improvement of distribution network, etc. the benefit of which would accrue to consumers. The Commission directs BEST to continue its efforts in bringing down the Distribution losses to the lowest possible levels and ensure that performance does not deteriorate beyond the levels already achieved in the past.

6.3.8 In MYT Order, the Commission has approved Distribution loss target of 4.18% for FY 2023-24 and FY 2024-25. The Commission while approving the Distribution Loss for FY 2022-23 in this Order has already held that to maintain consistency in its approach, the Commission has decided not to restate the loss trajectory as approved in the MYT Order.

6.3.9 In view of the above, the Commission for the purpose of the present approvals has retained the Distribution loss target at 4.18% for FY 2023-24 and FY 2024-25 as given in the Table below:

**Table 228: Distribution Loss Trajectory for FY 2023-24 and FY 2024-25, as approved by the Commission (MU)**

Particulars	FY 2023-24			FY 2024-25		
	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order
Distribution loss (%)	4.18%	4.43%	4.18%	4.18%	4.33%	4.18%

6.3.10 For the computation of Energy Balance, the Commission has considered the InSTS Loss of 3.18%, as approved in the InSTS order in Case No. 284 of 2022 vide dated 31 March, 2023. Accordingly, it has computed the Energy Balance for FY 2023-24 and FY 2024-25 as shown in the Table below:

**Table 229: Distribution Loss Trajectory for FY 2023-24 and FY 2024-25, as approved by the Commission (MU)**

Particulars	FY 2023-24			FY 2024-25		
	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order
Sales (MU)	4,771.37	4,579.60	4,772.81	4,816.71	4,622.81	5,023.20
Distribution loss (%)	4.18%	4.43%	4.18%	4.18%	4.33%	4.18%
Energy Requirement at T-D interface (MU)	4,979.52	4,791.88	4,981.02	5,026.83	4,832.04	5,242.33
Intra-state Transmission loss (%)	3.18%	3.18%	3.18%	3.18%	3.18%	3.18%
<b>Energy Requirement at G-T interface (MU)</b>	<b>5,143.07</b>	<b>4,949.26</b>	<b>5,144.61</b>	<b>5,191.94</b>	<b>4,990.74</b>	<b>5,414.52</b>

6.3.11 Accordingly, the Commission approves energy requirement at G<>T interface of 5,144.61 MU for FY 2023-24 and 5,414.52 MU for FY 2024-25, respectively.

## 6.4 Power Purchase Expenses

### *BEST's Submission*

6.4.1 BEST has estimated energy requirement for FY 2023-24 and FY 2024-25.

BEST submitted that, it has filed a Power Purchase Plan Petition before the Commission for approval on 20 December, 2022 (Case No. 240/MP/2022) for a period of seven years i.e., from FY 2023-24 to FY 2029-30. The power procurement plan was prepared as an optimal solution considering time block wise demand and tied up sources & other sources available in market. BEST has proposed the power procurement for FY 2023-24 and FY 2024-25 in line with its Power Procurement Plan.

6.4.2 BEST has submitted that, transmission constraints between MSETCL and Mumbai system is major hurdle for bringing Power from Outside Mumbai/ Maharashtra. However, STU in its letter has mentioned that 2856.87 MW additional capacity is required at CTU-STU interface to reduce power evacuation issues for Mumbai Licensees. Meanwhile, for power procurement of SECI projects, STU had issued conditional NOCs subject to completion of strengthening projects of CTU-STU network & availability of ATC margin with obligation to Indemnity Bond.

6.4.3 BEST submitted that majority of the schemes are expected to be commissioned before FY 2024-25 and thus BEST has presumed that power evacuation would be possible without any transmission constraints for FY 2024-25.

6.4.4 BEST has proposed to meet its power purchase requirement from various sources. Accordingly, the Power Purchase Expenses are estimated as follows:

- Power Purchase from Hydro Plant of TPC-G;
- Power Purchase from Manikaran Power Limited;
- Power Purchase from Sai Wardha;
- Purchase from GTAM/GDAM & Short Term Renewable energy sources;
- Transmission Charges, MSLDC charges and Standby charges.
- Others

### **TPC-G**

6.4.5 BEST undertaking has signed a Power Purchase Agreement with TPC-G for extension to its earlier PPAs dated 21 December, 2006, 5 February, 2010 and 26 March, 2018. BEST has signed this PPA in accordance with direction of the Commission in Case No. 249 of 2018.

6.4.6 **FY 2023-24:** Since, BEST is procuring power from TPC-G at higher rate than MPL, it has considered procurement of power from TPC-G for FY 2023-24 after procuring maximum power from MPL & M/s. Sai Wardha & power required for RPO compliance.

6.4.7 BEST has proposed to purchase power from TPC-G U-5, U-7 & U-8 as per optimal plan and cost considered is equal to cost proposed by TPC-G in its MTR Petition. Further, quantum of hydro power from TPC-G is restricted to MYT approved quantum and cost considered is equal to the one proposed by TPC-G in its MTR Petition.

6.4.8 **FY 2024-25:** BEST’s PPA for 679.69 MW with TPC-G is ending in March 2024. The Commission in its MYT Order had directed BEST to explore cheaper alternative sources for power procurement. The relevant extract of the said Order is as below:

*“6.4.7.8 The Commission observes that, in the past, BEST has preferred to enter into long-term arrangements for supply of power only with TPC-G rather than actively explore alternative sources that may be cheaper and through competitive bidding.*

*...  
Considering these concerns, BEST would have to approach the Commission well before the expiry of its PPA for its extension...”*

6.4.9 For FY 2024-25, BEST has proposed to renew PPA for Hydro plant only, subject to approval from the Commission and consent from TPC-G. Further, the fixed charges and variable charges considered for FY 2024-25 are same as projected by TPC-G in its MTR Petition.

6.4.10 In its Order in Case No. 163 of 2020, the Commission has directed TPC-G not to recover the component of Standby Charges in the balance instalments from the Distribution Licensees. Also, the amount to be refunded to AEML-D, BEST and TPC-D by TPC-G on account of component of Standby Charges already paid in the past instalments by them, along with the associated holding cost, Further, the Commission has mentioned that Distribution Licensee may claim the amount in the respective forthcoming Mid-Term Review (MTR) Petition.

6.4.11 BEST submitted that it has paid Rs. 29.17 Crore in 8 instalments towards Standby Charges in FY 2020-21. As per the Commission’s Order, BEST has calculated carrying cost on monthly basis for FY 2020-21 considering Interest Rate considered for computing IoWC. The details of the same are given below:

**Table 230 : Carrying Cost to be recovered from TPC-G on Standby Charges, as submitted by BEST (Rs. Crore)**

Particulars	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	FY21-22	FY22-23	FY23-24
Opening Balance	-	3.71	7.43	11.14	14.86	18.57	22.29	26.00	29.71	29.71	29.71	29.71	29.71	29.71	29.71
Addition	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	-	-	-	-	-	-	(29.71)
Closing	3.71	7.43	11.14	14.86	18.57	22.29	26.00	29.71	29.71	29.71	29.71	29.71	29.71	29.71	-
Average Balance	1.86	5.57	9.29	13.00	16.71	20.43	24.14	27.86	29.71	29.71	29.71	29.71	29.71	29.71	14.86
Interest Rate	9.01%	8.79%	8.58%	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%	9.55%	9.55%
<b>Total Carrying Cost</b>	<b>0.01</b>	<b>0.04</b>	<b>0.07</b>	<b>0.09</b>	<b>0.12</b>	<b>0.14</b>	<b>0.17</b>	<b>0.20</b>	<b>0.21</b>	<b>0.21</b>	<b>0.21</b>	<b>0.21</b>	<b>2.53</b>	<b>2.84</b>	<b>1.42</b>



6.4.12 BEST submitted that it has calculated total Carrying Cost of Rs. 8.47 Crore on the principal payment of Rs. 29.71 Crore totaling to Rs. 38.18 Crore. Accordingly, BEST is reducing the power purchase cost to the same extent from power procurement cost of TPC-G for FY 2023-24.

6.4.13 Following table summarizes the revised power purchase cost from TPC-G for FY 2023-24 and FY 2024-25

**Table 231 : Revised Estimated Variable and Fixed Cost of TPC-G for FY 2023-24 and FY 2024-25, as submitted by BEST**

Financial year	Net Generation to BEST	Variable Charge	Variable Cost	Total Fixed Cost	Standby Charges to be recovered along with Carrying Cost	Total Cost (Variable + Fixed)	Avg. Rate
	MU	Rs./kWh	Rs. Cr	Rs. Cr	Rs. Cr	Rs. Cr	Rs./kWh
FY 2023-24	2,661.00	5.00	1,330.06	451.71	(38.18)	1,743.59	6.55
FY 2024-25	743.00	1.74	129.53	106.38		235.91	3.18

**Manikaran Power Limited (MPL)**

6.4.14 BEST submitted that it has signed PPA with MPL to procure 100 MW power through i.e., Sai Wardha Power Generation Ltd and same was approved by the Commission in its Order in Case No 249 of 2018. The supply of power from MPL was to start from April 2019. However, the same was delayed and supply started from 1 March, 2020 and the said delay was allowed by the Commission in its Order in Case No 61 of 2021.

6.4.15 As per Clause 3.1 of PPA, supply of power was for period of 5 (Five) years commencing from the appointed date. Therefore, the PPA with MPL would expire in March 2024. However, PPA can be extended for one year as per the clause reproduced herein below:

*“3.1 The Procurement Contract*

*...  
Provided that at any time 3 (three) months, prior to the expiry of the Contract Period specified hereinabove, the Parties may with mutual agreement extend the Contract Period for such further period as they may determine, but not exceeding the lower of 25% (twenty-five per cent) of initial contract period or one year whichever is lower.”*

6.4.16 MPL has offered to extend the terms of the PPA up to 20 years post expiry of the current PPA up to 31 March 2045, by way of an amendment to be carried out to the existing PPA.

6.4.17 Accordingly, power procurement from MPL is considered for FY 2024-25 as per the existing PPA terms. BEST submitted that it will approach the

Commission for approval of extension of its PPA separately with detailed clauses to be amended and approach of BEST to extend the PPA.

- 6.4.18 BEST submitted that as per PPA with MPL, Base Fixed Charge & Base Energy Charge are fixed as Rs. 1.97/kWh. Further, fixed charge and energy charge will increase for every year as per the WPI. The relevant clause for fixed charge is reproduced below:

*“For determining the Fixed Charge due and payable to the Supplier, the Base Fixed Charge shall be revised annually to reflect 20%(twenty per cent) of the variation in WPI occurring between January 31 immediately preceding the Bid Date and January 31 immediately preceding the Accounting Year for which such revision is under taken .....*”

- 6.4.19 Similarly, for variable charge, the escalation of the base variable charge will be according to Clause 12.3.2 is given as follows:

*“The Parties agree that the generating cost component of Base Variable Charge specified in Clause 12.2 shall be increased for every Accounting Year following the Base Year so as to reflect 50%(fifty per cent) of the variation in WPI occurring between January 31 immediately preceding the Base Year and the January 31 immediately preceding the Accounting Year for which such revision is undertaken.”*

- 6.4.20 Therefore, to project the rate of MPL for FY 2023-24 and FY 2024-25, BEST first projected WPI for 31 March, 2023 and 31 March, 2024. BEST has used the 5-year average of WPI i.e., 4.63% as an escalation rate. The power projection rate is as follows:

**Table 232 : Manikaran Rates for FY 2023-24 and FY 2024-25, as submitted by BEST (Rs./kWh)**

Particulars	Fixed Charges	Variable Charges	Total Tariff
WPI 31.01.18	116.00	116.00	
WPI 31.01.23	150.46	150.46	
	29.71%	29.71%	
Variation Rate applies	20%	50%	
% of variation	5.94%	14.85%	
Base Tariff	1.97	1.97	
<b>Index tariff for FY 23-24</b>	<b>2.09</b>	<b>2.26</b>	<b>4.35</b>
WPI 31.01.18	116.00	116.00	
WPI 31.01.24	157.43	157.43	
	35.72%	35.72%	
Variation Rate applies	20%	50%	
% of variation	7.14%	17.86%	

Particulars	Fixed Charges	Variable Charges	Total Tariff
Base Tariff	1.97	1.97	
<b>Index tariff for FY 24-25</b>	<b>2.11</b>	<b>2.32</b>	<b>4.43</b>

6.4.21 BEST has considered same quantum as per PPA. The details of power purchase cost from MPL is given below:

**Table 233 : Revised Estimated Variable & Fixed Cost of Manikaran for FY 2023-24 and FY 2024-25, as submitted by BEST**

Year	Particulars	Energy Quantum	Energy Charges	Fixed charges	Energy Charges	Total Charges	Avg. Rate
		MU	Rs./kWh	Rs.Cr	Rs.Cr	Rs.Cr	Rs./kWh
FY 2023-24	Manikaran Power Ltd.	744.60	2.26	155.40	168.48	323.88	4.35
FY 2024-25	Manikaran Power Ltd.	744.60	2.32	157.16	172.88	330.05	4.43

**Sai Wardha Power Generation Limited**

6.4.22 BEST submitted that during a meeting held on 12 September, 2022, Manikaran Power/ Sai Wardha Power informed BEST about the revival of its 4th generation unit at Warora and offered to provide an additional 100 MW power to BEST over and above the existing 100 MW power, on the same terms and conditions as that of the existing PPA.

6.4.23 BEST further submitted that, it is analysing the offer of Sai Wardha with respect to market rates. BEST will approach the Commission for approval for procurement of power from M/s. Sai Wardha. However, due to competitive rates, offered by M/s. Sai Wardha, BEST has considered the power in FY 2023-24 & FY 2024-25, subject to approval from the Commission in Power Purchase Plan petition or separate as the case may be. Further, the power from M/s. Sai Wardha is expected to flow from January 2024. Hence, for FY 2023-24, power procurement from Sai Wardha is considered for 3 months while for FY 2024-25 power procurement equal to approved quantum of M/s. Manikaran is considered.

**Table 234 : Revised Estimated Variable & Fixed Cost of Sai Wardha for FY 2023-24 and FY 2024-25, as submitted by BEST**

Year	Particulars	Energy Quantum	Energy Charges	Fixed charges	Energy Charges	Total Charges	Avg. Rate
		MU	Rs./kWh	Rs.Cr	Rs.Cr	Rs.Cr	Rs./kWh
FY 2023-24	Sai Wardha	185.64	2.26	38.74	42.00	80.75	4.35
FY 2024-25	Sai Wardha	744.60	2.32	157.16	172.88	330.05	4.43

### **Renewable Energy Sources**

- 6.4.24 BEST has signed a long term PPA with M/s. Walwhan Solar Maharashtra (Erstwhile Welspun) to procure 31.5 MU of Solar power annually at tariff of Rs. 8.56 kWh. Hence, BEST has considered quantum & cost for FY 2023-24 & FY 2024-25 as per PPA.
- 6.4.25 BEST submitted that SECI has informed about the delay in SCOD to December 2024 for 400 MW PPA due to transmission constraints which are uncontrollable in nature. Hence, power from the said PPA is considered only for 3 months in FY 2024-25.
- 6.4.26 To meet RPO target, BEST has considered around 425 MU from GTAM/GDAM/Short term in FY 2023-24 and around 638 MU in FY 2024-25 on best effort basis. BEST is in the process of conducting the bidding process (Bid Process No. 1) for procurement of 325 MW Solar power and 475 MW Wind power on short term basis for April 2023 to March 2024 and the same bidding process (Bid Process No. 2) will be carried out for FY 2024-25 too. BEST will approach the Commission for the approval of the same at appropriate stage. The rate assumed for procurement of power from GTAM/GDAM/Short Term for FY 2023-24 and FY 2024-25 is actual purchase rate of H1 of FY 2022-23.
- 6.4.27 In view of the separate bidding process (Bid Process No. 3) being undertaken for procurement of power from around 275 MW solar power project for short/medium term for FY 2024-25, BEST proposed to procure approx. 493 MU from the said project. The cost assumed for solar power is 10% higher than approved rate of 234 MW PPA signed with SECI. BEST will approach the Commission for the approval of the same.

**Table 235 : Procurement of Power from Renewable Sources for FY 2023-24 and FY 2024-25, as submitted by BEST**

Sources	MU	Rate (Rs. kWh)	Cost (Rs. Cr)
<b>FY 2023-24</b>			
Walwhan Solar MH Ltd	31.50	8.56	26.97
RPS-Solar	202.85	4.32	87.63
RPS-Non-Solar	222.15	4.32	95.97
<b>Total</b>	<b>456.51</b>	<b>4.61</b>	<b>210.57</b>
<b>FY 2024-25</b>			
Walwhan Solar MH Ltd	31.50	8.56	26.96
RPS-Solar	304.50	4.32	131.54
RPS-Non-Solar	333.50	4.32	144.07
SECI Hybrid - Solar (Tranche III)	124.00	2.48	30.75
SECI Hybrid - Wind (Tranche III)	47.00	2.48	11.66
Solar New	493.00	2.98	146.96
<b>Total</b>	<b>1,333.50</b>	<b>3.69</b>	<b>491.95</b>

6.4.28 Further, BEST submitted that, as discussed above, BEST will try to fulfill its RPO target cumulatively till FY 2024-25 through procurement of additional power from power exchange/ short term bidding, etc. BEST submitted that the status of RPO compliance as per the above-mentioned efforts are provided in below table:

**Table 236 : RPO Compliance for FY 2023-24 and FY 2024-25, as submitted by BEST (MU)**

Particulars	MoU	Past Period deficit	FY 2022-23	FY 2023-24	FY 2024-25
<b>RPO Target</b>					
Solar (%)	%	0	8.00%	10.50%	13.50%
Non -Solar	%	0	11.50%	11.50%	11.50%
<b>MU's</b>	<b>0</b>	0	0	0	0
Solar	MU	106.13	333.03	441.06	572.54
Non -Solar	MU	256.99	478.73	483.07	487.72
<b>Less: Actual RPO complied</b>					
Solar	MU	0	145.33	234.35	953.00
Non -Solar	MU	0	20.56	222.15	380.50
<b>Balance RPO</b>					
Solar	MU	106.13	187.70	206.71	-380.46
Non -Solar	MU	256.99	458.17	260.92	107.22
<b>Balance Cumulative RPO</b>					
Solar	MU	106.13	293.83	500.54	120.08
Non -Solar	MU	256.99	715.16	976.08	1,083.30
<b>Total</b>	<b>MU</b>	<b>363.13</b>	<b>1,009.00</b>	<b>1,476.62</b>	<b>1,203.38</b>

6.4.29 BEST submitted that it has signed PPA with SECI Hybrid and SECI Solar to meet the RPO targets. As per the PPA, it was planned to avail power from these sources from FY 2023-24 and FY 2024-25 respectively. But due to delay in SCOD of transmission system to evacuate power from these sources, BEST will be able to get power from these sources from December 2024 onwards from SECI Hybrid and from FY 2025-26 onwards from SECI Solar. In this situation, BEST submitted that the delay in SCOD of transmission system is uncontrollable and it would be difficult for BEST to meet RPO targets as planned earlier. At the same time, it will be difficult to source power from other RE with long term PPA due to time required for bidding process and availing actual power.

6.4.30 Accordingly, BEST submitted that it would procure power from GDAM to the extent possible and meet the RPO target from Walwhan Solar, GDAM and

rooftop solar till FY 2024-25 to the possible extent. BEST is also procuring power from TPC Hydro since past years which is also green power. Further, the Commission is yet to specify the RPO targets for next control period. BEST will decide appropriate strategy in compliance with the regulatory framework. Further, BEST will explore the feasibility of allowing tender participation for RTC tender which would include RE sources (Wind & Solar). Thus, BEST requested the Commission to allow shortfall of RPO compliance of 4th Control Period to carry forward to the next control period.

### **Short Term Purchase**

- 6.4.31 BEST submitted that, it is in the process of short-term bidding for procurement of 100 MW RTC power from February 2023 to January 2024. Hence, the power for 10 months from the new RTC is considered for FY 2023-24. The rate is considered same as discovered H1 rate of FY 2022-23 of bilateral procurement. BEST will approach the Commission for its approval at appropriate stage.
- 6.4.32 Further, BEST proposed to buy around 375 MU from DAM market. The rate assumed for the same is equal to average of DAM rate observed from October to December 2022.
- 6.4.33 BEST submitted that since PPA of TPC-G is expiring in March 2024, it needs to plan for alternate source / any suitable arrangement. As mentioned earlier, BEST had filed a separate petition for Power Procurement Plan in line with the MYT Regulations 2019. Accordingly, BEST has assumed that alternate source / any suitable arrangement will be done in due course of time as per the Commission's approval on power procurement plan petition.
- 6.4.34 With regards to cost for such alternate source, BEST submitted that power purchase cost of Manikaran / Sai Wardha is in the range of Rs. 4.25-4.50 per unit and assuming ~5%-7% escalation on this cost it would work out to Rs. 4.75 per unit. BEST would abide by the directions of the Commission in power procurement plan petition and submitted that the projected alternate source (New RTC) cost be allowed at Rs.4.75 per unit in MTR Petition as an interim measure.

### **Other Charges**

- 6.4.35 BEST submitted that it has made O/C provision of Past Period Pool Imbalance cost in FY 2020-21 & FY 2021-22 of Rs. 248.66 Crore and Rs. 93.85 Crore respectively. The status of FBSM bills as under

**Table 237 : Status of FBSM Bills, as submitted by BEST (Rs. Crore)**

Financial Year	Total Payable	Total Receivable	Net Payable	O/C Provisions made	To be included in ARR
2011-12	5.44	21.22			
2012-13	5.75	21.91			
2013-14	-	4.39			
2014-15	-	1.68			
2015-16	-	6.63			
2016-17	-	3.44			
2017-18	30.34	30.91			
2018-19	230.01	5.64			
2019-20	229.82	-			
2020-21	19.84	30.29		248.66	
2021-22	17.86	8.46		93.85	
<b>Total</b>	<b>539.06</b>	<b>134.58</b>	<b>404.48</b>	<b>342.51</b>	<b>61.97</b>

*Note: Status including bills under in stay*

6.4.36 Hence, after deducting the amount of O/C Provisions, BEST has claimed remaining Rs. 61.97 Crore in FY 2023-24.

**Transmission Charges, MSLDC Charges and Standby Charges**

6.4.37 BEST has considered the intra-state Transmission Charges & MSLDC Charges as per the approved charges by the Commission in the Order in Case No. 327 of 2019 and in Case No. 291 of 2019 respectively and are summarized in the below table:

**Table 238 : Revised Transmission and MSLDC Charges for FY 2023-24 and FY 2024-25 (Rs. Crore)**

Particulars	Ensuing Years			
	FY 2023-24		FY 2024-25	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Intra-State Transmission Charges	254.91	254.91	250.31	250.31
MSLDC Charges	1.35	1.35	1.36	1.36

6.4.38 BEST submitted that the above charges would be subject to revision or as may be approved in their respective MTR Orders.

6.4.39 The revised summary of power purchase expense for FY 2023-24 and FY 2024-25 is as shown in the table below.

**Table 239 : Summary of Power Purchase Expenses for FY 2023-24, as submitted by BEST (Rs. Crore)**

Particulars	MYT Order			MTR Petition		
	Quantum (MU)	Cost (Rs. Cr)	Rate (Rs./kWh)	Quantum (MU)	Cost (Rs. Cr)	Rate (Rs./kWh)
<b>Long term / Medium term Sources</b>						
TPC-G	3,443.90	1,669.82	4.85	2,661.00	1,743.59	6.55
Walwhan Solar MH Ltd	31.50	26.96	8.56	31.50	26.97	8.56
Manikaran Power Limited	744.60	335.24	4.50	744.60	323.88	4.35
Sai Wardha				185.64	80.75	4.35
<b>Short term Sources</b>						
Solar Energy	417.12	120.96	2.90	202.85	87.63	4.32
Non-Solar Energy	505.87	145.19	2.87	222.15	95.97	4.32
New Contract RTC/Bilateral				622.20	352.22	5.66
DAM				279.31	128.14	4.59
Stand By Charges		97.66			97.66	
Past Period Pool Imbalance					61.97	
Intra State Transmission Charges		254.91			254.91	
MSLDC Charges		1.35			1.35	
<b>Total</b>	<b>5,142.99</b>	<b>2,652.09</b>	<b>5.16</b>	<b>4,949.26</b>	<b>3,255.03</b>	<b>6.58</b>

**Table 240: Summary of Power Purchase Expenses for FY 2024-25, as submitted by BEST (Rs. Crore)**

Particulars	MYT Order			MTR Petition		
	Quantum (MU)	Cost (Rs. Cr)	Rate (Rs./kWh)	Quantum (MU)	Cost (Rs. Cr)	Rate (Rs./kWh)
<b>Long term / Medium term Sources</b>						
TPC-G	3,355.21	1,676.14	5.00	743.00	235.91	3.18
Walwhan Solar MH Ltd	31.50	26.96	8.56	31.50	26.96	8.56
Manikaran Power Limited	744.60	338.45	4.55	744.60	330.05	4.43
Sai Wardha				744.60	330.05	4.43
<b>Short term Sources</b>						
Solar Energy	549.05	159.23	2.90	304.50	131.54	4.32
Non-Solar Energy	511.49	146.80	2.87	333.50	144.07	4.32
SECI Hybrid - Solar (Tranche III)				124.00	30.75	2.48
SECI Hybrid - Wind (Tranche III)				47.00	11.66	2.48
Solar New				493.00	146.96	2.98
New RTC				786.15	373.42	4.75
DAM/( Short Term sources				638.90	293.10	4.59
Stand By Charges		96.79			96.79	



Particulars	MYT Order			MTR Petition		
	Quantum (MU)	Cost (Rs. Cr)	Rate (Rs./kWh)	Quantum (MU)	Cost (Rs. Cr)	Rate (Rs./kWh)
Intra State Transmission Charges		250.31			250.31	
MSLDC Charges		1.36			1.36	
<b>Total</b>	<b>5,191.85</b>	<b>2,696.04</b>	<b>5.19</b>	<b>4,990.74</b>	<b>2,402.93</b>	<b>4.81</b>

6.4.40 BEST requested the Commission to approve the Power purchase cost as shown in above table for FY 2023-24 and FY 2024-25.

### **Transmission Constraint & Alternate Scenario**

6.4.41 BEST submitted that, if the transmission constraints remain exist in FY 2024-25, then after procuring power from long-term & medium term PPA, BEST will have to resort to procure power from embedded generation. Hence, power procurement from TPC-G is considered based on its costs and technical minimum requirement. BEST has considered maximum possible units from TPC-G hydro followed by technical minimum unit as per BEST's share of Unit 8 & Unit 5. Further, the balance quantum is considered from TPC-G Unit 7 which is the cheapest Thermal source.

6.4.42 The summary of Power procurement in alternative scenario is given below:

**Table 241 : Allocation of Available Transfer Capability**

Sources	Power Purchase (MU)	Rate	Power Purchase Cost (Rs. Crore)
Walwhan	31.50	8.56	26.96
Manikaran	744.60	4.43	330.05
Sai Wardha	744.60	4.43	330.05
TPC-G Unit No-5	1,159.00	5.13	594.41
TPC-G Unit No-7_gas_APM	955.04	4.73	452.00
TPC-G Unit No-8	442.00	5.04	222.79
TPC Hydro	743.00	3.18	235.91
SECI Hybrid - Solar (Trench III)	124.00	2.48	30.75
SECI Hybrid - Wind (Trench III)	47.00	2.48	11.66
<b>Total</b>	<b>4,990.74</b>	<b>4.48</b>	<b>2,234.58</b>

6.4.43 BEST submitted that, due to transmission constraints, BEST will have to bear additional cost of Rs. 180 Crore. Hence, BEST requested the Commission to direct STU to develop the required transmission infrastructure at the earliest, so that additional cost burden is not passed onto consumers.

### ***Commission's Analysis and Ruling***

6.4.44 The Commission notes that Power Purchase plan for FY 2023-24 and FY

2024-25 proposed by BEST is without considering the transmission constraints within Mumbai. The Commission also observes that BEST has also proposed power purchase from sources which are not yet approved by the Commission with a presumption that it will be approved in future. The Commission is of the view that such an approach adopted by BEST shows imprudent power purchase planning. Further, BEST has belatedly, after filing of MTR Petition, filed Case No 240 of 2022 seeking approval of Power Purchase Plan for a period of seven years i.e., from FY 2023-24 to FY 2029-30. The Commission in its Order dated 15 March, 2023 in Case No 240 of 2022 has ruled as follows:

*“16.8 In this regard, the Commission notes that as per corrected submission filed by STU, existing ATC of Mumbai Tie-lines is 2522 MW which has been reduced to 1905 MW in view of contingencies being faced at 400 kV line. But even if 400 kV contingency is not considered then also existing ATC of Mumbai Tie-line is limited to 2522 MW which is not sufficient to meet Mumbai Demand (@3851 MW achieved on 28 April 2022) without support of embedded generation. As submitted by BEST on such date of Maximum demand Mumbai tie-line loading was 2260 MW and embedded generation was 1591 MW. Even if on that day tie-lines was loaded to their full ATC i.e. 2522 MW then also 1329 MW embedded generation would have required. Therefore, in existing scenario, embedded generation is required for meeting electricity demand of Mumbai Consumers.*

*16.9 BEST has also pointed out that as per various scheme proposed for strengthening of transmission system, ATC of Mumbai Tie line will be increased upto 4415 MW in FY 2024-25 and hence sufficient capacity would be available for bringing cheaper power from outside. Although, STU and the MSLDC have pointed out such planned capacity addition in its submission but they have also cautioned that in case such schemes are delayed on account of RoW issues, forest clearance etc then desired transmission capacity addition would not be achieved. Hence, they have suggested that instead of removing embedded generation in one stroke it should be planned along with transmission capacity addition. The Commission notes that Mumbai Discoms' PPAs with embedded generation are valid till FY 2023-24. As per the planned scheme, Mumbai transmission capacity is likely to increase by 693 MW in FY 2023-24 and 1200 MW in FY 2024-25 to achieve cumulative transfer capacity of 4415 MW. Considering importance of such transmission schemes for reliable supply to Mumbai, these schemes are being monitored at various level including Government of Maharashtra level. In spite of the efforts, most of the transmission projects get delayed and hence the possibility of delay in commissioning of these considered scheme cannot be ruled out completely. Hence it would be prudent to wait till commissioning of these transmission schemes before phasing out embedded generation. Hence, the Commission is of the opinion that at least upto FY 2024-25, embedded generation*

*needs to be continued.*

- 16.10 *The Commission looked at the possibility of partial/phased reduction in embedded generation capacity. However, STU and MSLDC in its submission has also highlighted that non availability of embedded generation in Mumbai would create low voltage issue which will limit power transfer capability of Mumbai Tie-lines. Therefore, embedded generation is required for MSLDC for controlling grid voltages. In case some of the capacity of the embedded generation is not contracted then such capacity remains out of reach of SLDC as SLDC can give instruction to generating unit only if it has valid PPA with any buyer. Therefore, when system operator i.e. MSLDC based on its expertise as a system operator backed up by the study is recommending continuation of embedded generation for safe, secure and reliable system operation, the Commission cannot instruct against the same at least till the envisaged transmission capacity addition is achieved.*
- 16.11 *In view of above, considering issue of transmission constraint, BEST needs to extend its existing PPA with TPC-G for FY 2024-25 i.e. till March 2025. The Commission notes that Government of Maharashtra is also concerned about the supply to the Mumbai city and it has also issued direction under section 108 of the EA, 2003 to this Commission to extend PPA with embedded generation at least for 10 years once Distribution Licensee approaches for the same. The Commission has taken note of the concerns of the Government of Maharashtra and has conveyed to Government that the Commission would take appropriate and necessary steps with regards to extension of the existing PPA so as to ensure reliable and secure power supply to Mumbai. Through this present Order, the Commission is directing the extension of the existing PPAs only upto the end of this control period i.e 2024-25 (one year extension) because once transmission capacity addition projects are commissioned, Mumbai Distribution Licensee shall be free to explore cheaper alternative of power supply. This is necessitated since the consumers of the Mumbai cannot be exposed to the possibility of unsecured, unreliable and vulnerability to curtailment of power.*
- 16.12 *The Commission also notes that TPC-G's all embedded generation units are under Section 62 of the Electricity Act, 2003 and its ARR and tariff under MERC MYT Regulations 2019 has been determined till 4th Control Period i.e. till FY 2024-25. Hence, TPC-G would not have any issue in extending the PPA till March 2025.*
- 16.13 *In view of above, the Commission directs BEST to extend its existing PPA (Thermal + Hydro) with TPC-G till March 2025. Further, six months prior to end of such extended PPA, BEST may approach the Commission for future power procurement. At that time, based on the augmented transmission capacity, BEST may propose discontinuation of PPA with TPC-G in appropriate phases. STU and SLDC shall submit updated load flow studies at that point of time based on new element added in the system and increased*

*transmission capacity.*

.....

16.15 *The Commission also notes that although BEST in its Petition has proposed extension of PPA with Manikaran Power Ltd and entering into additional 100 MW PPA with Sai Wardha on same terms and condition, during the hearing in present matter, BEST has clearly stated that they are not pressing for the same and if required would approach separately. During pendency of present Petition, BEST has already initiated bidding process under Section 63 of the Electricity Act 2003 for procurement of 200 MW power on long term basis. In this regard, the Commission notes that although the Commission has directed for extension of existing PPA with TPC-G, in the past TPC-G's thermal units have not been used upto full capacity. Beneficiaries of TPC-G i.e. BEST and TPCD tried to procure cheaper power under short-term contract to replace costly generation of TPC-G thermal sources. Such short-term power is being allowed without any curtailment. If BEST is able to discover cheaper tariff in its ongoing long term bidding process, then such power can replace BEST's existing short-term sources. Although there would be issue of granting Long Term Access on account of transmission constraint, with conditional NoC from STU said power can flow under short term Open Access, with the remote possibility of curtailment due to system constraints. Hence, although the Commission has directed BEST to extend PPA with TPC-G for a year, it should continue its bidding process for long term power procurement. At the time of tariff adoption, BEST in its Petition shall factor in possible financial and the power availability impact due to transmission constraint and its implication on net power purchase cost of BEST."*

Thus, in view of transmission constraints, the Commission has directed BEST to extend the existing PPA with TPC-G for one year i.e., upto March 2025. The Commission has also allowed BEST to continue its efforts to contract cheaper power through competitive bidding process and scheduling it through Short term Open Access if permissible within available transmission capacity. Accordingly, it needs to be considered and factored in that the capacity of embedded generation (in present case TPC-G) needs to be used as base capacity for day ahead schedule for avoiding transmission constraint issues and only thereafter power from other sources can be considered for optimization of the power purchase cost. However, in case the demand for particular time blocks/days reduces, optimization can be resorted to that extent.

6.4.45 The Commission has thus approved the power purchase of BEST for FY 2023-24 and FY 2024-25 after taking into consideration the direction given by the Commission in its Order in Case No 240 of 2022.

### **TPC-G**

6.4.46 The Commission has considered the entire quantum of 679.69 MW from TPC-

G for FY 2023-24 and FY 2024-25. For working out the power purchase cost, the Commission has run Merit Order to despatch cheapest power from available sources on annual basis. The Commission has considered renewable power and hydro power as must run sources. BEST sources power from TPC-G and MPL through medium term contract and the balance power, if required to meet the demand, is assumed to be purchased from short-term bilateral sources or power exchange. For FY 2023-24 to FY 2024-25, RE Energy is assumed to be available and hence RE Energy (must-run), TPC-G Hydro (must-run) and MPL are getting fully dispatched. Out of three units of TPC-G (Unit5, Unit-7 and Unit-8), Unit-5 which has higher variable cost will not be getting fully dispatched. Accordingly, the generation from TPC-G and associated cost are approved by the Commission. However, in case of day to day operations and in Day Ahead schedule, the generation from Unit 5 needs to be considered to the extent required for addressing issue of transmission constraints.

- 6.4.47 The Commission notes that BEST has purchased around 3000 – 3300 MU from TPC-G during past 2 years. The Commission in this Order has also maintained the same quantum of around 3200 MU to be purchased from TPC-G for FY 2023-24 and FY 2024-25 considering the transmission constraints as mentioned above.
- 6.4.48 Considering the limited number of sources of power, the merit order has been run on an annual basis and may not correctly represent real time requirement of BEST. Based on the real time demand supply scenario, it is possible that generation from TPC-G may get despatch for higher or lower quantum which will be taken care at the time of truing-up, subject to prudence check.
- 6.4.49 Accordingly, the Commission approves the cost of power purchase from TPC-G of Rs. 2,293.36 Crore for FY 2023-24 and Rs. 2,300.83 Crore for FY 2024-25.
- 6.4.50 In addition to the above, the Commission also approves impact of past period truing-up of Rs (200.50) Crore to be recovered in FY 2023-24 and refund of Standby Charges of Rs 36.64 Crore as approved in TPC-G's MTR Order in Case No. 221 of 2022.

#### **Manikaran Power Limited (MPL)**

- 6.4.51 The Commission notes that BEST has proposed to extend the PPA for 20 years upto 2045. However, the Commission has not received any Petition for approval of the said extension. However, it is observed that as per clause 3.1 of PPA, BEST can extend the PPA for 1 year. BEST has also proposed to extend on same terms and conditions. Accordingly, the Commission has considered extension of PPA for 1 year only i.e., up to March 2025.

- 6.4.52 The Commission has simulated Merit Order run to despatch cheapest power from the available sources of power after considering renewable power and hydro power as must run. Due to lower variable cost of MPL, it is getting fully despatched (85% PLF) during the said period. Accordingly, generation from MPL and associated cost are approved by the Commission.
- 6.4.53 BEST has estimated fixed and variable charges with escalation factor of 4.63% computed based on WPI for the purpose of estimating the cost of power procurement in accordance with the terms of the PPA. The Commission approves fixed charges and variable charges considered by BEST for working out power purchase cost from MPL. The Commission directs BEST to ensure that the conditions of escalation be scrutinised as per the PPA.
- 6.4.54 Accordingly, the Commission approves the cost of power purchase from MPL of Rs. 324.76 Crore for FY 2023-24 and Rs. 330.05 Crore for FY 2024-25.

#### **Sai Wardha Power Generation Limited**

- 6.4.55 The Commission has not received any Petition in respect of power purchase proposed from M/s. Sai Wardha Power Generation Limited nor the same has been approved by the Commission as on date of this Order. Accordingly, the Commission has not considered any purchase from M/s. Sai Wardha Power Generation Limited.

#### **Renewable Energy Sources**

- 6.4.56 The Commission has considered the RPO targets for FY 2023-24 and FY 2024-25 as specified in the RPO Regulations, 2019 while approving RE purchase for the said period. The Commission has worked out RPO requirement excluding estimated power procurement from TPC-G Hydro in line with Regulation 10.2 of the RPO Regulations, 2019.
- 6.4.57 The Commission has considered the solar purchase from M/s Walwhan Solar Energy Maharashtra at the rate of Rs. 8.56/kWh as BEST has entered into a long term PPA to procure 31.5 MU of solar power annually.
- 6.4.58 The power from 400 MW PPA signed with SECI for Hybrid Wind/Solar power which was scheduled to be operational from February 2023 has been delayed to December 2024 due to transmission constraints. Accordingly, the Commission has also considered power from the said PPA from January 2025 to March 2025 only.
- 6.4.59 The Commission notes that BEST has proposed to purchase RE power (Solar and Non-Solar) to meet RPO from Power Exchange (GTAM/GDAM) and bilaterally through short term competitive bidding process. The Commission

further notes that BEST has to resort to such short-term purchase due to delay in availability of power from 400 MW PPA signed with SECI. The power from the said PPA would have been available at Rs 2.48/kWh. However, considering the fact the said power is not available, the Commission has considered that RE power will be procured from GDAM/GTAM or through competitive bidding process for FY 2023-24 and FY 2024-25. The Commission has considered the quantum of RE purchase such that BEST meets is standalone RPO for the FY 2023-24 and FY 2024-25. The Commission in the earlier section of the Order has already allowed BEST to carry forward the RPO. The status of RPO compliance as on the end of FY 2023-24 and FY 2024-25 is provided as below:

**Table 242: RPO Compliance for FY 2023-24 and FY 2024-25 (MU)**

RPO Targets & Achievement	Units	FY 2023-24	FY 2024-25
Total Energy Requirement	MU	5,144.61	5,414.52
Less: Hydro	MU	744.49	751.59
Net Energy Requirement	MU	4,400.12	4,662.92
Solar RPO target	%	10.50%	13.50%
Solar RPO target	MU	462.01	629.49
Solar RPO Achievement	MU	462.01	685.76
Op. Balance of Solar RPO	MU	292.67	292.67
Solar RPO Shortfall/(Surplus) during the year	MU	-	(56.26)
<b>Cl. Balance of Solar RPO</b>	<b>MU</b>	<b>292.67</b>	<b>236.41</b>
Non-Solar RPO target	%	11.50%	11.50%
Non-Solar RPO target	MU	506.01	536.24
Non-Solar RPO Achievement	MU	506.01	536.24
Op. Balance of Non-Solar RPO	MU	713.51	713.51
Non-Solar RPO Shortfall/(Surplus) during the year	MU	-	-
<b>Cl. Balance of Non-Solar RPO</b>	<b>MU</b>	<b>713.51</b>	<b>713.51</b>
<b>Total Shortfall allowed to be carry forward</b>	<b>MU</b>	<b>1,006.18</b>	<b>949.92</b>

6.4.60 As specified in the above Order, the Commission has allowed the BEST to carry forward the RPO shortfall upto FY 2022-23 to FY 2024-25. BEST shall make efforts and endeavor to meet the cumulative RPO up to FY 2024-25 in cost effective manner. The Commission in this Order has not considered any cost towards meeting the shortfall upto FY 2023-24. The Cost incurred by BEST to meet RPO to meet the past period shortfall may be claimed by BEST in FAC. If there is any shortfall at the end of Control Period, BEST may

approach the Commission with appropriate justification during the next tariff Petition.

- 6.4.61 The Commission has considered the recent rates discovered on GDAM Market on IEX which are reflective of present market rates for RE purchase approved in this Order. Accordingly, the Commission has considered the average rate of July 22 to December 22 i.e., Rs 4.90/kWh discovered on IEX – GDAM market for both the years.
- 6.4.62 **Accordingly, the Commission approves the cost of power purchase from RE sources (both solar as well as non-Solar) of Rs. 485.89 Crore for FY 2023-24 and Rs. 546.59 Crore for FY 2024-25.**

### **Short Term Purchase**

- 6.4.63 The Commission, after taking into account the purchase from TPC-G, MPL and RE purchase, the Commission has considered the remaining quantum of power purchase from short term sources at the average rate of Rs. 5.13/kWh for FY 2023-24 and FY 2024-25. The Commission has considered the said rate based on the average landed rate of IEX for 3 years from FY 2020-21 to FY 2022-23 (upto February 2023). However, it has been observed that BEST has filed petition for approval for tariff discovered through competitive bidding process undertaken by BEST for procurement of short term bilateral power purchase for the period April 2023 to March 2024. The Commission vide its Order in Case No. 37 of 2023 has approved short term bilateral power purchase of 199.74 MUs quantum for the period from April'2023 to March'2024 at average tariff of Rs 7.43/kWh discovered through competitive bidding process on DEEP portal. Also, as per Order dated 15 March, 2023 in Case No 240 of 2022, due to transmission constraint, the Commission has considered the quantum of power from TPC-G based on the past performance and has also directed to fulfil the RPO shortfall within FY 2024-25. Considering the quantum from TPC-G and Renewable power, the balance quantum to be procured from short term sources estimated is lower than the approved quantum of power procurement in Case No. 37 of 2023. However, the Commission feels that BEST will put their efforts to procure power so as to optimize the power purchase cost as well as to meet the shortfall in RPO. Accordingly, for FY 2023-24, the Commission has considered the rate of Rs. 7.43/kWh as approved in Case No. 37 of 2023 and any additional quantum, if procured, the ceiling rate approved is Rs. 5.13/kWh.
- 6.4.64 Accordingly, the Commission approves the cost of power purchase from short term sources of Rs. 147.54 Crore for FY 2023-24 and Rs. 161.90 Crore for FY 2024-25.



**Other Charges**

- 6.4.65 The Commission has already allowed Rs 342.51 Crore in respect of FBSM on provisional basis as submitted by BEST. The Commission notes that as per invoices raised by MSLDC, the total net liability of BEST is Rs 404.48 Crore. Accordingly, the Commission allows balance amount of Rs 61.97 Crore in FY 2023-24.
- 6.4.66 Approval of likely impact of FBSM payment by the Commission is over and above, power purchase cost approved by the Commission to safeguard the Licensee in case payments are required to be made of past period. This will not be considered as part of power purchase cost while calculation of FAC. BEST should make payment of FBSM bills and should not load such bill amount in FAC computation. In case actual bill amount of FBSM is more than the above fund, only such incremental amount may be considered for FAC computation.

**Transmission Charges, MSLDC Charges and Standby Charges**

- 6.4.67 The Commission has considered the Transmission charges approved by the Commission in the InSTS Order in Case No. 284 of 2022 and MSLDC Charges approved by the Commission in MSLDC Order in Case No. 232 of 2022.
- 6.4.68 The Commission also approves Stand-by Charges of Rs. 94.03 Crore for FY 2023-24 and Rs. 94.01 Crore for FY 2024-25 as per MSEDCL MTR Order in Case No. 226 of 2022.
- 6.4.69 Based on the above analysis, the summary of power purchase quantum, cost and rates approved by the Commission for FY 2023-24 and FY 2024-25 is as shown in the Tables below:

**Table 243: Total Power Purchase Quantum and Cost for FY 2023-24, as approved by the Commission.**

Particulars	MTR Petition			Approved in this Order		
	Quantum (MU)	Cost (Rs. Cr)	Rate (Rs./kWh)	Quantum (MU)	Cost (Rs. Cr)	Rate (Rs./kWh)
<b>Long term / Medium term Sources</b>						
TPC-G	2,661.00	1,743.59	6.55	3,231.37	2,293.36	7.10
Past Gap Approved of TPC-G passed on to DISCOM					(200.50)	
Walwhan Solar MH Ltd	31.50	26.97	8.56	31.59	27.04	8.56
Manikaran Power Limited	744.60	323.88	4.35	746.64	324.76	4.35

Particulars	MTR Petition			Approved in this Order		
	Quantum (MU)	Cost (Rs. Cr)	Rate (Rs./kWh)	Quantum (MU)	Cost (Rs. Cr)	Rate (Rs./kWh)
Sai Wardha	185.64	80.75	4.35	-	-	-
<b>Short term Sources</b>						
Solar Energy	202.85	87.63	4.32	430.43	210.91	4.90
Non-Solar Energy	222.15	95.97	4.32	506.01	247.95	4.90
New Contract RTC/Bilateral	622.20	352.22	5.66	198.58	147.54	7.43
DAM	279.31	128.14	4.59			
Stand By Charges		97.66			94.03	
Past Period Pool Imbalance		61.97			61.97	
Intra State Transmission Charges		254.91			232.10	
MSLDC Charges		1.35			0.93	
<b>Total</b>	<b>4,949.26</b>	<b>3,255.03</b>	<b>6.58</b>	<b>5,144.61</b>	<b>3,440.08</b>	<b>6.69</b>

**Table 244: Total Power Purchase Quantum and Cost for FY 2024-25, as approved by the Commission.**

Particulars	MTR Petition			Approved in this Order		
	Quantum (MU)	Cost (Rs. Cr)	Rate (Rs./kWh)	Quantum (MU)	Cost (Rs. Cr)	Rate (Rs./kWh)
<b>Long term / Medium term Sources</b>						
TPC-G	743.00	235.91	3.18	3,178.80	2,300.83	7.24
Walwhan Solar MH Ltd	31.50	26.96	8.56	31.48	26.95	8.56
Manikaran Power Limited	744.60	330.05	4.43	744.60	330.05	4.43
Sai Wardha	744.60	330.05	4.43	-	-	
<b>Short term Sources</b>						
Solar Energy	304.50	131.54	4.32	485.11	237.70	4.90
Non-Solar Energy	333.50	144.07	4.32	489.76	239.98	4.90
SECI Hybrid – Solar (Tranche III)	124.00	30.75	2.48	122.69	30.43	2.48
SECI Hybrid – Wind (Tranche III)	47.00	11.66	2.48	46.47	11.53	2.48
Solar New	493.00	146.96	2.98			
New RTC	786.15	373.42	4.75			
DAM/( Short Term sources	638.90	293.10	4.59	315.59	161.90	5.13
Stand By Charges		96.79			94.01	

Particulars	MTR Petition			Approved in this Order		
	Quantum (MU)	Cost (Rs. Cr)	Rate (Rs./kWh)	Quantum (MU)	Cost (Rs. Cr)	Rate (Rs./kWh)
Intra State Transmission Charges		250.31			299.32	
MSLDC Charges		1.36			0.99	
<b>Total</b>	<b>4,990.74</b>	<b>2,402.93</b>	<b>4.81</b>	<b>5,414.52</b>	<b>3,733.69</b>	<b>6.90</b>

## 6.5 Operation and Maintenance Expenses

### *BEST's Submission*

- 6.5.1 BEST submitted that O&M expense for FY 2023-24 and FY 24-25 is projected in accordance with Regulation 75.3 & 84.3 of MYT Regulations, 2019.
- 6.5.2 BEST has submitted that for Projecting O&M expenses for FY 2023-24 and FY 2024-25, the escalation factor of FY 2021-22 i.e., 5.16% per annum corresponding to increase in WPI Index declared by Office of Economic Affairs and CPI index declared by the Ministry of Labour & Employment, Government of India in the ratio of 70% and 30%, reduced by efficiency factor of 0.16% resulting in a net escalation factor of 4.90%.
- 6.5.3 BEST has worked out revised Normative O&M expenses as shown in the Table below:

**Table 245 : Summary of Revised O&M Expenses for FY 2023-24 and FY 2024-25, as submitted by BEST (Rs. Crore)**

Particular	FY 2023-24	FY 2024-25
Normative O&M Expenses for Previous Financial Year	646.24	677.89
Escalation Rate	4.90%	4.90%
<b>Revised Normative O&amp;M Expense for FY</b>	<b>677.89</b>	<b>711.10</b>

### Smart Meter Scheme

- 6.5.4 BEST submitted that Smart Metering scheme is being undertaken as per the Operational Guidelines for Revamped Distribution Sector Scheme (RDSS). Further, BEST submitted that as per the Regulation 84.7 of the MYT Regulations, 2019, a Distribution License may undertake opex schemes over and above normative O&M expenses subject to prudence check by the Commission.
- 6.5.5 As per Regulation 3.11 of the Capex Regulations, 2022, BEST has planned to execute the project of "Implementation of Smart Metering" under TOTEX model through Advanced Metering Infrastructure Service Provider (AMISP)

on Design, Built, Finance, Own, Operate and Transfer (DBFOOT) basis.

6.5.6 Ministry of Power has issued a guidance note for appointment of Advanced Metering Infrastructure (AMI) Service Provider for Smart Prepaid Metering in India. As per the said guidance note, DISCOM is required to consider AMISP payments (AMISP service charge along with the lump sum payment per meter) as operational expenditure while filing ARR and tariff review Petition to the SERC.

6.5.7 As can be seen from above Guidelines, Regulations & Guidance note, BEST has considered O&M expenditure towards Smart Meter under OPEX. The total O&M expenses including Smart Meter OPEX scheme considered for ARR is given below:

**Table 246 : Total O&M Expenses for FY 2023-24 and FY 2024-25, as submitted by BEST (Rs. Crore)**

Particulars	FY 2023-24		FY 2024-25	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Normative O&M	614.99	677.89	632.42	711.10
Opex Scheme		47.51		136.48
<b>Total O&amp;M Expenses</b>	<b>614.99</b>	<b>725.41</b>	<b>632.42</b>	<b>847.58</b>

6.5.8 Further, for the implementation of smart meters, BEST has carried out competitive bidding for selection of Advanced Metering Infrastructure Service Provider (AMISP). Accordingly, M/s. Adani Transmission Ltd. Was appointed as Advanced Metering Infrastructure Service Provider (AMISP) for implementation of smart meter. BEST submitted that after issuing of LOA, the work shall be completed within 30 months and after 9 months of LOA, first 5% of the meters of total quantity shall be covered under go-live system.

6.5.9 BEST submitted that due to smart metering implementation there will be improvement in outage detection, improvement in service restoration, improvement in billing efficiency, etc. Also, smart meter implementation will reduce manual meter reading, better work and asset management, outage management, etc. which will result in lowering overall O&M expenses. Further, BEST submitted that, it would be very difficult to quantify all the benefits at present. However, the same can be envisaged after initial installation of smart meters only.

6.5.10 Further, BEST notes that, the Commission has referred back the Smart Meter DPR submitted to the Commission due to non-submission of Rolling Capital Investment Plan as per MERC (Approval of Capital Investment Schemes) Regulations, 2022. BEST will soon file revised Smart Meter DPR along with Rolling Capital Investment Plan before the Commission. However, BEST

requested the Commission to consider the Smart Meter Project expenses over & above normative O&M under OPEX scheme.

### **Commission's Analysis and Ruling**

- 6.5.11 Regulations 75 and 84 of the MYT Regulations, 2019 specify the methodology for determination of O&M expenses for the Control Period from FY 2020-21 to FY 2024-25 for the Wires Business and Supply Business, respectively.
- 6.5.12 Based on the above referred Regulations, the Commission has determined the normative O&M expenses for Wire and Supply Business separately for FY 2023-24 and FY 2024-25 as explained in the following paras:
- 6.5.13 The Commission has estimated normative O&M expenses for FY 2023-24 and FY 2024-25 considering the base expenses of FY 2022-23 and escalating with the weighted average inflation rate of WPI:CPI in the ratio 70:30 as specified in the Regulations 75.3 and 84.3 of the MYT Regulations, 2019.
- 6.5.14 While calculating the escalation factor, the Commission has considered FY 2011-12 data series of WPI to work out escalation rate for O&M expenses. However, it was noticed that the base of CPI series for Industrial workers (CPI<sub>IW</sub>) has been changed by the Labour Bureau, from 2001 to 2016 resulting in change in number from September 2020 onwards. Therefore, from September 2020, Labour of Bureau has discontinued publication of CPI based on 2011 series and instead of the same, CPI based on 2016 series has been published. Since, the old base has been discontinued from September 2020, the Commission has considered the new base from September 2020 onwards and modified the same on pro-rata basis to appropriately reflect CPI based on 2011 series so as to maintain consistency and accordingly has calculated the escalation number for FY 2020-21.
- 6.5.15 Efficiency factor as specified in Regulation 75.3 and 84.3 of the MYT Regulations, 2019 (for Wires Business; similar provisions are there for Supply Business also), provided Zero % efficiency factor only if there is an increase in the number of consumers including Open Access consumers connected to the Distribution Wires and supply business of at least 2 percent annually over the last 3 years. However, as analyzed in the previous section of this Order, the Commission has approved efficiency factor of 0.84%. Accordingly, the Commission approves the normative O&M expenses of FY 2023-24 and FY 2024-25, equivalent to the escalation factor considered for FY 2021-22, by considering the escalation factor of 5.06% and reducing the same by efficiency factor of 0.84% to derive the O&M escalation factor of 4.22% on the base O&M expenses of FY 2022-23 as approved in this Order.
- 6.5.16 Based on the above analysis has considered the escalation rate for O&M

expenses as outlined below:

**Table 247: Escalation rate for O&M expenses for FY 2023-24 and FY 2024-25**

Year	WPI	Percentage Annual Change in WPI	CPI	Percentage Annual Change in CPI
FY 2016-17	111.62		275.92	
FY 2017-18	114.88	2.92%	284.42	3.08%
FY 2018-19	119.79	4.28%	299.92	5.45%
FY 2019-20	121.80	1.68%	322.50	7.53%
FY 2020-21	123.38	1.29%	338.69	5.02%
FY 2021-22	139.41	13.00%	356.06	5.13%
<b>Average from FY 2015-16-FY 2019-20</b>		<b>4.63%</b>		<b>5.24%</b>
Weights		30%		70%
<b>Escalation Factor</b>			<b>5.06%</b>	
Efficiency Factor			0.84%	
<b>Escalation Factor Net of Efficiency Factor</b>			<b>4.22%</b>	

6.5.17 Accordingly, the Commission approves the normative O&M Expenses for FY 2022-23 and FY 2024-25, considering the escalation factor as specified above:

**Table 248: Normative O&M Expenses for FY 2023-24 and FY 2024-25, as approved by the Commission (Rs. Crore)**

Particulars	FY 2023-24		FY 2024-25	
	MTR Petition	Approved in this Order	MTR Petition	Approved in this Order
Normative O&M expenses of Preceding year	646.24	635.33	677.89	662.13
Escalation Factor of respective years	4.90%	4.22%	4.90%	4.22%
Normative O&M expenses after applying escalation factor	<b>677.89</b>	<b>662.13</b>	<b>711.10</b>	<b>690.07</b>

6.5.18 The Commission notes that Smart Metering scheme is being undertaken as per the Operational Guidelines for Revamped Distribution Sector Scheme (RDSS). That BEST has already appointed M/s. Adani Transmission Ltd. As Advanced Metering Infrastructure Service Provider (AMISP) for implementation of smart meter. Further, as per guidance note issued by Ministry of Power, DISCOM is required to consider AMISP payments (AMISP service charge along with the lump sum payment per meter) as operational expenditure while filing ARR. Accordingly, BEST has claimed O&M expenditure towards Smart Meter under Opex. Considering the benefits likely to be accrued from the implementation of smart meters, BEST should complete the said work as per the schedule.

6.5.19 BEST has claimed Opex towards implementation of smart metering. However, the Commission notes the submission of BEST that it would be very difficult to quantify all the benefits of smart meter implementation and same can be envisaged after initial installation of smart meters only. Regulation 75.7 of the MYT Regulations, 2019 requires licensee to submit detailed justification, cost benefit analysis of such schemes as against capex schemes, and savings in O&M expenses. The relevant extract is reproduced herein below:

*“75.7 A Distribution Licensee may undertake Opex schemes for system automation, new technology and IT implementation, etc., and, such expenses may be allowed over and above normative O&M Expenses, subject to prudence check by the Commission:*

***Provided that the Distribution Licensee shall submit detailed justification, cost benefit analysis of such schemes as against capex schemes, and savings in O&M expenses, if any.***” (Emphasis Supplied)

6.5.20 Thus, considering the aforesaid provision, BEST is required to submit cost-benefit analysis and savings in O&M expense to claim Opex over and above normative O&M Expenses. The Commission is of the view that smart meter implementation will certainly lead to savings in O&M expense. Further, the Commission notes that BEST has been allowed escalation while computing normative O&M expense for FY 2023-24 and FY 2024-25. Thus, considering the provisions of MYT Regulations, 2019 as quoted above and savings likely to accrue to BEST, the Commission for projection purpose has not considered any Opex towards smart meter implementation. The Commission will consider allowance of Opex expense over and above normative expense on submission of detailed justification of cost benefit analysis and savings in O&M expense at the time of Truing-up for FY 2023-24 and FY 2024-25.

## **6.6 Capital Expenditure and Capitalization**

### ***BEST's Submission***

6.6.1 The BEST's Distribution Network comprise of 11000 kms. of underground cable network, which is very old and due for replacement. Also, the RSS equipment like 33kV & 11kV Switchgears, power transformers, Battery chargers and battery sets have outlived their useful life and need to be replaced in a phased manner in the next three years. This shall enable us to reduce the losses and we shall be able to provide Reliable continuous electric supply to our esteemed consumers.

6.6.2 The Government of India (GoI) has come up with the Reforms-Based and Results-Linked Revamped Distribution Sector Scheme (RDSS) for supporting DISCOMs (except private DISCOMs) to undertake reforms and performance

improvement in a time bound manner. The Scheme aims to carry out the works enabling improvement in the quality and reliability of power supply to consumers, by providing conditional financial assistance to DISCOMs to make the sector financially sustainable and operationally efficient. The sunset date for this scheme is 31 March, 2026.

- 6.6.3 To achieve the above goal and to utilize the opportunity provided by the central government in form of Grant under the Revamped Distribution Sector Scheme (RDSS) an Action plan & DPR was prepared. BEST has forwarded the DPR of Rs. 3460.98 Crore and Action Plan under the RDSS Project to Government of Maharashtra for its approval and to recommend the same to Government of India (GoI). This DPR contains Distribution Infrastructure works (i.e., RSS/DSS infra works, IT applications and Infrastructure works, Advance Distribution Management System (ADMS)) and Advance Metering Infrastructure (Smart Metering). The GoM has approved BEST's DPR of Rs. 3460.98 Crore and Action Plan on 25 August, 2022 and presently BEST's proposal is under consideration of Government of India. The grant to be provided is in the ratio of 60:40 for the component of Distribution Infrastructure works wherein the Central Government would be providing grant to the extent of 60% of the total value of the RDSS package and 40% shall have to be provided through internal funds of the utility.
- 6.6.4 BEST further submitted that according to sanctioned letter received by Power Finance Corporation dated 21 November, 2022, PFC has approved Rs. 978.22 Crore in the 13th Monitoring Committee meeting of RDSS held under the chairmanship of Secretary (Power) on 22 August, 2022. Accordingly, BEST has considered 60% as grant of the of approved expenses and proposed to be capitalized in FY 2023-24 & FY 2024-25.
- 6.6.5 However, BEST submitted that, it has proposed capex and capitalization according to the proposal submitted to GoI. Further, BEST submitted that the scope of existing approved DPRs are covered under RDSS scheme. Hence, BEST will close the existing DPRs and in process of submitting fresh DPRs for RDSS scheme.
- 6.6.6 The estimated capital expenditure and capitalization for FY 2023-24 and FY 2024-25 is as shown in the table below:

**Table 249 : Revised Capital Expenditure and Capitalisation for FY 2023-24 and FY 2024-25, as submitted by BEST (Rs. Crore)**

Particulars	FY 2023-24		FY 2024-25	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Capital Expenditure	-	960.65	-	828.06
Capitalisation	71.10	960.65	71.10	828.06



Particulars	FY 2023-24		FY 2024-25	
	MYT Order	MTR Petition	MYT Order	MTR Petition
DPR Schemes*	-	939.65	-	807.06
Non-DPR Schemes		21.00		21.00
Capitalisation + IDC	<b>71.10</b>	<b>960.65</b>	<b>71.10</b>	<b>828.06</b>

6.6.7 BEST submitted that, it has proposed Capex and capitalization according to the proposal submitted to GoI. BEST requested the Commission to approve the projected Capital Expenditure and Capitalization as submitted by BEST. Any variation in above expenses

### *Commission's Analysis and Ruling*

6.6.8 The Commission has observed that DPRs are not submitted for majority schemes related to RDSS, for which capitalization is proposed by BEST. In absence of any DPR, it is difficult to assess requirement of particular schemes and associated cost. Hence, it is important to have approved DPR for any scheme before loading cost through ARR to beneficiaries.

6.6.9 In view of the above, the Commission has decided to allow only schemes for which DPR is approved by the Commission. However, it is also important to acknowledge that to run the business, BEST is required to carry out capital expenditure. Also, BEST is in the process of implementation of RDSS, which is 60% funded by the Central / State Government. Hence, it is necessary also to have timely implementation of this scheme.

6.6.10 However, based on the past practice, the Commission has observed the trend of capitalization of BEST in the last five years and has allowed 50% of the same against the capital expenditure proposed, where there is no approved DPR.

6.6.11 Last five years capitalization trend of BEST is as shown in Table below:

**Table 250: Capitalization for FY 2017-18 to FY 2021-22 (Rs. Crore)**

Particulars	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	Average	50% of Avg.
DPR	88.12	146.13	177.47	126.13	84.86	124.54	<b>77.02</b>
Non DPR	6.85	45.39	61.62	10.17	23.49	29.50	
<b>Total Capitalisation approved</b>	<b>94.97</b>	<b>191.52</b>	<b>239.09</b>	<b>136.30</b>	<b>108.35</b>	<b>154.05</b>	

6.6.12 Based on the above approach, the following Table shows the capitalization approved by the Commission for FY 2023-24 and FY 2024-25:

**Table 251: Capitalisation for FY 2023-24, as approved by the Commission (Rs. Crore)**

Particulars	Wire	Supply	Total	Wire	Supply	Total
	MTR Petition			Approved in this Order		
DPR – Approved	137.99	-	137.99	137.99	-	137.99
DPR – Submitted/ Not Approved	439.04	362.62	801.66	69.32	7.70	77.02
Non-DPR	21.00	-	21.00	21.00	-	21.00
<b>Total</b>	<b>598.03</b>	<b>362.62</b>	<b>960.65</b>	<b>228.31</b>	<b>7.70</b>	<b>236.01</b>

**Table 252: Capitalisation for FY 2024-25, as approved by the Commission (Rs. Crore)**

Particulars	Wire	Supply	Total	Wire	Supply	Total
	MTR Petition			Approved in this Order		
DPR – Approved	120.72	-	120.72	120.72	-	120.72
DPR – Submitted/ Not Approved	640.00	46.33	686.34	69.32	7.70	77.02
Non-DPR	21.00	-	21.00	21.00	-	21.00
<b>Total</b>	<b>781.72</b>	<b>46.33</b>	<b>828.06</b>	<b>211.04</b>	<b>7.70</b>	<b>218.74</b>

6.6.13 Accordingly, the Commission approves Capitalisation of Rs. 236.01 Crore for FY 2023-24 and Rs. 218.74 Crore for FY 2024-25, respectively.

## 6.7 Funding of Capitalization

### *BEST's Submission*

6.7.1 BEST submitted that it has considered 60% of grant on capitalization proposed for FY 2023-24 & FY 2024-25 as per Sanction letter dated 21 November, 2021 received from PFC according to 13<sup>th</sup> Monitoring Committee meeting of RDSS. Further, the funding of capitalization is through capital connection fee, loan, equity and grant. The following table highlight the grant considered for RDSS Projects.

**Table 253 : Grant Considered for RDSS Project for FY 2023-24 and FY 2024-25, as submitted by BEST (Rs. Crore)**

Particulars	Claimed in MTR		Approved by PFC		Grants Claimed in MTR (60% of Approved Cost)	
	FY 24	FY 25	FY 24	FY 25	FY 24	FY 25
Implementation of SCADA & DMS	82.01	123.02	58.00	85.72	34.80	51.43
Network Infra (Loss Reduction)*	495.02	461.33	303.99	287.64	182.39	172.58
ERP, Billing Software and IT/OT enablement works	289.00	46.33	68.55	7.42	41.13	4.45
Auxiliary component cost for Consumer metering	73.62	-	72.53	-	43.52	-
Network Infra (Modernization)	-	176.38	-	-	-	-
<b>Total</b>	<b>939.65</b>	<b>807.06</b>	<b>503.07</b>	<b>380.78</b>	<b>301.84</b>	<b>228.47</b>
<i>*Included of R&amp;I Charges</i>						

6.7.2 BEST submitted that, Capital Connection Fee received from consumers in FY 2021-22 has been kept constant and considered for Grant. Further, BEST

submitted that it receives funding from MCGM for the capex of street lights. Accordingly, the capitalisation amount of Rs. 7.50 Crore for street lights is considered to be funded from grants.

6.7.3 BEST further submitted that it has got confirmation from PFC for funding of RDSS Scheme of Rs. 972.88 Crore for Loss Reduction Works. Under the RDSS Scheme BEST will receive a total grant of Rs. 583.73 Crore (60%) of approved RDSS funding for Loss Reduction Works. However, BEST will incur phase wise capital expenditure under the RDSS scheme. Therefore, BEST has considered only Rs. 530.32 Crore as grant for two years which is 60% of total capital expenditure proposed for approved funding by PFC.

6.7.4 The following table shows the revised estimated funding of capitalization for FY 2023-24 and FY 2024-25.

**Table 254 : Revised Funding of Capitalization for FY 2023-24 and FY 2024-25, as submitted by BEST (Rs. Crore)**

Particulars	FY 2023-24		FY 2024-25	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Capital Connection Fee	10.69	7.71	10.69	7.71
Grants for IPDS Scheme/RDSS Scheme		301.84		228.47
Grants for Street Lights	2.25	7.50	2.35	7.50
Loan	40.71	450.51	40.64	409.06
Internal Source	17.45	193.08	17.42	175.31
<b>Total of Capitalisation including IDC</b>	<b>71.10</b>	<b>960.65</b>	<b>71.10</b>	<b>828.06</b>

***Commission's Analysis and Ruling***

6.7.5 The Commission has considered funding as per capitalization approved in the earlier section of this Order.

6.7.6 The Commission has examined the details submitted by BEST for funding as mentioned herein above. Based on the review, the Commission approves an amount of Rs. 7.71 Crore to be funded through consumer contribution and the street lighting Grant same as that considered by BEST as part of sources for funding of capitalization. Further, the capex approved based on the average of 5 years for DPRs which are yet to be approved are also considered to be funded from grant towards RDSS scheme for which BEST has already received the confirmation form PFC. The remaining funding requirement is approved by the Commission to be met through debt and equity in the 70:30 ratio.

6.7.7 Based on the above, the details of funding of capitalisation for FY 2023-24 and FY 2024-25 are shown in Table below:

**Table 255: Details of funding of Capitalisation for FY 2023-24 and FY 2024-25, as approved by the Commission (Rs. Crore)**

Particulars	FY 2023-24			FY 2024-25		
	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order
Capital Connection Fee	10.69	7.71	7.71	10.69	7.71	7.71
Grants for RDSS Scheme	2.37	301.84	77.02	2.37	228.47	77.02
Grants for Street Light		7.50	7.50		7.50	7.50
Loan - 70%	40.63	450.51	100.64	40.63	409.06	88.55
Equity - 30%	17.41	193.08	43.13	17.41	175.31	37.95
<b>Total of Capitalisation</b>	<b>71.10</b>	<b>960.65</b>	<b>236.01</b>	<b>71.10</b>	<b>828.06</b>	<b>218.74</b>

## 6.8 Depreciation

### *BEST's Submission*

6.8.1 BEST has computed the depreciation by applying the average depreciation rate of FY 2021-22 i.e., 3.53%, on Average GFA of each year for FY 2023-24 and FY 2024-25. The details are presented in the table below:

**Table 256 : Revised Depreciation for FY 2023-24 and FY 2024-25, as submitted by BEST (Rs. Crore)**

Particulars	FY 2023-24		FY 2024-25	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Average GFA (Rs. Crore)	3,119.39	3,631.00	3,184.15	4,505.65
Avg. Depreciation rate (%)	4.07%	3.53%	4.07%	3.53%
<b>Depreciation (Rs. Crore)</b>	<b>127.11</b>	<b>128.35</b>	<b>129.75</b>	<b>159.27</b>

6.8.2 BEST requested the 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 Truing-up.

### *Commission's Analysis and Ruling*

6.8.3 The Commission has computed the depreciation as per Regulation 28 of the MYT Regulations, 2019. The Commission has considered the closing GFA for FY 2022-23 as approved in this Order as the opening GFA for FY 2023-24. The Commission has also taken the addition of GFA equivalent to the Capitalisation approved in this Order except the amount towards grants for RDSS Scheme, Capital Connection Fee and Grants for Street Lights, as no depreciation is considered for the assets funded through grants. The Commission has also considered retirement of assets, same as proposed by BEST which is same as actual retirement of FY 2021-22.

6.8.4 The Commission has considered the depreciation on average GFA for the year

by applying weighted average depreciation rate of 3.53% approved for FY 2021-22 after Truing-up in this Order.

6.8.5 The depreciation approved by the Commission for FY 2023-24 and FY 2024-25 is shown in the Table below:

**Table 257: Depreciation for FY 2023-24 and FY 2024-25, as approved by the Commission (Rs. Crore)**

Particulars	FY 2023-24			FY 2024-25		
	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order
Opening GFA	2839.71	3,160.53	3,124.37	2,871.30	4,101.47	3,248.44
Capitalisation with IDC	71.10	960.65	143.78	71.10	828.06	126.51
Retirement	39.51	19.70	19.70	39.51	19.70	19.70
<b>Closing GFA</b>	<b>2,871.30</b>	<b>4,101.47</b>	<b>3,248.44</b>	<b>2,902.89</b>	<b>4,909.83</b>	<b>3,355.25</b>
Average GFA	<b>2,855.51</b>	<b>3,631.00</b>	<b>3,186.40</b>	<b>2,887.09</b>	<b>4,505.65</b>	<b>3,301.84</b>
Depreciation Rate	4.07%	3.53%	3.53%	4.07%	3.53%	3.53%
<b>Depreciation</b>	<b>116.36</b>	<b>128.35</b>	<b>112.63</b>	<b>117.64</b>	<b>159.27</b>	<b>116.71</b>

6.8.6 The Commission approves depreciation of Rs. 112.63 Crore for FY 2023-24 and Rs. 116.71 Crore for FY 2024-25.

## 6.9 Interest on Long Term Loan

### *BEST's Submission*

6.9.1 BEST has considered long term loans to be taken up in line with the capitalization which is expected to incur during the respective years. BEST has computed interest on loan as specified in Regulation 30 of MYT Regulations, 2019.

6.9.2 BEST submitted that it has considered opening balance of loans same as closing balance of previous financial year. The loan addition during the year is considered as 70% of the capitalization that is expected to incur during the respective years. The loan repayment is considered equal to the depreciation charged/ claimed during the year.

6.9.3 BEST has computed the closing balance of loans and average balance of loans for FY 2023-24 and FY 2024-25. BEST has computed the weighted average interest rate for the period FY 2023-24 and FY 2024-25 based on opening loan balance of existing long-term loans. The following table shows the interest on loans that has been computed for FY 2023-24 and FY 2024-25.

**Table 258 : Revised Normative Interest on Loan for FY 2023-24 and FY 2024-25, as submitted by BEST (Rs. Crore)**

Particulars	FY 2023-24		FY 2024-25	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Opening Balance of Net Normative Loan	-	-	-	308.37
Less: Reduction of Normative Loan due to retirement or replacement of assets	27.66	13.79	27.66	13.79
Addition of Normative Loan due to capitalisation during the year	40.71	450.51	40.64	409.06
Repayment of Normative loan during the year	13.05	128.35	12.98	159.27
Closing Balance of Net Normative Loan	0.00	308.37	0.00	544.37
Closing Balance of Gross Normative Loan	-	-	-	-
Average Balance of Net Normative Loan	0.00	154.19	0.00	426.37
Weighted average Rate of Interest on actual Loans (%)	11.27%	10.49%	11.27%	10.49%
Interest Expenses	-	16.18	-	44.74
Financing Charges	-	-	-	-
<b>Total Interest &amp; Financing Charges</b>	-	<b>16.18</b>	-	<b>44.74</b>

6.9.4 Therefore, BEST requested the Commission to approve the interest expense as shown in the above table as calculated on normative basis as specified in the MYT Regulations, 2019. Any variation in above expenses will be claimed as per the regulations at the time of truing up.

#### *Commission's Analysis and Ruling*

6.9.5 The Commission has computed the interest on long-term loan for FY 2020-21 and FY 2021-22 in accordance with Regulation 30 of the MYT Regulations, 2019. It has considered the closing net normative loan balance for FY 2022-23 as approved in this Order, as the opening net normative loan balance for FY 2023-24. The loan addition during the year is considered as 70% of the approved capitalization during the respective years.

6.9.6 The Commission has considered the repayment equivalent to the depreciation approved for respective year.

6.9.7 As regards the interest rate to be considered, the Regulation 30 of the MYT Regulations, 2019 states that the rate of interest shall be the weighted average rate of interest computed on the basis of the actual loan portfolio at the beginning of each year. The Commission has considered weighted average interest rate of 10.49% same as approved for FY 2022-23 based on BEST submission, subject to truing up subsequently. For all years, opening normative loan is Nil and repayment (same as depreciation) is higher than loan addition and hence closing normative loan works out to Nil and so is the interest on loan. The interest on long-term loan capital approved by the Commission is shown in the Table below:

**Table 259: Interest on Loans for FY 2023-24 to FY 2024-25, as approved by the Commission (Rs. Crore)**

Particulars	FY 2023-24			FY 2024-25		
	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order
Opening Balance of Normative Loan	-	-	-	-	308.37	-
Less: Reduction of Normative Loan due retirement or replacement of assets	27.66	13.79	13.79	27.66	13.79	13.79
Loan Drawl during the year	40.71	450.51	100.64	40.64	409.06	88.55
Loan Repayment during the year	13.05	128.35	86.85	12.98	159.27	74.76
Closing Balance of Normative Loan	-	308.37	-	-	544.37	-
Average Balance of Normative Loan	-	154.19	-	-	426.37	-
Applicable Interest Rate (%)	11.27%	10.49%	10.49%	11.27%	10.49%	10.49%
<b>Interest Expenses</b>	-	<b>16.18</b>	-	-	<b>44.74</b>	-

6.9.8 The Commission approves nil Interest on Long Term Loans for FY 2023-24 and FY 2024-25 respectively.

## 6.10 Interest on Working Capital (IoWC) Loans

### *BEST's Submission*

6.10.1 BEST has calculated IoWC based on the norms specified in Regulations 32 of MYT Regulations, 2019.

6.10.2 Working capital has been computed based on

- a) One-month normative O&M expenses which is computed by BEST
- b) Maintenance spares has been taken as 1% of GFA.
- c) One and half month of expected revenue is considered as the Aggregate revenue requirement which is projected for the respective years for BEST
- d) Reduction of Security deposit which is expected to be retained by BEST
- e) Reduction of one month of power purchase cost

6.10.3 BEST has considered the interest rate on the working capital amount as the base rate plus 150 basis points as specified in the Regulations.

6.10.4 The following table shows the IoWC that has been projected for FY 2023-24 and FY 2024-25.



**Table 260 : Revised Normative Interest on Working Capital for Wire Business for FY 2023-24 and FY 2024-25, as submitted by BEST (Rs. Crore)**

Particulars	FY 2023-24		FY 2024-25	
	MYT Order	MTR Petition	MYT Order	MTR Petition
O&M expenses for a month	33.31	36.72	34.26	38.52
Maintenance Spares at 1% of Opening GFA	25.56	3.16	25.84	4.10
One and half months equivalent of the expected revenue from charges for use of Distribution Wires	43.02	90.70	43.52	103.12
Less: Amount held as Security Deposit from Distribution System Users	46.21	46.05	47.60	47.32
<b>Total Working Capital Requirement</b>	<b>55.68</b>	<b>84.53</b>	<b>56.02</b>	<b>98.42</b>
	-	-	-	-
Computation of Working Capital Interest	-	-	-	-
Interest Rate (%) - SBI Base Rate +150 basis points	9.50%	9.55%	9.50%	9.55%
<b>Interest on Working Capital</b>	<b>5.29</b>	<b>8.07</b>	<b>5.32</b>	<b>9.40</b>

**Table 261 : Revised Normative Interest on Working Capital for Retail Supply Business for FY 2023-24 and FY 2024-25, as submitted by BEST (Rs. Crore)**

Particulars	FY 2023-24		FY 2024-25	
	MYT Order	MTR Petition	MYT Order	MTR Petition
O&M expenses for a month	17.94	19.77	18.45	20.74
Maintenance Spares at 1% of Opening GFA	2.84	28.44	2.87	36.91
One and half months equivalent of the expected revenue from sale of electricity including revenue from CSS and Additional Surcharge	387.16	448.61	391.70	355.60
Less: Amount held as security deposit	415.90	414.46	428.38	425.87
Less: One month equivalent of cost of power purchase, transmission charges and MSLDC Charges	221.01	249.90	203.70	179.27
<b>Total Working Capital Requirement</b>	<b>-228.97</b>	<b>-167.53</b>	<b>-219.05</b>	<b>-191.89</b>
Computation of Working Capital Interest	-	-	-	-
Interest Rate (%) - SBI Base Rate +150 basis points	9.50%	9.55%	9.50%	9.55%
<b>Interest on Working Capital</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

6.10.5 BEST has submitted that normative IoWC for retail supply business is nil, as working capital requirement is funded by consumer security deposit. As per allocation matrix, consumer security deposit considered for Retail Supply business is higher than working capital requirement for retail supply business. Hence, IoWC for supply business is Nil. Interest on working capital has been worked out accordingly and summarized in the table above. BEST requested the Commission to consider IoWC as summarized in table above.

***Commission's Analysis and Ruling***



- 6.10.6 The Commission has computed the normative IoWC in accordance with the MYT Regulations, 2019. The rate of IoWC is the SBI MCLR Rate as on the date of the Petition (8.05%) plus 150 basis points.
- 6.10.7 Further, the Commission in this Order has held that BEST has not collected any security deposit from the Consumers as per provisions of MERC (Electricity Supply Code and Standard of Performance of Distribution Licensees including Power Quality), 2021. The said provisions are included so that Distribution Licensee are adequately protected from any bad debts and also result in additional availability of working capital. The Commission directs BEST to collect the Security Deposit as per provisions of the aforesaid Regulations. However, for the purpose of the computation of Working Capital, the Commission has considered Security Deposit as per actuals of FY 2021-22.
- 6.10.8 The Commission has considered interest rate on CSD equal to the prevailing Bank Rate of Reserve Bank of India (RBI), in accordance with the MYT Regulations, 2019
- 6.10.9 The Interest on Working Capital and Consumer's Security Deposit as approved by the Commission for the Wires Business and the Supply Business is as shown in the Table below:

**Table 262: Interest on Working Capital for FY 2023-24 and FY 2024-25, as approved by the Commission (Rs. Crore)**

Particulars	FY 2023-24			FY 2024-25		
	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order
<b>Wheeling Business</b>						
O&M expenses for a month	33.31	36.72	35.87	34.26	38.52	37.38
Maintenance Spares at 1% of Opening GFA	25.56	3.16	28.12	25.84	4.10	29.93
One and half months equivalent of the expected revenue from charges for use of Distribution Wires	43.02	90.70	52.46	43.52	103.12	57.45
Less: Amount held as Security Deposit from consumers	46.21	46.05	43.61	47.60	47.32	43.61
<b>Total Working Capital Requirement</b>	<b>55.68</b>	<b>84.53</b>	<b>72.83</b>	<b>56.02</b>	<b>98.42</b>	<b>81.14</b>
Rate of Interest (%)	9.50%	9.55%	9.55%	9.50%	9.55%	9.55%
<b>Interest on Working Capital</b>	<b>5.29</b>	<b>8.07</b>	<b>6.96</b>	<b>5.32</b>	<b>9.40</b>	<b>7.75</b>
<b>Retail Business</b>						

Particulars	FY 2023-24			FY 2024-25		
	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order
O&M expenses for a month	17.94	19.77	19.31	18.45	20.74	20.13
Maintenance Spares at 1% of Opening GFA	2.84	28.44	3.12	2.87	36.91	3.33
One and half months equivalent of the expected revenue from sale of electricity including revenue from CSS and Additional Surcharge	387.16	448.61	472.14	391.70	355.60	517.01
Less: Amount held as security deposit	415.90	414.46	392.53	428.38	425.87	392.53
Less: One month equivalent of cost of power purchase, transmission charges and MSLDC Charges	221.01	249.90	286.67	203.70	179.27	311.14
<b>Total Working Capital Requirement</b>	<b>(228.97)</b>	<b>(167.53)</b>	<b>(184.63)</b>	<b>(219.06)</b>	<b>(191.89)</b>	<b>(163.21)</b>
Rate of Interest (%)	9.50%	9.55%	9.55%	9.50%	9.55%	9.55%
<b>Interest on Working Capital</b>	-	-	-	-	-	-
<b>Total Distribution Business</b>						
<b>Interest on Working Capital</b>	<b>5.29</b>	<b>8.07</b>	<b>6.96</b>	<b>5.32</b>	<b>9.40</b>	<b>7.75</b>

6.10.10 The Commission approves Interest on Working Capital of Rs. 6.96 Crore for FY 2023-24 and Rs. 7.75 Crore for FY 2024-25.

### 6.11 Interest on Consumer Security Deposit (CSD)

#### BEST's Submission

6.11.1 BEST submitted that it has considered an annual growth rate of 2.75%, for the amount of CSD held for computation of interest on CSD. BEST submitted that the growth rate considered is based on previous year growth rate. Further there is no direct correlation with sales growth as security deposit amount in actual would depend upon the consumer category.

6.11.2 Further, the Interest on Consumer Security Deposit has been calculated at the rate of 4.25% (Bank Rate of RBI at the start of the financial year) as per the MYT Regulations, 2019. The rate considered is Bank rate as on 01 April, 2022. The interest on security deposit for FY 2023-24 and FY 2024-25 as presented in the table below:

**Table 263 : Revised Interest on consumer Security Deposit for FY 2023-24 and FY 2024-25, as submitted by BEST (Rs. Crore)**

Particulars	FY 2023-24		FY 2024-25	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Amount held as security deposit	455.38	460.51	469.04	473.19
RBI Bank Rate	5.40%	4.25%	5.40%	4.25%
Interest on Security Deposit	24.59	19.31	25.33	19.84

6.11.3 BEST requested the Commission to approve the projected Interest on CSD as submitted by BEST and any variation in above expenses will be claimed on actual basis at the time of Truing-up.

***Commission’s Analysis and Ruling***

6.11.4 The Commission has considered CSD for FY 2023-24 and FY 2024-25 as per actuals of FY 2021-22. The Commission in the earlier section of this Order has already directed BEST to collect Security Deposit as per provisions of MERC (Electricity Supply Code and Standard of Performance of Distribution Licensees including Power Quality), 2021.

6.11.5 Regulation 30.11 of the MYT Regulations, 2019 provides that interest shall be allowed only on amount held in cash as security deposit at the Bank Rate as declared by RBI as on 1<sup>st</sup> April of the Year. The relevant part of the same is reproduced here below:

*“30.11 Interest shall be allowed only on the amount held in cash as security deposit from Transmission System Users, Distribution System Users and Retail consumers at the Bank Rate as on 1<sup>st</sup> April of the Year for which the interest is payable.”*

6.11.6 Accordingly, prevailing RBI Bank Rate of 6.15% is considered by the Commission. The Commission has computed the interest on CSD on the average of opening and closing balance of the year. Accordingly, interest on CSD approved for FY 2023-24 and FY 2024-25 is shown in the Table below:

**Table 264: Interest on Consumer Security Deposit for FY 2023-24 and FY 2024-25, as approved by the Commission (Rs. Crore)**

Particulars	MYT Order	MTR Petition	Approved in this Order	Wire Business	Supply Business
<b>FY 2023-24</b>					
Interest on Consumer Security Deposit	24.59	19.31	26.82	2.68	24.14
<b>FY 2024-25</b>					
Interest on Consumer Security Deposit	25.33	19.84	26.82	2.68	24.14

6.11.7 The Commission approves interest on Consumers' Security Deposit of Rs. 26.82 Crore for FY 2023-24 and for FY 2024-25, respectively.

## 6.12 Contribution to Contingency Reserves

### *BEST's Submission*

6.12.1 BEST submitted that it has considered the contribution to contingency reserves as 0.25% of the Opening GFA as per MYT Regulations, 2019. The details are presented in table below:

**Table 265 : Revised Contribution to Contingency Reserves for FY 2023-24 and FY 2024-25, as submitted by BEST (Rs. Crore)**

Particulars	FY 2023-24		FY 2024-25	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Opening Balance of Contingency Reserves	-	70.10	-	78.00
Opening Gross Fixed Assets	-	3,160.53	-	4,101.47
Op. Bal of Contingency Reserves as % of Op. GFA	0.00%	2.22%	-	1.90%
Contribution to Contingency Reserves during the year	-	7.90	-	10.25
Utilisation of Contingency Reserves during the year	-	-	-	-
Cl. Balance of Contingency Reserves	-	78.00	-	88.26
Cl. Balance of Contingency Reserves as % of Op. GFA	0.00%	2.47%	0.00%	2.15%
<b>Total</b>	<b>7.10</b>	<b>7.90</b>	<b>7.18</b>	<b>10.25</b>

6.12.2 BEST requested the Commission to approve the projected Contribution to Contingency Reserves as submitted by BEST. Any variation in above expenses will be claimed on actual basis at the time of Truing-up.

### *Commission's Analysis and Ruling*

6.12.3 The Commission in the earlier section of this Order has already held that BEST has not adhered to provisions of MYT Regulations, 2019 and accordingly, the Commission has not considered any Contribution to Contingency Reserves. The said ruling is also applicable for FY 2023-24 and FY 2024-25. However, the Commission directs BEST to invest such contribution as per Regulation 35.1 of the MYT Regulations, 2019. The Commission will consider the same at the time of Truing-up based on submission of documentary evidence of said investment.

6.12.4 The Contribution to Contingency Reserves approved by the Commission is as summarised below:

**Table 266: Contribution to Contingency Reserves for FY 2023-24 and FY 2024-25, as approved by the Commission (Rs. Crore)**

Particulars	MYT Order	MTR Petition	Approved in this Order
<b>FY 2023-24</b>			
Contribution to Contingency Reserves	7.10	7.90	0
<b>FY 2024-25</b>			
Contribution to Contingency Reserves	7.18	10.25	0

6.12.5 The Commission approves Nil Contribution to Contingency Reserves for FY 2023-24 and for FY 2024-25.

### 6.13 Other Expenses

#### *BEST's Submission*

6.13.1 BEST has estimated the other expenses for FY 2023-24 and FY 2024-25 by applying 3% YoY escalation rate on the other expenses of FY 2022-23.

**Table 267 : Other Expenses revised for FY 2023-24 and FY 2024-25, as submitted by BEST (Rs. Crore)**

Particulars	FY 2023-24		FY 2024-25	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Other Expenses	48.85	27.56	50.31	28.59

6.13.2 BEST requested the Commission to approve other expenses for the period FY 2023-24 and FY 2024-25 as shown in the table above.

#### *Commission's Analysis and Ruling*

6.13.3 As per Regulation 35 of the MYT Regulations, 2019, the Commission has accepted the submission of BEST regarding prompt payment discount, ECS discount and load factor incentive. The Commission notes that BEST has considered 3% escalation on the previous year expenses i.e., FY 2022-23 to arrive at the expenses for FY 2023-24 and FY 2024-25. The Commission is of the view that since expenses for FY 2022-23 are not yet finally trued-up, it has considered the average of actual expenses allowed by the Commission in this Order for FY 2020-21 and FY 2021-22.

**Table 268: Other Expenses for FY 2023-24 and FY 2024-25, as approved by the Commission (Rs. Crore)**

Particulars	MYT Order	MTR Petition	Approved in this Order	Wire Business	Supply Business
<b>FY 2023-24</b>					
Other Expenses	48.85	27.56	24.19	-	24.19

Particulars	MYT Order	MTR Petition	Approved in this Order	Wire Business	Supply Business
<b>FY 2024-25</b>					
Other Expenses	50.31	28.59	24.19	-	24.19

6.13.4 The Commission approves the Other Expenses of Rs. 24.19 Crore for FY 2023-24 and FY 2024-25, respectively.

#### 6.14 Provision for Bad and Doubtful Debts

##### *BEST's Submission*

6.14.1 BEST submitted that it has considered Provision for Bad and doubtful debts for FY 2023-24 and FY 2024-25 as 1.5% of opening balance of receivables of FY 2021-22 (based on latest figure available based on accounts ledger), in line with Regulation 76 of MYT Regulations, 2019. The details are shown in table below:

**Table 269 : Provision for bad and Doubtful Revised for FY 2023-24 and FY 2024-25, as submitted by BEST (Rs. Crore)**

Particulars	FY 2023-24		FY 2024-25	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Opening Balance of Provision for bad and doubtful debts	-	-	-	-
Receivables for the year	449.33	612.19	449.33	505.18
Provision of bad and doubtful debt as % of Receivables	1.50%	1.50%	1.50%	1.50%
Provision for bad & doubtful debts during the year	6.74	9.18	6.74	7.58
Actual bad and doubtful debts written off	-	-	-	-
Closing Balance of Provision for bad and doubtful debts	-	-	-	-

6.14.2 BEST requested the 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 the Truing-up.

##### *Commission's Analysis and Ruling*

6.14.3 The Commission observed that BEST while claiming the Provision for Bad and Doubtful Debt has increased the Receivables in proportion to the increase in ARR with respect to FY 2021-22. The Commission is not inclined to consider the said methodology and approves the provision for bad and doubtful debt at the rate of 1.5% of the amount approved as Receivables for FY 2021-22 which shall be reconciled at the time of final Truing-up based on the Audited Accounts as per Regulation 76 and 85 of the MYT Regulations, 2019. Accordingly, the provision for bad and doubtful debts approved by the

Commission for FY 2023-24 and FY 2024-25 is shown in the Table below:

**Table 270: Provision for Bad and Doubtful Debts for FY 2023-24 and FY 2024-25, as approved by the Commission (Rs. Crore)**

Particulars	MYT Order	MTR Petition	Approved in this Order	Wire Business	Supply Business
<b>FY 2023-24</b>					
Provision for Doubtful debts	6.74	9.18	7.97	0.80	7.18
<b>FY 2024-25</b>					
Provision for Doubtful debts	6.74	7.58	7.97	0.80	7.18

6.14.4 The Commission approves the Provision for Bad and Doubtful Debts of Rs. 7.97 Crore for FY 2023-24 and FY 2024-25 respectively.

### 6.15 Return on Equity

#### *BEST's Submission*

6.15.1 BEST has calculated Return on equity as per Regulations 29 of MYT Regulations, 2019. For the purpose of arriving at the Regulatory Equity at the beginning of the year, BEST has considered the closing equity of previous year. As impact of replacement/retirement of assets, BEST has reduced the Equity to the extent of 30% of the GFA of the assets that have been projected to be retired during the year as per Regulation 27 of MYT Regulations, 2019. The details are as presented in the table below:

**Table 271 : Revised Return on Equity for Wires Business for FY 2023-24 and FY 2024-25, as submitted by BEST (Rs. Crore)**

Particulars	FY 2023-24		FY 2024-25	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Regulatory Equity at the beginning of the year	836.77	895.35	841.80	1,051.38
Capitalisation during the year	-	579.23	-	525.94
Equity portion of capitalisation during the year	15.71	173.77	15.68	157.78
Reduction in Equity Capital on account of retirement / replacement of assets	10.67	17.73	10.67	17.73
Regulatory Equity at the end of the year	841.81	1,051.38	846.81	1,191.43
<b>Return on Equity Computation</b>				
Base Rate of Return on Equity	14.00%	14.00%	14.00%	14.00%
Pretax Return on Equity after considering effective Tax rate	-	-	-	-
Return on Regulatory Equity at the beginning of the year	117.15	125.35	117.85	147.19
Return on Regulatory Equity addition during the year	0.35	10.92	0.35	9.80
<b>Total Return on Equity</b>	<b>117.50</b>	<b>136.27</b>	<b>118.20</b>	<b>157.00</b>



**Table 272 : Revised Return on Equity for Supply Business for FY 2023-24 and FY 2024-25, as submitted by BEST (Rs. Crore)**

Particulars	FY 2023-24		FY 2024-25	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Regulatory Equity at the beginning of the year	92.97	99.48	93.53	116.82
Capitalisation during the year	-	64.36	-	58.44
Equity portion of capitalisation during the year	1.75	19.31	1.74	17.53
Reduction in Equity Capital on account of retirement / replacement of assets	1.19	1.97	1.19	1.97
Regulatory Equity at the end of the year	93.53	116.82	94.09	132.38
<b>Return on Equity Computation</b>				
Base Rate of Return on Equity	15.50%	15.50%	15.50%	15.50%
Pre-tax Return on Equity after considering effective Tax rate	-	-	-	-
Return on Regulatory Equity at the beginning of the year	14.41	15.42	14.50	18.11
Return on Regulatory Equity addition during the year	0.04	1.34	0.04	1.21
<b>Total Return on Equity</b>	<b>14.45</b>	<b>16.76</b>	<b>14.54</b>	<b>19.31</b>

6.15.2 BEST has requested the 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 Truing-up.

#### ***Commission's Analysis and Ruling***

6.15.3 In absence of non-applicability of Income Tax as BEST being Local Authority, the Commission has computed RoE at 14% and 15.5% of the equity for Wires Business and Supply Businesses, respectively, in accordance with the MYT Regulations, 2019

6.15.4 The Commission has computed RoE in accordance with Regulation 29 of the MYT Regulations, 2019, based on opening equity, addition of equity as per approved capitalisation and weighted average rate of RoE based on allocation of assets to the wires and supply business.

6.15.5 To determine the equity eligible for return as per the Regulations, the Commission has considered the closing equity for FY 2022-23 approved in this Order on provisional Truing-up, as the opening equity for FY 2023-24. The addition in equity has been considered equal to the equity component of asset addition during the year. The impact of the replacement of assets is considered by reducing the equity to the extent of 30 % of the GFA of the assets that have been retired during the year.

6.15.6 The RoE approved by the Commission for FY 2023-24 and FY 2024-25 is



shown in Table below:

**Table 273: Return on Equity for FY 2023-24 and FY 2024-25, as approved by the Commission (Rs. Crore)**

Particulars	FY 2023-24				FY 2024-25			
	MTR Petition	Approved in this Order	Wire Business	Supply Business	MTR Petition	Approved in this Order	Wire Business	Supply Business
Regulatory Equity at the beginning of the year	994.83	997.77	898.00	99.78	1,168.21	1,034.99	931.50	103.50
Equity portion of capitalisation during the year	193.08	43.13	38.82	4.31	175.31	37.95	34.16	3.80
Reduction in Equity Capital on account of retirement / replacement of assets	19.70	5.91	5.32	0.59	19.70	5.91	5.32	0.59
<b>Regulatory Equity at the end of the year</b>	<b>1,168.21</b>	<b>1,034.99</b>	<b>931.50</b>	<b>103.50</b>	<b>1,323.82</b>	<b>1,067.04</b>	<b>960.33</b>	<b>106.70</b>
Return on Regulatory Equity at the beginning of the year	140.77	141.18	125.72	15.47	165.30	146.45	130.41	16.04
Return on Regulatory Equity addition during the year	12.27	2.63	2.35	0.29	11.01	2.27	2.02	0.25
<b>Total Return on Equity</b>	<b>153.03</b>	<b>143.82</b>	<b>128.06</b>	<b>15.75</b>	<b>176.31</b>	<b>148.72</b>	<b>132.43</b>	<b>16.29</b>

6.15.7 The Commission approves the Return on Equity of Rs. 143.82 Crore for FY 2023-24 and Rs. 148.72 Crore for FY 2024-25, respectively.

## 6.16 Return as Interest on Internal Funds

### *BEST's Submission*

6.16.1 BEST has submitted the Interest on internal funds as under:

**Table 274 : Revised Return on Internal Funds for FY 2023-24 and FY 2024-25, as submitted by BEST (Rs. Crore)**

Particulars	FY 2023-24		FY 2024-25	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Return on Internal Fund	5.28	5.28	5.28	5.28

6.16.2 BEST requested the Commission to approve the Return as Interest on Internal funds as submitted by BEST.

### **Commission's Analysis and Ruling**

6.16.3 The Appellate Tribunal of Electricity, in its Judgment dated 27 August, 2007 in Appeal No. 13 of 2007 had directed the Commission to take into

consideration interest on Government Grant as well as interest on internal funds, which is not included in the calculation of the Capital Base or notional equity in any way. Accordingly, the Commission has accepted the submission of BEST and approves the return on internal funds for FY 2023-24 and FY 2024-25 as shown in the Table below:

**Table 275: Return on Internal Funds for FY 2023-24 and FY 2024-25, as approved by the Commission (Rs. Crore)**

Particulars	MYT Order	MTR Petition	Approved in this Order	Wire Business	Supply Business
<b>FY 2023-24</b>					
Return on Internal Funds	5.28	5.28	5.28	4.75	0.53
<b>FY 2024-25</b>					
Return on Internal Funds	5.28	5.28	5.28	4.75	0.53

6.16.4 The Commission approves the return on internal funds of Rs. 5.28 Crore for FY 2023-24 and FY 2024-25 respectively.

## 6.17 Non-Tariff Income

### *BEST's Submission*

6.17.1 BEST has submitted that there was no particular growth pattern observed in Non-Tariff Income for Truing-up years & on the contrary Non-Tariff income has reduced due to COVID-19. However, BEST estimates that since the COVID-19 impact has been annulled by FY 2021-22, the growth in Non-Tariff income will be the same as the pre-covid basis. Hence, BEST has considered escalation rate of 3% on the Non-Tariff Income of FY 2022-23.

6.17.2 BEST has submitted the Non-Tariff Income as under:

**Table 276 : Revised Non-Tariff Income for FY 2023-24 and FY 2024-25, as submitted by BEST (Rs. Crore)**

Particulars	FY 2023-24		FY 2024-25	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Non-Tariff Income	60.36	40.79	62.17	42.01

6.17.3 BEST requested the Commission to approve the projected Non-Tariff Income as submitted by BEST. Any variation in above expenses will be claimed on actual basis at the time of Truing-up.

### *Commission's Analysis and Ruling*

6.17.4 BEST has considered the Non-Tariff Income by applying an escalation of 3%

to the Non-Tariff Income of FY 2022-23. The Commission notes that BEST itself has submitted that impact of COVID-19 has been annulled by FY 2021-22. Thus, the Commission is of the view that this would lead to increase in Non-Tariff income going forward. Accordingly, for projection, the Commission has considered the Non-Tariff income as approved in the MYT Order.

6.17.5 The Non-Tariff income approved by the Commission is shown in the Table below:

**Table 277: Non-Tariff Income for FY 2023-24 and FY 2024-25, as approved by the Commission (Rs. Crore)**

Particulars	MYT Order	MTR Petition	Approved in this Order	Wire Business	Supply Business
<b>FY 2023-24</b>					
Non-Tariff Income	60.36	40.79	60.36	6.04	54.32
<b>FY 2024-25</b>					
Non-Tariff Income	62.17	42.01	62.17	6.22	55.95

6.17.6 The Commission approves the Non-Tariff Income of Rs. 60.36 Crore for FY 2023-24 and Rs. 62.17 Crore for FY 2024-25, respectively.

## 6.18 Summary of Aggregate Revenue Requirement for FY 2023-24 and FY 2024-25

### BEST's Submission

6.18.1 BEST has submitted the segregation of Wires Business and Supply Business as per Regulation 71 of MYT Regulations, 2019. Following is the ARR summary for Distribution Wires business for FY 2023-24 and FY 2024-25.

**Table 278 : Revised ARR for Distribution Wires Business for FY 2023-24 and FY 2024-25, as submitted by BEST (Rs. Crore)**

Particulars	FY 2023-24		FY 2024-25	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Operation & Maintenance Expenses	399.75	440.63	411.07	462.22
Depreciation	104.72	115.51	105.88	143.34
Interest on Loan Capital	-	14.56	-	40.27
Interest on Working Capital	5.29	8.07	5.32	9.40
Interest on deposit from Consumers and Distribution System Users	2.46	1.93	2.53	1.98
Provision for bad and doubtful debts	0.67	0.87	0.67	0.99
Contribution to contingency reserves	6.39	7.11	6.46	9.23
<b>Total Revenue Expenditure</b>	<b>519.29</b>	<b>588.69</b>	<b>531.94</b>	<b>667.42</b>
Add: Return on Equity Capital	117.50	136.27	118.20	157.00

Particulars	FY 2023-24		FY 2024-25	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Add: Return on Internal fund	4.75	4.75	4.75	4.75
<b>Aggregate Revenue Requirement</b>	<b>641.54</b>	<b>729.71</b>	<b>654.90</b>	<b>829.17</b>
Less: Non-Tariff Income	6.04	4.08	6.22	4.20
<b>Aggregate Revenue Requirement from Distribution Wires</b>	<b>635.49</b>	<b>725.63</b>	<b>648.68</b>	<b>824.97</b>

6.18.2 Following is the ARR summary for Retail Supply business for FY 2023-24 and FY 2024-25.

**Table 279 : Revised ARR Retail Supply Business for FY 2023-24 and FY 2024-25, as submitted by BEST (Rs. Crore)**

Particulars	FY 2023-24		FY 2024-25	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Power Purchase Expenses (including Inter-State Transmission Charges) *	2,395.83	2,998.77	2,444.37	2,151.26
Operation & Maintenance Expenses	215.25	284.78	221.35	385.36
Depreciation	11.64	12.83	11.76	15.93
Interest on Loan Capital	-	1.62	-	4.47
Interest on Working Capital	-	-	-	-
Interest on Consumer Security Deposit	22.13	17.38	22.80	17.86
Provision for bad and doubtful debts	6.07	8.32	6.07	6.59
Contribution to contingency reserves	0.71	0.79	0.72	1.03
Intra-State Transmission Charges	254.91	254.91	250.31	250.31
MSLDC Fees & Charges	1.35	1.35	1.36	1.36
Income Tax	-	-	-	-
Other Expenses	48.85	27.56	50.31	28.59
<b>Total Revenue Expenditure</b>	<b>2,956.73</b>	<b>3,608.30</b>	<b>3,009.04</b>	<b>2,862.76</b>
Add: Return on Equity Capital	14.45	16.76	14.54	19.31
Add: Return on Internal fund	0.53	0.53	0.53	0.53
<b>Aggregate Revenue Requirement</b>	<b>2,971.71</b>	<b>3,625.60</b>	<b>3,024.10</b>	<b>2,882.60</b>
Less: Non-Tariff Income	54.33	36.71	55.95	37.81
<b>Aggregate Revenue Requirement from Retail Tariff</b>	<b>2,917.38</b>	<b>3,588.89</b>	<b>2,968.15</b>	<b>2,844.79</b>

\*-Rectification in power purchase cost as per Form 2.1

6.18.3 The revised Aggregate Revenue Requirement for FY 2023-24 and FY 2024-25 is as presented in table below:

**Table 280 : Revised Summary Aggregate Revenue Requirement for FY 2023-24 and FY 2024-25, as submitted by BEST (Rs. Crore)**

Particulars	FY 2023-24		FY 2024-25	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Power Purchase Expenses (including Inter-State Transmission Charges)	2,395.83	2,998.77	2,444.37	2,151.26
Operation & Maintenance Expenses	615.00	725.41	632.42	847.58

Particulars	FY 2023-24		FY 2024-25	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Depreciation	116.36	128.35	117.64	159.27
Interest on Loan Capital	-	16.18	-	44.74
Interest on Working Capital	5.29	8.07	5.32	9.40
Interest on Consumer Security Deposit	24.59	19.31	25.33	19.84
Provision for bad and doubtful debts	6.74	9.18	6.74	7.58
Contribution to contingency reserves	7.10	7.90	7.18	10.25
Intra-State Transmission Charges	254.91	254.91	250.31	250.31
MSLDC Fees & Charges	1.35	1.35	1.36	1.36
Other Expenses	48.85	27.56	50.31	28.59
<b>Total Revenue Expenditure</b>	<b>3,476.02</b>	<b>4,196.99</b>	<b>3,540.98</b>	<b>3,530.18</b>
Add: Return on Equity Capital	131.95	153.03	132.74	176.31
Add: Return on Internal fund	5.28	5.28	5.28	5.28
<b>Aggregate Revenue Requirement</b>	<b>3,613.24</b>	<b>4,355.31</b>	<b>3,679.00</b>	<b>3,711.77</b>
Less: Non-Tariff Income	60.37	40.79	62.17	42.01
<b>Aggregate Revenue Requirement from Retail Tariff</b>	<b>3,552.87</b>	<b>4,314.52</b>	<b>3,616.83</b>	<b>3,669.76</b>
<b>Past Revenue Gap Adjusted</b>	<b>(172.70)</b>	<b>(172.70)</b>	<b>(103.35)</b>	<b>(103.35)</b>
<b>ARR from Distribution Business with Revenue Gap</b>	<b>3,380.17</b>	<b>4,141.82</b>	<b>3,513.48</b>	<b>3,566.41</b>

6.18.4 BEST requested the Commission to approve the projected ARR for MYT Control Period of FY 2023-24 and FY 2024-25 as submitted by BEST. Any variation in above expenses will be claimed on actual basis at the time of Truing up.

### Commission's Analysis and Ruling

6.18.5 Based on the components of ARR approved in the above paragraphs, the Commission has approved the ARR for FY 2023-24 and FY 2024-25.

6.18.6 It has computed the ARR for the Wires and Supply business in accordance with the allocation matrix specified in Regulation 71 of the MYT Regulations, 2019, as shown in the following Tables:

**Table 281: Summary of ARR for Distribution Wires Business for FY 2023-24 to FY 2024-25, as approved by the Commission (Rs. Crore)**

Particulars	FY 2023-24		FY 2024-25	
	MTR Petition	Approved in this Order	MTR Petition	Approved in this Order
Operation & Maintenance Expenses	440.63	430.39	462.22	448.54
Depreciation	115.51	101.37	143.34	105.04
Interest on Loan Capital	14.56	-	40.27	-
Interest on Working Capital	8.07	6.96	9.40	7.75
Interest on deposit from Consumers and Distribution System Users	1.93	2.68	1.98	2.68

Particulars	FY 2023-24		FY 2024-25	
	MTR Petition	Approved in this Order	MTR Petition	Approved in this Order
Provision for bad and doubtful debts	0.87	0.80	0.99	0.80
Contribution to contingency reserves	7.11	-	9.23	-
<b>Total Revenue Expenditure</b>	<b>588.69</b>	<b>542.19</b>	<b>667.42</b>	<b>564.82</b>
Add: Return on Equity Capital	136.27	128.06	157.00	132.43
Add: Return on Internal fund	4.75	4.75	4.75	4.75
<b>Aggregate Revenue Requirement</b>	<b>729.71</b>	<b>675.01</b>	<b>829.17</b>	<b>701.99</b>
Less: Non-Tariff Income	4.08	6.04	4.20	6.22
<b>Aggregate Revenue Requirement from Distribution Wires</b>	<b>725.63</b>	<b>668.97</b>	<b>824.97</b>	<b>695.78</b>

**Table 282: Summary of ARR for Retail Supply Business for FY 2023-24 to FY 2024-25, as approved by the Commission (Rs. Crore)**

Particulars	FY 2023-24		FY 2024-25	
	MTR Petition	Approved in this Order	MTR Petition	Approved in this Order
Power Purchase Expenses (including Inter-State Transmission Charges)	2,998.77	3,207.05	2,151.26	3,433.38
Operation & Maintenance Expenses	284.78	231.75	385.36	241.52
Depreciation	12.83	11.26	15.93	11.67
Interest on Loan Capital	1.62	-	4.47	-
Interest on Working Capital	-	-	-	-
Interest on Consumer Security Deposit	17.38	24.14	17.86	24.14
Provision for bad and doubtful debts	8.32	7.18	6.59	7.18
Contribution to contingency reserves	0.79	-	1.03	-
Intra-State Transmission Charges	254.91	232.10	250.31	299.32
MSLDC Fees & Charges	1.35	0.93	1.36	0.99
Other Expenses	27.56	24.19	28.59	24.19
<b>Total Revenue Expenditure</b>	<b>3,608.30</b>	<b>3,738.60</b>	<b>2,862.76</b>	<b>4,042.39</b>
Add: Return on Equity Capital	16.76	15.75	19.31	16.29
Add: Return on Internal fund	0.53	0.53	0.53	0.53
<b>Aggregate Revenue Requirement</b>	<b>3,625.60</b>	<b>3,754.88</b>	<b>2,882.60</b>	<b>4,059.21</b>
Less: Non-Tariff Income	36.71	54.32	37.81	55.95
<b>Aggregate Revenue Requirement from Retail Tariff</b>	<b>3,588.89</b>	<b>3,700.56</b>	<b>2,844.79</b>	<b>4,003.26</b>

**Table 283: Summary of ARR for Distribution Business for FY 2023-24 to FY 2024-25, as approved by the Commission (Rs. Crore)**

Particulars	FY 2023-24		FY 2024-25	
	MTR Petition	Approved in this Order	MTR Petition	Approved in this Order
Power Purchase Expenses (including Inter-State Transmission Charges)	2,998.77	3,207.05	2,151.26	3,433.38

Particulars	FY 2023-24		FY 2024-25	
	MTR Petition	Approved in this Order	MTR Petition	Approved in this Order
Operation & Maintenance Expenses	725.41	662.13	847.58	690.07
Depreciation	128.35	112.63	159.27	116.71
Interest on Loan Capital	16.18	-	44.74	-
Interest on Working Capital	8.07	6.96	9.40	7.75
Interest on Consumer Security Deposit	19.31	26.82	19.84	26.82
Provision for bad and doubtful debts	9.18	7.97	7.58	7.97
Contribution to contingency reserves	7.90	-	10.25	-
Intra-State Transmission Charges	254.91	232.10	250.31	299.32
MSLDC Fees & Charges	1.35	0.93	1.36	0.99
Other Expenses	27.56	24.19	28.59	24.19
<b>Total Revenue Expenditure</b>	<b>4,196.99</b>	<b>4,280.79</b>	<b>3,530.18</b>	<b>4,607.21</b>
Add: Return on Equity Capital	153.03	143.82	176.31	148.72
Add: Return on Internal fund	5.28	5.28	5.28	5.28
<b>Aggregate Revenue Requirement</b>	<b>4,355.31</b>	<b>4,429.89</b>	<b>3,711.77</b>	<b>4,761.20</b>
Less: Non-Tariff Income	40.79	60.36	42.01	62.17
<b>Aggregate Revenue Requirement from Retail Tariff</b>	<b>4,314.52</b>	<b>4,369.53</b>	<b>3,669.76</b>	<b>4,699.03</b>
<b>Past Revenue Gap of MYT Order Adjusted</b>	<b>(172.70)</b>	<b>(172.70)</b>	<b>(103.35)</b>	<b>(103.35)</b>
<b>ARR from Distribution Business with Revenue Gap</b>	<b>4,141.82</b>	<b>4,196.83</b>	<b>3,566.41</b>	<b>4,595.68</b>

6.18.7 The Commission approves estimates of Aggregate Revenue Requirement of Rs. 4,196.83 Crore for FY 2023-24 and Rs. 4,595.68 Crore for FY 2024-25.



## 7 COMPLIANCE OF DIRECTIVES

### 7.1 Background

7.1.1 The Commission has given certain directives to BEST in the MYT Order in Case No. 324 of 2019. The directives, the status of compliance, and further directions of the Commission are set out below.

#### MYT Order Directives

### 7.2 Replacement of Electro-Mechanical Meters with Electronic Meter

#### *Directive*

7.2.1 The Commission has directed to expedite the replacement of existing Electromechanical meters with Electronic meters.

#### *BEST's Submission*

7.2.2 BEST has submitted that it has expedited the process of replacement of existing Electromechanical meters with electronic meters. As on 31 October 2022, out of 10 Lakh consumers only 88902 are remaining. BEST has proposed to implement Smart Meters for all its Consumers. In the following table progress has shown.

**Table 284 : Numbers of Electro-Mechanical meters with Electronic Meters from FY 2019-20 to FY 2021-22**

Particulars	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23 up to Dec, 2022
Actual Number of meters replaced in the year	1,24,340	18,331	53,684	13445

#### *Commission's Analysis and Ruling*

7.2.3 The Commission notes the submission made by BEST. However, the BEST is directed to expedite the replacement of existing Electro Mechanical meters with electronic meters. Further, it is directed to BEST to submit the implementation status of smart meters on half yearly basis to the Commission, so as to ensure the kVAh billing during next MYT control period.

### 7.3 Demand Side Management

#### *Directive*

7.3.1 The Commission's Demand Side Management Implementation Framework Regulations, 2010 provide a comprehensive framework for Distribution Licensees to plan and execute cost effective Demand Side Management



measures and to meet their costs. In Order to give further impetus to Demand Side Management measures, BEST should encourage the installation of energy-efficient appliances in new residential, industrial and commercial premises. This may include approaching the developers as well as consumers, and other means. The Commission expects Demand Side Management Plans/schemes from BEST as per Commission's Demand Side Management Implementation Framework Regulations, 2010 for future.

***BEST's Submission***

7.3.2 BEST has submitted that it had implemented following Demand Side Management Schemes prior to FY 2017-18:

**Table 285 : Demand Side Management Schemes before FY 2017-18**

Sr. No.	DSM Program Name	Target for No. of Installation	Installed Qty.	Energy Saved (kWh)	Program Status
1	T-5 Fluorescent Tube light	25000	18357	1659809	Closed
2	5 Star Ceiling Fan	5000	4786	873289	Closed
3	7 W LED Bulb (Ujala)	700000	162259	953837	Closed
4	9 W LED Bulb (Ujala)	1050000	9624	83505	Closed
5	20 W LED Tubelight (DETP)	500000	1784	7053	Closed
6	50 W Ceiling Fan (DEFP)	200000	131	1366	Closed
	Total Energy saved in kWh			3578859	

7.3.3 Further, BEST has executed the Capacity Building Programme under Demand Side Management Schemes for 30 Officer in the year 2019 and 100 nos. field level officers in the year 2020 and further 73 nos. of field level officers in the FY 2022-23.

7.3.4 BEST celebrated Energy Conservation Week from 14th to 20th December every year (since 2006). This has been done for promoting Energy Conservation Awareness among public, display of energy conservation flex banners/stickers at prominent places such as Cash Collection Centres, etc., and prepared electrical energy conservation models to propagate use of energy efficient equipment, use of non-conventional energy sources namely Solar & Wind and were demonstrated by BEST's officers by visiting various Marathi, Gujarati & English medium schools. The students at the schools were quizzed on the Energy Conservation matter and the winner students were awarded with LED lamps. In future as will be decided in DSMCC, BEST shall endeavor to implement Demand Side Management program.

7.3.5 In addition, BEST has executed numerous energy saving measures by equipment replacement such as (a) 40 W tube lights replaced by 19 W LED tube lights, (b) 150 W/ 250 W HPSV/ HPMV lanterns replaced by 105 W LED lanterns, (c) 400 W HPSV single / double integral lanterns replaced by 150 W

/ 250 W LED lanterns, (d) Conversion of existing old defective fans by BLDC fans, etc.

- 7.3.6 Further, BEST has proposed to install EV AC slow chargers in consumer premises under DSM program during FY 2023-24, FY 2024-25 & FY 2025-26. For the same, DPR will be submitted to the Commission shortly.

***Commission's Analysis and Ruling***

- 7.3.7 The Commission has noted the submission made by BEST and expects these initiatives from BEST. Further with increasing power purchase cost which is impacting tariff, BEST should come out with Demand Response scheme to incentivize the consumers for voluntary curtailment/shifting of load for reducing costly power procurement. BEST shall submit such scheme under Demand Side Management Regulations within 6 months from date of this Order.

**7.4 Delay in Bill Generation**

***Directive***

- 7.4.1 The Commission has directed BEST to expedite the overall billing process to expedite recovery of charges from consumers.

***BEST's Submission***

- 7.4.2 BEST submitted that starting from meter reading till Bill generation, BEST requires 6-7 days on an average for all the consumers including high value consumers. The rationale for this duration is that the meter reading exceptions are to be attended before bill generation in Order to avoid incorrect billing to consumers. The billing gets delayed in case Saturday/Sunday or holiday comes in the said duration. BEST is expediting the process to reduce the delay in bill Generation.
- 7.4.3 Further, it has started meter reading through mobile app, as such readings are updated instantaneously in the system. However, there is intermediate step of exception report before printing final bills. BEST has proposed Smart Metering to all its consumers. After implementation of this scheme, overall billing process will be expedited due to automation.

***Commission's Analysis and Ruling***

- 7.4.4 The Commission notes the submission made by BEST. BEST should endeavor to reduce the gap between Meter Reading and Issuance of bill. BEST is directed to expedite the overall billing process to expedite recovery of charges from consumers.

## **7.5 Non-Recovery of Overdue Security Deposit from Consumers**

### ***Directive***

7.5.1 BEST to ensure transparent and timely recovery/ refund of the CSD.

### ***BEST's Submission***

7.5.2 BEST submitted that Post COVID-19 pandemic, this was not strictly followed. However, now the process is initiated.

### ***Commission's Analysis and Ruling***

7.5.3 The Commission noted the reply of the BEST. The Commission would like to highlight that the impact of the COVID-19 pandemic has already been normalized post FY 2021-22 and still BEST has not strictly followed the Supply Code in relation to the levy of consumer security deposit on the consumer, recovery of the same and the punitive action for non-recovery on consumers. The Commission has already balanced the interests of the consumers and the Licencee by granting installments for payments of the Security Deposit. The Commission would like to put on record the displeasure of the lackluster approach of BEST. The Commission in this Tariff Order has already considered the notional security deposit and provided the impact of the same while calculating the interest on working capital.

7.5.4 The Commission would like to state that the Distribution Licensees are required to do the needful to ensure that the due amount of CSD is recovered/refunded from/to consumers as per the Regulations governing the same irrespective of COVID-19 pandemic as the same will be assisting as an additional fund available to meet their working capital requirement and reduce the dependence on the burden of the interest on the external source of funds.

7.5.5 The Commission directs BEST to ensure transparent and timely recovery/ refund of the CSD and provide the details of the billing and the recovery along with the action taken for no-recovery in the next tariff petition.

## **7.6 Sharing of Historical Data of Energy Consumption**

### ***Directive***

7.6.1 The Commission has directed BEST to share the consumer billing data with the individual consumer (to the extent possible) and explore other consumer friendly facilities which may enable energy efficient usage.

### ***BEST's Submission***

- 7.6.2 BEST submitted that Units for 12 months were shown in the bills. Provision was made for the consumer to view the historical data with regards to consumption of meter through consumption history on their portal as well as its mobile application. However, feasibility was being explored for providing other meter reading parameters in addition to consumption under Meter Reading. Further, BEST intended to install Smart meters to give consumer real-time feedback of consumption.

### ***Commission's Analysis and Ruling***

- 7.6.3 The Commission notes the reply of the BEST. The Commission expects BEST to explore other consumer friendly facilities which may enable energy efficient usage at the earliest and provide such information on the BEST Website for more awareness among the consumers.

## ***7.7 Financial Accounting of BEST***

### ***Directive***

- 7.7.1 The Commission has directed BEST to explore and ensure that separate bank accounts are available for the electricity supply and transport business to ensure proper tracking (internally) of the expenditure being done for various businesses, especially for working capital loan.

### ***BEST's Submission***

- 7.7.2 BEST submitted that each and every activity has given a separate Account code and accordingly Income & Expenditure is booked separately of Supply and Bus division in the Books of Accounts & also Profit and Loss Account for each financial year is maintained separately of both Divisions. As BEST had a Bank Overdraft Account of Rs. 350/- Crore in Canara Bank & all earnings of the Undertaking were required to be transferred to the O.D. Account as per the terms and conditions of the O.D. Account. Hence, all earnings of the Undertaking, i.e., Supply earnings and Transport earnings, were transferred first to the Overdraft Account, and all payments of the Undertaking were made from the Overdraft Account in Canara Bank as per the terms and conditions of the O.D. Account.
- 7.7.3 BEST had initiated the process for a separate Treasury (i.e., separate bank account), Balance Sheet, Assets, and Employees (i.e., Account, Audit, Personnel, Legal, Civil, Medical, Security, IT, Material Management, other associated departments, etc.) for the Electric Supply Branch. This was done so that the funds flow was conducted as envisaged in respective MERC Orders.

### ***Commission's Analysis and Ruling***

7.7.4 The Commission has noted the submission made by BEST. However, it is necessary to segregate the expenses and revenue between electricity and transport business. It has been observed that OD facility with Canara bank is utilized for Electricity and Transport business and therefore, there is a need to segregate the same and BEST needs to take action for such segregation before filing of the next MYT petition.

## **7.8 Distribution Losses and Energy Balance**

### ***Directive***

7.8.1 The Commission has directed BEST to provide the details of efforts and the quantifiable benefits of these efforts which BEST had put in for reducing Distribution Loss as compared to the target and to continue its efforts in bringing down the Distribution losses to the lowest possible levels and ensure that performance does not deteriorate beyond the levels already achieved in the past.

### ***BEST's Submission***

7.8.2 BEST submitted that the distribution losses are impacted by various technical, commercial and other parameters, such as sales mix, weather variations, vintage of the network and equipment, line loading, etc. BEST has been able to maintain its Distribution losses in the range of 5% to 6% which are almost near to the technical minimum of the network by taking various initiatives such as continuous vigilance activities, raids, consumer awareness on theft and energy conservation, reduce / shifting loading on network, legal actions against theft incidences and faulty meter replacements. Also ensures efficient cables & equipment's during procurement by in house as well as factory testing. BEST is continuously taking efforts for reducing Distribution Loss to its target level.

7.8.3 Further, BEST had forwarded the DPR of Rs. 3460.98 Crore and Action Plan under the RDSS Project to the Government of Maharashtra for its approval and to recommend the same to Govt. of India. The DPR contained Distribution Infrastructure works (i.e., RSS/DSS infra works, IT applications and Infrastructure works, Advance Distribution Management System (ADMS)) and Advance Metering Infrastructure (Smart Metering). The GoM approved BEST's DPR of Rs. 3460.98 Crore and Action Plan on 25.08.2022 and at that time, BEST's proposal is under consideration of the Government of India.

### ***Commission's Analysis and Ruling***

7.8.4 The Commission has noted the submission made by BEST. DPR for RDSS implementation has been referred back to BEST with a direction to submit as

per provisions of MERC (Approval of Capital Investment Schemes) Regulations, 2022. BEST is yet to submit the same. BEST is directed to submit the DPR within 2 months of the issue of this order so as to ensure the timely implementation of the RDSS project. BEST is directed to provide the detail implementation plan and actual implementation with any delay and reasons for such delay in next tariff proceedings. Further, BEST is directed to submit the details of efforts and the quantifiable benefits of these efforts which BEST had put in for reducing Distribution Loss and ensure that performance does not deteriorate beyond the levels already achieved in the past.

## **7.9 Power Purchase Expenses**

### ***Directive***

- 7.9.1 The Commission has directed BEST to explore options to contract non-solar power on a long-term basis adopting the competitive bidding route going forward and approach the Commission in a timely manner to seek necessary approvals.
- 7.9.2 Also, BEST has directed to ensure that Power planning should be undertaken by considering the procurement of RE power and purchase of REC is to be resorted to only in case of shortfall of generation of RE power and ensure to take timely steps to contract such RE Power for future consumption and seek necessary approvals from the Commission.

### ***BEST's Submission***

- 7.9.3 BEST had submitted that it had 20 MW Solar Power long-term tie-ups for 25 years. BEST had always tried to meet its RPO through a mix of Long-Term Solar Power Purchase, Short-Term Non-Solar Power Purchase, and remaining through REC.
- 7.9.4 The Commission has issued the Order on 26 April, 2021 and accorded its approval to the BEST Undertaking's procurement of 400 MW wind-solar hybrid power from Solar Energy Corporation of India Limited at tariff of Rs. 2.41/unit discovered through competitive bidding plus trading margin of Rs. 0.07 per unit plus for 25 years. The Commission also approved the draft Power Supply Agreement to be executed between BEST Undertaking and Solar Energy Corporation of India Limited for procurement of 400 MW wind-solar hybrid power project. MERC directed that post signing of the Power Supply Agreement by parties, copy of the same shall be submitted for records of the Commission. Accordingly, Power Supply Agreement was signed on 25 June, 2021 by both the parties. Copies submitted to the Commission and Maharashtra State Transmission Utility.

- 7.9.5 BEST Undertaking has also signed PPA for 234 MW Solar Power from Solar Energy Corporation of India (SECI) at Rs. 2.71 per unit which includes a fixed tariff of Rs. 2.54 per unit discovered through competitive bidding plus SECI's trading margin of Rs. 0.07 per unit plus additional risk premium of Rs 0.10 per unit due to not covered under State Government Guarantee for 25 years.
- 7.9.6 By tying up 400 MW Wind Solar Hybrid power and 234 MW Solar power, BEST would have been able to meet its Solar and Non-solar RPO from FY 2025-26 onwards.
- 7.9.7 BEST had taken all above efforts to fulfill RPO of FY 2020-21 and FY 2021-22. However, due to various reasons such as the suspension of REC trading, extension of COD of 400 MW SECI Hybrid project, non-response of generators/traders to the short-term bidding conducted by BEST, and financial constraints of BEST, BEST had a shortfall of Solar and Non-solar RPO of FY 2020-21 and FY 2021-22.
- 7.9.8 BEST has started procuring RE power from IEX (G-DAM) from the month of September 2021. The total quantum of RE purchased through IEX (G-DAM) was 20.36 MU (0.57 MU Non Solar + 19.79 MU Solar) in FY 2021-22 and 34.39 MU (5.26 MU Non Solar + 29.13 MU Solar) in FY 2022-23 (HI).
- 7.9.9 As RE power from 400 MW Wind Solar Hybrid project and 234 MW Solar projects would have been available from FY 2025-26 onwards, BEST would have conducted short-term/Medium-term bidding to fulfill RPO cumulatively till March 2025.

#### ***Commission's Analysis and Ruling***

- 7.9.10 The Commission has noted the submission made by BEST.

#### ***7.10 Delay in Power Purchase from Manikaran Power Limited***

##### ***Directive***

- 7.10.1 The Commission has noted that BEST has not provided any reasons for the delay in power availability from Manikaran Power Limited, resulting in a delay of five months in the process of signing a power purchase agreement. The Commission expressed its displeasure over the delay and will analyze the actual short-term power purchased by BEST compared to the approved rate of Manikaran to determine any additional financial burden for the year 2019-20. BEST is directed to file a separate petition for approval of the delay in power supply and detail the measures taken to address the delay. The Commission approves the fixed and variable charges considered by BEST for working out the power purchase cost from Manikaran Power Limited and directs BEST to ensure the conditions of escalation are scrutinized as per the PPA.

### ***BEST's Submission***

7.10.2 BEST submitted that as per directives of the Commission, BEST had filed a separate petition on 29 April, 2021 for approval of delay in supply of power from Manikaran. The Commission issued an Order dated 12 July, 2021 in case No. 61 of 2021 and Ordered as follows:

- i. Case No. 61 of 2021 is partly allowed.*
- ii. The Commission condones the delay for execution of Power Purchase Agreement and approves the continuation of power from Manikaran Power Limited to Brihanmumbai Electric Supply and Transport Undertaking and revises the start date as 1 March 2020.*
- iii. Brihanmumbai Electric Supply and Transport Undertaking to submit detailed analysis of power purchase expenses for FY 2019-20 as directed in para 9.3 above in its upcoming Mid Term Review Petition.”*

7.10.3 The average rate of power purchase from bilateral power sources & the Power Exchanges during the period from April, 2019 to February, 2020 found to be Rs. 3.86 / KWh, which rate is in fact lesser than the rate discovered through bid submitted by Manikaran Power Ltd. (i.e., Rs. 3.94 / KWh) and the actual MPL power purchase rate for FY 2019-20 was Rs. 3.98 KWh. BEST did not suffer any adverse financial impact during the period of non-availability of power from Manikaran Power Ltd. and there was consequently no adverse financial impact on the consumers of BEST due to delay in power procurement from Manikaran Power Ltd.

### ***Commission's Analysis and Ruling***

7.10.4 The Commission has noted the submission made by BEST. Also, the Commission has analysed the impact of the delay in power purchase from Manikaran Power Limited and provided ruling in the relevant para of this Order.

## ***7.11 Expiry of TPC-G PPA***

### ***Directive***

7.11.1 The Commission had observed that, in the past, BEST had preferred to enter into long-term arrangements for the supply of power only with TPC-G rather than actively exploring alternative sources that may have been cheaper and through competitive bidding. The Commission had been concerned that this should not become a fate accompli for future requirements, and that the other options or combination of alternatives should not be foreclosed merely due to paucity of time, notwithstanding the significance of the islanding arrangement



for Mumbai and subject to the remaining transmission constraints. These options could have included medium and/or long-term arrangements through competitive bidding also. Considering these concerns, BEST would have had to approach the Commission well before the expiry of its PPA for its extension or otherwise. Hence, the Commission directed BEST to approach the Commission for approval of its plans for future power procurement in accordance with Regulation 20 of the MYT Regulations, 2019.

***BEST's Submission***

7.11.2 BEST has submitted its Power Procurement Plan including Renewable Power for the approval of the Commission on 20 December, 2022.

***Commission's Analysis and Ruling***

7.11.3 The Commission has noted the submission made by BEST. The Commission has already issued Order dated 15 March 2023 in that matter.

***7.12 Impact of FBSM bills***

***Directive***

7.12.1 Approval of likely impact of FBSM payment by the Commission is over and above, power purchase cost approved by the Commission to safeguard the licensee in case payments are required to be made of past period. This will not be considered as part of power purchase cost while calculation of FAC. BEST should make payment of FBSM bills through this fund and should not load such bill amount in FAC computation. In case, actual bill amount of FBSM is more than the above fund, only such incremental amount may be considered for FAC computation.

***BEST's Submission***

7.12.2 BEST is following the Commission's Order and directions.

***Commission's Analysis and Ruling***

7.12.3 The Commission has noted the submission made by BEST.

***7.13 Operation and Maintenance Expenses***

***Directive***

7.13.1 The Commission has directed to BEST to submit impact of wage revision separately along with necessary documentary proof during final truing-up of FY 2019-20 during MTR Petition.

***BEST's Submission***

7.13.2 BEST submitted that impact of wage revision for the period 1.4.2016 to 31.3.2021 submitted in Truing-up of FY 2019-20 & FY 2020-21.

***Commission's Analysis and Ruling***

7.13.3 The Commission has noted the submission made by BEST and provided the observation in the relevant section of this order.

***7.14 Capital Expenditure and Capitalisation***

***Directive***

7.14.1 The Commission has directed BEST to adopt practice similar to other Licensees and capitalize IDC in the same year in which asset is capitalized from FY 2019-20 onwards and book it in its Audited Annual Accounts for the year.

7.14.2 BEST is directed to timely submit DPR for various schemes for which capitalization is proposed in future.

***BEST's Submission***

7.14.3 BEST submitted that as directed, it has followed the same methodology for IDC calculations and took care to submit timely DPR for proposing capitalisation."

***Commission's Analysis and Ruling***

7.14.4 The Commission has noted the submission made by BEST.

***7.15 Funding of Capital Expenditure***

***Directive***

7.15.1 The Commission has directed BEST to complete its projects in time, so that BEST would be eligible for full amount of grant from GoI.

***BEST's Submission***

7.15.2 BEST submitted that it will take care and follow the directions.

***Commission's Analysis and Ruling***

7.15.3 The Commission has noted the submission made by BEST. However, the BEST has not provided further justification or action for timely completion of

the scheme. BEST is directed to provide the details of the approved plan, schedule completion date, actual implementation status, physical progress for all the Government scheme where grants are involved in the next tariff Petition.

### **7.16 Contribution to Contingency Reserves**

#### ***Directive***

7.16.1 The Commission directed BEST to ensure timely investment of contingency reserves amount as specified in the MYT Tariff regulations, 2019.

#### ***BEST's Submission***

7.16.2 As directed, BEST will take care and follow the Regulations. However, BEST states that the Books of Accounts of BEST is still maintained manual and require considerable time to close the books of Account. The Contingencies Reserve Fund investment is therefore being invested after our Accounts are Audited by Internal Auditor and Municipal Chief Auditor (External Auditor) which resulted invested made after Oct. every year. BEST requested to the Commission to condone the delay in Investment. Further, BEST submitted that contingency reserves amount is invested in public sector undertaking.

#### ***Commission's Analysis and Ruling***

7.16.3 The Commission notes that BEST has not made any contribution towards contingency reserves citing the reason of Covid-19 pandemic for FY 2019-20 and also there was a delay in investment for FY 2020-21 and FY 2021-22 against the stipulated time as provided in MYT Regulations. This reflects the lack of discipline on the part of BEST with regard to ensuring timely investment of amount which is already approved by the Commission in the ARR and recovered by BEST through the tariff. The Commission expresses its displeasure and is of the view that such actions of BEST are not desirable and should be avoided by BEST in future. In the current order, the Commission has disallowed such contribution to contingency reserves due to delay in investment.

### **7.17 Provision for Bad and Doubtful Debts**

#### ***Directive***

7.17.1 The Commission has directed that, BEST should include future recovery from consumers whose past debts are written off as part of ARR & the benefit should be passed on to the consumers.

#### ***BEST's Submission***

7.17.2 BEST submitted that it is complying the directive of the Commission.

***Commission's Analysis and Ruling***

7.17.3 The Commission has noted the submission made by BEST and observed that no detail has been provided for the same by BEST and mere submission of the statement without any supporting cannot be considered as compliance of the direction. Accordingly, the Commission directs BEST to provide the details in relation to the past recovery of arrears / debts written off, efforts made, and the amount recovered in the next Tariff proceedings.

**7.18 Non-Tariff Income**

***Directive***

7.18.1 The Commission directed BEST to consider revenue from scrap on Capital Assets as Non-Tariff Income.

***BEST's Submission***

7.18.2 BEST submitted that it had considered the Revenue generated from Scrapped on Capital Asset as Non-Tariff Income and passed on the consumer through Tariff as approved by the Commission.

***Commission's Analysis and Ruling***

7.18.3 The Commission has noted the submission made by BEST.

**7.19 Sharing of Efficiency Gain / Loss on account of IoWC**

***Directive***

7.19.1 The Commission has directed BEST to justify the reasons for requiring loan from MCGM when all its costs are fully recovered from the approved tariffs and interest cost towards MCGM loan is not allowed as part of the ARR.

***BEST's Submission***

7.19.2 BEST submitted that the loan obtained from MCGM for making payment of outstanding TATA bills was fully repaid in FY 2018-19. Further, it was submitted that interest on the MCGM loan would not be claimed from 2019-20 onwards. Additionally, the Undertaking had already adopted the Bill discounting methodology to make the payment of TATA Bill on the due date in the future.

***Commission's Analysis and Ruling***

7.19.3 The Commission has noted the submission made by BEST.

### **7.20 kVAh Billing for Consumer categories having load above 20 kW**

#### ***Directive***

7.20.1 The Commission has directed BEST to expedite the preparedness for Meter replacement and billing software for the entire basket of 20 kW and above for the kVAh billing.

#### ***BEST's Submission***

7.20.2 BEST submitted that it has forwarded the DPR of Rs. 3460.98 Crore and Action Plan under the RDSS Project to Government of Maharashtra for its approval and to recommend the same to Govt. of India. This DPR contains Distribution Infrastructure works (i.e., RSS/DSS infra works, IT applications and Infrastructure works, Advance Distribution Management System (ADMS)) and Advance Metering Infrastructure (Smart Metering). The GoM has approved BEST's DPR of Rs. 3460.98 Crore and Action Plan on 25.08.2022 and presently BEST's proposal is under consideration of Govt. of India.

7.20.3 Also, BEST has submitted Detailed Project Report (DPR) for Capital Investment Schemes on "Implementation of Smart Metering for BEST Undertaking" for FY 2022-23 to FY 2025-26 (Totex Phase FY 2022-23 to FY 2032-33) in-principal approval of the Commission on 21.10.2022.

#### ***Commission's Analysis and Ruling***

7.20.4 The Commission has noted the submission made by BEST. DPR for RDSS and smart meter implementation has been referred back to BEST with a direction to submit as per provisions of MERC (Approval of Capital Investment Schemes) Regulations, 2022. BEST is yet to submit the same. BEST is directed to submit the DPR within 2 months of the issue of this order so as to ensure the timely implementation of the metering. BEST is directed to provide the detail implementation plan and actual implementation with any delay and reasons for such delay in next tariff proceedings. Further, BEST is directed to submit the details of efforts and the quantifiable benefits of these efforts which BEST had put in for reducing Distribution Loss and ensure that performance does not deteriorate beyond the levels already achieved in the past.

### **7.21 Single Meter for Single Premises**

#### ***Directive***

- 7.21.1 The Distribution Licensees are required to ensure strict adherence to the Rule of single meter for single premises.

***BEST's Submission***

- 7.21.2 BEST submitted that it has taken all efforts to convince the consumers to combine the load of such separate Meters to one electrical installation. A separate drive would be taken in this regard.
- 7.21.3 Further, BEST has proposed Smart Metering to all its consumers. At the time of replacement of meters, the matter would be sorted out.

***Commission's Analysis and Ruling***

- 7.21.4 The Commission has noted the submission made by BEST. BEST is directed to submit implementation status of proposed smart meter installation for all its Consumers.

**7.22 Time of Day Tariff**

***Directive***

- 7.22.1 The Commission has directed to BEST to come with a detailed ToD tariff proposal at the time of MTR.

***BEST's Submission***

- 7.22.2 BEST have studied the load curve pattern and submit our observations under ToD tariff in Tariff Philosophy chapter.

***Commission's Analysis and Ruling***

- 7.22.3 The Commission has noted the submission made by BEST. The Commission based on the submission of BEST and in line with the approach adopted at the time of the MYT Order continues with the existing ToD tariff structure. However, by the time of next MYT Petition, the smart meter are likely to be implemented, therefore the Commission directs BEST to provide the detailed consumer category-wise load analysis and propose the change in ToD structure and also recommended seasonal ToD tariff structure with proper justification.

**7.23 Miscellaneous**

***Directive***

- 7.23.1 The Commission directed BEST to adopt consumer centric approaches to resolve their queries to provide better services to the consumers. It has to

create an enabling environment which allows consumers to put forward their grievances to BEST by adopting consumer friendly processes. Distribution Licensee shall update contact number / mobile number, communication address with sufficient individual data security regular basis. With use of appropriate technological solutions, such works can be undertaken easily.

### ***BEST's Submission***

7.23.2 BEST submitted that it is expediting the process to reduce the time taken for processing online requests and taking the necessary steps to resolve the queries of consumers. As per the Regulations, BEST has developed new web portal for providing better services to the consumers. Status is as follows:

- Consumer can complain through BEST app.
- PO for updation of mobile no./email issued.
- BEST has put up a Customer Care website for consumer convenience.

### ***Commission's Analysis and Ruling***

7.23.3 The Commission has noted the submission made by BEST.

### **Additional Directives as per MTR Order**

#### ***7.24 Publishing Energy Accounting report***

7.24.1 The Best is directed to publish Periodic Energy Accounting Reports and the Annual Audit Report regularly on the website for public information.

#### ***7.25 Improvement in energy billing system***

7.25.1 Considering the limitation of the billing system, the seriousness of the issue and its implications, the Commission directs BEST to do complete audit of the billing system from the external reputed consultant having relevant experience and submit the compliance report along with Audit report within 6 months of the Order and take corrective action immediately to avoid such issues in future.

7.25.2 Further, the Commission also directs BEST to rectify the billing issues within the IT System so as to capture the units which are billed subsequently due to billing error, average billing or for any other billing adjustment, so as to reflect the correct sales and distribution loss of the respective financial year and provide the status of the same in the next tariff proceedings.

#### ***7.26 Reduction in Distribution loss***

7.26.1 The Commission is of the view that there is scope for reduction of Distribution loss considering the replacement of electromechanical Meters and many such

other measures. The Commission has approved capital expenditure schemes for replacement of such meters, development of substations, revamping of existing receiving substations, extension, and improvement of distribution network, etc. the benefit of which would accrue to consumers. The Commission directs BEST to continue its efforts in bringing down the Distribution losses to the lowest possible levels and ensure that performance does not deteriorate beyond the levels already achieved in the past.

### ***7.27 RDSS and Smart Meter Expenditure***

- 7.27.1 The Commission directs BEST to submit the DPR for Smart Meter within two (2) months of this Order as per provisions of MERC (Approval of Capital Investment Schemes) Regulations, 2022.
- 7.27.2 The Commission directs BEST to submit the details of smart meter implementation along with the benefits accrued in reduction of O&M expense at the time of next tariff Petition. BEST to submit detailed justification, cost benefit analysis of such schemes as against capex schemes, and savings in O&M expenses.
- 7.27.3 The BEST is directed to expedite the replacement of existing Electromechanical meters with electronic meters. Further, it is directed to BEST to submit the implementation status of smart meters on half yearly basis to the Commission, so as to ensure the kVAh billing during next MYT control period.
- 7.27.4 BEST is directed to provide the detail implementation plan and actual implementation with any delay and reasons for such delay in next tariff proceedings. Further, BEST is directed to submits the details of efforts and the quantifiable benefits of these efforts which BEST had put in for reducing Distribution Loss and ensure that performance does not deteriorate beyond the levels already achieved in the past.

### ***7.28 Funding of Capital Expenditure through grants***

- 7.28.1 BEST is directed to provide the details of the approved plan, schedule completion date, actual implementation status, physical progress for all the Government scheme where grants are involved in the next tariff petition.

### ***7.29 Contribution to Contingency Reserves***

- 7.29.1 The Commission directed BEST to ensure timely investment of contingency reserves amount as specified in the MYT Tariff Regulations, 2019.

### ***7.30 Consumer Security Deposit***

- 7.30.1 The Commission directs BEST to ensure transparent and timely recovery/



refund of the CSD and provide the details of the billing and the recovery along with the action taken for no-recovery in the next tariff petition.

**7.31 Provision for doubtful debts:**

7.31.1 The Commission *directs* BEST to provide the details in relation to the past recovery of arrears / debts written off, efforts made, and the amount recovered in the next Tariff proceedings.

**7.32 kVAh Billing for Consumer categories having load above 20 kW**

7.32.1 The Commission directs to implement the AMR meters to the HT consumers with communication facility and smart meters to LT Consumers with load above 20 kW by March 2025 and have the IT system compliant with the recording of the kVAH billing. In case of failure, the Commission may take necessary action as per the provisions of the Electricity Act, 2003 and the Regulations/Rules made there under.

7.32.2 The Commission directs BEST to display PF (computed by considering leading and lagging RkVAh) recorded during the month in the bill of all the Consumer categories till further directions so that the consumer can take corrective action in case of penalty was levied due to poor PF based on the information from the monthly Bill.

**7.33 Time of Day Tariff**

7.33.1 The Commission directs BEST to provide the detailed consumer category-wise load analysis and propose the change in ToD structure and also recommended seasonal ToD tariff structure with proper justification.

**7.34 Treatment of Electricity Duty and Municipality Tax recovered from theft**

7.34.1 The Commission further notes that BEST is considering the collection of ED and M-TOSE in the revenue in respect of recovery of theft income and also showing it as expense. The Commission is of the view that as a normal practice any amount payable to GoM towards ED, M-TOSE or otherwise is not considered in the revenue from sales. Accordingly, the Commission directs to apply the similar treatment and not consider amount towards ED and M-TOSE as revenue as well as expense in respect of recovery of theft income.

**7.35 Demand Response Scheme for saving power purchase expenses.**

7.35.1 Increased power purchase cost is impacting tariff. BEST shall come out with Demand Response Scheme to incentivize the consumers for voluntary curtailment/shifting of load for reducing costly power procurement. BEST shall submit such scheme under Demand Side Management Regulations after installations of smart meter.

## 8 TARIFF PHILOSOPHY

### 8.1 Past Recoveries of Revenue Gaps / (Surplus) from FY 2019 to FY 2021-22

#### *BEST's Submission*

8.1.1 As per Regulation 32 of MYT Regulations, 2015 and Regulation 33 of MYT Regulations, 2019, BEST is entitled for carrying/(holding) cost on the admissible amounts as per Truing-up being submitted for FY 2019-20, FY 2020-21 and FY 2021-22. Accordingly, BEST has computed the carrying/holding cost on the revenue gap/surplus and recovery of the same is proposed through tariff of FY 2023-24 and FY 2024-25.

8.1.2 BEST has considered interest rate applicable for working capital in line with MYT Regulations 2015/2019 for the calculation of carrying/(holding) cost. The computation of the carrying / (holding) cost is provided in the table below:

**Table 286 : Carrying Cost on Truing-up Years till FY 2023-24, as submitted by BEST (Rs. Crore)**

Particulars - Interest Computation		FY2019-20	FY2020-21	FY2021-22	FY2022-23	FY2023-24
Carrying cost / (Holding Cost) Rate	A	9.66%	8.57%	8.50%	9.55%	9.55%
Opening Balance	B	-	(132.02)	(433.26)	(5.76)	(5.76)
Gap/(Surplus) Addition during the year	C	(132.02)	(301.24)	427.50	-	5.76
Less: Incentive	D	-	-	-	-	-
Closing Balance	E=(B+C-D)	(132.02)	(433.26)	(5.76)	(5.76)	-
Average Balance	F= Average (B,E)	(66.01)	(282.64)	(219.51)	(5.76)	(2.88)
Carrying cost / (Holding Cost) Cost	G=A*F	(6.37)	(24.23)	(18.66)	(0.55)	(0.27)
<b>Total Carrying cost / (Holding Cost) Cost</b>	<b>H</b>	<b>(50.09)</b>				

8.1.3 BEST submitted that the Commission had determined surplus at the time of MYT Order and now at the time of MTR petition, the situation has changed for years under consideration due to reasons such as Covid-19, domestic coal shortfall leading to higher use of imported coal by generators, increase in prices at exchanges etc. Accordingly, BEST requested the Commission to compute carrying cost and holding cost both separately for the year under truing-up as earlier it was surplus and later on at the time of truing-up the same results into gap. BEST submitted that carrying /(holding) cost directly may be computed separately on surplus and gap amount and may not be netted off. For eg. In FY 2021-22, the Commission had approved surplus whereas BEST has proposed gap under Truing-up process. BEST submitted that carrying / (holding) cost is being claimed for Truing-up years only and has not claimed for provisional truing-up year, i.e., FY 2022-23. The carrying/(holding) cost

for FY 2022-23, if any would be claimed at the time of Truing-up for FY 2022-23.

8.1.4 The cumulative revenue gap/(surplus) including carrying/(holding) cost is shown in the table below:

**Table 287 : Cumulative Revenue gap till FY 2024-25 including carrying / (holding) cost, as submitted by BEST (Rs. Crore)**

<b>Standalone Basis</b>		
<b>Particulars</b>	<b>Formula</b>	<b>Amount (Rs. Cr)</b>
Final True Up Requirement for FY 19-20	1	(132.02)
Final True Up Requirement for FY 20-21	2	(301.24)
Final True Up Requirement for FY 21-22	3	427.50
Provisional True Up Requirement for FY 22-23	4	989.75
Revenue Gap for FY 23-24	5	633.02
Revenue Gap for FY 24-25	6	3.55
Carrying Cost	7	(50.09)
<b>Total Revenue Gap for the MYT Period</b>	<b>8=sum(1 to 7)</b>	<b>1,570.47</b>

<b>Financial Year</b>	<b>FY 2023-24</b>	<b>FY 2024-25</b>
Revenue at Existing Tariff	3,508.80	3,562.86
Revenue at Proposed Tariff	4,224.36	4,417.51
<b>Revenue Recovery</b>	<b>715.55</b>	<b>854.66</b>
<b>Total Additional Recovery</b>		<b>1,570.21</b>

8.1.5 BEST submitted that it has proposed revenue from tariff to ensure full recovery of the above gap in balance control period, i.e., FY 2023-24 and FY 2024-25. However, BEST requested the Commission to approve carrying / (holding) cost for FY 2023-24 and FY 2024-25 depending upon approval of final revenue gap/surplus for these years.

8.1.6 BEST submitted that it has proposed tariff structure or design keeping in mind that it provides recovery of revenue gap in the balance control period (FY 2023-24 and FY 2024-25). Also, BEST has proposed tariff hike in such a way that it provides gradual reduction in cross subsidy between consumer categories year on year. The Tariff design approach considered for proposing tariff hike keeping in mind the revenue gap to be recovered over next 2 years of the Control Period.

- a) As per projected ARR and considering revenue at existing tariff, for Wires Business, revenue gap of Rs. 754.12 Crore to be recovered over next 2 years (FY 2023-24 and FY 2024-25) through wheeling charges.
- b) There has been a revenue gap of Rs. 816.35 Crore (for Supply Business) which is to be addressed over next 2 years (FY 2023-24 & FY 2024-25) by way of tariff increase of the consumers;

c) BEST has proposed a revision in fixed and energy charges for various categories in order to bridge the revenue gap. Such tariff revision is minimum requirement for BEST to meet the inflationary cost increase that have arisen due to increase in power purchase cost corresponding to projected sales; change in consumer mix and its impact on revenue etc. The tariff revision is necessary for financial viability, and it is purely to meet the revenue gap emerged due to increase in cost on account of inflation as well as uncontrollable factors.

8.1.7 Further, BEST submitted that it has estimated revenue from sale of power at proposed tariff for FY 2023-24 and FY 2024-25. As per above the proposed tariff, following table shows the recovery of fixed cost and variable cost from ARR of the Supply business.

**Table 288: Recovery of fixed and variable charges and Wires Business through wheeling charges from FY 2019-20 and FY 2024-25, as submitted by BEST.**

Particulars	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
	True-up	True-up	True-up	Provisional	Projected	Projected
<b>Supply ARR (A)</b>	2,701.06	2,594.20	3,097.02	4,204.06	3,588.89	2,844.79
<i>Variable cost of PP (B)</i>	1,683.79	1,426.11	1,934.57	2,963.55	2,231.47	1,633.76
<i>Fixed cost (Other elements + Fixed cost of PP) (C)</i>	1,017.27	1,168.09	1,162.44	1,240.51	1,357.42	1,211.03
Ratio of Variable to Supply ARR (for the purpose of gap/ (surplus) allocation (D=B/A)	62.3%	55.0%	62.5%	70.5%	62.2%	57.4%
Add: the Gap/ (surplus) allocated in Wires & Supply ratio (E )		(741.37)	(327.62)	(198.58)	(165.96)	(99.31)
Add: Gap/ (surplus) allocated in Wires & Supply ratio of 4th Control Period along with carrying cost (F)					479.46	623.95
<b>Supply ARR incl. Gap / (Surplus) (G=A+E+F)</b>	<b>2,701.06</b>	<b>1,852.83</b>	<b>2,769.40</b>	<b>4,005.48</b>	<b>3,902.39</b>	<b>3,369.42</b>
<i>Variable cost of PP (H=B+E*D)</i>	1,683.79	1,018.56	1,729.93	2,823.56	2,128.28	1,576.73
<i>Fixed cost (Other elements + Fixed cost of PP) (I=G-H)</i>	1,017.27	834.27	1,039.48	1,181.92	1,774.10	1,792.70
<b>Total Revenue (excl Wheeling charges) at proposed tariff (J)</b>	2,856	2,331	2,466	3,067	3,278	3,369
<i>Revenue from Fixed/ Demand Charges (K)</i>	391	392	429	567	867	916
<i>Revenue from Energy &amp; other charges (Total revenue minus Fixed/ Demand Charges minus Wheeling charges) (L=J-K)</i>	2,465	1,939	2,036	2,499	2,411	2,453
Revenue gap/(Surplus) (M=G-J)	-154.94	-478.42	303.56	938.71	623.95	0.51
<b>Recovery of Supply ARR-up (N=J/G)</b>	106%	126%	89%	77%	84%	100%
<i>Recovery of Fixed cost from Fixed charges(O=K/I)</i>	38%	47%	41%	48%	49%	51%
<i>Recovery of Variable cost from Energy charges etc(P=L/H)</i>	146%	190%	118%	89%	113%	156%

8.1.8 Further, BEST submitted that as per total ARR including revenue gap of previous years, ACoS for FY 2023-24 and FY 2024-25 worked out to be

Rs.11.00/kWh and Rs.9.49/kWh respectively. As per proposed tariff, proposed ABR worked out to be Rs.9.18/kWh and Rs.9.50/kWh for FY 2023-24 and FY 2024-25 respectively. Therefore, resultant tariff hike in ABR is 13.93% and 3.42% for FY 2023-24 and FY 2024-25 and cumulative revenue gap would be recovered through proposed tariff.

**Table 289: ARR, Revenue gap and Tariff hike as per proposed tariff for FY 2023-24 and FY 2024-25, as submitted by BEST**

Particulars	Units	FY 2023-24	FY 2024-25
Estimated Sales	MUs	4,592.22	4,635.43
Stand-alone Aggregate Revenue Requirement	Rs. Crore	4,141.82	3,566.41
Recovery of gap/(surplus) of previous years	Rs. Crore	933.91	851.37
Net ARR	Rs. Crore	5,075.73	4,417.78
Revenue from existing tariff	Rs. Crore	3,508.80	3,562.86
Revenue at proposed Tariff	Rs. Crore	4,224.36	4,417.51
Cumulative Revenue gap/(surplus) at proposed	Rs. Crore	851.37	0.26
Proposed ABR	Rs. /unit	9.20	9.53
Tariff Hike Proposed w.r.t previous year	%	14.12%	3.60%
ACoS	Rs. /unit	11.05	9.53

### *Commission's Analysis and Ruling*

#### **Past Recoveries of Revenue Gap from FY 2019-20 to FY 2022-23**

8.1.9 The Commission has determined a Revenue Gap/ (Surplus) on Truing up of FY 2019-20 to FY 2021-22 and provisional Truing up of FY 2022-23. The Commission has computed the carrying/ (holding) Cost on the Revenue Gap/ (Surplus) of FY 2019-20 to FY 2021-22 up to its recovery in FY 2023-24 by applying the interest rates considered for computing the Interest on Working Capital for the respective years, in this Order. Further, determination of the Carrying/Holding Cost on the Revenue Gap/ Surplus for FY 2022-23 shall be dealt with at the time of Truing up in next MYT Order. The detail computation of the carrying cost is outlined as below:

**Table 290: Carrying / (Holding) Cost for Revenue Gap/(Surplus) of FY 2019-20 to FY 2021-22, approved by the Commission (Rs. Crore)**

Particulars	Units	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
Opening Gap/(Surplus)	Rs. Cr	-	-182.28	-592.97	-265.42	-265.42
Gap/(Surplus) during the Year	Rs. Cr	(182.28)	(410.69)	327.55	-	-
Gap/(Surplus) passed on to consumers	Rs. Cr					-265.42
Closing Gap/(Surplus)	Rs. Cr	-182.28	-592.97	-265.42	-265.42	-
Average Gap/(Surplus)	Rs. Cr	-91.14	-387.63	-429.20	-265.42	-132.71

Particulars	Units	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
Interest Rate for Carrying/(Holding) Cost	%	9.66%	8.57%	8.50%	9.55%	9.55%
Carrying/(Holding) Cost for the Year	Rs. Cr	(8.80)	(33.23)	(36.48)	(25.35)	(12.67)
	Rs. Cr	(116.53)				

8.1.10 Accordingly, the cumulative Revenue Gap/ (Surplus) to be recovered in FY 2023-24 is as shown in the following Table:

**Table 291: Cumulative Revenue Gap/(Surplus) to be recovered in FY 2023-24, as approved by the Commission (Rs. Crore)**

Particulars	MYT Petition	Approved in this Order		
		Wire	Supply	Total
Final True Up Requirement for FY 19-20	(132.02)	(14.45)	(167.83)	(182.28)
Final True Up Requirement for FY 20-21	(301.24)	117.25	(527.94)	(410.69)
Final True Up Requirement for FY 21-22	427.50	85.43	242.12	327.55
Provisional True Up Requirement for FY 22-23	989.75	42.76	667.63*	710.39
Carrying Cost	(50.09)	42.42	(158.96)	(116.53)
<b>Total Revenue Gap for the MYT Period</b>	<b>933.91</b>	<b>273.42</b>	<b>55.02</b>	<b>328.43</b>

\*-Adjusting the past approved surplus of Rs. 206.65 Crore in Supply business

8.1.11 Accordingly, the Commission approves the recovery of cumulative Revenue Gap of Rs. 328.43 Crore on Truing up of FY 2019-20 to FY 2021-22 and provisional Truing up of FY 2022-23, to be recovered in FY 2023-24.

**Overall Revenue Gap/(Surplus) projected for FY 2023-24 and FY 2024-25**

8.1.12 The Commission has computed the Revenue Gap/(Surplus) at the existing Tariff based on the approved ARR of the Distribution Wires and Retail Supply Business, and the revenue estimated by it from approved sale of electricity at the existing Tariff. Also, the past accumulated revenue gap of FY 2019-20 to FY 2022-23 is allowed to be adjusted in the ARR of FY 2023-24 along with the Carrying / (Holding) cost. The Revenue Gap/(Surplus) approved for the Control Period is as shown below:

**Table 292: Revenue Gap/ (Surplus) at existing Tariff for Distribution Business approved by Commission (Rs. Crore)**

Particulars	FY 2023-24	FY 2024-25	FY 2023-24	FY 2024-25	FY 2023-24	FY 2024-25
	Wire		Supply		Total	
Total ARR Approved (A)	668.97	695.78	3,527.86	3,899.91	4,196.83	4,595.68
Past Revenue Gap (B)	273.42		55.02		328.43	-
Total ARR to be recovered from Business (C)	942.39	695.78	3,582.88	3,899.91	4,525.26	4,595.68

Particulars	FY 2023-24	FY 2024-25	FY 2023-24	FY 2024-25	FY 2023-24	FY 2024-25
	Wire		Supply		Total	
Revenue at existing Tariff (D) <sup>\$</sup>	636.44	676.62	2,900.59	3,057.61	3,537.03	3,734.23
Revenue Gap at existing Tariff (E=C-D)	<b>305.95</b>	<b>19.16</b>	<b>682.29</b>	<b>842.29</b>	<b>988.23</b>	<b>861.46</b>
Energy Sales (MUs) (F)	4,772.81	5,023.20	4,772.81	5,023.20	4,772.81	5,023.20
AvCoS (Rs. /kWh) (G = C/F*10)	1.97	1.39	7.51	7.76	9.48	9.15
ABR at existing tariff (Rs/kWh) (H)*	1.26	1.27	7.28	7.28	8.60	8.60
Revenue Gap per unit (Rs. /kWh) (I = G - H)	0.71	0.12	0.23	0.48	0.88	0.55
<b>Tariff Hike Required (J = I / H)</b>	56.75%	9.32%	3.12%	6.65%	10.23%	6.36%
<b>YoY tariff hike</b>	56.75%	-29.85%	3.12%	3.42%	10.23%	-3.51%

*\$-Revenue from Existing Tariff exclude FAC*

*\*-Existing Tariff including FAC charged as on March 2023*

8.1.13 Considering the tariff hike required which is not uniformly spread to the consumers, the Commission has tried to defer the recovery of the revenue gap in both the year i.e., FY 2023-24 and FY 2024-25 in such a way that there is no tariff shock to consumers and has tried to evenly spread between both the years. Based on the deferment of the carrying cost, the Commission has recomputed the Revenue Gap/(Surplus) at the existing Tariff based on the approved ARR of the Distribution Wires and Retail Supply Business separately, and the revenue estimated by it from sale of electricity at the existing tariff, as shown below:

**Table 293: Revenue Gap/ (Surplus) at existing Tariff with deferment for Distribution Business approved by Commission (Rs. Crore)**

Particulars	FY 2023-24	FY 2024-25	FY 2023-24	FY 2024-25	FY 2023-24	FY 2024-25
	Wire		Supply		Total	
Total ARR Approved (A)	668.97	695.78	3,527.86	3,899.91	4,196.83	4,595.68
Past Revenue Gap (B)	273.42	-	55.02	-	328.43	-
Revenue Deferment (C)	(194.13)	194.13	(28.06)	28.06	(222.18)	222.18
Carrying Cost on deferment (D)	9.27	9.27	1.34	1.34	10.61	10.61
Total ARR to be recovered from Business (E = A to D)	757.53	899.17	3,556.16	3,929.30	4,313.69	4,828.48
Revenue at existing Tariff (D) <sup>\$</sup>	636.44	676.62	2,900.59	3,057.61	3,537.03	3,734.23
Revenue Gap at existing Tariff (E=C-D)	<b>121.09</b>	<b>222.56</b>	<b>655.57</b>	<b>871.69</b>	<b>776.66</b>	<b>1,094.25</b>
Energy Sales (MUs) (F)	4,772.81	5,023.20	4,772.81	5,023.20	4,772.81	5,023.20
AvCoS (Rs. /kWh) (G = C/F*10)	1.59	1.79	7.45	7.82	9.04	9.61
ABR at existing tariff (Rs/kWh) (H)*	1.26	1.27	7.28	7.28	8.60	8.60
Revenue Gap per unit (Rs. /kWh) (I = G - H)	0.33	0.52	0.17	0.54	0.44	1.01
<b>Tariff Hike Required to meet Revenue requirement (J = I / H)</b>	26.00%	41.28%	2.36%	7.46%	5.07%	11.75%
<b>Expected YoY tariff hike</b>	26.00%	12.78%	2.36%	4.99%	5.07%	6.35%

*\$-Revenue from Existing Tariff exclude FAC*

*\*-Existing Tariff including FAC charged as on March 2023*



8.1.14 Thus, there is a Revenue gap for Wire and Retail Supply Business for the period FY2023-24 and FY 2024-25 and therefore, the tariff has to be increase in order to adjust this Gap.

## 8.2 Tariff Philosophy

8.2.1 BEST has submitted that proceedings of the MTR Petition can be utilised to revisit the approach adopted by the Commission in MYT Order. BEST has requested the Commission to evolve a methodology during remaining two years of the fourth Control Period to re-determine the commercial principle to sustain growth, ensure financial viability of the Licensee, avoid financial losses and at the same time protect the consumer interests. In this context, Paragraph 5.10 of the Tariff Policy notified on 28 January, 2016 states as follows:

*“5.10 Consumer interest is best served in ensuring viability and sustainability of the entire value chain viz., generation, transmission and distribution of electricity, while at the same time facilitating power supply at reasonable rate to consumers. The financial turnaround/restructuring plans are approved by the Appropriate Government from time to time to achieve this objective. **The Appropriate Government as well as the Appropriate Commission while implementing such plans shall ensure viability of the generation, transmission and distribution in terms of recovery of all prudent costs.**” (emphasis added)*

8.2.2 The Commission has considered the main objectives of the Electricity Act, 2003 (“EA, 2003”) including the protection of the interest of consumers, the supply of electricity to all areas and rationalisation of tariffs. The EA, 2003 also enjoins the Commission to maintain a healthy balance between the interest of the Utilities and the reasonableness of the cost of power being supplied to consumers. The Commission has also kept in view the principles of tariff determination set out in Sections 61 and Section 62 of the EA, 2003, the Tariff Policy, 2016 and the MYT Regulations, 2019, and also taken into consideration BEST’s submissions as well as the public responses in these Tariff proceedings.

8.2.3 Further, the Commission has been guided by the Electricity Act, 2003 and the National Tariff Policy while determining retail tariffs across the State of Maharashtra. The Commission has laid emphasis on adoption of factors that encourages economy, efficiency, effective performance, and improved conditions of supply for the consumers. The Tariff determination process has been undertaken in such a way that it will ensure the recovery of cost of service from the consumers in stipulated time as specified in the National Tariff Policy and relevant Regulations of the Commission in order to avoid any unrecovered



gap for the current Control Period as specified in the National Tariff Policy and relevant Regulations of the Commission. Also, it envisages the interest of the consumers so as to determine the tariff in a way that does not affect the cross subsidy between and within the categories of consumers.

8.2.4 The Commission feels that the tariff structure across the States has become very complex and there is a need to not only simplify and rationalize the tariff structure, but also to make it harmonious across States.

8.2.5 The subsequent paragraphs deal with the submissions of BEST regarding the Tariff Philosophy and the changes approved by the Commission in the existing tariff structure.

### 8.3 Rationalization of Fixed Cost

#### *BEST's Submission*

8.3.1 BEST submitted that out of the total ARR, major expenses are fixed in nature, and it need to be incurred irrespective of quantum of sale of power to the consumers. A similarity can be drawn in case of generator i.e., even if power plant is shut down, the generating companies need to incur expenses for employees, minor R&M to other assets, depreciation, obligation for loan repayment, interest on loan payments etc. BEST also has similar type of fixed expenses which need to be incurred irrespective of any distribution / retail business undertaken by it.

8.3.2 BEST submitted that these fixed expenses should be recovered by a combination of Fixed & Demand Charges from the consumers. However, as per existing tariff, BEST is recovering fixed charges through fixed/demand charges tariff roughly at 40%-45% as shown in below table. While proposing the tariff, BEST has proposed fixed charges in such a way that it would provide recovery of ~50% of the fixed cost from ARR.

8.3.3 BEST submitted that as per proposed fixed charges, revenue from fixed charges would be able to recover the ~50% of the fixed cost for FY 2023-24 to FY 2024-25 as against the ~ recovery of 38%- 41% of fixed cost as per existing tariff for FY 20-21 to FY 2022-23.

**Table 294 : Proportion of Recovery of Fixed Charges, as submitted by BEST (Rs. Crore)**

Particulars	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
	True-up		Provisional		Proposed	
Supply ARR including past gap (A)	2,701.06	1,852.83	2,769.40	4,005.48	3,902.39	3,369.42
Variable cost of PP (including past gap) (B)	1,683.79	1,018.56	1,729.93	2,823.56	2,128.28	1,576.73

Particulars	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
	True-up		Provisional		Proposed	
Fixed cost (Other elements + Fixed cost of PP) (C=A-B )	1,017.27	834.27	1,039.48	1,181.92	1,774.10	1,792.70
Proportion of fixed charges in Supply ARR (including gap)	38%	45%	38%	30%	45%	53%
Revenue from Fixed/ Demand Charges (D)	391.45	391.85	429.49	567.49	867.25	916.27
Recovery of Fixed cost from Fixed charges/Demand charges (E=D/C)	38%	47%	41%	48%	49%	51%

8.3.4 Accordingly, BEST has proposed the category-wise fixed and demand charges for FY 2023-24 and FY 2024-25 as shown in below table:

**Table 295 : Fixed / Demand Charges for FY 2023-24 to FY 2024-25, as submitted by BEST (Rs. Crore)**

Category	Fixed charges (Per month per connection)		Demand charges (per kVA)	
	FY 23-24	FY 24-25	FY 23-24	FY 24-25
<b>HT Category</b>				
HT-1 Industrial	-	-	470.00	480.00
HT-2 Commercial	-	-	470.00	480.00
HT-3 Group Hsg	-	-	470.00	480.00
HT-4 Railway Metro	-	-	470.00	480.00
HT 5A Govt Sch & Hosp.	-	-	470.00	480.00
HT 5B Public Ser. Oths	-	-	470.00	480.00
HT 6 EV chg.	-	-	70.00	70.00
<b>LT Category</b>				
LT-1 A (BPL)	11.00	12.00	-	-
LT-1 B Residential	-	-	-	-
0-100	110.00	120.00	-	-
101-300	160.00	170.00	-	-
301-500	160.00	170.00	-	-
501<	200.00	210.00	-	-
LT2 (a)Comm <20	560.00	580.00	-	-
LT2 (b) 20-50 Comm.	-	-	470.00	480.00
LT2 (c) >50 Comm.	-	-	470.00	480.00
LT3A Industrial <20 kW	560.00	580.00	-	-
LT 3B >20 Industrial	-	-	470.00	480.00
LT-4A Schools & Hosp	560.00	580.00	-	-
LT-4B Public Service	560.00	580.00	-	-
LT 5A Agriculture Pumpset	-	-	50.00	60.00
LT 5B Agriculture Other	-	-	120.00	130.00
LT-11 Vehicle Chg	-	-	70.00	80.00

**Commission's Analysis and Ruling**

8.3.5 The Fixed/Demand Charges are intended to recover a significant part of the Fixed Costs. The Fixed Costs of a Distribution Licensee are all expenses, except the variable cost of power purchase.

8.3.6 The Commission has observed that while calculating the variable cost of power purchase, BEST has adjusted the past gap / (surplus) in the cost of power purchase. However, the Commission would like to highlight that FAC mechanism ensures the total recovery of power purchase cost except for any under-recovery due to 20% cap on FAC recovery. Also, recovery under FAC mechanism for FY 2019-20 to FY 2021-22 is in toto related to power purchase cost and FAC fund was existing during the same period. However, in FY 2022-23, the power purchase cost is under recovered whereby 20% cap has been implemented. Accordingly, the Commission has recomputed the variable cost without adjustment of any past gap / surplus and has recalculated the past trend of the recovery of the Fixed Cost from the Fixed / Demand charges included in the Revenue as outlined below:

**Table 296: Proportion of Recovery of Fixed Charges, approved by Commission (Rs. Crore)**

Particulars	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
	True-up			Provisional	Proposed	
Supply ARR including past gap (A)	2,688.17	1,803.31	2,707.96	3,734.40	3,556.16	3,929.30
Variable cost of PP (B)	1,683.79	1,426.11	1,934.57	2,710.39	2,717.47	2,758.37
Fixed cost (Other elements + Fixed cost of PP) (C=A-B)	1,004.37	377.19	773.39	1,024.01	838.68	1,170.93
Proportion of fixed charges in Supply ARR (including gap)	37%	21%	29%	27%	24%	30%
Existing Revenue from Fixed/ Demand Charges (D)	391.45	391.85	429.49	567.48	611.27	678.14
Recovery of Fixed cost from Fixed charges/Demand charges (E=D/C)	39%	104%	56%	55%	73%	58%

8.3.7 As can be observed from the above table, of the total ARR, around 39% - 56% is fixed in nature for the period FY 2019-20 to FY 2022-23 and the balance amount is variable. However, in FY 2020-21, the recovery is more than 100% due to adjustment of surplus of Rs. 741.37 Crore and hence is not considered for the comparison purpose. Also, the present recovery of the Fixed Cost through Fixed/Demand Charges is around 71% and 57% of the total fixed cost in FY 2023-24 and FY 2024-25 respectively, which is also on a lower side in absolute terms and also as compared to other Distribution Licensees. Accordingly, the Commission has decided to gradually increase the Fixed/Demand Charges for all consumer categories by around 5% to 7% for each of the remaining two years of the 4<sup>th</sup> Control Period i.e. FY 2023-24 and FY 2024-25, respectively. This is expected to increase the recovery of Fixed

cost of BEST from Fixed/Demand Charges. The higher revenue from this increase has been used to cushion the Energy Charges of different consumer categories. The category-wise Fixed/Demand Charges approved for each year of the 4<sup>th</sup> Control Period i.e., FY 2023-24 and FY 2024-25 are summarised subsequently in this Section, along with other Charges.

## 8.4 Energy Charges

### *BEST's Submission*

8.4.1 BEST has proposed energy charges considering balance recovery of the revenue gap of ARR for FY 2023-24 and FY 2024-25 along with past period gap after considering the revenue from the above proposed fixed charges. The category-wise energy charges for FY 2023-24 and FY 2024-25 proposed by BEST are as follows:

**Table 297 : Energy Charges for FY 2023-24 to FY 2024-25, as submitted by BEST (HT: Rs./kVAh and LT: Rs./kWh)**

Category	FY 2023-24	FY 2024-25
<b>HT Category</b>		
HT-1 Industrial	6.12	6.19
HT-2 Commercial	6.08	6.14
HT-3 Group Hsg	6.33	6.40
HT-4 Railway Metro	5.70	5.76
HT 5A Govt Sch & Hosp.	5.82	5.93
HT 5B Public Ser. Oths	6.39	6.45
HT 6 EV chg.	4.99	4.99
<b>LT Category</b>		
LT-1 A (BPL)	1.22	1.23
LT-1 B Residential	-	-
0-100	1.90	1.92
101-300	4.77	4.81
301-500	7.83	7.88
501<	9.53	9.60
LT2 (a)Comm <20	5.25	5.29
LT2 (b) 20-50 Comm.	5.01	5.03
LT2 (c) >50 Comm.	5.36	5.38
LT3A Industrial <20 kW	4.78	4.83
LT 3B >20 Industrial	5.07	5.12
LT-4A Schools & Hosp	5.47	5.58
LT-4B Public Service	5.47	5.53
LT 5A Agriculture Pumpset	2.34	2.37
LT 5B Agriculture Other	3.76	3.80
LT-11 Vehicle Chg	4.03	4.03

### *Commission's Analysis and Ruling*

8.4.2 The Commission has determined the category-wise Energy Charges such that

the cross-subsidies with respect to the ACoS are either maintained at the present levels or reduced, and the tariff of most categories is within  $\pm 20\%$  of the ACoS, as suggested by the National Tariff Policy to the extent possible considering the consumers, sales and revenue mix of BEST.

8.4.3 The category-wise Energy Charges approved by the Commission for each year are summarised subsequently in this Section, along with other Charges.

## 8.5 Wheeling Charges

### BEST's Submission

8.5.1 BEST has computed ARR for the Wires Business and Supply Business in accordance with the Allocation Matrix specified in Regulation 68 of the MYT Regulations, 2019. For the computation of wheeling charge for FY 2023-24, BEST has considered 50% (spread over 2 years) of the cumulative revenue gap up to FY 2022-23 along with ARR of FY 2023-24 and balance revenue gap of Wires Business proposed to be recovered in FY 2024-25 along with standalone Wires ARR of FY 2024-25.

8.5.2 For the computation of HT and LT Wheeling Charges, the BEST has considered the ratio of GFA of HT: LT as 40.65%: 59.35% as per amount of voltage wise gross fixed Assets as on 31 March,2022.

8.5.3 BEST has worked out the Wheeling Charges for the FY 2023-24 to FY 2024-25 as shown in the table below:

**Table 298 : Wheeling Charges for FY 2023-24 and FY 2024-25, as submitted by BEST (Rs./Unit)**

Sr.	Particulars	FY 2023-24	FY 2024-25
1	ARR for Wires Business	946.12	1,048.35
2	GFA attributable to HT Network (%)	40.65%	40.65%
3	GFA attributable to LT Network (%)	59.35%	59.35%
4	Charge recoverable from HT & LT consumers	384.60	426.16
5	Charge recoverable from LT consumers	561.52	622.20
6	HT Sales (MU)	647.33	647.33
7	LT Sales (MU)	3,944.89	3,988.10
8	Total Sales (MU)	4,592.22	4,635.43
9	Charge recoverable from HT consumers	54.21	59.51
10	Charge recoverable from LT consumers	891.90	988.84
11	<b>HT Wheeling Charge (Rs. /unit)</b>	<b>0.84</b>	<b>0.92</b>
12	<b>LT Wheeling Charge (Rs. /unit)</b>	<b>2.26</b>	<b>2.48</b>
13	<b>Total Wheeling Charge (Rs. /unit)</b>	<b>2.06</b>	<b>2.26</b>
14	<b>HT Wheeling charges kVAh billing</b>	<b>0.80</b>	<b>0.87</b>

*Note: HT Wheeling Charges for Rs./kVAh & LT Wheeling Charges for Rs./kWh*

- 8.5.4 Considering the Wires ARR and revenue proposed from wheeling charges, it would be sufficient to recover the revenue gap of Wires Business at the end of FY 2024-25.

**Table 299 : Recovery of Wires Business through Wheeling Charges from FY 2019-20 to FY 2024-25, as submitted by BEST (Rs. Crore)**

Particulars	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
	True-up			Provisional	Proposed	
<b>Wires ARR (A)</b>	633.60	668.81	666.60	660.33	725.63	824.97
Add: Gap/ (surplus) allocated in Wires & Supply ratio of 3 <sup>rd</sup> Control Period (B)		(30.13)	(13.31)	(8.07)	(6.74)	(4.04)
Add: Gap/ (surplus) allocated in Wires & Supply ratio of 4 <sup>th</sup> Control Period along with carrying cost (C)					454.45	227.42
<b>Wires ARR incl. Gap / (Surplus) (D=A+B+C)</b>	633.60	638.68	653.29	652.26	1,173.34	1,048.35
<b>Revenue from Wheeling Charges at proposed tariff (E)</b>	610.68	461.50	529.35	601.21	945.92	1,048.60
<b>Revenue gap for Wire Business (F=D-E)</b>	22.92	177.18	123.94	51.05	227.42	(0.25)
<b>Recovery of Wheeling charges to Wires ARR (F=E/D)</b>	<b>96.4%</b>	<b>72.3%</b>	<b>81.0%</b>	<b>92.2%</b>	<b>80.6%</b>	<b>100.0%</b>

***Commission's Analysis and Ruling***

- 8.5.5 The Commission has computed the ARR for the Wires Business and Supply Business in accordance with the Allocation Matrix specified in Regulation 68 of the MYT Regulations, 2019.
- 8.5.6 The Commission has computed wheeling charges as well as bifurcated the same at HT & LT Level based on the GFA ratio, in line with the Regulation 73.2 of the MYT Regulations, 2019. Further, the Commission has also issued Guidelines for Voltage-wise classification of distribution Assets to determine HT and LT wheeling charges based on such classification and the same is proposed to be applicable from 1 April, 2025 i.e., next Control Period.
- 8.5.7 BEST has submitted that MERC has issued "Guidelines for allocation of Assets and cost at different Voltage Levels of Distribution" on 21 July, 2022. As per para 6.3 of these Guidelines, the Commission has directed to test the guidelines and for better recognition of implementation and other issues, the Distribution Licensees shall, along with the existing method of computation of wheeling charges, also present their asset ratios and consequent division of various items of Distribution Wires ARR over different voltages using the principles of these Guidelines, in their upcoming MTR. Accordingly, BEST has prepared the relevant statements of Voltage Wise Assets as per Commissions guidelines for FY 2020-21 & FY 2021-22 with the certain assumptions.

8.5.8 Accordingly, for the computation of HT and LT Wheeling Charges, the BEST has considered the ratio of GFA of HT: LT as 40.65%: 59.35% as per amount of voltage wise gross fixed Assets as on 31 March,2022. However, the Commission observed that the supply component of Fixed Assets has been added by BEST in LT which is not the appropriate treatment for allocation of GFA into HT:LT Ratio. Accordingly, the Commission has recomputed the HT:LT ratio of GFA of HT: LT as 43.06%: 56.94% and the actual HT and LT sales as approved in the MYT Order, for computation of Wheeling charges.

8.5.9 As a part of the prudence check, the Commission examined the details pertaining to the voltage level assets submitted by BEST as part of the MYT submission.

8.5.10 The Wheeling Charges computed by the Commission are shown in the following Table:

**Table 300: Wheeling Charges for FY 2023-24 to FY 2024-25, as approved by the Commission (Rs. Crore)**

Sr.	Particulars	FY 2023-24	FY 2024-25	FY 2023-24	FY 2024-25
		MTR Petition		Approved in this Order	
1	ARR for Wires Business (along with past recoveries with carrying cost)	946.12	1,048.35	757.53	899.17
2	GFA attributable to HT Network (%)	40.65%	40.65%	43.06%	43.06%
3	GFA attributable to LT Network (%)	59.35%	59.35%	56.94%	56.94%
4	Charge recoverable from HT	384.60	426.16	326.22	387.22
5	Charge recoverable from LT consumers	561.52	622.20	431.31	511.95
6	HT Sales (MU)	647.33	647.33	686.07	740.84
7	LT Sales (MU)	3,944.89	3,988.10	4,086.73	4,282.37
8	Total Sales (MU)	4,592.22	4,635.43	4,772.81	5,023.20
9	Charge recoverable from HT consumers	54.21	59.51	46.89	57.11
10	Charge recoverable from LT consumers	891.90	988.84	710.64	842.06
11	<b>HT Wheeling Charge (Rs./kWh)</b>	<b>0.85</b>	<b>0.94</b>	<b>0.68</b>	<b>0.77</b>
12	<b>HT Wheeling Charge (Rs./kVAh)</b>	<b>0.84</b>	<b>0.92</b>	<b>0.67</b>	<b>0.76</b>
13	<b>LT Wheeling Charge (Rs./kWh)</b>	<b>2.26</b>	<b>2.48</b>	<b>1.74</b>	<b>1.97</b>
14	<b>Total Wheeling Charge (Rs. /unit)</b>	<b>2.06</b>	<b>2.26</b>	<b>1.59</b>	<b>1.79</b>

*Note: HT Wheeling Charges for Rs./kVAh & LT Wheeling Charges for Rs./kWh*

8.5.11 The above said determined Wheeling Charges are not applicable for consumers connected at EHV level i.e., 110/132 kV.

## 8.6 Cross Subsidy

### *BEST's Submission*

8.6.1 As per tariff design proposed as combination of fixed charges and variable



charges, the category-wise cross-subsidy proposed for FY 2023-24 and FY 2024-25 is as shown in table below:

**Table 301 : Category wise Cross Subsidy Percentage for FY 2023-24 and FY 2024-25, as submitted by BEST**

Category	FY 23-24	FY 24-25
<b>HT Category</b>		
HT-1 Industrial	79%	93%
HT-2 Commercial	91%	108%
HT-3 Group Hsg	79%	94%
HT-4 Railway Metro	117%	140%
HT 5A Govt Sch & Hosp.	77%	91%
HT 5B Public Ser. Oths	85%	101%
HT 6 EV chg.	0%	0%
<b>LT Category</b>		
LT-1 A (BPL)	33%	41%
LT-1 B Residential		
0-100	43%	53%
101-300	72%	87%
301-500	95%	113%
501<	108%	129%
LT2 (a)Comm <20	86%	104%
LT2 (b) 20-50 Comm.	130%	158%
LT2 (c) >50 Comm.	131%	159%
LT3A Industrial <20 kW	68%	83%
LT 3B >20 Industrial	107%	130%
LT-4A Schools & Hosp	71%	85%
LT-4B Public Service	72%	87%
LT 5A Agriculture Pumpset	0%	0%
LT 5B Agriculture Other	55%	66%
LT-11 Vehicle Chg	57%	68%

8.6.2 As per National Tariff Policy, Tariff should progressively reflect the cost of supply of electricity and cross subsidy should be gradually reduced. As per MYT Order dated 30 March, 2020, based on final True Up of FY 2018-19 and provisional True Up for FY 2019-20, BEST had revenue surplus of Rs.771.50 Crore. Hence, the Commission had approved reduction in tariff by 8.64% for FY 20-21 and marginal reduction or increase in tariff for the period from FY 2021-22 to FY 2024-25. Due to reduction in tariff for FY 2020-21, comparatively existing tariff is at lower side compared to the standalone ARR for the respective years.

8.6.3 Therefore, it is difficult to align the cross subsidy based on the proposed tariff



as specified in the National Tariff Policy. However, BEST has tried to reduce the gap between year-on-year cross subsidy while submitting tariff proposal for FY 2023-24 and FY 2024-25.

***Commission’s Analysis and Ruling***

8.6.4 The Commission has continued to determine the tariffs with an in-built incentive to consumers to reduce their consumption. The billing impact is designed to increase as the consumption increases on account of the higher telescopic tariffs applicable to higher consumption slabs, while at the same time ensuring that even consumers in the higher consumption slabs are charged at a lower rate to the extent of the consumption corresponding to lower slabs.

8.6.5 As mentioned previously, the Commission has attempted to bring the tariff of most of the categories in the  $\pm 20\%$  of ACoS range as prescribed by the National Tariff Policy. Further, the Commission has also tried to ensure that the level cross-subsidy either remains constant or reduces in the subsequent year to steady approach the ACoS as envisaged in the National Tariff Policy.

8.6.6 Based on the above stated approach, the revised ABR and the category-wise tariff increase, or reduction approved by the Commission for the FY 2023-24 and FY 2024-25 are given in the Table below:

**Table 302: Category-wise ABR and Tariff Increase/Decrease approved by Commission for FY 2023-24 and FY 2024-25**

Category	Average Billing Rate			% Tariff Increase/ Reduction	
	Existing *	Approved		Approved	
	FY 2022-23	FY 2023-24	FY 2024-25	FY 2023-24	FY 2024-25
<b>HT Category</b>					
HT - I Industry	8.06	9.16	9.66	13.59%	5.44%
HT - II Commercial	10.05	10.45	10.75	3.96%	2.92%
HT - III Group Housing	8.14	9.12	9.68	12.02%	6.11%
HT - IV (A) Railways	11.91	10.78	11.50	-9.47%	6.66%
HT - V (A) Public services (Govt. Hospital & Educational Institutions)	8.17	9.06	9.61	10.81%	6.13%
HT - V (B) Public services (Others)	8.93	9.77	10.58	9.42%	8.32%
HT - VI Electrical Vehicle	-	-	-	0.00%	0.00%
<b>LT Category</b>					
LT - I (B) Residential	3.06	3.46	3.73	12.89%	7.92%
LT - II (a) Commercial	7.31	7.76	8.29	6.19%	6.75%
LT - II (b) Commercial >20 & <=50 kW	9.01	9.97	10.53	10.71%	5.56%
LT - II (c) Commercial >50	10.88	11.40	11.90	4.79%	4.40%
LT - III (A) Industry (upto 20 kW)	11.06	11.46	12.17	3.62%	6.26%
LT-III (b) Industrial	7.35	8.33	9.14	13.32%	9.71%

Category	Average Billing Rate			% Tariff Increase/ Reduction	
	Existing *	Approved		Approved	
	FY 2022-23	FY 2023-24	FY 2024-25	FY 2023-24	FY 2024-25
LT - IV (A) Public Services - Govt. Hosp. & Edu. Institutions)	10.74	10.87	11.27	1.17%	3.69%
LT - IV (B) Public Services - Others	7.44	8.60	9.18	15.59%	6.80%
LT-V (A) Agriculture- Pumpsets	7.60	8.76	9.34	15.19%	6.59%
LT-V (B) Agriculture- Others	-	-	-	0.00%	0.00%
LT VI Vehicle Charging	7.08	6.80	7.49	-3.90%	10.17%

Note:\* Existing Tariff - ABR computed considering the Tariff for FY 2022-23 along with the FAC.

8.6.7 The category-wise cross-subsidy over the FY 2023-24 and FY 2024-25 as approved in this Order is given in the Table below:

**Table 303: Category-wise Cross-subsidy for FY 2023-24 and FY 2024-25, as approved by the Commission**

Category of Consumers	Approved FY 2022-23*	FY 2023-24	FY 2024-25
	%	%	%
<b>HT Category</b>			
HT - I Industry	101%	101%	100%
HT - II Commercial	113%	116%	112%
HT - III Group Housing	101%	101%	101%
HT - IV (A) Railways	109%	119%	120%
HT - V (A) Public services (Govt. Hospital & Educational Institutions)	101%	100%	100%
HT - V (B) Public services (Others)	109%	108%	110%
HT - VI Electrical Vehicle	0%	0%	0%
<b>LT Category</b>			
LT - I (A) Residential (BPL)	40%	38%	39%
LT - I (B) Residential	93%	86%	86%
LT - II (a) Commercial	112%	110%	109%
LT - II (b) Commercial >20 & <=50 kW	126%	126%	124%
LT - II (c) Commercial >50	127%	127%	127%
LT - III (A) Industry (upto 20 kW)	99%	92%	95%
LT-III (b) Industrial	117%	120%	117%
LT - IV (A) Public Services - Govt. Hosp. & Edu. Institutions)	95%	95%	96%
LT - IV (B) Public Services - Others	96%	97%	97%
LT-V (A) Agriculture- Pumpsets	0%	0%	0%
LT-V (B) Agriculture- Others	0%	75%	78%
LT VI Vehicle Charging	79%	83%	83%

\*- Cross subsidy as approved in MYT Order for FY 2022-23

8.6.8 The Commission has tried to maintain the cross subsidy across the tariff categories within 20% of the Average Cost of Supply as mandated in National

Tariff Policy. However, for a few categories, as seen from the above table, the cross-subsidy is beyond 20%. Any sudden and abrupt change without any roadmap for reduction will impact the consumer tariff. Thus, to have larger visibility on cross-subsidy reduction roadmap and its implication on consumer tariff, the Commission directs BEST to submit roadmap for Cross subsidy reduction and its implication on subsidised categories during next tariff filing so that it can be decided through public consultation process.

## **8.7 Time of Day Tariff**

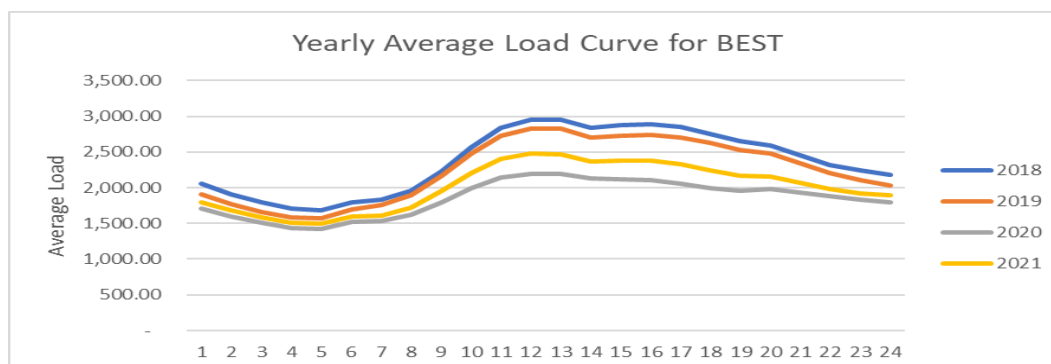
### ***BEST's Submission***

8.7.1 According to the directives given by the Commission in the last MYT Order and based on the TOD Study Report circulated to all Distribution Licensees, BEST has submitted its study on TOD charge analysis. The approach taken for further analysis is as given below:

- a) BEST analysed the data of its actual load from the load balance generation report (LGBR) from April 2018 to December 2020 and the source-wise monthly power purchase cost of the same period.
- b) This data was compared to block-wise data for power procured from power exchanges and bilateral sources of power.
- c) Since, BEST does not have the TOD meters that can be reprogrammed remotely. Hence, it would be difficult to modify TOD structure at this moment. The decision was taken to modify the existing time slots when the existing meters are replaced by Smart Meters under AMI Project under RDSS.
- d) Hence, the block-wise LGBR data and the power purchase data was divided into the time slots according to the existing TOD slots.
- e) The source-wise average load was obtained for each timeslot. This was multiplied by the average power purchase cost to obtain the total cost of power purchase for each TOD time-block.
- f) The cost for all the sources were added up and divided by the sum of power supplied to give a weighted average price of power purchase for each slot.
- g) The same was done for the power purchase data for power exchange and Bilateral sources, the average power supplied and average price was obtained for each source and multiplied to find the cost and then added up and divided by the total power purchased to provide the weighted average price for each TOD time-slot.
- h) These were used as a comparison to see in which time-slot the cost of power had risen due to a rise in demand.

8.7.2 Observations of BEST with reference to Load pattern are provided as below:

- The following is load pattern of BEST for the past four years:



- It can be observed that BEST's load curve has remained largely constant throughout the years with demand starting to peak from 9 am onwards, then reaching the peak around 1 pm and then steadily decreasing from 4 pm onwards.
- The following was the comparison of power purchased from contracted sources and open market (Exchange & Bilateral sources) for FY 2018-19:

Time Slot	PPA			IEX+Bilateral			Diff	Total APPC of BEST
	Quantum	Cost	APPC	Quantum	Cost	APPC		
	MU	Rs. Mn	Rs./kWh	MU	Rs. Mn	Rs./kWh		
1 (22 to 0600 hrs)	1.44	7.03	4.87	0.10	0.39	3.88	-0.99	4.68
2 (06 to 09 hrs and 12 to 18 hrs)	1.91	8.45	4.43	0.16	0.75	4.55	0.12	
3 (09 to 12 hrs)	2.03	8.91	4.38	0.17	0.76	4.57	0.18	
4 (18 to 22 hrs)	1.98	8.37	4.23	0.10	0.41	3.95	-0.28	

- For FY 2018-19, the average price is greater for time slots 2 and 3 whereas for timeslot 1, it is almost cheaper by Rs. 1/kWh.
- The comparison of power purchased from contracted sources and open market (Exchange & Bilateral sources) for FY 2019-20 as shown below:

Time Slot	PPA			IEX+Bilateral			Diff	Total APPC of BEST
	Quantum	Cost	APPC	Quantum	Cost	APPC		
	MU	Rs. Mn	Rs./kWh	MU	Rs. Mn	Rs./kWh		
1 (22 to 0600 hrs)	0.13	0.61	4.87	0.01	0.03	4.50	-0.37	4.88
2 (06 to 09 hrs and 12 to 18 hrs)	0.17	0.77	4.44	0.01	0.04	4.39	-0.05	
3 (09 to 12 hrs)	0.18	0.80	4.36	0.01	0.04	4.29	-0.07	
4 (18 to 22 hrs)	0.18	0.77	4.18	0.01	0.03	4.60	0.42	

- The difference between the PPA prices and IEX and Bilateral was negative for all time blocks except for time-block 4.

- The comparison of power purchased from contracted sources and open market (Exchange & Bilateral sources) for FY 2020-21 as shown below:

Time Slot	PPA			IEX+Bilateral			Diff	Total APPC of BEST
	Quantum	Cost	APPC	Quantum	Cost	APPC		
	MU	Rs. Mn	Rs./kWh	MU	Rs. Mn	Rs./kWh	Rs./kWh	Rs./kWh
1 (22 to 0600 hrs)	0.16	0.63	3.99	0.00	0.00	3.38	-0.61	5.66
2 (06 to 09 hrs and 12 to 18 hrs)	0.19	0.74	3.96	0.00	0.00	3.51	-0.45	
3 (09 to 12 hrs)	0.19	0.77	4.01	0.00	0.00	3.34	-0.67	
4 (18 to 22 hrs)	0.20	0.76	3.71	0.00	0.00	4.42	0.70	

- Similar to FY 2019-20 the difference in the prices is only in time-block 4.
- The comparison of power purchased from contracted sources and open market (Exchange & Bilateral sources) for FY 2021-22 as shown below:

Time Slot	PPA			IEX+Bilateral			Diff	Total APPC of BEST
	Quantum	Cost	APPC	Quantum	Cost	APPC		
	MU	Rs. Mn	Rs./kWh	MU	Rs. Mn	Rs./kWh	Rs./kWh	Rs./kWh
1 (22 to 0600 hrs)	0.17	0.91	5.47	0.00	0.02	5.23	-0.24	6.33
2 (06 to 09 hrs and 12 to 18 hrs)	0.19	1.01	5.19	0.01	0.03	5.34	0.15	
3 (09 to 12 hrs)	0.20	1.05	5.15	0.01	0.04	5.21	0.06	
4 (18 to 22 hrs)	0.21	1.05	4.89	0.00	0.02	6.44	1.55	

- In FY 2021-22, the price difference is positive for all the three timeslots except time slot-1. The comparison of present TOD charges with respect to the price differences is tabulated below:

Time Slot	Present ToD Charges	Difference in Prices (Rs./kWh)				Average Difference
		2018-19	2019-20	2020-21	2021-22	
1	(0.75)	(0.99)	(0.37)	(0.61)	(0.24)	(0.55)
2	-	0.12	(0.05)	(0.45)	0.15	(0.06)
3	0.50	0.18	(0.070)	(0.67)	0.06	(0.12)
4	1.00	(0.28)	0.42	0.70	1.55	0.60

8.7.3 Conclusion from the above observation by BEST was as follows:

- The demand curve of BEST is peculiar compared to other Distribution Licensee.
- The load curves suggest that TOD timeslots need modification and presently do not commensurate with the existing TOD charges.
- It can be observed the difference in prices among the timeslot closely correspond to the TOD prices for Timeslot 1 and 2. It is further

observed that difference in price in Timeslot 4 suggest that there can be price increase however, the load curve is dipping compared to timeslot 2.

- d) It is also submitted that average difference may not be correct indicator as prices have varied a lot due to coal crisis over last 1-2 years and it would not be prudent to consider FY 2021-22 data to decide for changes in TOD charges.
- e) As per the above observations, TOD charges can remain constant till smart meters are installed and TOD charges can be programmed according to custom timeslots.

8.7.4 Accordingly, BEST has proposed to continue with the prevailing Time of Day Tariff for the FY 2023-24 and FY 2024-25.

#### ***Commission's Analysis and Ruling***

8.7.5 In last MYT Order, envisaging substantial increase in Solar power, which will be helping the load curve as it shall be contributing to meet the day time peak load requirement, the Commission has planned to revise ToD timeslots at the time of MTR and rates to be decided as per Distribution Licensee's power procurement planning. Accordingly, the Commission directed all the Distribution Licensee to come with a detailed proposal at the time of MTR.

8.7.6 Also, the Commission has initiated the separate study on ToD tariff structure and the same was uploaded on MERC Website in November 2022. The Study report suggested change in ToD structure and also recommended seasonal ToD tariff structure. Accordingly, it was recommended to distribution licensee to review the report and suggest changes in ToD tariff structure in MTR Petition with supporting justification.

8.7.7 It is observed that the load curves suggest that TOD timeslots need modification and presently are not commensurate with the existing TOD charges. However, BEST is in the process of implementation of the smart meters which would be effective tool for considering the impact of Energy Consumption by different category of consumers on the load of BEST and to decide on ToD tariff more precisely. Also, the renewable power which has been tied-up by BEST with SECI is likely to be available from January 2025 and the actual impact of the same cannot be assessed at present on power procurement planning.

8.7.8 Therefore, the Commission based on the submission of BEST and in line with the approach adopted at the time of the MYT Order continues with the existing ToD tariff structure. However, by the time of next MYT Petition, the smart meter are likely to be implemented, therefore the Commission directs BEST

to provide the detailed consumer category-wise load analysis and propose the change in ToD structure and also recommended seasonal ToD tariff structure with proper justification.

- 8.7.9 Further, the ToD rates in kVAh terms for HT category have not been multiplied by the Power Factor, in order to ensure rounded numbers. Hence, the ToD rates are same in Rs/kWh terms for LT categories and in Rs/kVAh terms for HT categories.

## 8.8 kVAh billing of LT consumers with load above 20kW:

### *BEST's Submission*

- 8.8.1 The Commission, in the MYT Order had directed that: “BEST should take up necessary steps to ensure implementation of the kVAh for LT consumers with load of 20 kW and above. The Commission is intending to implement kVAh billing for LT consumers with load of 20 kW and above at the time of MTR proceeding”.
- 8.8.2 BEST had prepared plan to replace all consumer meters with load above 20 kW with kVAh compliant meters. Meanwhile MoP, vide notification dated 17th August, 2021 directed that “all the consumers (other than agricultural consumers) in areas with communication network, shall be supplied electricity with Smart meters working in Prepayment Mode conforming to relevant IS, within the time”. Hence, BEST has decided to replace all existing Energy Meters with Smart meters with Prepayment facility.
- 8.8.3 Now, BEST has appointed AMI-SP to execute the “Scheme of Prepaid Smart Metering” on Design, Built, Finance, Own, Operate & Transfer (DBFOOT) basis. AMI-SP will replace all 10.8 Lakh consumer meters with SMART meters within 30 months from the date of award of contract. The Project Implementation Schedule for AMI system establishment and timelines for Related Services milestones from date of execution of the Contract are given below:

Sr. No	Milestone	Timeline (in Months)
1	Submission of detailed Project Implementation Plan giving the compliance sheet along with the make and model of various infrastructure, hardware & software that are proposed for delivery and operations incl.: 1) Specification of System 2) Architecture and Software Solution	Within [60] days from the date of execution of the Contract
2	Approval of detailed Project Implementation Plan by Utility	Within [15] days from the date of submission of Project Implementation Plan.

Sr. No	Milestone	Timeline (in Months)
3	Delivery, site installation, integration and operationalization of 100% of Feeder Meters each with related hardware, software and equipment	Within [9] months from the date of execution of the Contract
4	1) Delivery, site installation and commissioning of Network Operations cum Monitoring Centre with related hardware, software and equipment; and 2) Delivery, Site installation, integration and operationalization of (5%) of Smart Meters each with related hardware, Software and equipment and Successful operational go-live,	Within [9] months from the date of execution of the Contract
5	Delivery, site installation, integration and operationalization of 50% of Smart Meters each with related hardware, software and equipment	Within [20] months from the date of execution of the Contract
6	Installation Milestone	Within [30] months from the date of execution of the Contract
7	Certification of Installation Milestone in accordance with the provisions of this Contract by Utility	Within [15] days from the date of Installation Milestone.
8	Operational period of the AMI system	From Operational Go-Live till end of the Contract Period (7.5 years)
9	Transfer of AMI system to the utility	At the end of Term of the Contract in accordance with Exit Management Plan

8.8.4 Transfer of AMI system to the utility at the end of Term of the Contract in accordance with Exit Management Plan

8.8.5 BEST will be giving priority for replacement of consumer meters with load above 20 kW, while execution of above AMI Project.

8.8.6 In view of the above, BEST submitted that it would submit the proposal for kVAh billing for LT consumers with load above 20 kW in the next MYT Petition.

#### ***Commission's Analysis and Ruling***

8.8.7 The Commission, in the MTR Orders issued in September 2018 for Distribution Licensees in the State, had expressed its intentions to implement kVAh billing to all HT consumer and LT consumers having load above 20 kW from 1 April, 2020 so as to provide the Licensees enough lead time to take necessary steps such as meter replacement, if required, preparedness of billing software etc. to ensure their operational preparedness for implementing the kVAh billing.

8.8.8 While the Commission had indicated to implement kVAh billing for all HT



consumers and LT consumers having load above 20 kW, however, BEST has proposed to implement kVAh billing for HT categories of Consumers only. Accordingly, the Commission allowed implementation of kVAh billing for HT categories of Consumers of BEST and directed BEST to take up necessary steps to ensure implementation of the kVAh for LT consumers with load of 20 kW and above at the time of MTR proceeding.

8.8.9 However, it is observed that BEST has been billing the HT Consumers on derived kVAh unit basis, based on the formula for PF specified by the Commission. i.e.

$$\text{kVAh(Total)} = \sqrt{(\text{kWh})^2 + (\text{RkVAhLag} + \text{RkVAhLead})^2}$$

8.8.10 With respect to the query raised by the Commission on the timeline for actual implementation of kVAh billing of HT & LT consumers, BEST submitted that as per the directives of CEA guidelines in January 2016 regarding implementing smart meters for consumers having consumption more than 200 units and Installation of Energy audit meters up-to distribution transformer level, a Special Study Team (SST) was formed by BEST in July 2018. As per BEST, SST was given task to study and initiate the proposal.

- i. A common software system was envisaged for reading the Meters pertaining to HT as well as LT consumers above 20 kW, Energy auditing of system up to distribution transformer level and also reading of the ABT meters of Interface points, which will reduce the cost of the project and meet all the regulatory requirements.
- ii. The proposal of Implementation of smart meters above 20 Kw and Energy audit meters with EFPI integration was in-principally approved by the management in Aug. 2019 and directed SST to prepare RFP.
- iii. For preparation of RFP, SST attended various seminars, discussed rigorously with Smart Meter implementing agencies, Meter manufacturers, etc. During the discussion, it was observed that there were various issues faced by other utilities all over India while implementation of such projects regarding adoption of right communication technology, no manufacturer has taken BIS certification for HT CT PT meter, etc. Hence it took considerable time for finalising the specifications. The final approval of the management for RFP was obtained in November 2020.
- iv. BEST while implementing above directives of Hon'ble Commission, also decided to replace meters for HT Consumers with Smart Meters, which not only have facility to record kVAh reading but also have other features such as Net Meter, power quality measurement, remote

firmware up-gradation, in-built modem etc.

- v. Accordingly, a comprehensive proposal was prepared, considering the directives of Hon'ble Commission, as well as CEA and other requirements. The proposal comprised of replacement of around 20,200 Nos. of meters with SMART Meters (200 Nos. of HT meters and 20,000 nos. of LT Meters having sanctioned load above 20 KW). Also 5000 nos. of SMART meters were proposed to be installed for Energy Auditing at various voltage levels from 110 KV interface points to Distribution Transformer at 415 Volts.
- vi. It was intended to keep common meter reading software and Meter data Management System (MDMS) for all above meters, to optimize the cost of the project thereby burden on the consumer in ARR will be minimum. As the system will be based on remote reading, it will reduce the requirement of visiting site for downloading the reading data.
- vii. The project was approved by the management and the tender was to be floated in last quarter of FY 2020-21. As per schedule it was envisaged that BEST will complete the work of replacement of meters pertaining to HT consumers by December 2021.
- viii. BEST had prepared above plan to replace all consumer meters with load above 20 kW with kVAh compliant meters. Meanwhile MoP, vide notification dated 17 August, 2021 directed that: "all the consumers (other than agricultural consumers) in areas with communication network, shall be supplied electricity with SMART meters working in Prepayment Mode, conforming to relevant IS, within the time". Hence, BEST decided to replace all existing energy meters with SMART meters with Prepayment facility.
- ix. The Ministry of Power, Govt. of India through its subsidiary and Nodal agency "Power Finance Corporation of India" (PFC) after approval from State cabinet, sanctioned financial assistance to BEST Undertaking, for execution of various projects including replacement of existing energy meters by SMART Meters.
- x. Now, in accordance with "Revamped Distribution Sector Scheme" (RDSS) of Govt. of India, BEST has appointed AMI-SP to execute the "Scheme of Prepaid Smart Metering" on Design, Built, Finance, Own, Operate & Transfer (DBFOOT) basis.
- xi. After issuing of LOA, the work shall be completed within 30 months and after 9 months of LOA, first 5% of the meters of total quantity shall

be covered under go-live system. Considering the maximum period for AMI-SP the scheduling is given below:

- Total Quantity Considered as Bill of Material – 10,80,676 Nos.
- 9<sup>th</sup> month after Issuing LOA will be June 2023 and the 30<sup>th</sup> month will be March 2025.

xii. The meter implementation will be as outlined below:

- a) 54,035 Smart Meters (5% of total) are operational at the end of 9<sup>th</sup> Month from date of execution of the Contract.
- b) From there on, 44,200 Smart Meters (4.09% of total) are operational every month till 5,00,000 Smart Meters (50% of total) are operational at the end of 20<sup>th</sup> Month from date of execution of the Contract.
- c) From there on, 54,035 Smart Meters (5 % of total) are operational every month till 10,80,676 smart meters (100% of total) are operational at the end of 30<sup>th</sup> Month from date of execution of the Contract.

8.8.11 As specified in the timeline, the Commission observed that by March 2025, BEST is planning to go live with smart meters and hence has proposed to implement the kVAh billing for LT Consumers with load above 20 kW from next MYT Period i.e. from April 2025. The Commission would like to record its serious displeasure over such delay in implementation of kVAH billing specifically for HT Consumers which has been billed on derived kVAh unit basis and are not provided with smart meter to record kVAH units. This reflects the lack of discipline on the part of BEST with regard to non-compliance of the directives of the Commission. Accordingly, the Commission directs to implement the smart meters to the HT consumers and LT Consumers with load above 20 kW by March 2025 and have the IT system compliant with the recording of the kVAH billing. In case of failure, the Commission may take necessary action as per the provisions of the Electricity Act, 2003 and the Regulations/Rules made there under.

8.8.12 This case clearly falls under the provisions of Section 142 and 146 of the Electricity Act, 2003 wherein the Commission needs to issue a show cause and give a chance to BEST to justify that it is not deliberately not resorting to non-compliance. Though the Commission is constrained to permit BEST to continue with the current tariff framework, BEST shall submit a six monthly progress report and the Commission is keeping this issue open and will decide the action to be taken in case the committed timelines are not met till March 2025. Accordingly, the Commission has determined the tariff to be considered for billing for LT Category in KWh and kVAh billing for all HT Consumers. However, BEST should take up necessary steps to ensure implementation of

the kVAh for LT consumers with load of 20 kW and above by next MYT proceeding.

- 8.8.13 Further, the Commission directs BEST to display PF (computed by considering leading and lagging RkVAh) recorded during the month in the bill of all the Consumer categories till further directions so that the consumer can take corrective action in case of penalty was levied due to poor PF based on the information from the monthly Bill.
- 8.8.14 Further, such PF can be used for converting kVAh into kWh for arriving at payment to be made towards taxes / duties imposed by the GoM, if applicable.
- 8.8.15 While determining per unit charges in kVAh, the Commission has used category wise PF which could be lower than unity. This makes per unit tariff lower than the tariff which would have been determined in kWh term. Further, in case of Energy Balance, the utility shall always maintain sale in kWh only. Tax on Sale of Electricity and Electricity duty shall be converted from kVAh to kWh. All the OA transactions will be maintained in kWh sale only, kVAh based sales shall be converted in kWh based on the Power Factor for the month provided in the Energy Bills.

## **8.9 Inclusion of Street Lights / thorough fares in HT**

### ***BEST's Submission***

- 8.9.1 BEST submitted that, it has received a requisition from MMRDA for supply of electricity at 11KV for their Mumbai Trans Harbour Link Project. The Mumbai Trans Harbour Link will be a public street / thorough fare. The HT electric supply will be used for providing lighting for the Trans Harbour Link.
- 8.9.2 BEST understands that there is no separate category for HT street light. Further, BEST understands that, in LT category street lights/thorough fares are billed under LT IV(B) Public Services – Others category.
- 8.9.3 Accordingly, BEST requested the Commission to include “lighting of public streets/ thorough fares which are open for use by the general public Provided that Street lights in residential complexes, commercial complexes, industrial premises, etc. will be billed at the Tariff of the respective applicable categories” under HT V(B) Public Services – Others.

### ***Commission's Analysis and Ruling***

- 8.9.4 The Commission has examined the submissions of BEST. The Commission notes that in last MYT Order, the Commission merged the LT VI – Street Light into LT IX (B) – Public Services (Others) as the later one has broader coverage of consumers who are into Public Services, and both have similar

end use. As stated by BEST, there is no separate tariff category defined in HT Category for providing power to street light and considering the proposal of supplying power to Mumbai Trans Harbour link, the Commission would like to provide the similar treatment as provided to LT Street Light and has included the same under the consumer category of HT V(B) -Public Services (Others).

## **8.10 Grid Support Charges for Rooftop Net Metering Arrangements**

### ***BEST's Submission***

- 8.10.1 BEST submitted that, at present it has a net metering installed capacity of 13.57 MW. BEST submitted that impact on sales due to net metering is very minimal and the same is expected to be minimum in the control period. However, BEST is proposing the Grid Support Charges as per the MERC (Grid Interactive Rooftop Renewable Energy Generating Systems) Regulations, 2019.
- 8.10.2 BEST further submitted that the net metering facility is being utilised by the high end HT/LT consumers which are subsidising consumers and the event of any decrease in consumption by these consumers from Distribution Licensee will have a direct impact by way of increase in tariff for all other consumers due to under recovery. As a result, Cross subsidy balance inbuilt in the tariff structure will get disturbed.
- 8.10.3 BEST submitted that the Commission has provided for levy of Grid Support Charges on the generated energy under the net metering systems in the MERC Grid Interactive Rooftop Renewable Energy Generating Systems Regulations 2019.
- 8.10.4 BEST submitted that as per the Net Metering Regulations 2019, the Grid Support Charges cover balancing, banking and wheeling cost after adjusting RPO benefits, avoided distribution losses and any other benefits accruing to the Distribution Licensee.
- 8.10.5 BEST submitted that the fixed cost component of its cost gets recovered partially through demand/fixed charges. However, the variable charges along with the fixed cost component built into it remains unrecovered. BEST further submitted that it shall save only variable component of power purchase cost and T&D losses due to consumer opting for net metering arrangement. BEST proposed Grid Support Charges for rooftop net metering arrangements as per the methodology laid down by the Commission in MSEDCL's MYT Order in the Case No. 322 of 2019. The relevant extract from the MSEDCL's Order is reproduced below:

*“8.20.24 Based on the above specified principle, the Commission hereby stipulates*

the following formulation for determination of Grid Support Charges separately for HT category of consumers and LT category of consumers for the gross generation of solar energy:

Grid Support Charges (HT)	$GSC (HT) = BC+CB+WC(HT)-(RREB+ADL(HT))$
Grid Support Charges (LT)	$GSC (LT) = BC+CB+WC(LT)-(RREB+ADL(LT))$

Where,

‘BC’ shall mean the Balancing Cost,

‘CB’ shall mean the Cost of availing Banking facility,

‘WC (HT) & WC (LT)’ shall mean the Wheeling Charges for HT & LT categories respectively,

‘RREB’ shall mean the Rooftop RE benefit accrued to the Distribution Licensee

‘ADL (HT) & ADL (LT)’ shall mean the Avoided Distribution Loss for HT & LT categories respectively,”

8.10.6 Based on above methodology, BEST has computed Grid Support Charges and given below:

**Table 304 : Grid Support Charges for FY 2023-24 and FY 2024-25, as submitted by BEST**

Symbol	Description	FY 2023-24		FY 2024-25	
		LT	HT	LT	HT
BC	Fixed Cost of Thermal Generating Stations which will act as standby or balancing support	2.08	2.08	2.20	2.20
CB	Difference in ToD Charges during day peak when generation from Solar occurs and banking takes place and ToD charges of the evening peak when utilization of banked energy takes place. OR 2% of banking cost (earlier policy initiative) whichever is lower	0.50	0.50	0.50	0.50
WC	Wheeling charges as per petition	2.26	0.84	2.48	0.92
RREB	Equivalent to RPO Non-compliance Charge as specified in Regulation 12.3 of the RPO Regulations, 2019	0.10	0.10	0.10	0.10
MVC	Marginal variable cost	4.59	4.59	2.34	2.34
HT/LT Loss%	Intrastate transmission loss+ wheeling loss	8.39%	4.22%	8.26%	4.20%
ADL	$MVC/(1-HT/LT Loss\%) - MVC$	0.42	0.20	0.21	0.10
	<b>Total Grid Support Charges</b>	<b>4.32</b>	<b>3.11</b>	<b>4.87</b>	<b>3.42</b>
	<b>Concessional GSC Charges (Rs./unit)</b>				
	<b>50% of the Total Grid Support Charges</b>	2.16	1.56	2.44	1.71

Note: Assumptions: New RTC Rate is considered Half as FC & Half as VC

8.10.7 BEST has observed that the Commission has suggested Concessional Grid Support Charges in MSEDCL’s MYT Order. Therefore, BEST requested the Commission to consider the BEST’s submission and approve Grid Support Charges/Concessional Grid Support Charges as appropriate.

**Commission’s Analysis and Ruling**

8.10.8 The Commission in its Order dated 30 March, 2020 in Case No 322 of 2019 in respect of MSEDCL has decided not to impose any Grid Support Charge on Rooftop Solar under net-metering arrangement till cumulative installed capacity of Rooftop Solar reaches 2000 MW. It was also held that, subsequent to that Commission will reconsider option of imposing Grid Support Charge as provided under the Regulations. The Commission notes that total installed capacity of rooftop Solar in Maharashtra is 1439 MW as on February, 2023. Since the installed capacity is less than 2000 MW, the Commission has not considered levy of any Grid Support Charges.

## **8.11 Schedule of Charges**

### ***BEST's Submission***

8.11.1 BEST submitted that it has not proposed any revision in its existing Schedule of Charges except the charges for Lost/Burnt Meter Charges.

### **Lost / Burnt Meter Charges**

8.11.2 BEST submitted that at present, meters are provided by the BEST free of cost, however, if the meter is lost or burnt or damaged, the cost of meter is recovered from the consumers in accordance with Regulation 15 of MERC (Electric Supply Code & SOP Regulations, 2021) and as approved by the Commission in MERC Case No. 90 of 2012 and cost of Net meter and SMART meter required to be added.

8.11.3 BEST installs Net meters for prosumers who opts to install Solar Roof Top in accordance with MERC (Grid Interactive Rooftop Renewable Energy Generating Systems) Regulations, 2019. The cost of Net Meter is higher than normal Electronic meter. Hence it is necessary to incorporate cost of Net meter in the schedule of charges.

8.11.4 Further, BEST has appointed AMI-SP to execute the "Scheme of Prepaid Smart Metering" on Design, Built, Finance, Own, Operate & Transfer (DBFOOT) basis. AMI-SP will replace all 10.8 Lakh consumer meters with SMART meters within 30 months from the date of award of contract. Hence it is also necessary to incorporate cost of SMART meter in the schedule of charges.

8.11.5 The existing charges and charges proposed by BEST towards cost of meter, applicable in case consumer opts to purchase the meter from BEST Undertaking & in case of Lost and Burnt meter, for normal electronic meter, Net meter and SMART meter is given below. The proposed charges are in accordance with the price discovered in the tender of respective meters, last purchased by BEST:

**Table 305 : Proposed Schedule of Charges, as submitted by BEST**

<b>Particulars</b>	<b>Existing Charges (Rs.) (Case No. 90 of 2012)</b>	<b>Proposed Charges by BEST (Rs.)</b>
<b>Normal Meter</b>		
Cost of meter (applicable in case consumer opts to purchase the meter from BEST Undertaking & in case of Lost and Burnt meter)		
Single phase meter	1000	1000 (No Change)
Three phase whole current meter	3000	3000 (No Change)
Three phase C.T. operated meter	4000	4000 (No Change)
H.T. meter	4500	
Single phase Prepaid meter	3300	3300 (No Change)
Three phase Prepaid meter	6000	6000 (No Change)
<b>Net Meter</b>		
Single phase Net Meter	--	2000
Three Phase Whole Current Net meter	--	5000
Three Phase C.T operated Net Meter	--	8000
H.T.Net Meter	--	9000
<b>SMART Meter</b>		
Single phase SMART Meter	--	4750
Three Phase Whole Current SMART meter	--	7300
Three Phase C.T operated SMART Meter	--	11700
H.T.SMART Meter	--	18900

8.11.6 BEST requested to the Commission to approve the Lost/Burnt meter charges proposed by BEST.

***Commission's Analysis and Ruling***

8.11.7 In accordance with the provisions of EA 2003, the Commission has notified MERC (Electricity Supply Code and Standards of Performance for Distribution Licensees, including Power Quality) Regulations, 2021. As per Regulation 19 of MERC (Electricity Supply Code and Standards of Performance for Distribution Licensees, including Power Quality) Regulations, 2021, Distribution Licensees are required to submit the proposal before the Commission for approval of Schedule of Charges (SoC) for such matters required by the Distribution Licensee to fulfil its obligation to supply electricity to consumers under the Electricity Act, 2003 and other relevant Regulations.

8.11.8 However, BEST has not proposed any revision, and the Commission notes the submission of BEST and has accordingly approved the Schedule of Charges as approved earlier which will be applicable for FY 2023-24 and FY 2024-25.



Since the opportunity was provided to BEST for revision in Schedule of Charges and as per BEST submission, such revision is not proposed, the Commission would like to highlight that any such revision in schedule of charges will be considered in next tariff petition only.

8.11.9 The Commission notes the submission of BEST that charges proposed are in accordance with the price discovered in the tender of respective meters, last purchased by BEST. Accordingly, charges approved by the Commission in case of Lost/Burnt Meter are as outlined in the following table:

**Table 306: Approved Schedule of Charges related to Lost / Burnt Meter Charges**

Particulars	Existing Charges (Rs.) (Case No. 90 of 2012)	Proposed Charges by BEST (Rs.)	Approved by the Commission (Rs.)
<b>Normal Meter</b>			
Cost of meter (applicable in case consumer opts to purchase the meter from BEST Undertaking & in case of Lost and Burnt meter)			
Single phase meter	1000	1000 (No Change)	1000
Three phase whole current meter	3000	3000 (No Change)	3000
Three phase C.T. operated meter	4000	4000 (No Change)	4000
H.T. meter	4500		4500
Single phase Prepaid meter	3300	3300 (No Change)	3300
Three phase Prepaid meter	6000	6000 (No Change)	6000
<b>Net Meter</b>			
Single phase Net Meter	--	2000	2000
Three Phase Whole Current Net meter	--	5000	5000
Three Phase C.T operated Net Meter	--	8000	8000
H.T.Net Meter	--	9000	9000
<b>SMART Meter</b>			
Single phase SMART Meter	--	4750	4750
Three Phase Whole Current SMART meter	--	7300	7300
Three Phase C.T operated SMART Meter	--	11700	11700
H.T.AMR Meter with Communication facility	--	18900	18900

## 8.12 Green Power Tariff

### *BEST's Submission*

8.12.1 Central Government is working on a green tariff policy that will help electricity distribution companies (Discoms) to supply electricity generated from clean energy projects at a cheaper rate as compared to power from conventional fuel sources such as coal.

- 8.12.2 Large corporate who are looking to procure only green power, they can contract such power from a clean energy developer as it is done in Commercial and Industrial (C&I) segment and Discoms will sell surplus (or may buy additional green power if required) and supply it at 'Green Power Tariff'. Green Power Tariff will be the weighted average tariff of green energy that consumer will have to pay. The tariff will be slightly lower than tariff from conventional fuel sources and a new regulation will help to ensure, if an industry/commercial establishment wants only green power from developer, open access applications will be approved within a fortnight.
- 8.12.3 A provision for a separate green tariff is also seen to reduce the hesitation of DISCOM in going for power purchase from RE sources, as this mechanism will not impact general tariffs. The Commission vide its Order (Case No. 134 of 2021), dated 22.03.2021 has already approved a 'Green Power Tariff' of Rs. 0.66/kWh to be levied on consumers opting for 100% green energy.
- 8.12.4 BEST requested the Commission to continue the existing Green Power Tariff of Rs. 0.66/kWh for the consumer opting for meeting its 100% of power requirement through RE sources.

***Commission's Analysis and Ruling***

- 8.12.5 The Commission determined Green Power Tariff for the consumers opting for meeting its 100% of power requirement through RE sources in the Case No. 134 of 2020 dated 22.03.2021, which is stipulated as Rs 0.66 per kWh as per the conditions and methodology specified under said Order.
- 8.12.6 On 6 June, 2022, Ministry of Power, GoI has notified Electricity (Promoting Renewable Energy Through Green Energy Open Access) Rules, 2022. The said rules mandate the State Commission to determine Green Power Tariff. The Commission has already determined the same vide its Order dated 22 March, 2021 as mentioned above.
- 8.12.7 Such Green Power Tariff would be in addition to regular tariff approved in MYT Order. The Commission observes that the concept of Green Tariff has been well appreciated by many stakeholders across state as it provides opportunity for consumers willing to meet their power requirement through green energy sources, however, the concept is still at nascent stage with limited participation.
- 8.12.8 Besides, there have been several developments since introduction of concept including COVID pandemic situation, which also has bearing on renewable energy development in the country. Other market related developments such as introduction of GDAM/GTAM and REC multiplier etc. are still evolving. Under the circumstance, the Commission is of the considered view that any

change in mechanism of Green Tariff is not desirable at this stage and the same should continue for remaining period of the 4<sup>th</sup> Control Period. Thus, the Commission hereby approves the Green Tariff of Rs 0.66/kWh to be applicable during remaining period of 4<sup>th</sup> Control Period (i.e., FY 2023-24 and FY 2024-25).

8.12.9 However, for ease of implementation and to comply with provisions of MoP Rules, the Commission stipulates following terms and conditions for levy of Green Power Tariff

- *All consumers (Extra High Voltage, High Voltage and Low Voltage) shall be eligible for opting RE power on payment of Green Power Tariff.*
- *The consumers who have opted for Open Access can also requisition for RE Power on payment of Green Power Tariff for balance power supplied by Distribution Licensee.*
- *If the Obligated Entity wants to meet its RPO by requisitioning RE Power from the Distribution Licensee, then such entity shall pay additional Rs 0.50 /kWh for the Green Power Tariff i.e., the Obligated entity shall pay total Green Power Tariff of Rs 1.16/kWh. Since the obligated entity also has the option to meet RPO by purchasing REC and is currently being traded at Rs 1/kWh, the green tariff is proposed with slight premium to REC Price.*
- *Revenue earned through Green Power Tariff shall be treated as tariff income of Supply Business and thereby be fully accounted for reduction in ARR of supply business.*
- *If the consumer is not an obligated entity under RPO Regulations, then that energy shall be counted towards RPO fulfilment of Distribution Licensee.*
- *The Consumer will have option to select the quantum of green power to be purchased in steps of 25% and going up to 100% of the consumption.*
- *Such an option will also be available for Open Access consumer for its balance consumption from the Distribution Licensee.*
- *The Distribution Licensee will levy Green Power Tariff only for percentage of consumption opted by the Consumer.*
- *Distribution Licensee shall issue Annual certificate to consumers stating percentage of power requirement of such consumer has been sourced through RE sources.*
- *Any requisition for green energy from a distribution licensee shall be*

*for a minimum period of one year.*

- *Distribution Licensee shall process the request of Consumer for Green Power Tariff not later than 30 days from the receipt of the request or next billing cycle, whichever is earlier. Distribution Licensee shall provide the facility of requesting for Green Power Tariff through its Web Portal, Mobile App or any other digital mode for convenience of consumers.*
- *Temporary Consumers can also opt of Green Tariff as per methodology specified above and Distribution Licensee shall issue certificate specifying that power requirement has been sourced through RE sources after receipt of payment.*
- *The Rules notified by MoP, GOI also specify that rating of the consumer based on the percent of green energy purchased by such consumer. The Commission notes that RPO specified for FY 2023-24 and FY 2024-25 is 22% and 25% respectively and is likely to be revised upwards going forward in next Control Period. As Distribution Licensee will already be meeting such consumption, it would not be correct to issue any certificate to individual consumer for RPO to be met by Distribution Licensee as a whole. The Commission has allowed the consumer the choice to opt for RE purchase in the steps of 25%. Accordingly, the Commission introduces the rating to be given by Distribution Licensee at the end of the financial year along with the electricity bill for the month of March specifying the percentage of power purchased from RE sources from his total consumption and rating as given below:*

<b>% of RE Purchase Opted</b>	<b>Rating</b>
>50% to 75%	Semi-Green
>75% to 100%	Green

### **8.13 Change in Billing Demand**

- 8.13.1 As specified in the last MYT Order, the Commission has gradually increased the minimum threshold limit of billing demand of the contract demand, by 5% in each year of the 4<sup>th</sup> Control Period so as to reach a threshold limit of 75% level in FY 2024-25. The Commission proposed to continue with the same minimum threshold limit for FY 2023-24 and FY 2024-25 as approved in last MYT Order.

### **8.14 Load Factor Incentive**

8.14.1 As per the existing tariff of BEST, Load factor incentive is available for incentivizing bulk consumers in the State to maintain steady demand on the system. Maximum incentive payable is 15% of energy charge. The Commission proposed to continue with same rebate. Details of LF Incentive / Penalty is given in the corresponding Tariff Schedule.

### **8.15 Prepaid Meter Rebate**

8.15.1 The Commission notes that Smart metering rollout being proposed has provision of pre-paid metering. Hence, option of pre-paid meter based billing needs to be enabled. The Commission also notes that in the past, discount of 5% was approved by the Commission for pre-paid metering for consumers of some of Distribution Licensee in the State. But the said pre-paid metering was envisaged for limited number of consumers and with intention of improving collection efficiency. But when almost all consumers are being installed with Smart meter having pre-paid facility, providing such discount of 5% per month would not be useful as same cost is again loaded into ARR and hence tariff of consumers. However, the Commission is of the view that it is essential to provide rebate which is not only commensurate with the prevailing market rates but also promote consumers to opt for pre-paid metering. Accordingly, the Commission approves rebate of 2% for consumers who are opting for pre-paid metering which is inclusive of prompt payment discount which otherwise is payable for early payment.

### **8.16 Advance Payment**

8.16.1 Regulation 16 of the MERC (Electricity Supply Code and Standards of Performance of Distribution Licensees including Power Quality) Regulations, 2021 allows the consumer to make the advance payment of charges for electricity supplied. The Commission notes that interest is payable at Bank Rate for such advance payment and such rate being lower than prevailing market rate, there is not much response from the Consumer to avail this facility.

8.16.2 The Commission is of the view that there is need to encourage the consumers to make advance payment, which will not only increase the collection of Distribution Licensee but also reduce the working capital requirement. Thus, the Commission, hereby deems it fit to invoke its Power to Relax under Regulation 30 of MERC (Electricity Supply Code and Standards of Performance of Distribution Licensees including Power Quality) Regulations, 2021 to allow higher interest rate based on the amount of advance payment.

8.16.3 Thus, the Commission hereby allows the advance payment/pre-payment of the bills for consumers for amount not exceeding 12 times average monthly bill for the past twelve months. Such facility shall be available for eligible

consumers only for non-defaulting consumers on record for at least past 12 months. Such consumers shall be eligible to avail discount in graded manner on their monthly bills, so long as they maintain advance payment amount in following manner:

<b>Advance Payment Amount maintained with Utility as on date of monthly bill</b>	<b>Discount in monthly bill applicable at the rate of</b>	<b>Illustration discount* (%)</b>
Advance Amount = Equiv. of (Avg. Monthly Bill for past 12 months) x [No. of months, <b>9 to 12 months</b> ]	Percent Discount in monthly Bill Amount = $1/12 \times (\text{SBI 1-yr MCLR as on 1}^{\text{st}} \text{ Apr}) + \mathbf{150 \text{ basis points}}$	$(1/12) \times 8.5\% = 0.708\%$ (monthly bill discount)
Advance Amount = Equiv. of (Avg. Monthly Bill for past 12 months) x [No. of months, <b>6 to 9 months</b> ]	Percent Discount in monthly Bill Amount = $1/12 \times (\text{SBI 1-yr MCLR as on 1}^{\text{st}} \text{ Apr}) + \mathbf{120 \text{ basis points}}$	$(1/12) \times 8.2\% = 0.683\%$ (monthly bill discount)
Advance Amount = Equiv. of (Avg. Monthly Bill for past 12 months) x [No. of months, <b>3 to 6 months</b> ]	Percent Discount in monthly Bill Amount = $1/12 \times (\text{SBI 1-yr MCLR as on 1}^{\text{st}} \text{ Apr}) + \mathbf{90 \text{ basis points}}$	$(1/12) \times 7.9\% = 0.658\%$ (monthly bill discount)
Advance Amount = Equiv. of (Avg. Monthly Bill for past 12 months) x [No. of months, <b>upto 3 months</b> ]	Percent Discount in monthly Bill Amount = $1/12 \times (\text{SBI 1-yr MCLR as on 1}^{\text{st}} \text{ Apr}) + \mathbf{60 \text{ basis points}}$	$(1/12) \times 7.6\% = 0.633\%$ (monthly bill discount)

*\*Note: Assume SBI 1-year MCLR of 7% p.a.*

### 8.17 Stabilising variation in consumer bill on account of FAC

8.17.1 As per MYT Regulations, 2019, the aggregate gain or loss to a Distribution Licensee on account of variation in cost of fuel, power purchase, and inter-State Transmission Charges shall be passed through under the Fuel Adjustment Charge (FAC) component of the Z-factor Charge (ZFAC), as an adjustment in its tariff on a monthly basis. Relevant part of the MYT Regulation is reproduced below:

*“10.2 The aggregate gain or loss to a Distribution Licensee on account of variation in cost of fuel, power purchase, and inter-State Transmission Charges, covered under Regulation 9.1, shall be passed through under the Fuel Adjustment Charge (FAC) component of the Z-factor Charge (ZFAC), as an adjustment in its Tariff on a monthly basis, as specified in these Regulations and as may be determined in orders of the Commission passed under these Regulations, and shall be subject to ex-post facto approval by the Commission on a quarterly basis:*

*.....”*

8.17.2 Similar arrangement for passing on the variation in fuel and power purchase cost existed in all previous Tariff Regulations of the Commission. Such mechanism is in line with the provision of the EA, 2003 which mandates recovery of the fuel cost in timely manner so that the Distribution Licensee are able to recover their legitimate power purchase cost variation. This has

helped regular recovery of power purchase variations without accumulating it till next tariff revision. This provision also addresses the financial/cash flow issue of Distribution Licensee wherein the payment for power purchase is required to be made in timely manner at prevailing cost. At the same time, it also helps in reducing carrying cost burden on consumer which otherwise would have to be borne if such monthly levy accumulates and the gap is recovered through tariff revision in MYT or MTR as the case may be. Although, consumers are now well aware of this mechanism, there is general and reasonable expectation that once the tariff is approved by the Commission, to the extent possible, it should remain constant during the year and there should not be large variations due to FAC. The unknown variation in the tariff on account of FAC has adverse financial implications on all the categories especially Industrial and Commercial categories where the impact of FAC is generally higher. Variation in tariff is magnified when there is negative FAC leading to reduction in tariff during a particular month and positive FAC in the immediate next month thereby increasing the tariff.

- 8.17.3 Variation in FAC is either on account of change in fuel related costs, changes in source of power procurement, alternate source of power procurement or change in mix of power procurement. During the Public hearings, many suggestions were received on this issue and the consumers requested that an appropriate revised mechanism should be put in place wherein there is a minimum impact of FAC felt by the consumers. The Commission opines that this is a very reasonable expectation of the Consumers. To alleviate this issue to the extent possible and to minimise the impact of FAC, the Commission, while approving this Tariff Order, has built-in annual fuel cost escalation. The Commission is fully aware that in spite of approving this annual escalation rate, the possibility of FAC cannot be ruled out completely since this escalation covers only some sources that form a part of total FAC i.e., the power purchase cost primarily of the PPA's covered under section 62 of the EA, 2003. To ensure stabilisation of tariffs to the extent possible, and to minimise the variation in FAC, the Commission in MYT Order has approved constitution of a FAC Fund with Distribution Licensee which can be built up over a period of time to be used for payment of FAC bills of Generating companies without immediately loading it on consumers. This has resulted into substantial amount of FAC Fund with the Licensees up to August, 2021. The fund so created was utilised in future months to offset the levy of FAC on Consumers for September 2021 onwards arising out of higher power purchase cost due to increase in demand and higher power purchase price prevailing in the market, high fuel cost etc. Finally, after exhausting total accumulated FAC fund, the Commission allowed levy of FAC to consumers from August 2022 onwards i.e., after more than 2 years of MYT Order being passed by the Commission. Thus, such FAC Fund mechanism has ensured stable tariff for longer period and due to substantial increase in power purchase cost in last

year and impact of Change in Law claims due to Court Order, FAC was required to levy to the Consumers. Considering the effectiveness of such mechanism, the Commission proposes to continue the similar mechanism for FY 2023-24 and FY 2024-25. The Commission also notes that in present MTR Order, it has tried to incorporate realistic price of power purchase, however considering current volatility of power market, need of levying FAC cannot be ruled out completely. However, it is expected that in order to provide stable tariff to consumers, Distribution Licensee may wait at least six months from issuance of this Order to balance out impact of variation in power purchase cost before levying it to consumers.

8.17.4 Therefore, using its powers for Removal of Difficulties under Regulations 106 of MYT Regulations, 2019, the Commission is making following changes in FAC mechanism stipulated under Regulation 10 of MYT Regulations, 2019:

- a) Distribution Licensee shall undertake computation of monthly FAC as per Regulation 10 of the MYT Regulations, 2019 except for treatment to be given to negative FAC as follows:
  - i. Negative FAC amount shall be carried forward to the next FAC billing cycle with holding cost.
  - ii. Such carried forward negative FAC shall be adjusted against FAC amount for the next month and balance negative amount shall be carried forward to subsequent month with holding cost.
  - iii. Such carry forward of negative FAC shall be continued till next tariff determination process.
  - iv. In case such FAC Fund is yet to be generated or such generated fund is not sufficient to adjust against FAC computed for given month, then Distribution Licensee can levy such amount to the consumers through FAC mechanism, upon seeking prior approval from the Commission.

8.17.5 In order to maintain transparency in management and use of such FAC Fund, Distribution Licensee shall maintain monthly account of such FAC fund and upload it on its website for information of stakeholders.

8.17.6 As the Commission has continued concept of FAC fund as stated above to stabilize the increase in fuel prices and power purchase costs, the Commission has modified the FAC mechanism such that the Distribution Licensees shall submit the FAC computations on a monthly basis for prior approval, irrespective of whether FAC is chargeable in a month or whether some amount is accruing to the Fund on account of negative FAC.



8.17.7 The details of the FAC as per the Regulations, shall be submitted by the 15<sup>th</sup> of every month prior to the month on which the FAC is proposed to be levied and the Commission will endeavour to decide the same within 10 days so that the same can be levied from the 1st of the subsequent month.

#### **8.18 Tariff for FY 2023-24 and FY 2024-25**

##### ***BEST's Submission***

8.18.1 BEST has submitted the proposed tariff for FY 2023-24 and FY 2024-25 as shown in Table below: for FY 2023-24 and FY 2024-25:

**Table 307: Proposed Tariff for FY 2023-24 and FY 2024-25, as submitted by BEST**

Category	Components of tariff FY 2023-24					Components of tariff FY 2024-25				
	Fixed Charges	Demand Charges	Energy Charges	Wheeling Charges	Average Billing Rate	Fixed Charges	Demand Charges	Energy Charges	Wheeling Charges	Average Billing Rate
	Rs./Month	Rs./KVA/month	Rs./kVAh or Rs.kWh			Rs./Month	Rs./KVA/month	Rs./kVAh or Rs.kWh		
<b>HT Category</b>										
HT - I Industry	-	470.00	6.12	0.84	8.69	-	480.00	6.19	0.92	8.88
HT - II Commercial	-	470.00	6.08	0.84	10.09	-	480.00	6.14	0.92	10.33
HT - III Group Housing	-	470.00	6.33	0.84	8.73	-	480.00	6.40	0.92	8.94
HT - IV (A) Railways	-	470.00	5.70	0.84	12.97	-	480.00	5.76	0.92	13.38
HT - V (A) Public services (Govt. Hospital & Educational Institutions)	-	470.00	5.82	0.84	8.48	-	480.00	5.93	0.92	8.71
HT - V (B) Public services (Others)	-	470.00	6.39	0.84	9.41	-	480.00	6.45	0.92	9.62
HT - VI Electrical Vehicle	-	70.00	4.99	0.84	-	-	70.00	4.99	0.92	-
<b>LT Category</b>										
LT - I (A) Residential (BPL)	11.00	-	1.22	2.26	3.70	12.00	-	1.23	2.48	3.95
LT - I (B) Residential										
0-100	110.00	-	1.90	2.26	4.73	120.00	-	1.92	2.48	5.02
101-300	160.00	-	4.77	2.26	7.99	170.00	-	4.81	2.48	8.30
301-500	160.00	-	7.83	2.26	10.51	170.00	-	7.88	2.48	10.81
501<	200.00	-	9.53	2.26	11.97	210.00	-	9.60	2.48	12.27
LT - II (a) Commercial	560.00	-	5.25	2.26	9.56	580.00	-	5.29	2.48	9.88
LT - II (b) Commercial >20 & <=50 kW	-	470.00	5.01	2.26	14.34	-	480.00	5.03	2.48	15.08
LT - II (c) Commercial >50	-	470.00	5.36	2.26	14.51	-	480.00	5.38	2.48	15.16
LT - III (A) Industry (upto 20 kW)	560.00	-	4.78	2.26	7.57	580.00	-	4.83	2.48	7.87
LT-III (b) Industrial	-	470.00	5.07	2.26	11.82	-	480.00	5.12	2.48	12.39
LT - IV (A) Public Services - Govt. Hosp. & Edu. Institutions)	560.00	-	5.47	2.26	7.80	580.00	-	5.58	2.48	8.13
LT - IV (B) Public Services - Others	560.00	-	5.47	2.26	8.00	580.00	-	5.53	2.48	8.28
LT-V (A) Agriculture- Pumpsets	-	50.00	2.34	2.26	-	-	60.00	2.37	2.48	-
LT-V (B) Agriculture- Others	-	120.00	3.76	2.26	6.05	-	130.00	3.80	2.48	6.28
LT VI Vehicle Charging	-	70.00	4.03	2.26	6.29	-	80.00	4.03	2.48	6.51

**Commission's Analysis and Ruling**

8.18.2 The revised tariff over the FY 2023-24 and FY 2024-25 as approved in this Order is given in the Table below:

**Table 308: Revised tariff effective from 1 April 2023 for the FY 2023-24 as approved by Commission.**

Consumer Category	Fixed/ Demand Charge per month	Wheeling Charges	Energy Charges
		(Rs. /kVAh for HT and Rs./kWh for LT)	
<b>HIGH TENSION CATEGORIES</b>			
HT - I Industry	Rs. 375 per kVA	0.67	7.15
HT - II Commercial	Rs. 375 per kVA	0.67	7.66
HT - III Group Housing	Rs. 375 per kVA	0.67	7.23
HT - IV (A) Railways	Rs. 375 per kVA	0.67	6.84
HT - V (A) Public services (Govt. Hospital & Educational Institutions)	Rs. 375 per kVA	0.67	7.08
HT - V (B) Public services (Others)	Rs. 375 per kVA	0.67	7.64
HT - VI Electrical Vehicle	Rs. 75 per kVA	0.67	6.83
<b>LOW TENSION CATEGORIES</b>			
LT - I (A) Residential (BPL)	Rs. 11	1.74	1.50
LT - I (B) Residential			
0-100 units	Rs. 85	1.74	1.95
101-300 units	Rs. 125	1.74	5.30
301-500 units	Rs. 125	1.74	8.89
>501 units	Rs. 150	1.74	10.86
LT - II (a) Commercial	Rs. 445	1.74	6.74
LT - II (b) Commercial >20 & <=50 kW	Rs. 375 per kVA	1.74	5.60
LT - II (c) Commercial >50	Rs. 375 per kVA	1.74	5.53
LT - III (A) Industry (upto 20 kW)	Rs. 445	1.74	6.23
LT-III (b) Industrial	Rs. 375 per kVA	1.74	6.17
LT - IV (A) Public Services - Govt. Hosp. & Edu. Institutions)	Rs. 445	1.74	6.81
LT - IV (B) Public Services - Others	Rs. 445	1.74	6.82
LT-V (A) Agriculture- Pumpsets	Rs. 40 per HP	1.74	2.36
LT-V (B) Agriculture- Others	Rs. 95 per kW	1.74	4.79
LT VI Vehicle Charging	Rs. 75 per kVA	1.74	5.51

**Table 309: Revised tariff effective from 1 April 2024 for the FY 2024-25 as approved by Commission**

Consumer Category	Fixed/ Demand Charge per month	Wheeling Charges	Energy Charges
		(Rs. /kVAh for HT and Rs./kWh for LT)	
<b>HIGH TENSION CATEGORIES</b>			
HT - I Industry	Rs. 400 per kVA	0.76	7.51
HT - II Commercial	Rs. 400 per kVA	0.76	8.04
HT - III Group Housing	Rs. 400 per kVA	0.76	7.59
HT - IV (A) Railways	Rs. 400 per kVA	0.76	7.18

Consumer Category	Fixed/ Demand Charge per month	Wheeling Charges	Energy Charges
		(Rs. /kVAh for HT and Rs./kWh for LT)	
HT - V (A) Public services (Govt. Hospital & Educational Institutions)	Rs. 400 per kVA	0.76	7.43
HT - V (B) Public services (Others)	Rs. 400 per kVA	0.76	8.25
HT - VI Electrical Vehicle	Rs. 80 per kVA	0.76	7.24
<b>LOW TENSION CATEGORIES</b>			
LT - I (A) Residential (BPL)	Rs. 12	1.97	1.52
LT - I (B) Residential			
0-100	Rs. 90	1.97	1.87
101-300	Rs. 135	1.97	5.46
301-500	Rs. 135	1.97	9.56
501<	Rs. 160	1.97	11.73
LT - II (a) Commercial	Rs. 475	1.97	7.08
LT - II (b) Commercial >20 & <=50 kW	Rs. 400 per kVA	1.97	5.88
LT - II (c) Commercial >50	Rs. 400 per kVA	1.97	5.25
LT - III (A) Industry (upto 20 kW)	Rs. 475	1.97	6.73
LT-III (b) Industrial	Rs. 400 per kVA	1.97	6.66
LT - IV (A) Public Services - Govt. Hosp. & Edu. Institutions)	Rs. 475	1.97	7.15
LT - IV (B) Public Services - Others	Rs. 475	1.97	7.16
LT-V (A) Agriculture- Pumpsets	Rs. 45 per HP	1.97	2.52
LT-V (B) Agriculture- Others	Rs. 100 per kW	1.97	4.93
LT VI Vehicle Charging	Rs. 80 per kVA	1.97	5.78

## 8.19 Applicability of Revised Tariff

8.19.1 The Tariffs determined in this Order shall be applicable from 1 April, 2023. Where the billing cycle of a consumer is different with respect to the date of applicability of the revised tariffs, they should be made applicable for the consumption on a pro rata basis. The bills for the respective periods as per the existing and revised tariffs shall be calculated based on the pro-rata consumption (units consumed during the respective periods, computed on the basis of average unit consumption per day multiplied by the number of days in the respective periods covered in the billing cycle).

8.19.2 The Commission has determined the revenue from the revised tariffs as if they were applicable for the entire year. Any shortfall or surplus in the actual revenue against the approved ARR will be revised during Truing-Up at the end of the Control Period, as specified in the MYT Regulations, 2019.

## 9 APPLICABILITY OF THE ORDER

This Order on approval for Truing-up of Aggregate Revenue Requirement (ARR) for FY 2019-20, FY 2020-21 and FY 2021-22, Provisional Truing-up of ARR for FY 2022-23 and determination of revised ARR and Tariff for FY 2023-24 and FY 2024-25 shall come into force from **1 April, 2023**.

The Commission notes that the present tariff determination for FY 2023-24 and FY 2024-25 is done after taking into consideration the embedded generation considering due to transmission constraints and prevailing high power purchase rates in the market. The Commission is of the view that if there is any substantial improvement/reduction in the costs considered by the Commission in the present Order, the Licensee may file revised tariff Petition for the 5<sup>th</sup> year of the Control Period i.e., FY 2024-25 in accordance with the Regulation 5 of the MYT Regulations, 2019.

The Petition of the Brihanmumbai Electric Supply and Transport Undertaking (BEST) in Case No. 212 of 2022 stands disposed of accordingly.

**Sd/-**  
**(Mukesh Khullar)**  
**Member**

**Sd-**  
**(I. M. Bohari)**  
**Member**

**Sd/**  
**(Sanjay Kumar)**  
**Chairperson**

  
**(Abhijit Deshpande)**  
**Secretary**

  
MAHARASHTRA ELECTRICITY REGULATORY COMMISSION  
॥ आदर्य इदम ॥

**10 APPENDIX-1: LIST OF PERSONS WHO ATTENDED THE TECHNICAL VALIDATION SESSION HELD ON 03 JANUARY, 2023**

<b>Sr. No.</b>	<b>Name of person</b>	<b>Organization</b>
1	Shri. N.N. Chougule	BES&T Undertaking
2	Shri. S.N. Bhinge	BES&T Undertaking
3	Shri. Bilal Shaikh	BES&T Undertaking
4	Shri. A.M. Sakhare	BES&T Undertaking
5	Shri. S.S. Bansode	BES&T Undertaking
6	Shri. M. M. Rane	BES&T Undertaking
7	Shri. A.M. Bhatkar	BES&T Undertaking
8	Shri. S.A. Jadhav	BES&T Undertaking
9	Shri. S.D. Chougule	BES&T Undertaking
10	Shri. Satyajit Suklabaidya	M/s MERCADOS
11	Shri. Anil Vaman Patkare	M/s MERCADOS
12	Shri. Parag Joshi	M/s MERCADOS
13	Shri. Sambhav Dhruv	M/s MERCADOS
14	Shri. N.M.Herlekar	BES&T Undertaking
15	Shri. Abhijit G. Pisal	BES&T Undertaking
16	Shri.S.P.Sontakke	BES&T Undertaking
17	Shri. S.M. Sonawane	BES&T Undertaking
18	Shri. D.G. Patil	BES&T Undertaking
19	Shri. Bhushan S. Gosavi	BES&T Undertaking
20	Shri. Jayant. M. Lande	BES&T Undertaking
21	Shri. R. R. Bandal	BES&T Undertaking
22	Shri. B.R. Bhole	BES&T Undertaking
23	Shri. Sachin Patil	BES&T Undertaking

**11 APPENDIX –2: LIST OF PERSONS WHO ATTENDED THE PUBLIC HEARING HELD ON 20 FEBRUARY, 2023**

Sr. No.	Name of person	Organization
	<b>Public Hearing attended Virtually</b>	
1.	Shri. N.M.Herlekar	BES&T Undertaking
2.	Shri. Abhijit G. Pisal	BES&T Undertaking
3.	Shri. A.V. Naik	BES&T Undertaking
4.	Dr. R.D. Patsute	BES&T Undertaking
5.	Shri. N.N. Chougule	BES&T Undertaking
6.	Shri. V. M. Kamat	BES&T Undertaking
7.	Shri. S.N. Bhinge	BES&T Undertaking
8.	Shri. A.M. Sakhare	BES&T Undertaking
9.	Shri. S.S.Bansode	BES&T Undertaking
10.	Shri. M. M. Rane	BES&T Undertaking
11.	Shri.S.P.Sontakke	BES&T Undertaking
12.	Shri. A.R. Talegaonkar	BES&T Undertaking
13.	Shri. A.M. Bhatkar	BES&T Undertaking
14.	Shri. S.A. Jadhav	BES&T Undertaking
15.	Shri. S.D. Chougule	BES&T Undertaking
16.	Shri. S.M. Sonawane	BES&T Undertaking
17.	Shri. D.G. Patil	BES&T Undertaking
18.	Shri. R. R. Bandal	BES&T Undertaking
19.	Shri. B.R. Bhole	BES&T Undertaking
20.	Shri. Vivek U. Kurade	BES&T Undertaking
21.	Shri. Bhushan S. Gosavi	BES&T Undertaking
22.	Shri. Jayant. M. Lande	BES&T Undertaking
23.	Shri. Manoj Daware	BES&T Undertaking
24.	Shri. S.D. Jogalekar	BES&T Undertaking
25.	Shri. Sachin Patil	BES&T Undertaking
26.	Shri. M.H. Vohra	BES&T Undertaking
27.	Shri. S.D. Bamane	BES&T Undertaking
28.	Shri. Jayesh Chauhan	M/s MERCADOS
29.	Shri. Anil Vaman Patkare	M/s MERCADOS
30.	Shri. Parag Joshi	M/s MERCADOS

<b>Sr. No.</b>	<b>Name of person</b>	<b>Organization</b>
31.	Shri. Sambhav Dhruv	M/s MERCADOS
32.	Shri. Guruprasad Shetty	AHAR
33.	Shri. Blaze D'Souza	Individual
34.	Shri. N. Ponrathnam	Individual



**ANNEXURE 1: CATEGORY-WISE REVENUE WITH REVISED TARIFF FOR FY 2023-24**

Category of Consumers	No. of consumers	Components of tariff				Relevant sales & load/demand data for		Full year revenue excluding Government subsidy (Rs. Crore)					Average Billing Rate (Rs/kWh)
		Fixed Charges (Per Month Per Connection)	Demand Charges (Per Month Per kVA)	Energy Charges (Rs. Per kVAh/kWh)	Wheeling Charges (Rs. Per kVAh/kWh)	Billed Demand in KVA/MVA	Sales in MVAh / MU	Revenue from Fixed Charges	Revenue from Demand Charges	Revenue from Energy Charges	Revenue from Wheeling Charges	Total	
<b>HT Category</b>													
HT-1 Industrial	37	-	375.00	7.15	0.67	57,742.18	194.20	-	25.98	138.85	13.01	177.85	9.16
HT-2 Commercial	96	-	375.00	7.66	0.67	1,15,718.58	245.97	-	52.07	188.41	16.48	256.97	10.45
HT-3 Group Hsg	12	-	375.00	7.23	0.67	8,700.00	32.12	-	3.92	23.22	2.15	29.29	9.12
HT-4 Railway Metro	3	-	375.00	6.84	0.67	1,868.75	2.57	-	0.84	1.76	0.17	2.77	10.78
HT 5A Govt Sch & Hosp	4	-	375.00	7.08	0.67	8,064.00	27.78	-	3.63	19.67	1.86	25.16	9.06
HT 5B Public Ser. Oths	46	-	375.00	7.64	0.67	63,997.54	197.17	-	28.80	150.64	13.21	192.65	9.77
HT 6 EV chg.	-	-	75.00	6.83	0.67	-	-	-	-	-	-	-	-
<b>Sub-Total</b>	<b>198</b>					<b>2,56,091.04</b>	<b>699.82</b>	<b>-</b>	<b>115.24</b>	<b>522.56</b>	<b>46.89</b>	<b>684.69</b>	<b>9.78</b>
<b>LT Category</b>													
LT-1 A (BPL)	59	11.00	-	1.50	1.74	-	0.04	0.00	-	0.01	0.01	0.01	3.46
LT-1 B Residential													
0-100	3,26,558	85.00	-	1.95	1.74	-	772.21	33.31	-	150.58	134.36	318.25	4.12
101-300	3,63,597	125.00	-	5.30	1.74	-	742.73	54.54	-	393.65	129.23	577.42	7.77
301-500	52,738	125.00	-	8.89	1.74	-	244.75	7.91	-	217.58	42.59	268.08	10.95
501<	30,583	150.00	-	10.86	1.74	-	407.19	5.50	-	442.21	70.85	518.56	12.74
LT2 (a)Comm <20	2,53,800	445.00	-	6.74	1.74	-	909.14	135.53	-	612.76	158.19	906.48	9.97
LT2 (b) 20-50 Comm.	5,852	-	445.00	5.60	1.74	1,36,339.34	179.30		72.81	100.41	31.20	204.41	11.40
LT2 (c) >50 Comm.	3,136	-	375.00	5.53	1.74	3,40,021.63	365.40		153.01	202.07	63.58	418.65	11.46
LT3A Industrial <20 k	8,914	375.00	-	6.23	1.74	-	112.08	4.01	-	69.83	19.50	93.34	8.33
LT 3B >20 Industrial	1,007	-	445.00	6.17	1.74	46,374.33	83.80		24.76	51.70	14.58	91.05	10.87
LT-4A Schools & Hosp	671	375.00	-	6.81	1.74	-	61.40	0.30	-	41.81	10.68	52.80	8.60
LT-4B Public Service	7,003	445.00	-	6.82	1.74	-	187.76	3.74	-	128.05	32.67	164.46	8.76
LT 5A Agriculture Pumpset		-	445.00	2.36	1.74	-	-		-	-	-	-	-
LT 5B Agriculture Othe	1	-	45.00	4.79	1.74	25.00	0.05	0.00	0.00	0.02	0.01	0.04	6.80
LT-VI Vehicle Chg	28	-	75.00	5.51	1.74	6,605.24	20.90	0.00	0.59	11.52	3.64	15.75	7.54
<b>Sub-Total</b>	<b>10,53,947</b>					<b>5,29,365.53</b>	<b>4,086.73</b>	<b>244.85</b>	<b>251.17</b>	<b>2,422.19</b>	<b>711.09</b>	<b>3,629.30</b>	<b>8.88</b>
Diff	-					-	-	-	-	-	-	-	-
<b>Total</b>	<b>10,54,145</b>					<b>7,85,456.58</b>	<b>4,786.55</b>	<b>244.85</b>	<b>366.42</b>	<b>2,944.75</b>	<b>757.98</b>	<b>4,313.99</b>	<b>9.01</b>

**ANNEXURE 2: CATEGORY-WISE REVENUE WITH REVISED TARIFF FOR FY 2024-25**

Category of Consumers	No. of consumers	Components of tariff				Relevant sales & load/demand data for revenue calculation		Full year revenue excluding Government subsidy (Rs. Crore)					Average Billing Rate (Rs/kWh)
		Fixed Charges (Per Month Per Connection)	Demand Charges (Per Month Per kVA)	Energy Charges (Rs. Per kVAh/kWh)	Wheeling Charges (Rs. Per kVAh/kWh)	Billed Demand in KVA/MVA	Sales in MU	Revenue from Fixed Charges	Revenue from Demand Charges	Revenue from Energy Charges	Revenue from Wheeling Charges	Total	
<b>HT Category</b>													
HT-1 Industrial	37	-	400.00	7.51	0.76	58,897.02	203.91	-	28.27	153.13	15.50	196.90	9.66
HT-2 Commercial	98	-	400.00	8.04	0.76	1,18,032.95	290.25	-	56.66	233.36	22.06	312.07	10.75
HT-3 Group Hsg	12	-	400.00	7.59	0.76	8,874.00	32.12	-	4.26	24.38	2.44	31.08	9.68
HT-4 Railway Metro	3	-	400.00	7.18	0.76	1,906.13	2.57	-	0.91	1.85	0.20	2.96	11.50
HT 5A Govt Sch & Hosp.	4	-	400.00	7.43	0.76	8,225.28	27.78	-	3.95	20.64	2.11	26.70	9.61
HT 5B Public Ser. Oths	46	-	400.00	8.25	0.76	65,277.49	199.14	-	31.33	164.29	15.13	210.76	10.58
HT 6 EV chg.	-	-	80.00	7.24	0.76	-	-	-	-	-	-	-	-
<b>Sub-Total</b>	<b>200</b>					<b>2,61,212.86</b>	<b>755.77</b>	<b>-</b>	<b>125.38</b>	<b>597.66</b>	<b>57.44</b>	<b>780.48</b>	<b>10.33</b>
<b>LT Category</b>													
LT-1 A (BPL)	60	12.00	-	1.52	1.97	-	0.04	0.00	-	0.01	0.01	0.01	3.73
LT-1 B Residential													
0-100	3,33,089	90.00	-	1.87	1.97	-	795.37	35.97	-	148.73	156.69	341.40	4.29
101-300	3,70,869	135.00	-	5.46	1.97	-	765.01	60.08	-	417.70	150.71	628.48	8.22
301-500	53,793	135.00	-	9.56	1.97	-	252.09	8.71	-	241.00	49.66	299.38	11.88
501<	31,195	160.00	-	11.73	1.97	-	419.40	5.99	-	491.96	82.62	580.57	13.84
LT2 (a)Comm <20	2,58,876	475.00	-	7.08	1.97	-	1,000.05	147.56	-	708.04	197.01	1,052.61	10.53
LT2 (b) 20-50 Comm.	5,969	-	400.00	5.88	1.97	1,52,972.74	188.26	2.87	73.43	110.70	37.09	224.08	11.90
LT2 (c) >50 Comm.	3,199	-	400.00	5.25	1.97	3,81,504.27	372.71	1.54	183.12	195.67	73.42	453.75	12.17
LT3A Industrial <20 kW	9,092	475.00	-	6.73	1.97	-	118.81	5.18	-	79.96	23.41	108.55	9.14
LT 3B >20 Industrial	1,027	-	400.00	6.66	1.97	47,301.82	87.99	0.49	22.70	58.60	17.33	99.13	11.27
LT-4A Schools & Hosp	684	475.00	-	7.15	1.97	-	61.40	0.39	-	43.90	12.10	56.38	9.18
LT-4B Public Service	7,143	475.00	-	7.16	1.97	-	197.15	4.07	-	141.16	38.84	184.07	9.34
LT 5A Agriculture Pumpset		-	50.00	2.52	1.97		-		-	-	-	-	-
LT 5B Agriculture Other	1	-	100.00	4.93	1.97	25.50	0.05	-	0.00	0.03	0.01	0.04	7.49
LT-11 Vehicle Chg	35	-	80.00	5.78	1.97	6,737.34	24.03	-	0.65	13.89	4.73	19.27	8.02
<b>Sub-Total</b>	<b>10,75,032.00</b>					<b>5,88,541.66</b>	<b>4,282.37</b>	<b>272.86</b>	<b>279.90</b>	<b>2,651.34</b>	<b>843.63</b>	<b>4,047.72</b>	<b>9.45</b>
<b>Total</b>	<b>10,75,232.00</b>					<b>8,49,754.53</b>	<b>5,038.14</b>	<b>272.86</b>	<b>405.29</b>	<b>3,248.99</b>	<b>901.06</b>	<b>4,828.20</b>	<b>9.58</b>

## **ANNEXURE 3: TARIFF SCHEDULE FOR FY 2023-24 AND FY 2024-25**

### **BRIHANMUMBAI ELECTRIC SUPPLY AND TRANSPORT UNDERTAKING**

#### **SCHEDULE OF ELECTRICITY TARIFF**

**(With effect from 1 April, 2023)**

Maharashtra Electricity Regulatory Commission, in exercise of the powers vested in it under Sections 61 and 62 of the Electricity Act, 2003 and all other powers enabling it in this behalf, has determined, by its Mid-Term Review Order dated **31 March, 2023** in Case No. 212 of 2022, the Tariffs for supply of electricity by the Distribution Licensee, Brihanmumbai Electric Supply and Transport Undertaking (BEST), to various classes of consumers as applicable from 1 April, 2023.

#### **General**

- 1 These Tariffs will supersede all Tariffs so far in force.
- 2 The Tariffs are subject to revision and/or surcharge that may be levied by the Distribution Licensee from time to time as per the directives of the Commission.
- 3 The Tariffs are exclusive of the separate Electricity Duty, Tax on Sale of Electricity and other levies by the Government or other competent authorities, which will be payable by consumers over and above the Tariffs.
- 4 The Tariffs are applicable for supply at one point only.
- 5 The Distribution Licensee may measure the Maximum Demand for any period shorter than 30 minutes / 15 minutes of maximum use, subject to conformity with the Commission's Electricity Supply Code Regulations, 2021 where it considers that there are considerable load fluctuations in operation.
- 6 The Tariffs are subject to the provisions of the applicable Regulations and any directions that may be issued by the Commission from time to time.
- 7 Unless specifically stated to the contrary, the figures of Energy Charge and Wheeling Charge are denominated in Rupees per unit (kWh or kVAh as case may be) for the energy consumed during the month.
- 8 Fuel Adjustment Charge (FAC) computed in accordance with provisions of MYT Regulations, 2019 and Commission's directions in this regard from time to time shall be applicable to all categories of consumers and will be charged over and above the base tariff.

## **LOW TENSION (LT) TARIFF**

### **LT I (A): LT – Residential (BPL)**

#### **Applicability:**

This Below Poverty Line (BPL) Tariff category is applicable to Residential consumers who have a Sanctioned Load upto 0.25 kW and who have consumed upto 360 units per annum in the previous financial year. The eligibility of such consumers will be reassessed at the end of each financial year. If more than 360 units have been consumed in the previous financial year, the LT I (B) - Residential Tariff shall thereafter be applicable, and such consumer cannot revert thereafter to the BPL category irrespective of his future consumption level.

The categorisation of BPL consumers will be reassessed at the end of the financial year on a pro rata basis if there has been consumption for only a part of the year. The categorisation of BPL consumers who have been added during the previous year would be assessed on a pro rata basis, i.e., 30 units per month.

This BPL category will also be applicable to all new consumers subsequently added in any month with a Sanctioned Load of upto 0.25 kW and consumption between 1 to 30 units (on pro rata basis of 1 unit/day) in the first billing month.

The BPL Tariff is applicable only to individuals and not to institutions.

#### **Tariff Schedule of LT BPL Consumers**

<b>Consumption Slab (kWh)</b>	<b>Fixed/ Demand Charge</b>	<b>Energy Charge (Rs./kWh)</b>	<b>Wheeling Charge (Rs./kWh)</b>
FY 2023-24 w.e.f. 1 April, 2023 to 31 March, 2024	Rs. 11 per month	1.50	1.74
FY 2024-25 w.e.f. 1 April, 2024 to 31 March, 2025	Rs. 12 per month	1.52	1.97

**LT I (B): LT – Residential**

**Applicability:**

This Tariff category is applicable for electricity used at Low/Medium Voltage for operating various appliances used for purposes such as lighting, heating, cooling, cooking, washing/cleaning, entertainment/leisure, water pumping in the following premises:

- a) Private residential premises, Government / semi-Government residential quarters, Private Corporate bodies staff quarters / Hostels / Rest Houses;
- b) Premises used exclusively for worship, such as temples, gurudwaras, churches, mosques, etc.; provided that halls, gardens or any other part of such premises that may be let out for a consideration or used for commercial activities would be charged at the applicable LT-II Tariff, unless specified in other category;
- c) Government / Private / Co-operative Housing Societies / Colonies/complexes (where electricity is used exclusively for domestic purposes) only for common facilities such as Water Pumping / Street and other common area Lighting / Lifts /Parking Lots/ Fire-fighting Pumps and other equipment, etc.;
- d) Sports Clubs or facilities / Health Clubs or facilities / Gymnasium / Swimming Pool / Community Hall of Government / Private / Co-operative Housing Colonies/complexes - provided that they are situated in the same premises, and are for the exclusive use of the members and employees of such Housing Colonies/complexes;
- e) Telephone booths owned/operated by Persons with Disabilities/Handicapped persons;
- f) Residential premises used by professionals like Lawyers, Doctors, Engineers, Chartered Accountants, etc., in furtherance of their professional activities, but not including Nursing Homes and Surgical Wards or Hospitals;
- g) Single-phase household Flour Mills (Ghar-ghanti) used only for captive purposes;
- h) A residential LT consumer with consumption upto 500 units per month (current month of supply) who undertakes construction or renovation activity in his existing premises: such consumer shall not require a separate temporary connection, and would be billed at this Residential Tariff rate;
- i) Home-stay facilities at tourist destinations and religious places.
- j) Consumers undertaking business or commercial / industrial / non-residential activities from a part of their residence, whose monthly consumption is upto 300 units a month and annual consumption in the previous financial year was upto 3600 units. The applicability of this Tariff to such consumers will be assessed at the end of each financial year. In case consumption has exceeded 3600 units in the previous financial year, the consumer will thereafter not be eligible for the Tariff under this category but be charged at the Tariff otherwise

applicable for such consumption, with prior intimation to him.

- k) Entities supplied electricity at a single point at Low/Medium Voltage for residential purposes, in accordance with the Electricity (Removal of Difficulties) Eighth Order, 2005, in the following cases:
- i. a Co-operative Group Housing Society which owns the premises, for making electricity available to the members of such Society residing in the same premises for residential purposes; and
  - ii. a person, for making electricity available to its employees residing in the same premises for residential purposes.
- l) Crematoriums and Burial Grounds for all purposes, including area lighting, Electric Kiln, Water Pumps, etc.
- m) Temporary purposes for public religious functions / festivals like Ganesh Utsav, Navaratri, Eid, Moharrum, Ram Lila, Diwali, Christmas, Guru Nanak Jayanti, Gopalkala Utsav, Dasher, etc., and for areas where community prayers are held; and for functions to commemorate anniversaries of personalities and National or State events for which Public Holidays have been declared, such as Gandhi Jayanti, Ambedkar Jayanti, Chhatrapati Shivaji Jayanti, Republic Day, Independence Day, Maharashtra Day, etc.

Provided that such temporary connection shall be subjected to 1.5 times of fixed charges.

Note:

This Tariff category shall also be applicable to consumers who are supplied power at High Voltage for any of the purposes above other than (i) & (j) above.

### **Tariff Schedule for LT I (B): LT – Residential**

#### **Tariff w.e.f. 1 April, 2023 to 31 March, 2024**

Consumption Slab (kWh)	Fixed/ Demand Charge <sup>\$\$</sup>	Energy Charge (Rs./kWh)	Wheeling Charge (Rs./kWh)
0-100 units	Rs. 85 per connection per month	1.95	1.74
101 – 300 units	Rs. 125 per connection per month	5.30	1.74
301 – 500 units	Rs. 125 per connection per month	8.89	1.74
Above 500 units (balance units)	Rs. 150 per connection per month	10.86	1.74

#### **Tariff w.e.f. 1 April, 2024 to 31 March, 2025**

Consumption Slab (kWh)	Fixed/ Demand Charge <sup>\$\$</sup>	Energy Charge (Rs./kWh)	Wheeling Charge (Rs./kWh)
0-100 units	Rs. 90 per connection per month	1.87	1.97
101 – 300 units	Rs. 135 per connection per month	5.46	1.97
301 – 500 units	Rs. 135 per connection per month	9.56	1.97
Above 500 units (balance units)	Rs. 160 per connection per month	11.73	1.97

**Note:**

- a) \$\$: The above Fixed Charges are for single-phase connections. A Fixed Charge of Rs. 150 per month will be levied on Residential consumers availing 3-phase supply. An Additional Fixed Charge of Rs.150 per 10 kW load or part thereof above 10 kW load shall also be payable for FY 2023-24, and Rs. 160 per month and per 10 KW, respectively, in FY 2024-25.
- b) Professionals like Lawyers, Doctors, Professional Engineers, Chartered Accountants, etc., occupying premises exclusively for conducting their profession, shall not be eligible for this Tariff, and will be charged at the Tariff applicable to the respective categories.

## **LT II: LT – Non Residential or Commercial**

### **Applicability:**

#### **A. 0-20kW**

This Tariff category is applicable for electricity used at Low/Medium voltage in non-residential, non-industrial and/or commercial premises for commercial consumption meant for operating various appliances used for purposes such as lighting, heating, cooling, cooking, washing/cleaning, entertainment/ leisure and water pumping in, but not limited to, the following premises:

- a) Non-Residential, Commercial and Business premises, including Shopping Malls and Showrooms, Exhibition Centres;
- b) Warehouses / Godowns;
- c) Combined lighting and power supply for facilities relating to Entertainment, including film studios, cinemas and theatres (including multiplexes), Hospitality, Leisure, Meeting/Town Halls, and places of Recreation and Public Entertainment;
- d) Offices, including Commercial Establishments;
- e) Marriage Halls, Resorts, Hotels / Restaurants / Canteens / Cafeterias, Ice-cream parlours, Coffee / Tea Shops, Guest Houses, Internet / Cyber Cafes, Telephone Booths not covered under the LT I category, and Fax / Photocopy shops;
- f) Automobile and all other types of repairs, servicing and maintenance centres (unless specifically covered under another tariff category); Retail Gas Filling, Petrol Pumps and Service Stations, including Garages;
- g) Toll Collection plazas;
- h) Tailoring Shops, Computer Training Institutes, Private Training Centres, Typing Institutes, Photo Laboratories, Beauty Parlours and Saloons, Mobile Shoppe's;
- i) Banks and ATM centres, Telephone Exchanges, TV Stations, Microwave Stations, Radio Stations;
- j) Common facilities, like Water Pumping / Lifts / Fire-Fighting Pumps and other equipment / Street and other common area lighting, etc., in Commercial Complexes;
- k) Sports Clubs/facilities, Health Clubs/facilities, Gymnasiums, Swimming Pools not covered under any other category;
- l) External illumination of monuments/ historical/ heritage buildings approved by Maharashtra Tourism Development Corporation (MTDC) or the concerned Local Authority;



- m) Construction of all types of structures/ infrastructures such as buildings, bridges, fly-overs, dams, Power Stations, roads, Aerodromes, tunnels for laying of pipelines for all purposes;

Note:

Residential LT consumers with consumption above 500 units per month (current month of supply) and who undertake construction or renovation activity in their existing premises shall not require a separate Temporary category connection, and shall be billed at the LT-II Commercial Tariff rate;

- n) Milk Collection Centres; Standalone milk refrigeration, storage centres;
- o) Sewage Treatment Plants/ Common Effluent Treatment Plants for Commercial Complexes not covered under the LT – Public Services or LT – Industry categories;
- p) Advertisements, hoardings (including hoardings fixed on lamp posts/installed along roadsides), and other commercial illumination such as external flood-lights, displays, neon signs at departmental stores, malls, multiplexes, theatres, clubs, hotels and other such establishments.
- q) Temporary supply for any of the activity not covered under Residential category.

Provided that Temporary supply consumer shall pay 1.5 time applicable fixed/demand charges and 1.25 time applicable energy charge.

Provided further that temporary supply for operating Fire-Fighting pumps and equipment in residential or other premises shall be charged as per the Tariff category applicable to such premises.

**B. 20 kW and ≤ 50 kW and (C) > 50 kW**

**Applicability:**

As per the applicability described in LT II (A) and for the Sanctioned Load in the range applicable in this sub- category, i.e., LT II (B) and LT II (C).

**Tariff Schedule for LT II: LT – Non Residential or Commercial**

**Tariff w.e.f. 1 April, 2023 to 31 March, 2024**

Consumption Slab (kWh)	Fixed/ Demand Charge	Energy Charge (Rs./kWh)	Wheeling Charge (Rs./kWh)
(A) 0-20 kW	Rs. 445 per connection per month	6.74	1.74
(B) > 20 kW and ≤ 50 kW	Rs. 375 per kVA per month	5.60	1.74
(C) > 50 kW	Rs. 375 per kVA per month	5.53	1.74

<b>TOD Tariffs (in addition to above base tariffs)</b>			
0600 to 0900 hours		-	
0900 to 1200 hours		0.50	
1200 to 1800 hours		-	
1800 to 2200 hours		1.00	
2200 to 0600 hours		(0.75)	

**Tariff w.e.f. 1 April, 2024 to 31 March, 2025**

<b>Consumption Slab (kWh)</b>	<b>Fixed/ Demand Charge</b>	<b>Energy Charge (Rs./kWh)</b>	<b>Wheeling Charge (Rs./kWh)</b>
(A) 0-20 kW	Rs. 475 per connection per month	7.08	1.97
(B) > 20 kW and ≤ 50 kW	Rs. 400 per kVA per month	5.88	1.97
(C) > 50 kW	Rs. 400 per kVA per month	5.25	1.97
<b>TOD Tariffs (in addition to above base tariffs)</b>			
0600 to 0900 hours		-	
0900 to 1200 hours		0.50	
1200 to 1800 hours		-	
1800 to 2200 hours		1.00	
2200 to 0600 hours		(0.75)	

**Note:**

*The ToD Tariff is applicable to the LT-II (B) and (C) categories, and optionally available to LT- II (A) category consumers having ToD meter installed.*

**LT III: LT- Industry:**

**LT III (A): LT - Industry upto 20 kW load**

**LT III (B): LT - Industry, above 20 kW load**

**Applicability:**

This Tariff category is applicable for electricity for Industrial use, at Low/Medium Voltage, for purposes of manufacturing and processing, including electricity used within such premises for general lighting, heating/cooling, etc.

It is also applicable for use of electricity / power supply for Administrative Offices / Canteens, Recreation Hall / Sports Club or facilities / Health Club or facilities/ Gymnasium / Swimming Pool exclusively meant for employees of the industry; lifts, water pumps, fire-fighting pumps and equipment, street and common area lighting; Research and Development units etc. –

Provided that all such facilities are situated within the same industrial premises and supplied power from the same point of supply;

This Tariff category shall also be applicable for use of electricity / power supply by an Information Technology (IT) or IT-enabled Services (ITeS) Unit as defined in the applicable IT/ITeS Policy of Government of Maharashtra.

This Tariff Category shall be also applicable to integrated logistics parks under Government of Maharashtra Policy, 2018.

It shall also be applicable for use of electricity / power supply for (but not limited to) the following purposes:

- a) Dhobi/Laundry activities
- b) Flour Mill, Dal Mill, Rice Mill, Poha Mill, Masala Mill, Saw Mill, Cattle / Poultry Feed Manufacturing plants;
- c) Ice Factory, Ice-cream manufacturing units, Milk Processing and Chilling Plants (Dairy);
- d) Engineering Workshops, Engineering Goods Manufacturing units; Printing Presses; Transformer Repair Workshops; Tyre Remolding/Rethreading units; and Vulcanizing units, Rubber product manufacturing, Packaging material manufacturing,
- e) Ordinance / Ammunition Factories of Defence Establishments;
- f) Mining, Quarrying and Stone Crushing units;
- g) Garment Manufacturing units;
- h) Soap and cosmetics, Deodorant manufacturing, etc.
- i) LPG/CNG bottling plants and associated retail gas filling stations, etc.;
- j) Sewage Treatment Plant/ Common Effluent Treatment Plant for industries, and

not covered under the LT – Public Service category;

- k) Start-up power for Generating Plants, i.e. the power required for trial run of a Power Plant during commissioning of the Unit and its Auxiliaries, and for its start-up after planned or forced outage (but not for construction);
- l) Brick Kiln (Bhatti), Biomass Pellet;
- m) Biotechnology Industries covered under the Biotechnology Policy of Government of Maharashtra;
- n) Cold Storages not covered under LT V (B) – Agriculture (Others), Packaged Drinking water plant;
- o) Food (including seafood and meat) Processing units, Khandsari / Jaggery Manufacturing Units;
- p) Stand-alone Research and Development units
- q) Telecommunications Towers and associated telecom infrastructure but does not cover offices/outlets etc.
- r) Powerlooms including other allied activities like, Warping, Doubling, Twisting, etc., connected at Low/Medium Tension only.
- s) Auxiliary Power Supply to EHV/Distribution Substations (but not for construction)
- t) Ready-mix Concrete or hot mix plants.

### **Tariff Schedule for LT III: LT Industry**

**Tariff w.e.f. 1 April, 2023 to 31 March, 2024**

Consumption Slab (kWh)	Fixed/ Demand Charge	Energy Charge (Rs./kWh)	Wheeling Charge (Rs./kWh)
LT III (A): 0-20 kW	Rs. 445 per connection per month	6.23	1.74
LT III (B): Above 20 kW	Rs. 375 per kVA per month	6.17	1.74
<b>TOD Tariffs (Optional- in addition to above base tariffs)</b>			
0600 to 0900 hours		-	
0900 to 1200 hours		0.50	
1200 to 1800 hours		-	
1800 to 2200 hours		1.00	
2200 to 0600 hours		(0.75)	

**Tariff w.e.f. 1 April, 2024 to 31 March, 2025**

<b>Consumption Slab (kWh)</b>	<b>Fixed/ Demand Charge</b>	<b>Energy Charge (Rs./kWh)</b>	<b>Wheeling Charge (Rs./kWh)</b>
LT III (A): 0-20 kW	Rs. 475 per connection per month	6.73	1.97
LT III (B): Above 20 kW	Rs. 400 per kVA per month	6.66	1.97
<b>TOD Tariffs (Optional- in addition to above base tariffs)</b>			
0600 to 0900 hours		-	
0900 to 1200 hours		0.50	
1200 to 1800 hours		-	
1800 to 2200 hours		1.00	
2200 to 0600 hours		(0.75)	

Note:

*The ToD Tariff is compulsorily applicable to LT III (B) (i.e., above 20 kW), and optionally available to LT- III (A) (i.e., up to 20 kW) having ToD meter installed.*

**LT IV: Public Services :**

**LT IV (A): LT - Government Educational Institutions and Hospitals**

**Applicability:**

This Tariff category is applicable for electricity supply at Low/Medium Voltage for Educational Institutions, such as Schools and Colleges; Health Care facilities, such as Hospitals, Dispensaries, Clinics, Primary Health Care Centres, Diagnostic Centres, Blood Bank and Pathology Laboratories; Libraries and public reading rooms - of the State or Central Government or Local Self-Government bodies such as Municipalities, Zilla Parishads, Panchayat Samitis, Gram Panchayats, etc.

It shall also be applicable for electricity used for Hostels / Sports Clubs and facilities / Health Clubs and facilities / Gymnasium / Swimming Pools attached to such Educational Institutions / Hospitals, provided that they are situated in the same premises and are meant primarily for their students / faculty/ employees/ patients.

This Tariff is also applicable for electricity supply at Public Sanitary Conveniences.

**Tariff Schedule for LT IV (A): Public Services - Government Educational Institutions and Hospitals**

Consumption Slab (kWh)	Fixed/ Demand Charge	Energy Charge (Rs./kWh)	Wheeling Charge (Rs./kWh)
All Units - FY 2023-24 w.e.f. 1 April, 2023 to 31 March, 2024	Rs. 445 per connection per month	6.81	1.74
All Units - FY 2024-25 w.e.f. 1 April, 2024 to 31 March, 2025	Rs. 475 per connection per month	7.15	1.97
<b>TOD Tariffs (in addition to above base tariffs)</b>			
0600 to 0900 hours		-	
0900 to 1200 hours		0.50	
1200 to 1800 hours		-	
1800 to 2200 hours		1.00	
2200 to 0600 hours		(0.75)	

**Note:**

*The ToD Tariff is compulsorily applicable to the LT IV (A) category with Contract Demand / Sanctioned Load above 20 kW; and optionally available to the LT IV (A) category with Contract Demand/Sanctioned Load up to 20 kW having ToD meter installed.*

#### **LT IV (B) : LT - Public Services – Others**

##### **Applicability:**

This Tariff category is applicable for electricity supply at Low/Medium Voltage for:

- a) Educational Institutions, such as Schools and Colleges; Health Care facilities, such as Hospitals, Dispensaries, Clinics, Primary Health Care Centres, Diagnostic Centres, Blood Banks, Laboratories; Libraries and public reading rooms - other than those of the State or Central Government or Local Self-Government bodies such as Municipalities, Zilla Parishads, Panchayat Samitis, Gram Panchayats, etc.
- b) Sports Clubs and facilities / Health Clubs and facilities / Gymnasium / Swimming Pools attached to such Educational Institutions / Health Care facilities, provided that they are situated in the same premises and are meant primarily for their students/faculty/employees/ patients;
- c) All offices of Government and Municipal/ Local Authorities/ Local Self-Government bodies, such as Municipalities, Zilla Parishads, Panchayat Samitis, Gram Panchayats; Police Stations and Police Chowkies; Post Offices; Armed Forces/Defense and Para-Military establishments;
- d) Service-oriented Spiritual Organisations;
- e) Accommodation facilities provided by religious trusts registered under Maharashtra Public Trust Act for devotees;
- f) State or Municipal/Local Authority Transport establishments, including their Workshops
- g) Fire Service Stations; Jails, Prisons; Courts;
- h) Airports;
- i) Ports, Jetties and provision for Shore Power Supply;
- j) Railway/Metro/Monorail Stations, including Shops, Workshops, Yards, etc, if the supply is at Low/ Medium Voltage.
- k) All Students Hostels affiliated to Educational Institutions not covered under LT Public Service - Government;
- l) All other Students' or Working Men/Women's Hostels;
- m) Other types of Homes/Hostels, such as (i) Homes/Hostels for Destitutes, Disabled Persons (physically or mentally handicapped persons, etc.) and mentally ill persons (ii) Remand Homes (iii) Dharamshalas, (iv) Rescue Homes, (v) Orphanages - subject to verification and confirmation by the Distribution Licensee's concerned Zonal Chief Engineer or equivalent;
- n) Dam operation including Lighting and other activities, etc.
- o) Pumping of water, purification of water and allied activities relating to Public

Water Supply Schemes, Sewage Treatment Plants and waste processing unit.

**Tariff Schedule for LT IV (B): Public Services - Government Educational Institutions and Hospitals**

Consumption Slab (kWh)	Fixed/ Demand Charge	Energy Charge (Rs./kWh)	Wheeling Charge (Rs./kWh)
All Units - FY 2023-24 w.e.f. 1 April, 2023 to 31 March, 2024	Rs. 445 per connection per month	6.82	1.74
All Units - FY 2024-25 w.e.f. 1 April, 2024 to 31 March, 2025	Rs. 475 per connection per month	7.16	1.97
<b>TOD Tariffs (in addition to above base tariffs)</b>			
0600 to 0900 hours		-	
0900 to 1200 hours		0.50	
1200 to 1800 hours		-	
1800 to 2200 hours		1.00	
2200 to 0600 hours		(0.75)	

**Note:**

- a) The ToD Tariff is compulsorily applicable to the LT IV (B) category with Contract Demand/Sanctioned Load above 20 kW; and optionally available to the LT IV (B) category with Contract Demand/Sanctioned Load up to 20 kW having ToD meter installed.



**LT V: Agriculture :**

**LT V (A): Agriculture – Pumpsets**

**Applicability:**

This Tariff category is applicable for motive power supplied for agricultural metered pumping loads, and for one lamp of wattage up to 40 to be connected to the motive power circuit for use in pump-houses at Low/Medium Voltage.

This tariff is also applicable for floriculture, horticulture, nursery and plantation.

It is also applicable for power supply for cane crushers and/or fodder cutters for self-use for agricultural processing operations, but not for operating a flour mill, oil mill or expeller in the same premises, either operated by a separate motor or a change of belt drive.

**Tariff Schedule for LT V (A): Agriculture – Pumpsets**

<b>Consumption Slab (kWh)</b>	<b>Fixed/ Demand Charge</b>	<b>Energy Charge (Rs./kWh)</b>	<b>Wheeling Charge (Rs./kWh)</b>
All Units - FY 2023-24 w.e.f. 1 April, 2023 to 31 March, 2024	Rs. 40 per HP per month	2.36	1.74
All Units - FY 2024-25 w.e.f. 1 April, 2024 to 31 March, 2025	Rs. 45 per HP per month	2.52	1.97

**Note:**

*Consumers who avail power supply at High Voltage for the above purposes shall also be billed as per this Tariff category.*

**LT V (B): Agriculture – Others**

**Applicability:**

This Tariff category is applicable for use of electricity / power supply at Low / Medium Voltage for:

- a) Pre-cooling plants and cold storage units for Agricultural Products – processed or otherwise;
- b) Poultries exclusively undertaking layer and broiler activities, including Hatcheries;
- c) High-Technology Agriculture (i.e. Tissue Culture, Green House, Mushroom cultivation activities), provided the power supply is exclusively utilized for purposes directly concerned with the crop cultivation process, and not for any

- engineering or industrial process;
- d) Aquaculture, Sericulture, Cattle Breeding Farms, etc.
- e) Tabela, which involves no associated industrial/commercial activity of sales counter, milk processing or Dairy/Chilling plant.

**Tariff Schedule for LT V (B): Agriculture – Others**

<b>Consumption Slab (kWh)</b>	<b>Fixed/ Demand Charge</b>	<b>Energy Charge (Rs./kWh)</b>	<b>Wheeling Charge (Rs./kWh)</b>
All Units - FY 2023-24 w.e.f. 1 April, 2023 to 31 March, 2024	Rs. 95 per kW per month	4.79	1.74
All Units - FY 2024-25 w.e.f. 1 April, 2024 to 31 March, 2025	Rs. 100 per kW per month	4.93	1.97

**Note:**

*Consumers who avail power supply at High Voltage for the above purposes shall also be billed as per this Tariff category.*

**LT VI: LT - Electric Vehicle (EV) Charging Stations**

**Applicability:**

This Tariff category is applicable for Electric Vehicle Charging Station including battery swapping station for electric vehicle.

In case the consumer uses the electricity supply for charging his own electric vehicle at his premises, the tariff applicable shall be as per the category of such premises. The Consumer has an option to seek a separate connection for EV Charging under this category.

Electricity consumption for other facilities at Charging Station such as restaurant, rest rooms, convenience stores, etc., shall be charged at tariff applicable to Commercial Category.

**Tariff Schedule for LT VI: LT - Electric Vehicle (EV) Charging Stations**

Consumption Slab (kWh)	Fixed/ Demand Charge	Energy Charge (Rs./kWh)	Wheeling Charge (Rs./kWh)
All Units - FY 2023-24 w.e.f. 1 April, 2023 to 31 March, 2024	Rs. 75 per kVA per month	5.51	1.74
All Units - FY 2024-25 w.e.f. 1 April, 2024 to 31 March, 2025	Rs. 80 per kVA per month	5.78	1.97
<b>TOD Tariffs (in addition to above base tariffs)</b>			
0600 to 0900 hours		-	
0900 to 1200 hours		0.50	
1200 to 1800 hours		-	
1800 to 2200 hours		1.00	
2200 to 0600 hours		(0.75)	

## **HIGH TENSION (HT) TARIFF**

### **HT I: Industry**

#### **Applicability:**

This Tariff category is applicable for electricity for Industrial use at Extra High Voltage (132 kV/110 kV) and High Voltage (33 kV/11 kV) for purposes of manufacturing and processing, including electricity used within such premises for general lighting, heating/cooling, etc.

It is also applicable for use of electricity / power supply for Administrative Offices / Canteen, Recreation Hall / Sports Club or facilities / Health Club or facilities/ Gymnasium / Swimming Pool exclusively meant for employees of the industry; lifts, water pumps, fire-fighting pumps and equipment, street and common area lighting; Research and Development units, etc. -

Provided that all such facilities are situated within the same industrial premises and supplied power from the same point of supply.

This Tariff category shall be applicable for use of electricity / power supply by an Information Technology (IT) or IT-enabled Services (ITeS) Unit as defined in the applicable IT/ITes Policy of Government of Maharashtra.

This Tariff Category shall be also applicable to integrated logistics parks under Government of Maharashtra Policy, 2018.

It shall also be applicable for use of electricity / power supply for (but not limited to) the following purposes:

- a) Dhobi and Laundry activities
- b) Flour Mills, Dal Mills, Rice Mills, Poha Mills, Masala Mills, Saw Mills, Cattle / Poultry Feed Manufacturing plants;
- c) Ice Factories, Ice-cream manufacturing units, Milk Processing and Chilling Plants (Dairy);
- d) Engineering Workshops, Engineering Goods manufacturing units; Printing Presses; Transformer Repair Workshops; Tyre Remolding/Rethreading units, and Vulcanizing units, Rubber product manufacturing, Packaging material manufacturing;
- e) Ordinance / Ammunition Factories of Defense Establishments;
- f) Mining, Quarrying and Stone Crushing units;
- g) Garment Manufacturing units;
- h) Soap and cosmetics, Deodorant manufacturing, etc.
- i) LPG/CNG bottling plants, and associated retail filling stations;
- j) Sewage Treatment Plant/ Common Effluent Treatment Plant for industries, and not covered under the HT – Public Services (Others);

- k) Start-up power for Generating Plants, i.e., the power required for trial run of a Power Plant during commissioning of the Unit and its Auxiliaries, and for its start-up after planned or forced outage (but not for construction);
- l) Brick Kiln (Bhatti) / Biomass Pellet;
- m) Biotechnology Industries covered under the Biotechnology Policy of Government of Maharashtra;
- n) Cold Storages not covered under LT V (B) – Agriculture (Others);
- o) Food (including Seafood and meat) Processing units.
- p) Stand-alone Research and Development units
- q) Seed manufacturing.
- r) Dedicated Water Supply Schemes to Power Plants
- s) Auxiliary Power Supply to EHV/Distribution Substations (but not for construction)
- t) Telecommunications Towers and associated telecom infrastructure but does not cover offices/outlets etc.
- u) Ready-mix Concrete or hot mix plants

**Tariff Schedule for HT I : HT – Industry**

Consumption Slab (kWh)	Fixed/ Demand Charge	Energy Charge (Rs./kWh)	Wheeling Charge (Rs./kWh)
All Units - FY 2023-24 w.e.f. 1 April, 2023 to 31 March, 2024	Rs. 375 per kVA per month	7.15	0.67
All Units - FY 2024-25 w.e.f. 1 April, 2024 to 31 March, 2025	Rs. 400 per kVA per month	7.51	0.76
<b>TOD Tariffs (in addition to above base tariffs)</b>			
0600 to 0900 hours		-	
0900 to 1200 hours		0.50	
1200 to 1800 hours		-	
1800 to 2200 hours		1.00	
2200 to 0600 hours		(0.75)	

**Note:**

- Demand Charge shall be applicable at the rate of 25% of the above rates on the start-up demand contracted by the Power Plant (as referred to at (h) above) with the Distribution Licensee.
- No Wheeling Charges will be applicable for consumers connected at EHV level i.e., 110/132 kV.

## **HT II- HT Commercial**

### **Applicability:**

This Tariff category is applicable for electricity used at Extra High Voltage (132 kV/110 kV) and High Voltage (33 kV/11 kV) in non-residential, non-industrial and/or commercial premises for commercial consumption meant for operating various appliances used for purposes such as lighting, heating, cooling, cooking, entertainment/ leisure and water pumping in, but not limited to, the following premises:

- a) Non-Residential, Commercial and Business premises, including Shopping Malls and Showrooms;
- b) Warehouses/Godowns
- c) Combined lighting and power services for facilities relating to Entertainment, including film studios, cinemas and theatres (including multiplexes), Hospitality, Leisure, Meeting/Town Halls, and places of Recreation and Public Entertainment;
- d) Offices, including Commercial Establishments;
- e) Marriage Halls, Resorts, Hotels / Restaurants / Canteens / Cafeterias, Ice-cream parlours, Coffee Shops, Guest Houses, Internet / Cyber Cafes, Telephone Booths and Fax / Photocopy shops;
- f) Automobile and all other types of repairs, servicing and maintenance centres (unless specifically covered under another Tariff category); Retail Gas Filling Stations, Petrol Pumps & Service Stations, including Garages, Toll Collection plazas;
- g) Tailoring Shops, Computer Training Institutes, Typing Institutes, Private Training Centres, Photo Laboratories, Beauty Parlours and Saloons;
- h) Banks and ATM centres, Telephone Exchanges, TV Stations, Micro Wave Stations, Radio Stations;
- i) Common facilities, like Water Pumping / Lifts / Fire-Fighting Pumps and other equipment / Street and other common area Lighting, etc., in Commercial Complexes;
- j) Sports Clubs/facilities, Health Clubs/facilities, Gymnasiums, Swimming Pools not covered under any other category;
- k) External illumination of monuments/ historical/heritage buildings approved by Maharashtra Tourism Development Corporation (MTDC) or the concerned Local Authority;
- l) Construction of all types of structures/ infrastructures such as buildings, bridges, flyovers, dams, Power Stations, roads, Aerodromes, tunnels for laying of pipelines for all purposes;

Note:

Residential HT consumers with consumption above 500 units per month (current

month of supply) and who undertake construction or renovation activity in their existing premises shall not require a separate Temporary category connection but be billed at the HT-II Commercial Tariff;

- m) Milk Collection Centres, standalone milk refrigeration and storage centres;
- n) Sewage Treatment Plant/ Common Effluent Treatment Plant for Commercial Complexes, not covered under the Public Services or Industrial category;
- o) Advertisements, hoardings (including hoardings fixed on lamp posts/installed along roadsides), and other commercial illumination such as external flood-lights, displays, neon signs at departmental stores, malls, multiplexes, theatres, clubs, hotels and other such establishments
- p) Temporary supply for any of the activity not covered under any other HT category  
Provided that Temporary supply consumer shall pay 1.5 time applicable fixed/demand charges and 1.25-time applicable energy charge.

**Tariff Schedule for HT II : HT – Commercial**

Consumption Slab (kWh)	Fixed/ Demand Charge	Energy Charge (Rs./kWh)	Wheeling Charge (Rs./kWh)
All Units - FY 2023-24 w.e.f. 1 April, 2023 to 31 March, 2024	Rs. 375 per kVA per month	7.66	0.67
All Units - FY 2024-25 w.e.f. 1 April, 2024 to 31 March, 2025	Rs. 400 per kVA per month	8.04	0.76
<b>TOD Tariffs (in addition to above base tariffs)</b>			
0600 to 0900 hours		-	
0900 to 1200 hours		0.50	
1200 to 1800 hours		-	
1800 to 2200 hours		1.00	
2200 to 0600 hours		(0.75)	

**Note:**

- *A consumer in the HT II category requiring single-point supply for the purpose of downstream consumption by separately identifiable entities shall have to operate as a Franchisee authorised as such by the Distribution Licensee; or such downstream entities shall be required to take separate individual connections and be charged under the Tariff category applicable to them.*
- *No Wheeling Charges will be applicable for consumers connected at EHV level i.e., 110/132 kV.*

**HT III- HT – Group Housing Society (Residential)**

**Applicability:**

Entities supplied electricity at a single point at High Voltage (33 kV/11 kV) for residential purposes in accordance with the Electricity (Removal of Difficulties) Eighth Order, 2005, in the following cases:

- a) a Co-operative Group Housing Society which owns the premises, for making electricity available to the members of such Society residing in the same premises for residential purposes;
- b) a person, for making electricity available to its employees residing in the same premises for residential purposes.
- c) Serving Armed Forces/Paramilitary forces residential establishments. These Consumers shall be eligible for 20% discount on Energy Charge including FAC. This 20% discount is also applicable to defense.

**Tariff Schedule for HT III : HT – Group Housing Society (Residential)**

Consumption Slab (kWh)	Fixed/ Demand Charge	Energy Charge (Rs./kWh)	Wheeling Charge (Rs./kWh)
All Units - FY 2023-24 w.e.f. 1 April, 2023 to 31 March, 2024	Rs. 375 per kVA per month	7.23	0.67
All Units - FY 2024-25 w.e.f. 1 April, 2024 to 31 March, 2025	Rs. 400 per kVA per month	7.59	0.76
<b>TOD Tariffs (in addition to above base tariffs)</b>			
0600 to 0900 hours		-	
0900 to 1200 hours		0.50	
1200 to 1800 hours		-	
1800 to 2200 hours		1.00	
2200 to 0600 hours		(0.75)	

**Note:**

- *No Wheeling Charges will be applicable for consumers connected at EHV level i.e., 110/132 kV.*



**HT IV- Railway/ Metro/Monorail**

**Applicability:**

This Tariff category is applicable to power supply at Extra High Voltage (132 kV/110 kV) and High Voltage (33 kV/11 kV) for Railways, Metro and Monorail, including Stations and Shops, Workshops, Yards, etc.

**Tariff Schedule for HT IV : HT – Railway/ Metro/Monorail**

<b>Consumption Slab (kWh)</b>	<b>Fixed/ Demand Charge</b>	<b>Energy Charge (Rs./kWh)</b>	<b>Wheeling Charge (Rs./kWh)</b>
All Units - FY 2023-24 w.e.f. 1 April, 2023 to 31 March, 2024	Rs. 375 per kVA per month	6.84	0.67
All Units - FY 2024-25 w.e.f. 1 April, 2024 to 31 March, 2025	Rs. 400 per kVA per month	7.18	0.76

**Note:**

*No Wheeling Charges will be applicable for supply at EHV Level to Railway / Metro / Monorail.*

## **HT V- Public Services**

### **HT V – (A): HT - Government Educational Institutions and Hospitals**

#### **Applicability:**

This Tariff category is applicable for electricity supply at Extra High Voltage (132 kV/110 kV) and High Voltage (33 kV/11 kV) for Educational Institutions, such as Schools and Colleges; Health Care facilities, such as Hospitals, Dispensaries, Clinics, Primary Health Care Centres, Diagnostic Centres, Blood Banks and Pathology Laboratories; Libraries and public reading rooms - of the State or Central Government, Local Self-Government bodies such as Municipalities, Zilla Parishads, Panchayat Samitis, Gram Panchayats, etc.;

It shall also be applicable for electricity used for Hostel, Sports Clubs and facilities / Health Clubs and facilities / Gymnasium / Swimming Pools attached to such Educational Institutions / Health Care facilities, provided that they are situated in the same premises and are meant primarily for the students / faculty/ employees/ patients of such Educational Institutions and Hospitals.

This Tariff is also applicable for electricity supply at Public Sanitary Conveniences.

#### **Tariff Schedule for HT V (A) : HT – Public Services - Government Educational Institutions and Hospitals**

<b>Consumption Slab (kWh)</b>	<b>Fixed/ Demand Charge</b>	<b>Energy Charge (Rs./kWh)</b>	<b>Wheeling Charge (Rs./kWh)</b>
All Units - FY 2023-24 w.e.f. 1 April, 2023 to 31 March, 2024	Rs. 375 per kVA per month	7.08	0.67
All Units - FY 2024-25 w.e.f. 1 April, 2024 to 31 March, 2025	Rs. 400 per kVA per month	7.43	0.76
<b>TOD Tariffs (in addition to above base tariffs)</b>			
0600 to 0900 hours		-	
0900 to 1200 hours		0.50	
1200 to 1800 hours		-	
1800 to 2200 hours		1.00	
2200 to 0600 hours		(0.75)	

#### **Note:**

*No Wheeling Charges will be applicable for supply at EHV Level*

## **HT V – (B): Public Services – Others**

### **Applicability:**

This Tariff category is applicable for electricity supply at Extra High Voltage (132 kV/110 kV) and High Voltage (33 kV/11 kV) for:

- a) Educational Institutions, such as Schools and Colleges; Health Care facilities, such as Hospitals, Dispensaries, Clinics, Primary Health Care Centres, Diagnostic Centres, Blood Banks, and Pathology Laboratories; Libraries and public reading rooms - other than those of the State or Central Government, Local Self-Government bodies such as Municipalities, Zilla Parishads, Panchayat Samitties, Gram Panchayats, etc.
- b) Sports Clubs and facilities / Health Clubs, Student / working Men / Women hostel and facilities / Gymnasium / Swimming Pools attached to such Educational Institutions / Health Care facilities, provided that they are situated in the same premises and are meant primarily for their students / faculty/ employees/ patients;
- c) All offices of Government and Municipal/ Local Authorities/ Local Self Government bodies, such as Municipalities, Zilla Parishads, Panchayat Samittis, Gram Panchayats; Police Stations and Police Chowkies; Post Offices; Armed Forces / Defense and Para- Military establishments;
- d) Service-oriented Spiritual Organisations;
- e) Accommodation facilities provided by religious trusts registered under Maharashtra Public Trust Act for devotees. State or Municipal/Local Authority Transport establishments, including their Workshops;
- f) Fire Service Stations; Jails, Prisons; Courts;
- g) Airports;
- h) Ports, Jetties and provision for Shore Power Supply.
- i) Pumping of water, purification of water and allied activities relating to Public Water Supply Schemes, Sewage Treatment Plants;
- j) Waste processing units and Water ATM not covered under other HT category;
- k) Dam operation including Lighting and other activities, etc
- l) lighting of public streets/ thorough fares which are open for use by the general public

Provided that Street lights in residential complexes, commercial complexes, industrial premises, etc. will be billed at the Tariff of the respective applicable categories.

**Tariff Schedule for HT V (B) : HT – Public Services – Others**

<b>Consumption Slab (kWh)</b>	<b>Fixed/ Demand Charge</b>	<b>Energy Charge (Rs./kWh)</b>	<b>Wheeling Charge (Rs./kWh)</b>
All Units - FY 2023-24 w.e.f. 1 April, 2023 to 31 March, 2024	Rs. 375 per kVA per month	7.64	0.67
All Units - FY 2024-25 w.e.f. 1 April, 2024 to 31 March, 2025	Rs. 400 per kVA per month	8.25	0.76
<b>TOD Tariffs (in addition to above base tariffs)</b>			
0600 to 0900 hours		-	
0900 to 1200 hours		0.50	
1200 to 1800 hours		-	
1800 to 2200 hours		1.00	
2200 to 0600 hours		(0.75)	

**Note:**

*No Wheeling Charges will be applicable for supply at EHV Level*

**HT VI: HT - Electric Vehicle (EV) Charging Stations Applicability**

**Applicability:**

This Tariff category is applicable for Electric Supply at High Voltage (33 kV/11 kV) for Electric Vehicle Charging Station including battery swapping station for Electric Vehicle.

In case the consumer uses the electricity supply for charging his own electric vehicle at his premises, the tariff applicable shall be as per the category of such premises. The Consumer has an option to seek a separate connection for EV Charging under this category.

Electricity consumption for other facilities at Charging Station such as restaurant, rest rooms, convenience stores, etc., shall be charged at tariff applicable to Commercial Category.

**Tariff Schedule for HT VI : HT – Electric Vehicle Charging Stations**

Consumption Slab (kWh)	Fixed/ Demand Charge	Energy Charge (Rs. /kWh)	Wheeling Charge (Rs. /kWh)
All Units - FY 2023-24 w.e.f. 1 April, 2023 to 31 March, 2024	Rs. 75 per kVA per month	6.83	0.67
All Units - FY 2024-25 w.e.f. 1 April, 2024 to 31 March, 2025	Rs. 80 per kVA per month	7.24	0.76
<b>TOD Tariffs (in addition to above base tariffs)</b>			
0600 to 0900 hours		-	
0900 to 1200 hours		0.50	
1200 to 1800 hours		-	
1800 to 2200 hours		1.00	
2200 to 0600 hours		(0.75)	

- *No Wheeling Charges will be applicable for consumers connected at EHV level i.e., 110/132 kV.*

## **MISCELLANEOUS AND GENERAL CHARGES**

### **Fuel Adjustment Charge (FAC) Component of Z-factor Charge**

The Fuel Adjustment Charge (FAC) component of the Z-factor Charge will be determined in accordance with the formula specified in the relevant Multi Year Tariff Regulations and any directions that may be given by the Commission from time to time, and will be applicable to all consumer categories for their entire consumption.

In case of any variation in the fuel prices and power purchase prices, the Distribution Licensee shall pass on the adjustments through the FAC component of the Z-factor Charge accordingly.

The details of the applicable ZFAC for each month shall be available on the Distribution Licensee's website [www.bestundertaking.com](http://www.bestundertaking.com).

### **Electricity Duty and Tax on Sale of Electricity**

Electricity Duty and Tax on Sale of Electricity shall be levied in addition to the Tariffs approved by the Commission, and in accordance with the Government of Maharashtra stipulations from time to time. The rate and the reference number of the Government Resolution/ Order under which the Electricity Duty and Tax on Sale of Electricity are applied shall be stated in the consumers' energy bills. A copy of such Resolution / Order shall be provided on the Distribution Licensee's website [www.bestundertaking.com](http://www.bestundertaking.com).

### **Power Factor Computation**

Where the average Power Factor measurement is not possible through the installed meter, the following formula for calculating the average Power Factor during the billing period shall be applied:

$$\text{Average Power Factor} = \frac{\text{Total (kWh)}}{\text{Total (kVAh)}}$$

Wherein the kVAh is =  $\sqrt{\sum(\text{KWh})^2 + \sum(\text{RkVAh Lag} + \text{RkVAh Lead})^2}$

Further, average PF so computed can be considered as leading or lagging based on the following test:

If "RkVAh lead" > "RkVAh lag" then "Average P.F." is to be treated as "Lead P.F."

If "RkVAh lead" = < "RkVAh lag" then "Average P.F." is to be treated as "Lag P.F."

### **Power Factor Incentive**

Applicable for LT II: Non-Residential/Commercial [LT II (B), LT II (C)] (for Contract Demand/Sanctioned Load above 20 kW), LT III (B): Industry above 20 kW, LT IV : Public

Service [LT IV (A) and LT IV (B)], and LT VI – Electric Vehicle (EV) Charging Stations having contract demand/sanctioned load above 20 kW.

Whenever the average Power Factor is more than 0.95 (lag or lead) and upto 1, an incentive shall be given at the rate of the following percentages of the amount of the monthly electricity bill, excluding Taxes and Duties:

Sl.	Range of Power Factor	Power Factor Level	Incentive
1	0.951 to 0.954	0.95	0.0%
2	0.955 to 0.964	0.96	0.5%
3	0.965 to 0.974	0.97	1.0%
4	0.975 to 0.984	0.98	1.5%
5	0.985 to 0.994	0.99	2.5%
6	0.995 to 1.000	1.00	3.5%

**Note:** Power Factor shall be measured/computed upto 3 decimals, after universal rounding off.

### **Power Factor Penalty**

Applicable for LT II: Non-Residential/Commercial [LT II (B), LT II (C)] (for Contract Demand / Sanctioned Load above 20 kW), LT III (B): Industry above 20 kW, LT IV : Public Service [LT IV (A) and LT IV (B)], and LT VI – Electric Vehicle (EV) Charging Stations having contract demand/sanctioned load above 20 kW.

Whenever the average PF is less than 0.9 (lag or lead), penal charges shall be levied at the rate of the following percentages of the amount of the monthly electricity bill, excluding Taxes and Duties:

Sl.	Range of Power Factor	Power Factor Level	Penalty
1	0.895 to 0.900	0.90	0.0%
2	0.885 to 0.894	0.89	1.0%
3	0.875 to 0.884	0.88	1.5%
4	0.865 to 0.874	0.87	2.0%
5	0.855 to 0.864	0.86	2.5%
6	0.845 to 0.854	0.85	3.0%
7	0.835 to 0.844	0.84	3.5%
8	0.825 to 0.834	0.83	4.0%
9	0.815 to 0.824	0.82	4.5%
10	0.805 to 0.814	0.81	5.0%
...	...	...	...

**Note:** Power Factor shall be measured/computed upto 3 decimals, after universal rounding off.

### **Prompt Payment Discount**

A prompt payment discount of one percent of the monthly bill (excluding Taxes and Duties) shall be provided to consumers for payment of electricity bills within 7 days from the date of their issue.

### **Delayed Payment Charges**

In case the electricity bill is not paid within the due date mentioned on the bill, delayed payment charges of 1.25 percent shall be levied on the total amount of the electricity bill (including Taxes and Duties).

### **Discount for digital payment**

A discount of 0.25% of the monthly bill (excluding taxes and duties), subject to a cap of Rs. 500/-, shall be provided to LT category consumers for payment of electricity bills through various modes of digital payment such as credit cards, debit cards, UPI, BHIM, internet banking, mobile banking, mobile wallets, etc.

### **Discount for E-bill**

A discount of Rs. 10 per consumer per bill shall be provided for those opting for E-bills through written/email confirmation. No hard copy of the bills shall be generated for such consumers.

### **Rate of Interest on Arrears**

The rate of interest chargeable on the arrears of payment of billed dues shall be as given below:

<b>Sr. No.</b>	<b>Delay in Payment (months)</b>	<b>Interest Rate per annum (%)</b>
1	Payment made after 60 days and before 90 days from the date of billing	12%
2	Payment made after 90 days and up to 180 days from the date of billing	15%

### **Rebate for consumers with Prepaid connections**

Consumers with prepaid metered connections shall be entitled for rebate of 2% in the Energy Charge Rate (incl FAC) applicable for the consumer category.

### **Load Factor Incentive**

Consumers having Load Factor above 75% and upto 85% will be entitled to an incentive in the form of a rebate of 0.75% on the Energy Charges for every percentage point increase in Load Factor from 75% to 85%. Consumers having a Load Factor above 85 % will be entitled



to a rebate of 1% on the Energy Charges for every percentage point increase in Load Factor from 85%. The total rebate will be subject to a ceiling of 15% of the Energy Charges applicable to the consumer.

This incentive is applicable only to consumers in the Tariff categories HT I: Industry, HT II: Commercial and HT VI: Public Services - HT VI (A) and HT VI (B) only.

The Load Factor incentive will be available only if the consumer has no arrears with the Distribution Licensee, and payment is made within seven days from the date of the electricity bill. However, it will be available to consumers in whose case payment of arrears in instalments has been allowed by the Distribution Licensee, and such payment is being made as scheduled. The Distribution Licensee shall take a commercial decision on the schedule for such payments.

The Load Factor is to be computed as follows:

$$\text{Load Factor} = \frac{\text{Consumption during the month in MU}}{\text{Maximum Consumption possible during the month in MU}}$$

**Maximum consumption possible** = Contract Demand (kVA) × Unity Power Factor

× (Total no. of hours during the month, less actual interruptions hours recorded on meter for billing period)

In case the consumer exceed its Contract Demand (including during the non-peak hours, i.e., 22:00 hrs to 06:00 hrs.) in any particular month, the Load Factor Incentive will not be payable to the consumer in that month.

### **Penalty for exceeding Contract Demand**

In case a consumer (availing Demand-based Tariff) exceeds his Contract Demand, he will be billed at the applicable Demand Charge rate for the Demand actually recorded, and also be charged an additional amount at the rate of 150% of the applicable Demand Charge (only for the Demand in excess of the Contract Demand).

Under these circumstances, the consumer shall not be liable for any other action under Section 126 of the EA, 2003, since the penal additional Demand Charge provides for the penalty that the consumer is liable to pay for exceeding his Contract Demand. In case a consumer exceeds his Contract Demand on more than three occasions in a calendar year, the action to be taken would be governed by the provisions of the Supply Code Regulations.

In case any consumer exceeds the Contract Demand on more than three occasions in a calendar year, the action taken in such cases would be governed by the Supply Code.

### **Additional Demand Charges for Consumers having Captive Power Plant**

For consumers having a Captive Power Plant, additional Demand Charges at the rate of Rs.

20/kVA/month shall be payable only on the extent of the Stand-by demand component and not on the entire Contract Demand. The additional Demand Charges will be levied on the Stand-by component only if the consumer's demand exceeds his Contract Demand.

### **Consumers' Security Deposit**

As specified under Regulations 13 of the MERC (Supply Code Electricity Supply Code and Standards of Performance of Distribution Licensees including Power Quality) Regulations, 2021, Consumer shall pay Security Deposit and will be entitle for interest on such Security Deposit.

### **Definitions**

#### **Maximum Demand:**

Maximum Demand in kilo-Watts or kilo-Volt Amperes, in relation to any period shall, unless otherwise provided in any general or specific Order of the Commission, mean twice the highest number of kilo-watt-hours or kilo-Volt Ampere hours supplied and taken during any consecutive thirty minute blocks in that period.

#### **Contract Demand:**

Contract Demand means the demand in kilo-Watt (kW) or kilo-Volt Amperes (kVA), mutually agreed between the Distribution Licensee and the consumer as entered into in the agreement or agreed through other written communication. (For conversion of kW into kVA, the Power Factor of 0.80 shall be applied.)

#### **Sanctioned Load:**

Sanctioned Load means the load in kW mutually agreed between the Distribution Licensee and the consumer.

#### **Billing Demand - LT Tariff categories:**

Monthly Billing Demand will be the higher of the following:

- a) 65% of the actual Maximum Demand recorded in the month during 0600 hours to 2200 hours;
- b) 40% of the Contract Demand.

Note:

- Only the Demand registered during the period 0600 to 2200 Hrs. will be considered for determination of the Billing Demand.

- In case of a change in Contract Demand, the above period will be reckoned from the month following the month in which the change in Contract Demand is effected.

**Billing Demand - HT Tariff categories:**

Monthly Billing Demand will be the higher of the following:

- a) Actual Maximum Demand recorded in the month during 0600 hours to 2200 hours;
- b) 75% of the highest Billing Demand recorded during the preceding eleven months, subject to the limit of Contract Demand;
- c) 70% of the Contract Demand\*.

\* FY 2023-24: 70%, FY 2024-25: 75%

**Note:**

- Only the Demand registered during the period 0600 to 2200 Hrs. will be considered for determination of the Billing Demand.
- In case of a change in Contract Demand, the above period will be reckoned from the month following the month in which the change of Contract Demand is effected.